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ASSESSMENT REPORT

describing

DIAMOND DRILLING

at the Osiris and Orion Projects of the

RACKLA GOLD PROPERTY

AT 1-206; BOB 1-16; BT 1-192; Dale 1-12; EN 1-192, EX 1-18; IS 1-28; JAM 1-32; OS 1-576, 641-676, 749-770, 841-846, 913-1076; PH 1-22; RR 149-222; ST 1-517; Smac 1-3; STEN 1-142; T 29-3133 and WH 1-61

NTS 106C/01, 02, 03, 07, 08 and 106B/04
Latitude 64°01´N to 64°16´ N; Longitude 133°19´W to 131°54´W

in the

Mayo Mining District, Yukon Territory

Field work performed from May 17th to September 26th, 2017

prepared by

Archer, Cathro & Associates (1981) Limited

for

ATAC RESOURCES LTD.

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CONTENTS

INTRODUCTION	1
PROPERTY LOCATION, CLAIM DATA, ACCESS AND INFRASTRUCTURE	1
HISTORY AND PREVIOUS WORK	6
GEOMORPHOLOGY AND CLIMATE	1
REGIONAL GEOLOGY	1
PROPERTY GEOLOGY	2
MINERALIZATION	1
DIAMOND DRILLING	3
DISCUSSION AND CONCLUSIONS	7
REFERENCES	8

APPENDICIES

I STATEMENTS OF QUALIFICATIONS
II STATEMENT OF EXPENDITURES
III DIAMOND DRILLING - SAMPLING METHODS, ANALYSIS, DATA VERIFICATION AND QA/QC RESULTS
IV DIAMOND DRILLING - GEOLOGICAL, GEOTECHNICAL AND SAMPLE LOGS
V DIAMOND DRILLING - CERTIFICATES OF ANALYSIS
VI DIAMOND DRILLING - CROSS SECTIONS

FIGURES

No.	Description	
1	Property Location	1
2	Claim Locations – Group A-B	In pocket
3	Claim Locations – Group C-F	In pocket
4	Showings, Camp and Airstrip Locations	3
5	Tectonic Setting	6
6	Regional Stratigraphic Section	6
7	Regional Geology	In pocket
8	Osiris Cluster Geology	7
9	Anubis Cluster Geology	8

TABLES

		PAGE
I	Nadaleen Trend Claim Information	1
II	Annual ATAC Results Summary Table	4
III	Proterozoic to Lower Cambrian Rocks Along the Nadaleen Trend	7
IV	Paleozoic Rocks along the Nadaleen Trend	7
V	Summary of Mineralized Zones along the Nadaleen Trend Targeted in 2017	13
VI	2017 Osiris Diamond Drill Hole Specifics	15
VII	2017 Orion Diamond Drill Hole Specifics	16
VIII	2017 Significant Diamond Drill Intersections	16

INTRODUCTION

The Rackla Gold Property comprises a 1700 km^2 area of highly prospective, platform to basin facies, sedimentary rocks located along the northern edge of the Tintina Gold Belt at the transition from the Selwyn Basin to the Mackenzie Platform in east-central Yukon Territory (Fig. 1). Various commodities have been explored for and discovered both currently and historically within the claim block. Past exploration focused on base metal mineralization, while recently the emphasis has been directed towards gold potential. The property is comprised of three projects: the 100% owned Carlin-type gold Osiris Project, the 100% owned Rau Project and the Orion Project which is subject to an earn-in agreement with Barrick Gold Corporation.

This report describes the work completed, methods used and the results obtained from the 2017 exploration program conducted at the Osiris and Orion Projects between May 17th and September 26th, 2017. Management and labour for the project was provided by Archer, Cathro & Associates (1981) Limited (Archer Cathro) on behalf of ATAC Resources Limited (ATAC). The authors supervised and participated in the program and interpreted all resulting data. The authors' Statements of Qualifications are listed in Appendix I; while Appendix II provides a Statement of Expenditures related to the program.

PROPERTY LOCATION, CLAIM DATA, ACCESS AND INFRASTRUCTURE

The Osiris and Orion Projects of the Rackla Gold Property consists of 5,424 contiguous mineral claims located from 64°01´N to 64°16´ N and stretching from 133°19´W to 131°54´W on NTS map sheets NTS 106C/01, 02, 03, 07, 08 and 106B/04 (Figs. 2 - 4). The work presented in this report was filed for all 5,424 claims. Claim information for these claims is presented below in Table I. The claims are all registered with the Mayo Mining Recorder in the name of Archer Cathro, who holds them in trust for ATAC. Specifics concerning claim registration are tabulated below while the locations of individual claims associated with this report are shown on Figures 2 and 3.

The Osiris Project is made up of Claim Groups A and B (Fig. 2) and the Orion Project is made up of Claim Groups C through F (Fig. 3). The cluster of showings in the Osiris Project is known as the Osiris cluster and the cluster of showings in the Orion Project is known as the Anubis Cluster (Fig. 4). The combination of the Osiris cluster and the Anubis cluster are referred to herein as the Nadaleen Trend.

TABLE I: NADALEEN TREND CLAIM INFORMATION

Claim Name	Claim From	Claim To	Grant Number From	Grant Number To	Expiry*
BOB	1	16	YF44457	YF44472	Apr 28, 2023
BT	1	192	YF42501	YF42692	Apr 28, 2024
Dale	1	12	YD08533	YD08544	Apr 28, 2047
EN	1	50	YD01401	YD01450	Apr 28, 2036
EN	73	110	YD01473	YD01510	Apr 28, 2036
EN	133	170	YD01533	YD01570	Apr 28, 2036
EX	1	18	YD72482	YD72499	Apr 28, 2034

IS	1	28	YC99751	YC99778	Apr 28, 2036
JAM	1	32	YD08501	YD08532	Apr 28, 2026
OS	641	652	YD70371	YD70382	Apr 28, 2036
OS	913	954	YD70643	YD70684	Apr 28, 2036
OS	957	978	YD70687	YD70708	Apr 28, 2036
RR	149	222	YC89849	YC89922	Apr 28, 2032
ST	1	24	YD26901	YD26924	Apr 28, 2044
ST	25	50	YD26925	YD26950	Apr 28, 2040
ST	87	91	YD26987	YD26991	Apr 28, 2044
ST	92	117	YD26992	YD27017	Apr 28, 2040
ST	254	279	YD27154	YD27179	Apr 28, 2040
ST	350	361	YD27250	YD27261	Apr 28, 2040
ST	432	517	YD27332	YD27417	Apr 28, 2041
STEN	17	20	YC99517	YC99520	Apr 28, 2045
STEN	63	89	YD10413	YD10439	Apr 28, 2043
STEN	90		YD10440		Apr 28, 2047
STEN	91		YD10441		Apr 28, 2043
STEN	92		YD10442		Apr 28, 2047
STEN	93		YD10443		Apr 28, 2043
STEN	94		YD10444		Apr 28, 2047
STEN	95		YD10445		Apr 28, 2043
STEN	96		YD10446		Apr 28, 2047
STEN	97		YD10447		Apr 28, 2043
STEN	98		YD10448		Apr 28, 2047
STEN	99		YD10449		Apr 28, 2043
STEN	100		YD10450		Apr 28, 2047
STEN	101		YD10451		Apr 28, 2043
STEN	102	104	YD10452	YD10454	Apr 28, 2047
STEN	105	126	YD10455	YD10476	Apr 28, 2043
STEN	127	142	YD10477	YD10492	Apr 28, 2047
T	29	670	YD09759	YD10400	Mar 01, 2032
T	671	747	YD22801	YD22877	Mar 01, 2032
T	748	771	YD22878	YD22901	Mar 01, 2041
T	772	785	YD22902	YD22915	Mar 01, 2037
T	786	809	YD22916	YD22939	Mar 01, 2041
T	810	823	YD22940	YD22953	Mar 01, 2037
T	824	847	YD22954	YD22977	Mar 01, 2041
T	848	861	YD22978	YD22991	Mar 01, 2037
T	862	889	YD22992	YD23019	Mar 01, 2041
T	890	903	YD23020	YD23033	Mar 01, 2037
T	904	1071	YD23034	YD23201	Mar 01, 2041
T	1072	1521	YD23202	YD23651	Mar 01, 2028
T	1522	2157	YD23652	YD24287	Mar 01, 2023
T	2158		YD24288		Mar 01, 2027
T	2159		YD24289		Mar 01, 2023
T	2160		YD24290		Mar 01, 2027
T	2161		YD24291		Mar 01, 2023
T	2162		YD24292		Mar 01, 2027

T	2163		YD24293		Mar 01, 2023
T	2164		YD24294		Mar 01, 2027
T	2165		YD24295		Mar 01, 2023
T	2166		YD24296		Mar 01, 2027
T	2167		YD24297		Mar 01, 2023
T	2168		YD24298		Mar 01, 2027
T	2169		YD24299		Mar 01, 2023
T	2170		YD24300		Mar 01, 2027
T	2171		YD24301		Mar 01, 2023
T	2172		YD24302		Mar 01, 2027
T	2173		YD24303		Mar 01, 2023
T	2174		YD24304		Mar 01, 2027
T	2175		YD24305		Mar 01, 2023
T	2176		YD24306		Mar 01, 2027
T	2177		YD24307		Mar 01, 2023
T	2178		YD24308		Mar 01, 2027
T	2179		YD24309		Mar 01, 2023
T	2180		YD24310		Mar 01, 2027
T	2181		YD24311		Mar 01, 2023
T	2182		YD24312		Mar 01, 2027
T	2183		YD24313		Mar 01, 2023
T	2184		YD24314		Mar 01, 2027
T	2185		YD24315		Mar 01, 2023
T	2186		YD24316		Mar 01, 2027
T	2187		YD24317		Mar 01, 2023
T	2188		YD24318		Mar 01, 2027
T	2189		YD24319		Mar 01, 2023
T	2190		YD24320		Mar 01, 2027
T	2191		YD24321		Mar 01, 2023
T	2192		YD24322		Mar 01, 2027
T	2193		YD24323		Mar 01, 2023
T	2194		YD24324		Mar 01, 2027
T	2195		YD24325		Mar 01, 2023
T	2196		YD24326		Mar 01, 2027
T	2197		YD24327		Mar 01, 2023
T	2198		YD24328		Mar 01, 2027
T	2199		YD24329		Mar 01, 2023
T	2200		YD24330		Mar 01, 2027
T	2201		YD24331		Mar 01, 2023
T	2202		YD24332		Mar 01, 2027
T	2203		YD24333		Mar 01, 2023
T	2204	2295	YD24334	YD24425	Mar 01, 2027
T	2296		YD24426		Mar 01, 2041
T	2297		YD24427		Mar 01, 2027
T	2298		YD24428		Mar 01, 2041
T	2299	2341	YD24429	YD24471	Mar 01, 2027
T	2342	2348	YD24472	YD24478	Mar 01, 2041
T	2349	2387	YD24479	YD24517	Mar 01, 2027

T	2388	2397	YD24518	YD24527	Mar 01, 2041
T	2398	2427	YD24528	YD24557	Mar 01, 2027
T	2428	2437	YD24558	YD24567	Mar 01, 2041
T	2438	2467	YD24568	YD24597	Mar 01, 2027
T	2468	2477	YD24598	YD24607	Mar 01, 2041
T	2478	2507	YD24608	YD24637	Mar 01, 2027
T	2508	2517	YD24638	YD24647	Mar 01, 2041
T	2518	2547	YD24648	YD24677	Mar 01, 2027
T	2548	2557	YD24678	YD24687	Mar 01, 2041
T	2558	2570	YD24688	YD24700	Mar 01, 2027
T	2571	2587	YD11401	YD11417	Mar 01, 2027
T	2588	2597	YD11418	YD11427	Mar 01, 2041
T	2598	2627	YD11428	YD11457	Mar 01, 2027
T	2628	2637	YD11458	YD11467	Mar 01, 2041
T	2638	2667	YD11468	YD11497	Mar 01, 2027
T	2668	2677	YD11498	YD11507	Mar 01, 2041
T	2678	2707	YD11508	YD11537	Mar 01, 2027
T	2708	2717	YD11538	YD11547	Mar 01, 2041
T	2718	2747	YD11548	YD11577	Mar 01, 2027
T	2748	2757	YD11578	YD11587	Mar 01, 2041
T	2758	2771	YD11588	YD11601	Mar 01, 2027
T	2772		YD11602		Mar 01, 2041
T	2773		YD11603		Mar 01, 2027
T	2774		YD11604		Mar 01, 2041
T	2775		YD11605		Mar 01, 2027
T	2776		YD11606		Mar 01, 2041
T	2777		YD11607		Mar 01, 2027
T	2778		YD11608		Mar 01, 2041
T	2779		YD11609		Mar 01, 2027
T	2780		YD11610		Mar 01, 2041
T	2781		YD11611		Mar 01, 2027
T	2782		YD11612		Mar 01, 2041
T	2783		YD11613		Mar 01, 2027
T	2784		YD11614		Mar 01, 2041
T	2785		YD11615		Mar 01, 2027
T	2786		YD11616		Mar 01, 2041
T	2787		YD11617		Mar 01, 2027
T	2788	2807	YD11618	YD11637	Mar 01, 2041
T	2808	2814	YD11638	YD11644	Mar 01, 2027
T	2815	2850	YD11645	YD11680	Mar 01, 2041
T	2851	2858	YD11681	YD11688	Mar 01, 2027
T	2859	2870	YD11689	YD11700	Mar 01, 2041
T	2871	2894	YD32901	YD32924	Mar 01, 2041
T	2895	2902	YD32925	YD32932	Mar 01, 2027
T	2903	2938	YD32933	YD32968	Mar 01, 2041
T	2939	2949	YD32969	YD32979	Mar 01, 2027
T	2950	2957	YD32980	YD32987	Mar 01, 2041
T	2958		YD32988		Mar 01, 2044

T	2959		YD32989		Mar 01, 2041
T	2960		YD32990		Mar 01, 2044
T	2961		YD32991		Mar 01, 2041
T	2962	2971	YD32992	YD33001	Mar 01, 2044
T	2972	2997	YD33002	YD33027	Mar 01, 2040
T	3004		YD33034		Mar 01, 2040
T	3005		YD33035		Mar 01, 2041
T	3006		YD33036		Mar 01, 2040
T	3007		YD33037		Mar 01, 2041
T	3008	3045	YD33038	YD33075	Mar 01, 2040
T	3126	3131	YD33156	YD33161	Mar 01, 2032
T	3132	3133	YD33239	YD33240	Mar 01, 2027
WH	1	61	YF41901	YF41961	Apr 28, 2038
Smac	1	2	YD07302	YD07303	Mar 01, 2025
Smac	3		YD07301		Mar 01, 2025
AT	1	206	YF44251	YF44456	Apr 28, 2034
EN	51	72	YD01451	YD01472	Apr 28, 2036
EN	111	132	YD01511	YD01532	Apr 28, 2036
EN	171	192	YD01571	YD01592	Apr 28, 2036
OS	1	576	YD69731	YD70306	Apr 28, 2034
OS	653	676	YD70383	YD70406	Apr 28, 2036
OS	749	770	YD70479	YD70500	Apr 28, 2036
OS	841	846	YD70571	YD70576	Apr 28, 2036
OS	955	956	YD70685	YD70686	Apr 28, 2036
OS	979	1076	YD70709	YD70806	Apr 28, 2036
PH	1	11	YE55701	YE55711	Apr 28, 2034
PH	12		YE55712		Apr 28, 2030
PH	13	22	YE55713	YE55722	Apr 28, 2034
ST	51	86	YD26951	YD26986	Apr 28, 2040
ST	118	253	YD27018	YD27153	Apr 28, 2040
ST	280	349	YD27180	YD27249	Apr 28, 2040
ST	362	431	YD27262	YD27331	Apr 28, 2040
STEN	1	16	YC99501	YC99516	Apr 28, 2045
STEN	21	38	YC99523	YC99540	Apr 28, 2043
STEN	39	54	YD08485	YD08500	Apr 28, 2043
STEN	55	62	YD10405	YD10412	Apr 28, 2043
T	2998	3003	YD33028	YD33033	Mar 01, 2040
T	3046	3125	YD33076	YD33155	Mar 01, 2040

**Expiry dates include 2017 work which has been filed and has received assessment credit.*

The Anubis cluster portion of the property lies 174 km northeast of Mayo, the nearest supply centre. The closest road access is to the community of Keno City, situated 49 km by road northeast of Mayo. Access to the project in 2017 was routed via Mayo to the Stewart airstrip approximately 200 km east-northeast of Whitehorse. Alkan Air provided the project's service flights several times per week with a Cessna 208B Grand Caravan. The locations of the Stewart airstrip and Nadaleen camp is shown on Figure 4.

Daily access to work areas on the project was provided by Horizon Helicopters utilizing 2 Eurocopter AS350 SD2 (A-Star). This machine also transferred all supplies into camp from the airstrip and completed the diamond and RAB drill moves between their respective drill sites.

HISTORY AND PREVIOUS WORK

The earliest recorded exploration in the area of the Nadaleen Trend occurred when McIntyre Mines staked the Birkeland claims, then called Tom and Mom, in 1974 approximately 200 km east of Mayo. Mapping, geochemical soil sampling, trenching and the drilling of 10 BQ and 22 Winkie holes were carried out in 1975. The most significant results achieved were 4.4% zinc, 0.5% lead and 2.7 g/t silver over 1.8 m in DDH75-31 (Shearer, 1975). In 1978, McIntyre Mines entered a joint venture with Canadian Superior Exploration Ltd. No further work was reported and the Birkeland claims expired.

In 1976 the Sian claims were staked approximately 37 km southwest of the Birkeland claims by McIntyre Mines following prospecting of geological targets. Mapping, geochemical soil sampling and EM, mag and SP geophysical surveys were carried out in 1977. Gold was tested for in four grab samples; however, results did not exceed the detection limit for gold (Birkeland, 1978). After entering a joint venture with Canadian Superior Exploration, detailed mapping, trenching and sampling was completed in 1979. Results of this work found low grade lead and zinc throughout a folded dolomite unit. One diamond drill hole was completed in 1980 but did not intersect any mineralization. No further work was recommended and in 1982 the Sian property passed to Serem Ltd, after which the claims were voided and no further exploration was reported.

The Highhawk and Leah showings are situated approximately five and ten kilometres from the Sian showing. They occur within the Leah claims which adjoin the Star, Lee and Nod claims. The Leah claims were staked by a syndicate composed of Highhawk Mines Ltd, Envoy Resources Ltd, Sprott Silver Mines Ltd, Hecate Gold Corporation and Bow River Resources Ltd in 1976. The Star claims, which adjoined to the north, were staked by private prospectors and optioned to Prism Resources Ltd in 1977. Mapping and soil geochemical testing completed by Prism in 1977 returned disappointing results and all claims were dropped. The Lee and Nod claims were staked to the south of the Leah claims in December of 1976 and were optioned to Tay River Mines. No work is on record for these claims and they were allowed to lapse.

McIntyre Mines staked the Jam property in 1977, 4.2 km north of its Sian property. Soil and silt sampling in conjunction with mapping later that year found a favorable dolomite breccia host rock with associated zinc and lead sulphide mineralization. No further work was reported and the Jam claims lapsed.

In 1976, the Black, Ida, Red and Eira claims, located approximately 8 km east of the Sian claims, were staked by the Ortell Syndicate (Precambrian Shield Resources Ltd, Giant Yellowknife Mines Ltd, Nemco Resources Ltd and Highwood Resources Ltd). In 1977, the Black and Ida claims were optioned to a joint venture between DeJour Mines Limited and Nova-Co Exploration Limited (Thompson, 1977). Mapping and geochemical sampling on the Ida claims later that year returned moderately anomalous zinc values, with erratic lead and silver support.

Also in 1977, prospecting and stream sediment sampling carried out on the Eira property by the Ortell Syndicate returned anomalous silver and zinc results, up to 2.4 ppm and 680 ppm respectively (Curry, 1977). This led to more detailed grid soil sampling and geological mapping. This work returned a number of moderate, non-coincident silver, zinc and lead anomalies.

In 2001, the Geological Survey of Canada completed a regional stream sediment sampling program (Heon, 2003), which included coverage of the current Sten claims, in an area now referred to as the Nadaleen Trend. Creeks draining this area returned weak gold and strong arsenic anomalies.

ATAC's initial interest in the area was to follow up on an anomalous arsenic silt sample collected by the Geological Survey of Canada in 2001. Over a three day period in 2009, 89 stream sediment, 1 rock and 9 soil samples were collected on the Sten claims. These samples returned a string of moderately to very strongly anomalous results ranging from 12 to 1775 ppb gold and 123 to 155,000 ppm arsenic (Eaton, 2010). Additional claims were staked by ATAC as a result of this work. A summary of the work completed to date by ATAC is presented below in Table II. Locations of showings and historical work areas referred to in this report can be found on Figure 3.

TABLE II: Annual ATAC Results Summary Table

Year of work	Work Completed	General Results	Highlight Results	Reference
2010	Mapping Prospecting, soil sampling and 1289.24 m of diamond drilling in 9 holes	Drilling defined three Carlin-type gold bearing zones – Osiris (5 holes), Conrad (2 holes) and Ibis (1 hole)	7 holes intersected significant mineralization. **Osiris** – OS-10-01 65.20 m of 4.65g/t Au. **Conrad** – OS-10-08 21.13 m of 8.03 g/t Au **Ibis** - OS-10-07 17.00 m of 0.92 g/t Au	Lane, 2011
2011	Diamond drill program (26,675 m in 89 holes), mapping, prospecting, airborne magnetic and radiometric geophysical survey	Mapping continued to refine the stratigraphic section, prospecting identified prospective anomalies. Targeted drilling at Osiris, Ibis and Conrad Zones and scout drilling at Atum, Amon, Dale, Ptah and Pyramid Zones	50 holes intersected significant mineralization. **Conrad** – OS-11-010 114.93 m of 3.15 g/t Au **Ibis** – OS-11-073 51.82 m of 3.13 g/t Au **Osiris** – OS-11-082 44.20 m of 4.41 g/t Au **Sunrise** – OS-11-053 30.98 m of 3.09 g/t Au	Lane and Carne, 2012 & McDivitt, 2012
2012	Diamond drill program (36,920 m in 116 holes) , soil sampling, mapping,	Soil sampling and prospecting led to the discovery of gold mineralization at the	67 drill holes intersected significant mineralization. **Anubis** – AN-12-001 8.51 m of 19.85 g/t Au	Lane et al., 2013

	auger sampling and geophysical surveys	Pharaoh and Anubis Zones. Detailed drilling at Conrad, Osiris, Ibis, Atum, Sunrise, Pyramid, Anubis and GT Zones	**Conrad** – OS-12-114 42.93 m of 18.44 g/t Au **Ibis** – OS-12-120 27.43 m of 6.28 g/t Au **Osiris** – OS-12-139 27.43 m of 2.00 g/t Au **Sunrise** – OS-12-173 14.86 m of 10.54 g/t Au	
2013	Diamond drill program (7,303 m in 26 holes), soil sampling, prospecting, mapping, hand and excavator pit sampling	Discovery of six new targets including Lyra, Corona, Dorado, Draco, Columbia and Zodiac	15 drill holes intersected significant mineralization. **Conrad** – OS-13-219 68.58 m of 4.23 g/t Au **Ibis** – OS-13-207 21.87 m of 2.62 g/t Au **Sunrise** – OS-13-206 15.24 m of 9.83 g/t Au	Lane and Phillips, 2014)
2014	Diamond drill program (4,733 m in 10 holes), trenching, auger drilling and surface mapping	Extended known soil geochemical anomalies and improved geologic understanding of local units and structures	6 drill holes intersected significant mineralization. **Conrad** – OS-14-227 30.79 m of 9.50 g/t Au **Sunrise** – OS-14-225 12.19 m of 3.09 g/t Au	Lane and Phillips, 2015
2015	RAB drill program (482 m in 31 holes) and a diamond drill program (1,289 m in 1 hole)	Discovery of the Orion zone, tested continuity and between Conrad Upper and Middle zones	1 drill hole intersected significant mineralization. **Conrad** – OS-15-231 124.96 m of 3.02 g/t Au 1 RAB hole intersected significant mineralization **Orion** – ARB-15-026 47.24 m of 3.79 g/t Au	Lane and Phillips, 2016
2016	Diamond drill program (1,540 m in 10 holes) and RAB drill program (2,141 m in 42 holes)	Discovery of oxide gold mineralization in the Anubis Fault, confirmed RAB drill results in diamond drill core at Orion	6 drill holes intersected significant mineralization. **Orion** – AN-16-010 61.29 m of 2.75 g/t Au	Lane and Walsh, 2017
2017	Diamond drill program (15,088 m in 32 holes), RAB drill program (1,532 m in 32 holes), mapping, excavator trenching, soil sampling, ridge and spur sampling, gravity survey.	Discovered high-grade gold mineralization in the 650- and 850-faults at Conrad, expanded the Osiris and Sunrise Zones at depth and refined the stratigraphy of the Orion project	25 drill holes intersected significant mineralization. **Conrad** – OS-17-259 76.20m of 3.54 g/t Au **Sunrise** – OS-17-249 15.24 m of 13.52 g/t Au **Osiris** – OS-17-244 12.19 m or 9.60 g/t Au	Coulter and Lane, 2018

GEOMORPHOLOGY AND CLIMATE

The Nadaleen Trend occurs on the eastern half of the 185 km east-west oriented Rackla Gold Property in the Selwyn and Wernecke Mountains and is drained by creeks that flow into the Nadaleen, Rackla and Stewart Rivers, all part of the Yukon River watershed. Local topography varies from low forested valleys to alpine terrain and features generally east-west to northwest trending broad glaciated valleys. Elevations range from approximately 600 to 2000 m above sea level. Outcrop is most abundant near ridge crests and in actively eroding creek beds. Most hillsides are talus covered at slope breaks and are blanketed by glacial till at lower elevations. The region was glaciated in the Late Pleistocene, 22,000 years ago (Duk-Rodkin, 1999) with ice flow generally occurring from east to west.

Treeline in the vicinity of the project is at about 1500 m. Slopes above that elevation, especially steep north facing slopes, have little vegetation. Moderately steep, south facing slopes are well drained and are often lightly forested with poplar and spruce. The density and size of vegetation gradually increases on lower slopes, and the valley floors are well treed with mature black spruce. Understory vegetation typically consists of low shrubs and moss.

The climate in the Nadaleen Trend area is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, mild summers. Although summers are relatively mild, arctic cold fronts often cover the area and snowfall can occur in any month. The property is mostly snow free from early June through late September.

REGIONAL GEOLOGY

The Geological Survey of Canada performed geological mapping in the vicinity of the Rackla Gold Property at 1:250,000 scale in the early 1970s (Blusson, 1974). In 1999, the Geological Survey of Canada (Gordey and Makepeace, 1999) completed a compilation of Yukon-wide geology and updated the lithological units named in the Rackla area. The Yukon Geological Survey conducted mapping on 106C/03 and 106C/04 1:50,000 map sheets in 2010 and 2011 (Colpron, 2012 and Chakungal and Bennett, 2010), completed map sheets 106D/01, 106C/01-04 in 2012 (Colpron et al., 2013), extended coverage to the east in 2013 on map sheet 106B/04 (Moynihan, 2014). In early 2016 the Yukon Geological Survey released a revised bedrock geology map for Yukon that built upon the previous compilations (Colpron, 2016).

The Rackla Gold Property straddles the boundary between deep water dominantly clastic rocks of the Selwyn Basin to the south and shallower water shelf strata of the Mackenzie platform to the north (Colpron and Nelson, 2011). The Dawson Fault, which juxtaposes rocks of Selwyn Basin against rocks of Mackenzie Platform, is a crustal break that may date back to late Neoproterozoic rifting and was reactivated as a north directed thrust in the Cretaceous (Macdonald et. al, 2010). The tectonic setting of the Rackla Gold Property is shown in Figure 4, while regional relationships and the importance of the Dawson Fault system are presented in Figure 5.

Recent mapping by the Yukon Geological Survey has refined the Proterozoic to Paleozoic sedimentary stratigraphy underlying the Nadaleen Trend. A description of this revised mapping

is outlined below, with Proterozoic to Lower Cambrian rocks described in Table II and Paleozoic rocks in Table III.

TABLE III: PROTEROZOIC TO LOWER CAMBRIAN ROCKS ALONG THE NADALEEN TREND

REGIONAL LOCATION	AGE	REGIONAL UNIT NAME
North of Kathleen Lakes fault	Neoproterozoic	Windermere Supergoup and Rapitan Group stratigraphy.
Hanging wall (south) of Dawson Thrust fault.	Neoproterozoic to Cambrian	Hyland Group, Earn Group, with south eastern areas dominated by Gull Lake Formation and volcanic rocks of the Old Cabin Formation.
Between Kathleen Lakes and Dawson Thrust faults		Nadaleen and Blueflower Assemblages correlative with the uppermost portion of the Windermere Supergroup overlain by upper Hyland Group stratigraphy.

TABLE IV: PALEOZOIC ROCKS ALONG THE NADALEEN TREND

FACIES	AGE	ROCK TYPE
Off Shelf Rocks	Ordovician to Lower Devonian	Black shale of the Road River Group
	Ordovician to Silurian	Limestone and calcareous sandstone
	Middle Devonian	Limestone
	Middle Devonian to Lower Mississippian	Silty-mudstone and limestone; and shale of the Earn Group
	Mississippian to Lower Devonian	Clastic rocks
Platform Rocks	Upper Cambrian to Devonian (?)	Limestone and Dolostone

To date, mineralization along the Nadaleen Trend has dominantly been found between the Kathleen Lakes and Dawson Thrust Faults.

PROPERTY GEOLOGY

The distribution of lithologies and regional scale structures defined to date along the Nadaleen Trend are shown on Figure 6. Stratigraphic relationships between the mapped units along the Nadaleen Trend are shown on a stratigraphic section on Figure 7.

It is believed that the Nadaleen Trend area underwent extensive deformation as part of a Mesozoic to early Cretaceous fold and thrust event, followed by a transition into a probable strike slip regime. Two major regional structures transect the property: the Dawson Thrust and the Kathleen Lakes Faults. The Dawson Thrust, historically described as defining the northern edge of Selwyn basin, placed Precambrian slope and basinal sedimentary rocks over Paleozoic

shelf carbonates during a Jurassic to Cretaceous compressional tectonic event. This fault is likely a much older structure, possibly dating back to Precambrian rifting, which was reactivated during a later compressional regime.

The Kathleen Lakes Fault marks the contact between Paleozoic platform rocks to the north and Paleozoic shelf to basin rocks to the south in the western part of the property. Both the Dawson Thrust Fault and Kathleen Lakes Faults become difficult to trace to the east as they move into broad valleys covered by a thick layer of glacial till. The Nadaleen Fault near the eastern end of the property appears to be a splay off the Kathleen Lakes Fault.

The prevalence of debrite and turbidite facies within almost all units, along with the highly variable stratigraphic thicknesses of units provides strong evidence for long lived syn-sedimentary tectonism.

ANUBIS AREA TO OSIRIS AREA – PROPERTY GEOLOGY

Lithologies of the Nadaleen Trend between the Anubis Area and Osiris Area have been divided into three groups: Paleozoic Rocks, Neoproterozoic to Cambrian Rocks and Neoproterozoic Rocks. Descriptions of each of these are provided below, while maps outlining the distribution of these units are shown on Figures 11 and 12.

Paleozoic Rocks – Are exposed from the Pyramid Zone to just south and west of Nadaleen Camp. This group has been subdivided into nine lithologically distinct map units:

- **P**: Well bedded, typically yellow-orange weathered, likely reworked, sandy limestones (mudstones to predominately crinoidal wacke-packstones, to fossiliferous floatstones, in place with coarse lithic clasts), possibly calrcareous sandstones to conglomerates interbedded with non-calcareous shales.

- **PM**: Shale-siltstone interbeds of limestone (mostly crinoidal wacke-packstones and mudstones) and siliceous rocks, likely formed by diagentietc silicicfication of carbonate (limestone or calcarente) beds.

- **M**: Light grey, thick bedded spire-forming limestones, predominately crinoid packstones. Common presence of diagenetic(?) silicification in the form of bands, lenses and completely replaced beds up to several meters thick. Common karst features(caves, dissolution cavities with speleothems and infill breccia).

- **MD30**: Steel grey-black, laminated non-calcareous shale, calcareous shale and shaly mud limestone and discontinuous interlayered thin (1-5mm) bioclastic (crinoid fragments) and lithic (chert and shale) packstones.

- **MD20:** Steel grey-black, laminated non-calcareous shale with interlayered lithic (chert clast rich) arenite, gritstone and rarer conglomerate

- **MD10**: Carbonaceous non-calcareous and calcareous shales and siltstones, contain fossiliferous wackestone-rudstone debrisflow beds with 2-hole crinoids.

- **D40**: Grey-tan, massive bedded (rare bedding surfaces) lime mudstone, bioclastic wackestone, packstone. Macro-fossils including rugose colonial coral (hexagonaria), brachiopods, bryozoans, single and 2-hole crinoids.

- **D30**: Grey-tan dolomite, burrows and fenestral fabric, low clastic input based on geochemistry.

- **D20**: Grey-tan dolomite, burrows and fenestral fabric higher clastic input based on the geochemistry.

- **D10**: Dark grey to black fossiliferous limestone wackestone, locally variably dolomitic with hexagonal corals rugose corals and brachiopods

- **S30**: Similar to S10, light-medium grey, coarse thick bedded bioclastic rudstone, locally graded beds and basal bed scours and flute casts. Coarse fossil debris includes whole and broken rugose and colonial corals (halysites, syringoporella(?)), bryozoans, stromatoporoids, brachiopods, rare trilobites and crinoids (including 'star' crinoids)

- **S20**: Dark-medium grey couplets of 10-20 cm graded bed lime fine-grained wackestone-mudstone and laminated to cm-planar bedded lime mudstone.

- **S10:** Light-medium grey, coarse, thick bedded bioclastic rudsotne, locally graded beds and basal bed scours, flute casts. Coarse fossil debris include whole and broken rugose and colonial coral (halysites, syringoporella (?), bryozoans, stromatoporoids, brachiopods, rare trilobites and crinoids (including 'star' crinoids).

- **O30:** Yellow-orange weathering, grey-brown laminated calcareous siltstone and planar cm-bedded lime mudstone. Locally includes coarse lithic-fragmental rudstone-floatstone (debris flow).

- **O20:** Black laminated carbaceous graptolitic shale and cm-bedded, siliceous mudstone. Graptolites include isograptus, tetragraptus, didymograptus, phyllograptus and dicanograptus.

- **O10:** Medium grey, generally massive bedded coarse lithic fragmental rudstone-floatstone. Mostly rounded lime mudstone clasts and brown-black laminated siliceous mudstone. Locally contains fine fossil fragments (crinoid, brachiopod shells).

Neoproterozoic to Cambrian Rocks - This stratigraphy is exposed across the entire length of the map area. It is divided into two lithologic map units as follows:

- **PCd**: Neoproterozoic (to Cambrian?) dolostone

- **PCs**: Neoproterozoic (to Cambrian?) black carbonaceous shales to siltstone at the south flank of the property.

- **D:** "Whitecliff" dolostone (to dolomitic limestone?); likely fault-bounded slice, stratigraphic setting unknown

- **Cs1:** Buff-brown, cm bedded fine-medium grained quartz sandstone. Bedding parallal burrows.

- **PCn:** Maroon-green shale with thin-interbedded fine-grained sandstone, prominent pencil cleavage

- **pC:** Angular dolomite fragment rudstone with a lime mud matrix, capped by black, crystalline limestone.

OSIRIS AREA – PROPERTY GEOLOGY

Lithologies in the Osiris Area have been subdivided from the regional lithologies due to the extensive detailed mapping and core logging that has taken place between 2010 and 2017. Detailed descriptions of each lithology are outlined below, while their distribution with respect to one another is displayed on Figure 8. From oldest to youngest, these include:

- **NONAD:** The North of Nadaleen mudstone is part of the upper Ice Brook Formation and is a light teal-green to maroon and brown mudstone with minor interbedded quartz pebble conglomerate. The mudstone displays distinctive rusty brown weathering.

- **C-LST1:** The Conrad limestone 1 is part of the lower Nadaleen Formation and is a light grey, silty laminated clastic limestone with cone in cone and beef calcite, and wispy fine quartz sand layers.

- **C-SLC**: The Conrad siliciclastic unit is part of the Nadaleen Formation and is a grey-green pyritic siltstone and mudstone, poorly sorted matrix-supported quartz pebble conglomerate with lesser grey, well sorted, weakly calcareous sandstone. The conglomerate, informally referred to as 'starry night', consists of rounded quartz pebbles floating in a mix of sand and silt with occasional larger clasts that appear to be rip up clasts of matrix material.

- **C-DST:** The Conrad dolostone is part of the Nadaleen Formation and is a finely crystalline hydrothermal dolostone with distinct black crackle breccia veinlets in the Conrad area. Further to the west, nearer to the Nadaleen fault, it is a non- to partially-dolomitzied limestone.

- **C-SHL:** The Conrad shale is part of the Nadaleen Formation and is a black, laminated siltstone to shale with local intervals of sandstone associated with trace disseminated pyrite.

- **C-LST2**: The Conrad limestone (2) is part of the Nadaleen Formation and is a dark, crystalline lime mudstone, calc-arenite, and lensoidal pebble to boulder conglomerates. It is interpreted as debris flows with lesser interbedded siltstone and grey to black shale. Clast composition of the conglomerate is dominated by limestone and lesser dolostone.

- **O-MST**: The Osiris mudstone is part of the upper Nadaleen Formation and is a finely laminated maroon and green to greenish-grey siltstone. This unit can be subdivided into an overlying maroon and green siltstone and a lower greenish-grey siltstone.

- **O-LST1:** The Osiris limestone (1) is part of the lower Gametrail Formation and is a well bedded, tan and grey limestone with primary sedimentary structures. Monolithic, intraclast rudstone layers, averaging 0.5 - 2 m thick, are common throughout the unit. They consist of randomly oriented to imbricated, tabular to equant clasts in a carbonate mudstone matrix. Clast composition is almost exclusively the same as the enclosing carbonate mudstones.

- **O-DST:** The Osiris dolostone is part of the middle Gametrail Formation and is a fine-grained diagenetic dolostone. The dolostone retains many of the original depositional fabrics identical to O-LST1 (see above for further description).

- **O-DMT:** The Osiris diamictite is part of the upper Gametrail Formation and is a limestone pebble to boulder conglomerate, predominantly matrix supported debrites. Clasts vary from centimeter- to meter-scale and comprise limestone that is similar to O-LST1. Matrix composition is variable comprising non to weakly calcareous green siltstone and shale and/or crystalline limestone. The bottom of the unit is consistently marked with a non-calcareous siltstone horizon that is approximately 5 m in true thickness.

- **O-LST2:** The Osiris limestone (2) is part of the lower Blueflower Formation and is a very dark grey-black, coarsely crystalline limestone. The base of the unit is often associated with beds of polymict floatstone containing clasts of orange-weathering dolostone, limestone, rounded quartz pebbles and minor shale.

- **O-GAB:** The 465.6 ± 4.4 Ma (Tucker, 2015) Osiris gabbro has a slight rusty coating on weathered surfaces and dark grey-green on fresh surfaces. The gabbro is composed of medium to coarse grained amphibole, plagioclase and clinopyroxene.

- **C-INT:** The 74.4 ± 1 Ma (Tucker, 2015) Conrad gabbroic dikes dip approximately 60° to the north, 2 sub-parallel dikes trend roughly east-west and are up to 20 m in true thickness. The dikes are generally competent in drill core, pale beige grey in colour and pervasively altered. The gabbro dikes are composed of coarse plagioclase, clinopyroxene and abundant secondary carbonate and pyrite.

MINERALIZATION

The focus of exploration along the Nadaleen Trend is for Carlin-type gold mineralization. Carlin-type deposits have been reported around the world, but to date, major economic occurrences have been restricted to the Great Basin of the southwestern United States. Recent discoveries along the Nadaleen Trend have many characteristics of Carlin-type deposits, and hold promise of great potential for new discoveries of economic importance (Arehart et al., 2013).

Carlin-type deposits are characterized as sediment-hosted micron-scale gold hosted within disseminated arsenian pyrite (Arehart, 1996). The deposits are typically found as replacement bodies in silty-carbonates within slope and basinal facies and have both structural and stratigraphic controls with a strong relationship to deep seated crustal-scale structures (Cline et al., 2005; Muntean et al., 2011). Carlin-type mineralizing fluids are typically weakly acidic, resulting in the dissolution of carbonate which is followed in the mineralization process by precipitation of quartz and gold-bearing arsenian pyrite and trace metal enrichments of As-Sb-Hg-Tl (Muntean et al., 2011). Permeability is the key factor controlling the distribution of alteration and mineralization and features that control it include primary fluid conduits, such as fault and shear zones, as well as stylolites, veinlets and fold hinges (Tucker et. al., 2013).

Along the Nadaleen Trend, Carlin-type mineralization has been drill-proven at the Osiris, Conrad, Sunrise, Ibis, Anubis and Orion Zones. Gold mineralization is best developed within limestone sequences where alteration, characterized by decalcification occurs in association with realgar mineralization peripheral to calcite flooding. Mineralization hosted within non-calcareous rocks generally occurs within brittle fractures and is directly associated with fault breccia and/or intense fracture development. Table V presents a summary of all significantly mineralized zones along the Nadaleen Trend.

TABLE V – SUMMARY OF MINERALIZED ZONES WITHIN THE NADALEEN TREND TARGETED IN 2017

Area	Mineralized Zone	Year Discovered	Comments	Mineralization Type
Osiris Area	Osiris	2010	Original location of Carlin-type mineralization in 2010. Discovery hole OS-10-001 returned 65.20 m of 4.65 g/t gold. 63 drill holes have been completed and the zone remains open down dip and to the north.	Carlin-Type Au
	Conrad	2010	800 metres northeast of Osiris, Conrad is the most advanced Carlin-type gold zone with 123 holes drilled to date. It has a total strike length of 800 m and remains open in all directions. Highlight 2012 hole intersected 42.93 m of 18.44 g/t gold in hole OS-12-114.	Carlin-Type Au
	Ibis	2011	Encouraging near surface gold zone directly south of Osiris with 26 drill holes. Highlight 2012 drill hole intersected 27.43 m of 6.28 g/t gold in OS-12-120. Mineralization remains open at depth.	Carlin-Type Au
	Sunrise	2012	Directly east of Osiris the true discovery of the Sunrise zone was uncovered during road building in	Carlin-Type Au

			2012. Hole OS-17-249 intersected 15.24 m of 13.52 g/t gold. Sunrise Zone remains open at depth and along strike.	
	Atum (formerly Isis)	2010	Large gold in soil anomaly 600 m west of Osiris. Rock grab samples up to 28.9 g/t Au. To date, most significant mineralization encountered during drilling includes 17.00 m of 0.92 g/t Au in hole OS-10-07.	Carlin-Type Au
Anubis Area	Anubis	2012	Located 10 km west of Osiris, outcrop samples collected in 2012 returned up to 139 g/t Au. Hole AN-12-01 intersected 8.51 m of 19.85 g/t gold within strongly altered carbonate interbeds within an argillite package.	Carlin-Type Au
	Ana	2012	550 m northwest of Anubis, grab samples from hand pits collected at the sites of anomalous gold-in-soil samples returned up to 5.59 g/t Au in clay rich fault breccia. Two drill holes targeted this fault zone at depth in 2012 though no significant mineralization was intersected.	Carlin-Type Au
	Draco	2013	1.4 km northwest of Anubis within a moderate silver, mercury and thallium geochemical anomaly. Excavator pits dug in 2013 in the vicinity of the soil anomaly returned rock samples yielding up to 1.57 g/t Au in moderately oxidized thickly bedded limestone.	Carlin-Type Au
	Columba	2013	1.8 km northwest of Anubis on a north facing thickly covered area within a strong mercury anomaly. Grab samples from excavator pits returned up to 0.52 g/t Au from altered argillite samples collected proximal to the Anubis Fault.	Carlin-Type Au
	Dorado	2013	2.2 km northwest of Anubis within a moderately strong mercury and thallium soil geochemical anomaly. Grab samples from hand pits returned up to 4.64 g/t Au in strongly oxidized limestone.	Carlin-Type Au
	Zodiac	2013	3.5 km northwest of Anubis within a strong mercury and thallium anomaly. Mineralization was confirmed through prospecting and hand pitting in 2013. Grab samples from hand pits returned up to 1.03 g/t Au within gouge material of the Anubis Fault. Samples mineralized in up to 900 g/t Ag, 11.75 % Pb and 28.99% Zn showed strong silica alteration of dolomitic limestone proximal to the Anubis fault.	Carlin-Type Au & earlier (?) Ag, Pb, Zn
	Corona	2013	400 m east-northeast of Anubis, within a moderately strong arsenic and strong thallium anomaly. Samples collected from excavator pits dug within the surface trace of the Northern Fault returned gold up to 2.41 g/t Au within altered argillite. Arsenic and lead oxide coated samples containing galena returned up to 2,910 g/t Ag, and 73.15 % Pb.	Carlin-Type Au & earlier (?) Ag, Pb
	Hydra	2012	600 m north of Anubis, with a strong arsenic and thallium soil geochemical anomaly. Samples collected from hand pits returned up to 0.80 g/t Au within rubbly variably oxidized limestone. Excavator pit sampling in 2013 returned samples with up to 151	Carlin-Type Au & earlier (?) Ag, Pb

			g/t Ag, 0.2 % Pb and 2.45 % Zn.	
	Orion	2015	300 metres northwest of the Anubis discovery outcrop. Hole AN-16-010 twinned the Orion discovery hole ARB-15-026, and returned 61.29 m of 2.75 g/t Au.	Carlin-Type Au
	Pyramid	2011	4 by 0.6 km arsenic anomaly and orpiment/realgar boulder train about 10 km northwest of Anubis.	Carlin-Type Au
	Lyra	2013	2.95 km northwest of Anubis and associated with a strong thallium soil geochemical anomaly. Silver and lead mineralization occurs associated with galena veinlets up to 2 cm thick within strongly altered dolomite (?) with antimony and lead oxide coating.	Ag, Pb

DIAMOND DRILLING

GENERAL

Diamond drilling was carried out at the Osiris project between June 2nd and September 22nd by Superior Diamond Drilling Ltd. of Powell River, BC. The work was completed using HQ and NQ equipment on a heli-portable Discovery II drill. A total of 11,214.33 m of diamond drilling was completed in 29 holes at the Osiris project and 2,502.71 m of diamond drilling was completed in 4 holes at the Orion project.

The drills were set up on wood framed structures approximately 20 feet long by 20 feet wide. This pad type was prepared by Minconsult Exploration Services. Following completion of the hole, the drill collar was marked with a piece of drill rod cemented into the hole and labeled with the basic drill hole information. Drill hole locations were surveyed using a Leica Geosystems differential GPS.

The drill collar locations are plotted on Figure 11, and key data for the holes are listed in Table VI for the Osiris Project and Table VII for the Orion Project. Geologic cross sections are presented in Figures 12-18. Sampling and analytical procedures, data verification and QAQC results are provided in Appendix III, while geological and sample logs are given in Appendix IV. Certificates of analysis from 2017 sampling are shown in Appendix V.

TABLE VI: 2017 OSIRIS DIAMOND DRILL HOLE SPECIFICS

Zone	Hole Name	Easting	Northing	Elevation	Azimuth	Dip	Depth	Core Size
Conrad	OS -17-232	630262	7112533	1459	38.47	-61	445.62	HQ-NQ
Conrad	OS -17-233	630498	7112485	1394	223.47	-65	683.06	HQ-NQ
Conrad	OS -17-234	630497	7112486	1395	263.47	-57	367.28	HQ-NQ
Conrad	OS -17-235	630260	7112464	1453	38.47	-61	425.50	HQ-NQ
Conrad	OS -17-236	630597	7112432	1322	80.47	-59	472.44	HQ-NQ
Osiris	OS -17-237	629220	7112317	1614	72.47	-60	327.66	HQ-NQ
Conrad	OS -17-238	630799	7112421	1277	7.47	-69	323.70	HQ-NQ
Osiris	OS -17-239	629340	7112276	1633	270.47	-75	327.36	HQ-NQ
Osiris	OS -17-240	629343	7112279	1632	346.47	-58	322.78	HQ

Conrad	OS -17-241	630797	7112328	1260	349.47	-55	356.62	HQ
Osiris	OS -17-242	629368	7112393	1559	275.47	-50	268.83	HQ-NQ
Conrad	OS -17-243	630798	7112328	1260	7.47	-61	403.86	HQ
Osiris	OS -17-244	629379	7112459	1536	277.47	-50	301.14	HQ-NQ
Conrad	OS -17-245	630639	7112300	1333	352.47	-65	420.62	HQ-NQ
Sunrise	OS -17-246	629572	7111942	1774	358.47	-55	213.36	HQ
Sunrise	OS -17-247	629554	7111848	1823	3.47	-55	352.65	HQ-NQ
Conrad	OS -17-248	630296	7112402	1414	21.47	-50	566.93	HQ-NQ
Sunrise	OS -17-249	629554	7111847	1824	3.47	-63	396.24	HQ-NQ
Conrad	OS -17-250	630343	7112253	1395	34.47	-77	603.50	HQ-NQ
Sunrise	OS -17-251	629483	7111928	1767	0.47	-54	226.16	HQ
Sunrise	OS -17-252	629483	7111928	1767	357.47	-67	274.93	HQ
Conrad	OS -17-253	630650	7112145	1361	322.47	-59	659.59	HQ-NQ
Sunrise	OS -17-254	629460	7111865	1763	0.47	-66	423.06	HQ-NQ
Conrad	OS -17-255	630797	7112419	1277	310.47	-60	357.98	HQ-NQ
Osiris	OS -17-256	629383	7112432	1549	269.47	-53	346.86	HQ-NQ
Conrad	OS -17-257	630828	7112509	1321	222.47	-62	304.80	HQ-NQ
Osiris	OS -17-258	629394	7112499	1537	274.47	-52	422.45	HQ-NQ
Conrad	OS -17-259	630828	7112511	1321	255.47	-58	396.24	HQ-NQ
Osiris	OS -17-260	629276	7112475	1525	272.47	-50	223.11	HQ

TABLE VII: 2017 ORION DIAMOND DRILL HOLE SPECIFICS

Zone	Hole Name	Easting	Northing	Elevation	Azimuth	Dip	Depth	Core Size
Orion	BDO-17-001	617013	7113607	1077	27.47	-60	709.27	HQ-NQ
Orion	BDO-17-002	619675	7113135	1539	64.47	-55	669.95	HQ-NQ
Orion	BDO-17-003	617975	7113841	1263	37.47	-55	594.36	HQ-NQ
Orion	BDO-17-004	615567	7114343	1061	37.47	-55	529.13	HQ-NQ

DIAMOND DRILLING RESULTS

Observations from the Osiris Project drilled this year are described below. Significantly mineralized intervals from the holes are listed in Table VII.

TABLE VIII: 2017 SIGNIFICANT DIAMOND DRILL INTERSECTIONS

Zone	Hole	From (m)	To (m)	Interval (m)	Gold (g/t)
CONRAD	OS-17-232	115.21	127.41	12.20	4.91
CONRAD	and	409.04	421.23	12.19	5.97
CONRAD	incl.	410.65	418.19	7.54	8.59
CONRAD	OS-17-233	42.67	79.25	36.58	3.65
CONRAD	incl.	57.91	70.80	12.89	5.51
CONRAD	and	362.71	375.23	12.52	2.48
CONRAD	and	487.68	554.74	67.06	3.35

CONRAD	incl.	492.28	502.09	9.81	7.02
CONRAD	and incl.	510.19	525.33	15.14	7.25
CONRAD	OS-17-234	53.34	86.87	33.53	3.49
CONRAD	OS-17-235	No significant results			
CONRAD	OS-17-236	3.05	30.48	27.43	4.37
CONRAD	incl.	20.46	27.43	6.97	10.66
CONRAD	and	37.06	71.63	34.57	3.52
CONRAD	and	132.59	149.35	16.76	8.59
CONRAD	incl.	133.65	141.55	7.90	17.24
CONRAD	and	190.50	233.17	42.67	3.78
CONRAD	incl.	194.40	201.17	6.77	8.16
OSIRIS	OS-17-237	175.47	192.63	17.16	2.89
CONRAD	OS-17-238	19.81	27.43	7.62	4.96
CONRAD	and	54.86	67.36	12.50	20.78
CONRAD	incl.	64.01	67.36	3.35	35.60
CONRAD	and	259.08	269.49	10.41	7.15
CONRAD	incl.	262.13	267.21	5.08	11.83
OSIRIS	OS-17-239	130.28	144.17	13.89	1.85
OSIRIS	OS-17-240	246.07	255.27	9.20	3.28
CONRAD	OS-17-241	106.68	143.26	36.58	2.10
CONRAD	and	276.34	281.94	5.60	14.46
OSIRIS	OS-17-242	111.79	118.80	7.01	3.11
CONRAD	OS-17-243	No significant intersections			
OSIRIS	OS-17-244	118.26	130.45	12.19	9.60
OSIRIS	and	148.74	154.84	6.10	3.80
OSIRIS	and	176.17	189.92	13.75	1.64
OSIRIS	and	206.65	217.20	10.55	2.50
OSIRIS	OS-17-245	238.53	240.53	2.00	11.95
OSIRIS	and	282.13	300.23	18.10	2.56
SUNRISE	OS-17-246	No significant intersections			
SUNRISE	OS-17-247	311.50	319.13	7.63	13.70
CONRAD	OS-17-248	269.75	277.37	7.62	2.65
CONRAD	and	405.38	411.48	6.10	3.32
SUNRISE	OS-17-249	329.18	339.60	10.42	7.97
SUNRISE	incl.	332.23	336.84	4.61	14.97
SUNRISE	and	344.42	359.66	15.24	13.52
SUNRISE	incl.	347.47	356.62	9.15	21.50
CONRAD	OS-17-250	505.00	515.11	10.11	8.44
CONRAD	incl.	507.71	512.64	4.93	15.52
CONRAD	and	531.76	536.45	4.69	5.46
SUNRISE	OS-17-251	168.46	174.35	5.89	3.76
SUNRISE	incl.	168.46	169.58	1.12	12.80
SUNRISE	OS-17-252	192.63	196.54	3.91	8.39
SUNRISE	incl.	195.39	196.54	1.15	19.15
CONRAD	OS-17-253	580.64	601.98	21.34	1.76
SUNRISE	OS-17-254	322.64	328.57	5.93	4.50
SUNRISE	incl.	322.64	325.53	2.89	7.88
SUNRISE	and	368.20	381.88	13.68	4.55

SUNRISE	incl.	374.29	376.96	2.67	15.50
CONRAD	OS-17-255	27.43	41.15	13.72	3.57
CONRAD	and	123.44	145.00	21.56	9.33
CONRAD	incl.	124.97	135.87	10.90	14.57
OSIRIS	OS-17-256	133.43	147.86	14.43	2.45
CONRAD	OS-17-257	30.48	42.67	12.19	9.44
OSIRIS	OS-17-258	271.88	288.34	16.46	5.29
OSIRIS	incl.	277.98	285.29	7.31	7.41
CONRAD	OS-17-259	57.91	83.82	25.91	5.44
CONRAD	incl.	67.06	83.82	16.76	7.40
CONRAD	and	170.69	246.89	76.20	3.54
CONRAD	incl.	170.69	204.22	33.53	7.17
OSIRIS	OS-17-260	46.19	58.82	12.63	1.76

Osiris Project Summary

Drilling in 2017 started by testing a series of NW-SE trending structures at Conrad termed the 350-, 650- and 850-faults. The goal of this work was to determine if these were high-grade gold-bearing feeder structures to the system. Additionally, shallow step-out drilling was conducted at Osiris and Sunrise.

A total of 6,787.74 m was drilled at Conrad in 15 diamond drill holes. Drilling targeted a series of NW-SE trending structures at Conrad termed the 350-, 650- and 850-faults in addition to step-out drilling. Holes OS-17-238 and OS-17-257 intersected 12.50 m of 20.78 g/t Au and 12.19 m of 9.44 g/t Au, respectively, in what is now believed to be the 850-fault zone. In core, the zone appears as a ~10 m wide damage zone that is dark black in colour, is highly fractured and contains disseminated realgar throughout. The exact orientation and nature of the 850-fault zone is currently unknown due to limited drill intercepts; however, is thought to be a NW-SE trending normal fault. The nature of the 650-fault is also unclear; however, is also thought to be a gold-bearing NW-SE trending normal fault. The 650- and 850-faults are thought to represent a feeder structure to Conrad and possibly represent a broader fault zone rather than two discrete faults. Drilling at the 350-fault structure resulted in defining a large ~50m wide NW-SE trending right-lateral strike slip fault. It is not determined if the 350-fault plane is mineralized or if it is a broad damage zone that may facilitate fluid flow. Additional drilling is recommended along the 650- and 850-fault structures to determine the extent of the higher grade gold mineralization, particularly where intersecting the Conrad Limestone at depth.

A total of 1,886.40 m was drilled at Sunrise in 6 diamond drill holes. Drilling in 2017 targeted additional step-out drilling at depth. Hole OS-17-249 intersected the highest grade gold intercepts to date at Sunrise: 15.24 m of 13.52 g/t Au and 10.42 m of 7.97 g/t Au. These results were highly encouraging as not only were these the highest grades but also the Sunrise zone appears to be bifurcating at depth. The Sunrise zone is open to the east and at depth.

A total of 2,540.19 m was drilled at Osiris in 8 diamond drill holes. Hole OS-17-244 intersected the highest grade gold intercepts to date at northern Osiris: 12.19 m of 9.60 g/t Au. Systematic step-out drilling at Osiris has continued to find additional mineralization mostly within the Osiris Limestone 1 unit. The Osiris zone is open to the north and at depth.

Orion Project Summary

Four diamond drill holes were completed at the Anubis cluster this year and are summarized herein. The goal of the drilling was to gain a better understanding of the stratigraphy, lithogeochemistry and structural setting of the various host rocks surrounding the Anubis and Northern Faults. Holes were specifically positioned outside the main pathfinder (As, Sb, Hg and Tl) soil geochemical footprint in order to gain an unaltered understanding of the host rocks.

Hole BDO-17-001was designed to test the base of the Devonian limestone. The hole encountered a sequence of massive limestone and dolomite with local bioturbation and fenestral fabric indicating a shallow shelf depositional environment. The hole did not encounter any significant mineralization. The hole did not reach below the limestone sequence due to drill limitations.

Hole BDO-17-002 was designed to test the Ordovician-Silurian stratigraphy. The hole encountered a mixed package of carbonates and newly identified sub-aqueous mafic volcanic and volcanoclastic rocks. The silicious mudstones between the volcanic-volcanoclastic intervals were enriched in Ag-As-Sb-Cu-Zn-V.

Hole BDO-17-003 was designed to test beneath the section of black shales between the Anubis Fault and the Northern Fault. The hole encountered what is believed to be a typical Devonian stratigraphic sequence with two zones of alteration with elevated Carlin-type trace elements in the hanging wall and within the Northern Fault. This hole confirms robust Carlin-type alteration and mineralization on an outward extension in less favourable rock types.

Hole BDO-17-004 was designed to test the base of the Devonian limestone along the western extent of the Anubis Fault, similar to that of BDO-17-001. The hole interested the Anubis Fault at 486 m and ended in sheared Devonian mudstones. A 57.9 m interval from the hanging-wall limestone to the footwall sheared mudstone was strongly anomalous Carlin-type trace elements. This hole highlights the fertile nature of the Anubis Fault along its mapped western extension and beyond known zones.

DISCUSSION AND CONCLUSIONS

The Rackla Gold Property lies at the boundary between Mackenzie Platform and Selwyn Basin, within geomorphological and geological settings similar to those at the Carlin gold district in northeast Nevada. At the eastern end of the 185 km long Rackla Gold Property, the Nadaleen Trend represents the first discovery of Carlin type gold mineralization in Canada. Progression of the property's known geochemical anomalies has resulted in the discovery of many significant new gold zones.

Diamond drilling in 2017 confirmed the existence of high-grade gold mineralization in the 650- and 850-fault zones at Conrad and discovered the highest grade gold mineralization to date at Sunrise and northern Osiris. Further diamond drilling at the Osiris cluster is warranted as all of the zones are open at depth and along strike.

It is likely that undiscovered gold occurrences within the Nadaleen Trend occur at depth and may have relatively subdued surface signatures. Further surface exploration efforts should focus on areas where the coincident presence of favourable indicator elements in soil occurring in association with favourable stratigraphy as well as structural features which could facilitate auriferous fluid transport and deposition. For example, untested and subdued As and Au soil anomalies exist east of Ibis within the Osiris Limestone and should be a target of future exploration.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

Adam Coulter, M.Sc., GIT

Julia Lane, P.Geo.

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APPENDIX I

STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Adam Coulter, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of Western Ontario in 2013 with a B.Sc. in Honors Specialization in Geology and in 2015 with a M.Sc. in Geology.

2. From 2012 to present, I have been actively engaged in mineral exploration in Yukon Territory, Northwest Territories and Ontario.

3. I am a Geoscientist in Training (GIT) with the Association of Professional Geoscientist of Ontario (Member Number 10136)

4. I have personally participated in the fieldwork reported herein and have interpreted all data resulting from this work.

Adam Coulter, M.Sc., GIT

STATEMENT OF QUALIFICATIONS

I, Julia Lane, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

5. I graduated from the University of British Columbia in 2008 with a B.Sc. in Earth and Ocean Science.

6. From 2006 to present, I have been actively engaged in mineral exploration in Yukon Territory, British Columbia and Ontario.

7. I am a Professional Geologist (P.Geo.) with the Association of Professional Engineers and Geoscientists of British Columbia (Licence Number 39441).

8. I am a partner with Archer, Cathro & Associates (1981) Limited.

9. I have personally participated in the fieldwork reported herein and have interpreted all data resulting from this work.

Julia Lane, P.Geo.

APPENDIX II

STATEMENT OF EXPENDITURES

Statement of Expenditures
Nadaleen Group A
OS 15-36, 51-78, 93-126, 141-576, PH 1-11, 13-22, ST 67-86, 134-253, Sten 21-28, 31-38, T 3082-3125
February 14, 2018

Contract Diamond Drilling (including management)

Superior Diamond Drilling Inc.	$1,250,472.26

Statement of Expenditures
Nadaleen Group B
AT 1-206, EN 51-72, 111-132, 171-192, OS 1-14, 37-50, 79-92, 127-140, 653-676, 749-770, 841-846, 955-956, 979-1076, ST 51-66, 118-133, 280-349, 362-431, Sten 1-16, 29-30, 39-54, 55-62, T 2998-3003
February 14, 2018

Contract Diamond Drilling (including management)

Superior Diamond Drilling Inc.	$890,858.34

Statement of Expenditures
Orion Group C (659 Claims)
Dale 1-12, EN 1-50, 73-110, 133-170, EX 1-18, IS 1-28, OS 641-652, 913-954, 957-978, ST 16-50, 87-117, 254-279, 350-361, Sten 17-20, 63-130, T 776-785, 814-823, 852-861, 894-903, 936-945, 978-987, 1020-1029, 1062-1071, 2948-2957, 2968-2997, 3004-3045, WH 1-61
February 13, 2018

Contract Diamond Drilling and support (including management)	
Superior Diamond Drilling Inc. Hole BDO-17-002	$122,800.08
ALS Chemex Hole BDO 17-002 assays	15,572.48
	138,372.56
Pro-rated Support Costs (including management	
Horizon Helicopters	182,292.38
Minconsult Exploration Services	18,563.93
	200,856.31
Total	$339,228.87

Statement of Expenditures
Orion Group D (691 Claims)
BT 1-192, ST 2-15, T 766-775, 810-813, 848-851, 890-893, 932-935, 974-977, 1016-1019, 1058-1061, 2074-2111, 2132-2157, 2178-2203, 2224-2249, 2270-2295, 2316-2341, 2362-2387, 2410-2427, 2450-2467, 2490-2507, 2530-2547, 2570-2587, 2610-2627, 2650-2667, 2690-2707, 2730-2747, 2770-2787,2812-2830, 2855-2874, 2897-2918, 2944-2947, 2962-2967, 3132-3133
February 13, 2018

Contract Diamond Drilling (including management)	
Superior Diamond Drilling Inc. Hole BDO-17-003	$147,680.69
ALS Chemex Hole BDO 17-003 assays	8,768.85
	156,449.54
Pro-rated Support Costs (including management	
Horizon Helicopters	161,724.46
Minconsult Exploration Services	16,469.38
	178,193.84
Total	$334,643.38

Statement of Expenditures
Orion Group E (686 Claims)
Jam 1-16, ST 432-517, Sten 131-142, T 748-761, 786-799, 824-843, 862-885, 904-927, 946-969, 988-1011, 1030-1053, 1996-2011, 2054-2069, 2112-2127, 2158-2173, 2201-2219, 2250-2265, 2296-2311, 2342-2357, 2388-2405, 2428-2445, 2468-2485, 2508-2525, 2548-2565, 2588-2605, 2628-2645, 2668-2685, 2708-2725, 2748-2765, 2788-2811, 2831-2854, 2875-2896, 2919-2941, 2958-2960
February 13, 2018

Contract Diamond Drilling (including management)	
Superior Diamond Drilling Inc. Hole BDO-17-001	$126,938.05
ALS Chemex Hole BDO 17-001 assays	13,367.89
	140,305.94
Pro-rated Support Costs (including management	
Horizon Helicopters	192,991.29
Minconsult Exploration Services	19,653.47
	212,644.76
Total	$352,950.70

Statement of Expenditures
Orion Group F (689 Claims)
Jam 17-32, Smac 1-3, ST 1, T 762-765, 800-809, 844-847, 886-889, 928-331, 970-973, 1012-1015, 1054-1057, 1478-1995, 2012-2053, 2070-2073, 2128-2131, 2174-2177, 2220-2223, 2266-2269, 2312-2315, 2358-2361, 2406-2409, 2446-2449, 2486-2489, 2526-2529, 2566-2569, 2606-2609, 2646-2649, 2686-2689, 2726-2729, 2766-2769, 2942-2943, 2961
February 13, 2018

Contract Diamond Drilling (including management)	
Superior Diamond Drilling Inc. Hole BDO-17-004	$131,472.98
ALS Chemex Hold BDO 17-004 assays	11,970.70
	143,443.68
Pro-rated Support Costs (including management	
Horizon Helicopters	143,975.48
Minconsult Exploration Services	14,661.89
	158,637.37
Total	$302,081.05

APPENDIX III

DIAMOND DRILLING - SAMPLING METHODS, ANALYSIS, DATA VERIFICATION AND QA/QC RESULTS

2017 Drill Core Sampling Methods, Sample Analysis, Data Verification and QA/QC Results

Geotechnical and geological logging was performed on all drill core from the 2017 program. A geotechnical log was filled out prior to geological logging of drill core and included the conversion of drill marker blocks from imperial to metric and determinations of recovery, rock quality designations (RQD), hydrochloric acid reactivity, fracture frequency, hardness, weathering, strength and joint sets. Wetted core photographs were taken and catalogued prior to logging.

Random samples were collected for density measurements using both wet and dry evaluation methods to provide base level density data for resource evaluation.

All logging data were either recorded as a hardcopy during the day and transcribed to digital format during the evenings or directly into a MS SQL Server® database.

Drill core samples were collected using the following procedures:

1) Core was reassembled, lightly washed and measured.
2) Core was photographed.
3) Core was geotechnically logged.
4) Core was geologically logged and sample intervals were designated. Sample intervals were set at geological boundaries, drill blocks or sharp changes in visual mineral content.
5) Core recovery was calculated for each sample interval.
6) In 2010, visually promising core intervals were split with an impact core splitter. In 2011 through 2017, intervals of core deemed to hold promise of gold mineralization were sawn in half using a rock saw and the remainder left unsampled. All drill intervals not sawn had chips sampled every ten centimetres for up to six metre long intervals of core.
7) Samples were double bagged in 6 mm plastic bags, a sample tag was placed in each sample bag, then two or three samples were placed in a durable fiber bag sealed with a metal clasp and sample numbers were written on the outside of that bag with permanent felt pen. The fibre bag was sealed with a numbered security tag.
8) Two blank and two standard samples were randomly included in every batch of 31 core samples (in 2012 to 2017, batches comprised 30 core samples). In 2017, 1 blank and 1 standard were randomly included in every batch of 37 core samples at the Orion Project.
9) One quarter-split duplicate sample was included in every batch of 31 core samples (in 2012 to 2017, batches comprised 30 core samples). In 2017, 1 quarter-split duplicate sample was included in every batch of 37 core samples at the Orion Project
10) In 2012 and 2017, one coarse reject (laboratory) duplicate sample was included in every batch of 30 core samples. In 2017, no coarse reject (laboratory) duplicate samples were included at the Orion Project.

Core recovery is generally poor in the top 10-20 metres of the holes and excellent below that, averaging 90% for all drilled intervals from the 2010 to 2017 drill programs at the Nadaleen Trend Drill Zones. Care was taken to ensure that the sample split was not biased to sulphide content and, therefore, the sampling should be reliable and representative of the mineralization.

Sample Handling and Security

Drill core was flown by helicopter from the drill sites to a logging and sampling area in the Nadaleen Camp. The samples were later flown by helicopter to the Stewart Airstrip, flown by fixed wing to the Mayo airport and transported to Whitehorse by truck. All samples were controlled by employees of Archer Cathro until they were delivered directly to ALS Minerals' laboratory in Whitehorse for preparation. ALS Minerals was responsible for shipping the prepared sample splits to its North Vancouver laboratory, where they were analyzed.

Archer Cathro ensured that a Chain of Custody form accompanied all batches of drill core during transportation from the Property to the laboratory. A unique security tag was attached to each individual fibre bag when the bag was sealed. The bags and security tags had to be intact in order to be delivered to ALS Minerals.

Sample Analysis

All samples were sent to ALS Minerals' laboratory in Whitehorse for preparation and then on to its laboratory in North Vancouver for analysis. ALS Minerals, a wholly owned subsidiary of ALS Limited, is an independent commercial laboratory specializing in analytical geochemistry services. Both ALS Minerals' Whitehorse and North Vancouver laboratories are individually certified to standards within ISO 9001:2008. The North Vancouver laboratory has also received accreditation to ISO/IEC 17025:2005 from the Standards Council of Canada for several analytical methods.

All rock and core samples were dried, fine crushed before a 250 gram split was pulverized to better than 85% passing 75 microns. The pulverizing circuit was cleaned with quartz sand twice between samples. Pulps were then analyzed at ALS in North Vancouver, B.C. where gold determinations were carried out. Splits of the pulverized fraction were dissolved using a multi acid digestion and analyzed for 49 elements using inductively coupled plasma (ICP) together with mass spectrometry (MS) and atomic emission spectroscopy (AES). Gold analyses were by the Au-AA25 procedure that involves fire assay preparation using a 30 gram charge with an atomic absorption spectroscopy (AAS) finish. Mercury analyses were digested with aqua regia and analyzed by inductively coupled plasma mass spectrometry (ICP-MS).

DATA VERIFICATION

Database

Geological and geotechnical logging prior to 2011 was initially recorded as a hardcopy and then transcribed into MS Excel®. In 2011 through 2015, logging was recorded as a hardcopy and then entered into a MS SQL Server® database. All of the 2010 data has been transferred to the database.

Visual comparison of hardcopy data and digital data was conducted on select holes to ensure accuracy. Any discrepancies identified by this process were investigated, by examining the core stored on the Property, and corrected.

Collar Locations

All drill hole collars were located and recorded using a Leica RTK GPS system.

Down-hole Orientations

Prior to 2011, no down-hole azimuth measurements were made and dip deviations were measured using an acid test at the bottom of each hole.

Original 2011 to 2015 survey data obtained from the Reflex survey tools supplied by the drill contractor in CSV format has been imported directly into the MS SQL Server® database. All of the down-hole data was visually inspected and erroneous data has been omitted.

Assays

Assay certificates, for all of the drilling done to date, were obtained from ALS Minerals in CSV format and imported directly into the MS SQL Server® database. Spot checking of data within the database to hard copy certificates issued by ALS Minerals has not revealed any issues.

Samples from the diamond drilling programs were subjected to a QA/QC program designed by Archer Cathro for ATAC. The QA/QC program consisted of:

1) Sequentially numbered sample tickets: to identify each sample with a unique number to minimize the possibility of sample numbering errors and to ensure uniform collection of sample data.
2) Sealed sample bags: to secure individual sample bags in order to reduce the possibility of sample contamination, spilling or tampering.
3) Chain of custody: samples were stored in a secure preparation area and delivered to the laboratory directly by Archer Cathro personnel.
4) Sample duplicates: select samples were quartered and re-submitted for assay. In addition, duplicates of coarse reject material of select 2012 through 2014 samples were re-submitted for assay.
5) Sample blanks: commercial samples were purchased and inserted in the sample sequence. All blank samples yielded background values, including samples inserted directly following a “standard” value to test for “smear effect” during the sample preparation process, indicating no observable contamination. These blanks each comprised 5 kg (NQ samples) and 7 kg (HQ samples) of material and were assigned unique sample numbers within the sample sequence so as to be “blind” to the laboratory.
6) Reference standard samples: commercially available standard samples consider matrix compatible with Nadaleen Trend –style gold mineralization were purchased for the 2010 through 2012 drill programs. Four standards were prepared from coarse reject material from the 2012 core samples for use during the 2012 through 2016 drill programs. Four

standards were prepared from coarse reject material from the 2016 core samples for use during the 2017 drill program. Standards were assigned a unique sample number within the sample sequence.

The consensus and two standard deviation values for each of the standard samples used during the 2017 program while the certificates for each of the standard samples prepared occur in the following pages.

Standard Sample Parameters

Standard Name	Standard Gold Grade	2Sigma
OS-CS1	0.49	0.30
OS-CS2	2.54	0.158
OS-CS3	7.75	0.44
OS-CS4	12.80	0.39
OS-CS5	0.54	0.044
OS-CS6	2.67	0.10
OS-CS7	8.24	0.24
OS-CS8	12.86	0.60

Of the 116 batches analyzed in 2017, eight batches failed the QA/QC program. Four of these batches failed due to a standard returning a gold value below the acceptable grade, while the other four returned higher. All eight batches were reanalyzed and returned acceptable gold values for the problem standards.

SMEE & ASSOCIATES CONSULTING LTD.
CONSULTING GEOCHEMISTRY / GEOLOGY

Certificate of Analysis

ATAC OS CS 1

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au Inst.	**0.490 g/t**	**0.030 g/t**

Means and standard deviations were calculated from data supplied by six laboratories. Instructions to the laboratories were for the laboratory to finish the fire assay gold with AAS or ICP and with gravimetric if above 5 g/t.

The participating laboratories were:

ALS Chemex, Vancouver
Acme, Vancouver
TSL, Saskatoon
Actlabs, Ancaster
Actlabs, Thunder Bay
SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ± 2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data (shown as the 1st Iteration in the attached Excel spreadsheets). The standard deviation values are known as the "Between Lab" deviations, and can be used to monitor accuracy of a single analysis.

Standards with a Relative Standard Deviation (RSD) of near or less than 5 % are classified as Certified, RSD's of between near 5 % and 15 % are classified as Provisional and must be used with caution when assessing the accuracy of a single analysis, and RSD's of more than 15 % are Indicated and cannot be used to monitor accuracy.

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The bulk standards were prepared and packaged by CDN Labs of Langley B.C. Each bulk sample was pulverized in a large rod mill, screened through 270 mesh using an electric sieve, and homogenized in a large rotating mixer.

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June, 2013

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ATAC OS CS 2

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au Inst.	**2.544 g/t**	**0.158 g/t**

Means and standard deviations were calculated from data supplied by six laboratories. Instructions to the laboratories were for the laboratory to finish the fire assay gold with AAS or ICP and with gravimetric if above 5 g/t.

The participating laboratories were:

ALS Chemex, Vancouver
Acme, Vancouver
TSL, Saskatoon
Actlabs, Ancaster
Actlabs, Thunder Bay
SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ± 2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data (shown as the 1st Iteration in the attached Excel spreadsheets). The standard deviation values are known as the "Between Lab" deviations, and can be used to monitor accuracy of a single analysis.

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ATAC OS CS 3

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au Grav.	**7.75 g/t**	**0.44 g/t**

Means and standard deviations were calculated from data supplied by six laboratories. Instructions to the laboratories were for the laboratory to finish the fire assay gold with AAS or ICP and with gravimetric if above 5 g/t.

The participating laboratories were:

ALS Chemex, Vancouver
Acme, Vancouver
TSL, Saskatoon
Actlabs, Ancaster
Actlabs, Thunder Bay
SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ± 2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data (shown as the 1st Iteration in the attached Excel spreadsheets). The standard deviation values are known as the "Between Lab" deviations, and can be used to monitor accuracy of a single analysis.

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ATAC OS CS 4

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au Grav.	**12.80 g/t**	**0.39 g/t**

Means and standard deviations were calculated from data supplied by six laboratories. Instructions to the laboratories were for the laboratory to finish the fire assay gold with AAS or ICP and with gravimetric if above 5 g/t.

The participating laboratories were:

ALS Chemex, Vancouver
Acme, Vancouver
TSL, Saskatoon
Actlabs, Ancaster
Actlabs, Thunder Bay
SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ± 2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data (shown as the 1st Iteration in the attached Excel spreadsheets). The standard deviation values are known as the "Between Lab" deviations, and can be used to monitor accuracy of a single analysis.

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OS CS-5

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au	**0.539 g/t**	**0.044 g/t**

Means and standard deviations were calculated from data supplied by six laboratories each assaying 10 randomly selected packages from the total lot. Gold was assayed using a normal fire assay and either AAS or ICP finish.

The participating laboratories were:

BV, Vancouver

ALS, Vancouver

MS Analytical, Langley

Actlabs, Thunder Bay

TSL, Saskatoon

SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards. Standards with

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an RSD of near or less than 5 % are certified, RSD's of between near 5 % and 15 % are Provisional, and RSD's over 15 % or that have insufficient data are Indicated.

The bulk standards were prepared by CDN Labs of Langley B.C. Each standard was screened to 270 mesh and the oversize discarded and the fines homogenized in a large rotating mixer. Each standard was packaged in tin-tie kraft paper bags and then sealed in plastic to prevent gravity separation and oxidation.

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OS CS-6

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au	**2.67g/t**	**0.10 g/t**

Means and standard deviations were calculated from data supplied by six laboratories each assaying 10 randomly selected packages from the total lot. Gold was assayed using a normal fire assay and either AAS or ICP finish.

The participating laboratories were:

BV, Vancouver

ALS, Vancouver

MS Analytical, Langley

Actlabs, Thunder Bay

TSL, Saskatoon

SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from

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individual analyses, unlike the Confidence Limits published on other standards. Standards with an RSD of near or less than 5 % are certified, RSD's of between near 5 % and 15 % are Provisional, and RSD's over 15 % or that have insufficient data are Indicated.

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OS CS-7

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au	**8.24 g/t**	**0.24 g/t**

Means and standard deviations were calculated from data supplied by six laboratories each assaying 10 randomly selected packages from the total lot. Gold was assayed using a normal fire assay and either gravimetric or AAS or ICP finish, depending on the laboratory.

The participating laboratories were:

BV, Vancouver

ALS, Vancouver

MS Analytical, Langley

Actlabs, Thunder Bay

TSL, Saskatoon

SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from

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individual analyses, unlike the Confidence Limits published on other standards. Standards with an RSD of near or less than 5 % are certified, RSD's of between near 5 % and 15 % are Provisional, and RSD's over 15 % or that have insufficient data are Indicated.

The bulk standards were prepared by CDN Labs of Langley B.C. Each standard was screened to 270 mesh and the oversize discarded and the fines homogenized in a large rotating mixer. Each standard was packaged in tin-tie kraft paper bags and then sealed in plastic to prevent gravity separation and oxidation.

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OS CS-8

Element	Certified Mean	Two Standard Deviations (between lab)
FA Au	**12.86 g/t**	**0.60 g/t**

Means and standard deviations were calculated from data supplied by six laboratories each assaying 10 randomly selected packages from the total lot. Gold was assayed using a normal fire assay and gravimetric finish.

The participating laboratories were:

BV, Vancouver

ALS, Vancouver

MS Analytical, Langley

Actlabs, Thunder Bay

TSL, Saskatoon

SGS, Vancouver

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from

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individual analyses, unlike the Confidence Limits published on other standards. Standards with an RSD of near or less than 5 % are certified, RSD's of between near 5 % and 15 % are Provisional, and RSD's over 15 % or that have insufficient data are Indicated.

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APPENDIX IV

DIAMOND DRILLING - GEOLOGICAL, GEOTECHNICAL AND SAMPLE LOGS

OS -17-232

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
0.00	5.40	5.40	OVB	--	No recovery 0 - 5.40m							
						--	--	---	---	--	--	0
5.40	169.10	163.70	SLC	MG	To be filled in later!							
						DK	BK	BD	---	--	Re	0.01
169.10	332.05	162.95	LST	FG	There is a gradational mm to cm scale interbedded contact from black siltstone siliciclastics to grey limestone. The limestone increases with depth and shows an abundance of stylolites that generally follow bedding (approximately 50 degrees) which is absent in the siliciclastics. Pyrite occurs disseminated throughout the gradational contact as well as occurring as rims along calcite veinlets 2-5 mm in thickness. Calcite veins are visible throughout the limestone in a chaotic assemblage which are 1 mm to 10 cm in thickness. From 180.70 m to 239.78 m the calcite veins increase in abundance and thickness, and begin to show a crackled appearance, with a mosaic appearance occurring at approximately 226.50 to 236.61 m. Beginning at 254.25 m and down to 285.11 m there is an increase appearance of dark grey siltstone beds occurring at 30-100 cm intervals with an average thickness of 10-20 cm. From 305.50 m to 314.50 m the limestone changes from a structurally competent rock with smooth visible bedding with few calcite veins to a chaotic highly fractured limestone with abundant calcite veins. Core changes from HQ to NQ at 308.46 m.							
											Ca	5
						MD	GY	BD			Cb	95

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
332.05	332.84	0.79	INT	FG	Light grey altered intrusive rock with brecciation observed throughout the entire interval (332.05 - 332.84 m). Within the aphanitic groundmass fine black minerals and fine to medium sized quartz crystals are observed. Brecciation is most concentrated at upper contact. Bleaching is seen at the lower contact. The 1 to 4 mm sized clast seen in the brecciated zones disrupt the 0.5 - 3 mm calcite veinlet's present. Calcite is observed throughout the interval as veinlet's. Realgar is present along joint surfaces, speckled throughout the interval, and is most frequently observed from 332.40 - 332.84 m, along veinlet's replacing calcite. Green sub angular ~1 mm mineral is observed within the interval (fuchsite?). The rock in the interval is more competent than the surrounding rock above and below. The rock does not react with HCL.							
						LT	GY	AN	BLE	3I		
332.84	351.22	18.38	LST	FG	Fairly competent light grey fine-medium grained limestone is observed in the 332.84 - 387.71 m interval. The limestone is cut by 0.05 - 5 cm chaotic calcite veins. Dark grey stylolite's are observed throughout the interval and are spaced ~60 cm apart. At 378 - 385m, the stylolites show cross-cutting relationships with veins and other stylolites. Different generations of veins terminate against different generations of stylolites. Stylolites cross-cut each other but do not tend to terminate against each other. Realgar is present along joint surfaces, speckled throughout the interval, and along veins replacing calcite (335.0 - 336.56 m). There is massive replacement of limestone by realgar between 351.3 and 351.85m with associated decalcification of limestone for ~30cm either side. More ~30cm-scale dissolution occures between 365 and 367m. From 369 - 378m, fractures are infilled with black clays (arsian pyrite?). An 80cm interval of this dark clay +/- fine grained aresnian pyrite is present around 374m with minor calcite veinlets. Below the 341 meters mark rare ~1cm siltstone beds are observed.							
						MD	GY	BD	BLE	3I		

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
410.48	415.49	5.01	FLR	CG	There is a zone of polymict fault breccia with angular clasts of light grey limestone, black siliciclastic siltstones/clays and vein calcite measuring approximately 3 meters. Clasts range in size from 1 to 80mm and are unsorted and chaotic. Clasts are supported in a dark grey to black siliciclastic matrix (either reworked wall rock, decalcified material or a mix of both) but locally it is clast supported. The largest clasts are composed of the limestone. These limestone clasts contain calcite veins and abundant and chaotic veinlets. Some limestone clasts show abundant stylolites. Bedding is apparent in one or two of the clasts. This limestone appears very similar to the limestone adjacent to the fault. The smaller clasts comprise predominantly fragments of calcite veins and pieces of dark siliciclastic material with minor limestone. In the largest siliciclastic clasts, mm-scale bedding is visible. There is no sense of ductile shear in the fault rock - only brittle deformation. The upper contact grades into the overlying large calcite vein. The lower contact is abrupt.							
						DK	GY	BX				
415.49	445.62	30.13	LST	FG	Calcite veins are visible throughout the limestone in a chaotic assemblage which are 1 mm to 10 cm in thickness. Dark grey stylolite's are observed throughout the interval with sets perpendicular to core axis and 20 degrees to core axis. There are 1 cm calcite veins with a main orientation of 45 degrees. There are 1 cm thick silty beds nearly perpendicular to core axis.							
						MD	GY	BD				

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	5.40	5.40	0	0	0.00	0	0R	--	--	OVB
5.40	5.49	0.09	0.09	100	0.00	0	0R	1H	4W	Mush
5.49	7.01	1.52	0.25	16	0.00	0	0R	1H	4W	
7.01	8.53	1.52	0.3	20	0.00	0	0R	1H	4W	
8.53	10.06	1.53	0.72	47	0.12	8	0R	3H	4W	
10.06	11.58	1.52	0.8	53	0.00	0	0R	1H	4W	
11.58	13.11	1.53	0.38	25	0.00	0	0R	1H	4W	
13.11	14.63	1.52	1.52	100	0.80	53	0R	2H	4W	Rubble until 19.20-20.72
14.63	16.15	1.52	1.4	92	0.00	0	0R	1H	4W	
16.15	17.68	1.53	1.08	71	0.00	0	0R	1H	4W	
17.68	19.20	1.52	1.38	91	0.46	30	0R	2H	3W	
19.20	20.73	1.53	1.49	97	1.22	80	0R	3H	2W	
20.73	22.25	1.52	1.48	97	1.35	89	0R	3H	2W	
22.25	23.77	1.52	1.45	95	0.93	61	0R	3H	1W	Rubble
23.77	25.30	1.53	1.28	84	0.71	46	0R	3H	1W	Rubble
25.30	26.82	1.52	1.48	97	1.39	91	0R	3H	1W	
26.82	28.35	1.53	1.19	78	0.88	58	0R	3H	1W	Small rubble
28.35	29.87	1.52	1.52	100	0.98	64	0R	3H	2W	
29.87	31.39	1.52	1.37	90	0.57	38	0R	3H	1W	
31.39	32.92	1.53	1.49	97	0.90	59	0R	3H	1W	
32.92	34.44	1.52	1.4	92	0.83	55	0R	3H	1W	
34.44	35.97	1.53	1.33	87	0.65	42	0R	3H	1W	
35.97	37.49	1.52	1.35	89	0.47	31	0R	3H	1W	
37.49	39.01	1.52	1.44	95	0.49	32	0R	2H	1W	
39.01	40.54	1.53	1.45	95	1.13	74	0R	2H	1W	
40.54	42.06	1.52	1.42	93	1.35	89	0R	3H	1W	
42.06	43.09	1.03	1.03	100	0.70	68	0R	3H	1W	
43.09	45.11	2.02	1.45	72	0.97	48	0R	3H	1W	
45.11	46.63	1.52	1.46	96	1.04	68	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
46.63	48.16	1.53	1.41	92	0.90	59	0R	3H	1W	
48.16	49.68	1.52	1.45	95	1.45	95	0R	4H	1W	
49.68	51.21	1.53	1.47	96	1.03	67	0R	4H	1W	
51.21	52.73	1.52	1.38	91	1.38	91	0R	4H	1W	
52.73	54.25	1.52	1.39	91	1.23	81	0R	4H	1W	
54.25	55.78	1.53	1.5	98	1.26	82	0R	4H	1W	
55.78	57.30	1.52	1.45	95	1.34	88	0R	4H	1W	
57.30	58.83	1.53	1.36	89	1.32	86	0R	4H	1W	
58.83	60.35	1.52	1.31	86	1.11	73	0R	4H	1W	
60.35	61.87	1.52	1.44	95	1.41	93	0R	4H	1W	
61.87	63.40	1.53	1.46	95	1.46	95	0R	4H	1W	
63.40	64.92	1.52	1.5	99	1.40	92	0R	4H	1W	
64.92	66.45	1.53	1.43	93	1.34	88	0R	4H	1W	
66.45	67.97	1.52	1.4	92	1.40	92	0R	3H	1W	
67.97	69.49	1.52	1.49	98	1.35	89	0R	4H	1W	
69.49	71.02	1.53	1.43	93	1.13	74	0R	4H	1W	
71.02	72.54	1.52	1.52	100	1.48	97	1R	4H	1W	
72.54	74.07	1.53	1.38	90	1.07	70	1R	4H	1W	
74.07	75.59	1.52	1.37	90	1.06	70	1R	4H	1W	
75.59	77.11	1.52	1.46	96	1.34	88	1R	4H	1W	
77.11	78.64	1.53	1.46	95	1.46	95	1R	4H	1W	
78.64	80.16	1.52	1.32	87	1.06	70	1R	4H	1W	
80.16	81.69	1.53	1.46	95	1.28	84	1R	4H	1W	
81.69	83.21	1.52	1.45	95	1.45	95	1R	4H	1W	
83.21	84.73	1.52	1.5	99	1.50	99	0R	4H	1W	
84.73	86.26	1.53	1.5	98	0.95	62	0R	4H	1W	
86.26	87.78	1.52	1.52	100	1.38	91	0R	4H	1W	
87.78	89.31	1.53	1.53	100	1.34	88	0R	4H	1W	
89.31	90.83	1.52	1.41	93	1.05	69	0R	4H	1W	
90.83	92.35	1.52	1.52	100	1.52	100	0R	4H	1W	
92.35	93.88	1.53	1.41	92	1.25	82	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
93.88	95.40	1.52	1.52	100	1.52	100	0R	4H	2W	
95.40	96.93	1.53	1.52	99	1.34	88	0R	2H	3W	
96.93	98.45	1.52	1.52	100	1.52	100	0R	3H	1W	
98.45	99.97	1.52	1.34	88	1.28	84	0R	4H	1W	
99.97	101.50	1.53	1.53	100	1.41	92	1R	4H	1W	
101.50	103.02	1.52	1.49	98	1.30	86	0R	4H	1W	
103.02	104.55	1.53	1.53	100	1.53	100	0R	4H	1W	
104.55	106.07	1.52	1.43	94	1.36	89	0R	4H	1W	Two small joints (5x2) -Don’t make set one with CA - fill, other with RK
106.07	107.60	1.53	1.53	100	1.21	79	0R	4H	1W	
107.60	109.12	1.52	1.32	87	0.83	55	0R	4H	4W	
109.12	110.64	1.52	1.52	100	0.98	64	0R	3H	1W	
110.64	112.17	1.53	1.16	76	0.61	40	1R	3H	2W	
112.17	113.69	1.52	1.07	70	0.42	28	1R	3H	3W	
113.69	115.21	1.52	1.52	100	0.82	54	0R	3H	3W	
115.21	116.74	1.53	1.23	80	0.72	47	1R	3H	1W	
116.74	118.26	1.52	1.05	69	0.73	48	2R	3H	4W	
118.26	119.79	1.53	1.48	97	0.73	48	1R	3H	2W	
119.79	121.31	1.52	1.34	88	0.76	50	1R	3H	1W	
121.31	122.83	1.52	1.17	77	0.28	18	0R	3H	2W	
122.83	124.36	1.53	1.53	100	1.30	85	0R	3H	1W	
124.36	125.88	1.52	1.39	91	1.34	88	0R	3H	1W	
125.88	127.41	1.53	1.13	74	0.75	49	3R	4H	2W	
127.41	128.93	1.52	1.49	98	1.41	93	0R	4H	1W	
128.93	130.45	1.52	1.34	88	1.06	70	2R	4H	1W	
130.45	131.98	1.53	1.43	93	1.19	78	3R	4H	1W	
131.98	133.50	1.52	1.52	100	1.52	100	1R	4H	1W	
133.50	135.03	1.53	1.51	99	0.84	55	0R	4H	1W	
135.03	136.55	1.52	1.52	100	1.41	93	0R	4H	1W	
136.55	138.07	1.52	1.25	82	1.15	76	0R	4H	1W	
138.07	139.60	1.53	1.53	100	1.01	66	0R	4H	1W	
139.60	141.12	1.52	1.04	68	0.30	20	0R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
141.12	142.65	1.53	1.49	97	0.91	59	0R	4H	1W	
142.65	144.17	1.52	1.36	89	0.95	63	0R	4H	4W	
144.17	145.69	1.52	1.47	97	0.82	54	0R	4H	1W	
145.69	147.22	1.53	1.37	90	0.95	62	0R	4H	1W	
147.22	148.74	1.52	1.52	100	1.52	100	0R	4H	1W	
148.74	150.27	1.53	1.14	75	1.14	75	0R	4H	1W	
150.27	151.79	1.52	1.52	100	1.41	93	0R	4H	1W	
151.79	153.31	1.52	1.52	100	1.52	100	0R	4H	1W	
153.31	154.84	1.53	1.53	100	1.51	99	0R	4H	1W	
154.84	156.36	1.52	1.52	100	1.30	86	0R	4H	1W	
156.36	157.89	1.53	1.43	93	1.27	83	0R	3H	1W	
157.89	159.41	1.52	1.42	93	1.32	87	0R	4H	1W	
159.41	160.93	1.52	1.52	100	0.61	40	0R	3H	1W	
160.93	162.46	1.53	1.46	95	1.38	90	0R	4H	1W	
162.46	163.98	1.52	1.48	97	1.38	91	0R	4H	1W	
163.98	165.51	1.53	1.5	98	1.27	83	0R	4H	1W	
165.51	167.03	1.52	1.52	100	1.36	89	0R	4H	1W	
167.03	168.55	1.52	1.5	99	1.14	75	0R	4H	1W	
168.55	170.08	1.53	1.32	86	0.99	65	2R	4H	1W	
170.08	171.60	1.52	1.52	100	1.32	87	3R	4H	1W	
171.60	173.13	1.53	1.53	100	0.68	44	3R	4H	1W	
173.13	174.65	1.52	1.47	97	0.99	65	4R	4H	1W	
174.65	176.17	1.52	1.45	95	0.58	38	4R	4H	1W	
176.17	177.70	1.53	1.38	90	0.88	58	0R	4H	1W	
177.70	179.29	1.59	1.52	96	1.01	64	0R	3H	1W	
179.29	180.75	1.46	1.46	100	1.01	69	0R	3H	1W	
180.75	182.27	1.52	1.41	93	1.05	69	4R	4H	1W	
182.27	183.79	1.52	1.39	91	1.14	75	3R	4H	1W	
183.79	185.32	1.53	1.37	90	1.27	83	4R	4H	1W	
185.32	186.32	1.00	1	100	1.00	100	3R	4H	1W	
186.32	188.37	2.05	1.44	70	1.29	63	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
188.37	189.89	1.52	1.52	100	1.37	90	4R	3H	1W	
189.89	191.41	1.52	1.52	100	1.17	77	4R	3H	1W	
191.41	192.94	1.53	1.53	100	1.28	84	4R	3H	1W	
192.94	194.46	1.52	1.52	100	0.87	57	4R	3H	1W	
194.46	195.99	1.53	1.41	92	1.05	69	4R	3H	1W	
195.99	197.51	1.52	1.47	97	1.18	78	4R	4H	1W	
197.51	199.03	1.52	1.52	100	1.25	82	4R	3H	1W	
199.03	200.56	1.53	1.42	93	1.42	93	4R	3H	1W	
200.56	202.08	1.52	1.52	100	1.06	70	4R	3H	1W	
202.08	203.60	1.52	1.52	100	1.43	94	4R	3H	1W	
203.60	205.13	1.53	1.49	97	1.41	92	4R	3H	1W	
205.13	206.65	1.52	1.37	90	1.29	85	4R	3H	1W	
206.65	208.17	1.52	1.52	100	1.09	72	4R	3H	1W	
208.17	209.70	1.53	1.45	95	1.13	74	4R	3H	1W	
209.70	211.23	1.53	1.53	100	1.36	89	4R	3H	1W	
211.23	212.75	1.52	1.3	86	1.22	80	4R	3H	1W	
212.75	214.27	1.52	1.52	100	1.52	100	4R	3H	1W	
214.27	215.80	1.53	1.5	98	1.50	98	4R	3H	1W	
215.80	217.32	1.52	1.52	100	1.52	100	4R	3H	1W	
217.32	218.85	1.53	1.45	95	1.45	95	4R	3H	1W	
218.85	220.37	1.52	1.52	100	1.51	99	4R	3H	1W	
220.37	221.90	1.53	1.49	97	1.35	88	4R	4H	1W	
221.90	223.42	1.52	1.52	100	1.48	97	4R	3H	1W	
223.42	224.94	1.52	1.52	100	1.42	93	4R	3H	1W	
224.94	226.47	1.53	1.49	97	1.36	89	4R	3H	1W	
226.47	227.99	1.52	1.46	96	1.46	96	4R	3H	1W	
227.99	229.51	1.52	1.45	95	1.45	95	4R	3H	1W	
229.51	231.04	1.53	1.5	98	1.42	93	4R	3H	1W	
231.04	232.56	1.52	1.52	100	1.48	97	4R	3H	1W	
232.56	234.09	1.53	1.53	100	1.18	77	4R	3H	1W	
234.09	235.61	1.52	1.52	100	1.44	95	4R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
235.61	237.13	1.52	1.49	98	1.49	98	4R	3H	1W	
237.13	238.66	1.53	1.53	100	1.45	95	4R	3H	1W	
238.66	240.18	1.52	1.52	100	1.25	82	4R	3H	1W	
240.18	241.71	1.53	1.48	97	1.34	88	4R	3H	1W	
241.71	243.23	1.52	1.35	89	1.13	74	4R	3H	1W	
243.23	244.75	1.52	1.43	94	1.41	93	4R	3H	1W	
244.75	246.28	1.53	1.45	95	1.39	91	4R	3H	1W	
246.28	247.80	1.52	1.46	96	1.35	89	4R	3H	1W	
247.80	249.33	1.53	1.49	97	1.33	87	4R	3H	1W	
249.33	250.85	1.52	1.52	100	1.52	100	4R	3H	1W	
250.85	252.37	1.52	1.4	92	1.15	76	4R	3H	1W	
252.37	253.90	1.53	1.53	100	1.49	97	4R	3H	4W	
253.90	255.42	1.52	1.38	91	1.07	70	4R	3H	1W	
255.42	256.95	1.53	1.4	92	1.16	76	4R	3H	1W	
256.95	258.47	1.52	1.42	93	1.18	78	4R	3H	1W	
258.47	260.00	1.53	1.35	88	0.89	58	4R	3H	1W	
260.00	261.52	1.52	1.46	96	1.40	92	2R	3H	1W	
261.52	263.04	1.52	1.49	98	1.09	72	4R	3H	1W	
263.04	264.57	1.53	1.48	97	1.32	86	4R	4H	1W	
264.57	266.09	1.52	1.48	97	1.31	86	3R	3H	1W	
266.09	267.61	1.52	1.11	73	0.17	11	4R	2H	1W	soft, dark siltstone sections
267.61	269.14	1.53	1.41	92	1.08	71	4R	3H	1W	
269.14	270.66	1.52	1.42	93	1.14	75	3R	3H	1W	
270.66	272.19	1.53	1.46	95	1.30	85	3R	3H	1W	
272.19	273.71	1.52	1.39	91	1.26	83	2R	2H	1W	soft, dark siltstone (hardness 2-3)
273.71	275.23	1.52	1.49	98	1.30	86	2R	3H	1W	
275.23	276.76	1.53	1.44	94	1.16	76	2R	3H	1W	
276.76	278.28	1.52	1.52	100	1.28	84	2R	3H	1W	
278.28	279.81	1.53	1.38	90	1.19	78	2R	3H	1W	
279.81	281.33	1.52	1.52	100	1.34	88	3R	3H	1W	
281.33	282.85	1.52	1.43	94	0.98	64	2R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
282.85	284.38	1.53	1.53	100	1.28	84	4R	3H	1W	
284.38	285.90	1.52	1.49	98	1.49	98	3R	3H	1W	
285.90	287.43	1.53	1.41	92	1.36	89	3R	3H	1W	
287.43	288.95	1.52	1.52	100	1.52	100	2R	3H	1W	
288.95	290.47	1.52	1.44	95	1.31	86	4R	3H	1W	
290.47	292.00	1.53	1.48	97	1.28	84	4R	3H	1W	
292.00	293.52	1.52	1.43	94	1.32	87	3R	3H	1W	
293.52	295.05	1.53	1.42	93	0.85	56	2R	3H	1W	Rbz at 294.68 to 295.05
295.05	296.57	1.52	1.4	92	0.83	55	3R	3H	1W	Rbz at 295.05m to 295.15m and at 295.47m to 295.77m
296.57	298.09	1.52	1.46	96	1.35	89	2R	4H	1W	3 sections of RBZ ~5cm wide at 296.57m, 296.79m, 297.26m.
298.09	299.62	1.53	1.45	95	1.03	67	3R	4H	1W	RBZ with some 10cm blocks from 298.95m to 299.62m
299.62	301.14	1.52	1.43	94	1.15	76	3R	3H	1W	
301.14	302.67	1.53	1.53	100	1.07	70	4R	3H	1W	10cm RBZ at 302.1m
302.67	304.19	1.52	1.45	95	1.21	80	4R	3H	1W	
304.19	307.24	3.05	2.37	78	1.41	46	4R	3H	1W	RBZ for 30cm at 307m. Multiply fractured rbz (1/4 core sized pieces) from 305.57 to 306.7.
307.24	308.46	1.22	0.49	40	0.00	0	4R	3H	1W	Whole interval RBZ.
308.46	311.51	3.05	2.54	83	1.54	50	4R	3H	1W	RBZ at 308.46m to 309.5m.
311.51	314.55	3.04	2.82	93	1.76	58	4R	3H	1W	
314.55	317.60	3.05	2.61	86	2.22	73	4R	3H	1W	
317.60	320.65	3.05	2.94	96	1.74	57	4R	3H	1W	
320.65	323.70	3.05	2.96	97	2.61	86	4R	4H	1W	
323.70	326.75	3.05	2.45	80	1.88	62	4R	3H	1W	
326.75	329.79	3.04	2.94	97	2.34	77	4R	3H	1W	
329.79	332.84	3.05	3.02	99	2.52	83	2R	3H	1W	
332.84	335.89	3.05	3.03	99	2.98	98	4R	3H	1W	
335.89	338.94	3.05	3.01	99	2.82	92	4R	3H	1W	
338.94	341.98	3.04	3.03	100	2.89	95	4R	3H	1W	
341.98	345.03	3.05	3.02	99	2.89	95	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
345.03	348.08	3.05	3.01	99	2.83	93	4R	4H	1W	
348.08	351.13	3.05	3.04	100	2.97	97	4R	4H	1W	
351.13	354.17	3.04	2.71	89	2.62	86	2R	3H	1W	
354.17	357.22	3.05	2.88	94	2.24	73	4R	3H	1W	
357.22	360.27	3.05	3.04	100	2.67	88	4R	3H	1W	
360.27	363.32	3.05	2.92	96	2.71	89	4R	4H	1W	
363.32	366.37	3.05	2.9	95	2.84	93	2R	4H	1W	
366.37	369.42	3.05	2.85	93	2.77	91	3R	4H	1W	
369.42	372.47	3.05	2.85	93	2.77	91	3R	4H	1W	
372.47	375.51	3.04	2.75	90	2.45	81	2R	3H	1W	
375.51	378.56	3.05	2.89	95	2.79	91	4R	4H	1W	
378.56	381.61	3.05	2.98	98	2.54	83	4R	4H	1W	
381.61	384.66	3.05	2.85	93	2.78	91	4R	4H	1W	
384.66	387.71	3.05	3.01	99	2.73	90	4R	4H	1W	
387.71	390.75	3.04	2.62	86	1.70	56	4R	3H	1W	
390.75	393.80	3.05	2.83	93	2.36	77	4R	4H	1W	
393.80	396.85	3.05	2.8	92	2.80	92	4R	4H	1W	
396.85	399.90	3.05	2.85	93	2.26	74	3R	3H	1W	
399.90	402.95	3.05	2.55	84	2.14	70	4R	3H	1W	
402.95	406.00	3.05	2.72	89	2.25	74	4R	3H	1W	Massive calcite vein
406.00	409.04	3.04	2.6	86	2.29	75	4R	3H	1W	
409.04	412.09	3.05	2.61	86	2.05	67	4R	4H	1W	Fault Zone
412.09	415.14	3.05	2.82	92	2.41	79	3R	4H	1W	Fault Zone
415.14	418.19	3.05	2.76	90	2.02	66	3R	4H	1W	
418.19	421.23	3.04	2.62	86	1.91	63	4R	4H	1W	
421.23	424.28	3.05	2.77	91	2.37	78	4R	4H	1W	
424.28	427.33	3.05	2.79	91	2.03	67	4R	4H	1W	
427.33	430.38	3.05	3.03	99	2.32	76	4R	4H	1W	
430.38	433.43	3.05	2.51	82	1.71	56	4R	4H	1W	
433.43	436.47	3.04	2.65	87	1.54	51	3R	3H	1W	
436.47	439.52	3.05	2.63	86	1.72	56	4R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
439.52	442.57	3.05	2.66	87	1.50	49	4R	4H	1W	
442.57	445.62	3.05	1.89	62	1.19	39	4R	4H	1W	E.O.H.

OS -17-232

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229088	☐	N17-007	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229177	☐	N17-013	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229165	☐	N17-013	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229151	☐	N17-013	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229149	☐	N17-013	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229134	☐	N17-009	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229131	☐	N17-009	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229119	☐	N17-009	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229113	☐	N17-009	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229006	☐	N17-002	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229101	☐	N17-007	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229083	☐	N17-007	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229072	☐	N17-005	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229070	☐	N17-005	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229054	☐	N17-005	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229048	☐	N17-005	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229044	☐	N17-005	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229029	☐	N17-002	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229015	☐	N17-002	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229011	☐	N17-002	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229106	☐	N17-007	Core		☑	☐	☐
5.40	7.01	1.61	OVB, SLC	0.25	16	W229001	☐	N17-002	Core		☐	☐	☐
7.01	10.06	3.05	SLC	1.02	33	W229002	☐	N17-002	Core		☐	☐	☐
10.06	13.11	3.05	SLC	1.18	39	W229003	☐	N17-002	Core		☐	☐	☐
13.11	16.15	3.04	SLC	2.92	96	W229004	☐	N17-002	Core		☐	☐	☐
16.15	19.20	3.05	SLC	2.46	81	W229005	☐	N17-002	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
19.20	22.25	3.05	SLC	2.97	97	W229007	☐	N17-002	Core		☐	☐	☐
22.25	25.30	3.05	SLC	2.73	90	W229008	☐	N17-002	Core		☐	☐	☐
25.30	26.40	1.10	SLC	1.10	100	W229009	☐	N17-002	Core		☐	☐	☐
26.40	28.35	1.95	SLC	1.73	89	W229010	☐	N17-002	Core		☐	☐	☐
28.35	31.39	3.04	SLC	2.89	95	W229012	☐	N17-002	Core		☐	☐	☐
31.39	34.44	3.05	SLC	2.89	95	W229013	☐	N17-002	Core		☐	☐	☐
34.44	37.49	3.05	SLC	2.68	88	W229014	☐	N17-002	Core		☐	☐	☐
37.49	40.54	3.05	SLC	2.89	95	W229016	☐	N17-002	Core		☐	☐	☐
40.54	43.59	3.05	SLC	2.94	96	W229017	☐	N17-002	Core		☐	☐	☐
43.59	45.11	1.52	SLC	1.45	95	W229018	☐	N17-002	Core		☐	☐	☐
45.11	48.16	3.05	SLC	2.87	94	W229019	☐	N17-002	Core		☐	☐	☐
48.16	51.21	3.05	SLC	2.92	96	W229020	☐	N17-002	Core		☐	☐	☐
51.21	54.25	3.04	SLC	2.77	91	W229021	☐	N17-002	Core		☐	☐	☐
54.25	57.30	3.05	SLC	2.95	97	W229022	☐	N17-002	Core		☐	☐	☐
54.25	57.30	3.05	SLC	2.95	97	W229023	☐	N17-002	Core		☐	☑	☐
57.30	60.35	3.05	SLC	2.67	88	W229024	☐	N17-002	Core		☐	☐	☐
60.35	63.40	3.05	SLC	2.90	95	W229025	☐	N17-002	Core		☐	☐	☐
63.40	66.45	3.05	SLC	2.93	96	W229026	☐	N17-002	Core		☐	☐	☐
66.45	69.49	3.04	SLC	2.89	95	W229027	☐	N17-002	Core		☐	☐	☐
69.49	72.54	3.05	SLC	2.95	97	W229028	☐	N17-002	Core		☐	☐	☐
72.54	75.59	3.05	SLC	2.75	90	W229030	☐	N17-002	Core		☐	☐	☐
75.59	77.35	1.76	SLC	1.60	91	W229031	☐	N17-002	Core		☐	☐	☐
77.35	78.64	1.29	SLC	1.23	95	W229032	☐	N17-002	Core		☐	☐	☐
78.64	81.69	3.05	SLC	2.78	91	W229033	☐	N17-002	Core		☐	☐	☐
81.69	84.73	3.04	SLC	2.95	97	W229034	☐	N17-002	Core		☐	☐	☐
81.69	84.73	3.04	SLC	2.95	97	W229035	☐	N17-002	Core		☐	☐	☑
84.73	87.78	3.05	SLC	3.02	99	W229036	☐	N17-002	Core		☐	☐	☐
87.78	90.83	3.05	SLC	2.94	96	W229037	☐	N17-005	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
90.83	93.88	3.05	SLC	2.93	96	W229038	☐	N17-005	Core		☐	☐	☐
93.88	96.93	3.05	SLC	3.04	100	W229039	☐	N17-005	Core		☐	☐	☐
96.93	99.97	3.04	SLC	2.86	94	W229040	☐	N17-005	Core		☐	☐	☐
99.97	103.02	3.05	SLC	3.02	99	W229041	☐	N17-005	Core		☐	☐	☐
103.02	106.07	3.05	SLC	2.86	94	W229042	☐	N17-005	Core		☐	☐	☐
106.07	107.60	1.53	SLC	1.53	100	W229043	☐	N17-005	Core		☐	☐	☐
107.60	110.64	3.04	SLC	2.84	93	W229045	☐	N17-005	Core		☐	☐	☐
110.64	113.48	2.84	SLC	2.24	79	W229046	☐	N17-005	Core		☐	☐	☐
113.48	115.21	1.73	SLC	1.52	88	W229047	☐	N17-005	Core		☐	☐	☐
115.21	117.15	1.94	SLC	1.91	98	W229049	☐	N17-005	Core		☐	☐	☐
117.15	119.79	2.64	SLC	2.14	81	W229050	☐	N17-005	Core		☐	☐	☐
117.15	119.79	2.64	SLC	2.14	81	W229051	☐	N17-005	Core		☐	☐	☑
119.79	122.83	3.04	SLC	2.51	83	W229052	☐	N17-005	Core		☐	☐	☐
122.83	125.65	2.82	SLC	2.82	100	W229053	☐	N17-005	Core		☐	☐	☐
125.65	127.41	1.76	SLC	1.13	64	W229055	☐	N17-005	Core		☐	☐	☐
127.41	130.45	3.04	SLC	2.83	93	W229056	☐	N17-005	Core		☐	☐	☐
130.45	133.50	3.05	SLC	2.95	97	W229057	☐	N17-005	Core		☐	☐	☐
133.50	136.55	3.05	SLC	3.03	99	W229058	☐	N17-005	Core		☐	☐	☐
136.55	139.60	3.05	SLC	2.78	91	W229059	☐	N17-005	Core		☐	☐	☐
139.60	142.65	3.05	SLC	2.53	83	W229060	☐	N17-005	Core		☐	☐	☐
142.65	145.69	3.04	SLC	2.83	93	W229061	☐	N17-005	Core		☐	☐	☐
145.69	148.74	3.05	SLC	2.89	95	W229062	☐	N17-005	Core		☐	☐	☐
148.74	151.79	3.05	SLC	2.63	86	W229063	☐	N17-005	Core		☐	☐	☐
151.79	154.84	3.05	SLC	3.05	100	W229064	☐	N17-005	Core		☐	☐	☐
154.84	157.89	3.05	SLC	2.99	98	W229065	☐	N17-005	Core		☐	☐	☐
157.89	159.41	1.52	SLC	1.52	100	W229066	☐	N17-005	Core		☐	☐	☐
157.89	159.41	1.52	SLC	1.52	100	W229067	☐	N17-005	Core		☐	☑	☐
159.41	161.29	1.88	SLC	1.72	91	W229068	☐	N17-005	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
161.29	162.46	1.17	SLC	1.17	100	W229069	☐	N17-005	Core		☐	☐	☐
162.46	165.04	2.58	SLC	2.57	100	W229071	☐	N17-005	Core		☐	☐	☐
165.04	167.03	1.99	SLC	1.95	98	W229073	☐	N17-007	Core		☐	☐	☐
167.03	169.68	2.65	SLC	2.31	87	W229074	☐	N17-007	Core		☐	☐	☐
169.68	171.60	1.92	LST	1.92	100	W229075	☐	N17-007	Core		☐	☐	☐
171.60	174.65	3.05	LST	3.00	98	W229076	☐	N17-007	Core		☐	☐	☐
174.65	177.70	3.05	LST	2.83	93	W229077	☐	N17-007	Core		☐	☐	☐
177.70	180.75	3.05	LST	3.01	99	W229078	☐	N17-007	Core		☐	☐	☐
177.70	180.75	3.05	LST	3.01	99	W229079	☐	N17-007	Core		☐	☑	☐
180.75	183.79	3.04	LST	2.80	92	W229080	☐	N17-007	Core		☐	☐	☐
183.79	186.84	3.05	LST	2.78	91	W229081	☐	N17-007	Core		☐	☐	☐
186.84	189.89	3.05	LST	3.05	100	W229082	☐	N17-007	Core		☐	☐	☐
189.89	192.94	3.05	LST	3.05	100	W229084	☐	N17-007	Core		☐	☐	☐
192.94	195.99	3.05	LST	2.79	91	W229085	☐	N17-007	Core		☐	☐	☐
195.99	199.03	3.04	LST	3.04	100	W229086	☐	N17-007	Core		☐	☐	☐
199.03	202.08	3.05	LST	2.97	97	W229087	☐	N17-007	Core		☐	☐	☐
202.08	205.13	3.05	LST	3.05	100	W229089	☐	N17-007	Core		☐	☐	☐
205.13	208.17	3.04	LST	2.92	96	W229090	☐	N17-007	Core		☐	☐	☐
208.17	211.23	3.06	LST	2.98	97	W229091	☐	N17-007	Core		☐	☐	☐
211.23	214.27	3.04	LST	2.90	95	W229092	☐	N17-007	Core		☐	☐	☐
211.23	214.27	3.04	LST	2.90	95	W229093	☐	N17-007	Core		☐	☐	☑
214.27	217.32	3.05	LST	3.05	100	W229094	☐	N17-007	Core		☐	☐	☐
217.32	220.37	3.05	LST	3.01	99	W229095	☐	N17-007	Core		☐	☐	☐
220.37	223.42	3.05	LST	3.01	99	W229096	☐	N17-007	Core		☐	☐	☐
223.42	226.47	3.05	LST	3.05	100	W229097	☐	N17-007	Core		☐	☐	☐
226.47	229.51	3.04	LST	3.01	99	W229098	☐	N17-007	Core		☐	☐	☐
229.51	232.56	3.05	LST	3.05	100	W229099	☐	N17-007	Core		☐	☐	☐
232.56	235.61	3.05	LST	3.05	100	W229100	☐	N17-007	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
235.61	238.66	3.05	LST	3.03	99	W229102	☐	N17-007	Core		☐	☐	☐
238.66	241.71	3.05	LST	3.02	99	W229103	☐	N17-007	Core		☐	☐	☐
241.71	244.75	3.04	LST	3.04	100	W229104	☐	N17-007	Core		☐	☐	☐
244.75	247.80	3.05	LST	2.91	95	W229105	☐	N17-007	Core		☐	☐	☐
247.80	250.85	3.05	LST	3.04	100	W229107	☐	N17-007	Core		☐	☐	☐
250.85	253.90	3.05	LST	2.98	98	W229108	☐	N17-007	Core		☐	☐	☐
253.90	256.95	3.05	LST	2.78	91	W229109	☐	N17-009	core		☐	☐	☐
256.95	260.00	3.05	LST	2.77	91	W229110	☐	N17-009	core		☐	☐	☐
260.00	263.04	3.04	LST	2.95	97	W229111	☐	N17-009	core		☐	☐	☐
263.04	266.09	3.05	LST	2.96	97	W229112	☐	N17-009	core		☐	☐	☐
266.09	269.14	3.05	LST	2.52	83	W229114	☐	N17-009	core		☐	☐	☐
269.14	272.19	3.05	LST	2.88	94	W229115	☐	N17-009	core		☐	☐	☐
272.19	275.23	3.04	LST	2.88	95	W229116	☐	N17-009	core		☐	☐	☐
275.23	278.28	3.05	LST	3.05	100	W229117	☐	N17-009	core		☐	☐	☐
278.28	281.33	3.05	LST	2.97	97	W229118	☐	N17-009	core		☐	☐	☐
281.33	284.38	3.05	LST	2.97	97	W229120	☐	N17-009	core		☐	☐	☐
284.38	287.43	3.05	LST	2.90	95	W229121	☐	N17-009	core		☐	☐	☐
284.38	287.43	3.05	LST	2.90	95	W229122	☐	N17-009	core		☐	☐	☑
287.43	290.47	3.04	LST	2.99	98	W229123	☐	N17-009	core		☐	☐	☐
290.47	293.52	3.05	LST	2.91	95	W229124	☐	N17-009	core		☐	☐	☐
293.52	296.57	3.05	LST	2.82	92	W229125	☐	N17-009	core		☐	☐	☐
296.57	299.62	3.05	LST	2.91	95	W229126	☐	N17-009	core		☐	☐	☐
299.62	301.14	1.52	LST	1.52	100	W229127	☐	N17-009	core		☐	☐	☐
301.14	304.19	3.05	LST	2.98	98	W229128	☐	N17-009	core		☐	☐	☐
304.19	307.24	3.05	LST	2.37	78	W229129	☐	N17-009	core		☐	☐	☐
307.24	309.65	2.41	LST	0.70	29	W229130	☐	N17-009	core		☐	☐	☐
309.65	311.51	1.86	LST	1.00	54	W229132	☐	N17-009	core		☐	☐	☐
311.51	314.55	3.04	LST	2.82	93	W229133	☐	N17-009	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
314.55	317.60	3.05	LST	2.61	86	W229135	☐	N17-009	core		☐	☐	☐
317.60	320.65	3.05	LST	2.94	96	W229136	☐	N17-009	core		☐	☐	☐
320.65	323.70	3.05	LST	2.96	97	W229137	☐	N17-009	core		☐	☐	☐
323.70	326.75	3.05	LST	2.45	80	W229138	☐	N17-009	core		☐	☐	☐
323.70	326.75	3.05	LST	2.45	80	W229139	☐	N17-009	core		☐	☑	☐
326.75	329.79	3.04	LST	2.94	97	W229140	☐	N17-009	core		☐	☐	☐
329.79	331.92	2.13	LST	2.10	99	W229141	☐	N17-009	core		☐	☐	☐
331.92	332.84	0.92	LST	0.92	100	W229142	☐	N17-009	core		☐	☐	☐
332.84	335.89	3.05	INT, LST	3.03	99	W229143	☐	N17-009	core		☐	☐	☐
335.89	338.94	3.05	LST	3.01	99	W229144	☐	N17-009	core		☐	☐	☐
338.94	341.98	3.04	LST	3.03	100	W229145	☐	N17-013	Core		☐	☐	☐
341.98	345.03	3.05	LST	3.02	99	W229146	☐	N17-013	Core		☐	☐	☐
345.03	348.08	3.05	LST	3.01	99	W229147	☐	N17-013	Core		☐	☐	☐
348.08	351.13	3.05	LST	3.04	100	W229148	☐	N17-013	Core		☐	☐	☐
351.13	352.30	1.17	LST	1.12	96	W229150	☐	N17-013	Core		☐	☐	☐
352.30	354.17	1.87	LST	1.84	98	W229152	☐	N17-013	Core		☐	☐	☐
354.17	357.22	3.05	LST	2.88	94	W229153	☐	N17-013	Core		☐	☐	☐
357.22	360.27	3.05	LST	3.04	100	W229154	☐	N17-013	Core		☐	☐	☐
360.27	363.32	3.05	LST	2.92	96	W229155	☐	N17-013	Core		☐	☐	☐
363.32	366.37	3.05	LST	2.90	95	W229156	☐	N17-013	Core		☐	☐	☐
366.37	369.42	3.05	LST	2.85	93	W229157	☐	N17-013	Core		☐	☐	☐
369.42	372.47	3.05	LST	2.85	93	W229158	☐	N17-013	Core		☐	☐	☐
372.47	375.51	3.04	LST	2.75	90	W229159	☐	N17-013	Core		☐	☐	☐
375.51	378.56	3.05	LST	2.89	95	W229160	☐	N17-013	Core		☐	☐	☐
378.56	381.61	3.05	LST	2.98	98	W229161	☐	N17-013	Core		☐	☐	☐
378.56	381.61	3.05	LST	2.98	98	W229162	☐	N17-013	Core		☐	☑	☐
381.61	384.66	3.05	LST	2.85	93	W229163	☐	N17-013	Core		☐	☐	☐
384.66	387.71	3.05	LST	3.01	99	W229164	☐	N17-013	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
387.71	390.75	3.04	LST	2.62	86	W229166	☐	N17-013	Core		☐	☐	☐
390.75	393.80	3.05	LST	2.83	93	W229167	☐	N17-013	Core		☐	☐	☐
390.75	393.80	3.05	LST	2.83	93	W229168	☐	N17-013	Core		☐	☐	☑
393.80	396.85	3.05	LST	2.80	92	W229169	☐	N17-013	Core		☐	☐	☐
396.85	399.90	3.05	LST	2.85	93	W229170	☐	N17-013	Core		☐	☐	☐
399.90	402.95	3.05	LST	2.55	84	W229171	☐	N17-013	Core		☐	☐	☐
402.95	406.00	3.05	LST	2.72	89	W229172	☐	N17-013	Core		☐	☐	☐
406.00	409.04	3.04	LST	2.60	86	W229173	☐	N17-013	Core		☐	☐	☐
409.04	410.65	1.61	LST	0.77	48	W229174	☐	N17-013	Core		☐	☐	☐
410.65	412.09	1.44	FLR	1.05	73	W229175	☐	N17-013	Core		☐	☐	☐
412.09	415.14	3.05	FLR	2.82	92	W229176	☐	N17-013	Core		☐	☐	☐
415.14	418.19	3.05	FLR	2.76	90	W229178	☐	N17-013	Core		☐	☐	☐
418.19	421.23	3.04	LST	2.62	86	W229179	☐	N17-013	Core		☐	☐	☐
421.23	424.28	3.05	LST	2.77	91	W229180	☐	N17-013	Core		☐	☐	☐
424.28	427.33	3.05	LST	2.79	91	W229181	☐	N17-014	core		☐	☐	☐
427.33	430.38	3.05	LST	3.03	99	W229182	☐	N17-014	core		☐	☐	☐
430.38	433.43	3.05	LST	2.51	82	W229183	☐	N17-014	core		☐	☐	☐
433.43	436.47	3.04	LST	2.65	87	W229184	☐	N17-014	core		☐	☐	☐
436.47	439.52	3.05	LST	2.63	86	W229185	☐	N17-014	core		☐	☐	☐
439.52	442.57	3.05	LST	2.66	87	W229186	☐	N17-014	core		☐	☐	☐
442.57	445.62	3.05	LST	1.89	62	W229187	☐	N17-014	core		☐	☐	☐

OS -17-233

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
0.00	3.10	3.10	OVB	--	No recovery 0 - 2.61m							
						--	--	---	---	--	--	0
318.30	426.52	108.22	SLC	MG	Medium grey to black laminated siltstone with pyrite laminations and weak to moderate displays of arsenic mineralization on fracture surfaces and associated with calcite veins.							
						--	BK					
						DK	GY	BD				
426.52	426.76	0.24	INT	MG	Cream colored altered intrusive rock; crystal size ranges from <1mm to 2mm. Minerals include quartz, plagioclase, fuchasite. Black dolomite veins <1mm thick crosscut the intrusive.							
						--	BK					
						MD	GY	BD	BLE	4I		
521.00	683.06	162.06	LST	MG	Grey to dark grey interbedded fine-grained siliciclastic and medium-grained limestone with moderate to weak calcite veining with varying zones of realgar and orpiment mineralization. 683.06 EOH.							
											Om	1
											Re	3
						DK	GY				Ca	10
						MD	GY	BD	OXI	1I	Ca	5

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	2.61	2.61	0	0	0.00	0	--	--	--	OVB no recovery
2.61	3.05	0.44	0.44	100	0.33	75	--	--	--	
3.05	4.57	1.52	0.53	35	0.00	0	4R	2H	4W	rubble
4.57	6.10	1.53	1.39	91	0.73	48	4R	2H	3W	rubble
6.10	7.62	1.52	1.37	90	0.28	18	4R	2H	3W	rubble
7.62	9.14	1.52	1.1	72	0.00	0	4R	2H	3W	rubble
9.14	10.67	1.53	1.23	80	0.10	7	4R	2H	3W	
10.67	12.19	1.52	1.32	87	0.38	25	4R	2H	2W	
12.19	13.72	1.53	1.06	69	0.66	43	4R	2H	2W	
13.72	15.24	1.52	0.98	64	0.52	34	4R	2H	2W	
15.24	16.76	1.52	0.89	59	0.00	0	4R	2H	4W	rubble
16.76	18.29	1.53	1.53	100	0.00	0	4R	4H	4W	rubble
18.29	19.81	1.52	1.03	68	0.00	0	4R	2H	4W	rubble
19.81	21.34	1.53	0.94	61	0.00	0	4R	2H	4W	rubble
21.34	22.86	1.52	1.52	100	0.22	14	4R	2H	3W	
22.86	24.38	1.52	1.27	84	0.95	63	4R	2H	2W	
24.38	25.91	1.53	1.43	93	0.98	64	4R	2H	3W	
25.91	27.43	1.52	1.37	90	0.51	34	4R	2H	2W	
27.43	28.96	1.53	1.3	85	1.01	66	4R	2H	2W	
28.96	30.48	1.52	1.47	97	0.91	60	4R	2H	2W	10cm of rubble/breccia with calcite fill
30.48	32.00	1.52	1.26	83	0.83	55	4R	2H	2W	
32.00	33.53	1.53	1.53	100	0.87	57	4R	2H	2W	
33.53	35.05	1.52	1.19	78	0.62	41	4R	2H	2W	Rubble for 10 cm at 33.71 m. Joints the same but with different infill (Clay vs Calcite)
35.05	36.58	1.53	1.48	97	0.72	47	4R	2H	2W	Rubble for 15cm @ 36.48
36.58	38.10	1.52	1.52	100	0.88	58	4R	2H	2W	2nd and 3rd joint sets the same, just different infill
38.10	39.62	1.52	1.47	97	1.28	84	4R	3H	2W	both joint sets have clay and calcite infill
39.62	41.15	1.53	1.47	96	1.28	84	4R	3H	2W	joint set has clay and calcite infill

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
41.15	42.67	1.52	1.52	100	0.51	34	4R	2H	3W	clay and calcite infill, infill width not recorded
42.67	44.20	1.53	1.31	86	1.15	75	3R	4H	4W	
44.20	45.72	1.52	1.52	100	1.30	86	3R	4H	3W	Arsenic Oxide coating
45.72	47.24	1.52	1.4	92	1.40	92	4R	3H	3W	
47.24	48.77	1.53	1.48	97	1.06	69	1R	2H	3W	
48.77	50.29	1.52	1.52	100	0.97	64	4R	4H	2W	
50.29	51.82	1.53	1.45	95	0.75	49	4R	3H	2W	Clay and calcite infill
51.82	53.34	1.52	1.52	100	1.28	84	4R	3H	2W	
53.34	54.86	1.52	1.43	94	0.99	65	4R	3H	3W	Clay and calcite infill
54.86	56.39	1.53	1.52	99	0.83	54	4R	2H	3W	
56.39	57.91	1.52	1.47	97	1.34	88	4R	3H	2W	
57.91	59.44	1.53	1.48	97	1.26	82	4R	2H	2W	
59.44	60.96	1.52	1.52	100	1.52	100	4R	3H	2W	
60.96	62.48	1.52	1.52	100	1.52	100	4R	4H	2W	
62.48	64.00	1.52	1.23	81	0.82	54	4R	3H	3W	
64.00	65.53	1.53	1.53	100	1.34	88	4R	3H	2W	
65.53	67.06	1.53	1.52	99	1.48	97	2R	3H	2W	
67.06	68.58	1.52	1.33	88	1.18	78	1R	3H	2W	
68.58	70.10	1.52	1.52	100	1.12	74	1R	3H	2W	Core is weathered (hence unrealistic clay infill width)
70.10	71.63	1.53	1.52	99	1.49	97	4R	3H	2W	Core is weathered
71.63	73.15	1.52	1.15	76	0.77	51	2R	2H	2W	
73.15	74.68	1.53	1.52	99	1.33	87	4R	3H	2W	
74.68	76.20	1.52	1.52	100	1.52	100	4R	3H	1W	
76.20	77.72	1.52	1.25	82	1.15	76	4R	3H	2W	
77.72	79.25	1.53	1.45	95	1.30	85	4R	2H	2W	
79.25	80.77	1.52	1.52	100	1.29	85	4R	3H	2W	
80.77	82.30	1.53	1.52	99	0.83	54	4R	3H	2W	
82.30	83.82	1.52	1.52	100	0.73	48	4R	3H	2W	
83.82	85.34	1.52	1.49	98	0.86	57	4R	3H	2W	
85.34	86.87	1.53	1.36	89	1.36	89	4R	3H	2W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
86.87	88.39	1.52	1.52	100	1.52	100	4R	3H	2W	
88.39	89.92	1.53	1.53	100	1.13	74	4R	3H	1W	
89.92	91.44	1.52	1.52	100	1.52	100	4R	3H	1W	
91.44	92.96	1.52	1.49	98	1.33	88	4R	3H	2W	
92.96	94.49	1.53	1.5	98	1.45	95	4R	3H	2W	
94.49	96.01	1.52	1.48	97	1.12	74	4R	3H	3W	
96.01	97.54	1.53	1.52	99	1.52	99	4R	3H	2W	
97.54	99.06	1.52	1.5	99	1.50	99	4R	3H	1W	
99.06	100.58	1.52	1.51	99	1.51	99	4R	3H	1W	
100.58	102.11	1.53	1.41	92	1.20	78	4R	3H	3W	
102.11	103.63	1.52	1.52	100	1.38	91	4R	3H	2W	
103.63	105.10	1.47	1.47	100	0.98	67	3R	3H	3W	
105.10	106.68	1.58	1.53	97	0.98	62	3R	3H	3W	
106.68	108.20	1.52	1.47	97	1.41	93	4R	3H	1W	
108.20	109.73	1.53	1.53	100	1.37	90	4R	3H	1W	
109.73	111.25	1.52	1.43	94	1.39	91	4R	3H	1W	
111.25	112.78	1.53	1.43	93	1.43	93	4R	3H	1W	
112.78	114.30	1.52	1.52	100	1.32	87	4R	3H	1W	
114.30	115.82	1.52	1.52	100	1.37	90	4R	3H	1W	
115.82	117.35	1.53	1.42	93	1.42	93	4R	3H	1W	
117.35	118.87	1.52	1.5	99	1.33	88	4R	3H	1W	
118.87	120.40	1.53	1.48	97	1.48	97	4R	3H	1W	
120.40	121.92	1.52	1.52	100	1.52	100	4R	3H	1W	
121.92	123.44	1.52	1.52	100	1.52	100	4R	3H	1W	
123.44	124.97	1.53	1.45	95	1.12	73	4R	3H	1W	
124.97	126.50	1.53	1.47	96	1.47	96	4R	3H	1W	
126.50	128.02	1.52	1.52	100	1.52	100	4R	3H	1W	
128.02	129.54	1.52	1.52	100	1.52	100	4R	3H	1W	
129.54	131.06	1.52	1.5	99	1.38	91	4R	3H	1W	
131.06	132.59	1.53	1.4	92	1.40	92	4R	3H	1W	
132.59	134.11	1.52	1.49	98	1.42	93	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
134.11	135.64	1.53	1.47	96	1.41	92	4R	3H	1W	
135.64	137.16	1.52	1.39	91	1.33	88	4R	3H	1W	
137.16	138.68	1.52	1.52	100	1.41	93	4R	3H	1W	
138.68	140.21	1.53	1.34	88	1.34	88	4R	3H	1W	
140.21	141.73	1.52	1.43	94	1.43	94	4R	3H	1W	
141.73	143.26	1.53	1.53	100	1.53	100	4R	3H	1W	
143.26	144.78	1.52	1.52	100	1.48	97	4R	3H	1W	
144.78	146.30	1.52	1.51	99	0.82	54	4R	3H	1W	
146.30	147.83	1.53	1.5	98	1.24	81	4R	3H	1W	
147.83	149.35	1.52	1.4	92	1.40	92	4R	3H	1W	
149.35	150.76	1.41	1.41	100	1.41	100	4R	3H	1W	
150.76	152.40	1.64	1.54	94	1.38	84	4R	3H	1W	
152.40	153.92	1.52	1.46	96	1.46	96	4R	3H	1W	
153.92	155.45	1.53	1.53	100	1.47	96	4R	3H	1W	
155.45	156.97	1.52	1.52	100	0.66	43	4R	3H	1W	
156.97	158.50	1.53	1.49	97	1.49	97	3R	3H	1W	
158.50	160.02	1.52	1.52	100	1.34	88	4R	3H	1W	
160.02	161.54	1.52	1.52	100	1.38	91	4R	3H	1W	
161.54	163.07	1.53	1.53	100	1.53	100	4R	3H	1W	
163.07	164.59	1.52	1.48	97	1.12	74	4R	3H	2W	
164.59	166.12	1.53	1.34	88	0.71	46	4R	3H	3W	
166.12	167.64	1.52	1.52	100	1.52	100	4R	3H	1W	
167.64	169.16	1.52	1.52	100	1.25	82	4R	3H	2W	
169.16	170.69	1.53	1.53	100	0.98	64	4R	3H	1W	
170.69	172.21	1.52	1.5	99	1.50	99	4R	3H	1W	
172.21	173.74	1.53	1.51	99	1.51	99	4R	3H	1W	
173.74	175.26	1.52	1.52	100	1.23	81	4R	3H	1W	
175.26	176.78	1.52	1.52	100	1.52	100	4R	3H	1W	
176.78	178.30	1.52	1.52	100	1.52	100	4R	3H	1W	This interval in the photos is labelled wrong. The meter marker says 176.28 but should say 176.78.
178.30	179.83	1.53	1.53	100	1.38	90	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
179.83	181.36	1.53	1.46	95	1.46	95	4R	3H	1W	
181.36	182.88	1.52	1.48	97	1.25	82	4R	3H	2W	
182.88	184.40	1.52	1.52	100	0.61	40	3R	2H	3W	
184.40	185.93	1.53	1.42	93	0.89	58	0R	2H	1W	
185.93	187.45	1.52	1.46	96	1.13	74	4R	3H	2W	
187.45	188.98	1.53	1.5	98	1.25	82	4R	3H	1W	
188.98	190.50	1.52	1.47	97	1.30	86	4R	3H	1W	
190.50	192.02	1.52	1.44	95	1.01	66	4R	3H	3W	
192.02	193.55	1.53	1.48	97	1.48	97	4R	3H	1W	
193.55	195.07	1.52	1.48	97	1.33	88	4R	3H	1W	
195.07	196.60	1.53	1.53	100	1.53	100	4R	3H	1W	
196.60	198.12	1.52	1.46	96	1.46	96	4R	3H	1W	
198.12	199.64	1.52	1.51	99	1.23	81	4R	3H	1W	
199.64	201.17	1.53	1.53	100	1.53	100	4R	3H	1W	
201.17	202.69	1.52	1.52	100	1.52	100	4R	3H	1W	
202.69	204.22	1.53	1.53	100	1.53	100	4R	3H	1W	
204.22	205.74	1.52	1.5	99	1.50	99	4R	3H	1W	
205.74	207.26	1.52	1.52	100	1.52	100	4R	3H	1W	
207.26	208.79	1.53	1.53	100	1.53	100	4R	3H	2W	
208.79	210.31	1.52	1.52	100	1.42	93	4R	3H	2W	
210.31	211.84	1.53	1.46	95	1.46	95	4R	3H	1W	
211.84	213.36	1.52	1.52	100	1.42	93	4R	3H	1W	
213.36	214.88	1.52	1.49	98	1.44	95	4R	3H	1W	
214.88	216.40	1.52	1.38	91	1.26	83	4R	3H	2W	
216.40	217.93	1.53	1.43	93	1.12	73	4R	3H	2W	
217.93	219.45	1.52	1.52	100	1.46	96	4R	3H	1W	
219.45	220.98	1.53	1.53	100	1.38	90	4R	3H	1W	
220.98	222.20	1.22	1.08	89	1.06	87	4R	3H	1W	
222.20	225.25	3.05	2.74	90	2.08	68	4R	3H	1W	
225.25	228.30	3.05	2.87	94	2.30	75	4R	3H	1W	
228.30	231.34	3.04	2.82	93	2.58	85	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
231.34	233.48	2.14	1.92	90	1.47	69	4R	3H	1W	
233.48	236.52	3.04	2.86	94	2.55	84	4R	3H	1W	
236.52	237.74	1.22	1.02	84	0.96	79	4R	3H	1W	1 joint pair and 2 individual orientations.
237.74	240.79	3.05	2.68	88	1.24	41	4R	3H	1W	
240.79	243.84	3.05	3.05	100	1.98	65	4R	3H	1W	
243.84	246.88	3.04	2.93	96	1.97	65	4R	3H	1W	
246.88	248.41	1.53	1.31	86	0.40	26	4R	3H	1W	
248.41	251.46	3.05	2.97	97	2.15	70	4R	3H	1W	
251.46	254.51	3.05	1.52	50	1.19	39	4R	3H	1W	
254.51	256.03	1.52	1.52	100	1.19	78	4R	3H	1W	
256.03	259.08	3.05	2.87	94	1.45	48	4R	3H	1W	
259.08	262.13	3.05	3.05	100	2.80	92	4R	3H	1W	
262.13	265.18	3.05	2.85	93	2.53	83	4R	3H	1W	
265.18	268.22	3.04	2.85	94	2.53	83	4R	3H	1W	
268.22	271.27	3.05	3.01	99	2.87	94	4R	3H	1W	
271.27	274.32	3.05	2.96	97	2.56	84	3R	3H	1W	Reduced rxn on black, softer, altered limestone.
274.32	277.37	3.05	2.92	96	2.32	76	4R	3H	1W	
277.37	280.42	3.05	2.97	97	2.29	75	2R	4H	1W	Changing HCl reaction from 4 to 0 along this interval.
280.42	283.46	3.04	2.82	93	1.62	53	1R	4H	1W	
283.46	286.51	3.05	2.62	86	1.50	49	4R	4H	1W	rubble zone from 284.70-286.36 m
286.51	289.56	3.05	2.89	95	0.41	13	4R	3H	1W	Rubble zone 286.80-289.00 m
289.56	292.61	3.05	2.99	98	1.71	56	4R	3H	1W	
292.61	295.66	3.05	2.93	96	1.98	65	4R	3H	1W	
295.66	298.70	3.04	2.71	89	1.46	48	4R	3H	1W	
298.70	301.75	3.05	2.8	92	1.87	61	3R	3H	1W	
301.75	304.80	3.05	2.77	91	1.82	60	4R	3H	1W	
304.80	307.58	2.78	2.78	100	1.32	47	2R	4H	1W	rubble zone from 366.00-307.58 m
307.58	310.90	3.32	2.95	89	1.58	48	3R	3H	1W	rubble zone
310.90	313.94	3.04	2.83	93	1.37	45	4R	3H	1W	RBZ from 311.5 to 311.8m
313.94	316.99	3.05	3.05	100	1.39	46	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
316.99	320.04	3.05	2.91	95	1.59	52	0R	4H	1W	RBZ from 318.5 to 320.4
320.04	323.09	3.05	2.83	93	0.58	19	0R	4H	1W	
323.09	325.22	2.13	1.6	75	0.39	18	0R	4H	1W	RBZ from 323.09 to 325.50.
325.22	327.66	2.44	2.28	93	0.65	27	0R	4H	1W	
327.66	329.18	1.52	1.3	86	0.20	13	0R	4H	1W	clay infill in rubble zones up to 2cm thick.
329.18	332.23	3.05	2.5	82	1.05	34	0R	3H	1W	
332.23	335.28	3.05	2.75	90	0.80	26	0R	3H	1W	RBZ from 334.80 to 334.90
335.28	336.80	1.52	1.52	100	0.11	7	0R	4H	1W	predominantly at 35 degrees.
336.80	338.94	2.14	2.14	100	0.22	10	0R	4H	1W	
338.94	341.38	2.44	2.08	85	0.85	35	0R	3H	1W	
341.38	344.42	3.04	2.91	96	0.83	27	0R	4H	1W	predominantly at 30 - 40 degrees.
344.42	345.95	1.53	1.53	100	0.83	54	0R	4H	1W	
345.95	347.47	1.52	1.33	88	0.14	9	0R	3H	1W	
347.47	350.52	3.05	2.82	92	1.62	53	0R	4H	1W	
350.52	353.57	3.05	2.98	98	1.60	52	0R	3H	1W	RBZ for 40cm.
353.57	356.62	3.05	2.93	96	1.50	49	0R	3H	1W	10cm RBZ at 354m and again at 356.5m.
356.62	359.66	3.04	2.91	96	0.56	18	0R	3H	1W	very broken up, joint set along bedding.
359.66	362.71	3.05	3.05	100	1.08	35	0R	3H	1W	
362.71	365.76	3.05	2.82	92	1.41	46	0R	4H	1W	
365.76	368.81	3.05	2.84	93	1.58	52	0R	3H	1W	
368.81	371.56	2.75	2.75	100	0.67	24	0R	4H	1W	
371.56	374.90	3.34	2.71	81	0.92	28	0R	4H	1W	
374.90	377.95	3.05	2.14	70	0.53	17	0R	4H	1W	40cm larger rubble section, 1/4 core pieces.
377.95	381.00	3.05	2.11	69	0.50	16	0R	4H	1W	most core is multiply fractured.
381.00	384.05	3.05	2.63	86	0.51	17	0R	3H	1W	2 small 5cm rubble zones.
384.05	387.10	3.05	2.88	94	1.55	51	0R	3H	1W	
387.10	390.14	3.04	2.99	98	1.78	59	0R	3H	1W	
390.14	393.19	3.05	2.89	95	1.22	40	0R	3H	1W	
393.19	396.24	3.05	2.88	94	1.22	40	0R	3H	1W	
396.24	399.29	3.05	2.92	96	1.16	38	0R	4H	1W	
399.29	402.34	3.05	2.65	87	1.43	47	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
402.34	405.38	3.04	3.04	100	1.01	33	0R	3H	1W	
405.38	408.42	3.04	2.73	90	0.72	24	0R	4H	1W	RBZ at 406.20 for 20cm and at 408.7 for 30cm.
408.42	411.48	3.06	2.74	90	1.00	33	0R	4H	1W	RBZ for 50cm at 408.3 and at 409.15 for 30cm.
411.48	414.53	3.05	2.93	96	1.98	65	0R	4H	1W	
414.53	417.58	3.05	2.81	92	2.65	87	0R	4H	1W	
417.58	420.62	3.04	2.85	94	2.70	89	0R	4H	1W	
420.62	423.67	3.05	3.05	100	3.02	99	0R	4H	1W	
423.67	426.72	3.05	2.89	95	2.46	81	0R	4H	1W	
426.72	429.77	3.05	3	98	2.45	80	0R	4H	1W	
429.77	432.82	3.05	2.97	97	2.81	92	0R	4H	1W	
432.82	435.86	3.04	2.91	96	2.51	83	0R	4H	1W	
435.86	438.91	3.05	2.95	97	2.63	86	1R	3H	1W	Cracks between beds reacting to HCl
438.91	441.96	3.05	2.73	90	1.53	50	1R	4H	1W	
441.96	445.01	3.05	3.05	100	2.34	77	1R	4H	1W	
445.01	448.06	3.05	3.05	100	2.45	80	1R	4H	1W	
448.06	451.10	3.04	2.72	89	1.60	53	1R	4H	1W	
451.10	454.15	3.05	3.05	100	2.60	85	1R	4H	1W	
454.15	457.20	3.05	2.83	93	2.73	90	1R	4H	1W	
457.20	460.25	3.05	2.91	95	2.88	94	0R	4H	1W	
460.25	463.30	3.05	3.05	100	2.43	80	0R	4H	1W	
463.30	466.34	3.04	3.04	100	3.00	99	0R	4H	1W	
466.34	469.39	3.05	3.01	99	2.97	97	0R	4H	1W	
469.39	472.44	3.05	3.05	100	3.05	100	0R	4H	1W	
472.44	475.49	3.05	2.97	97	2.37	78	0R	4H	1W	
475.49	478.54	3.05	2.98	98	2.49	82	0R	4H	1W	
478.54	481.58	3.04	3.02	99	1.30	43	4R	4H	1W	
481.58	484.63	3.05	1.98	65	1.81	59	4R	4H	1W	
484.63	487.68	3.05	2.98	98	2.34	77	4R	4H	1W	
487.68	490.73	3.05	2.6	85	1.58	52	1R	4H	1W	
490.73	493.78	3.05	2.57	84	2.07	68	1R	5H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
493.78	496.82	3.04	2.9	95	2.74	90	0R	4H	1W	
496.82	499.87	3.05	3.02	99	2.62	86	1R	4H	1W	
499.87	502.92	3.05	2.6	85	2.41	79	0R	4H	1W	
502.92	505.97	3.05	2.92	96	2.45	80	0R	4H	1W	
505.97	509.02	3.05	3.02	99	2.67	88	0R	4H	1W	
509.02	512.06	3.04	3.02	99	2.72	89	0R	4H	1W	
512.06	515.11	3.05	2.92	96	2.48	81	1R	4H	1W	
515.11	518.16	3.05	2.79	91	2.55	84	0R	4H	1W	
518.16	521.21	3.05	3.03	99	2.42	79	1R	5H	1W	
521.21	524.26	3.05	2.7	89	2.63	86	1R	3H	1W	
524.26	527.30	3.04	3.01	99	2.83	93	4R	4H	1W	
527.30	530.35	3.05	2.87	94	2.72	89	4R	4H	1W	
530.35	533.40	3.05	3.01	99	2.70	89	4R	3H	1W	
533.40	536.45	3.05	3	98	2.72	89	4R	3H	1W	
536.45	539.50	3.05	3.05	100	2.87	94	4R	3H	1W	
539.50	542.54	3.04	2.75	90	2.30	76	4R	3H	1W	
542.54	545.59	3.05	2.79	91	1.86	61	4R	3H	1W	
545.59	548.64	3.05	2.86	94	2.02	66	4R	3H	1W	
548.64	551.69	3.05	2.83	93	0.89	29	4R	3H	1W	
551.69	554.74	3.05	2.89	95	2.41	79	4R	3H	1W	
554.74	557.79	3.05	2.97	97	2.53	83	4R	3H	1W	
557.79	560.83	3.04	3.01	99	2.82	93	4R	3H	1W	
560.83	563.88	3.05	3.03	99	3.00	98	4R	3H	1W	Single crystalline calcite filled
563.88	566.93	3.05	2.85	93	2.07	68	2R	3H	1W	Single undulating joint, near crystalline calcite vein.
566.93	569.98	3.05	2.98	98	2.69	88	2R	3H	1W	
569.98	573.02	3.04	3.04	100	3.04	100	3R	3H	1W	Single joint
573.02	576.07	3.05	3.01	99	2.66	87	4R	3H	1W	
576.07	579.12	3.05	2.82	92	2.13	70	2R	4H	1W	Rubble from 578.80 - 579.12 m these orientations are single joints.
579.12	582.17	3.05	3.05	100	2.98	98	2R	4H	1W	
582.17	585.22	3.05	3.05	100	2.77	91	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
585.22	588.26	3.04	3.04	100	3.04	100	4R	3H	1W	
588.26	591.31	3.05	3.05	100	2.90	95	4R	3H	1W	
591.31	594.36	3.05	2.91	95	2.74	90	4R	3H	1W	
594.36	597.41	3.05	2.86	94	2.36	77	4R	3H	1W	
597.41	600.46	3.05	2.75	90	2.54	83	4R	3H	1W	
600.46	603.50	3.04	2.88	95	2.05	67	4R	3H	1W	
603.50	606.55	3.05	2.93	96	2.43	80	4R	3H	1W	Single joint rubble (realgar) from 603.10 - 603.25.
606.55	609.60	3.05	3.01	99	3.01	99	4R	3H	1W	
609.60	612.65	3.05	3.03	99	2.44	80	4R	3H	1W	
612.65	615.70	3.05	2.72	89	2.52	83	4R	3H	1W	
615.70	618.74	3.04	2.85	94	2.64	87	3R	3H	1W	
618.74	621.80	3.06	2.88	94	2.79	91	4R	3H	1W	
621.80	624.84	3.04	3.04	100	2.64	87	4R	3H	1W	
624.84	627.89	3.05	2.81	92	2.12	70	4R	3H	1W	
627.89	630.94	3.05	2.74	90	1.60	52	4R	3H	1W	Core dropped back down drill rod and redriled for ~50cm
630.94	633.98	3.04	3.03	100	2.80	92	3R	3H	1W	Interbeds fizz slightly
633.98	637.03	3.05	3.03	99	2.80	92	3R	3H	1W	Interbeds fizz slightly
637.03	640.08	3.05	3	98	2.56	84	3R	3H	1W	Interbeds fizz slightly
640.08	643.13	3.05	3.03	99	2.47	81	3R	3H	1W	
643.13	646.18	3.05	3.02	99	2.72	89	3R	3H	1W	
646.18	649.22	3.04	3.04	100	2.93	96	4R	3H	1W	
649.22	652.27	3.05	3.05	100	2.63	86	4R	3H	1W	
652.27	655.32	3.05	3.05	100	2.74	90	4R	3H	1W	
655.32	658.37	3.05	3.03	99	2.66	87	1R	3H	1W	Strong decalcification in contrast to surrounding limestone at 657m
658.37	661.42	3.05	2.97	97	2.68	88	4R	3H	1W	
661.42	664.46	3.04	2.98	98	2.67	88	4R	3H	1W	
664.46	667.51	3.05	2.94	96	2.74	90	4R	3H	1W	
667.51	670.56	3.05	3.05	100	1.85	61	4R	3H	1W	
670.56	673.61	3.05	2.93	96	2.26	74	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
673.61	676.66	3.05	2.93	96	2.26	74	4R	3H	1W	
676.66	679.70	3.04	2.98	98	2.73	90	4R	3H	1W	
679.70	681.84	2.14	1.91	89	1.37	64	4R	3H	1W	
681.84	683.06	1.22	1.22	100	1.22	100	4R	3H	1W	EOH

OS -17-233

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228231	☐	N17-011	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228004	☐	N17-001	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228178	☐	N17-008	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228198	☐	N17-010	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228205	☐	N17-010	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228210	☐	N17-010	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228158	☐	N17-008	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228220	☐	N17-011	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228149	☐	N17-008	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228248	☐	N17-011	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228251	☐	N17-011	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228256	☐	N17-012	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228271	☐	N17-012	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228280	☐	N17-012	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228286	☐	N17-012	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228216	☐	N17-010	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228074	☐	N17-004	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228014	☐	N17-001	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228025	☐	N17-001	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228032	☐	N17-001	Core	CS8	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228042	☐	N17-003	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228053	☐	N17-003	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228173	☐	N17-008	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228068	☐	N17-003	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228138	☐	N17-006	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228083	☐	N17-004	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228087	☐	N17-004	Core	CS1	☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228102	☐	N17-004	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228107	☐	N17-004	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228113	☐	N17-006	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228126	☐	N17-006	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228133	☐	N17-006	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228066	☐	N17-003	Core		☑	☐	☐
3.05	6.10	3.05	OVB	1.69	55	W228001	☐	N17-001	Core		☐	☐	☐
6.10	9.14	3.04	LST	2.47	81	W228002	☐	N17-001	Core		☐	☐	☐
9.14	12.19	3.05	LST	2.55	84	W228003	☐	N17-001	Core		☐	☐	☐
12.19	15.24	3.05	LST	2.04	67	W228005	☐	N17-001	Core		☐	☐	☐
15.24	18.29	3.05	LST	2.42	79	W228006	☐	N17-001	Core		☐	☐	☐
18.29	21.34	3.05	LST	1.97	65	W228007	☐	N17-001	Core		☐	☐	☐
21.34	24.38	3.04	LST	2.79	92	W228008	☐	N17-001	Core		☐	☐	☐
24.38	27.43	3.05	LST	2.80	92	W228009	☐	N17-001	Core		☐	☐	☐
27.43	30.48	3.05	LST	2.77	91	W228010	☐	N17-001	Core		☐	☐	☐
27.43	30.48	3.05	LST	2.77	91	W228011	☐	N17-001	Core		☐	☑	☐
30.48	33.53	3.05	LST	1.70	56	W228012	☐	N17-001	Core		☐	☐	☐
33.53	36.58	3.05	LST	1.67	55	W228013	☐	N17-001	Core		☐	☐	☐
36.58	39.62	3.04	LST	2.99	98	W228015	☐	N17-001	Core		☐	☐	☐
39.62	42.67	3.05	LST	3.00	98	W228016	☐	N17-001	Core		☐	☐	☐
42.67	45.72	3.05	LST	2.97	97	W228017	☐	N17-001	Core		☐	☐	☐
45.72	48.77	3.05	LST	2.88	94	W228018	☐	N17-001	Core		☐	☐	☐
48.77	51.82	3.05	LST	2.97	97	W228019	☐	N17-001	Core		☐	☐	☐
51.82	54.86	3.04	LST	2.96	97	W228020	☐	N17-001	Core		☐	☐	☐
54.86	57.91	3.05	LST	2.99	98	W228021	☐	N17-001	Core		☐	☐	☐
57.91	60.96	3.05	LST	3.00	98	W228022	☐	N17-001	Core		☐	☐	☐
60.96	64.00	3.04	LST	3.04	100	W228023	☐	N17-001	Core		☐	☐	☐
64.00	66.05	2.05	LST	2.05	100	W228024	☐	N17-001	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
66.05	67.68	1.63	LST	1.50	92	W228026	☐	N17-001	Core		☐	☐	☐
67.68	70.80	3.12	LST	3.04	97	W228027	☐	N17-001	Core		☐	☐	☐
70.80	73.15	2.35	LST	2.29	97	W228028	☐	N17-001	Core		☐	☐	☐
73.15	76.20	3.05	LST	3.04	100	W228029	☐	N17-001	Core		☐	☐	☐
76.20	79.25	3.05	LST	2.70	89	W228030	☐	N17-001	Core		☐	☐	☐
79.25	82.30	3.05	LST	3.04	100	W228031	☐	N17-001	Core		☐	☐	☐
82.30	85.34	3.04	LST	3.01	99	W228033	☐	N17-001	Core		☐	☐	☐
82.30	85.34	3.04	LST	3.01	99	W228034	☐	N17-001	Core		☐	☐	☑
85.34	88.39	3.05	LST	2.88	94	W228035	☐	N17-001	Core		☐	☐	☐
88.39	91.44	3.05	LST	3.05	100	W228036	☐	N17-001	Core		☐	☐	☐
91.44	94.49	3.05	LST	2.99	98	W228037	☐	N17-003	Core		☐	☐	☐
94.49	97.54	3.05	LST	3.00	98	W228038	☐	N17-003	Core		☐	☐	☐
97.54	100.58	3.04	LST	3.01	99	W228039	☐	N17-003	Core		☐	☐	☐
100.58	103.63	3.05	LST	2.93	96	W228040	☐	N17-003	Core		☐	☐	☐
103.63	106.68	3.05	LST	3.05	100	W228041	☐	N17-003	Core		☐	☐	☐
106.68	109.73	3.05	LST	3.01	99	W228043	☐	N17-003	Core		☐	☐	☐
109.73	112.78	3.05	LST	2.86	94	W228044	☐	N17-003	Core		☐	☐	☐
112.78	115.82	3.04	LST	3.04	100	W228045	☐	N17-003	Core		☐	☐	☐
115.82	118.87	3.05	LST	2.92	96	W228046	☐	N17-003	Core		☐	☐	☐
118.87	121.92	3.05	LST	3.00	98	W228047	☐	N17-003	Core		☐	☐	☐
121.92	124.97	3.05	LST	2.97	97	W228048	☐	N17-003	Core		☐	☐	☐
124.97	128.02	3.05	LST	2.99	98	W228049	☐	N17-003	Core		☐	☐	☐
124.97	128.02	3.05	LST	2.99	98	W228050	☐	N17-003	Core		☐	☐	☑
128.02	131.06	3.04	LST	3.02	99	W228051	☐	N17-003	Core		☐	☐	☐
131.06	134.11	3.05	LST	2.86	94	W228052	☐	N17-003	Core		☐	☐	☐
134.11	137.16	3.05	LST	2.86	94	W228054	☐	N17-003	Core		☐	☐	☐
137.16	140.21	3.05	LST	2.86	94	W228055	☐	N17-003	Core		☐	☐	☐
140.21	143.26	3.05	LST	2.96	97	W228056	☐	N17-003	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
143.26	146.30	3.04	LST	3.03	100	W228057	☐	N17-003	Core		☐	☐	☐
146.30	149.35	3.05	LST	2.90	95	W228058	☐	N17-003	Core		☐	☐	☐
149.35	152.40	3.05	LST	2.99	98	W228059	☐	N17-003	Core		☐	☐	☐
152.40	155.45	3.05	LST	2.99	98	W228060	☐	N17-003	Core		☐	☐	☐
155.45	158.50	3.05	LST	3.01	99	W228061	☐	N17-003	Core		☐	☐	☐
158.50	161.54	3.04	LST	3.04	100	W228062	☐	N17-003	Core		☐	☐	☐
161.54	164.59	3.05	LST	3.01	99	W228063	☐	N17-003	Core		☐	☐	☐
164.59	167.64	3.05	LST	2.86	94	W228064	☐	N17-003	Core		☐	☐	☐
167.64	170.69	3.05	LST	3.05	100	W228065	☐	N17-003	Core		☐	☐	☐
170.69	173.74	3.05	LST	3.01	99	W228067	☐	N17-003	Core		☐	☐	☐
173.74	176.78	3.04	LST	3.04	100	W228069	☐	N17-003	Core		☐	☐	☐
173.74	176.78	3.04	LST	3.04	100	W228070	☐	N17-003	Core		☐	☑	☐
176.78	179.83	3.05	LST	3.04	100	W228071	☐	N17-004	Core		☐	☐	☐
179.83	181.36	1.53	LST	1.46	95	W228072	☐	N17-003	Core		☐	☐	☐
181.36	183.84	2.48	LST	2.48	100	W228073	☐	N17-004	Core		☐	☐	☐
183.84	185.93	2.09	LST	2.02	97	W228075	☐	N17-004	Core		☐	☐	☐
185.93	188.98	3.05	LST	2.96	97	W228076	☐	N17-004	Core		☐	☐	☐
188.98	192.02	3.04	LST	2.91	96	W228077	☐	N17-004	Core		☐	☐	☐
192.02	195.07	3.05	LST	2.96	97	W228078	☐	N17-004	Core		☐	☐	☐
195.07	198.12	3.05	LST	2.99	98	W228079	☐	N17-004	Core		☐	☐	☐
198.12	201.17	3.05	LST	3.04	100	W228080	☐	N17-004	Core		☐	☐	☐
201.17	204.22	3.05	LST	3.02	99	W228081	☐	N17-004	Core		☐	☐	☐
204.22	207.26	3.04	LST	3.02	99	W228082	☐	N17-004	Core		☐	☐	☐
207.26	210.31	3.05	LST	3.05	100	W228084	☐	N17-004	Core		☐	☐	☐
210.31	213.36	3.05	LST	2.98	98	W228085	☐	N17-004	Core		☐	☐	☐
213.36	216.40	3.04	LST	2.87	94	W228086	☐	N17-004	Core		☐	☐	☐
216.40	219.45	3.05	LST	2.95	97	W228088	☐	N17-004	Core		☐	☐	☐
219.45	222.20	2.75	LST	2.65	96	W228089	☐	N17-004	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
222.20	225.25	3.05	LST	2.74	90	W228090	☐	N17-004	Core		☐	☐	☐
225.25	228.30	3.05	LST	2.87	94	W228091	☐	N17-004	Core		☐	☐	☐
228.30	231.34	3.04	LST	2.82	93	W228092	☐	N17-004	Core		☐	☐	☐
228.30	231.34	3.04	LST	2.82	93	W228093	☐	N17-004	Core		☐	☑	☐
231.34	233.48	2.14	LST	1.92	90	W228094	☐	N17-004	Core		☐	☐	☐
233.48	236.52	3.04	LST	2.86	94	W228095	☐	N17-004	Core		☐	☐	☐
236.52	239.00	2.48	LST	2.18	88	W228096	☐	N17-004	Core		☐	☐	☐
239.00	241.07	2.07	LST	1.71	83	W228097	☐	N17-004	Core		☐	☐	☐
241.07	243.84	2.77	LST	2.76	100	W228098	☐	N17-004	Core		☐	☐	☐
243.84	246.88	3.04	LST	2.93	96	W228099	☐	N17-004	Core		☐	☐	☐
246.88	248.41	1.53	LST	1.31	86	W228100	☐	N17-004	Core		☐	☐	☐
248.41	251.46	3.05	LST	2.97	97	W228101	☐	N17-004	Core		☐	☐	☐
251.46	254.51	3.05	LST	1.52	50	W228103	☐	N17-004	Core		☐	☐	☐
254.51	256.03	1.52	LST	1.51	99	W228104	☐	N17-004	Core		☐	☐	☐
256.03	259.08	3.05	LST	2.87	94	W228105	☐	N17-004	Core		☐	☐	☐
259.08	262.13	3.05	LST	3.03	99	W228106	☐	N17-004	Core		☐	☐	☐
262.13	265.18	3.05	LST	2.85	93	W228108	☐	N17-004	Core		☐	☐	☐
265.18	268.22	3.04	LST	2.85	94	W228109	☐	N17-006	core		☐	☐	☐
268.22	271.27	3.05	LST	2.66	87	W228110	☐	N17-006	core		☐	☐	☐
271.27	273.98	2.71	LST	2.66	98	W228111	☐	N17-006	core		☐	☐	☐
273.98	276.23	2.25	LST	2.15	96	W228112	☐	N17-006	core		☐	☐	☐
276.23	277.37	1.14	LST	1.09	96	W228114	☐	N17-006	core		☐	☐	☐
277.37	280.42	3.05	LST	2.97	97	W228115	☐	N17-006	core		☐	☐	☐
280.42	283.46	3.04	LST	2.82	93	W228116	☐	N17-006	core		☐	☐	☐
283.46	286.51	3.05	LST	2.62	86	W228117	☐	N17-006	core		☐	☐	☐
286.51	289.56	3.05	LST	2.89	95	W228118	☐	N17-006	core		☐	☐	☐
289.56	292.61	3.05	LST	2.99	98	W228119	☐	N17-006	core		☐	☐	☐
292.61	295.66	3.05	LST	2.93	96	W228120	☐	N17-006	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
295.66	298.70	3.04	LST	2.71	89	W228121	☐	N17-006	core		☐	☐	☐
298.70	301.75	3.05	LST	2.80	92	W228122	☐	N17-006	core		☐	☐	☐
298.70	301.75	3.05	LST	2.80	92	W228123	☐	N17-006	core		☐	☐	☑
301.75	304.80	3.05	LST	2.77	91	W228124	☐	N17-006	core		☐	☐	☐
304.80	307.58	2.78	LST	2.66	96	W228125	☐	N17-006	core		☐	☐	☐
307.58	310.90	3.32	LST	2.86	86	W228127	☐	N17-006	core		☐	☐	☐
310.90	313.94	3.04	LST	2.83	93	W228128	☐	N17-006	core		☐	☐	☐
313.94	315.90	1.96	LST	1.58	81	W228129	☐	N17-006	core		☐	☐	☐
313.94	315.90	1.96	LST	1.58	81	W228130	☐	N17-006	core		☐	☑	☐
315.90	318.30	2.40	LST	2.40	100	W228131	☐	N17-006	core		☐	☐	☐
318.30	321.18	2.88	SLC, LST	2.34	81	W228132	☐	N17-006	core		☐	☐	☐
321.18	323.09	1.91	SLC	1.55	81	W228134	☐	N17-006	core		☐	☐	☐
323.09	325.41	2.32	SLC	1.70	73	W228135	☐	N17-006	core		☐	☐	☐
325.41	327.66	2.25	SLC	1.93	86	W228136	☐	N17-006	core		☐	☐	☐
327.66	329.52	1.86	SLC	1.62	87	W228137	☐	N17-006	core		☐	☐	☐
329.52	332.23	2.71	SLC	1.80	66	W228139	☐	N17-006	core		☐	☐	☐
332.23	335.28	3.05	SLC	2.75	90	W228140	☐	N17-006	core		☐	☐	☐
335.28	336.80	1.52	SLC	1.39	91	W228141	☐	N17-006	core		☐	☐	☐
336.80	338.94	2.14	SLC	1.88	88	W228142	☐	N17-006	core		☐	☐	☐
338.94	341.38	2.44	SLC	2.08	85	W228143	☐	N17-006	core		☐	☐	☐
341.38	344.42	3.04	SLC	2.91	96	W228144	☐	N17-006	core		☐	☐	☐
344.42	347.47	3.05	SLC	2.86	94	W228145	☐	N17-008	core		☐	☐	☐
347.47	349.69	2.22	SLC	1.90	86	W228146	☐	N17-008	core		☐	☐	☐
349.69	351.98	2.29	SLC	2.27	99	W228147	☐	N17-008	core		☐	☐	☐
351.98	354.02	2.04	SLC	1.90	93	W228148	☐	N17-008	core		☐	☐	☐
354.02	356.62	2.60	SLC	2.31	89	W228150	☐	N17-008	core		☐	☐	☐
356.62	359.66	3.04	SLC	2.06	68	W228151	☐	N17-008	core		☐	☐	☐
359.66	362.71	3.05	SLC	1.64	54	W228152	☐	N17-008	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
359.66	362.71	3.05	SLC	1.64	54	W228153	☐	N17-008	core		☐	☐	☑
362.71	365.76	3.05	SLC	2.99	98	W228154	☐	N17-008	core		☐	☐	☐
365.76	368.81	3.05	SLC	2.84	93	W228155	☐	N17-008	core		☐	☐	☐
368.81	371.86	3.05	SLC	2.75	90	W228156	☐	N17-008	core		☐	☐	☐
371.86	375.23	3.37	SLC	3.37	100	W228157	☐	N17-008	core		☐	☐	☐
375.23	377.95	2.72	SLC	1.92	71	W228159	☐	N17-008	core		☐	☐	☐
377.95	381.00	3.05	SLC	2.11	69	W228160	☐	N17-008	core		☐	☐	☐
381.00	384.05	3.05	SLC	2.63	86	W228161	☐	N17-008	core		☐	☐	☐
384.05	387.10	3.05	SLC	2.99	98	W228162	☐	N17-008	core		☐	☐	☐
387.10	390.14	3.04	SLC	2.99	98	W228163	☐	N17-008	core		☐	☐	☐
390.14	393.19	3.05	SLC	2.89	95	W228164	☐	N17-008	core		☐	☐	☐
393.19	396.24	3.05	SLC	2.88	94	W228165	☐	N17-008	core		☐	☐	☐
396.24	399.29	3.05	SLC	2.92	96	W228166	☐	N17-008	core		☐	☐	☐
399.29	402.34	3.05	SLC	2.65	87	W228167	☐	N17-008	core		☐	☐	☐
399.29	402.34	3.05	SLC	2.65	87	W228168	☐	N17-008	core		☐	☑	☐
402.34	405.38	3.04	SLC	3.04	100	W228169	☐	N17-008	core		☐	☐	☐
405.38	408.43	3.05	SLC	2.73	90	W228170	☐	N17-008	core		☐	☐	☐
408.43	411.48	3.05	SLC	2.74	90	W228171	☐	N17-008	core		☐	☐	☐
411.48	414.53	3.05	SLC	2.93	96	W228172	☐	N17-008	core		☐	☐	☐
414.53	417.58	3.05	SLC	2.81	92	W228174	☐	N17-008	core		☐	☐	☐
417.58	420.62	3.04	SLC	2.85	94	W228175	☐	N17-008	core		☐	☐	☐
420.62	423.67	3.05	SLC	3.05	100	W228176	☐	N17-008	core		☐	☐	☐
423.67	425.72	2.05	SLC	2.01	98	W228177	☐	N17-008	core		☐	☐	☐
425.72	426.76	1.04	SLC	1.04	100	W228179	☐	N17-008	core		☐	☐	☐
426.76	429.77	3.01	SLC, INT	3.01	100	W228180	☐	N17-008	core		☐	☐	☐
429.77	432.82	3.05	SLC	2.97	97	W228181	☐	N17-010	core		☐	☐	☐
432.82	435.86	3.04	SLC	2.91	96	W228182	☐	N17-010	core		☐	☐	☐
435.86	438.91	3.05	SLC	2.95	97	W228183	☐	N17-010	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
438.91	441.96	3.05	SLC	2.73	90	W228184	☐	N17-010	core		☐	☐	☐
438.91	441.96	3.05	SLC	2.73	90	W228185	☐	N17-010	core		☐	☐	☑
441.96	445.01	3.05	SLC	3.05	100	W228186	☐	N17-010	core		☐	☐	☐
445.01	448.06	3.05	SLC	3.05	100	W228187	☐	N17-010	core		☐	☐	☐
448.06	451.10	3.04	SLC	2.72	89	W228188	☐	N17-010	core		☐	☐	☐
451.10	454.15	3.05	SLC	3.05	100	W228189	☐	N17-010	core		☐	☐	☐
454.15	457.20	3.05	SLC	3.05	100	W228190	☐	N17-010	core		☐	☐	☐
457.20	460.25	3.05	SLC	2.91	95	W228191	☐	N17-010	core		☐	☐	☐
460.25	463.30	3.05	SLC	3.05	100	W228192	☐	N17-010	core		☐	☐	☐
463.30	466.34	3.04	SLC	3.04	100	W228193	☐	N17-010	core		☐	☐	☐
466.34	469.39	3.05	SLC	3.01	99	W228194	☐	N17-010	core		☐	☐	☐
469.39	472.44	3.05	SLC	3.05	100	W228195	☐	N17-010	core		☐	☐	☐
472.44	475.49	3.05	SLC	2.97	97	W228196	☐	N17-010	core		☐	☐	☐
475.49	478.54	3.05	SLC	2.98	98	W228197	☐	N17-010	core		☐	☐	☐
478.54	481.58	3.04	SLC	3.02	99	W228199	☐	N17-010	core		☐	☐	☐
481.58	484.63	3.05	LST	1.98	65	W228200	☐	N17-010	core		☐	☐	☐
481.58	484.63	3.05	LST	1.98	65	W228201	☐	N17-010	core		☐	☑	☐
484.63	487.68	3.05	LST	2.98	98	W228202	☐	N17-010	core		☐	☐	☐
487.68	490.73	3.05	LST	2.60	85	W228203	☐	N17-010	core		☐	☐	☐
490.73	492.28	1.55	SLC	1.43	92	W228204	☐	N17-010	core		☐	☐	☐
492.28	494.59	2.31	SLC	2.20	95	W228206	☐	N17-010	core		☐	☐	☐
494.59	497.77	3.18	SLC	3.16	99	W228207	☐	N17-010	core		☐	☐	☐
497.77	499.74	1.97	SLC	1.90	96	W228208	☐	N17-010	core		☐	☐	☐
499.74	502.09	2.35	SLC	2.25	96	W228209	☐	N17-010	core		☐	☐	☐
502.09	503.67	1.58	SLC	1.44	91	W228211	☐	N17-010	core		☐	☐	☐
503.67	505.97	2.30	SLC	2.17	94	W228212	☐	N17-010	core		☐	☐	☐
505.97	509.01	3.04	SLC	2.95	97	W228213	☐	N17-010	core		☐	☐	☐
509.01	510.19	1.18	SLC	1.07	91	W228214	☐	N17-010	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
510.19	513.01	2.82	SLC	2.78	99	W228215	☐	N17-010	core		☐	☐	☐
513.01	515.11	2.10	SLC	2.04	97	W228217	☐	N17-011	Core		☐	☐	☐
515.11	517.65	2.54	SLC	2.45	96	W228218	☐	N17-011	Core		☐	☐	☐
517.65	521.04	3.39	SLC	3.39	100	W228219	☐	N17-011	Core		☐	☐	☐
521.04	522.21	1.17	LST	1.17	100	W228221	☐	N17-011	Core		☐	☐	☐
522.21	525.33	3.12	LST	3.08	99	W228222	☐	N17-011	Core		☐	☐	☐
525.33	527.30	1.97	LST	1.90	96	W228223	☐	N17-011	Core		☐	☐	☐
527.30	530.35	3.05	LST	2.87	94	W228224	☐	N17-011	Core		☐	☐	☐
530.35	533.40	3.05	LST	3.01	99	W228225	☐	N17-011	Core		☐	☐	☐
533.40	536.45	3.05	LST	3.00	98	W228226	☐	N17-011	Core		☐	☐	☐
536.45	539.50	3.05	LST	3.05	100	W228227	☐	N17-011	Core		☐	☐	☐
539.50	542.54	3.04	LST	2.75	90	W228228	☐	N17-011	Core		☐	☐	☐
542.54	545.59	3.05	LST	2.79	91	W228229	☐	N17-011	Core		☐	☐	☐
545.59	548.64	3.05	LST	2.86	94	W228230	☐	N17-011	Core		☐	☐	☐
548.64	551.69	3.05	LST	2.83	93	W228232	☐	N17-011	Core		☐	☐	☐
551.69	554.74	3.05	LST	2.89	95	W228233	☐	N17-011	Core		☐	☐	☐
554.74	557.79	3.05	LST	2.97	97	W228234	☐	N17-011	Core		☐	☐	☐
557.79	560.83	3.04	LST	2.82	93	W228235	☐	N17-011	Core		☐	☐	☐
557.79	560.83	3.04	LST	2.82	93	W228236	☐	N17-011	Core		☐	☑	☐
560.83	563.88	3.05	LST	3.03	99	W228237	☐	N17-011	Core		☐	☐	☐
563.88	566.93	3.05	LST	2.85	93	W228238	☐	N17-011	Core		☐	☐	☐
566.93	569.98	3.05	LST	2.98	98	W228239	☐	N17-011	Core		☐	☐	☐
569.98	573.02	3.04	LST	3.04	100	W228240	☐	N17-011	Core		☐	☐	☐
573.02	576.07	3.05	LST	3.01	99	W228241	☐	N17-011	Core		☐	☐	☐
576.07	579.12	3.05	LST	2.82	92	W228242	☐	N17-011	Core		☐	☐	☐
579.12	582.17	3.05	LST	2.98	98	W228243	☐	N17-011	Core		☐	☐	☐
579.12	582.17	3.05	LST	2.98	98	W228244	☐	N17-011	Core		☐	☐	☑
582.17	585.22	3.05	LST	3.05	100	W228245	☐	N17-011	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
585.22	588.26	3.04	LST	3.04	100	W228246	☐	N17-011	Core		☐	☐	☐
588.26	591.31	3.05	LST	3.05	100	W228247	☐	N17-011	Core		☐	☐	☐
591.31	593.03	1.72	LST	1.70	99	W228249	☐	N17-011	Core		☐	☐	☐
593.03	594.80	1.77	LST	1.67	94	W228250	☐	N17-011	Core		☐	☐	☐
594.80	597.41	2.61	LST	2.54	97	W228252	☐	N17-011	Core		☐	☐	☐
597.41	600.07	2.66	LST	2.57	97	W228253	☐	N17-012	Core		☐	☐	☐
600.07	601.91	1.84	LST	1.84	100	W228254	☐	N17-012	Core		☐	☐	☐
601.91	603.50	1.59	LST	1.54	97	W228255	☐	N17-012	Core		☐	☐	☐
603.50	606.55	3.05	LST	2.93	96	W228257	☐	N17-012	Core		☐	☐	☐
606.55	609.60	3.05	LST	3.01	99	W228258	☐	N17-012	Core		☐	☐	☐
609.60	612.65	3.05	LST	3.03	99	W228259	☐	N17-012	Core		☐	☐	☐
612.65	615.70	3.05	LST	2.72	89	W228260	☐	N17-012	Core		☐	☐	☐
615.70	618.74	3.04	LST	2.85	94	W228261	☐	N17-012	Core		☐	☐	☐
618.74	621.80	3.06	LST	2.88	94	W228262	☐	N17-012	Core		☐	☐	☐
621.80	624.84	3.04	LST	3.04	100	W228263	☐	N17-012	Core		☐	☐	☐
621.80	624.84	3.04	LST	3.04	100	W228264	☐	N17-012	Core		☐	☑	☐
624.84	627.89	3.05	LST	2.81	92	W228265	☐	N17-012	Core		☐	☐	☐
627.89	629.20	1.31	LST	1.22	93	W228266	☐	N17-012	Core		☐	☐	☐
629.20	630.94	1.74	LST	1.50	86	W228267	☐	N17-012	Core		☐	☐	☐
630.94	633.98	3.04	LST	3.04	100	W228268	☐	N17-012	Core		☐	☐	☐
633.98	637.03	3.05	LST	3.03	99	W228269	☐	N17-012	Core		☐	☐	☐
637.03	640.08	3.05	LST	3.00	98	W228270	☐	N17-012	Core	CS1	☐	☐	☐
640.08	643.13	3.05	LST	3.03	99	W228272	☐	N17-012	Core		☐	☐	☐
643.13	646.18	3.05	LST	3.02	99	W228273	☐	N17-012	Core		☐	☐	☐
646.18	649.22	3.04	LST	3.02	99	W228274	☐	N17-012	Core		☐	☐	☐
646.18	649.22	3.04	LST	3.02	99	W228275	☐	N17-012	Core		☐	☐	☑
649.22	652.27	3.05	LST	3.05	100	W228276	☐	N17-012	Core		☐	☐	☐
652.27	655.32	3.05	LST	3.01	99	W228277	☐	N17-012	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
655.32	656.68	1.36	LST	1.36	100	W228278	☐	N17-012	Core		☐	☐	☐
656.68	658.37	1.69	LST	1.62	96	W228279	☐	N17-012	Core		☐	☐	☐
658.37	661.42	3.05	LST	2.97	97	W228281	☐	N17-012	Core		☐	☐	☐
661.42	664.46	3.04	LST	2.98	98	W228282	☐	N17-012	Core		☐	☐	☐
664.46	667.51	3.05	LST	2.94	96	W228283	☐	N17-012	Core		☐	☐	☐
667.51	670.56	3.05	LST	3.05	100	W228284	☐	N17-012	Core		☐	☐	☐
670.56	673.61	3.05	LST	2.83	93	W228285	☐	N17-012	Core		☐	☐	☐
673.61	676.66	3.05	LST	2.93	96	W228287	☐	N17-012	Core		☐	☐	☐
676.66	679.70	3.04	LST	2.98	98	W228288	☐	N17-012	Core		☐	☐	☐
679.70	681.84	2.14	LST	1.91	89	W228289	☐	N17-015	core		☐	☐	☐
681.84	683.06	1.22	LST	1.22	100	W228290	☐	N17-015	core		☐	☐	☐

OS -17-234

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
0.00	4.20	4.20	OVB	--	No recovery 0 - 3.42m. Strongly altered limestone - likely not in place.							
						--	--	---	---	--	--	0
4.20	237.08	232.88	LST	FG	Fine-to medium-grained grey calcareous limestone interbedded with medium-grained grey and white calcareous limestone. The limestone frequently illustrates stylolites along bedding. There is chaotic mm-to cm scale calcite veins and veinlets intermingled chaotically throughout the rock. Several zones of highly fractured and soft altered limestone along with crystalline realgar can be seen throughout the limestone most evidently throughout calcite veins							
											Re	2
						MD	GY	BD			Ca	15
237.08	367.28	130.20	SLC	FG	Dark grey to black, fine-grained, non-calcareous thinly laminated siltstone with thinly interbedded grey limestone that is gradational over the contact and becomes less frequent with depth (237.08 to 273.6 m). Below 273.6 m the laminated siltstone is interbedded with abundant light grey quartz arenite, moderately abundant grey granule conglomerate and rare siltstone breccia. EOH = 367.28 m							
						DK	BK	BD			Py	3

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	3.42	3.42	0	0	0.00	0	--	--	--	
3.42	4.57	1.15	0.5	43	0.00	0	4R	3H	2W	RBZ for entire interval.
4.57	6.10	1.53	0.34	22	0.16	10	4R	3H	2W	RBZ for entire interval.
6.10	7.62	1.52	1.3	86	0.00	0	4R	3H	2W	RBZ for entire interval.
7.62	9.14	1.52	1.34	88	0.45	30	4R	3H	2W	RBZ for entire interval.
9.14	10.67	1.53	1.4	92	0.36	24	4R	3H	1W	RBZ 10.20 - 10.67m with competent core every 20 cm.
10.67	12.19	1.52	0.89	59	0.43	28	4R	3H	1W	
12.19	13.72	1.53	0.66	43	0.00	0	4R	3H	1W	
13.72	15.24	1.52	0.26	17	0.00	0	4R	3H	1W	RBZ for entire interval.
15.24	16.76	1.52	0.7	46	0.18	12	4R	3H	2W	RBZ 15.25 - 16.60m.
16.76	18.29	1.53	1.21	79	0.90	59	4R	3H	2W	
18.29	19.81	1.52	1.26	83	0.11	7	4R	3H	1W	RBZ 19.50 - 19.81m.
19.81	21.34	1.53	1.05	69	0.59	39	4R	3H	1W	
21.34	22.86	1.52	1.3	86	0.19	13	4R	3H	1W	RBZ 23m - 23.5m
22.86	24.38	1.52	1.17	77	0.74	49	4R	3H	1W	
24.38	25.91	1.53	0.9	59	0.39	25	4R	3H	1W	
25.91	27.43	1.52	1.46	96	1.07	70	4R	3H	1W	RBZ from 26.5m - 26.80m
27.43	28.96	1.53	1.41	92	1.25	82	4R	3H	1W	
28.96	30.48	1.52	1.01	66	0.89	59	4R	3H	1W	
30.48	32.00	1.52	1.2	79	0.75	49	4R	3H	1W	RBZ from 31.2 to 37m
32.00	33.53	1.53	1.14	75	1.07	70	4R	3H	1W	
33.53	35.05	1.52	1.19	78	1.12	74	4R	3H	1W	
35.05	36.58	1.53	1.32	86	1.22	80	4R	3H	1W	
36.58	38.10	1.52	1.5	99	1.30	86	4R	3H	1W	
38.10	39.62	1.52	0.59	39	0.34	22	4R	3H	1W	
39.62	41.15	1.53	1.29	84	0.68	44	4R	3H	1W	
41.15	42.67	1.52	1.13	74	0.36	24	4R	3H	1W	RBZ from 41.80-42.0
42.67	44.20	1.53	1.02	67	0.75	49	4R	2H	1W	RBZ from 42.80-43.50
44.20	45.72	1.52	1.18	78	1.13	74	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
45.72	47.24	1.52	1.35	89	1.27	84	4R	3H	1W	
47.24	48.77	1.53	1.36	89	1.20	78	4R	3H	1W	RBZ from 48.5-48.5m
48.77	50.29	1.52	1.45	95	1.09	72	4R	3H	1W	
50.29	51.82	1.53	1.13	74	0.70	46	4R	3H	1W	
51.82	53.34	1.52	1.42	93	0.99	65	4R	3H	1W	
53.34	54.86	1.52	1.43	94	1.30	86	4R	3H	1W	
54.86	56.39	1.53	1.5	98	1.30	85	4R	3H	1W	
56.39	57.91	1.52	1.32	87	1.25	82	4R	3H	1W	
57.91	59.44	1.53	1.51	99	1.50	98	4R	3H	1W	
59.44	60.96	1.52	1.52	100	1.50	99	4R	3H	1W	
60.96	62.48	1.52	1.47	97	1.45	95	4R	3H	1W	
62.48	64.00	1.52	1.5	99	1.47	97	4R	3H	1W	
64.00	65.53	1.53	1.53	100	1.30	85	4R	3H	1W	
65.53	67.06	1.53	1.35	88	1.02	67	4R	3H	1W	
67.06	68.58	1.52	1.4	92	1.00	66	4R	3H	1W	
68.58	70.10	1.52	1.41	93	1.16	76	2R	3H	1W	
70.10	71.63	1.53	1.46	95	1.23	80	4R	3H	1W	
71.63	73.15	1.52	1.32	87	1.12	74	4R	3H	1W	
73.15	74.68	1.53	1.42	93	1.25	82	4R	3H	1W	
74.68	76.20	1.52	1.41	93	1.37	90	4R	3H	1W	
76.20	77.72	1.52	1.52	100	1.40	92	4R	3H	1W	
77.72	79.25	1.53	1.18	77	0.89	58	4R	3H	1W	
79.25	80.77	1.52	1.36	89	1.30	86	3R	3H	1W	
80.77	82.30	1.53	1.42	93	1.20	78	4R	3H	1W	
82.30	83.82	1.52	1.42	93	1.36	89	4R	3H	1W	
83.82	85.34	1.52	1.41	93	1.35	89	4R	3H	1W	
85.34	86.87	1.53	1.49	97	1.11	73	4R	3H	1W	
86.87	88.39	1.52	1.42	93	1.00	66	4R	3H	1W	
88.39	89.92	1.53	1.33	87	1.21	79	4R	3H	1W	
89.92	91.44	1.52	1.31	86	1.06	70	1R	3H	1W	
91.44	92.96	1.52	1.46	96	1.37	90	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
92.96	94.49	1.53	1.51	99	1.37	90	4R	3H	1W	
94.49	96.01	1.52	1.52	100	1.33	88	4R	3H	1W	
96.01	97.54	1.53	1.44	94	1.24	81	4R	3H	1W	
97.54	99.06	1.52	1.4	92	1.34	88	4R	3H	1W	
99.06	100.58	1.52	1.38	91	1.30	86	4R	3H	1W	
100.58	102.11	1.53	1.47	96	1.42	93	4R	3H	1W	
102.11	103.63	1.52	1.49	98	1.44	95	4R	3H	1W	
103.63	105.16	1.53	1.5	98	1.14	75	4R	3H	1W	
105.16	106.68	1.52	1.38	91	1.20	79	4R	3H	1W	
106.68	108.20	1.52	1.51	99	1.48	97	4R	3H	1W	
108.20	109.73	1.53	1.4	92	1.34	88	4R	3H	1W	
109.73	111.25	1.52	1.51	99	1.19	78	4R	3H	1W	
111.25	112.78	1.53	1.5	98	1.40	92	4R	3H	1W	
112.78	114.30	1.52	1.52	100	1.40	92	4R	3H	1W	
114.30	115.82	1.52	1.28	84	1.28	84	4R	3H	1W	
115.82	117.35	1.53	1.51	99	1.51	99	4R	3H	1W	
117.35	118.87	1.52	1.5	99	1.50	99	4R	3H	1W	
118.87	120.40	1.53	1.53	100	1.53	100	4R	3H	1W	
120.40	121.92	1.52	1.31	86	1.11	73	4R	3H	1W	
121.92	123.44	1.52	1.18	78	0.86	57	4R	3H	1W	RBZ 121.92-122m, 122.6-123.15m.
123.44	124.97	1.53	1.45	95	1.35	88	4R	3H	1W	
124.97	126.41	1.44	1.44	100	1.44	100	4R	3H	1W	
126.41	128.02	1.61	1.41	88	1.26	78	4R	3H	1W	
128.02	129.54	1.52	1.48	97	1.33	88	4R	3H	1W	RBZ 129.10-129.25m
129.54	131.06	1.52	1.25	82	1.03	68	4R	3H	1W	
131.06	132.58	1.52	1.35	89	1.27	84	4R	3H	1W	
132.58	134.11	1.53	1.49	97	1.42	93	4R	3H	1W	
134.11	135.64	1.53	1.42	93	1.42	93	4R	3H	1W	
135.64	137.16	1.52	1.4	92	1.38	91	4R	3H	1W	
137.16	138.68	1.52	1.52	100	1.42	93	4R	3H	1W	
138.68	140.21	1.53	1.2	78	0.88	58	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
140.21	141.73	1.52	1.52	100	1.49	98	4R	3H	1W	
141.73	143.26	1.53	1.53	100	1.23	80	4R	3H	1W	
143.26	144.78	1.52	1.05	69	0.92	61	4R	3H	1W	
144.78	146.30	1.52	1.34	88	1.05	69	4R	3H	1W	
146.30	147.82	1.52	1.52	100	1.18	78	4R	3H	1W	
147.82	149.35	1.53	1.42	93	1.42	93	4R	3H	1W	
149.35	150.88	1.53	1.47	96	1.38	90	2R	3H	1W	
150.88	152.40	1.52	1.47	97	1.32	87	4R	3H	1W	
152.40	153.92	1.52	1.28	84	1.21	80	4R	3H	1W	
153.92	155.45	1.53	1.51	99	1.17	76	4R	3H	1W	
155.45	156.97	1.52	1.51	99	1.40	92	4R	3H	1W	
156.97	158.50	1.53	1.5	98	1.50	98	4R	3H	1W	
158.50	160.02	1.52	1.49	98	1.49	98	4R	3H	1W	
160.02	161.54	1.52	1.37	90	1.23	81	4R	3H	1W	
161.54	163.07	1.53	1.48	97	1.48	97	4R	3H	1W	
163.07	164.60	1.53	1.51	99	1.11	73	4R	3H	1W	
164.60	166.12	1.52	1.43	94	0.98	64	4R	3H	1W	
166.12	167.64	1.52	1.15	76	0.61	40	4R	3H	1W	
167.64	169.16	1.52	1.51	99	1.21	80	4R	3H	1W	Two unpaired joints.
169.16	170.69	1.53	1.53	100	1.34	88	4R	3H	1W	
170.69	172.21	1.52	1.21	80	1.05	69	4R	3H	1W	
172.21	173.74	1.53	1.43	93	1.11	73	4R	3H	1W	
173.74	175.26	1.52	1.32	87	1.11	73	4R	3H	1W	
175.26	176.78	1.52	1.52	100	1.52	100	4R	3H	1W	
176.78	178.31	1.53	1.5	98	1.35	88	4R	3H	1W	
178.31	179.83	1.52	1.52	100	1.32	87	4R	3H	2W	
179.83	181.36	1.53	1.4	92	1.16	76	4R	3H	3W	
181.36	182.88	1.52	1.52	100	1.52	100	4R	3H	2W	
182.88	183.79	0.91	0.82	90	0.82	90	4R	3H	1W	
183.79	184.40	0.61	0.27	44	0.23	38	4R	3H	1W	
184.40	187.45	3.05	2.76	90	2.67	88	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
187.45	190.50	3.05	2.98	98	2.85	93	4R	3H	1W	
190.50	193.56	3.06	2.88	94	2.68	88	4R	3H	2W	
193.56	196.60	3.04	3.04	100	3.04	100	4R	3H	1W	
196.60	199.64	3.04	3.04	100	3.04	100	4R	3H	2W	
199.64	202.70	3.06	3.06	100	3.06	100	4R	3H	1W	
202.70	205.74	3.04	3	99	2.97	98	4R	3H	1W	
205.74	208.79	3.05	3.05	100	3.05	100	4R	3H	1W	
208.79	211.84	3.05	2.96	97	2.93	96	4R	3H	1W	
211.84	214.88	3.04	2.97	98	2.97	98	4R	3H	1W	
214.88	217.93	3.05	2.99	98	2.99	98	4R	3H	1W	
217.93	220.98	3.05	2.89	95	2.89	95	4R	3H	1W	
220.98	224.03	3.05	3	98	2.86	94	4R	3H	2W	
224.03	227.08	3.05	3	98	2.92	96	4R	3H	1W	
227.08	230.12	3.04	2.88	95	2.88	95	4R	3H	1W	
230.12	233.17	3.05	2.56	84	2.39	78	4R	3H	1W	
233.17	236.22	3.05	3.05	100	2.98	98	4R	3H	1W	
236.22	239.27	3.05	2.75	90	2.75	90	3R	3H	1W	
239.27	242.31	3.04	2.84	93	2.80	92	4R	3H	1W	
242.31	245.36	3.05	2.63	86	2.22	73	3R	3H	1W	
245.36	248.41	3.05	2.86	94	2.31	76	2R	3H	1W	
248.41	251.46	3.05	2.93	96	2.78	91	3R	3H	1W	
251.46	254.51	3.05	2.89	95	2.36	77	2R	3H	1W	
254.51	257.56	3.05	2.88	94	2.54	83	1R	3H	1W	
257.56	260.60	3.04	2.98	98	2.19	72	1R	3H	1W	
260.60	263.65	3.05	3.04	100	1.77	58	1R	3H	1W	
263.65	266.70	3.05	2.93	96	1.64	54	1R	3H	1W	
266.70	269.75	3.05	2.99	98	2.21	72	1R	3H	1W	
269.75	272.80	3.05	2.74	90	1.68	55	1R	3H	1W	
272.80	275.84	3.04	2.95	97	2.64	87	1R	3H	1W	Single joint at 60 degrees.
275.84	278.90	3.06	2.97	97	2.02	66	0R	3H	1W	
278.90	281.94	3.04	2.81	92	2.12	70	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
281.94	284.99	3.05	2.81	92	2.12	70	0R	3H	1W	
284.99	288.03	3.04	2.72	89	2.08	68	0R	3H	1W	
288.03	291.08	3.05	3.05	100	3.00	98	0R	3H	1W	Patchy pyrite on joint surface.
291.08	294.13	3.05	2.74	90	1.35	44	0R	3H	1W	
294.13	297.18	3.05	2.85	93	2.11	69	0R	3H	1W	
297.18	300.23	3.05	2.35	77	1.29	42	0R	3H	1W	
300.23	303.28	3.05	2.52	83	1.34	44	0R	3H	1W	
303.28	306.32	3.04	2.95	97	1.58	52	0R	3H	1W	
306.32	309.37	3.05	3.02	99	1.52	50	0R	3H	1W	
309.37	312.42	3.05	3.04	100	2.21	72	0R	4H	1W	
312.42	315.47	3.05	2.91	95	2.19	72	0R	3H	1W	
315.47	318.52	3.05	2.92	96	1.20	39	0R	3H	1W	
318.52	321.57	3.05	3.05	100	2.42	79	0R	3H	1W	
321.57	324.61	3.04	2.95	97	1.83	60	0R	3H	1W	
324.61	327.66	3.05	3.05	100	3.03	99	0R	3H	1W	
327.66	330.71	3.05	2.78	91	1.47	48	0R	3H	1W	
330.71	333.76	3.05	3.03	99	2.92	96	0R	3H	1W	
333.76	336.80	3.04	3	99	2.86	94	0R	3H	1W	
336.80	339.85	3.05	3.03	99	2.82	92	0R	3H	1W	
339.85	342.90	3.05	3.02	99	2.89	95	0R	3H	1W	
342.90	345.95	3.05	3.05	100	2.72	89	0R	3H	1W	
345.95	347.47	1.52	1.47	97	1.22	80	0R	3H	1W	
347.47	348.99	1.52	1.52	100	1.48	97	0R	3H	1W	
348.99	352.04	3.05	2.96	97	2.74	90	0R	3H	1W	
352.04	355.09	3.05	2.93	96	2.68	88	0R	2H	1W	
355.09	358.14	3.05	3.05	100	3.05	100	0R	2H	1W	
358.14	361.19	3.05	3.05	100	3.05	100	0R	2H	1W	
361.19	364.24	3.05	3.05	100	3.05	100	0R	3H	1W	
364.24	367.28	3.04	2.63	87	2.21	73	0R	3H	1W	

OS -17-234

Nadaleen
Conrad Zone

Archer,Cathro & Associates (1981) Limited

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228373	☐	N17-017	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228430	☐	N17-020	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228424	☐	N17-020	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228413	☐	N17-020	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228404	☐	N17-020	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228394	☐	N17-017	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228302	☐	N17-015	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228386	☐	N17-017	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228358	☐	N17-016	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228351	☐	N17-016	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228342	☐	N17-016	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228336	☐	N17-016	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228323	☐	N17-015	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228318	☐	N17-015	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228312	☐	N17-015	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228390	☐	N17-017	core		☑	☐	☐
3.42	4.57	1.15	OVB	1.15	100	W228291	☐	N17-015	core		☐	☐	☐
4.57	7.62	3.05	LST	2.64	87	W228292	☐	N17-015	core		☐	☐	☐
7.62	10.67	3.05	LST	2.74	90	W228293	☐	N17-015	core		☐	☐	☐
10.67	13.72	3.05	LST	1.55	51	W228294	☐	N17-015	core		☐	☐	☐
13.72	16.76	3.04	LST	0.96	32	W228295	☐	N17-015	core		☐	☐	☐
13.72	16.76	3.04	LST	0.96	32	W228296	☐	N17-015	core		☐	☐	☑
16.76	19.81	3.05	LST	2.47	81	W228297	☐	N17-015	core		☐	☐	☐
19.81	22.86	3.05	LST	2.35	77	W228298	☐	N17-015	core		☐	☐	☐
22.86	25.91	3.05	LST	2.07	68	W228299	☐	N17-015	core		☐	☐	☐
25.91	28.96	3.05	LST	2.32	76	W228300	☐	N17-015	core		☐	☐	☐
28.96	32.00	3.04	LST	2.21	73	W228301	☐	N17-015	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
32.00	35.05	3.05	LST	2.33	76	W228303	☐	N17-015	core		☐	☐	☐
35.05	38.10	3.05	LST	2.82	92	W228304	☐	N17-015	core		☐	☐	☐
38.10	41.15	3.05	LST	1.88	62	W228305	☐	N17-015	core		☐	☐	☐
38.10	41.15	3.05	LST	1.88	62	W228306	☐	N17-015	core		☐	☑	☐
41.15	44.20	3.05	LST	2.15	70	W228307	☐	N17-015	core		☐	☐	☐
44.20	47.24	3.04	LST	2.53	83	W228308	☐	N17-015	core		☐	☐	☐
47.24	50.29	3.05	LST	2.81	92	W228309	☐	N17-015	core		☐	☐	☐
50.29	53.34	3.05	LST	2.55	84	W228310	☐	N17-015	core		☐	☐	☐
53.34	56.39	3.05	LST	2.93	96	W228311	☐	N17-015	core		☐	☐	☐
56.39	59.44	3.05	LST	2.83	93	W228313	☐	N17-015	core		☐	☐	☐
59.44	62.48	3.04	LST	2.99	98	W228314	☐	N17-015	core		☐	☐	☐
62.48	65.53	3.05	LST	3.03	99	W228315	☐	N17-015	core		☐	☐	☐
65.53	68.58	3.05	LST	1.75	57	W228316	☐	N17-015	core		☐	☐	☐
68.58	71.63	3.05	LST	2.87	94	W228317	☐	N17-015	core		☐	☐	☐
71.63	74.68	3.05	LST	2.74	90	W228319	☐	N17-015	core		☐	☐	☐
74.68	77.72	3.04	LST	2.93	96	W228320	☐	N17-015	core		☐	☐	☐
77.72	80.77	3.05	LST	2.54	83	W228321	☐	N17-015	core		☐	☐	☐
80.77	83.82	3.05	LST	2.56	84	W228322	☐	N17-015	core		☐	☐	☐
83.82	86.87	3.05	LST	2.90	95	W228324	☐	N17-015	core		☐	☐	☐
86.87	89.92	3.05	LST	2.75	90	W228325	☐	N17-016	core		☐	☐	☐
89.92	92.96	3.04	LST	2.77	91	W228326	☐	N17-016	core		☐	☐	☐
92.96	96.01	3.05	LST	3.03	99	W228327	☐	N17-016	core		☐	☐	☐
96.01	99.06	3.05	LST	2.84	93	W228328	☐	N17-016	core		☐	☐	☐
96.01	99.06	3.05	LST	2.84	93	W228329	☐	N17-016	core		☐	☐	☑
99.06	102.11	3.05	LST	2.85	93	W228330	☐	N17-016	core		☐	☐	☐
102.11	105.16	3.05	LST	2.99	98	W228331	☐	N17-016	core		☐	☐	☐
105.16	108.20	3.04	LST	2.89	95	W228332	☐	N17-016	core		☐	☐	☐
108.20	111.25	3.05	LST	2.91	95	W228333	☐	N17-016	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
111.25	114.30	3.05	LST	3.02	99	W228334	☐	N17-016	core		☐	☐	☐
114.30	117.35	3.05	LST	2.79	91	W228335	☐	N17-016	core		☐	☐	☐
117.35	120.40	3.05	LST	3.03	99	W228337	☐	N17-016	core		☐	☐	☐
120.40	123.44	3.04	LST	2.49	82	W228338	☐	N17-016	core		☐	☐	☐
123.44	126.49	3.05	LST	2.97	97	W228339	☐	N17-016	core		☐	☐	☐
126.49	129.54	3.05	LST	2.89	95	W228340	☐	N17-016	core		☐	☐	☐
129.54	132.58	3.04	LST	2.60	86	W228341	☐	N17-016	core		☐	☐	☐
132.58	135.64	3.06	LST	2.91	95	W228343	☐	N17-016	core		☐	☐	☐
135.64	138.68	3.04	LST	2.12	70	W228344	☐	N17-016	core		☐	☐	☐
138.68	141.73	3.05	LST	2.72	89	W228345	☐	N17-016	core		☐	☐	☐
138.68	141.73	3.05	LST	2.72	89	W228346	☐	N17-016	core		☐	☑	☐
141.73	144.78	3.05	LST	2.58	85	W228347	☐	N17-016	core		☐	☐	☐
144.78	147.82	3.04	LST	2.86	94	W228348	☐	N17-016	core		☐	☐	☐
147.82	150.88	3.06	LST	2.89	94	W228349	☐	N17-016	core		☐	☐	☐
150.88	153.92	3.04	LST	2.53	83	W228350	☐	N17-016	core		☐	☐	☐
153.92	156.97	3.05	LST	2.57	84	W228352	☐	N17-016	core		☐	☐	☐
156.97	160.02	3.05	LST	2.90	95	W228353	☐	N17-016	core		☐	☐	☐
160.02	163.07	3.05	LST	2.71	89	W228354	☐	N17-016	core		☐	☐	☐
163.07	166.12	3.05	LST	2.61	86	W228355	☐	N17-016	core		☐	☐	☐
166.12	169.16	3.04	LST	1.82	60	W228356	☐	N17-016	core		☐	☐	☐
169.16	172.21	3.05	LST	2.39	78	W228357	☐	N17-016	core		☐	☐	☐
172.21	175.26	3.05	LST	2.22	73	W228359	☐	N17-016	core		☐	☐	☐
175.26	178.31	3.05	LST	3.02	99	W228360	☐	N17-016	core		☐	☐	☐
178.31	181.36	3.05	LST	2.97	97	W228361	☐	N17-017	core		☐	☐	☐
181.36	184.40	3.04	LST	2.34	77	W228362	☐	N17-017	core		☐	☐	☐
184.40	187.45	3.05	LST	2.76	90	W228363	☐	N17-017	core		☐	☐	☐
187.45	190.50	3.05	LST	2.98	98	W228364	☐	N17-017	core		☐	☐	☐
190.50	193.56	3.06	LST	2.88	94	W228365	☐	N17-017	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
193.56	196.60	3.04	LST	3.04	100	W228366	☐	N17-017	core		☐	☐	☐
193.56	196.60	3.04	LST	3.04	100	W228367	☐	N17-017	core		☐	☑	☐
196.60	199.64	3.04	LST	3.04	100	W228368	☐	N17-017	core		☐	☐	☐
199.64	202.70	3.06	LST	3.05	100	W228369	☐	N17-017	core		☐	☐	☐
202.70	205.74	3.04	LST	3.00	99	W228370	☐	N17-017	core		☐	☐	☐
205.74	208.79	3.05	LST	3.05	100	W228371	☐	N17-017	core		☐	☐	☐
208.79	211.84	3.05	LST	2.96	97	W228372	☐	N17-017	core		☐	☐	☐
211.84	214.88	3.04	LST	2.97	98	W228374	☐	N17-017	core		☐	☐	☐
214.88	217.93	3.05	LST	2.99	98	W228375	☐	N17-017	core		☐	☐	☐
217.93	220.98	3.05	LST	2.89	95	W228376	☐	N17-017	core		☐	☐	☐
220.98	224.03	3.05	LST	3.00	98	W228377	☐	N17-017	core		☐	☐	☐
224.03	227.08	3.05	LST	3.00	98	W228378	☐	N17-017	core		☐	☐	☐
224.03	227.08	3.05	LST	3.00	98	W228379	☐	N17-017	core		☐	☐	☑
227.08	230.12	3.04	LST	2.88	95	W228380	☐	N17-017	core		☐	☐	☐
230.12	233.17	3.05	LST	2.56	84	W228381	☐	N17-017	core		☐	☐	☐
233.17	237.00	3.83	LST	3.83	100	W228382	☐	N17-017	core		☐	☐	☐
237.00	239.27	2.27	LST	2.27	100	W228383	☐	N17-017	core		☐	☐	☐
239.27	242.31	3.04	SLC	2.84	93	W228384	☐	N17-017	core		☐	☐	☐
242.31	245.36	3.05	SLC	2.63	86	W228385	☐	N17-017	core		☐	☐	☐
245.36	248.41	3.05	SLC	2.86	94	W228387	☐	N17-017	core		☐	☐	☐
248.41	251.46	3.05	SLC	2.93	96	W228388	☐	N17-017	core		☐	☐	☐
251.46	254.51	3.05	SLC	2.89	95	W228389	☐	N17-017	core		☐	☐	☐
254.51	257.56	3.05	SLC	2.88	94	W228391	☐	N17-017	core		☐	☐	☐
257.56	259.18	1.62	SLC	1.62	100	W228392	☐	N17-017	core		☐	☐	☐
259.18	261.05	1.87	SLC	1.85	99	W228393	☐	N17-017	core		☐	☐	☐
261.05	263.98	2.93	SLC	2.92	100	W228395	☐	N17-017	core		☐	☐	☐
263.98	266.70	2.72	SLC	2.70	99	W228396	☐	N17-017	core		☐	☐	☐
266.70	269.75	3.05	SLC	2.21	72	W228397	☐	N17-020	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
269.75	272.05	2.30	SLC	2.04	89	W228398	☐	N17-020	Core		☐	☐	☐
272.05	275.34	3.29	SLC	2.90	88	W228399	☐	N17-020	Core		☐	☐	☐
275.34	277.21	1.87	SLC	1.87	100	W228400	☐	N17-020	Core		☐	☐	☐
277.21	278.90	1.69	SLC	1.51	89	W228401	☐	N17-020	Core		☐	☐	☐
278.90	281.94	3.04	SLC	2.12	70	W228402	☐	N17-020	Core		☐	☐	☐
281.94	284.99	3.05	SLC	2.03	67	W228403	☐	N17-020	Core		☐	☐	☐
284.99	288.03	3.04	SLC	2.08	68	W228405	☐	N17-020	Core		☐	☐	☐
288.03	291.08	3.05	SLC	3.00	98	W228406	☐	N17-020	Core		☐	☐	☐
291.08	294.13	3.05	SLC	1.35	44	W228407	☐	N17-020	Core		☐	☐	☐
294.13	297.18	3.05	SLC	2.11	69	W228408	☐	N17-020	Core		☐	☐	☐
294.13	297.18	3.05	SLC	2.11	69	W228409	☐	N17-020	Core		☐	☐	☑
297.18	300.90	3.72	SLC	3.18	85	W228410	☐	N17-020	Core		☐	☐	☐
300.90	303.28	2.38	SLC	1.98	83	W228411	☐	N17-020	Core		☐	☐	☐
303.28	304.96	1.68	SLC	1.68	100	W228412	☐	N17-020	Core		☐	☐	☐
304.96	307.95	2.99	SLC	2.45	82	W228414	☐	N17-020	Core		☐	☐	☐
307.95	310.47	2.52	SLC	2.52	100	W228415	☐	N17-020	Core		☐	☐	☐
310.47	312.42	1.95	SLC	1.95	100	W228416	☐	N17-020	Core		☐	☐	☐
312.42	315.47	3.05	SLC	2.19	72	W228417	☐	N17-020	Core		☐	☐	☐
315.47	318.52	3.05	SLC	1.20	39	W228418	☐	N17-020	Core		☐	☐	☐
318.52	321.57	3.05	SLC	2.42	79	W228419	☐	N17-020	Core		☐	☐	☐
318.52	321.57	3.05	SLC	2.42	79	W228420	☐	N17-020	Core		☐	☑	☐
321.57	324.61	3.04	SLC	1.83	60	W228421	☐	N17-020	Core		☐	☐	☐
324.61	327.66	3.05	SLC	3.03	99	W228422	☐	N17-020	Core		☐	☐	☐
327.66	330.71	3.05	SLC	1.47	48	W228423	☐	N17-020	Core		☐	☐	☐
330.71	333.76	3.05	SLC	2.42	79	W228425	☐	N17-020	Core		☐	☐	☐
333.76	336.80	3.04	SLC	2.86	94	W228426	☐	N17-020	Core		☐	☐	☐
336.80	339.85	3.05	SLC	2.82	92	W228427	☐	N17-020	Core		☐	☐	☐
339.85	342.90	3.05	SLC	2.89	95	W228428	☐	N17-020	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
342.90	345.95	3.05	SLC	2.72	89	W228429	☐	N17-020	Core		☐	☐	☐
345.95	348.99	3.04	SLC	2.70	89	W228431	☐	N17-020	Core		☐	☐	☐
348.99	352.04	3.05	SLC	2.74	90	W228432	☐	N17-020	Core		☐	☐	☐
352.04	355.09	3.05	SLC	2.93	96	W228433	☐	N17-022	Core		☐	☐	☐
355.09	358.14	3.05	SLC	3.05	100	W228434	☐	N17-022	Core		☐	☐	☐
355.09	358.14	3.05	SLC	3.05	100	W228435	☐	N17-022	Core		☐	☑	☐
358.14	361.19	3.05	SLC	3.05	100	W228436	☐	N17-022	Core		☐	☐	☐
361.19	364.24	3.05	SLC	3.05	100	W228437	☐	N17-022	Core		☐	☐	☐
364.24	367.28	3.04	SLC	2.63	87	W228438	☐	N17-022	Core		☐	☐	☐

OS -17-235

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
5.70	247.34	241.64	SLC	MG	Dark grey, fine to medium grained interbedded siliciclastic. Beds in this unit are; Dark grey, medium grained, quartz granule conglomerate with subrounded clasts; Dark grey, fine grained, siltstone with laminations of pyrite; Dark grey, medium grained, quartz arenite.							
											Py	10
											Re	0.1

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	5.49	5.49	0	0	0.00	0	--	--	--	Overburden, no rock sampled.
5.49	7.01	1.52	1.49	98	0.67	44	1R	3H	3W	
7.01	8.53	1.52	1.5	99	0.76	50	1R	4H	3W	
8.53	10.06	1.53	1.16	76	0.00	0	1R	4H	2W	
10.06	11.58	1.52	1.29	85	0.35	23	1R	4H	2W	
11.58	13.11	1.53	1.3	85	0.69	45	1R	4H	2W	
13.11	14.63	1.52	1.5	99	1.00	66	1R	4H	1W	
14.63	16.15	1.52	0.45	30	0.18	12	1R	4H	1W	
16.15	17.68	1.53	1.5	98	1.32	86	1R	4H	1W	
17.68	19.20	1.52	1.52	100	0.90	59	1R	4H	1W	
19.20	20.73	1.53	1.53	100	1.02	67	1R	4H	1W	
20.73	22.25	1.52	1.52	100	0.93	61	1R	4H	1W	
22.25	23.77	1.52	1.52	100	1.37	90	1R	4H	1W	
23.77	25.30	1.53	1.43	93	1.14	75	1R	4H	1W	
25.30	26.82	1.52	1.52	100	1.48	97	1R	4H	1W	
26.82	28.35	1.53	1.5	98	1.43	93	1R	4H	1W	
28.35	29.87	1.52	1.48	97	1.10	72	1R	4H	1W	
29.87	31.39	1.52	1.52	100	1.31	86	1R	4H	1W	
31.39	32.92	1.53	1.48	97	1.21	79	1R	4H	1W	
32.92	34.44	1.52	1.52	100	1.29	85	1R	4H	1W	RBZ 34.00 to 34.44 (1/4 core size).
34.44	35.97	1.53	1.53	100	0.86	56	1R	4H	1W	
35.97	37.49	1.52	1.52	100	1.36	89	1R	4H	1W	
37.49	39.01	1.52	1.5	99	1.05	69	1R	4H	1W	RBZ 38.55 to 39.01m
39.01	40.54	1.53	1.46	95	0.67	44	1R	4H	1W	Larger rubble, multiply fractured for entire interval.
40.54	42.06	1.52	1.52	100	1.29	85	1R	4H	1W	
42.06	43.59	1.53	1.53	100	1.33	87	1R	4H	1W	42.06 to 42.16 large amount of clay seen (3cm^3)
43.59	45.11	1.52	1.48	97	0.97	64	1R	3H	1W	RBZ 43.59 to 44.19.
45.11	46.63	1.52	1.52	100	1.15	76	1R	4H	1W	RBZ 45.60- 46.00m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
46.63	48.16	1.53	1.53	100	1.40	92	1R	4H	1W	
48.16	49.68	1.52	1.52	100	1.31	86	1R	4H	1W	
49.68	51.21	1.53	1.53	100	1.26	82	1R	4H	1W	
51.21	52.73	1.52	1.52	100	1.49	98	1R	4H	1W	
52.73	54.25	1.52	1.48	97	1.32	87	1R	4H	1W	
54.25	55.78	1.53	1.51	99	1.33	87	1R	4H	1W	
55.78	57.30	1.52	1.52	100	1.27	84	1R	4H	1W	
57.30	58.83	1.53	1.52	99	1.49	97	1R	4H	1W	
58.83	60.35	1.52	1.48	97	1.13	74	1R	4H	1W	
60.35	61.87	1.52	1.52	100	0.76	50	1R	4H	1W	
61.87	63.40	1.53	1.45	95	0.65	42	1R	2H	1W	
63.40	64.92	1.52	1.2	79	0.68	45	1R	3H	1W	
64.92	66.45	1.53	1.53	100	0.82	54	1R	4H	1W	RBZ 65.80- 66.45m
66.45	67.97	1.52	1.52	100	0.65	43	1R	4H	1W	RBZ 66.45-67.15m
67.97	69.49	1.52	1.4	92	0.80	53	1R	4H	1W	RBZ 68.80- 69
69.49	71.02	1.53	1.31	86	0.95	62	1R	4H	1W	
71.02	72.54	1.52	1.52	100	0.97	64	1R	4H	1W	
72.54	74.07	1.53	1.53	100	1.39	91	1R	4H	1W	
74.07	75.59	1.52	1.33	88	0.84	55	1R	4H	1W	Missing joint orientation.
75.59	77.11	1.52	1.52	100	1.46	96	1R	4H	1W	
77.11	78.64	1.53	1.49	97	1.47	96	1R	4H	1W	
78.64	80.16	1.52	1.52	100	0.92	61	1R	4H	1W	
80.16	81.69	1.53	1.45	95	1.17	76	1R	4H	1W	
81.69	83.21	1.52	1.52	100	1.29	85	1R	4H	1W	Missing joint orientation.
83.21	84.73	1.52	1.52	100	1.33	88	1R	4H	1W	Missing joint orientation.
84.73	86.26	1.53	1.48	97	1.48	97	1R	4H	1W	
86.26	87.78	1.52	1.52	100	1.02	67	--	--	1W	Missing reactivity, hardness, weathering, and strength and joint orientation.
87.78	89.31	1.53	1.45	95	1.34	88	0R	4H	1W	Missing joint orientation.
89.31	90.83	1.52	1.52	100	1.52	100	0R	4H	1W	
90.83	92.35	1.52	1.5	99	1.41	93	0R	4H	1W	Missing joint orientation.
92.35	93.88	1.53	1.5	98	1.45	95	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
93.88	95.40	1.52	1.52	100	1.45	95	0R	4H	1W	Qtz infilling one joint; missing joint orientation.
95.40	96.93	1.53	1.48	97	1.48	97	0R	4H	1W	Missing joint orientation.
96.93	98.45	1.52	1.47	97	0.94	62	0R	4H	1W	Missing joint orientation.
98.45	99.97	1.52	1.51	99	1.06	70	0R	4H	1W	5 cm rubble section
99.97	101.50	1.53	1.47	96	1.01	66	0R	4H	1W	
101.50	103.02	1.52	1.31	86	0.95	63	0R	4H	1W	
103.02	104.54	1.52	1.31	86	0.94	62	0R	2H	1W	
104.54	106.07	1.53	1.38	90	1.32	86	1R	2H	1W	
106.07	107.59	1.52	1.35	89	1.10	72	1R	4H	1W	10cm rubble section; missing joint orientation.
107.59	109.12	1.53	1.45	95	1.32	86	1R	4H	1W	
109.12	110.64	1.52	1.52	100	1.45	95	0R	4H	1W	
110.64	112.17	1.53	1.52	99	1.05	69	1R	2H	1W	
112.17	113.69	1.52	1.47	97	1.20	79	1R	2H	1W	
113.69	115.21	1.52	1.5	99	1.36	89	--	2H	1W	
115.21	116.74	1.53	1.45	95	1.07	70	0R	3H	1W	
116.74	118.26	1.52	1.36	89	1.20	79	0R	3H	1W	
118.26	119.79	1.53	1.5	98	1.22	80	1R	3H	1W	
119.79	121.31	1.52	1.41	93	1.01	66	1R	3H	1W	
121.31	122.83	1.52	1.48	97	1.46	96	1R	3H	1W	
122.83	124.36	1.53	1.52	99	1.36	89	1R	3H	1W	
124.36	125.88	1.52	1.52	100	1.52	100	1R	2H	1W	Missing joint orientation.
125.88	127.41	1.53	1.51	99	1.47	96	1R	2H	1W	
127.41	128.93	1.52	1.42	93	1.15	76	1R	3H	1W	10cm rubble section
128.93	130.45	1.52	1.52	100	1.44	95	1R	3H	1W	Missing joint orientation.
130.45	131.98	1.53	1.49	97	1.31	86	1R	3H	1W	
131.98	133.50	1.52	1.39	91	1.07	70	1R	3H	1W	10cm rubble section
133.50	135.03	1.53	1.52	99	1.04	68	1R	3H	1W	MRBZ 133.50-133.70m (mechanical rubble zone), missing joint orientation.
135.03	136.55	1.52	1.35	89	0.98	64	1R	3H	1W	
136.55	138.07	1.52	1.45	95	0.77	51	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
138.07	139.60	1.53	1.53	100	1.12	73	0R	3H	1W	
139.60	141.12	1.52	1.32	87	0.65	43	0R	2H	1W	About 80cm of rubble
141.12	142.65	1.53	1.52	99	0.90	59	1R	3H	1W	
142.65	144.17	1.52	1.5	99	0.95	63	1R	3H	1W	
144.17	145.69	1.52	1.5	99	1.21	80	1R	3H	1W	
145.69	147.22	1.53	1.53	100	1.27	83	1R	4H	1W	Missing joint orientation.
147.22	148.74	1.52	1.45	95	1.42	93	1R	3H	1W	
148.74	150.27	1.53	1.5	98	1.04	68	1R	3H	1W	Three about 10cm
150.27	151.79	1.52	1.5	99	1.45	95	1R	4H	1W	
151.79	153.31	1.52	1.49	98	1.42	93	1R	4H	1W	
153.31	154.84	1.53	1.41	92	1.28	84	0R	4H	1W	
154.84	156.36	1.52	1.52	100	1.47	97	0R	3H	1W	
156.36	157.89	1.53	1.52	99	1.40	92	0R	4H	1W	Single joint oriented at 30 TCA
157.89	159.41	1.52	1.52	100	1.42	93	0R	4H	1W	
159.41	160.93	1.52	1.44	95	1.35	89	0R	4H	1W	
160.93	162.46	1.53	1.52	99	1.49	97	1R	4H	1W	
162.46	163.98	1.52	1.47	97	1.47	97	1R	4H	1W	
163.98	165.51	1.53	1.53	100	1.53	100	0R	3H	1W	Two single joints, one at 30 degrees TCA and one at 80 degrees TCA; both are RK/CA infill
165.51	167.03	1.52	1.47	97	1.31	86	1R	4H	1W	
167.03	168.55	1.52	1.5	99	1.24	82	1R	3H	1W	
168.55	170.08	1.53	1.47	96	1.38	90	1R	4H	1W	
170.08	171.60	1.52	1.52	100	1.52	100	0R	4H	1W	
171.60	173.13	1.53	1.52	99	1.52	99	0R	3H	1W	Infill composed of pyrite and calcite.
173.13	174.65	1.52	1.49	98	1.49	98	0R	4H	1W	
174.65	176.17	1.52	1.39	91	0.67	44	0R	4H	1W	
176.17	177.70	1.53	1.53	100	1.53	100	0R	4H	1W	
177.70	179.22	1.52	1.48	97	1.41	93	0R	4H	1W	
179.22	180.75	1.53	1.44	94	1.26	82	0R	4H	1W	
180.75	182.27	1.52	1.5	99	1.38	91	0R	4H	1W	2 single joints.
182.27	183.79	1.52	1.4	92	0.98	64	0R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
183.79	185.32	1.53	1.49	97	1.47	96	0R	3H	1W	
185.32	186.84	1.52	1.17	77	0.88	58	0R	3H	1W	
186.84	188.37	1.53	1.45	95	1.37	90	0R	3H	1W	
188.37	189.89	1.52	1.51	99	1.11	73	0R	3H	1W	
189.89	191.41	1.52	1.5	99	1.45	95	0R	3H	1W	
191.41	192.94	1.53	1.44	94	1.27	83	0R	3H	1W	
192.94	194.46	1.52	1.49	98	1.38	91	0R	3H	1W	
194.46	195.99	1.53	1.38	90	1.24	81	0R	3H	1W	
195.99	197.51	1.52	1.18	78	0.71	47	0R	3H	1W	RBZ 196.66 - 197.31 m.
197.51	199.03	1.52	1.21	80	0.90	59	0R	3H	1W	RBZ 198.00 - 198.60 m.
199.03	200.56	1.53	1.28	84	0.90	59	0R	3H	1W	RBZ 199.03 - 199.40 m.
200.56	202.08	1.52	1.15	76	0.43	28	0R	3H	1W	RBZ 200.56 - 200.70 and 201.88 - 202.88 m.
202.08	203.60	1.52	1.46	96	1.32	87	0R	3H	1W	
203.60	205.13	1.53	1.45	95	1.45	95	0R	3H	1W	
205.13	206.65	1.52	1.35	89	1.15	76	0R	3H	1W	
206.65	208.18	1.53	1.3	85	0.48	31	0R	3H	1W	
208.18	209.70	1.52	1.35	89	1.01	66	0R	3H	1W	
209.70	211.23	1.53	1.4	92	1.08	71	0R	3H	1W	
211.23	212.75	1.52	1.25	82	0.41	27	0R	3H	1W	
212.75	214.17	1.42	1.42	100	0.81	57	0R	2H	1W	very soft, RBZ 213.12 - 213.50 m.
214.17	215.80	1.63	1.27	78	0.95	58	0R	3H	1W	
215.80	217.32	1.52	1.32	87	0.93	61	4R	3H	1W	
217.32	218.85	1.53	1.42	93	1.03	67	4R	3H	1W	
218.85	220.37	1.52	1.14	75	0.48	32	4R	3H	1W	
220.37	221.89	1.52	1.52	100	0.84	55	4R	3H	1W	RBZ 221.47 - 221.80 m.
221.89	223.42	1.53	1.29	84	0.59	39	4R	3H	1W	Gouge like mud/clay 222.45 - 222.66 m.
223.42	224.94	1.52	1.11	73	0.81	53	4R	3H	1W	RBZ 223.54 - 223.73 m.
224.94	226.47	1.53	1.31	86	0.92	60	4R	3H	1W	
226.47	227.99	1.52	1.29	85	0.68	45	4R	3H	1W	
227.99	229.51	1.52	1.43	94	0.96	63	4R	3H	1W	
229.51	231.04	1.53	1.35	88	1.08	71	4R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
231.04	232.56	1.52	1.1	72	0.52	34	4R	4H	1W	
232.56	234.09	1.53	1.45	95	1.33	87	2R	3H	1W	
234.09	235.61	1.52	1.48	97	1.34	88	2R	4H	1W	
235.61	237.13	1.52	1.43	94	0.70	46	1R	4H	1W	
237.13	238.66	1.53	1.53	100	1.31	86	0R	4H	1W	
238.66	240.18	1.52	1.33	88	0.82	54	0R	3H	1W	
240.18	241.71	1.53	1.21	79	0.58	38	1R	4H	1W	RBZ between 240.60-241.71m
241.71	243.23	1.52	1.52	100	1.32	87	0R	4H	1W	
243.23	244.45	1.22	1.22	100	1.22	100	0R	4H	1W	
244.45	245.36	0.91	0.63	69	0.55	60	1R	4H	1W	
245.36	247.50	2.14	1.78	83	0.84	39	1R	3H	1W	Switched from HQ to NQ
247.50	250.55	3.05	2.99	98	1.74	57	3R	4H	1W	
250.55	253.59	3.04	2.8	92	1.56	51	4R	4H	1W	
253.59	256.64	3.05	2.54	83	1.50	49	3R	4H	1W	
256.64	259.69	3.05	2.81	92	1.51	50	4R	4H	1W	RBZ from 256.64-257.82m
259.69	262.74	3.05	2.35	77	1.07	35	3R	4H	1W	RBZ 259.80-262.74m
262.74	265.78	3.04	2.79	92	1.93	63	3R	4H	1W	
265.78	268.83	3.05	2.55	84	0.96	31	4R	3H	1W	RBZ throughout interval containing black 'clay-like' fault gouge and localized zones of mineralized realgar.
268.83	271.88	3.05	2.81	92	1.26	41	4R	3H	1W	
271.88	274.93	3.05	2.85	93	2.16	71	2R	3H	1W	
274.93	277.98	3.05	3.05	100	2.86	94	4R	3H	1W	
277.98	281.02	3.04	3.04	100	2.73	90	4R	3H	1W	
281.02	284.07	3.05	2.86	94	2.69	88	4R	3H	1W	
284.07	287.12	3.05	2.95	97	2.69	88	4R	3H	1W	
287.12	290.17	3.05	3	98	2.44	80	4R	3H	1W	
290.17	293.22	3.05	3.05	100	3.05	100	4R	3H	1W	
293.22	296.27	3.05	3.05	100	3.05	100	4R	3H	1W	
296.27	299.31	3.04	3.04	100	2.50	82	4R	3H	1W	
299.31	302.36	3.05	2.73	90	1.56	51	4R	3H	1W	
302.36	305.41	3.05	3.05	100	2.85	93	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
305.41	308.46	3.05	3.05	100	1.61	53	4R	3H	1W	
308.46	311.51	3.05	2.93	96	2.62	86	4R	3H	1W	
311.51	314.56	3.05	3.02	99	2.35	77	4R	3H	1W	
314.56	317.60	3.04	3	99	3.00	99	4R	3H	1W	
317.60	320.65	3.05	2.95	97	2.00	66	4R	3H	1W	
320.65	323.70	3.05	2.98	98	2.56	84	4R	3H	1W	
323.70	326.74	3.04	2.97	98	2.42	80	4R	3H	1W	
326.74	329.79	3.05	3	98	2.72	89	4R	3H	1W	
329.79	332.84	3.05	3.03	99	2.60	85	4R	3H	1W	
332.84	335.89	3.05	3.05	100	2.69	88	4R	3H	1W	
335.89	338.94	3.05	2.56	84	1.94	64	4R	3H	1W	
338.94	341.99	3.05	3.05	100	2.20	72	4R	3H	1W	
341.99	345.03	3.04	2.98	98	2.98	98	4R	3H	1W	
345.03	348.08	3.05	2.98	98	2.98	98	4R	3H	1W	
348.08	351.13	3.05	3.01	99	3.01	99	4R	3H	1W	
351.13	354.18	3.05	2.98	98	2.90	95	4R	3H	1W	
354.18	357.23	3.05	2.93	96	2.93	96	4R	3H	1W	
357.23	360.27	3.04	3.04	100	3.04	100	4R	3H	1W	
360.27	363.32	3.05	3.01	99	3.01	99	4R	3H	1W	
363.32	366.37	3.05	2.98	98	2.89	95	4R	3H	1W	
366.37	369.42	3.05	3.03	99	3.03	99	4R	3H	1W	
369.42	372.47	3.05	2.93	96	2.89	95	4R	3H	1W	Rubble zone from 373.85-374, 374.6-371.9
372.47	375.51	3.04	3.04	100	2.69	88	4R	3H	1W	
375.51	378.56	3.05	2.96	97	2.96	97	4R	3H	1W	
378.56	381.61	3.05	3.04	100	2.69	88	4R	3H	1W	
381.61	384.66	3.05	3	98	2.94	96	4R	3H	1W	
384.66	387.71	3.05	3	98	2.93	96	4R	3H	1W	
387.71	390.75	3.04	2.86	94	2.86	94	4R	3H	1W	
390.75	393.80	3.05	3	98	3.00	98	4R	3H	1W	
393.80	396.85	3.05	3	98	2.94	96	4R	3H	1W	
396.85	399.90	3.05	3.04	100	2.65	87	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
399.90	402.95	3.05	3.02	99	2.88	94	4R	3H	1W	
402.95	405.99	3.04	3.04	100	2.96	97	4R	3H	1W	
405.99	409.04	3.05	2.69	88	2.31	76	4R	3H	1W	
409.04	412.09	3.05	3.04	100	2.96	97	4R	3H	1W	
412.09	415.14	3.05	2.96	97	2.96	97	4R	3H	1W	
415.14	418.19	3.05	3.05	100	3.05	100	4R	3H	1W	
418.19	421.23	3.04	3	99	3.00	99	4R	3H	1W	
421.23	424.28	3.05	2.96	97	2.82	92	4R	3H	1W	
424.28	425.50	1.22	1.15	94	1.02	84	4R	3H	1W	E.O.H.

OS -17-235

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229279	☐	N17-019	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229363	☐	N17-024	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229359	☐	N17-023	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229355	☐	N17-023	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229348	☐	N17-023	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229336	☐	N17-023	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229316	☐	N17-021	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229305	☐	N17-021	core	CS8	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229304	☐	N17-021	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229191	☐	N17-014	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229284	☐	N17-019	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229366	☐	N17-024	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229276	☐	N17-019	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229263	☐	N17-019	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229250	☐	N17-018	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229243	☐	N17-018	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229235	☐	N17-018	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229231	☐	N17-018	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229214	☐	N17-014	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229210	☐	N17-014	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229199	☐	N17-014	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229294	☐	N17-021	core	CS2	☐	☐	☐
2.55	3.96	1.41	OVB	0.98	70	W229188	☐	N17-014	core		☐	☐	☐
3.96	7.01	3.05	OVB	2.81	92	W229189	☐	N17-014	core		☐	☐	☐
7.01	10.06	3.05	SLC	2.66	87	W229190	☐	N17-014	core		☐	☐	☐
10.06	13.11	3.05	SLC	2.59	85	W229192	☐	N17-014	core		☐	☐	☐
13.11	16.15	3.04	SLC	1.95	64	W229193	☐	N17-014	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
16.15	19.20	3.05	SLC	3.02	99	W229194	☐	N17-014	core		☐	☐	☐
16.15	19.20	3.05	SLC	3.02	99	W229195	☐	N17-014	core		☐	☑	☐
19.20	22.25	3.05	SLC	3.05	100	W229196	☐	N17-014	core		☐	☐	☐
22.25	25.30	3.05	SLC	2.95	97	W229197	☐	N17-014	core		☐	☐	☐
25.30	28.35	3.05	SLC	3.02	99	W229198	☐	N17-014	core		☐	☐	☐
28.35	31.39	3.04	SLC	3.00	99	W229200	☐	N17-014	core		☐	☐	☐
31.39	34.44	3.05	SLC	3.00	98	W229201	☐	N17-014	core		☐	☐	☐
34.44	37.49	3.05	SLC	3.05	100	W229202	☐	N17-014	core		☐	☐	☐
37.49	40.54	3.05	SLC	2.96	97	W229203	☐	N17-014	core		☐	☐	☐
40.54	43.59	3.05	SLC	3.05	100	W229204	☐	N17-014	core		☐	☐	☐
40.54	43.59	3.05	SLC	3.05	100	W229205	☐	N17-014	core		☐	☐	☑
43.59	46.63	3.04	SLC	3.00	99	W229206	☐	N17-014	core		☐	☐	☐
46.63	49.68	3.05	SLC	3.05	100	W229207	☐	N17-014	core		☐	☐	☐
49.68	52.73	3.05	SLC	3.05	100	W229208	☐	N17-014	core		☐	☐	☐
52.73	55.78	3.05	SLC	2.99	98	W229209	☐	N17-014	core		☐	☐	☐
55.78	58.83	3.05	SLC	3.04	100	W229211	☐	N17-014	core		☐	☐	☐
58.83	61.87	3.04	SLC	3.00	99	W229212	☐	N17-014	core		☐	☐	☐
61.87	64.92	3.05	SLC	2.65	87	W229213	☐	N17-014	core		☐	☐	☐
64.92	67.97	3.05	SLC	3.05	100	W229215	☐	N17-014	core		☐	☐	☐
67.97	71.02	3.05	SLC	2.71	89	W229216	☐	N17-014	core		☐	☐	☐
71.02	74.07	3.05	SLC	3.05	100	W229217	☐	N17-018	core		☐	☐	☐
74.07	77.11	3.04	SLC	2.85	94	W229218	☐	N17-018	core		☐	☐	☐
77.11	80.16	3.05	SLC	3.01	99	W229219	☐	N17-018	core		☐	☐	☐
80.16	83.21	3.05	SLC	2.97	97	W229220	☐	N17-018	core		☐	☐	☐
83.21	85.54	2.33	SLC	2.33	100	W229221	☐	N17-018	core		☐	☐	☐
83.21	85.54	2.33	SLC	2.33	100	W229222	☐	N17-018	core		☐	☐	☑
85.54	87.78	2.24	SLC	2.11	94	W229223	☐	N17-018	core		☐	☐	☐
87.78	90.83	3.05	SLC	2.89	95	W229224	☐	N17-018	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
90.83	93.88	3.05	SLC	2.86	94	W229225	☐	N17-018	core		☐	☐	☐
93.88	96.93	3.05	SLC	2.93	96	W229226	☐	N17-018	core		☐	☐	☐
96.93	99.97	3.04	SLC	2.00	66	W229227	☐	N17-018	core		☐	☐	☐
99.97	103.02	3.05	SLC	1.96	64	W229228	☐	N17-018	core		☐	☐	☐
103.02	106.07	3.05	SLC	2.26	74	W229229	☐	N17-018	core		☐	☐	☐
106.07	109.12	3.05	SLC	2.42	79	W229230	☐	N17-018	core		☐	☐	☐
109.12	112.17	3.05	SLC	2.50	82	W229232	☐	N17-018	core		☐	☐	☐
112.17	115.21	3.04	SLC	2.97	98	W229233	☐	N17-018	core		☐	☐	☐
115.21	118.26	3.05	SLC	2.27	74	W229234	☐	N17-018	core		☐	☐	☐
118.26	121.31	3.05	SLC	2.23	73	W229236	☐	N17-018	core		☐	☐	☐
121.31	124.36	3.05	SLC	2.82	92	W229237	☐	N17-018	core		☐	☐	☐
124.36	127.41	3.05	SLC	3.04	100	W229238	☐	N17-018	core		☐	☐	☐
124.36	127.41	3.05	SLC	3.04	100	W229239	☐	N17-018	core		☐	☑	☐
127.41	130.45	3.04	SLC	2.94	97	W229240	☐	N17-018	core		☐	☐	☐
130.45	133.00	2.55	SLC	2.47	97	W229241	☐	N17-018	core		☐	☐	☐
133.00	135.03	2.03	SLC	1.95	96	W229242	☐	N17-018	core		☐	☐	☐
135.03	136.55	1.52	SLC	1.35	89	W229244	☐	N17-018	core		☐	☐	☐
136.55	139.60	3.05	SLC	2.98	98	W229245	☐	N17-018	core		☐	☐	☐
139.60	142.65	3.05	SLC	2.84	93	W229246	☐	N17-018	core		☐	☐	☐
142.65	145.69	3.04	SLC	2.16	71	W229247	☐	N17-018	core		☐	☐	☐
145.69	147.86	2.17	SLC	2.10	97	W229248	☐	N17-018	core		☐	☐	☐
147.86	150.71	2.85	SLC	2.64	93	W229249	☐	N17-018	core		☐	☐	☐
150.71	153.31	2.60	SLC	2.60	100	W229251	☐	N17-018	core		☐	☐	☐
153.31	156.36	3.05	SLC	2.75	90	W229252	☐	N17-018	core		☐	☐	☐
156.36	159.41	3.05	SLC	3.04	100	W229253	☐	N17-019	Core		☐	☐	☐
159.41	162.46	3.05	SLC	2.96	97	W229254	☐	N17-019	Core		☐	☐	☐
162.46	165.51	3.05	SLC	3.00	98	W229255	☐	N17-019	Core		☐	☐	☐
165.51	168.55	3.04	SLC	2.97	98	W229256	☐	N17-019	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
168.55	171.60	3.05	SLC	2.99	98	W229257	☐	N17-019	Core		☐	☐	☐
171.60	174.65	3.05	SLC	3.01	99	W229258	☐	N17-019	Core		☐	☐	☐
171.60	174.65	3.05	SLC	3.01	99	W229259	☐	N17-019	Core		☐	☑	☐
174.65	177.70	3.05	SLC	2.92	96	W229260	☐	N17-019	Core		☐	☐	☐
177.70	180.75	3.05	SLC	2.92	96	W229261	☐	N17-019	Core		☐	☐	☐
180.75	183.79	3.04	SLC	2.90	95	W229262	☐	N17-019	Core		☐	☐	☐
183.79	186.84	3.05	SLC	2.66	87	W229264	☐	N17-019	Core		☐	☐	☐
186.84	189.89	3.05	SLC	2.96	97	W229265	☐	N17-019	Core		☐	☐	☐
189.89	192.94	3.05	SLC	2.94	96	W229266	☐	N17-019	Core		☐	☐	☐
192.94	195.99	3.05	SLC	2.87	94	W229267	☐	N17-019	Core		☐	☐	☐
195.99	199.03	3.04	SLC	2.39	79	W229268	☐	N17-019	Core		☐	☐	☐
199.03	202.08	3.05	SLC	2.43	80	W229269	☐	N17-019	Core		☐	☐	☐
199.03	202.08	3.05	SLC	2.43	80	W229270	☐	N17-019	Core		☐	☐	☑
202.08	205.13	3.05	SLC	2.91	95	W229271	☐	N17-019	Core		☐	☐	☐
205.13	208.18	3.05	SLC	2.65	87	W229272	☐	N17-019	Core		☐	☐	☐
208.18	210.81	2.63	SLC	2.37	90	W229273	☐	N17-019	Core		☐	☐	☐
210.81	212.75	1.94	SLC	1.69	87	W229274	☐	N17-019	Core		☐	☐	☐
212.75	215.43	2.68	SLC	2.68	100	W229275	☐	N17-019	Core		☐	☐	☐
215.43	217.32	1.89	SLC	1.70	90	W229277	☐	N17-019	Core		☐	☐	☐
217.32	220.37	3.05	SLC	2.56	84	W229278	☐	N17-019	Core		☐	☐	☐
220.37	223.42	3.05	SLC	2.85	93	W229280	☐	N17-019	Core		☐	☐	☐
223.42	226.47	3.05	SLC	2.42	79	W229281	☐	N17-019	Core		☐	☐	☐
226.47	229.51	3.04	SLC	2.72	89	W229282	☐	N17-019	Core		☐	☐	☐
229.51	232.56	3.05	SLC	2.45	80	W229283	☐	N17-019	Core		☐	☐	☐
232.56	235.61	3.05	SLC	2.93	96	W229285	☐	N17-019	Core		☐	☐	☐
235.61	237.62	2.01	SLC	1.98	99	W229286	☐	N17-019	Core		☐	☐	☐
237.62	240.18	2.56	SLC	2.46	96	W229287	☐	N17-019	Core		☐	☐	☐
240.18	241.71	1.53	SLC	1.25	82	W229288	☐	N17-019	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
241.71	244.45	2.74	SLC	2.74	100	W229289	☐	N17-021	core		☐	☐	☐
241.71	244.45	2.74	SLC	2.74	100	W229290	☐	N17-021	core		☐	☑	☐
244.45	247.34	2.89	SLC	2.75	95	W229291	☐	N17-021	core		☐	☐	☐
247.34	249.14	1.80	LST, SLC	1.80	100	W229292	☐	N17-021	core		☐	☐	☐
249.14	250.55	1.41	LST	1.41	100	W229293	☐	N17-021	core		☐	☐	☐
250.55	253.59	3.04	LST	2.80	92	W229295	☐	N17-021	core		☐	☐	☐
253.59	256.64	3.05	LST	2.54	83	W229296	☐	N17-021	core		☐	☐	☐
256.64	259.69	3.05	LST	2.81	92	W229297	☐	N17-021	core		☐	☐	☐
259.69	261.71	2.02	LST	1.98	98	W229298	☐	N17-021	core		☐	☐	☐
261.71	263.65	1.94	LST	1.81	93	W229299	☐	N17-021	core		☐	☐	☐
263.65	265.39	1.74	LST	1.63	94	W229300	☐	N17-021	core		☐	☐	☐
263.65	265.39	1.74	LST	1.63	94	W229301	☐	N17-021	core		☐	☐	☑
265.39	266.90	1.51	LST	1.51	100	W229302	☐	N17-021	core		☐	☐	☐
266.90	268.83	1.93	LST	1.81	94	W229303	☐	N17-021	core		☐	☐	☐
268.83	271.88	3.05	LST	2.81	92	W229306	☐	N17-021	core		☐	☐	☐
271.88	273.95	2.07	LST	2.02	98	W229307	☐	N17-021	core		☐	☐	☐
273.95	275.96	2.01	LST	1.99	99	W229308	☐	N17-021	core		☐	☐	☐
275.96	277.98	2.02	LST	2.01	100	W229309	☐	N17-021	core		☐	☐	☐
277.98	281.02	3.04	LST	3.04	100	W229310	☐	N17-021	core		☐	☐	☐
281.02	284.07	3.05	LST	2.86	94	W229311	☐	N17-021	core		☐	☐	☐
284.07	287.12	3.05	LST	2.93	96	W229312	☐	N17-021	core		☐	☐	☐
287.12	290.17	3.05	LST	3.00	98	W229313	☐	N17-021	core		☐	☐	☐
290.17	292.17	2.00	LST	2.00	100	W229314	☐	N17-021	core		☐	☐	☐
292.17	295.23	3.06	LST	3.06	100	W229315	☐	N17-021	core		☐	☐	☐
295.23	296.27	1.04	LST	1.04	100	W229317	☐	N17-021	core		☐	☐	☐
296.27	299.31	3.04	LST	2.50	82	W229318	☐	N17-021	core		☐	☐	☐
299.31	302.36	3.05	LST	2.73	90	W229319	☐	N17-021	core		☐	☐	☐
302.36	305.41	3.05	LST	3.05	100	W229320	☐	N17-021	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
305.41	307.20	1.79	LST	1.70	95	W229321	☐	N17-021	core		☐	☐	☐
307.20	308.71	1.51	LST	1.47	97	W229322	☐	N17-021	core		☐	☐	☐
308.71	311.51	2.80	LST	2.71	97	W229323	☐	N17-021	core		☐	☐	☐
311.51	313.63	2.12	LST	2.00	94	W229324	☐	N17-021	core		☐	☐	☐
313.63	316.49	2.86	LST	2.81	98	W229325	☐	N17-023	core		☐	☐	☐
316.49	318.81	2.32	LST	2.24	97	W229326	☐	N17-023	core		☐	☐	☐
318.81	320.65	1.84	LST	1.66	90	W229327	☐	N17-023	core		☐	☐	☐
320.65	323.70	3.05	LST	2.98	98	W229328	☐	N17-023	core		☐	☐	☐
320.65	323.70	3.05	LST	2.98	98	W229329	☐	N17-023	core		☐	☑	☐
323.70	326.74	3.04	LST	2.97	98	W229330	☐	N17-023	core		☐	☐	☐
326.74	329.79	3.05	LST	3.00	98	W229331	☐	N17-023	core		☐	☐	☐
329.79	332.84	3.05	LST	3.03	99	W229332	☐	N17-023	core		☐	☐	☐
332.84	335.89	3.05	LST	3.05	100	W229333	☐	N17-023	core		☐	☐	☐
335.89	338.94	3.05	LST	2.56	84	W229334	☐	N17-023	core		☐	☐	☐
338.94	341.99	3.05	LST	3.05	100	W229335	☐	N17-023	core		☐	☐	☐
341.99	345.03	3.04	LST	2.98	98	W229337	☐	N17-023	core		☐	☐	☐
345.03	348.08	3.05	LST	2.98	98	W229338	☐	N17-023	core		☐	☐	☐
348.08	351.13	3.05	LST	3.01	99	W229339	☐	N17-023	core		☐	☐	☐
348.08	351.13	3.05	LST	3.01	99	W229340	☐	N17-023	core		☐	☐	☑
351.13	354.18	3.05	LST	2.98	98	W229341	☐	N17-023	core		☐	☐	☐
354.18	357.23	3.05	LST	2.93	96	W229342	☐	N17-023	core		☐	☐	☐
357.23	360.27	3.04	LST	3.04	100	W229343	☐	N17-023	core		☐	☐	☐
360.27	363.32	3.05	LST	3.01	99	W229344	☐	N17-023	core		☐	☐	☐
363.32	366.37	3.05	LST	2.98	98	W229345	☐	N17-023	core		☐	☐	☐
366.37	369.42	3.05	LST	3.03	99	W229346	☐	N17-023	core		☐	☐	☐
369.42	372.47	3.05	LST	2.93	96	W229347	☐	N17-023	core		☐	☐	☐
372.47	375.51	3.04	LST	3.04	100	W229349	☐	N17-023	core		☐	☐	☐
375.51	378.56	3.05	LST	2.96	97	W229350	☐	N17-023	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
378.56	381.61	3.05	LST	3.04	100	W229351	☐	N17-023	core		☐	☐	☐
381.61	384.66	3.05	LST	2.96	97	W229352	☐	N17-023	core		☐	☐	☐
384.66	387.71	3.05	LST	3.00	98	W229353	☐	N17-023	core		☐	☐	☐
387.71	390.75	3.04	LST	2.86	94	W229354	☐	N17-023	core		☐	☐	☐
390.75	393.80	3.05	LST	3.00	98	W229356	☐	N17-023	core		☐	☐	☐
393.80	396.85	3.05	LST	3.00	98	W229357	☐	N17-023	core		☐	☐	☐
396.85	399.90	3.05	LST	3.04	100	W229358	☐	N17-023	core		☐	☐	☐
399.90	402.95	3.05	LST	3.02	99	W229360	☐	N17-023	core		☐	☐	☐
402.95	405.99	3.04	LST	3.04	100	W229361	☐	N17-024	core		☐	☐	☐
405.99	409.04	3.05	LST	2.69	88	W229362	☐	N17-024	core		☐	☐	☐
409.04	412.09	3.05	LST	3.04	100	W229364	☐	N17-024	core		☐	☐	☐
412.09	415.14	3.05	LST	3.05	100	W229365	☐	N17-024	core		☐	☐	☐
415.14	418.19	3.05	LST	3.05	100	W229367	☐	N17-024	core		☐	☐	☐
418.19	421.23	3.04	LST	3.04	100	W229368	☐	N17-024	core		☐	☐	☐
421.23	424.28	3.05	LST	2.96	97	W229369	☐	N17-024	core		☐	☐	☐
424.28	425.50	1.22	LST	1.22	100	W229380	☐	N17-024	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
359.75	472.44	112.69	SLC	MG	Dark grey, quartz granule conglomerate interbedded with dark grey siltstone, and laminated fine grained sandstone and siltstone. A single lense of pebble conglomerate is observed at 361.40 m. Quartz veinlets 0.1 - 1 cm are observed throughout the entire interval, ~2% of entire interval. Veins of quartz are observed from 367.50 - 469.50m, ~1% of entire interval. Additionally, Veining abundance decreases with depth in the siliciclastic unit. Clay alteration is common along joint surfaces. Pyrite appears as thin layers within siltstone beds from 363.80 - 365.20 m, and as blebs within siltstone beds.							
						DK	GY	BD				

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	3.05	3.05	0	0	0.00	0	--	--	--	overburden, no recovery
3.05	4.57	1.52	0.83	55	0.00	0	4R	3H	4W	
4.57	6.10	1.53	1.25	82	0.00	0	4R	3H	4W	
6.10	7.62	1.52	1.29	85	0.73	48	4R	3H	4W	
7.62	9.14	1.52	1.25	82	0.22	14	4R	3H	4W	
9.14	10.67	1.53	1.04	68	0.15	10	4R	3H	4W	
10.67	12.19	1.52	1.21	80	0.29	19	4R	3H	4W	
12.19	13.72	1.53	1.12	73	0.11	7	3R	3H	4W	
13.72	15.24	1.52	1.21	80	0.71	47	4R	3H	4W	
15.24	16.76	1.52	1.39	91	1.06	70	3R	4H	3W	
16.76	18.29	1.53	1.38	90	0.55	36	3R	3H	3W	
18.29	19.81	1.52	1.14	75	0.49	32	3R	3H	2W	
19.81	21.34	1.53	1.39	91	1.22	80	3R	3H	1W	
21.34	22.86	1.52	1.47	97	1.42	93	2R	3H	1W	
22.86	24.38	1.52	1.43	94	0.81	53	3R	3H	1W	
24.38	25.91	1.53	1.36	89	0.86	56	3R	3H	1W	
25.91	27.43	1.52	1.13	74	0.49	32	3R	3H	1W	
27.43	28.96	1.53	1.49	97	0.63	41	3R	3H	1W	
28.96	30.48	1.52	1.46	96	1.42	93	3R	3H	1W	
30.48	32.00	1.52	1.42	93	1.01	66	3R	3H	1W	
32.00	33.53	1.53	1.36	89	0.96	63	3R	3H	1W	RBZ
33.53	35.05	1.52	1.32	87	0.58	38	3R	3H	1W	
35.05	36.58	1.53	1.29	84	0.35	23	3R	3H	1W	
36.58	38.10	1.52	1.46	96	0.63	41	3R	3H	1W	
38.10	39.62	1.52	1.3	86	0.91	60	3R	3H	1W	
39.62	41.15	1.53	1.39	91	0.98	64	3R	3H	1W	
41.15	42.67	1.52	1.45	95	1.16	76	3R	3H	1W	
42.67	44.12	1.45	1.36	94	0.97	67	4R	3H	1W	
44.12	45.72	1.60	1.4	88	1.40	88	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
45.72	47.24	1.52	1.35	89	1.13	74	4R	3H	1W	
47.24	48.77	1.53	1.35	88	1.02	67	4R	3H	1W	
48.77	50.29	1.52	1.21	80	0.83	55	3R	3H	1W	
50.29	51.82	1.53	1.52	99	1.27	83	3R	3H	1W	
51.82	53.34	1.52	1.35	89	1.35	89	4R	3H	1W	
53.34	54.86	1.52	1.48	97	1.06	70	4R	3H	1W	
54.86	56.39	1.53	1.47	96	1.38	90	4R	3H	1W	
56.39	57.91	1.52	1.51	99	1.38	91	4R	3H	1W	
57.91	59.44	1.53	1.53	100	1.24	81	4R	3H	1W	
59.44	60.96	1.52	1.46	96	1.17	77	4R	3H	1W	
60.96	62.48	1.52	1.52	100	1.36	89	4R	3H	1W	
62.48	64.01	1.53	1.52	99	1.36	89	4R	3H	1W	
64.01	65.53	1.52	1.43	94	1.43	94	4R	3H	1W	
65.53	67.06	1.53	1.5	98	1.25	82	4R	3H	1W	
67.06	68.58	1.52	1.37	90	0.90	59	4R	3H	1W	
68.58	70.10	1.52	1.52	100	1.25	82	4R	3H	1W	
70.10	71.63	1.53	1.53	100	1.22	80	4R	3H	1W	
71.63	73.15	1.52	1.43	94	1.27	84	4R	3H	1W	
73.15	74.68	1.53	1.47	96	1.47	96	4R	3H	1W	
74.68	76.20	1.52	1.42	93	1.27	84	4R	3H	1W	
76.20	77.72	1.52	1.38	91	1.17	77	4R	3H	1W	
77.72	79.25	1.53	1.5	98	1.33	87	4R	3H	1W	
79.25	80.77	1.52	1.41	93	1.11	73	4R	3H	1W	
80.77	82.30	1.53	1.43	93	1.02	67	4R	3H	1W	RBZ
82.30	83.82	1.52	1.49	98	1.43	94	4R	3H	1W	
83.82	85.34	1.52	1.52	100	1.52	100	4R	3H	1W	
85.34	86.87	1.53	1.52	99	1.48	97	4R	3H	1W	
86.87	88.39	1.52	1.5	99	1.42	93	4R	3H	1W	
88.39	89.92	1.53	1.33	87	1.28	84	4R	3H	1W	
89.92	91.44	1.52	1.52	100	1.52	100	4R	3H	1W	
91.44	92.96	1.52	1.38	91	1.26	83	3R	3H	1W	RBZ 92.60m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
92.96	94.49	1.53	1.53	100	1.23	80	3R	3H	1W	
94.49	96.01	1.52	1.36	89	1.36	89	4R	3H	1W	
96.01	97.54	1.53	1.5	98	1.45	95	4R	3H	1W	
97.54	99.06	1.52	1.36	89	1.36	89	4R	3H	1W	
99.06	100.58	1.52	1.52	100	1.32	87	4R	3H	1W	
100.58	102.11	1.53	1.07	70	0.90	59	4R	3H	1W	
102.11	103.63	1.52	1.4	92	1.25	82	4R	3H	1W	
103.63	105.16	1.53	1.31	86	0.98	64	4R	3H	1W	
105.16	106.68	1.52	1.52	100	1.30	86	4R	3H	1W	
106.68	108.20	1.52	1.46	96	1.28	84	4R	3H	1W	
108.20	109.73	1.53	1.39	91	1.04	68	3R	3H	1W	
109.73	111.25	1.52	1.48	97	1.28	84	4R	3H	1W	
111.25	112.78	1.53	1.52	99	1.40	92	4R	3H	1W	
112.78	114.30	1.52	1.45	95	1.45	95	4R	3H	1W	
114.30	115.82	1.52	1.52	100	1.52	100	4R	3H	1W	
115.82	117.35	1.53	1.4	92	1.32	86	4R	3H	1W	
117.35	118.87	1.52	1.52	100	1.45	95	4R	3H	1W	
118.87	120.40	1.53	1.42	93	1.34	88	4R	3H	1W	
120.40	121.92	1.52	1.48	97	1.48	97	4R	3H	1W	
121.92	123.44	1.52	1.49	98	1.49	98	3R	3H	1W	
123.44	124.97	1.53	1.35	88	1.35	88	2R	2H	1W	
124.97	126.49	1.52	1.52	100	1.20	79	4R	3H	1W	
126.49	128.02	1.53	1.53	100	1.19	78	3R	2H	1W	
128.02	129.54	1.52	1.38	91	1.38	91	3R	3H	1W	Two single joints of different orientations
129.54	131.06	1.52	1.52	100	1.42	93	3R	3H	1W	RBZ with realgar at 131m
131.06	132.59	1.53	1.53	100	1.38	90	4R	3H	1W	
132.59	134.11	1.52	1.31	86	1.01	66	3R	3H	1W	RBZ with realgar at 134m
134.11	135.64	1.53	1.44	94	1.36	89	1R	3H	1W	
135.64	137.16	1.52	1.48	97	1.24	82	1R	3H	1W	
137.16	138.68	1.52	1.51	99	1.39	91	0R	2H	1W	
138.68	140.21	1.53	1.53	100	1.48	97	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
140.21	141.73	1.52	1.43	94	1.10	72	2R	3H	1W	
141.73	143.26	1.53	1.52	99	1.45	95	4R	3H	1W	
143.26	144.78	1.52	1.41	93	1.30	86	4R	3H	1W	
144.78	146.30	1.52	1.32	87	1.10	72	4R	3H	1W	
146.30	147.83	1.53	1.34	88	1.15	75	4R	3H	1W	
147.83	149.35	1.52	1.48	97	1.31	86	3R	3H	1W	
149.35	150.88	1.53	1.47	96	1.37	90	4R	3H	1W	
150.88	152.40	1.52	1.46	96	1.21	80	4R	3H	1W	
152.40	153.92	1.52	1.44	95	1.11	73	4R	3H	1W	
153.92	155.45	1.53	1.46	95	1.41	92	4R	3H	1W	Realgar on joint surface
155.45	156.97	1.52	1.4	92	1.18	78	4R	3H	1W	
156.97	158.50	1.53	1.53	100	1.30	85	4R	3H	1W	
158.50	160.02	1.52	1.37	90	1.31	86	4R	3H	1W	
160.02	161.54	1.52	1.47	97	0.83	55	4R	3H	1W	
161.54	163.07	1.53	1.47	96	1.39	91	4R	3H	1W	
163.07	164.59	1.52	1.49	98	1.36	89	4R	3H	1W	
164.59	166.12	1.53	1.48	97	1.48	97	4R	3H	1W	
166.12	167.64	1.52	1.46	96	0.95	63	4R	3H	1W	
167.64	169.16	1.52	1.32	87	0.94	62	4R	3H	1W	Single joint has 1 cm calcite infill at 169m
169.16	170.69	1.53	1.34	88	1.16	76	3R	3H	1W	
170.69	172.21	1.52	1.42	93	1.27	84	3R	3H	1W	
172.21	173.74	1.53	1.53	100	1.45	95	4R	3H	1W	
173.74	175.26	1.52	1.4	92	1.07	70	4R	3H	1W	
175.26	176.78	1.52	1.52	100	1.41	93	4R	3H	1W	
176.78	178.31	1.53	1.53	100	1.42	93	4R	3H	1W	
178.31	179.83	1.52	1.51	99	1.42	93	4R	3H	1W	Single joint with slickensides, TCA=70
179.83	181.36	1.53	1.49	97	1.36	89	4R	3H	1W	5 cm RBZ
181.36	182.88	1.52	1.52	100	1.52	100	4R	3H	1W	
182.88	184.40	1.52	1.4	92	1.05	69	4R	3H	1W	
184.40	185.93	1.53	1.53	100	1.30	85	4R	3H	1W	
185.93	187.45	1.52	1.52	100	1.49	98	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
187.45	188.98	1.53	1.52	99	1.49	97	4R	3H	1W	
188.98	190.50	1.52	1.52	100	1.45	95	4R	3H	1W	One carbonate filled joint perpendicular TCA
190.50	192.02	1.52	1.45	95	1.01	66	4R	3H	1W	
192.02	193.55	1.53	1.53	100	0.96	63	3R	3H	1W	
193.55	195.07	1.52	1.36	89	0.98	64	3R	3H	1W	45cm of rubble
195.07	196.60	1.53	1.44	94	1.30	85	2R	3H	1W	
196.60	198.12	1.52	1.52	100	1.49	98	1R	4H	1W	
198.12	199.64	1.52	1.52	100	1.24	82	1R	4H	1W	
199.64	201.17	1.53	1.53	100	1.09	71	4R	3H	1W	
201.17	202.69	1.52	1.52	100	1.11	73	4R	3H	1W	
202.69	204.22	1.53	1.53	100	1.42	93	4R	3H	1W	
204.22	205.74	1.52	1.52	100	1.19	78	4R	3H	1W	
205.74	207.26	1.52	1.52	100	1.23	81	3R	3H	1W	
207.26	208.79	1.53	1.4	92	1.03	67	4R	3H	1W	
208.79	210.31	1.52	1.52	100	1.25	82	2R	3H	1W	
210.31	211.84	1.53	1.53	100	1.52	99	4R	4H	1W	
211.84	213.36	1.52	1.49	98	1.49	98	2R	4H	1W	
213.36	214.88	1.52	1.52	100	1.52	100	3R	3H	1W	
214.88	216.41	1.53	1.53	100	1.45	95	3R	3H	1W	
216.41	217.93	1.52	1.44	95	1.44	95	2R	3H	1W	
217.93	219.46	1.53	1.5	98	1.38	90	0R	4H	1W	
219.46	220.98	1.52	1.52	100	1.34	88	1R	4H	1W	
220.98	222.50	1.52	1.52	100	1.50	99	4R	3H	1W	
222.50	224.03	1.53	1.52	99	1.45	95	4R	3H	1W	
224.03	225.55	1.52	1.52	100	1.52	100	4R	3H	1W	
225.55	227.08	1.53	1.52	99	1.52	99	4R	3H	1W	
227.08	228.60	1.52	1.52	100	1.42	93	4R	3H	1W	
228.60	230.12	1.52	1.44	95	1.36	89	4R	3H	1W	
230.12	231.65	1.53	1.53	100	1.53	100	4R	3H	1W	
231.65	233.17	1.52	1.52	100	1.34	88	4R	3H	1W	
233.17	234.69	1.52	1.5	99	1.50	99	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
234.69	236.22	1.53	1.53	100	1.53	100	4R	3H	1W	
236.22	237.74	1.52	1.51	99	1.51	99	4R	3H	1W	
237.74	239.27	1.53	1.53	100	1.53	100	4R	3H	1W	
239.27	240.79	1.52	1.52	100	1.50	99	4R	3H	1W	
240.79	242.32	1.53	1.42	93	1.42	93	4R	3H	1W	
242.32	243.84	1.52	1.52	100	1.52	100	4R	3H	1W	
243.84	245.36	1.52	1.51	99	1.45	95	4R	3H	1W	
245.36	246.89	1.53	1.37	90	1.37	90	4R	3H	1W	
246.89	248.41	1.52	1.52	100	1.52	100	4R	3H	1W	
248.41	249.94	1.53	1.53	100	1.45	95	4R	3H	1W	
249.94	251.46	1.52	1.42	93	1.37	90	4R	3H	1W	
251.46	252.98	1.52	1.52	100	1.52	100	4R	3H	1W	
252.98	254.51	1.53	1.53	100	1.30	85	4R	3H	1W	Minor rubble at the end of interval
254.51	256.03	1.52	1.52	100	1.52	100	3R	3H	1W	
256.03	257.56	1.53	1.53	100	1.53	100	4R	3H	1W	
257.56	259.08	1.52	1.52	100	1.52	100	4R	3H	1W	
259.08	260.60	1.52	1.49	98	1.49	98	4R	3H	1W	
260.60	262.13	1.53	1.53	100	1.53	100	4R	3H	1W	
262.13	263.65	1.52	1.42	93	1.41	93	4R	3H	1W	
263.65	265.18	1.53	1.52	99	1.52	99	4R	3H	1W	Competent
265.18	266.70	1.52	1.5	99	1.21	80	4R	3H	1W	
266.70	268.22	1.52	1.49	98	1.40	92	4R	3H	1W	
268.22	269.75	1.53	1.43	93	0.87	57	4R	3H	1W	
269.75	271.27	1.52	1.52	100	1.52	100	4R	3H	1W	
271.27	272.80	1.53	1.43	93	1.35	88	4R	3H	1W	
272.80	274.32	1.52	1.52	100	1.46	96	4R	3H	1W	
274.32	275.84	1.52	1.46	96	1.42	93	4R	3H	1W	
275.84	277.37	1.53	1.53	100	1.20	78	3R	3H	1W	
277.37	278.89	1.52	1.35	89	0.95	63	3R	3H	1W	
278.89	280.42	1.53	1.52	99	1.35	88	4R	3H	1W	Two 10cm rubble sections
280.42	281.94	1.52	1.4	92	1.20	79	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
281.94	283.46	1.52	1.47	97	1.13	74	4R	3H	1W	
283.46	284.99	1.53	1.38	90	1.20	78	4R	3H	1W	
284.99	286.51	1.52	1.49	98	1.38	91	3R	3H	1W	
286.51	289.56	3.05	2.61	86	2.53	83	3R	3H	1W	
289.56	292.61	3.05	3.05	100	2.02	66	3R	3H	1W	
292.61	295.66	3.05	2.86	94	2.29	75	4R	3H	1W	
295.66	298.70	3.04	2.94	97	2.41	79	4R	3H	1W	
298.70	301.75	3.05	2.84	93	2.07	68	4R	3H	1W	
301.75	304.80	3.05	2.78	91	1.91	63	3R	3H	1W	
304.80	307.85	3.05	2.77	91	1.93	63	2R	3H	1W	
307.85	310.90	3.05	3.05	100	2.97	97	1R	3H	1W	
310.90	313.94	3.04	3.04	100	2.89	95	3R	3H	1W	
313.94	316.99	3.05	3.05	100	3.05	100	4R	3H	1W	
316.99	320.04	3.05	3.05	100	2.80	92	4R	3H	1W	
320.04	323.09	3.05	3.05	100	2.72	89	3R	3H	1W	
323.09	326.14	3.05	3.05	100	2.94	96	3R	3H	1W	
326.14	329.18	3.04	2.97	98	2.45	81	4R	3H	1W	
329.18	332.23	3.05	3.05	100	2.98	98	3R	3H	1W	Realgar on joint surface
332.23	335.28	3.05	2.91	95	2.73	90	3R	3H	1W	
335.28	338.33	3.05	3.05	100	2.87	94	3R	3H	1W	
338.33	341.38	3.05	3.05	100	2.63	86	2R	3H	1W	
341.38	344.42	3.04	3.04	100	3.04	100	4R	3H	1W	
344.42	347.47	3.05	3.05	100	3.05	100	4R	3H	1W	
347.47	350.52	3.05	3.03	99	3.03	99	4R	3H	1W	
350.52	353.57	3.05	3	98	2.78	91	4R	3H	1W	
353.57	356.62	3.05	3.02	99	2.80	92	3R	3H	1W	Realgar on joint surface
356.62	359.66	3.04	2.84	93	2.56	84	4R	3H	1W	
359.66	362.71	3.05	2.96	97	2.20	72	2R	3H	1W	RBZ at 362m
362.71	365.76	3.05	3.05	100	2.50	82	0R	3H	1W	RBZ at 363m
365.76	368.81	3.05	3.05	100	2.98	98	0R	3H	1W	
368.81	371.86	3.05	3.05	100	3.05	100	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
371.86	374.90	3.04	3.04	100	3.04	100	0R	3H	1W	
374.90	377.95	3.05	2.99	98	2.86	94	0R	3H	1W	
377.95	381.00	3.05	3.02	99	2.98	98	0R	3H	1W	
381.00	384.05	3.05	3.05	100	2.29	75	0R	3H	1W	10 degree through core axis
384.05	387.10	3.05	3.04	100	2.46	81	0R	3H	1W	
387.10	390.14	3.04	3.04	100	3.04	100	0R	3H	1W	
390.14	393.19	3.05	3.05	100	3.05	100	0R	3H	1W	
393.19	396.24	3.05	2.98	98	2.98	98	0R	3H	1W	
396.24	399.29	3.05	3.05	100	3.05	100	0R	3H	1W	
399.29	402.34	3.05	3.04	100	3.04	100	0R	3H	1W	
402.34	405.38	3.04	3.03	100	3.03	100	0R	3H	1W	
405.38	408.43	3.05	3.04	100	3.04	100	0R	3H	1W	
408.43	411.48	3.05	2.98	98	2.98	98	0R	3H	1W	
411.48	414.53	3.05	2.99	98	2.99	98	0R	3H	1W	
414.53	417.58	3.05	2.95	97	2.95	97	0R	3H	1W	
417.58	420.62	3.04	2.98	98	2.98	98	0R	3H	1W	
420.62	423.67	3.05	3.02	99	3.02	99	0R	3H	1W	
423.67	426.72	3.05	3.04	100	3.04	100	0R	3H	1W	
426.72	429.77	3.05	2.87	94	2.87	94	0R	3H	1W	
429.77	432.82	3.05	3.05	100	3.05	100	0R	3H	1W	
432.82	435.86	3.04	2.7	89	2.70	89	0R	3H	1W	
435.86	438.91	3.05	3.05	100	3.05	100	0R	3H	1W	
438.91	441.96	3.05	2.93	96	2.93	96	0R	3H	1W	
441.96	445.01	3.05	3.05	100	3.05	100	0R	3H	1W	
445.01	448.06	3.05	3.04	100	3.04	100	0R	3H	1W	
448.06	451.10	3.04	3.01	99	3.01	99	0R	3H	1W	
451.10	454.15	3.05	3.05	100	3.05	100	0R	3H	1W	
454.15	457.20	3.05	2.72	89	2.68	88	0R	3H	1W	
457.20	460.25	3.05	3.05	100	3.05	100	0R	3H	1W	
460.25	463.30	3.05	3.05	100	3.05	100	0R	3H	1W	
463.30	466.34	3.04	3.01	99	3.01	99	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
466.34	469.39	3.05	3.02	99	3.02	99	0R	3H	1W	
469.39	472.44	3.05	3.02	99	3.02	99	0R	3H	1W	E.O.H.

OS -17-236

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228540	☐	N17-026	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228633	☐	N17-030	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228625	☐	N17-030	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228619	☐	N17-030	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228608	☐	N17-028	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228596	☐	N17-028	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228589	☐	N17-028	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228585	☐	N17-028	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228576	☐	N17-027	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228574	☐	N17-027	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228447	☐	N17-022	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228545	☐	N17-027	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228539	☐	N17-026	core	CS4	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228526	☐	N17-026	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228521	☐	N17-026	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228501	☐	N17-025	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228499	☐	N17-025	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228491	☐	N17-025	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228478	☐	N17-025	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228461	☐	N17-022	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228452	☐	N17-022	Core	CS4	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228451	☐	N17-022	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228568	☐	N17-027	core		☑	☐	☐
3.05	6.10	3.05	LST, OVB	2.08	68	W228439	☐	N17-022	Core		☐	☐	☐
6.10	9.14	3.04	LST	2.54	84	W228440	☐	N17-022	Core		☐	☐	☐
9.14	12.19	3.05	LST	2.25	74	W228441	☐	N17-022	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
12.19	15.24	3.05	LST	2.33	76	W228442	☐	N17-022	Core		☐	☐	☐
15.24	18.29	3.05	LST	2.77	91	W228443	☐	N17-022	Core		☐	☐	☐
15.24	18.29	3.05	LST	2.77	91	W228444	☐	N17-022	Core		☐	☐	☑
18.29	20.46	2.17	LST	1.69	78	W228445	☐	N17-022	Core		☐	☐	☐
20.46	23.50	3.04	LST	3.00	99	W228446	☐	N17-022	Core		☐	☐	☐
23.50	25.91	2.41	LST	2.31	96	W228448	☐	N17-022	Core		☐	☐	☐
25.91	27.43	1.52	LST	1.13	74	W228449	☐	N17-022	Core		☐	☐	☐
27.43	30.48	3.05	LST	2.95	97	W228450	☐	N17-022	Core		☐	☐	☐
30.48	33.27	2.79	LST	2.58	92	W228453	☐	N17-022	Core		☐	☐	☐
33.27	35.05	1.78	LST	1.57	88	W228454	☐	N17-022	Core		☐	☐	☐
35.05	37.06	2.01	LST	1.82	91	W228455	☐	N17-022	Core		☐	☐	☐
37.06	39.62	2.56	LST	1.97	77	W228456	☐	N17-022	Core		☐	☐	☐
39.62	42.67	3.05	LST	2.14	70	W228457	☐	N17-022	Core		☐	☐	☐
42.67	45.72	3.05	LST	2.37	78	W228458	☐	N17-022	Core		☐	☐	☐
45.72	48.59	2.87	LST	2.78	97	W228459	☐	N17-022	Core		☐	☐	☐
48.59	50.29	1.70	LST	1.52	89	W228460	☐	N17-022	Core		☐	☐	☐
50.29	53.34	3.05	LST	2.87	94	W228462	☐	N17-022	Core		☐	☐	☐
53.34	56.39	3.05	LST	2.95	97	W228463	☐	N17-022	Core		☐	☐	☐
56.39	59.44	3.05	LST	3.04	100	W228464	☐	N17-022	Core		☐	☐	☐
59.44	62.48	3.04	LST	2.98	98	W228465	☐	N17-022	Core		☐	☐	☐
62.48	65.53	3.05	LST	2.79	91	W228466	☐	N17-022	Core		☐	☐	☐
65.53	68.58	3.05	LST	2.87	94	W228467	☐	N17-022	Core		☐	☐	☐
68.58	71.63	3.05	LST	3.05	100	W228468	☐	N17-022	Core		☐	☐	☐
71.63	74.68	3.05	LST	2.90	95	W228469	☐	N17-025	core		☐	☐	☐
74.68	77.72	3.04	LST	2.80	92	W228470	☐	N17-025	core		☐	☐	☐
77.72	80.77	3.05	LST	2.91	95	W228471	☐	N17-025	core		☐	☐	☐
80.77	83.82	3.05	LST	2.92	96	W228472	☐	N17-025	core		☐	☐	☐
83.82	85.34	1.52	LST	1.52	100	W228473	☐	N17-025	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
83.82	85.34	1.52	LST	1.52	100	W228474	☐	N17-025	core		☐	☑	☐
85.34	88.39	3.05	LST	3.02	99	W228475	☐	N17-025	core		☐	☐	☐
88.39	91.44	3.05	LST	2.85	93	W228476	☐	N17-025	core		☐	☐	☐
91.44	94.49	3.05	LST	2.91	95	W228477	☐	N17-025	core		☐	☐	☐
94.49	97.54	3.05	LST	2.86	94	W228479	☐	N17-025	core		☐	☐	☐
97.54	100.58	3.04	LST	2.88	95	W228480	☐	N17-025	core		☐	☐	☐
100.58	103.63	3.05	LST	2.47	81	W228481	☐	N17-025	core		☐	☐	☐
103.63	106.68	3.05	LST	2.83	93	W228482	☐	N17-025	core		☐	☐	☐
106.68	109.73	3.05	LST	2.85	93	W228483	☐	N17-025	core		☐	☐	☐
106.68	109.73	3.05	LST	2.85	93	W228484	☐	N17-025	core		☐	☐	☑
109.73	112.78	3.05	LST	3.00	98	W228485	☐	N17-025	core		☐	☐	☐
112.78	115.82	3.04	LST	3.02	99	W228486	☐	N17-025	core		☐	☐	☐
115.82	118.87	3.05	LST	2.92	96	W228487	☐	N17-025	core		☐	☐	☐
118.87	121.92	3.05	LST	2.90	95	W228488	☐	N17-025	core		☐	☐	☐
121.92	123.16	1.24	LST	1.24	100	W228489	☐	N17-025	core		☐	☐	☐
123.16	125.07	1.91	LST	1.79	94	W228490	☐	N17-025	core		☐	☐	☐
125.07	126.49	1.42	LST	1.40	99	W228492	☐	N17-025	core		☐	☐	☐
126.49	128.92	2.43	LST	2.43	100	W228493	☐	N17-025	core		☐	☐	☐
128.92	131.06	2.14	LST	2.05	96	W228494	☐	N17-025	core		☐	☐	☐
131.06	132.59	1.53	LST	1.53	100	W228495	☐	N17-025	core		☐	☐	☐
132.59	133.65	1.06	LST	1.06	100	W228496	☐	N17-025	core		☐	☐	☐
133.65	136.87	3.22	LST	3.02	94	W228497	☐	N17-025	core		☐	☐	☐
136.87	138.68	1.81	LST	1.81	100	W228498	☐	N17-025	core		☐	☐	☐
138.68	141.55	2.87	LST	2.87	100	W228500	☐	N17-025	core		☐	☐	☐
141.55	143.26	1.71	LST	1.71	100	W228502	☐	N17-025	core		☐	☐	☐
143.26	146.30	3.04	LST	2.73	90	W228503	☐	N17-025	core		☐	☐	☐
146.30	149.35	3.05	LST	2.82	92	W228504	☐	N17-025	core		☐	☐	☐
149.35	152.40	3.05	LST	2.93	96	W228505	☐	N17-026	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
152.40	155.45	3.05	LST	2.90	95	W228506	☐	N17-026	core		☐	☐	☐
155.45	158.50	3.05	LST	3.02	99	W228507	☐	N17-026	core		☐	☐	☐
158.50	161.54	3.04	LST	2.84	93	W228508	☐	N17-026	core		☐	☐	☐
158.50	161.54	3.04	LST	2.84	93	W228509	☐	N17-026	core		☐	☑	☐
161.54	164.59	3.05	LST	2.96	97	W228510	☐	N17-026	core		☐	☐	☐
164.59	167.64	3.05	LST	2.94	96	W228511	☐	N17-026	core		☐	☐	☐
167.64	170.69	3.05	LST	2.66	87	W228512	☐	N17-026	core		☐	☐	☐
170.69	173.74	3.05	LST	2.95	97	W228513	☐	N17-026	core		☐	☐	☐
173.74	176.78	3.04	LST	2.93	96	W228514	☐	N17-026	core		☐	☐	☐
176.78	179.83	3.05	LST	3.04	100	W228515	☐	N17-026	core		☐	☐	☐
179.83	182.88	3.05	LST	3.01	99	W228516	☐	N17-026	core		☐	☐	☐
182.88	185.93	3.05	LST	2.93	96	W228517	☐	N17-026	core		☐	☐	☐
185.93	188.48	2.55	LST	2.50	98	W228518	☐	N17-026	core		☐	☐	☐
188.48	190.50	2.02	LST	1.92	95	W228519	☐	N17-026	core		☐	☐	☐
190.50	192.02	1.52	LST	1.45	95	W228520	☐	N17-026	core		☐	☐	☐
192.02	194.40	2.38	LST	2.33	98	W228522	☐	N17-026	core		☐	☐	☐
194.40	196.60	2.20	LST	1.87	85	W228523	☐	N17-026	core		☐	☐	☐
196.60	199.32	2.72	LST	2.70	99	W228524	☐	N17-026	core		☐	☐	☐
199.32	201.17	1.85	LST	1.85	100	W228525	☐	N17-026	core		☐	☐	☐
201.17	203.83	2.66	LST	2.56	96	W228527	☐	N17-026	core		☐	☐	☐
203.83	205.74	1.91	LST	1.81	95	W228528	☐	N17-026	core		☐	☐	☐
205.74	207.26	1.52	LST	1.52	100	W228529	☐	N17-026	core		☐	☐	☐
205.74	207.26	1.52	LST	1.52	100	W228530	☐	N17-026	core		☐	☐	☑
207.26	208.74	1.48	LST	1.40	95	W228531	☐	N17-026	core		☐	☐	☐
208.74	210.31	1.57	LST	1.53	97	W228532	☐	N17-026	core		☐	☐	☐
210.31	211.84	1.53	LST	1.53	100	W228533	☐	N17-026	core		☐	☐	☐
211.84	213.86	2.02	LST	1.97	98	W228534	☐	N17-026	core		☐	☐	☐
213.86	215.59	1.73	LST	1.73	100	W228535	☐	N17-026	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
215.59	217.63	2.04	LST	1.95	96	W228536	☐	N17-026	core		☐	☐	☐
217.63	219.46	1.83	LST	1.83	100	W228537	☐	N17-026	core		☐	☐	☐
219.46	220.98	1.52	LST	1.52	100	W228538	☐	N17-026	core		☐	☐	☐
220.98	224.03	3.05	LST	3.04	100	W228541	☐	N17-027	core		☐	☐	☐
224.03	227.08	3.05	LST	3.05	100	W228542	☐	N17-027	core		☐	☐	☐
224.03	227.08	3.05	LST	3.04	100	W228543	☐	N17-027	core		☐	☑	☐
227.08	230.12	3.04	LST	2.96	97	W228544	☐	N17-027	core		☐	☐	☐
230.12	233.17	3.05	LST	3.05	100	W228546	☐	N17-027	core		☐	☐	☐
233.17	236.22	3.05	LST	3.03	99	W228547	☐	N17-027	core		☐	☐	☐
236.22	239.27	3.05	LST	3.04	100	W228548	☐	N17-027	core		☐	☐	☐
239.27	242.32	3.05	LST	2.94	96	W228549	☐	N17-027	core		☐	☐	☐
242.32	245.36	3.04	LST	3.03	100	W228550	☐	N17-027	core		☐	☐	☐
245.36	248.41	3.05	LST	2.89	95	W228551	☐	N17-027	core		☐	☐	☐
248.41	251.46	3.05	LST	2.95	97	W228552	☐	N17-027	core		☐	☐	☐
251.46	254.25	2.79	LST	2.79	100	W228553	☐	N17-027	core		☐	☐	☐
254.25	256.03	1.78	LST	1.78	100	W228554	☐	N17-027	core		☐	☐	☐
254.25	256.03	1.78	LST	1.78	100	W228555	☐	N17-027	core		☐	☐	☑
256.03	259.08	3.05	LST	3.05	100	W228556	☐	N17-027	core		☐	☐	☐
259.08	262.13	3.05	LST	3.02	99	W228557	☐	N17-027	core		☐	☐	☐
262.13	265.18	3.05	LST	2.94	96	W228558	☐	N17-027	core		☐	☐	☐
265.18	268.22	3.04	LST	2.99	98	W228559	☐	N17-027	core		☐	☐	☐
268.22	271.27	3.05	LST	2.95	97	W228560	☐	N17-027	core		☐	☐	☐
271.27	274.32	3.05	LST	2.95	97	W228561	☐	N17-027	core		☐	☐	☐
274.32	277.37	3.05	LST	2.62	86	W228562	☐	N17-027	core		☐	☐	☐
277.37	280.42	3.05	LST	2.87	94	W228563	☐	N17-027	core		☐	☐	☐
280.42	283.46	3.04	LST	2.87	94	W228564	☐	N17-027	core		☐	☐	☐
283.46	286.82	3.36	LST	3.07	91	W228565	☐	N17-027	core		☐	☐	☐
286.82	289.56	2.74	LST	2.41	88	W228566	☐	N17-027	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
289.56	292.61	3.05	LST	3.04	100	W228567	☐	N17-027	core		☐	☐	☐
292.61	295.66	3.05	LST	2.86	94	W228569	☐	N17-027	core		☐	☐	☐
295.66	298.70	3.04	LST	2.94	97	W228570	☐	N17-027	core		☐	☐	☐
298.70	301.75	3.05	LST	2.84	93	W228571	☐	N17-027	core		☐	☐	☐
301.75	304.80	3.05	LST	2.78	91	W228572	☐	N17-027	core		☐	☐	☐
304.80	307.85	3.05	LST	2.77	91	W228573	☐	N17-027	core		☐	☐	☐
307.85	310.90	3.05	LST	3.04	100	W228575	☐	N17-027	core		☐	☐	☐
310.90	313.94	3.04	LST	3.04	100	w228577	☐	N17-028	core		☐	☐	☐
313.94	316.99	3.05	LST	3.04	100	W228578	☐	N17-028	core		☐	☐	☐
316.99	320.04	3.05	LST	3.05	100	W228579	☐	N17-028	core		☐	☐	☐
320.04	323.09	3.05	LST	3.05	100	W228580	☐	N17-028	core		☐	☐	☐
320.04	323.09	3.05	LST	3.05	100	W228581	☐	N17-028	core		☐	☐	☑
323.09	326.14	3.05	LST	3.05	100	W228582	☐	N17-028	core		☐	☐	☐
326.14	329.18	3.04	LST	2.97	98	W228583	☐	N17-028	core		☐	☐	☐
329.18	332.23	3.05	LST	3.05	100	W228584	☐	N17-028	core		☐	☐	☐
332.23	335.28	3.05	LST	2.91	95	W228586	☐	N17-028	core		☐	☐	☐
335.28	338.33	3.05	LST	3.05	100	W228587	☐	N17-028	core		☐	☐	☐
338.33	341.38	3.05	LST	3.05	100	W228588	☐	N17-028	core		☐	☐	☐
341.38	344.42	3.04	LST	3.04	100	W228590	☐	N17-028	core		☐	☐	☐
344.42	347.47	3.05	LST	3.05	100	W228591	☐	N17-028	core		☐	☐	☐
344.42	347.47	3.05	LST	3.05	100	W228592	☐	N17-028	core		☐	☑	☐
347.47	350.52	3.05	LST	3.00	98	W228593	☐	N17-028	core		☐	☐	☐
350.52	353.00	2.48	LST	2.43	98	W228594	☐	N17-028	core		☐	☐	☐
353.00	355.54	2.54	LST	2.49	98	W228595	☐	N17-028	core		☐	☐	☐
355.54	356.62	1.08	LST	1.00	93	W228597	☐	N17-028	core		☐	☐	☐
356.62	359.66	3.04	LST	2.84	93	W228598	☐	N17-028	core		☐	☐	☐
359.66	362.71	3.05	LST	2.96	97	W228599	☐	N17-028	core		☐	☐	☐
362.71	365.76	3.05	SLC	3.05	100	W228600	☐	N17-028	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
365.76	368.81	3.05	SLC	3.05	100	W228601	☐	N17-028	core		☐	☐	☐
368.81	371.86	3.05	SLC	3.05	100	W228602	☐	N17-028	core		☐	☐	☐
371.86	374.90	3.04	SLC	3.04	100	W228603	☐	N17-028	core		☐	☐	☐
374.90	377.95	3.05	SLC	2.99	98	W228604	☐	N17-028	core		☐	☐	☐
377.95	381.00	3.05	SLC	3.02	99	W228605	☐	N17-028	core		☐	☐	☐
381.00	384.05	3.05	SLC	3.05	100	W228606	☐	N17-028	core		☐	☐	☐
384.05	387.10	3.05	SLC	3.04	100	W228607	☐	N17-028	core		☐	☐	☐
387.10	390.14	3.04	SLC	3.04	100	W228609	☐	N17-028	core		☐	☐	☐
390.14	393.19	3.05	SLC	3.04	100	W228610	☐	N17-028	core		☐	☐	☐
393.19	396.24	3.05	SLC	2.98	98	W228611	☐	N17-028	core		☐	☐	☐
396.24	399.29	3.05	SLC	3.04	100	W228612	☐	N17-028	core		☐	☐	☐
399.29	402.34	3.05	SLC	3.04	100	W228613	☐	N17-030	core		☐	☐	☐
402.34	405.38	3.04	SLC	3.03	100	W228614	☐	N17-030	core		☐	☐	☐
405.38	408.43	3.05	SLC	3.04	100	W228615	☐	N17-030	core		☐	☐	☐
405.38	408.43	3.05	SLC	3.04	100	W228616	☐	N17-030	core		☐	☑	☐
408.43	411.48	3.05	SLC	2.98	98	W228617	☐	N17-030	core		☐	☐	☐
411.48	414.53	3.05	SLC	2.99	98	W228618	☐	N17-030	core		☐	☐	☐
414.53	417.58	3.05	SLC	2.95	97	W228620	☐	N17-030	core		☐	☐	☐
417.58	420.62	3.04	SLC	2.98	98	W228621	☐	N17-030	core		☐	☐	☐
420.62	423.67	3.05	SLC	3.02	99	W228622	☐	N17-030	core		☐	☐	☐
423.67	426.72	3.05	SLC	3.04	100	W228623	☐	N17-030	core		☐	☐	☐
426.72	429.77	3.05	SLC	2.87	94	W228624	☐	N17-030	core		☐	☐	☐
429.77	432.82	3.05	SLC	3.04	100	W228626	☐	N17-030	core		☐	☐	☐
432.82	435.86	3.04	SLC	2.70	89	W228627	☐	N17-030	core		☐	☐	☐
435.86	438.91	3.05	SLC	3.05	100	W228628	☐	N17-030	core		☐	☐	☐
435.86	438.91	3.05	SLC	3.05	100	W228629	☐	N17-030	core		☐	☐	☑
438.91	441.96	3.05	SLC	2.93	96	W228630	☐	N17-030	core		☐	☐	☐
441.96	445.01	3.05	SLC	3.05	100	W228631	☐	N17-030	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
445.01	448.06	3.05	SLC	3.04	100	W228632	☐	N17-030	core		☐	☐	☐
448.06	451.10	3.04	SLC	3.01	99	W228634	☐	N17-030	core		☐	☐	☐
451.10	454.15	3.05	SLC	3.04	100	W228635	☐	N17-030	core		☐	☐	☐
454.15	457.20	3.05	SLC	2.72	89	W228636	☐	N17-030	core		☐	☐	☐
457.20	460.25	3.05	SLC	3.04	100	W228637	☐	N17-030	core		☐	☐	☐
460.25	463.30	3.05	SLC	3.04	100	W228638	☐	N17-030	core		☐	☐	☐
463.30	466.34	3.04	SLC	3.01	99	W228639	☐	N17-030	core		☐	☐	☐
466.34	469.39	3.05	SLC	3.02	99	W228640	☐	N17-030	core		☐	☐	☐
469.39	472.44	3.05	SLC	3.02	99	W228641	☐	N17-030	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	2.06	2.06	0	0	0.00	0	--	--	--	Overburden
2.06	3.35	1.29	1.25	97	0.00	0	0R	3H	2W	
3.35	4.88	1.53	1.35	88	0.00	0	0R	3H	2W	
4.88	6.40	1.52	1.13	74	0.00	0	0R	3H	2W	
6.40	7.92	1.52	1.52	100	0.00	0	0R	3H	1W	
7.92	9.45	1.53	1.52	99	0.30	20	1R	3H	1W	
9.45	10.97	1.52	1.52	100	0.43	28	3R	3H	1W	
10.97	12.50	1.53	1.53	100	0.12	8	2R	3H	1W	
12.50	14.02	1.52	1.18	78	0.57	38	3R	3H	1W	
14.02	15.85	1.83	1.8	98	1.53	84	3R	3H	1W	
15.85	17.37	1.52	1.52	100	1.52	100	4R	3H	1W	
17.37	18.89	1.52	1.4	92	0.85	56	4R	3H	1W	
18.89	20.42	1.53	1.53	100	1.53	100	4R	3H	1W	
20.42	21.95	1.53	1.27	83	0.62	41	4R	3H	1W	
21.95	23.45	1.50	1.18	79	0.81	54	4R	3H	1W	
23.45	24.99	1.54	1.52	99	1.35	88	3R	4H	1W	
24.99	26.52	1.53	1.53	100	1.47	96	3R	3H	1W	
26.52	28.02	1.50	1.5	100	1.07	71	3R	3H	1W	
28.02	29.57	1.55	1.53	99	0.00	0	0R	3H	1W	
29.57	31.09	1.52	1.4	92	0.57	38	3R	3H	1W	
31.09	32.61	1.52	1.35	89	0.84	55	2R	4H	1W	
32.61	34.14	1.53	1.53	100	0.65	42	2R	3H	3W	RBZ at 34.00 - 34.14 m
34.14	35.66	1.52	1.5	99	0.89	59	2R	3H	3W	RBZ at 35.53 - 35.66 m
35.66	37.19	1.53	0.7	46	0.45	29	2R	3H	3W	RBZ at 35.80, 36.84 - 37.19, very rubbly, much of interval is missing.
37.19	38.71	1.52	1.43	94	1.00	66	2R	3H	3W	RBZ at 38.5, 37.8 m
38.71	40.23	1.52	1.16	76	0.55	36	2R	3H	3W	at 39 - 39.5 m, multiple single fractures.
40.23	41.76	1.53	1	65	0.10	7	2R	3H	3W	RBZ at 40.35 - 40.5, 41 - 41.76 m
41.76	43.28	1.52	1.17	77	0.40	26	2R	3H	3W	RBZ entire interval, except 42 - 42.3, 42.82 - 43 m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
43.28	44.81	1.53	1.53	100	0.47	31	2R	3H	3W	RBZ entire interval, except 15 cm at 44 m and 44.2 - 44.6 m, multiple single unmatched joints.
44.81	46.33	1.52	0.89	59	0.10	7	2R	3H	3W	RBZ entire interval.
46.33	47.85	1.52	1.24	82	0.20	13	2R	3H	3W	RBZ 46.33 - 47 m, multiple single joints.
47.85	49.38	1.53	1.11	73	0.28	18	2R	3H	3W	RBZ entire interval with 3 isolated > 10 cm places.
49.38	50.90	1.52	1.23	81	0.36	24	2R	3H	3W	RBZ entire interval, except for after >10cm.
50.90	52.43	1.53	1.24	81	0.13	8	2R	3H	3W	RBZ entire interval.
52.43	53.95	1.52	1.29	85	0.18	12	2R	3H	3W	RBZ 53.05 - 53.80 m, multiple unmatched joints.
53.95	55.47	1.52	0.75	49	0.00	0	2R	3H	3W	RBZ or multiply fractures with unmatched joints for entire interval.
55.47	57.00	1.53	1.4	92	0.42	27	2R	3H	3W	RBZ 55.47 - 55.70 m, 56.6 - 57.00 m.
57.00	58.52	1.52	1.37	90	0.86	57	2R	3H	3W	RBZ 57.60 - 57.80 m, multiple unmatched joints.
58.52	60.05	1.53	0.95	62	0.28	18	2R	3H	3W	RBZ 59 - 60.05, one unmactched joint
60.05	61.56	1.51	1.38	91	0.21	14	2R	3H	3W	RBZ 60.05 - 61.20 m, 61.35 - 61.56 m.
61.56	63.09	1.53	1.39	91	0.73	48	2R	3H	3W	
63.09	64.62	1.53	1.22	80	0.40	26	2R	3H	3W	RBZ 63.09 - 64.05 m.
64.62	66.14	1.52	1.43	94	0.42	28	2R	3H	3W	
66.14	67.67	1.53	1.44	94	0.44	29	2R	3H	3W	RBZ 66.35 - 67.25 m.
67.67	69.19	1.52	1.43	94	0.54	36	2R	3H	3W	Multiple single joints.
69.19	70.71	1.52	1.12	74	0.15	10	2R	3H	1W	RBZ 70.05 - 70.50 m.
70.71	72.24	1.53	1.39	91	0.50	33	2R	3H	1W	
72.24	73.76	1.52	1.28	84	0.67	44	2R	3H	1W	
73.76	75.29	1.53	1.51	99	0.54	35	2R	3H	1W	RBZ 74.5 - 75 m, multiple single joints.
75.29	76.81	1.52	1.52	100	0.97	64	2R	3H	1W	RBZ 76.5 -76.81 m.
76.81	78.33	1.52	1.52	100	0.96	63	2R	3H	1W	RBZ at 77.9, 78.10 m.
78.33	79.86	1.53	1.45	95	0.32	21	2R	3H	1W	
79.86	81.38	1.52	1.51	99	0.72	47	2R	3H	1W	80.05 - 80.10 m.
81.38	82.91	1.53	1.4	92	0.68	44	2R	3H	1W	RBZ 82.3 - 82.80, 81.60, 81.90 m.
82.91	84.43	1.52	1.48	97	0.40	26	2R	3H	1W	RBZ 83.10 - 84.43 m.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
84.43	85.95	1.52	1.37	90	0.75	49	2R	3H	1W	RBZ at 84.5, 85.0, 85.5 m.
85.95	87.47	1.52	1.13	74	0.14	9	2R	3H	1W	RBZ 86.34 - 87.47 m.
87.47	89.00	1.53	1.29	84	0.51	33	2R	3H	1W	Multiple single joints.
89.00	90.53	1.53	1.47	96	0.26	17	2R	3H	1W	RBZ 89.7 - 90.53 m.
90.53	92.05	1.52	1.48	97	0.76	50	2R	3H	1W	RBZ 90.6 - 91.0 m.
92.05	93.57	1.52	1.24	82	0.00	0	2R	3H	1W	RBZ entire interval.
93.57	95.10	1.53	1.36	89	0.43	28	2R	3H	1W	RBZ at 93.7, 94.2 m.
95.10	96.62	1.52	1.39	91	0.95	63	2R	3H	1W	RBZ 96.4 - 96.62 m.
96.62	98.15	1.53	1.39	91	0.25	16	2R	3H	1W	RBZ 96.8 - 98.15 m.
98.15	99.67	1.52	0.83	55	0.15	10	2R	3H	1W	RBZ 98.25 - 99.67 m.
99.67	101.19	1.52	0.56	37	0.24	16	2R	2H	1W	RBZ 100 -101.19 m.
101.19	102.71	1.52	1.52	100	1.40	92	2R	3H	1W	
102.71	104.24	1.53	1.24	81	0.90	59	2R	3H	1W	
104.24	105.77	1.53	1.51	99	1.13	74	2R	3H	1W	
105.77	107.29	1.52	1.47	97	1.07	70	2R	3H	1W	RBZ at 106.05 m.
107.29	108.81	1.52	1.43	94	1.30	86	2R	3H	1W	
108.81	110.34	1.53	1.43	93	1.36	89	2R	3H	1W	
110.34	111.86	1.52	1.42	93	1.15	76	2R	3H	1W	
111.86	113.39	1.53	1.53	100	1.45	95	2R	3H	1W	
113.39	114.91	1.52	1.52	100	1.46	96	2R	3H	1W	
114.91	116.43	1.52	1.48	97	1.28	84	2R	3H	1W	3 single joints.
116.43	117.96	1.53	1.33	87	0.96	63	2R	3H	1W	
117.96	119.48	1.52	1.52	100	1.33	88	2R	3H	1W	
119.48	121.01	1.53	1.47	96	1.12	73	2R	3H	1W	
121.01	122.53	1.52	1.41	93	1.33	88	2R	3H	1W	
122.53	124.05	1.52	1.46	96	1.30	86	2R	3H	1W	RBZ at 123.5 m, single joints.
124.05	125.58	1.53	1.42	93	1.30	85	2R	3H	1W	
125.58	127.10	1.52	1.52	100	1.52	100	2R	3H	1W	
127.10	128.62	1.52	1.48	97	1.38	91	2R	3H	1W	
128.62	130.15	1.53	1.46	95	1.04	68	2R	3H	1W	
130.15	131.67	1.52	1.5	99	1.32	87	2R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
131.67	133.20	1.53	1.32	86	0.51	33	2R	3H	1W	RBZ 132.05 - 132.3, 132.4 - 132.20 m.
133.20	134.72	1.52	1.44	95	0.80	53	2R	3H	1W	RBZ 133.20 - 133.30 m.
134.72	136.24	1.52	1.28	84	0.45	30	2R	3H	1W	
136.24	137.77	1.53	1.52	99	0.92	60	2R	3H	1W	
137.77	139.29	1.52	1.37	90	1.05	69	2R	3H	1W	
139.29	140.82	1.53	1.29	84	0.81	53	2R	3H	1W	
140.82	142.34	1.52	1.51	99	1.26	83	2R	3H	1W	
142.34	143.87	1.53	1.37	90	0.90	59	2R	3H	1W	
143.87	145.39	1.52	1.5	99	1.06	70	2R	2H	1W	
145.39	146.91	1.52	1.43	94	1.18	78	2R	2H	1W	
146.91	148.44	1.53	1.34	88	0.94	61	2R	3H	1W	RBZ at 148.05, 148.34 m.
148.44	149.96	1.52	1.52	100	1.19	78	2R	2H	1W	
149.96	151.49	1.53	1.36	89	1.04	68	3R	2H	1W	
151.49	153.01	1.52	1.41	93	1.05	69	3R	2H	1W	
153.01	154.53	1.52	1.18	78	0.58	38	3R	3H	1W	
154.53	156.06	1.53	1.53	100	1.37	90	4R	3H	1W	
156.06	157.58	1.52	1.47	97	1.39	91	3R	3H	1W	
157.58	159.11	1.53	1.42	93	1.38	90	3R	2H	1W	
159.11	160.63	1.52	1.37	90	1.07	70	3R	2H	1W	
160.63	162.15	1.52	1.34	88	1.01	66	3R	2H	1W	
162.15	163.68	1.53	1.41	92	0.41	27	3R	2H	1W	
163.68	165.20	1.52	1.43	94	1.42	93	3R	2H	1W	
165.20	166.73	1.53	1.5	98	0.52	34	3R	2H	1W	
166.73	168.25	1.52	1.34	88	0.97	64	3R	3H	1W	
168.25	169.77	1.52	1.52	100	1.17	77	3R	3H	1W	
169.77	171.30	1.53	1.49	97	1.21	79	2R	3H	1W	
171.30	172.82	1.52	1.46	96	1.39	91	2R	3H	1W	
172.82	174.35	1.53	1.53	100	0.92	60	3R	3H	1W	
174.35	175.87	1.52	1.5	99	1.16	76	3R	3H	1W	
175.87	177.39	1.52	1.52	100	1.10	72	3R	3H	1W	
177.39	178.92	1.53	1.51	99	1.12	73	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
178.92	180.44	1.52	1.47	97	1.02	67	3R	3H	1W	
180.44	181.97	1.53	1.51	99	1.04	68	2R	3H	1W	
181.97	183.49	1.52	1.44	95	1.18	78	2R	3H	1W	
183.49	185.01	1.52	1.45	95	0.97	64	2R	3H	1W	
185.01	186.54	1.53	1.42	93	1.06	69	2R	3H	1W	
186.54	188.06	1.52	1.52	100	1.34	88	1R	3H	1W	
188.06	189.59	1.53	1.48	97	1.26	82	1R	3H	1W	
189.59	191.11	1.52	1.49	98	1.30	86	1R	3H	1W	
191.11	192.63	1.52	1.48	97	1.37	90	2R	3H	1W	
192.63	194.16	1.53	1.37	90	0.89	58	4R	3H	1W	
194.16	195.68	1.52	1.34	88	0.72	47	4R	3H	1W	
195.68	197.21	1.53	1.52	99	1.10	72	4R	3H	1W	
197.21	198.73	1.52	1.52	100	0.81	53	4R	3H	1W	
198.73	200.25	1.52	1.49	98	0.94	62	4R	3H	1W	
200.25	201.78	1.53	1.43	93	0.96	63	4R	3H	1W	
201.78	203.30	1.52	1.44	95	0.92	61	4R	3H	1W	
203.30	204.83	1.53	1.5	98	1.12	73	4R	3H	1W	
204.83	206.35	1.52	1.51	99	0.68	45	4R	3H	1W	
206.35	207.87	1.52	1.52	100	1.09	72	2R	2H	1W	
207.87	209.40	1.53	1.53	100	1.48	97	1R	2H	1W	
209.40	211.84	2.44	2.27	93	1.01	41	3R	3H	1W	
211.84	214.88	3.04	3.04	100	1.93	63	4R	3H	1W	
214.88	217.93	3.05	3.05	100	2.40	79	3R	3H	1W	
217.93	220.98	3.05	2.95	97	2.29	75	2R	3H	1W	
220.98	224.02	3.04	2.87	94	1.73	57	1R	3H	1W	
224.02	227.08	3.06	2.91	95	2.36	77	3R	3H	1W	
227.08	230.12	3.04	2.96	97	1.99	65	3R	3H	1W	
230.12	233.17	3.05	2.98	98	2.67	88	3R	3H	1W	
233.17	236.22	3.05	2.89	95	2.62	86	2R	2H	1W	
236.22	239.27	3.05	3.05	100	2.89	95	3R	3H	1W	
239.27	242.32	3.05	2.75	90	2.15	70	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
242.32	245.36	3.04	3.04	100	2.32	76	2R	3H	1W	
245.36	248.41	3.05	3.02	99	1.93	63	4R	3H	1W	
248.41	251.46	3.05	2.86	94	2.69	88	3R	3H	1W	
251.46	254.50	3.04	3	99	3.00	99	3R	3H	1W	
254.50	257.56	3.06	2.94	96	2.68	88	3R	3H	1W	
257.56	260.60	3.04	3.04	100	1.83	60	4R	3H	1W	RBZ @259.2-259.4m, 259.5-260.60
260.60	263.65	3.05	2.88	94	0.98	32	4R	3H	1W	RBZ 260.60-261.70m
263.65	266.70	3.05	3.05	100	2.48	81	4R	3H	1W	RBZ 266.14-266.30m
266.70	269.75	3.05	2.98	98	2.58	85	4R	3H	1W	
269.75	272.80	3.05	3.05	100	2.51	82	4R	3H	1W	
272.80	275.84	3.04	3.01	99	2.44	80	4R	3H	1W	
275.84	278.89	3.05	2.89	95	2.89	95	4R	3H	1W	
278.89	281.94	3.05	3.05	100	3.05	100	4R	3H	1W	
281.94	284.99	3.05	3.03	99	2.93	96	3R	3H	1W	
284.99	288.04	3.05	3.03	99	3.03	99	4R	3H	1W	
288.04	291.08	3.04	3.04	100	3.03	100	3R	3H	1W	
291.08	294.13	3.05	3.05	100	1.94	64	3R	4H	1W	RBZ at 292.95m, and 294-294.10m
294.13	297.18	3.05	3.05	100	2.67	88	2R	3H	1W	
297.18	300.23	3.05	2.94	96	2.68	88	4R	3H	1W	
300.23	303.28	3.05	3.05	100	3.05	100	4R	3H	1W	
303.28	306.32	3.04	3.04	100	3.00	99	4R	3H	1W	
306.32	309.37	3.05	3	98	3.00	98	4R	3H	1W	
309.37	312.42	3.05	3.04	100	2.88	94	4R	3H	1W	
312.42	315.47	3.05	3.05	100	2.95	97	2R	3H	1W	
315.47	318.52	3.05	3.05	100	3.05	100	4R	3H	1W	
318.52	321.56	3.04	3.04	100	2.89	95	4R	3H	1W	
321.56	324.61	3.05	2.83	93	2.53	83	2R	3H	1W	
324.61	327.66	3.05	2.6	85	2.56	84	0R	3H	1W	E.O.H.

OS -17-237

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229449	☐	N17-031	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229497	☐	N17-032	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229494	☐	N17-032	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229483	☐	N17-032	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229480	☐	N17-032	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229387	☐	N17-024	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229454	☐	N17-031	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229447	☐	N17-031	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229432	☐	N17-029	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229428	☐	N17-029	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229427	☐	N17-029	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229400	☐	N17-029	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229394	☐	N17-024	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229461	☐	N17-031	core	CS6	☐	☐	☐
2.06	4.88	2.82	OVB, DMT	2.64	94	W229370	☐	N17-024	core		☐	☐	☐
4.88	7.92	3.04	DMT	2.65	87	W229371	☐	N17-024	core		☐	☐	☐
7.92	10.97	3.05	DMT	3.04	100	W229372	☐	N17-024	core		☐	☐	☐
10.97	14.02	3.05	DMT	2.70	89	W229373	☐	N17-024	core		☐	☐	☐
14.02	17.37	3.35	DMT	3.32	99	W229374	☐	N17-024	core		☐	☐	☐
17.37	20.42	3.05	DMT	2.93	96	W229375	☐	N17-024	core		☐	☐	☐
20.42	23.45	3.03	DMT	2.45	81	W229376	☐	N17-024	core		☐	☐	☐
23.45	26.52	3.07	DMT	3.05	99	W229377	☐	N17-024	core		☐	☐	☐
26.52	29.57	3.05	DMT	3.03	99	W229378	☐	N17-024	core		☐	☐	☐
29.57	32.61	3.04	DMT	2.75	90	W229379	☐	N17-024	core		☐	☐	☐
32.61	34.14	1.53	DMT	1.53	100	W229381	☐	N17-024	core		☐	☐	☐
34.14	36.10	1.96	DMT	1.51	77	W229382	☐	N17-024	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
36.10	38.71	2.61	DMT	1.81	69	W229383	☐	N17-024	core		☐	☐	☐
38.71	41.76	3.05	DMT	2.16	71	W229384	☐	N17-024	core		☐	☐	☐
41.76	44.81	3.05	DMT	2.71	89	W229385	☐	N17-024	core		☐	☐	☐
41.76	44.81	3.05	DMT	2.71	89	W229386	☐	N17-024	core		☐	☑	☐
44.81	47.85	3.04	DST	2.13	70	W229388	☐	N17-024	core		☐	☐	☐
47.85	50.90	3.05	DST	2.34	77	W229389	☐	N17-024	core		☐	☐	☐
50.90	53.95	3.05	DST	2.53	83	W229390	☐	N17-024	core		☐	☐	☐
50.90	53.95	3.05	DST	2.53	83	W229391	☐	N17-024	core		☐	☐	☑
53.95	57.00	3.05	DST	2.15	70	W229392	☐	N17-024	core		☐	☐	☐
57.00	60.05	3.05	DST	2.32	76	W229393	☐	N17-024	core		☐	☐	☐
60.05	63.09	3.04	DST	2.77	91	W229395	☐	N17-024	core		☐	☐	☐
63.09	66.14	3.05	DST	2.65	87	W229396	☐	N17-024	core		☐	☐	☐
66.14	67.67	1.53	DST	1.44	94	W229397	☐	N17-029	core		☐	☐	☐
67.67	69.19	1.52	DST	1.43	94	W229398	☐	N17-029	core		☐	☐	☐
69.19	70.71	1.52	DST	1.12	74	W229399	☐	N17-029	core		☐	☐	☐
70.71	73.76	3.05	DST	2.67	88	W229401	☐	N17-029	core		☐	☐	☐
73.76	76.81	3.05	DST	2.83	93	W229402	☐	N17-029	core		☐	☐	☐
76.81	79.86	3.05	DST	2.93	96	W229403	☐	N17-029	core		☐	☐	☐
79.86	82.91	3.05	DST	2.91	95	W229404	☐	N17-029	core		☐	☐	☐
79.86	82.91	3.05	DST	2.91	95	W229405	☐	N17-029	core		☐	☑	☐
82.91	85.95	3.04	DST	2.85	94	W229406	☐	N17-029	core		☐	☐	☐
85.95	89.00	3.05	DST	2.42	79	W229407	☐	N17-029	core		☐	☐	☐
89.00	92.05	3.05	DST	2.95	97	W229408	☐	N17-029	core		☐	☐	☐
92.05	94.83	2.78	DST	2.40	86	W229409	☐	N17-029	core		☐	☐	☐
94.83	96.44	1.61	DST	1.49	93	W229410	☐	N17-029	core		☐	☐	☐
96.44	97.91	1.47	DST	1.26	86	W229411	☐	N17-029	core		☐	☐	☐
97.91	101.19	3.28	DST	1.51	46	W229412	☐	N17-029	core		☐	☐	☐
97.91	101.19	3.28	DST	1.53	47	W229413	☐	N17-029	core		☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
101.19	104.24	3.05	DST	2.76	90	W229414	☐	N17-029	core		☐	☐	☐
104.24	107.29	3.05	DST	1.98	65	W229415	☐	N17-029	core		☐	☐	☐
107.29	110.34	3.05	DST	1.86	61	W229416	☐	N17-029	core		☐	☐	☐
110.34	113.39	3.05	DST	1.95	64	W229417	☐	N17-029	core		☐	☐	☐
113.39	116.43	3.04	DST	3.00	99	W229418	☐	N17-029	core		☐	☐	☐
116.43	119.48	3.05	DST	1.85	61	W229419	☐	N17-029	core		☐	☐	☐
119.48	122.53	3.05	DST	1.88	62	W229420	☐	N17-029	core		☐	☐	☐
122.53	125.58	3.05	DST	1.88	62	W229421	☐	N17-029	core		☐	☐	☐
125.58	127.60	2.02	DST	2.02	100	W229422	☐	N17-029	core		☐	☐	☐
127.60	129.77	2.17	DST	2.05	94	W229423	☐	N17-029	core		☐	☐	☐
129.77	131.27	1.50	DST	1.50	100	W229424	☐	N17-029	core		☐	☐	☐
131.27	133.07	1.80	DST	1.05	58	W229425	☐	N17-029	core		☐	☐	☐
133.07	135.17	2.10	DST	2.09	100	W229426	☐	N17-029	core		☐	☐	☐
135.17	137.77	2.60	DST	2.34	90	W229429	☐	N17-029	core		☐	☐	☐
137.77	140.82	3.05	DST	1.66	54	W229430	☐	N17-029	core		☐	☐	☐
140.82	143.87	3.05	DST	1.88	62	W229431	☐	N17-029	core		☐	☐	☐
143.87	146.91	3.04	DST	2.24	74	W229433	☐	N17-031	core		☐	☐	☐
146.91	148.44	1.53	DST	0.94	61	W229434	☐	N17-031	core		☐	☐	☐
148.44	151.49	3.05	DST, LST	2.23	73	W229435	☐	N17-031	core		☐	☐	☐
151.49	154.53	3.04	LST	1.63	54	W229436	☐	N17-031	core		☐	☐	☐
154.53	157.58	3.05	LST	2.76	90	W229437	☐	N17-031	core		☐	☐	☐
157.58	159.83	2.25	LST	2.05	91	W229438	☐	N17-031	core		☐	☐	☐
159.83	161.50	1.67	LST	1.53	92	W229439	☐	N17-031	core		☐	☐	☐
161.50	163.68	2.18	LST	2.10	96	W229440	☐	N17-031	core		☐	☐	☐
163.68	166.73	3.05	LST	2.93	96	W229441	☐	N17-031	core		☐	☐	☐
166.73	169.77	3.04	LST	2.87	94	W229442	☐	N17-031	core		☐	☐	☐
169.77	172.82	3.05	LST	2.95	97	W229443	☐	N17-031	core		☐	☐	☐
172.82	175.47	2.65	LST	2.52	95	W229444	☐	N17-031	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
175.47	177.39	1.92	LST	1.84	96	W229445	☐	N17-031	core		☐	☐	☐
177.39	178.92	1.53	LST	1.51	99	W229446	☐	N17-031	core		☐	☐	☐
178.92	180.44	1.52	LST	1.47	97	W229448	☐	N17-031	core		☐	☐	☐
180.44	183.49	3.05	LST	2.95	97	W229450	☐	N17-031	core		☐	☐	☐
183.49	186.54	3.05	LST	2.87	94	W229451	☐	N17-031	core		☐	☐	☐
183.49	186.54	3.05	LST	2.87	94	W229452	☐	N17-031	core		☐	☐	☑
186.54	189.59	3.05	LST	3.00	98	W229453	☐	N17-031	core		☐	☐	☐
189.59	192.63	3.04	LST	2.97	98	W229455	☐	N17-031	core		☐	☐	☐
192.63	195.68	3.05	LST	2.71	89	W229456	☐	N17-031	core		☐	☐	☐
195.68	198.73	3.05	LST	3.04	100	W229457	☐	N17-031	core		☐	☐	☐
198.73	201.78	3.05	LST	2.92	96	W229458	☐	N17-031	core		☐	☐	☐
201.78	204.83	3.05	LST	2.94	96	W229459	☐	N17-031	core		☐	☐	☐
204.83	207.87	3.04	LST	3.03	100	W229460	☐	N17-031	core		☐	☐	☐
207.87	209.40	1.53	LST	1.53	100	W229462	☐	N17-031	core		☐	☐	☐
209.40	211.84	2.44	LST	2.27	93	W229463	☐	N17-031	core		☐	☐	☐
211.84	214.88	3.04	LST	3.04	100	W229464	☐	N17-031	core		☐	☐	☐
214.88	217.93	3.05	LST	3.05	100	W229465	☐	N17-031	core		☐	☐	☐
217.93	220.98	3.05	LST	2.95	97	W229466	☐	N17-031	core		☐	☐	☐
220.98	222.57	1.59	LST	1.56	98	W229467	☐	N17-031	core		☐	☐	☐
220.98	222.57	1.59	LST	1.56	98	W229468	☐	N17-031	core		☐	☑	☐
222.57	224.03	1.46	LST	1.44	99	W229469	☐	N17-032	Core		☐	☐	☐
224.03	227.08	3.05	LST	2.91	95	W229470	☐	N17-032	Core		☐	☐	☐
227.08	230.12	3.04	LST	2.96	97	W229471	☐	N17-032	Core		☐	☐	☐
227.08	230.12	3.04	LST	2.96	97	W229472	☐	N17-032	Core		☐	☐	☑
230.12	231.79	1.67	LST	1.67	100	W229473	☐	N17-032	Core		☐	☐	☐
231.79	233.54	1.75	LST	1.60	91	W229474	☐	N17-032	Core		☐	☐	☐
233.54	236.22	2.68	LST	2.50	93	W229475	☐	N17-032	Core		☐	☐	☐
236.22	239.27	3.05	LST	3.05	100	W229476	☐	N17-032	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
239.27	242.32	3.05	LST	2.75	90	W229477	☐	N17-032	Core		☐	☐	☐
242.32	245.36	3.04	LST	3.04	100	W229478	☐	N17-032	Core		☐	☐	☐
245.36	248.41	3.05	LST	3.02	99	W229479	☐	N17-032	Core		☐	☐	☐
248.41	251.46	3.05	LST	2.86	94	W229481	☐	N17-032	Core		☐	☐	☐
251.46	254.51	3.05	LST	3.00	98	W229482	☐	N17-032	Core		☐	☐	☐
254.51	257.56	3.05	LST	2.94	96	W229484	☐	N17-032	Core		☐	☐	☐
257.56	260.60	3.04	LST	3.04	100	W229485	☐	N17-032	Core		☐	☐	☐
260.60	263.65	3.05	LST	2.88	94	W229486	☐	N17-032	Core		☐	☐	☐
263.65	266.70	3.05	LST	3.05	100	W229487	☐	N17-032	Core		☐	☐	☐
266.70	269.75	3.05	LST	2.98	98	W229488	☐	N17-032	Core		☐	☐	☐
266.70	269.75	3.05	LST	2.98	98	W229489	☐	N17-032	Core		☐	☑	☐
269.75	272.80	3.05	LST	3.05	100	W229490	☐	N17-032	Core		☐	☐	☐
272.80	275.84	3.04	LST	3.01	99	W229491	☐	N17-032	Core		☐	☐	☐
275.84	278.89	3.05	LST	2.89	95	W229492	☐	N17-032	Core		☐	☐	☐
278.89	281.94	3.05	LST	3.05	100	W229493	☐	N17-032	Core		☐	☐	☐
281.94	284.99	3.05	LST	3.03	99	W229495	☐	N17-032	Core		☐	☐	☐
284.99	288.04	3.05	LST	3.03	99	W229496	☐	N17-032	Core		☐	☐	☐
288.04	291.08	3.04	LST	3.04	100	W229498	☐	N17-032	Core		☐	☐	☐
291.08	294.13	3.05	LST	3.05	100	W229499	☐	N17-032	Core		☐	☐	☐
294.13	297.18	3.05	LST	3.05	100	W229500	☐	N17-032	Core		☐	☐	☐
297.18	300.23	3.05	LST	3.05	100	W229501	☐	N17-032	Core		☐	☐	☐
300.23	303.28	3.05	LST	3.05	100	W229502	☐	N17-032	Core		☐	☐	☐
303.28	306.32	3.04	LST	3.04	100	W229503	☐	N17-032	Core		☐	☐	☐
306.32	309.37	3.05	LST	3.00	98	W229504	☐	N17-032	Core		☐	☐	☐
309.37	312.42	3.05	LST	3.04	100	W229505	☐	N17-033	Core		☐	☐	☐
312.42	315.47	3.05	LST	3.05	100	W229506	☐	N17-033	Core		☐	☐	☐
315.47	318.52	3.05	LST	3.05	100	W229507	☐	N17-033	Core		☐	☐	☐
318.52	321.56	3.04	LST	3.04	100	W229508	☐	N17-033	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
321.56	324.61	3.05	LST	2.83	93	W229509	☐	N17-033	Core		☐	☐	☐
324.61	327.66	3.05	MST	2.60	85	W229510	☐	N17-033	Core		☐	☐	☐

OS -17-238

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
13.72	310.90	297.18	SLC	FG	Dark grey siltstone interbedded within light grey, very fine grained sandstone.Very fine disseminated pyrite throughout seen with hand lens. Small quartz veinlets throughout (3%).							
						LT	GY					

OS -17-238

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	13.72	13.72	0	0	0.00	0	--	--	--	overburden not recovered
13.72	15.24	1.52	0.7	46	0.18	12	0R	2H	4W	dark grey/black clay and rubble zone top of hole
15.24	16.76	1.52	0.4	26	0.00	0	0R	3H	4W	rubble zone
16.76	18.29	1.53	0.77	50	0.00	0	0R	3H	4W	rubble zone
18.29	19.81	1.52	0.87	57	0.00	0	0R	3H	4W	rubble zone
19.81	21.97	2.16	0.22	10	0.00	0	0R	2H	4W	rubble zone
21.97	22.86	0.89	0	0	0.00	0	0R	--	--	potentially no recovery due to top of hole conditions (empty interval)
22.86	24.38	1.52	0.28	18	0.00	0	0R	2H	4W	rubble zone
24.38	25.91	1.53	0.91	59	0.13	8	0R	2H	4W	rubble zone
25.91	27.43	1.52	0.74	49	0.00	0	0R	2H	4W	rubble zone
27.43	28.96	1.53	1	65	0.13	8	0R	2H	4W	rubble zone
28.96	30.48	1.52	0.6	39	0.00	0	0R	2H	4W	rubble zone
30.48	32.00	1.52	0.77	51	0.00	0	0R	2H	4W	rubble zone
32.00	33.53	1.53	0.7	46	0.12	8	0R	3H	4W	rubble zone
33.53	35.05	1.52	1.1	72	0.00	0	0R	3H	2W	rock becoming more competent but still have rubble zones
35.05	36.58	1.53	0.79	52	0.00	0	0R	3H	2W	
36.58	38.10	1.52	0.89	59	0.22	14	0R	3H	2W	
38.10	39.62	1.52	0.95	63	0.00	0	0R	3H	2W	
39.62	41.15	1.53	0.76	50	0.00	0	0R	2H	2W	rubble zone
41.15	42.67	1.52	1	66	0.10	7	0R	2H	2W	rubble zone
42.67	44.19	1.52	1.28	84	0.58	38	0R	3H	2W	
44.19	45.72	1.53	1.16	76	0.35	23	0R	3H	2W	
45.72	47.24	1.52	1.24	82	0.69	45	0R	3H	2W	
47.24	48.77	1.53	1.07	70	0.59	39	0R	3H	2W	
48.77	50.29	1.52	1.29	85	0.47	31	0R	3H	2W	
50.29	51.82	1.53	1.39	91	1.10	72	0R	3H	1W	
51.82	53.34	1.52	1.1	72	0.52	34	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
53.34	54.86	1.52	1.1	72	0.32	21	0R	3H	1W	
54.86	56.39	1.53	1.45	95	1.05	69	0R	2H	1W	soft realgar/clay rubble zone
56.39	57.91	1.52	0.88	58	0.49	32	0R	2H	1W	soft realgar/clay and rubble zone
57.91	59.43	1.52	1.16	76	0.50	33	0R	2H	1W	RBZ
59.43	60.96	1.53	1.47	96	0.89	58	0R	3H	1W	RBZ with realgar
60.96	62.48	1.52	1.52	100	0.82	54	0R	3H	1W	RBZ (clay and realgar)
62.48	64.01	1.53	1.26	82	0.90	59	0R	3H	1W	RBZ with realgar and clay
64.01	65.53	1.52	1.23	81	0.84	55	0R	2H	1W	RBZ with clay and realgar
65.53	67.06	1.53	1.37	90	0.57	37	0R	3H	1W	RBZ with clay and realgar
67.06	68.58	1.52	1.42	93	1.21	80	0R	3H	1W	
68.58	70.10	1.52	1.41	93	1.36	89	0R	3H	1W	
70.10	71.63	1.53	1.37	90	1.10	72	0R	3H	1W	RBZ 2 % realgar
71.63	73.15	1.52	1.47	97	0.92	61	0R	3H	1W	RBZ
73.15	74.68	1.53	1.15	75	0.26	17	0R	3H	1W	RBZ
74.68	76.20	1.52	1.5	99	0.58	38	0R	3H	1W	
76.20	77.72	1.52	1.37	90	1.14	75	0R	3H	1W	
77.72	79.25	1.53	1.46	95	1.43	93	0R	3H	1W	
79.25	80.77	1.52	1.37	90	0.81	53	0R	3H	1W	
80.77	82.30	1.53	1.5	98	0.71	46	0R	3H	1W	
82.30	83.82	1.52	1.48	97	0.98	64	0R	3H	1W	
83.82	85.34	1.52	1.4	92	0.91	60	0R	2H	1W	
85.34	86.87	1.53	1.38	90	0.90	59	0R	3H	1W	RBZ
86.87	88.40	1.53	1.5	98	0.92	60	0R	2H	1W	RBZ (soft gouge clay material)
88.40	89.92	1.52	1.33	88	0.88	58	0R	3H	1W	
89.92	91.44	1.52	1.44	95	0.98	64	0R	3H	1W	
91.44	92.96	1.52	1.44	95	1.09	72	0R	3H	1W	
92.96	94.49	1.53	1.51	99	0.74	48	0R	3H	1W	
94.49	96.01	1.52	1.47	97	0.83	55	0R	3H	1W	
96.01	97.54	1.53	1.53	100	1.12	73	0R	3H	1W	
97.54	99.06	1.52	1.45	95	1.45	95	0R	3H	1W	
99.06	100.58	1.52	1.43	94	1.09	72	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
100.58	102.11	1.53	1.44	94	1.33	87	0R	3H	1W	
102.11	103.63	1.52	1.48	97	1.26	83	0R	3H	1W	
103.63	105.16	1.53	1.4	92	1.06	69	0R	3H	1W	
105.16	106.68	1.52	1.52	100	1.21	80	0R	3H	1W	
106.68	108.20	1.52	1.43	94	1.05	69	0R	3H	1W	
108.20	109.73	1.53	1.43	93	0.88	58	0R	3H	1W	
109.73	111.25	1.52	1.49	98	1.20	79	0R	3H	1W	
111.25	112.78	1.53	1.5	98	1.46	95	0R	3H	1W	
112.78	114.30	1.52	1.41	93	1.36	89	0R	3H	1W	
114.30	115.82	1.52	1.4	92	1.36	89	0R	3H	1W	
115.82	117.35	1.53	1.37	90	1.02	67	0R	2H	1W	RBZ from 116.58-117.00m
117.35	118.87	1.52	1.29	85	0.83	55	0R	2H	1W	RBZ from 118.21-118.3m8 &118.80-118.87m
118.87	120.40	1.53	1.46	95	0.95	62	0R	2H	1W	RBZ from 120.00-120.20m
120.40	121.92	1.52	1.5	99	1.20	79	0R	3H	1W	RBZ from 120.86-121.45m
121.92	123.44	1.52	1.37	90	1.37	90	0R	3H	1W	
123.44	124.97	1.53	1.51	99	1.32	86	0R	3H	1W	
124.97	126.49	1.52	1.46	96	1.46	96	0R	3H	1W	
126.49	128.02	1.53	1.49	97	1.42	93	0R	3H	1W	
128.02	129.54	1.52	1.51	99	1.51	99	0R	3H	1W	
129.54	131.06	1.52	1.42	93	1.42	93	0R	3H	1W	
131.06	132.59	1.53	1.52	99	1.52	99	0R	3H	1W	
132.59	134.11	1.52	1.46	96	1.46	96	0R	3H	1W	
134.11	135.64	1.53	1.42	93	1.42	93	0R	3H	1W	
135.64	137.16	1.52	1.45	95	1.25	82	0R	3H	1W	
137.16	138.68	1.52	1.2	79	0.69	45	0R	3H	1W	RBZ from 137.38-138.00m
138.68	140.21	1.53	1.5	98	1.50	98	0R	3H	1W	Realgar on some joint surfaces.
140.21	141.73	1.52	1.32	87	1.32	87	0R	3H	1W	
141.73	143.26	1.53	1.45	95	1.45	95	0R	3H	1W	
143.26	144.78	1.52	1.52	100	1.52	100	0R	3H	1W	
144.78	146.30	1.52	1.45	95	1.45	95	0R	3H	1W	
146.30	146.61	0.31	0.3	97	0.30	97	0R	3H	1W	**Core switches to NQ @146.61m**

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
146.61	149.35	2.74	2.48	91	2.25	82	0R	3H	1W	RBZ from 146.61-146.90M
149.35	152.40	3.05	2.98	98	2.38	78	0R	3H	1W	
152.40	155.45	3.05	2.99	98	1.13	37	0R	3H	1W	
155.45	158.50	3.05	2.94	96	2.70	89	0R	3H	1W	
158.50	161.54	3.04	3.03	100	2.15	71	0R	3H	1W	
161.54	164.59	3.05	2.79	91	1.76	58	0R	2H	1W	RBZ from 162.70-163.40m
164.59	167.64	3.05	3.01	99	2.81	92	0R	3H	1W	
167.64	170.69	3.05	3.04	100	1.54	50	0R	3H	1W	
170.69	173.74	3.05	2.97	97	2.97	97	0R	3H	1W	
173.74	176.78	3.04	3.04	100	2.78	91	0R	3H	1W	
176.78	179.83	3.05	3.04	100	2.88	94	0R	3H	1W	
179.83	182.88	3.05	2.75	90	2.25	74	0R	3H	1W	
182.88	185.93	3.05	3	98	2.75	90	0R	3H	1W	
185.93	188.98	3.05	2.96	97	2.81	92	0R	3H	1W	
188.98	192.02	3.04	2.85	94	2.54	84	0R	3H	1W	
192.02	195.07	3.05	2.96	97	2.72	89	0R	3H	1W	
195.07	198.12	3.05	2.95	97	2.55	84	0R	3H	1W	
198.12	201.17	3.05	2.89	95	2.69	88	0R	3H	1W	
201.17	204.22	3.05	2.96	97	2.75	90	0R	3H	1W	
204.22	207.26	3.04	2.7	89	1.51	50	0R	3H	1W	
207.26	210.31	3.05	2.75	90	1.77	58	0R	3H	1W	RBZ
210.31	213.36	3.05	2.8	92	2.36	77	0R	3H	1W	
213.36	216.41	3.05	2.99	98	2.99	98	0R	3H	1W	
216.41	219.46	3.05	2.83	93	2.47	81	0R	3H	1W	RBZ at 219 m
219.46	222.50	3.04	2.47	81	1.44	47	0R	3H	1W	
222.50	225.55	3.05	2.5	82	2.07	68	0R	3H	1W	
225.55	228.60	3.05	3	98	3.00	98	0R	3H	1W	
228.60	231.65	3.05	2.99	98	2.45	80	0R	3H	1W	
231.65	234.69	3.04	3	99	2.88	95	0R	3H	1W	
234.69	237.74	3.05	2.75	90	2.53	83	0R	3H	1W	
237.74	240.79	3.05	2.88	94	2.88	94	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
240.79	243.84	3.05	2.78	91	2.63	86	0R	3H	1W	
243.84	246.89	3.05	2.82	92	2.58	85	0R	3H	1W	RBZ at 244 and 246 m
246.89	249.94	3.05	2.88	94	2.58	85	0R	3H	1W	
249.94	252.98	3.04	2.62	86	1.78	59	0R	3H	1W	RBZ at 251 m
252.98	256.03	3.05	2.83	93	2.25	74	0R	3H	1W	
256.03	259.08	3.05	2.83	93	2.34	77	0R	3H	1W	
259.08	262.13	3.05	2.95	97	2.33	76	0R	3H	1W	
262.13	265.18	3.05	2.2	72	1.15	38	0R	3H	1W	RBZ at 262.50 and 263 m. 10 % realgar in joints
265.18	268.22	3.04	2.92	96	1.99	65	0R	3H	1W	RBZ at 287 m. 15 % realgar in joints
268.22	271.27	3.05	2.55	84	1.02	33	0R	3H	1W	RBZ
271.27	274.32	3.05	2.62	86	1.73	57	0R	3H	1W	RBZ
274.32	277.37	3.05	2.76	90	1.46	48	0R	2H	1W	RBZ
277.37	280.42	3.05	2.87	94	2.55	84	0R	3H	1W	
280.42	283.46	3.04	2.76	91	1.64	54	0R	3H	1W	RBZ AT 282 M
283.46	286.51	3.05	2.97	97	2.39	78	0R	3H	1W	
286.51	289.56	3.05	2.59	85	0.55	18	0R	4H	1W	RBZ 287.2-289.2m
289.56	292.61	3.05	2.68	88	0.64	21	0R	4H	1W	RBZ 292.10-292.6m
292.61	295.66	3.05	2.2	72	1.16	38	0R	4H	1W	RBZ 294.4-295.66m
295.66	298.70	3.04	2.52	83	0.57	19	0R	4H	1W	RBZ 295.66-296.75m
298.70	301.75	3.05	3.01	99	2.60	85	0R	4H	1W	
301.75	304.80	3.05	2.94	96	2.94	96	0R	4H	1W	
304.80	307.85	3.05	3.05	100	2.53	83	0R	4H	1W	RBZ 305.85-309.05m
307.85	310.90	3.05	2.64	87	1.31	43	0R	4H	1W	RBZ 309-310m This rubble zone has slightly larger rubble pieces, core is roughly quartered.
310.90	313.94	3.04	2.93	96	2.62	86	4R	3H	1W	
313.94	316.99	3.05	2.39	78	1.25	41	4R	3H	1W	RBZ 314.40-315.60m
316.99	320.04	3.05	3.05	100	1.87	61	4R	3H	1W	RBZ 317.45-317.8m Core in this rubble zone is multiply fractured and is roughly quartered.
320.04	323.09	3.05	3.05	100	2.23	73	3R	1H	1W	RBZ 321.90-322.00m.
323.09	323.70	0.61	0.61	100	0.15	25	1R	2H	1W	RBZ 323.35-323.70m

OS -17-238

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228657	☐	N17-034	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228664	☐	N17-034	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228667	☐	N17-034	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228678	☐	N17-034	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228688	☐	N17-035	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228710	☐	N17-035	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228714	☐	N17-035	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228718	☐	N17-035	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228729	☐	N17-037	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228739	☐	N17-037	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228748	☐	N17-037	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228753	☐	N17-037	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228645	☐	N17-030	core	CS1	☐	☐	☐
4.37	13.72	9.35	OVB	2.46	26	W228642	☐	N17-030	core		☐	☐	☐
13.72	19.81	6.09	SLC, OVB	2.74	45	W228643	☐	N17-030	core		☐	☐	☐
19.81	27.43	7.62	SLC	2.15	28	W228644	☐	N17-030	core		☐	☐	☐
27.43	32.00	4.57	SLC	2.37	52	W228646	☐	N17-030	core		☐	☐	☐
32.00	35.05	3.05	SLC	1.80	59	W228647	☐	N17-030	core		☐	☐	☐
35.05	38.10	3.05	SLC	1.68	55	W228648	☐	N17-030	core		☐	☐	☐
38.10	41.15	3.05	SLC	1.71	56	W228649	☐	N17-034	core		☐	☐	☐
41.15	44.19	3.04	SLC	2.28	75	W228650	☐	N17-034	core		☐	☐	☐
44.19	47.24	3.05	SLC	2.40	79	W228651	☐	N17-034	core		☐	☐	☐
44.19	47.24	3.05	SLC	2.40	79	W228652	☐	N17-034	core		☐	☐	☑
47.24	50.29	3.05	SLC	2.36	77	W228653	☐	N17-034	core		☐	☐	☐
50.29	52.17	1.88	SLC	1.80	96	W228654	☐	N17-034	core		☐	☐	☐
52.17	54.86	2.69	SLC	2.03	75	W228655	☐	N17-034	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
54.86	57.91	3.05	SLC	2.33	76	W228656	☐	N17-034	core		☐	☐	☐
57.91	60.96	3.05	SLC	2.63	86	W228658	☐	N17-034	core		☐	☐	☐
60.96	64.01	3.05	SLC	2.83	93	W228659	☐	N17-034	core		☐	☐	☐
64.01	67.36	3.35	SLC	2.90	87	W228660	☐	N17-034	core		☐	☐	☐
67.36	70.10	2.74	SLC	2.52	92	W228661	☐	N17-034	core		☐	☐	☐
70.10	73.15	3.05	SLC	2.84	93	W228662	☐	N17-034	core		☐	☐	☐
73.15	76.20	3.05	SLC	2.65	87	W228663	☐	N17-034	core		☐	☐	☐
76.20	79.25	3.05	SLC	2.83	93	W228665	☐	N17-034	core		☐	☐	☐
79.25	82.30	3.05	SLC	2.87	94	W228666	☐	N17-034	core		☐	☐	☐
82.30	85.34	3.04	SLC	2.88	95	W228668	☐	N17-034	core		☐	☐	☐
85.34	88.40	3.06	SLC	2.88	94	W228669	☐	N17-034	core		☐	☐	☐
88.40	91.44	3.04	SLC	2.77	91	W228670	☐	N17-034	core		☐	☐	☐
91.44	94.49	3.05	SLC	2.95	97	W228671	☐	N17-034	core		☐	☐	☐
94.49	97.54	3.05	SLC	3.00	98	W228672	☐	N17-034	core		☐	☐	☐
97.54	100.58	3.04	SLC	2.88	95	W228673	☐	N17-034	core		☐	☐	☐
100.58	103.63	3.05	SLC	2.92	96	W228674	☐	N17-034	core		☐	☐	☐
100.58	103.63	3.05	SLC	2.92	96	W228675	☐	N17-034	core		☐	☑	☐
103.63	106.68	3.05	SLC	2.92	96	W228676	☐	N17-034	core		☐	☐	☐
106.68	109.73	3.05	SLC	2.95	97	W228677	☐	N17-034	core		☐	☐	☐
109.73	112.78	3.05	SLC	2.99	98	W228679	☐	N17-034	core		☐	☐	☐
112.78	115.82	3.04	SLC	2.81	92	W228680	☐	N17-034	core		☐	☐	☐
115.82	118.87	3.05	SLC	2.66	87	W228681	☐	N17-034	core		☐	☐	☐
118.87	121.92	3.05	SLC	2.96	97	W228682	☐	N17-034	core		☐	☐	☐
121.92	124.97	3.05	SLC	2.88	94	W228683	☐	N17-034	core		☐	☐	☐
124.97	128.02	3.05	SLC	2.95	97	W228684	☐	N17-034	core		☐	☐	☐
128.02	131.06	3.04	SLC	2.93	96	W228685	☐	N17-035	Core		☐	☐	☐
131.06	134.11	3.05	SLC	2.98	98	W228686	☐	N17-035	Core		☐	☐	☐
134.11	137.16	3.05	SLC	2.98	98	W228687	☐	N17-035	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
137.16	140.21	3.05	SLC	2.70	89	W228689	☐	N17-035	Core		☐	☐	☐
140.21	143.26	3.05	SLC	2.77	91	W228690	☐	N17-035	Core		☐	☐	☐
143.26	146.61	3.35	SLC	3.27	98	W228691	☐	N17-035	Core		☐	☐	☐
146.61	149.35	2.74	SLC	2.48	91	W228692	☐	N17-035	Core		☐	☐	☐
149.35	152.40	3.05	SLC	2.98	98	W228693	☐	N17-035	Core		☐	☐	☐
149.35	152.40	3.05	SLC	2.94	96	W228694	☐	N17-035	Core		☐	☑	☐
152.40	155.45	3.05	SLC	2.99	98	W228695	☐	N17-035	Core		☐	☐	☐
155.45	158.50	3.05	SLC	2.94	96	W228696	☐	N17-035	Core		☐	☐	☐
158.50	161.54	3.04	SLC	2.93	96	W228697	☐	N17-035	Core		☐	☐	☐
161.54	164.59	3.05	SLC	2.79	91	W228698	☐	N17-035	Core		☐	☐	☐
164.59	167.64	3.05	SLC	3.01	99	W228699	☐	N17-035	Core		☐	☐	☐
167.64	170.69	3.05	SLC	3.04	100	W228700	☐	N17-035	Core		☐	☐	☐
170.69	173.74	3.05	SLC	2.97	97	W228701	☐	N17-035	Core		☐	☐	☐
170.69	173.74	3.05	SLC	2.97	97	W228702	☐	N17-035	Core		☐	☐	☑
173.74	176.78	3.04	SLC	3.04	100	W228703	☐	N17-035	Core		☐	☐	☐
176.78	179.83	3.05	SLC	3.04	100	W228704	☐	N17-035	Core		☐	☐	☐
179.83	182.88	3.05	SLC	2.75	90	W228705	☐	N17-035	Core		☐	☐	☐
182.88	185.93	3.05	SLC	3.00	98	W228706	☐	N17-035	Core		☐	☐	☐
185.93	188.98	3.05	SLC	2.96	97	W228707	☐	N17-035	Core		☐	☐	☐
188.98	192.02	3.04	SLC	2.85	94	W228708	☐	N17-035	Core		☐	☐	☐
192.02	195.07	3.05	SLC	2.96	97	W228709	☐	N17-035	Core		☐	☐	☐
195.07	198.12	3.05	SLC	2.95	97	W228711	☐	N17-035	Core		☐	☐	☐
198.12	201.17	3.05	SLC	2.89	95	W228712	☐	N17-035	Core		☐	☐	☐
201.17	204.22	3.05	SLC	2.96	97	W228713	☐	N17-035	Core		☐	☐	☐
204.22	207.26	3.04	SLC	2.70	89	W228715	☐	N17-035	Core		☐	☐	☐
207.26	210.31	3.05	SLC	2.75	90	W228716	☐	N17-035	Core		☐	☐	☐
210.31	213.36	3.05	SLC	2.80	92	W228717	☐	N17-035	Core		☐	☐	☐
213.36	216.41	3.05	SLC	2.99	98	W228719	☐	N17-035	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
216.41	219.46	3.05	SLC	2.83	93	W228720	☐	N17-035	Core		☐	☐	☐
219.46	222.50	3.04	SLC	2.47	81	W228721	☐	N17-037	Core		☐	☐	☐
222.50	225.55	3.05	SLC	2.50	82	W228722	☐	N17-037	Core		☐	☐	☐
225.55	228.60	3.05	SLC	3.00	98	W228723	☐	N17-037	Core		☐	☐	☐
228.60	231.65	3.05	SLC	2.99	98	W228724	☐	N17-037	Core		☐	☐	☐
231.65	234.69	3.04	SLC	3.00	99	W228725	☐	N17-037	Core		☐	☐	☐
231.65	234.69	3.04	SLC	3.00	99	W228726	☐	N17-037	Core		☐	☑	☐
234.69	237.74	3.05	SLC	2.75	90	W228727	☐	N17-037	Core		☐	☐	☐
237.74	240.79	3.05	SLC	2.88	94	W228728	☐	N17-037	Core		☐	☐	☐
240.79	243.84	3.05	SLC	2.78	91	W228730	☐	N17-037	Core		☐	☐	☐
243.84	246.89	3.05	SLC	2.82	92	W228731	☐	N17-037	Core		☐	☐	☐
246.89	249.94	3.05	SLC	2.88	94	W228732	☐	N17-037	Core		☐	☐	☐
249.94	252.98	3.04	SLC	2.62	86	W228733	☐	N17-037	Core		☐	☐	☐
252.98	256.03	3.05	SLC	2.83	93	W228734	☐	N17-037	Core		☐	☐	☐
256.03	259.08	3.05	SLC	2.83	93	W228735	☐	N17-037	Core		☐	☐	☐
259.08	262.13	3.05	SLC	2.95	97	W228736	☐	N17-037	Core		☐	☐	☐
262.13	264.77	2.64	SLC	1.98	75	W228737	☐	N17-037	Core		☐	☐	☐
264.77	267.21	2.44	SLC	2.17	89	W228738	☐	N17-037	Core		☐	☐	☐
267.21	269.49	2.28	SLC	2.23	98	W228740	☐	N17-037	Core		☐	☐	☐
269.49	271.27	1.78	SLC	1.60	90	W228741	☐	N17-037	Core		☐	☐	☐
271.27	274.32	3.05	SLC	2.62	86	W228742	☐	N17-037	Core		☐	☐	☐
274.32	277.37	3.05	SLC	2.76	90	W228743	☐	N17-037	Core		☐	☐	☐
277.37	280.42	3.05	SLC	2.87	94	W228744	☐	N17-037	Core		☐	☐	☐
280.42	283.46	3.04	SLC	2.76	91	W228745	☐	N17-037	Core		☐	☐	☐
283.46	286.51	3.05	SLC	2.97	97	W228746	☐	N17-037	Core		☐	☐	☐
286.51	289.56	3.05	SLC	2.59	85	W228747	☐	N17-037	Core		☐	☐	☐
289.56	292.61	3.05	SLC	2.68	88	W228749	☐	N17-037	Core		☐	☐	☐
289.56	292.61	3.05	SLC	2.68	88	W228750	☐	N17-037	Core		☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
292.61	295.66	3.05	SLC	2.20	72	W228751	☐	N17-037	Core		☐	☐	☐
295.66	298.70	3.04	SLC	2.52	83	W228752	☐	N17-037	Core		☐	☐	☐
298.70	301.75	3.05	SLC	3.01	99	W228754	☐	N17-037	Core		☐	☐	☐
301.75	304.80	3.05	SLC	2.94	96	W228755	☐	N17-037	Core		☐	☐	☐
304.80	307.85	3.05	SLC	2.64	87	W228756	☐	N17-037	Core		☐	☐	☐
307.85	310.90	3.05	SLC	2.64	87	W228757	☐	N17-039	Core		☐	☐	☐
310.90	313.94	3.04	SLC, LST	2.93	96	W228758	☐	N17-039	Core		☐	☐	☐
313.94	316.99	3.05	LST	2.39	78	W228759	☐	N17-039	Core		☐	☐	☐
316.99	320.04	3.05	LST	3.05	100	W228760	☐	N17-039	Core		☐	☐	☐
320.04	323.09	3.05	LST	3.05	100	W228761	☐	N17-039	Core		☐	☐	☐
323.09	323.70	0.61	CGL	0.61	100	W228762	☐	N17-039	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	1.89	1.89	0	0	0.00	0	0R	--	--	overburden, no recovery
1.89	3.96	2.07	1.81	87	0.33	16	1R	3H	1W	mainly rubble
3.96	5.49	1.53	1.49	97	0.35	23	2R	3H	1W	rubble between 4.25-5m
5.49	7.01	1.52	0.9	59	0.13	9	3R	3H	1W	rubble zone for most of the interval
7.01	8.53	1.52	1.24	82	0.28	18	2R	3H	1W	rubble zone for most of interval.
8.53	10.06	1.53	1.5	98	0.26	17	2R	3H	1W	rubble zone from 9-9.5m. 70 degree joint set has Re infil
10.06	11.58	1.52	1.52	100	1.06	70	1R	3H	1W	Re infil in joint set
11.58	13.11	1.53	1.34	88	0.76	50	1R	3H	1W	Re infill in joint set
13.11	14.63	1.52	1.43	94	0.80	53	1R	3H	1W	
14.63	16.15	1.52	1.26	83	0.56	37	1R	3H	1W	Rubble zone from 15.5-16m
16.15	17.68	1.53	1.35	88	0.24	16	1R	3H	1W	rubble zone from 16.65-17.25m
17.68	19.20	1.52	1.52	100	0.81	53	1R	3H	1W	5 10-15cm RBZ
19.20	20.73	1.53	1.36	89	0.82	54	1R	3H	1W	
20.73	22.25	1.52	1.44	95	0.99	65	1R	3H	1W	
22.25	23.77	1.52	1.52	100	1.02	67	1R	4H	1W	
23.77	25.30	1.53	1.41	92	0.79	52	1R	3H	1W	
25.30	26.82	1.52	1.4	92	0.68	45	1R	3H	1W	15cm RBZ
26.82	28.35	1.53	1.39	91	0.89	58	1R	4H	1W	
28.35	29.87	1.52	1.49	98	0.42	28	1R	3H	1W	
29.87	31.39	1.52	1.52	100	0.58	38	1R	3H	1W	
31.39	32.92	1.53	1.48	97	0.90	59	1R	3H	1W	
32.92	34.44	1.52	1.42	93	0.86	57	1R	3H	1W	
34.44	35.97	1.53	1.41	92	1.04	68	1R	4H	1W	
35.97	37.49	1.52	1.49	98	0.79	52	1R	3H	1W	
37.49	39.01	1.52	1.46	96	0.96	63	1R	3H	1W	
39.01	40.54	1.53	1.29	84	0.50	33	1R	3H	1W	
40.54	42.06	1.52	1.37	90	1.12	74	1R	3H	1W	
42.06	43.59	1.53	1.37	90	0.99	65	1R	3H	1W	
43.59	46.63	3.04	1.52	50	1.27	42	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
46.63	48.16	1.53	1.45	95	1.08	71	0R	3H	1W	
48.16	49.68	1.52	1.52	100	1.35	89	0R	3H	1W	
49.68	51.21	1.53	1.15	75	1.03	67	2R	3H	1W	
51.21	52.73	1.52	1.52	100	1.32	87	1R	3H	1W	
52.73	54.25	1.52	1.51	99	0.77	51	3R	3H	1W	
54.25	55.78	1.53	1.52	99	1.52	99	4R	3H	1W	
55.78	57.30	1.52	1.43	94	1.03	68	4R	3H	1W	
57.30	58.81	1.51	1.42	94	1.31	87	1R	3H	1W	
58.81	60.35	1.54	1.48	96	1.48	96	2R	3H	1W	
60.35	61.87	1.52	1.41	93	1.05	69	2R	3H	1W	
61.87	63.40	1.53	1.4	92	1.21	79	2R	3H	1W	
63.40	64.92	1.52	1.47	97	1.06	70	2R	3H	1W	
64.92	66.45	1.53	1.53	100	1.53	100	2R	3H	1W	
66.45	67.97	1.52	1.47	97	1.47	97	2R	3H	1W	
67.97	69.49	1.52	1.52	100	1.47	97	1R	3H	1W	
69.49	71.02	1.53	1.44	94	1.27	83	1R	3H	1W	
71.02	72.54	1.52	1.52	100	1.40	92	1R	3H	1W	
72.54	74.07	1.53	1.46	95	1.10	72	1R	3H	1W	
74.07	75.59	1.52	1.27	84	0.85	56	1R	3H	1W	
75.59	77.11	1.52	1.33	88	0.61	40	1R	3H	1W	
77.11	78.64	1.53	1.49	97	1.22	80	0R	3H	1W	
78.64	80.16	1.52	1.4	92	1.37	90	0R	3H	1W	
80.16	81.69	1.53	1.36	89	0.88	58	1R	3H	1W	RBZ 81.40-81.69m
81.69	83.21	1.52	1.42	93	0.68	45	1R	2H	1W	RBZ 81.80-82.30m
83.21	84.73	1.52	1.46	96	0.39	26	0R	3H	1W	
84.73	86.26	1.53	1.35	88	0.75	49	1R	2H	1W	RBZ 85.35-85.80m
86.26	87.78	1.52	1.52	100	0.94	62	0R	3H	1W	
87.78	89.31	1.53	1.52	99	1.25	82	0R	3H	1W	Small amounts of realgar exist on joint surfaces.
89.31	90.83	1.52	1.4	92	1.40	92	0R	3H	1W	
90.83	92.35	1.52	1.48	97	1.38	91	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
92.35	93.89	1.54	1.51	98	1.21	79	1R	3H	1W	Realgar and orpiment coating joint surfaces.
93.89	95.40	1.51	1.39	92	1.02	68	1R	3H	1W	
95.40	96.93	1.53	1.39	91	0.74	48	1R	3H	1W	
96.93	98.45	1.52	1.35	89	0.65	43	0R	3H	1W	RBZ 96.93-97.29m & 98.20-98.45m
98.45	99.97	1.52	1.52	100	1.25	82	1R	4H	1W	Realgar and orpiment coat several joint surfaces.
99.97	101.50	1.53	1.46	95	1.10	72	1R	4H	1W	
101.50	103.02	1.52	1.5	99	0.95	63	2R	4H	1W	RBZ 101.80-102.10m
103.02	104.55	1.53	1.3	85	0.75	49	0R	3H	1W	RBZ 103.20-104.00m
104.55	106.07	1.52	1.52	100	1.10	72	1R	3H	1W	RBZ 105.30-105.45m
106.07	107.59	1.52	1.49	98	1.03	68	1R	3H	1W	
107.59	109.12	1.53	1.51	99	1.41	92	1R	4H	1W	RBZ 107.90-108.18m
109.12	110.64	1.52	1.52	100	1.52	100	1R	4H	1W	
110.64	112.17	1.53	1.45	95	1.40	92	1R	4H	1W	
112.17	113.69	1.52	1.34	88	0.85	56	1R	3H	1W	RBZ 112.25-112.40m
113.69	115.21	1.52	1.3	86	0.60	39	1R	3H	1W	RBZ 114.00-115.21m
115.21	116.74	1.53	1.52	99	1.01	66	1R	4H	1W	Massive realgar coated on joint surfaces.
116.74	118.26	1.52	1.39	91	1.25	82	2R	4H	1W	RBZ 117.55-117.90m
118.26	119.79	1.53	1.39	91	0.97	63	1R	4H	1W	RBZ 119.10-119.25m
119.79	121.31	1.52	1.51	99	0.77	51	2R	3H	1W	
121.31	122.83	1.52	1.45	95	1.20	79	2R	3H	1W	
122.83	124.36	1.53	1.35	88	0.83	54	4R	3H	1W	RBZ 122.90-123.30m
124.36	125.88	1.52	1.49	98	1.49	98	4R	3H	1W	
125.88	127.41	1.53	1.43	93	1.39	91	4R	3H	1W	
127.41	128.93	1.52	1.44	95	1.44	95	4R	4H	1W	
128.93	130.45	1.52	1.4	92	1.30	86	3R	3H	1W	RBZ 130.20-130.30m
130.45	131.97	1.52	1.43	94	0.87	57	4R	3H	1W	
131.97	133.50	1.53	1.38	90	1.20	78	2R	3H	1W	
133.50	135.03	1.53	1.48	97	1.08	71	3R	3H	1W	
135.03	136.55	1.52	1.15	76	0.92	61	3R	3H	1W	
136.55	138.07	1.52	1.34	88	0.46	30	4R	3H	1W	RBZ 136.60-138.00m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
138.07	139.60	1.53	1.21	79	1.21	79	2R	2H	1W	
139.60	141.12	1.52	1.39	91	0.83	55	4R	2H	1W	
141.12	142.65	1.53	1.52	99	1.48	97	4R	3H	1W	Two single joints.
142.65	144.17	1.52	1.49	98	1.26	83	4R	3H	1W	RBZ 142.80-142.90m & 143.60-143.66m
144.17	145.69	1.52	1.37	90	1.37	90	4R	3H	1W	
145.69	147.22	1.53	1.49	97	1.20	78	4R	3H	1W	
147.22	148.74	1.52	1.45	95	1.45	95	4R	3H	1W	
148.74	150.27	1.53	1.52	99	1.52	99	4R	3H	1W	
150.27	151.79	1.52	1.39	91	1.39	91	4R	3H	1W	
151.79	153.31	1.52	1.52	100	1.48	97	4R	3H	1W	
153.31	154.84	1.53	1.42	93	0.50	33	4R	3H	1W	
154.84	156.36	1.52	1.52	100	1.08	71	4R	3H	1W	
156.36	157.89	1.53	1.52	99	0.91	59	4R	3H	1W	
157.89	159.41	1.52	1.43	94	1.06	70	4R	3H	1W	
159.41	160.93	1.52	1.44	95	0.55	36	4R	2H	1W	
160.93	162.46	1.53	1.43	93	0.56	37	3R	3H	1W	
162.46	163.98	1.52	1.39	91	1.06	70	4R	3H	1W	
163.98	165.51	1.53	1.4	92	1.07	70	4R	3H	1W	
165.51	167.03	1.52	1.06	70	1.06	70	4R	3H	1W	
167.03	168.55	1.52	1.52	100	0.69	45	4R	3H	1W	RBZ 167.03-167.12
168.55	170.08	1.53	1.43	93	1.11	73	4R	3H	1W	
170.08	171.60	1.52	1.48	97	1.09	72	3R	3H	1W	
171.60	173.13	1.53	1.53	100	0.75	49	1R	3H	1W	Re in 70 degree joints
173.13	174.65	1.52	1.52	100	1.03	68	1R	3H	1W	
174.65	176.17	1.52	1.39	91	0.41	27	1R	2H	1W	Re in 70degree joint. RBZ 175.05-175.20m & 175.40-175.75m
176.17	177.70	1.53	1.5	98	0.00	0	1R	3H	1W	RBZ's 176.17-176.30m and 177.25-177.70m
177.70	179.22	1.52	1.46	96	0.22	14	1R	3H	1W	Re in 60 degree joint. RBZ 177.70-177.80m & 178.00-178.93m.
179.22	180.75	1.53	1.49	97	0.58	38	1R	3H	1W	
180.75	182.27	1.52	1.52	100	1.07	70	1R	3H	1W	Re in 40 & 70 degree joints

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
182.27	183.79	1.52	1.51	99	1.16	76	1R	3H	1W	Om in 40deg joint. Re in 70deg joint
183.79	185.32	1.53	1.48	97	0.83	54	1R	3H	1W	Re in 40 & 70deg joints
185.32	186.84	1.52	1.52	100	0.46	30	1R	3H	1W	
186.84	188.37	1.53	1.49	97	1.30	85	1R	3H	1W	2 single joints at 30deg orthagonal to eachother
188.37	189.89	1.52	1.52	100	0.92	61	1R	3H	1W	Re & Om in 35deg joint
189.89	191.41	1.52	1.41	93	0.46	30	1R	3H	1W	
191.41	192.94	1.53	1.5	98	0.36	24	1R	3H	1W	rubble
192.94	194.46	1.52	1.5	99	0.40	26	2R	3H	1W	rubble
194.46	195.99	1.53	1	65	0.45	29	1R	3H	1W	rubble
195.99	197.51	1.52	1.36	89	0.00	0	1R	3H	1W	rubble
197.51	199.03	1.52	1.48	97	0.28	18	2R	3H	1W	sections of rubble
199.03	202.39	3.36	1.84	55	0.25	7	2R	3H	1W	mostly rubble, Calcite on joint surfaces
202.39	205.43	3.04	2.15	71	0.95	31	2R	3H	1W	first half of run rubble, second half competent.
205.43	208.48	3.05	1.55	51	0.50	16	2R	3H	1W	large rubble sections. Ignor info filled out in joint log
208.48	211.53	3.05	2.92	96	2.38	78	2R	3H	1W	30 cm thick rubble section at start of interval.
211.53	214.58	3.05	2.97	97	2.67	88	2R	3H	1W	60cm rubble section.
214.58	217.63	3.05	2.9	95	1.13	37	2R	3H	1W	half of run is rubble. Other half is competent with only mechanical breaks. One slighly undulatory joint at 25 tca with green arsenic oxide coating.
217.63	220.68	3.05	2.68	88	1.24	41	1R	3H	1W	1/3 of run is rubble. One joint set nearly parallel to core axis with 3mm clay infill
220.68	223.72	3.04	2.95	97	2.20	72	1R	4H	1W	many mechanical breaks. Possible natural joint set, widly spaced, wth green As-oxide partially coating
223.72	226.77	3.05	2.81	92	1.50	49	1R	4H	1W	1/3 OF RUN IS RUBBLE. Half a joint set (one joint), 5 degrees to core axis with 1mm clay infill
226.77	229.82	3.05	2.63	86	0.20	7	1R	3H	1W	mostly rubble. No identifiable joint sets.
229.82	232.87	3.05	2.56	84	1.05	34	1R	3H	1W	1/3 of run rubble. Two half joint sets (one each).

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
232.87	235.92	3.05	2.94	96	2.86	94	1R	3H	1W	competent run, many mechanical breaks, one/ maybe two natural joints
235.92	238.96	3.04	2.73	90	0.88	29	1R	3H	1W	mostly rubble. One natural joint measurable.
238.96	242.02	3.06	2.48	81	0.47	15	1R	3H	1W	mostly rubble. No joint sets measurable.
242.02	245.06	3.04	2.53	83	0.51	17	2R	3H	1W	half rubble
245.06	248.12	3.06	2.66	87	0.82	27	1R	3H	1W	half rubble
248.12	251.16	3.04	2.67	88	1.80	59	1R	3H	1W	
251.16	254.20	3.04	2.83	93	1.37	45	1R	3H	1W	20cm rubble section
254.20	257.25	3.05	2.91	95	1.76	58	1R	3H	1W	
257.25	260.30	3.05	2.83	93	0.67	22	1R	3H	1W	
260.30	263.35	3.05	3.05	100	1.82	60	1R	3H	1W	
263.35	266.40	3.05	2.75	90	1.12	37	1R	3H	1W	joints with same attitude but different infill (Ca, Rk, Cl).
266.40	269.44	3.04	2.99	98	1.32	43	2R	3H	1W	5cm rubble section
269.44	272.49	3.05	2.76	90	1.93	63	3R	3H	1W	start of limestone. 50cm rubble sextions
272.49	275.54	3.05	2.99	98	2.24	73	3R	2H	1W	
275.54	278.54	3.00	2.78	93	1.69	56	4R	3H	1W	
278.54	281.64	3.10	2.86	92	0.58	19	4R	3H	1W	half rubble
281.64	284.68	3.04	3.04	100	0.28	9	4R	3H	1W	mostly rubble
284.68	287.73	3.05	2.65	87	0.77	25	4R	3H	1W	half of run is rubble
287.73	290.78	3.05	2.93	96	1.85	61	4R	3H	1W	30cm rubble section
290.78	293.83	3.05	2.81	92	1.88	62	4R	2H	1W	
293.83	296.88	3.05	3.05	100	2.76	90	4R	2H	1W	
296.88	299.92	3.04	3.03	100	2.84	93	2R	2H	1W	
299.92	302.97	3.05	3.05	100	2.44	80	3R	2H	1W	
302.97	306.02	3.05	2.99	98	2.04	67	1R	3H	1W	
306.02	309.07	3.05	3.05	100	2.94	96	2R	3H	1W	
309.07	312.12	3.05	2.97	97	2.85	93	2R	3H	1W	
312.12	315.16	3.04	3.04	100	3.01	99	2R	3H	1W	
315.16	318.21	3.05	3.04	100	2.70	89	2R	3H	1W	
318.21	321.26	3.05	3.05	100	2.62	86	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
321.26	324.31	3.05	3	98	2.59	85	1R	2H	1W	
324.31	327.36	3.05	3.05	100	3.01	99	1R	2H	1W	EOH

OS -17-239

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229572	☐	N17-036	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229642	☐	N17-040	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229638	☐	N17-040	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229628	☐	N17-040	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229621	☐	N17-040	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229606	☐	N17-038	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229601	☐	N17-038	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229514	☐	N17-033	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229587	☐	N17-038	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229568	☐	N17-036	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229556	☐	N17-036	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229553	☐	N17-036	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229538	☐	N17-033	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229536	☐	N17-033	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229522	☐	N17-033	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229591	☐	N17-038	Core	CS2	☐	☐	☐
1.89	3.96	2.07	DST, OVB	1.81	87	W229511	☐	N17-033	Core		☐	☐	☐
3.96	7.01	3.05	DST	2.39	78	W229512	☐	N17-033	Core		☐	☐	☐
7.01	9.26	2.25	DST	2.25	100	W229513	☐	N17-033	Core		☐	☐	☐
9.26	11.58	2.32	DST	1.93	83	W229515	☐	N17-033	Core		☐	☐	☐
11.58	14.17	2.59	DST	2.48	96	W229516	☐	N17-033	Core		☐	☐	☐
14.17	16.15	1.98	DST	1.82	92	W229517	☐	N17-033	Core		☐	☐	☐
16.15	17.72	1.57	DST	1.57	100	W229518	☐	N17-033	Core		☐	☐	☐
16.15	17.72	1.57	DST	1.57	100	W229519	☐	N17-033	Core		☐	☐	☑
17.72	19.20	1.48	DST	1.48	100	W229520	☐	N17-033	Core		☐	☐	☐
19.20	22.25	3.05	DST	2.80	92	W229521	☐	N17-033	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
22.25	25.30	3.05	DST	2.93	96	W229523	☐	N17-033	Core		☐	☐	☐
25.30	28.35	3.05	DST	2.79	91	W229524	☐	N17-033	Core		☐	☐	☐
28.35	31.39	3.04	DST	3.01	99	W229525	☐	N17-033	Core		☐	☐	☐
31.39	34.44	3.05	DST	2.90	95	W229526	☐	N17-033	Core		☐	☐	☐
34.44	37.49	3.05	DST	2.90	95	W229527	☐	N17-033	Core		☐	☐	☐
37.49	40.54	3.05	DST	2.75	90	W229528	☐	N17-033	Core		☐	☐	☐
40.54	43.59	3.05	DST	2.74	90	W229529	☐	N17-033	Core		☐	☐	☐
43.59	45.98	2.39	DST	2.39	100	W229530	☐	N17-033	Core		☐	☐	☐
45.98	49.09	3.11	DST	3.05	98	W229531	☐	N17-033	Core		☐	☐	☐
45.98	49.09	3.11	DST	3.05	98	W229532	☐	N17-033	Core		☐	☑	☐
49.09	51.21	2.12	DMT	1.77	83	W229533	☐	N17-033	Core		☐	☐	☐
51.21	54.25	3.04	DMT	3.03	100	W229534	☐	N17-033	Core		☐	☐	☐
54.25	57.30	3.05	DMT	2.95	97	W229535	☐	N17-033	Core		☐	☐	☐
57.30	60.35	3.05	DMT	2.90	95	W229537	☐	N17-033	Core		☐	☐	☐
60.35	63.40	3.05	DMT	2.81	92	W229539	☐	N17-033	Core		☐	☐	☐
63.40	66.45	3.05	DMT	3.00	98	W229540	☐	N17-033	Core		☐	☐	☐
66.45	69.49	3.04	DMT	2.99	98	W229541	☐	N17-036	core		☐	☐	☐
69.49	72.54	3.05	DMT	2.96	97	W229542	☐	N17-036	core		☐	☐	☐
72.54	75.59	3.05	DMT	2.73	90	W229543	☐	N17-036	core		☐	☐	☐
75.59	78.64	3.05	DMT	2.82	92	W229544	☐	N17-036	core		☐	☐	☐
78.64	81.69	3.05	DMT	2.76	90	W229545	☐	N17-036	core		☐	☐	☐
81.69	84.73	3.04	DST	2.88	95	W229546	☐	N17-036	core		☐	☐	☐
84.73	87.78	3.05	DST	2.87	94	W229547	☐	N17-036	core		☐	☐	☐
87.78	90.83	3.05	DST	2.92	96	W229548	☐	N17-036	core		☐	☐	☐
90.83	93.89	3.06	DST	2.99	98	W229549	☐	N17-036	core		☐	☐	☐
90.83	93.89	3.06	DST	2.99	98	W229550	☐	N17-036	core		☐	☐	☑
93.89	96.93	3.04	DST	2.78	91	W229551	☐	N17-036	core		☐	☐	☐
96.93	99.97	3.04	DST	2.87	94	W229552	☐	N17-036	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
99.97	101.50	1.53	DST	1.46	95	W229554	☐	N17-036	core		☐	☐	☐
101.50	104.55	3.05	DST	2.80	92	W229555	☐	N17-036	core		☐	☐	☐
104.55	107.59	3.04	DST	3.01	99	W229557	☐	N17-036	core		☐	☐	☐
107.59	110.64	3.05	DST	3.03	99	W229558	☐	N17-036	core		☐	☐	☐
110.64	113.69	3.05	DST	2.79	91	W229559	☐	N17-036	core		☐	☐	☐
113.69	116.74	3.05	DST	2.82	92	W229560	☐	N17-036	core		☐	☐	☐
116.74	119.79	3.05	DST	2.78	91	W229561	☐	N17-036	core		☐	☐	☐
119.79	122.83	3.04	DST	2.96	97	W229562	☐	N17-036	core		☐	☐	☐
122.83	125.88	3.05	DST	2.84	93	W229563	☐	N17-036	core		☐	☐	☐
122.83	125.88	3.05	DST	2.84	93	W229564	☐	N17-036	core		☐	☑	☐
125.88	128.00	2.12	LST	1.86	88	W229565	☐	N17-036	core		☐	☐	☐
128.00	130.28	2.28	LST	2.12	93	W229566	☐	N17-036	core		☐	☐	☐
130.28	132.68	2.40	LST	2.20	92	W229567	☐	N17-036	core		☐	☐	☐
132.68	135.03	2.35	LST	2.23	95	W229569	☐	N17-036	core		☐	☐	☐
135.03	136.55	1.52	LST	1.15	76	W229570	☐	N17-036	core		☐	☐	☐
136.55	138.78	2.23	LST	1.75	78	W229571	☐	N17-036	core		☐	☐	☐
138.78	139.95	1.17	LST	1.17	100	W229573	☐	N17-036	core		☐	☐	☐
139.95	142.65	2.70	LST	2.62	97	W229574	☐	N17-036	core		☐	☐	☐
142.65	144.17	1.52	LST	1.49	98	W229575	☐	N17-036	core		☐	☐	☐
144.17	147.22	3.05	LST	2.86	94	W229576	☐	N17-036	core		☐	☐	☐
147.22	150.27	3.05	LST	2.97	97	W229577	☐	N17-038	Core		☐	☐	☐
150.27	153.31	3.04	LST	2.91	96	W229578	☐	N17-038	Core		☐	☐	☐
153.31	156.36	3.05	LST	2.94	96	W229579	☐	N17-038	Core		☐	☐	☐
156.36	159.41	3.05	LST	2.95	97	W229580	☐	N17-038	Core		☐	☐	☐
159.41	162.46	3.05	LST	2.87	94	W229581	☐	N17-038	Core		☐	☐	☐
162.46	165.51	3.05	LST	2.79	91	W229582	☐	N17-038	Core		☐	☐	☐
165.51	168.55	3.04	LST	2.58	85	W229583	☐	N17-038	Core		☐	☐	☐
168.55	171.60	3.05	LST	2.91	95	W229584	☐	N17-038	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
171.60	174.65	3.05	DST	2.95	97	W229585	☐	N17-038	Core		☐	☐	☐
174.65	176.17	1.52	DST	1.39	91	W229586	☐	N17-038	Core		☐	☐	☐
176.17	177.70	1.53	DST	1.50	98	W229588	☐	N17-038	Core		☐	☐	☐
177.70	179.22	1.52	DST	1.46	96	W229589	☐	N17-038	Core		☐	☐	☐
179.22	182.27	3.05	DST	3.01	99	W229590	☐	N17-038	Core		☐	☐	☐
182.27	184.14	1.87	DST	1.82	97	W229592	☐	N17-038	Core		☐	☐	☐
184.14	187.17	3.03	DST	3.03	100	W229593	☐	N17-038	Core		☐	☐	☐
187.17	189.89	2.72	DST	2.70	99	W229594	☐	N17-038	Core		☐	☐	☐
189.89	192.94	3.05	DST	2.91	95	W229595	☐	N17-038	Core		☐	☐	☐
189.89	192.94	3.05	DST	2.91	95	W229596	☐	N17-038	Core		☐	☐	☑
192.94	195.99	3.05	DST	2.50	82	W229597	☐	N17-038	Core		☐	☐	☐
195.99	199.03	3.04	DST	2.84	93	W229598	☐	N17-038	Core		☐	☐	☐
199.03	202.39	3.36	DST	1.84	55	W229599	☐	N17-038	Core		☐	☐	☐
202.39	205.43	3.04	DST	2.15	71	W229600	☐	N17-038	Core		☐	☐	☐
205.43	208.48	3.05	DST	1.55	51	W229602	☐	N17-038	Core		☐	☐	☐
208.48	212.30	3.82	DST	3.66	96	W229603	☐	N17-038	Core		☐	☐	☐
212.30	214.14	1.84	DST	1.83	99	W229604	☐	N17-038	Core		☐	☐	☐
214.14	216.25	2.11	DST	1.99	94	W229605	☐	N17-038	Core		☐	☐	☐
216.25	220.68	4.43	DST	3.57	81	W229607	☐	N17-038	Core		☐	☐	☐
220.68	223.72	3.04	DST	2.95	97	W229608	☐	N17-038	Core		☐	☐	☐
220.68	223.72	3.04	DST	2.95	97	W229609	☐	N17-038	Core		☐	☑	☐
223.72	226.77	3.05	DST	2.81	92	W229610	☐	N17-038	Core		☐	☐	☐
226.77	229.82	3.05	DST	2.63	86	W229611	☐	N17-038	Core		☐	☐	☐
229.82	232.87	3.05	DST	2.56	84	W229612	☐	N17-038	Core		☐	☐	☐
232.87	235.92	3.05	DST	2.94	96	W229613	☐	N17-040	Core		☐	☐	☐
235.92	238.96	3.04	DST	2.73	90	W229614	☐	N17-040	Core		☐	☐	☐
238.96	242.02	3.06	DST	2.48	81	W229615	☐	N17-040	Core		☐	☐	☐
242.02	245.06	3.04	DST	2.53	83	W229616	☐	N17-040	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
245.06	248.12	3.06	DST	2.66	87	W229617	☐	N17-040	Core		☐	☐	☐
248.12	251.16	3.04	DST	2.67	88	W229618	☐	N17-040	Core		☐	☐	☐
248.12	251.16	3.04	DST	2.67	88	W229619	☐	N17-040	Core		☐	☑	☐
251.16	254.20	3.04	DST	2.83	93	W229620	☐	N17-040	Core		☐	☐	☐
254.20	257.25	3.05	DST	2.91	95	W229622	☐	N17-040	Core		☐	☐	☐
257.25	260.30	3.05	DST	2.83	93	W229623	☐	N17-040	Core		☐	☐	☐
260.30	263.35	3.05	DST	3.05	100	W229624	☐	N17-040	Core		☐	☐	☐
263.35	265.47	2.12	DST	2.01	95	W229625	☐	N17-040	Core		☐	☐	☐
265.47	267.24	1.77	DST	1.59	90	W229626	☐	N17-040	Core		☐	☐	☐
267.24	269.44	2.20	DMT	1.96	89	W229627	☐	N17-040	Core		☐	☐	☐
269.44	272.49	3.05	DMT	2.76	90	W229629	☐	N17-040	Core		☐	☐	☐
272.49	275.54	3.05	DMT	2.99	98	W229630	☐	N17-040	Core		☐	☐	☐
275.54	278.59	3.05	DMT	2.78	91	W229631	☐	N17-040	Core		☐	☐	☐
278.59	281.64	3.05	DMT	2.86	94	W229632	☐	N17-040	Core		☐	☐	☐
281.64	283.84	2.20	DMT	1.78	81	W229633	☐	N17-040	Core		☐	☐	☐
283.84	285.58	1.74	DMT	1.72	99	W229634	☐	N17-040	Core		☐	☐	☐
283.84	285.58	1.74	DMT	1.72	99	W229635	☐	N17-040	Core		☐	☐	☑
285.58	287.73	2.15	DMT	1.70	79	W229636	☐	N17-040	Core		☐	☐	☐
287.73	290.78	3.05	DMT	2.93	96	W229637	☐	N17-040	Core		☐	☐	☐
290.78	293.83	3.05	DMT	2.81	92	W229639	☐	N17-040	Core		☐	☐	☐
293.83	296.88	3.05	DMT	3.05	100	W229640	☐	N17-040	Core		☐	☐	☐
296.88	299.92	3.04	DMT	3.03	100	W229641	☐	N17-040	Core		☐	☐	☐
299.92	306.02	6.10	DMT	6.04	99	Q010837	☐	N17-C01	Core		☐	☐	☐
306.02	312.12	6.10	DMT	6.02	99	Q010838	☐	N17-C01	Core		☐	☐	☐
312.12	318.21	6.09	DMT	6.08	100	Q010839	☐	N17-C01	Core		☐	☐	☐
318.21	324.31	6.10	DMT	6.05	99	Q010840	☐	N17-C01	Core		☐	☐	☐
324.31	327.36	3.05	DMT	3.05	100	Q010841	☐	N17-C01	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	17.98	17.98	0	0	0.00	0	--	--	--	
17.98	19.51	1.53	1.53	100	1.30	85	1R	3H	1W	
19.51	21.03	1.52	1.41	93	1.13	74	1R	3H	1W	
21.03	22.56	1.53	1.47	96	0.71	46	1R	3H	1W	
22.56	24.08	1.52	1.52	100	0.84	55	1R	3H	1W	
24.08	25.60	1.52	1.29	85	0.44	29	1R	3H	1W	
25.60	27.13	1.53	1.48	97	0.59	39	1R	2H	1W	RBZ 26.30-26.50m
27.13	28.65	1.52	1.27	84	0.70	46	2R	2H	1W	RBZ 27.80-27.90m
28.65	30.18	1.53	1.41	92	0.86	56	3R	3H	1W	5cm RBZ at 29.05m
30.18	31.70	1.52	1.52	100	1.35	89	4R	3H	1W	
31.70	33.22	1.52	1.43	94	1.29	85	4R	3H	1W	
33.22	34.75	1.53	1.53	100	1.24	81	4R	3H	1W	
34.75	36.27	1.52	1.44	95	0.81	53	4R	3H	1W	
36.27	37.80	1.53	1.52	99	1.30	85	4R	3H	1W	
37.80	39.32	1.52	1.49	98	1.28	84	4R	3H	1W	
39.32	40.84	1.52	1.41	93	1.11	73	4R	3H	1W	
40.84	42.37	1.53	1.39	91	0.80	52	4R	3H	1W	
42.37	43.89	1.52	1.51	99	0.74	49	4R	3H	1W	RBZ 43.25-46.68m
43.89	45.42	1.53	1.5	98	0.84	55	4R	3H	1W	
45.42	46.94	1.52	1.44	95	1.22	80	4R	3H	1W	
46.94	48.46	1.52	1.52	100	1.33	88	4R	3H	1W	
48.46	49.99	1.53	1.38	90	0.78	51	4R	3H	1W	
49.99	51.51	1.52	1.28	84	0.25	16	4R	3H	1W	RBZ 50.30-50.50m
51.51	53.04	1.53	1.25	82	0.32	21	4R	3H	1W	RBZ 52.35-53.00
53.04	54.56	1.52	1.32	87	0.39	26	4R	3H	1W	RBZ 53.04-53.30m, 53.75-54.06m
54.56	56.08	1.52	1.52	100	0.94	62	4R	3H	1W	RBZ 55.75-55.85m
56.08	57.61	1.53	1.37	90	1.17	76	3R	3H	1W	
57.61	59.13	1.52	1.47	97	1.40	92	4R	3H	1W	
59.13	60.66	1.53	1.53	100	1.32	86	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
60.66	62.18	1.52	1.52	100	0.85	56	4R	3H	1W	
62.18	63.70	1.52	1.36	89	0.95	63	4R	3H	1W	
63.70	65.23	1.53	1.46	95	1.01	66	4R	3H	1W	
65.23	66.75	1.52	1.41	93	0.70	46	4R	3H	1W	RBZ 65.90-66.25m
66.75	68.28	1.53	1.43	93	0.93	61	4R	3H	1W	
68.28	69.80	1.52	1.49	98	0.63	41	4R	3H	1W	
69.80	71.32	1.52	1.48	97	0.80	53	4R	3H	1W	
71.32	72.85	1.53	1.38	90	0.69	45	4R	3H	1W	RBZ 72.25-72.85m
72.85	74.37	1.52	1.52	100	1.08	71	4R	3H	1W	RBZ 73.00-73.20m, 74.15-74.30m
74.37	75.90	1.53	1.38	90	1.04	68	4R	3H	1W	
75.90	77.42	1.52	1.31	86	0.70	46	4R	3H	1W	RBZ 75.00-75.10m, 76.75-77m
77.42	78.94	1.52	1.52	100	1.33	88	4R	3H	1W	
78.94	80.47	1.53	1.43	93	0.98	64	4R	3H	1W	RBZ19.80-80.00m, 80.25-80.47m
80.47	81.99	1.52	1.38	91	0.63	41	4R	3H	1W	RBZ 80.85-81.00m,
81.99	83.52	1.53	1.53	100	1.46	95	4R	3H	1W	
83.52	85.04	1.52	1.52	100	1.04	68	4R	3H	1W	
85.04	86.56	1.52	1.48	97	1.16	76	4R	3H	1W	RBZ 86.80-87.00
86.56	88.09	1.53	1.42	93	0.92	60	4R	3H	1W	
88.09	89.61	1.52	1.52	100	1.48	97	4R	3H	1W	
89.61	91.14	1.53	1.51	99	1.45	95	4R	3H	1W	
91.14	92.66	1.52	1.51	99	1.46	96	4R	3H	1W	
92.66	94.18	1.52	1.49	98	1.49	98	4R	3H	1W	
94.18	95.71	1.53	1.49	97	1.31	86	4R	3H	1W	RBZ 95.15-95.27m
95.71	97.23	1.52	1.52	100	1.47	97	4R	3H	1W	
97.23	98.75	1.52	1.5	99	1.32	87	4R	3H	1W	
98.75	100.27	1.52	1.49	98	1.49	98	4R	3H	1W	
100.27	101.80	1.53	1.53	100	1.53	100	4R	3H	1W	
101.80	103.33	1.53	1.53	100	1.53	100	4R	3H	1W	
103.33	104.85	1.52	1.52	100	1.52	100	4R	3H	1W	
104.85	106.38	1.53	1.53	100	1.43	93	4R	3H	1W	
106.38	107.90	1.52	1.52	100	1.52	100	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
107.90	109.42	1.52	1.47	97	1.47	97	4R	3H	1W	
109.42	110.95	1.53	1.47	96	1.21	79	4R	3H	1W	
110.95	112.47	1.52	1.45	95	1.45	95	4R	3H	1W	
112.47	114.00	1.53	1.53	100	1.53	100	4R	3H	1W	
114.00	115.52	1.52	1.52	100	1.52	100	4R	3H	1W	
115.52	117.04	1.52	1.52	100	1.52	100	4R	3H	1W	
117.04	118.57	1.53	1.48	97	1.48	97	4R	3H	1W	
118.57	120.09	1.52	1.52	100	1.52	100	4R	3H	1W	
120.09	121.62	1.53	1.49	97	1.42	93	4R	3H	1W	
121.62	123.14	1.52	1.42	93	1.42	93	4R	3H	1W	
123.14	124.66	1.52	1.5	99	1.50	99	4R	3H	1W	
124.66	126.19	1.53	1.53	100	1.53	100	4R	3H	1W	
126.19	127.71	1.52	1.48	97	1.48	97	4R	3H	1W	
127.71	129.23	1.52	1.52	100	1.38	91	4R	3H	1W	
129.23	130.76	1.53	1.4	92	0.81	53	4R	3H	1W	
130.76	132.28	1.52	1.52	100	1.47	97	4R	3H	1W	
132.28	135.33	3.05	3.05	100	2.97	97	4R	3H	1W	10' geoteching starts here. CA and OX infill in 30deg joint.
135.33	138.38	3.05	2.97	97	2.95	97	4R	3H	1W	
138.38	141.43	3.05	2.93	96	2.43	80	4R	3H	1W	
141.43	144.48	3.05	2.95	97	1.19	39	4R	3H	1W	RBZ 143.90-144.10m
144.48	147.52	3.04	2.89	95	2.21	73	4R	3H	1W	
147.52	150.57	3.05	3.05	100	2.38	78	4R	3H	1W	
150.57	153.62	3.05	2.73	90	2.11	69	4R	3H	1W	
153.62	156.67	3.05	2.99	98	2.24	73	4R	3H	1W	
156.67	159.72	3.05	2.88	94	1.79	59	4R	3H	1W	
159.72	162.76	3.04	3.04	100	2.12	70	4R	3H	1W	
162.76	165.81	3.05	3.01	99	2.53	83	4R	3H	1W	
165.81	168.86	3.05	2.97	97	2.88	94	4R	3H	1W	
168.86	171.91	3.05	3.05	100	2.86	94	4R	3H	1W	
171.91	174.96	3.05	3	98	2.94	96	4R	3H	1W	
174.96	178.00	3.04	3.01	99	2.93	96	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
178.00	181.05	3.05	3.02	99	2.55	84	4R	3H	1W	30deg joint infill CA + Re
181.05	184.10	3.05	3.02	99	1.97	65	4R	3H	1W	
184.10	187.15	3.05	3.05	100	2.91	95	4R	3H	1W	
187.15	190.20	3.05	2.89	95	2.62	86	4R	3H	1W	
190.20	193.24	3.04	3.04	100	1.85	61	4R	3H	1W	
193.24	196.29	3.05	3.04	100	2.85	93	4R	3H	1W	
196.29	199.34	3.05	3.05	100	1.34	44	4R	3H	1W	
199.34	202.38	3.04	3.03	100	2.50	82	3R	3H	1W	
202.38	205.44	3.06	3.05	100	2.78	91	3R	3H	1W	
205.44	208.49	3.05	3.05	100	2.67	88	4R	3H	1W	
208.49	211.53	3.04	3.02	99	2.84	93	4R	3H	1W	
211.53	214.58	3.05	2.95	97	2.94	96	4R	3H	1W	
214.58	217.63	3.05	3.04	100	1.95	64	4R	3H	1W	
217.63	220.68	3.05	3.05	100	2.61	86	4R	3H	1W	Om in 10deg joint
220.68	223.72	3.04	3.04	100	1.53	50	4R	3H	1W	RBZ 221.25-221.50m, Re in one of the 50deg joints
223.72	226.77	3.05	3.05	100	2.98	98	4R	3H	1W	
226.77	229.82	3.05	3.05	100	2.78	91	4R	3H	1W	
229.82	232.87	3.05	3.05	100	2.50	82	4R	4H	1W	RBZ with heavy Re replacement throughout 232.70-232.87m
232.87	235.92	3.05	2.89	95	2.27	74	2R	2H	1W	RBZ 233.25-233.35m with heavy Re replacment.
235.92	238.96	3.04	3.04	100	3.04	100	4R	3H	1W	
238.96	242.01	3.05	3.02	99	3.02	99	4R	3H	1W	
242.01	245.06	3.05	3.01	99	3.01	99	4R	3H	1W	
245.06	248.11	3.05	2.67	88	2.22	73	4R	3H	1W	RBZ 246.07-246.43m, one joint set infill with crystalline realgar.
248.11	251.16	3.05	2.82	92	1.90	62	2R	3H	1W	RBZ 248.40-248.90m, multiply fractured core at 249.19-249.63m
251.16	254.20	3.04	3.04	100	1.38	45	1R	3H	1W	RBZ 251.80-251.99m, multiply fractured core at 252.30-252.68m
254.20	257.25	3.05	2.75	90	2.33	76	3R	3H	1W	
257.25	260.30	3.05	2.97	97	2.91	95	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
260.30	263.35	3.05	3.05	100	2.97	97	1R	3H	1W	RBZ 261-261.59m, Very poor to no recovery at this rubble zone.
263.35	266.40	3.05	3.05	100	3.05	100	1R	3H	1W	
266.40	269.44	3.04	3.04	100	3.04	100	1R	3H	1W	
269.44	272.49	3.05	2.91	95	2.91	95	3R	3H	1W	
272.49	275.54	3.05	2.93	96	2.92	96	4R	3H	1W	
275.54	278.59	3.05	2.87	94	2.60	85	4R	3H	1W	RBZ 278.10-278.45m
278.59	281.64	3.05	2.66	87	2.61	86	4R	3H	1W	
281.64	284.68	3.04	3.04	100	3.04	100	4R	3H	1W	
284.68	287.73	3.05	3.05	100	2.93	96	4R	3H	1W	
287.73	290.78	3.05	2.91	95	2.79	91	4R	3H	1W	
290.78	293.83	3.05	3.05	100	2.54	83	4R	3H	1W	
293.83	296.88	3.05	2.94	96	2.10	69	4R	3H	1W	
296.88	299.92	3.04	3.04	100	2.97	98	4R	3H	1W	
299.92	302.97	3.05	2.91	95	2.15	70	4R	3H	1W	
302.97	306.02	3.05	3.05	100	2.88	94	4R	3H	1W	
306.02	309.07	3.05	2.87	94	2.24	73	4R	3H	1W	
309.07	312.12	3.05	3.05	100	2.67	88	4R	3H	1W	
312.12	315.16	3.04	3.04	100	2.60	86	4R	3H	1W	
315.16	318.21	3.05	2.97	97	2.97	97	4R	3H	1W	
318.21	321.26	3.05	3.05	100	2.48	81	4R	3H	1W	
321.26	322.78	1.52	1.42	93	1.42	93	3R	3H	1W	E.O.H

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229660	☐	N17-041	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229676	☐	N17-041	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229681	☐	N17-041	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229694	☐	N17-044	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229704	☐	N17-044	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229706	☐	N17-044	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229717	☐	N17-044	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232356	☐	N17-085	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229658	☐	N17-041	Core		☑	☐	☐
7.67	8.84	1.17	OVB	1.00	85	W229643	☐	N17-040	Core		☐	☐	☐
8.84	17.98	9.14	DST	2.01	22	W229644	☐	N17-040	Core		☐	☐	☐
17.98	21.03	3.05	DST	2.94	96	W229645	☐	N17-040	Core		☐	☐	☐
21.03	24.08	3.05	DST	2.99	98	W229646	☐	N17-040	Core		☐	☐	☐
24.08	27.13	3.05	DST	2.77	91	W229647	☐	N17-040	Core		☐	☐	☐
27.13	30.18	3.05	DST	2.68	88	W229648	☐	N17-040	Core		☐	☐	☐
30.18	33.22	3.04	LST	2.95	97	W229649	☐	N17-041	Core		☐	☐	☐
33.22	36.27	3.05	LST	2.97	97	W229650	☐	N17-041	Core		☐	☐	☐
36.27	39.32	3.05	LST	3.01	99	W229651	☐	N17-041	Core		☐	☐	☐
39.32	42.37	3.05	LST	2.80	92	W229652	☐	N17-041	Core		☐	☐	☐
42.37	45.42	3.05	LST	3.01	99	W229653	☐	N17-041	Core		☐	☐	☐
45.42	48.46	3.04	LST	2.96	97	W229654	☐	N17-041	Core		☐	☐	☐
48.46	49.99	1.53	LST	1.38	90	W229655	☐	N17-041	Core		☐	☐	☐
49.99	52.23	2.24	LST	1.96	88	W229656	☐	N17-041	Core		☐	☐	☐
52.23	54.06	1.83	LST	1.25	68	W229657	☐	N17-041	Core		☐	☐	☐
54.06	56.08	2.02	LST	2.02	100	W229659	☐	N17-041	Core		☐	☐	☐
56.08	59.13	3.05	LST	1.84	60	W229661	☐	N17-041	Core		☐	☐	☐
59.13	62.18	3.05	LST	3.05	100	W229662	☐	N17-041	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
59.13	62.18	3.05	LST	3.05	100	W229663	☐	N17-041	Core		☐	☐	☑
62.18	65.23	3.05	LST	2.82	92	W229664	☐	N17-041	Core		☐	☐	☐
65.23	68.28	3.05	LST	2.84	93	W229665	☐	N17-041	Core		☐	☐	☐
68.28	71.32	3.04	LST	2.97	98	W229666	☐	N17-041	Core		☐	☐	☐
71.32	74.37	3.05	LST	2.91	95	W229667	☐	N17-041	Core		☐	☐	☐
74.37	77.42	3.05	LST	2.69	88	W229668	☐	N17-041	Core		☐	☐	☐
77.42	80.47	3.05	LST	2.95	97	W229669	☐	N17-041	Core		☐	☐	☐
80.47	83.52	3.05	LST	2.91	95	W229670	☐	N17-041	Core		☐	☐	☐
80.47	83.52	3.05	LST	2.91	95	W229671	☐	N17-041	Core		☐	☑	☐
83.52	86.56	3.04	LST	3.00	99	W229672	☐	N17-041	Core		☐	☐	☐
86.56	89.61	3.05	LST	2.94	96	W229673	☐	N17-041	Core		☐	☐	☐
89.61	92.66	3.05	LST	3.02	99	W229674	☐	N17-041	Core		☐	☐	☐
92.66	95.71	3.05	LST	2.98	98	W229675	☐	N17-041	Core		☐	☐	☐
95.71	98.75	3.04	LST	3.02	99	W229677	☐	N17-041	Core		☐	☐	☐
98.75	104.85	6.10	LST	6.07	100	Q010842	☐	N17-C01	Core		☐	☐	☐
104.85	110.95	6.10	LST	6.04	99	Q010843	☐	N17-C01	Core		☐	☐	☐
110.95	117.04	6.09	LST	6.02	99	Q010844	☐	N17-C01	Core		☐	☐	☐
117.04	123.14	6.10	LST	5.91	97	Q010845	☐	N17-C01	Core		☐	☐	☐
123.14	129.23	6.09	LST	6.03	99	Q010846	☐	N17-C01	Core		☐	☐	☐
129.23	135.33	6.10	LST	5.97	98	Q010847	☐	N17-C01	Core		☐	☐	☐
135.33	141.33	6.00	LST	5.90	98	Q010848	☐	N17-C01	Core		☐	☐	☐
141.33	147.52	6.19	LST	5.84	94	Q010849	☐	N17-C01	Core		☐	☐	☐
147.52	152.10	4.58	LST	4.57	100	Q010850	☐	N17-C01	Core		☐	☐	☐
152.10	155.14	3.04	LST	3.04	100	W229678	☐	N17-041	Core		☐	☐	☐
155.14	158.19	3.05	LST	2.78	91	W229679	☐	N17-041	Core		☐	☐	☐
158.19	161.24	3.05	LST	2.61	86	W229680	☐	N17-041	Core		☐	☐	☐
161.24	164.29	3.05	LST	3.00	98	W229682	☐	N17-041	Core		☐	☐	☐
164.29	168.86	4.57	LST	4.51	99	Q010851	☐	N17-C01	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
168.86	171.91	3.05	LST	3.05	100	W229683	☐	N17-041	Core		☐	☐	☐
171.91	174.96	3.05	LST	3.00	98	W229684	☐	N17-041	Core		☐	☐	☐
174.96	177.20	2.24	LST	2.19	98	W229685	☐	N17-044	Core		☐	☐	☐
177.20	179.50	2.30	LST	2.28	99	W229686	☐	N17-044	Core		☐	☐	☐
179.50	181.05	1.55	LST	1.53	99	W229687	☐	N17-044	Core		☐	☐	☐
181.05	187.15	6.10	LST	6.07	100	Q010852	☐	N17-C01	Core		☐	☐	☐
187.15	193.24	6.09	LST	5.93	97	Q010853	☐	N17-C01	Core		☐	☐	☐
193.24	196.29	3.05	LST	3.04	100	W232354	☐	N17-085	core		☐	☐	☐
193.24	199.34	6.10	LST	6.09	100	Q010854	☐	N17-C01	Core		☐	☐	☐
196.29	199.34	3.05	LST	3.05	100	W232355	☐	N17-085	core		☐	☐	☐
199.34	205.44	6.10	LST	6.08	100	Q010855	☐	N17-C01	Core		☐	☐	☐
205.44	211.53	6.09	LST	6.07	100	Q010856	☐	N17-C01	Core		☐	☐	☐
211.53	216.10	4.57	LST	4.36	95	Q010857	☐	N17-C01	Core		☐	☐	☐
216.10	219.15	3.05	LST	3.05	100	W229688	☐	N17-044	Core		☐	☐	☐
219.15	222.20	3.05	LST	3.05	100	W229689	☐	N17-044	Core		☐	☐	☐
222.20	225.25	3.05	LST	3.05	100	W229690	☐	N17-044	Core		☐	☐	☐
225.25	228.30	3.05	LST	3.00	98	W229691	☐	N17-044	Core		☐	☐	☐
228.30	229.82	1.52	LST	1.52	100	W229692	☐	N17-044	Core		☐	☐	☐
229.82	232.05	2.23	LST	2.23	100	W229693	☐	N17-044	Core		☐	☐	☐
232.05	234.39	2.34	LST	2.25	96	W229695	☐	N17-044	Core		☐	☐	☐
234.39	235.92	1.53	LST	1.53	100	W229696	☐	N17-044	Core		☐	☐	☐
235.92	238.96	3.04	LST	3.04	100	W229697	☐	N17-044	Core		☐	☐	☐
235.92	238.96	3.04	LST	3.04	100	W229698	☐	N17-044	Core		☐	☑	☐
238.96	242.01	3.05	LST	3.03	99	W229699	☐	N17-044	Core		☐	☐	☐
242.01	243.54	1.53	LST	1.48	97	W229700	☐	N17-044	Core		☐	☐	☐
243.54	246.07	2.53	LST	2.53	100	W229701	☐	N17-044	Core		☐	☐	☐
246.07	249.19	3.12	LST	2.80	90	W229702	☐	N17-044	Core		☐	☐	☐
249.19	250.90	1.71	LST	1.51	88	W229703	☐	N17-044	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
250.90	252.53	1.63	LST	1.63	100	W229705	☐	N17-044	Core		☐	☐	☐
252.53	255.27	2.74	LST	2.74	100	W229707	☐	N17-044	Core		☐	☐	☐
255.27	257.25	1.98	LST	1.91	96	W229708	☐	N17-044	Core		☐	☐	☐
257.25	260.30	3.05	LST	3.05	100	W229709	☐	N17-044	Core		☐	☐	☐
260.30	261.82	1.52	LST	1.52	100	W229710	☐	N17-044	Core		☐	☐	☐
260.30	261.82	1.52	LST	1.52	100	W229711	☐	N17-044	Core		☐	☐	☑
261.82	264.87	3.05	LST	3.03	99	W232357	☐	N17-085	core		☐	☐	☐
261.82	267.92	6.10	LST	5.84	96	Q010858	☐	N17-C01	Core		☐	☐	☐
264.87	267.92	3.05	LST	3.03	99	W232358	☐	N17-085	core		☐	☐	☐
267.92	274.02	6.10	LST	5.79	95	Q010859	☐	N17-C01	Core		☐	☐	☐
274.02	280.11	6.09	LST	6.03	99	Q010860	☐	N17-C01	Core		☐	☐	☐
280.11	284.68	4.57	LST	4.47	98	Q010861	☐	N17-C01	Core		☐	☐	☐
284.68	287.73	3.05	LST	3.05	100	W229712	☐	N17-044	Core		☐	☐	☐
287.73	289.26	1.53	LST	1.42	93	W229713	☐	N17-044	Core		☐	☐	☐
289.26	292.30	3.04	LST	3.04	100	W229714	☐	N17-044	Core		☐	☐	☐
292.30	295.35	3.05	LST	3.05	100	W229715	☐	N17-044	Core		☐	☐	☐
295.35	298.40	3.05	LST	2.99	98	W229716	☐	N17-044	Core		☐	☐	☐
298.40	301.45	3.05	LST	2.96	97	W229718	☐	N17-044	Core	CS2	☐	☐	☐
301.45	304.50	3.05	LST	3.05	100	W229719	☐	N17-044	Core		☐	☐	☐
304.50	306.02	1.52	LST	1.52	100	W229720	☐	N17-044	Core		☐	☐	☐
306.02	309.07	3.05	LST	2.87	94	W229721	☐	N17-045	Core		☐	☐	☐
309.07	312.12	3.05	LST	3.05	100	W229722	☐	N17-045	Core		☐	☐	☐
312.12	315.16	3.04	LST	3.04	100	W229723	☐	N17-045	Core		☐	☐	☐
315.16	318.21	3.05	LST	2.97	97	W229724	☐	N17-045	Core		☐	☐	☐
318.21	321.26	3.05	LST	3.05	100	W229725	☐	N17-045	Core		☐	☐	☐
321.26	322.78	1.52	LST	1.42	93	W229726	☐	N17-045	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	10.85	10.85	0	0	0.00	0	--	--	--	OVB, Casing up until this point.
10.85	12.19	1.34	1.17	87	1.10	82	0R	4H	2W	
12.19	13.72	1.53	1.23	80	1.02	67	0R	4H	3W	RBZ 12.6-12.7m
13.72	15.24	1.52	1.27	84	0.77	51	0R	4H	2W	RBZ 13.72-13.85m
15.24	16.76	1.52	1.41	93	0.74	49	0R	4H	2W	RBZ 16.4-16.52
16.76	18.29	1.53	1.28	84	0.00	0	0R	4H	3W	RBZ 16.76-17.30m, 18.20-18.29m
18.29	19.81	1.52	1.52	100	0.45	30	0R	4H	2W	
19.81	21.34	1.53	1.53	100	1.39	91	0R	4H	2W	
21.34	22.86	1.52	1.4	92	0.56	37	0R	4H	2W	
22.86	24.38	1.52	1.23	81	0.53	35	0R	4H	3W	RBZ 23.50-23.70m
24.38	25.91	1.53	1.24	81	0.44	29	0R	4H	2W	RBZ 24.42-24.60m, 24.90-25.00m
25.91	27.43	1.52	1.45	95	0.66	43	0R	3H	1W	RBZ 27.05-27.43
27.43	28.96	1.53	1.2	78	0.49	32	0R	3H	1W	RBZ 28.85-28.96m. Core is multiply fractured from 28.30-28.70m
28.96	30.48	1.52	1.52	100	0.11	7	0R	3H	1W	RBZ 29.20-30.00m
30.48	32.00	1.52	1.19	78	0.28	18	0R	3H	1W	Rubble zones every ~15cm across interval, multiply fractured core.
32.00	33.53	1.53	1.29	84	0.16	10	1R	3H	1W	Multiply fractured core across majority of interval (50%) high amount of fractures, planes in between silty/shale bedding fizzes slightly. RBZ at 32.70-33
33.53	36.58	3.05	2.63	86	0.20	7	0R	3H	1W	Started teching core at 3.05m intervals, every two blocks. RBZ at 33.90-35.40m.
36.58	39.62	3.04	2.15	71	1.03	34	0R	2H	1W	RBZ 37.05-38.00m,39.30-39.45m
39.62	42.67	3.05	2.5	82	0.40	13	0R	2H	1W	RBZ 39.80-40.50m, 42.00-42.67m
42.67	45.72	3.05	2	66	0.45	15	0R	3H	1W	RBZ 42.67-42.79m, 43.00-45.72m
45.72	48.77	3.05	2.66	87	0.97	32	0R	3H	1W	RBZ 46.20-47.24m, 47.77-48.00m
48.77	51.82	3.05	2.47	81	0.50	16	0R	3H	1W	RBZ @50.40m, 50.60m, 51.00m, 51.70m
51.82	54.86	3.04	1.41	46	0.53	17	0R	3H	1W	RBZ 51.82-54.25m,
54.86	57.91	3.05	2.05	67	0.74	24	0R	3H	1W	RBZ 55.05-56.20m, 56.39-57.60m
57.91	60.96	3.05	2.77	91	1.27	42	0R	3H	1W	RBZ 58.80-59.44m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
60.96	64.01	3.05	2.37	78	0.30	10	0R	4H	1W	RBZ 60.96-61.85, 62.68-63.00m
64.01	67.06	3.05	2.89	95	0.92	30	0R	4H	1W	
67.06	70.10	3.04	2.72	89	1.43	47	0R	4H	1W	
70.10	73.15	3.05	2.96	97	2.29	75	0R	4H	1W	
73.15	76.20	3.05	2.92	96	0.98	32	0R	4H	1W	RBZ 73.95-74.15m
76.20	79.25	3.05	2.8	92	1.25	41	0R	4H	1W	
79.25	82.30	3.05	2.07	68	0.80	26	0R	4H	1W	RBZ 79.25-79.58m
82.30	85.34	3.04	2.62	86	1.34	44	0R	4H	1W	RBZ 83.85-84.00m, 84.25-84.50m
85.34	88.39	3.05	2.99	98	1.12	37	0R	4H	1W	
88.39	91.44	3.05	2.74	90	1.79	59	0R	4H	1W	RBZ 89.50-89.80m
91.44	94.49	3.05	3.05	100	1.92	63	0R	4H	1W	RBZ 93.80-94.49m
94.49	97.54	3.05	2.03	67	0.54	18	0R	4H	1W	RBZ 95.00-95.15m, 95.85-95.95m. Multilpy fractured core.3
97.54	100.58	3.04	2.87	94	1.75	58	0R	4H	1W	RBZ 99.00-99.15m, 100.10-100.25m
100.58	103.63	3.05	2.65	87	1.64	54	0R	4H	1W	RBZ 100.58-101.20m
103.63	106.68	3.05	3.02	99	2.62	86	0R	4H	1W	
106.68	109.73	3.05	3.05	100	2.76	90	0R	4H	1W	
109.73	112.78	3.05	2.54	83	1.82	60	0R	4H	1W	RBZ 110.20-110.50m & 111.90-112.10m
112.78	115.82	3.04	2.98	98	2.79	92	0R	4H	1W	RBZ 113.68-113.75m & 114.20-114.25m.
115.82	118.87	3.05	3.05	100	2.65	87	0R	4H	1W	
118.87	121.92	3.05	3.05	100	1.85	61	0R	4H	1W	
121.92	124.97	3.05	2.86	94	2.24	73	0R	4H	1W	
124.97	128.02	3.05	3	98	1.76	58	0R	4H	1W	
128.02	131.06	3.04	2.95	97	1.53	50	0R	4H	1W	
131.06	134.11	3.05	3.03	99	1.73	57	0R	3H	1W	
134.11	137.16	3.05	2.76	90	2.13	70	0R	3H	1W	RBZ 134.75-135.27m
137.16	140.21	3.05	2.79	91	2.53	83	0R	3H	1W	
140.21	143.26	3.05	2.54	83	1.60	52	0R	3H	1W	RBZ 140.70-140.90m & 143.00-143.26m
143.26	146.30	3.04	2.73	90	1.71	56	0R	4H	1W	RBZ 143.26-143.46m & 144.20-144.30m
146.30	149.35	3.05	2.93	96	2.51	82	0R	4H	1W	
149.35	152.40	3.05	2.57	84	1.95	64	0R	4H	1W	
152.40	155.45	3.05	2.74	90	2.25	74	0R	4H	1W	RBZ 152.40-152.50m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
155.45	158.50	3.05	2.71	89	2.50	82	0R	4H	1W	RBZ 156.97-157.05m & 158.25-158.35m
158.50	161.54	3.04	2.69	88	2.08	68	0R	4H	1W	
161.54	164.59	3.05	2.9	95	2.20	72	0R	4H	1W	
164.59	167.64	3.05	2.98	98	1.70	56	0R	4H	1W	
167.64	170.69	3.05	2.72	89	1.85	61	0R	4H	1W	
170.69	173.74	3.05	2.56	84	2.08	68	0R	4H	1W	
173.74	176.78	3.04	2.41	79	2.22	73	0R	4H	1W	
176.78	179.83	3.05	2.99	98	2.78	91	0R	4H	1W	RBZ 177.90-178.31m
179.83	182.88	3.05	3.05	100	2.95	97	0R	4H	1W	2 single joints.
182.88	185.93	3.05	2.99	98	2.63	86	0R	4H	1W	
185.93	188.98	3.05	2.93	96	2.80	92	0R	4H	1W	RBZ 186.50-186.60m
188.98	192.02	3.04	3.04	100	2.84	93	0R	4H	1W	
192.02	195.07	3.05	2.86	94	2.32	76	0R	4H	1W	RBZ 193.55-194.15m
195.07	198.12	3.05	2.65	87	1.66	54	0R	4H	1W	RBZ 196.57-196.70m.
198.12	201.17	3.05	2.81	92	2.51	82	0R	4H	1W	
201.17	204.22	3.05	2.94	96	2.60	85	0R	4H	1W	
204.22	207.26	3.04	2.77	91	2.55	84	0R	4H	1W	
207.26	210.31	3.05	2.48	81	1.63	53	0R	3H	1W	RBZ 209.00-209.15 & 209.85-210.25m
210.31	213.36	3.05	1.8	59	0.71	23	1R	2H	1W	Majority of interval made up of rubble zones and soft black core.
213.36	216.41	3.05	2.98	98	1.15	38	4R	3H	1W	Contact between siliciclastic and limestone units.
216.41	219.46	3.05	2.68	88	1.70	56	3R	3H	1W	RBZ 216.90-217.20m
219.46	222.50	3.04	2.87	94	2.51	83	4R	3H	1W	
222.50	225.55	3.05	2.82	92	2.26	74	4R	3H	1W	
225.55	228.60	3.05	3.01	99	2.93	96	4R	3H	1W	
228.60	231.65	3.05	2.73	90	2.42	79	4R	3H	1W	
231.65	234.70	3.05	2.99	98	2.84	93	4R	3H	1W	
234.70	237.74	3.04	2.91	96	2.61	86	4R	3H	1W	
237.74	240.79	3.05	3.05	100	2.71	89	4R	3H	1W	
240.79	243.84	3.05	3.05	100	2.43	80	4R	3H	1W	
243.84	246.89	3.05	3.05	100	2.59	85	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
246.89	249.94	3.05	2.85	93	2.69	88	4R	3H	1W	
249.94	252.98	3.04	3.04	100	2.78	91	4R	3H	1W	
252.98	256.03	3.05	3.05	100	2.88	94	4R	3H	1W	
256.03	259.08	3.05	3.02	99	3.02	99	4R	3H	1W	
259.08	262.13	3.05	2.99	98	2.83	93	4R	3H	1W	
262.13	265.18	3.05	2.94	96	2.82	92	4R	3H	1W	
265.18	268.22	3.04	2.97	98	2.62	86	4R	3H	1W	
268.22	271.27	3.05	3.05	100	2.48	81	4R	3H	1W	
271.27	274.32	3.05	2.88	94	1.78	58	4R	3H	1W	
274.32	277.37	3.05	2.8	92	1.52	50	2R	2H	1W	RBZ 276.85-277.00m. Clay zone 276.50-276.85m
277.37	280.42	3.05	3.05	100	1.91	63	0R	2H	1W	zone of clay mixed with rubble 277.37-278.00m
280.42	283.46	3.04	3.01	99	2.03	67	0R	3H	1W	
283.46	286.51	3.05	2.89	95	1.77	58	0R	3H	1W	
286.51	289.56	3.05	3.05	100	2.21	72	0R	3H	1W	
289.56	292.61	3.05	2.96	97	1.94	64	0R	3H	1W	RBZ 291.47-291.90m
292.61	295.66	3.05	2.99	98	2.17	71	0R	3H	1W	
295.66	298.70	3.04	3.04	100	2.43	80	2R	3H	1W	
298.70	301.75	3.05	3.05	100	2.86	94	4R	3H	1W	
301.75	304.80	3.05	3.03	99	2.73	90	4R	3H	1W	
304.80	307.85	3.05	2.91	95	1.94	64	4R	4H	1W	
307.85	310.90	3.05	2.96	97	2.70	89	4R	3H	1W	
310.90	313.94	3.04	2.74	90	2.66	88	4R	3H	1W	Single stepped joint
313.94	316.99	3.05	3.05	100	3.00	98	4R	3H	1W	
316.99	320.04	3.05	2.58	85	1.75	57	3R	3H	1W	
320.04	323.09	3.05	2.96	97	2.05	67	3R	3H	1W	Blocky from 320.04-320.14m and 320.40-320.50m
323.09	326.14	3.05	2.91	95	2.55	84	4R	3H	1W	Realgar on fracture surfaces
326.14	329.18	3.04	2.82	93	2.38	78	3R	3H	1W	
329.18	332.23	3.05	3.05	100	2.70	89	3R	3H	1W	
332.23	335.28	3.05	3.02	99	2.93	96	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
335.28	338.33	3.05	3.05	100	2.88	94	3R	4H	1W	
338.33	341.38	3.05	2.84	93	1.89	62	4R	3H	1W	
341.38	344.42	3.04	2.83	93	2.72	89	3R	3H	1W	
344.42	347.47	3.05	3	98	2.55	84	4R	3H	1W	
347.47	350.52	3.05	2.93	96	2.61	86	3R	3H	1W	
350.52	353.57	3.05	3.01	99	2.74	90	3R	3H	1W	
353.57	355.09	1.52	1.33	88	1.27	84	3R	3H	1W	
355.09	356.62	1.53	1.53	100	1.33	87	4R	3H	1W	

OS -17-241

Nadaleen
Conrad Zone

Archer,Cathro & Associates (1981) Limited

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228822	☐	N17-042	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228899	☐	N17-046	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228879	☐	N17-046	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228870	☐	N17-046	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228867	☐	N17-046	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228863	☐	N17-043	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228855	☐	N17-043	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228765	☐	N17-039	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228841	☐	N17-043	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228809	☐	N17-042	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228805	☐	N17-042	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228801	☐	N17-042	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228792	☐	N17-039	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228791	☐	N17-039	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228782	☐	N17-039	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228776	☐	N17-039	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228853	☐	N17-043	Core		☑	☐	☐
10.85	13.72	2.87	OVB	2.40	84	W228763	☐	N17-039	Core		☐	☐	☐
13.72	15.90	2.18	DST	2.00	92	W228764	☐	N17-039	Core		☐	☐	☐
15.90	18.29	2.39	DST	1.58	66	W228766	☐	N17-039	Core		☐	☐	☐
18.29	21.34	3.05	SLC	3.05	100	W228767	☐	N17-039	Core		☐	☐	☐
21.34	24.38	3.04	SLC	2.63	87	W228768	☐	N17-039	Core		☐	☐	☐
24.38	27.43	3.05	SLC	2.69	88	W228769	☐	N17-039	Core		☐	☐	☐
27.43	30.48	3.05	SLC	2.72	89	W228770	☐	N17-039	Core		☐	☐	☐
30.48	33.53	3.05	SLC	2.48	81	W228771	☐	N17-039	Core		☐	☐	☐
30.48	33.53	3.05	SLC	2.48	81	W228772	☐	N17-039	Core		☐	☐	☑
33.53	35.72	2.19	SLC	1.67	76	W228773	☐	N17-039	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
35.72	38.10	2.38	SLC	1.50	63	W228774	☐	N17-039	Core		☐	☐	☐
38.10	39.62	1.52	SLC	1.43	94	W228775	☐	N17-039	Core		☐	☐	☐
39.62	42.67	3.05	SLC	2.50	82	W228777	☐	N17-039	Core		☐	☐	☐
42.67	45.72	3.05	SLC	2.00	66	W228778	☐	N17-039	Core		☐	☐	☐
45.72	48.77	3.05	SLC	2.66	87	W228779	☐	N17-039	Core		☐	☐	☐
48.77	51.82	3.05	SLC	2.47	81	W228780	☐	N17-039	Core		☐	☐	☐
51.82	54.86	3.04	SLC	1.41	46	W228781	☐	N17-039	Core		☐	☐	☐
54.86	57.30	2.44	SLC	1.65	68	W228783	☐	N17-039	Core		☐	☐	☐
57.30	59.44	2.14	SLC	1.55	72	W228784	☐	N17-039	Core		☐	☐	☐
59.44	60.96	1.52	SLC	1.47	97	W228785	☐	N17-039	Core		☐	☐	☐
60.96	64.01	3.05	SLC	2.37	78	W228786	☐	N17-039	Core		☐	☐	☐
64.01	67.06	3.05	SLC	2.89	95	W228787	☐	N17-039	Core		☐	☐	☐
64.01	67.06	3.05	SLC	2.89	95	W228788	☐	N17-039	Core		☐	☑	☐
67.06	70.10	3.04	SLC	2.72	89	W228789	☐	N17-039	Core		☐	☐	☐
70.10	73.15	3.05	SLC	2.96	97	W228790	☐	N17-039	Core		☐	☐	☐
73.15	76.20	3.05	SLC	2.92	96	W228793	☐	N17-042	Core		☐	☐	☐
76.20	79.25	3.05	SLC	2.80	92	W228794	☐	N17-042	Core		☐	☐	☐
79.25	82.30	3.05	SLC	2.07	68	W228795	☐	N17-042	Core		☐	☐	☐
82.30	85.34	3.04	SLC	2.62	86	W228796	☐	N17-042	Core		☐	☐	☐
85.34	88.39	3.05	SLC	2.99	98	W228797	☐	N17-042	Core		☐	☐	☐
88.39	91.44	3.05	SLC	2.74	90	W228798	☐	N17-042	Core		☐	☐	☐
91.44	93.61	2.17	SLC	2.17	100	W228799	☐	N17-042	Core		☐	☐	☐
93.61	96.01	2.40	SLC	1.69	70	W228800	☐	N17-042	Core		☐	☐	☐
96.01	99.06	3.05	SLC	2.61	86	W228802	☐	N17-042	Core		☐	☐	☐
96.01	99.06	3.05	SLC	2.61	86	W228803	☐	N17-042	Core		☐	☐	☑
99.06	100.90	1.84	SLC	1.63	89	W228804	☐	N17-042	Core		☐	☐	☐
100.90	103.63	2.73	SLC	2.10	77	W228806	☐	N17-042	Core		☐	☐	☐
103.63	106.68	3.05	SLC	3.02	99	W228807	☐	N17-042	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
106.68	109.73	3.05	SLC	3.05	100	W228808	☐	N17-042	Core		☐	☐	☐
109.73	112.78	3.05	SLC	2.54	83	W228810	☐	N17-042	Core		☐	☐	☐
112.78	115.82	3.04	SLC	2.98	98	W228811	☐	N17-042	Core		☐	☐	☐
115.82	118.87	3.05	SLC	3.05	100	W228812	☐	N17-042	Core		☐	☐	☐
118.87	121.92	3.05	SLC	3.05	100	W228813	☐	N17-042	Core		☐	☐	☐
121.92	124.97	3.05	SLC	2.86	94	W228814	☐	N17-042	Core		☐	☐	☐
124.97	128.02	3.05	SLC	3.00	98	W228815	☐	N17-042	Core		☐	☐	☐
128.02	131.06	3.04	SLC	2.95	97	W228816	☐	N17-042	Core		☐	☐	☐
131.06	134.11	3.05	SLC	3.03	99	W228817	☐	N17-042	Core		☐	☐	☐
134.11	137.16	3.05	SLC	2.76	90	W228818	☐	N17-042	Core		☐	☐	☐
137.16	140.21	3.05	SLC	2.79	91	W228819	☐	N17-042	Core		☐	☐	☐
140.21	143.26	3.05	SLC	2.54	83	W228820	☐	N17-042	Core		☐	☐	☐
143.26	146.30	3.04	SLC	2.54	84	W228821	☐	N17-042	Core		☐	☐	☐
146.30	149.35	3.05	SLC	2.93	96	W228823	☐	N17-042	Core		☐	☐	☐
149.35	152.40	3.05	SLC	2.57	84	W228824	☐	N17-042	Core		☐	☐	☐
152.40	155.45	3.05	SLC	2.74	90	W228825	☐	N17-042	Core		☐	☐	☐
155.45	158.50	3.05	SLC	2.71	89	W228826	☐	N17-042	Core		☐	☐	☐
155.45	158.50	3.05	SLC	2.71	89	W228827	☐	N17-042	Core		☐	☑	☐
158.50	161.54	3.04	SLC	2.69	88	W228828	☐	N17-042	Core		☐	☐	☐
161.54	164.59	3.05	SLC	2.90	95	W228829	☐	N17-043	Core		☐	☐	☐
164.59	167.64	3.05	SLC	2.98	98	W228830	☐	N17-043	Core		☐	☐	☐
167.64	170.69	3.05	SLC	2.72	89	W228831	☐	N17-043	Core		☐	☐	☐
170.69	173.74	3.05	SLC	2.56	84	W228832	☐	N17-043	Core		☐	☐	☐
173.74	176.78	3.04	SLC	2.41	79	W228833	☐	N17-043	Core		☐	☐	☐
176.78	179.83	3.05	SLC	2.99	98	W228834	☐	N17-043	Core		☐	☐	☐
179.83	182.88	3.05	SLC	3.05	100	W228835	☐	N17-043	Core		☐	☐	☐
182.88	185.93	3.05	SLC	2.99	98	W228836	☐	N17-043	Core		☐	☐	☐
185.93	188.98	3.05	SLC	2.93	96	W228837	☐	N17-043	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
188.98	192.02	3.04	SLC	3.04	100	W228838	☐	N17-043	Core		☐	☐	☐
188.98	192.02	3.04	SLC	3.04	100	W228839	☐	N17-043	Core		☐	☑	☐
192.02	195.07	3.05	SLC	2.86	94	W228840	☐	N17-043	Core		☐	☐	☐
195.07	198.12	3.05	SLC	2.65	87	W228842	☐	N17-043	Core		☐	☐	☐
198.12	201.17	3.05	SLC	2.81	92	W228843	☐	N17-043	Core		☐	☐	☐
201.17	204.22	3.05	SLC	2.94	96	W228844	☐	N17-043	Core		☐	☐	☐
204.22	207.26	3.04	SLC	2.77	91	W228845	☐	N17-043	Core		☐	☐	☐
204.22	207.26	3.04	SLC	2.77	91	W228846	☐	N17-043	Core		☐	☐	☑
207.26	210.03	2.77	SLC	2.35	85	W228847	☐	N17-043	Core		☐	☐	☐
210.03	213.00	2.97	SLC	1.93	65	W228848	☐	N17-043	Core		☐	☐	☐
213.00	214.66	1.66	SLC, LST	1.62	98	W228849	☐	N17-043	Core		☐	☐	☐
214.66	216.41	1.75	LST	1.75	100	W228850	☐	N17-043	Core		☐	☐	☐
216.41	218.30	1.89	LST	1.79	95	W228851	☐	N17-043	Core		☐	☐	☐
218.30	220.07	1.77	LST	1.77	100	W228852	☐	N17-043	Core		☐	☐	☐
220.07	222.50	2.43	LST	2.39	98	W228854	☐	N17-043	Core		☐	☐	☐
222.50	225.55	3.05	LST	2.82	92	W228856	☐	N17-043	Core		☐	☐	☐
225.55	228.60	3.05	LST	3.01	99	W228857	☐	N17-043	Core		☐	☐	☐
228.60	231.65	3.05	LST	2.73	90	W228858	☐	N17-043	Core		☐	☐	☐
231.65	234.70	3.05	LST	2.99	98	W228859	☐	N17-043	Core		☐	☐	☐
234.70	237.74	3.04	LST	2.91	96	W228860	☐	N17-043	Core		☐	☐	☐
237.74	240.79	3.05	LST	3.05	100	W228861	☐	N17-043	Core		☐	☐	☐
240.79	243.84	3.05	LST	3.05	100	W228862	☐	N17-043	Core		☐	☐	☐
243.84	245.36	1.52	LST	1.52	100	W228864	☐	N17-043	Core		☐	☐	☐
245.36	248.41	3.05	LST	2.82	92	W228865	☐	N17-046	Core		☐	☐	☐
248.41	249.94	1.53	LST	1.29	84	W228866	☐	N17-046	Core		☐	☐	☐
249.94	252.98	3.04	LST	3.04	100	W228868	☐	N17-046	Core		☐	☐	☐
252.98	256.03	3.05	LST	3.05	100	W228869	☐	N17-046	Core		☐	☐	☐
256.03	259.08	3.05	LST	3.02	99	W228871	☐	N17-046	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
259.08	262.13	3.05	LST	2.99	98	W228872	☐	N17-046	Core		☐	☐	☐
262.13	265.18	3.05	LST	2.94	96	W228873	☐	N17-046	Core		☐	☐	☐
265.18	268.22	3.04	LST	2.97	98	W228874	☐	N17-046	Core		☐	☐	☐
268.22	271.27	3.05	LST	3.05	100	W228875	☐	N17-046	Core		☐	☐	☐
271.27	274.32	3.05	LST	2.88	94	W228876	☐	N17-046	Core		☐	☐	☐
274.32	276.34	2.02	LST	1.98	98	W228877	☐	N17-046	Core		☐	☐	☐
276.34	278.09	1.75	LST	1.48	85	W228878	☐	N17-046	Core		☐	☐	☐
278.09	280.74	2.65	SLC	2.55	96	W228880	☐	N17-046	Core		☐	☐	☐
280.74	281.94	1.20	SLC	1.09	91	W228881	☐	N17-046	Core		☐	☐	☐
280.74	281.94	1.20	SLC	1.09	91	W228882	☐	N17-046	Core		☐	☑	☐
281.94	284.99	3.05	SLC	2.81	92	W228883	☐	N17-046	Core		☐	☐	☐
284.99	288.04	3.05	SLC	3.05	100	W228884	☐	N17-046	Core		☐	☐	☐
288.04	291.08	3.04	SLC	2.55	84	W228885	☐	N17-046	Core		☐	☐	☐
291.08	294.19	3.11	SLC	2.56	82	W228886	☐	N17-046	Core		☐	☐	☐
294.19	297.18	2.99	SLC	2.68	90	W228887	☐	N17-046	Core		☐	☐	☐
294.19	297.18	2.99	SLC	2.68	90	W228888	☐	N17-046	Core		☐	☐	☑
297.18	300.23	3.05	SLC	2.95	97	W228889	☐	N17-046	Core		☐	☐	☐
300.23	303.28	3.05	LST	2.31	76	W228890	☐	N17-046	Core		☐	☐	☐
303.28	306.34	3.06	LST	3.04	99	W228891	☐	N17-046	Core		☐	☐	☐
306.34	309.37	3.03	LST	2.98	98	W228892	☐	N17-046	Core		☐	☐	☐
309.37	312.42	3.05	LST	2.74	90	W228893	☐	N17-046	Core		☐	☐	☐
312.42	315.47	3.05	LST	3.05	100	W228894	☐	N17-046	Core		☐	☐	☐
315.47	318.52	3.05	LST	2.76	90	W228895	☐	N17-046	Core		☐	☐	☐
318.52	321.56	3.04	LST	2.99	98	W228896	☐	N17-046	Core		☐	☐	☐
321.56	324.61	3.05	LST	2.81	92	W228897	☐	N17-046	Core		☐	☐	☐
324.61	326.14	1.53	LST	1.53	100	W228898	☐	N17-046	Core		☐	☐	☐
326.14	329.18	3.04	LST	2.82	93	W228900	☐	N17-046	Core		☐	☐	☐
329.18	332.23	3.05	LST	3.05	100	W228901	☐	N17-047	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
332.23	335.28	3.05	LST	3.02	99	W228902	☐	N17-047	core		☐	☐	☐
335.28	338.33	3.05	LST	3.05	100	W228903	☐	N17-047	core		☐	☐	☐
338.33	341.38	3.05	LST	2.84	93	W228904	☐	N17-047	core		☐	☐	☐
341.38	344.42	3.04	LST	2.83	93	W228905	☐	N17-047	core		☐	☐	☐
344.42	347.47	3.05	LST	3.00	98	W228906	☐	N17-047	core		☐	☐	☐
347.47	350.52	3.05	LST	2.93	96	W228907	☐	N17-047	core		☐	☐	☐
350.52	353.57	3.05	LST	3.01	99	W228908	☐	N17-047	core		☐	☐	☐
353.57	355.09	1.52	LST	1.33	88	W228909	☐	N17-047	core		☐	☐	☐
355.09	356.62	1.53	LST	1.53	100	W228923	☐	N17-047	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	3.00	3.00	0	0	0.00	0	--	--	--	
3.00	3.05	0.05	0	0	0.00	0	--	--	--	overburden
3.05	11.58	8.53	0.57	7	0.00	0	4R	--	3W	overburden
11.58	14.63	3.05	0.65	21	0.00	0	4R	--	3W	overburden
14.63	17.68	3.05	0.67	22	0.00	0	4R	--	3W	overburden
17.68	19.20	1.52	0.74	49	0.00	0	4R	--	3W	overburden
19.20	20.73	1.53	0.72	47	0.00	0	4R	--	3W	overburden
20.73	22.25	1.52	0.87	57	0.00	0	4R	--	3W	overburden. Re and Om in rubble at 21.00-21.15m
22.25	25.30	3.05	2.1	69	0.00	0	4R	--	3W	overburden
25.30	28.35	3.05	1.85	61	0.00	0	4R	--	3W	overburden
28.35	31.39	3.04	2.41	79	0.00	0	4R	--	3W	overburden
31.39	34.44	3.05	1.92	63	0.00	0	4R	--	3W	overburden. Re in rubble 32.22-32.52m
34.44	37.49	3.05	1.85	61	0.00	0	4R	--	3W	overburden
37.49	40.54	3.05	2.17	71	0.00	0	4R	--	3W	overburden. Re and Om in rubble 40.20-40.54m.
40.54	42.06	1.52	0.8	53	0.00	0	4R	--	3W	overburden
42.06	43.58	1.52	1.14	75	0.33	22	4R	--	2W	overburden
43.58	45.11	1.53	0.75	49	0.12	8	4R	--	2W	overburden
45.11	46.63	1.52	0.62	41	0.00	0	4R	--	2W	overburden
46.63	51.21	4.58	0.25	5	0.00	0	4R	--	3W	overburden
51.21	52.73	1.52	1.5	99	0.75	49	4R	--	1W	Minor overburden at top of run.
52.73	55.17	2.44	2.44	100	1.34	55	4R	3H	1W	
55.17	58.22	3.05	2.79	91	1.34	44	4R	3H	1W	
58.22	61.26	3.04	2.86	94	1.57	52	4R	3H	1W	
61.26	64.31	3.05	2.4	79	0.77	25	4R	3H	1W	
64.31	67.36	3.05	2.63	86	1.80	59	4R	3H	1W	
67.36	70.41	3.05	2.9	95	1.62	53	4R	3H	1W	
70.41	73.46	3.05	2.68	88	1.99	65	4R	3H	1W	
73.46	76.50	3.04	2.67	88	1.31	43	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
76.50	79.55	3.05	2.98	98	2.45	80	4R	3H	1W	
79.55	82.60	3.05	2.7	89	0.86	28	0R	3H	1W	
82.60	85.65	3.05	2.7	89	0.72	24	4R	3H	1W	
85.65	88.70	3.05	3	98	2.34	77	4R	3H	1W	
88.70	91.74	3.04	2.51	83	0.38	13	3R	3H	1W	
91.74	94.79	3.05	2.83	93	1.64	54	4R	3H	1W	
94.79	97.84	3.05	2.05	67	2.05	67	4R	3H	1W	
97.84	100.89	3.05	2.84	93	2.39	78	4R	3H	1W	
100.89	103.94	3.05	3	98	1.90	62	4R	3H	1W	
103.94	106.98	3.04	2.77	91	1.59	52	4R	3H	1W	
106.98	110.03	3.05	2.9	95	1.27	42	4R	3H	1W	
110.03	113.08	3.05	2.81	92	2.20	72	4R	3H	1W	
113.08	116.43	3.35	3.04	91	2.63	79	4R	3H	1W	
116.43	119.48	3.05	2.93	96	2.46	81	4R	3H	1W	
119.48	122.53	3.05	2.96	97	1.93	63	4R	3H	1W	
122.53	125.58	3.05	2.96	97	2.22	73	4R	3H	1W	
125.58	128.63	3.05	2.92	96	2.28	75	4R	3H	1W	
128.63	131.67	3.04	2.63	87	0.88	29	4R	3H	1W	
131.67	134.72	3.05	3.04	100	2.15	70	2R	3H	1W	
134.72	137.77	3.05	2.99	98	2.69	88	3R	3H	1W	
137.77	140.82	3.05	2.85	93	2.04	67	3R	3H	1W	
140.82	143.87	3.05	2.89	95	2.56	84	4R	3H	1W	
143.87	146.91	3.04	2.87	94	2.40	79	4R	3H	1W	
146.91	149.96	3.05	2.74	90	2.01	66	2R	3H	1W	
149.96	153.01	3.05	3.04	100	2.83	93	4R	3H	1W	
153.01	156.06	3.05	3.04	100	2.37	78	3R	3H	1W	
156.06	159.11	3.05	3.04	100	2.62	86	4R	3H	1W	
159.11	162.15	3.04	2.78	91	2.22	73	4R	3H	1W	
162.15	165.20	3.05	2.56	84	1.28	42	1R	3H	1W	RBZ soft clay
165.20	168.25	3.05	2.4	79	0.72	24	0R	3H	1W	RBZ
168.25	171.30	3.05	2.63	86	0.94	31	0R	3H	1W	RBZ

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
171.30	174.35	3.05	2.31	76	1.37	45	0R	3H	1W	RBZ
174.35	177.39	3.04	2.93	96	2.40	79	0R	3H	1W	RBZ soft clay with realgar at 174.60 m. Re infill on joint surface
177.39	180.44	3.05	2.95	97	2.67	88	0R	3H	1W	
180.44	183.49	3.05	2.61	86	1.27	42	0R	3H	1W	rBZ
183.49	186.54	3.05	2.55	84	1.52	50	0R	3H	1W	RBZ with realgar
186.54	189.59	3.05	2.73	90	1.03	34	1R	3H	1W	Realgar on joint surfaces and as veinlets
189.59	192.63	3.04	1.04	34	0.00	0	1R	3H	1W	
192.63	195.68	3.05	2.75	90	0.82	27	0R	3H	1W	One single stepped joint
195.68	198.73	3.05	2.71	89	1.40	46	1R	4H	1W	Minor realgar on high angle joint surfaces
198.73	201.78	3.05	2.71	89	1.77	58	1R	3H	1W	
201.78	204.83	3.05	2.44	80	1.34	44	1R	3H	1W	
204.83	207.87	3.04	2.94	97	2.64	87	1R	3H	1W	Few fractures appear to be natural, but rock is very blocky
207.87	210.92	3.05	2.67	88	1.34	44	1R	3H	1W	
210.92	213.97	3.05	2.46	81	0.96	31	2R	3H	1W	
213.97	217.02	3.05	2.82	92	1.21	40	1R	3H	1W	realgar on some fracture surfaces
217.02	220.07	3.05	2.76	90	1.08	35	1R	3H	1W	orpiment on some fracture surfaces.
220.07	223.11	3.04	2.85	94	1.96	64	0R	3H	1W	realgar on the 50 degree joint set and in the RBZ
223.11	226.16	3.05	3.05	100	1.63	53	1R	3H	1W	Realgar on joint and fracture surfaces.RBZ at 224.70-224.85m
226.16	229.21	3.05	2.75	90	1.56	51	1R	3H	1W	RBZ at 227.05m
229.21	232.26	3.05	2.82	92	0.58	19	1R	3H	1W	RBZ at 229.50-229.80m,231.61-231.71m
232.26	235.31	3.05	2.9	95	0.35	11	1R	3H	1W	RBZ at 233.70-234.60m, 234.85-235.15m
235.31	238.35	3.04	2.3	76	0.24	8	1R	3H	1W	rbz at 235.70m, 236.65-236.80m, 237.20-238.00m
238.35	241.40	3.05	3.05	100	2.60	85	1R	3H	1W	
241.40	244.45	3.05	3.05	100	2.40	79	1R	3H	1W	
244.45	247.50	3.05	3.01	99	2.99	98	1R	3H	1W	
247.50	250.54	3.04	3.03	100	3.03	100	1R	3H	1W	
250.54	253.59	3.05	3.03	99	2.98	98	1R	3H	1W	
253.59	256.64	3.05	2.92	96	2.57	84	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
256.64	259.69	3.05	2.94	96	2.64	87	1R	3H	1W	
259.69	262.74	3.05	2.94	96	1.34	44	2R	3H	1W	Diamictite contains limestone clasts that are increasing the reactivity of the interval.
262.74	265.79	3.05	3.05	100	2.80	92	2R	3H	1W	Diamictite contains large boulder size clasts of limestone which increases the reactivity level.
265.79	268.83	3.04	2.88	95	2.88	95	1R	3H	1W	E.O.H

OS -17-242

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229737	☐	N17-045	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229755	☐	N17-045	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229756	☐	N17-045	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229765	☐	N17-048	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229774	☐	N17-048	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229776	☐	N17-048	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229785	☐	N17-048	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229799	☐	N17-049	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229805	☐	N17-049	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229811	☐	N17-049	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229823	☐	N17-049	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229729	☐	N17-045	Core	CS2	☐	☐	☐
3.00	14.63	11.63	OVB	1.28	11	W229727	☐	N17-045	Core		☐	☐	☐
14.63	19.20	4.57	OVB	1.41	31	W229728	☐	N17-045	Core		☐	☐	☐
19.20	22.25	3.05	OVB	1.59	52	W229730	☐	N17-045	Core		☐	☐	☐
22.25	25.30	3.05	OVB	2.10	69	W229731	☐	N17-045	Core		☐	☐	☐
25.30	28.35	3.05	OVB	1.85	61	W229732	☐	N17-045	Core		☐	☐	☐
28.35	31.39	3.04	OVB	2.41	79	W229733	☐	N17-045	Core		☐	☐	☐
31.39	34.44	3.05	OVB	1.92	63	W229734	☐	N17-045	Core		☐	☐	☐
34.44	37.49	3.05	OVB	1.85	61	W229735	☐	N17-045	Core		☐	☐	☐
37.49	40.54	3.05	OVB	2.17	71	W229736	☐	N17-045	Core		☐	☐	☐
40.54	43.58	3.04	OVB	1.94	64	W229738	☐	N17-045	Core		☐	☐	☐
43.58	46.63	3.05	OVB	1.37	45	W229739	☐	N17-045	Core		☐	☐	☐
46.63	52.73	6.10	OVB	1.75	29	W229740	☐	N17-045	Core		☐	☐	☐
52.73	54.25	1.52	LST	1.52	100	W229741	☐	N17-045	Core		☐	☐	☐
54.25	55.17	0.92	LST	0.92	100	W229742	☐	N17-045	Core		☐	☐	☐
54.25	55.17	0.92	LST	0.92	100	W229743	☐	N17-045	Core		☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
55.17	58.22	3.05	LST	2.79	91	W229744	☐	N17-045	Core	CS3	☐	☐	☐
55.17	58.22	3.05	LST	2.79	91	W229745	☐	N17-045	Core		☐	☑	☐
58.22	61.26	3.04	LST	2.86	94	W229746	☐	N17-045	Core		☐	☐	☐
61.26	64.31	3.05	LST	2.40	79	W229747	☐	N17-045	Core		☐	☐	☐
64.31	67.36	3.05	LST	2.63	86	W229748	☐	N17-045	Core		☐	☐	☐
67.36	70.41	3.05	LST	2.90	95	W229749	☐	N17-045	Core		☐	☐	☐
70.41	73.46	3.05	LST	2.68	88	W229750	☐	N17-045	Core		☐	☐	☐
73.46	76.50	3.04	LST	2.67	88	W229751	☐	N17-045	Core		☐	☐	☐
76.50	79.55	3.05	LST	2.98	98	W229752	☐	N17-045	Core		☐	☐	☐
79.55	80.90	1.35	LST	1.34	99	W229753	☐	N17-045	Core		☐	☐	☐
80.90	82.22	1.32	LST	1.23	93	W229754	☐	N17-045	Core		☐	☐	☐
82.22	84.00	1.78	LST	1.59	89	W229757	☐	N17-048	core		☐	☐	☐
84.00	85.65	1.65	LST	1.58	96	W229758	☐	N17-048	core		☐	☐	☐
85.65	88.70	3.05	LST	3.00	98	W229759	☐	N17-048	core		☐	☐	☐
88.70	91.74	3.04	LST	2.51	83	W229760	☐	N17-048	core		☐	☐	☐
91.74	94.79	3.05	LST	2.83	93	W229761	☐	N17-048	core		☐	☐	☐
94.79	97.84	3.05	LST	2.05	67	W229762	☐	N17-048	core		☐	☐	☐
97.84	100.53	2.69	LST	2.59	96	W229763	☐	N17-048	core		☐	☐	☐
100.53	101.62	1.09	LST	1.09	100	W229764	☐	N17-048	core		☐	☐	☐
101.62	103.94	2.32	LST	2.17	94	W229766	☐	N17-048	core		☐	☐	☐
103.94	106.98	3.04	LST	2.77	91	W229767	☐	N17-048	core		☐	☐	☐
106.98	110.03	3.05	LST	2.90	95	W229768	☐	N17-048	core		☐	☐	☐
106.98	110.03	3.05	LST	2.90	95	W229769	☐	N17-048	core		☐	☐	☑
110.03	111.79	1.76	LST	1.76	100	W229770	☐	N17-048	core		☐	☐	☐
111.79	113.91	2.12	LST	1.90	90	W229771	☐	N17-048	core		☐	☐	☐
113.91	115.59	1.68	LST	1.58	94	W229772	☐	N17-048	core		☐	☐	☐
115.59	117.69	2.10	LST	2.10	100	W229773	☐	N17-048	core		☐	☐	☐
117.69	118.80	1.11	LST	1.11	100	W229775	☐	N17-048	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
118.80	120.58	1.78	LST	1.78	100	W229777	☐	N17-048	core		☐	☐	☐
120.58	122.53	1.95	LST	1.72	88	W229778	☐	N17-048	core		☐	☐	☐
122.53	125.58	3.05	LST	2.96	97	W229779	☐	N17-048	core		☐	☐	☐
122.53	125.58	3.05	LST	2.96	97	W229780	☐	N17-048	core		☐	☑	☐
125.58	128.63	3.05	LST	2.92	96	W229781	☐	N17-048	core		☐	☐	☐
128.63	131.67	3.04	LST	2.63	87	W229782	☐	N17-048	core		☐	☐	☐
131.67	134.72	3.05	LST	3.04	100	W229783	☐	N17-048	core		☐	☐	☐
134.72	137.77	3.05	LST	2.99	98	W229784	☐	N17-048	core		☐	☐	☐
137.77	140.82	3.05	LST	2.85	93	W229786	☐	N17-048	core		☐	☐	☐
140.82	143.87	3.05	LST	2.89	95	W229787	☐	N17-048	core		☐	☐	☐
143.87	146.91	3.04	LST	2.87	94	W229788	☐	N17-048	core		☐	☐	☐
146.91	149.96	3.05	LST	2.74	90	W229789	☐	N17-048	core		☐	☐	☐
149.96	153.01	3.05	LST	3.04	100	W229790	☐	N17-048	core		☐	☐	☐
153.01	156.06	3.05	LST	3.04	100	W229791	☐	N17-048	core		☐	☐	☐
156.06	159.11	3.05	LST	3.04	100	W229792	☐	N17-048	core		☐	☐	☐
159.11	162.15	3.04	LST	2.78	91	W229793	☐	N17-049	core		☐	☐	☐
162.15	165.20	3.05	LST	2.56	84	W229794	☐	N17-049	core		☐	☐	☐
165.20	168.25	3.05	DST	2.40	79	W229795	☐	N17-049	core		☐	☐	☐
168.25	171.30	3.05	DST	2.63	86	W229796	☐	N17-049	core		☐	☐	☐
171.30	174.35	3.05	DST	2.31	76	W229797	☐	N17-049	core		☐	☐	☐
174.35	177.39	3.04	DST	2.93	96	W229798	☐	N17-049	core		☐	☐	☐
177.39	180.44	3.05	DST	2.95	97	W229800	☐	N17-049	core		☐	☐	☐
180.44	183.49	3.05	DST	2.61	86	W229801	☐	N17-049	core		☐	☐	☐
183.49	186.54	3.05	DST	2.55	84	W229802	☐	N17-049	core		☐	☐	☐
186.54	188.76	2.22	DST	2.14	96	W229803	☐	N17-049	core		☐	☐	☐
188.76	190.50	1.74	DST	0.97	56	W229804	☐	N17-049	core		☐	☐	☐
190.50	192.95	2.45	DST	0.93	38	W229806	☐	N17-049	core		☐	☐	☐
192.95	195.68	2.73	DST	2.43	89	W229807	☐	N17-049	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
192.95	195.68	2.73	DST	2.43	89	W229808	☐	N17-049	core		☐	☐	☑
195.68	198.73	3.05	DST	2.71	89	W229809	☐	N17-049	core		☐	☐	☐
198.73	201.78	3.05	DST	2.71	89	W229810	☐	N17-049	core		☐	☐	☐
201.78	204.83	3.05	DST	2.44	80	W229812	☐	N17-049	core		☐	☐	☐
204.83	207.87	3.04	DST	2.94	97	W229813	☐	N17-049	core		☐	☐	☐
204.83	207.87	3.04	DST	2.94	97	W229814	☐	N17-049	core		☐	☑	☐
207.87	210.92	3.05	DST	2.67	88	W229815	☐	N17-049	core		☐	☐	☐
210.92	212.44	1.52	DST	1.04	68	W229816	☐	N17-049	core		☐	☐	☐
212.44	213.97	1.53	DST	1.42	93	W229817	☐	N17-049	core		☐	☐	☐
213.97	217.02	3.05	DST	2.82	92	W229818	☐	N17-049	core		☐	☐	☐
217.02	220.07	3.05	DST	2.76	90	W229819	☐	N17-049	core		☐	☐	☐
220.07	223.11	3.04	DST	2.85	94	W229820	☐	N17-049	core		☐	☐	☐
223.11	226.16	3.05	DST	3.05	100	W229821	☐	N17-049	core		☐	☐	☐
226.16	229.21	3.05	DST	2.75	90	W229822	☐	N17-049	core		☐	☐	☐
229.21	232.26	3.05	DST	2.82	92	W229824	☐	N17-049	core		☐	☐	☐
232.26	235.31	3.05	DST	2.90	95	W229825	☐	N17-049	core		☐	☐	☐
235.31	238.35	3.04	DST	2.30	76	W229826	☐	N17-049	core		☐	☐	☐
238.35	241.40	3.05	DST	3.05	100	W229827	☐	N17-049	core		☐	☐	☐
241.40	244.45	3.05	DST	3.05	100	W229828	☐	N17-049	core		☐	☐	☐
244.45	247.50	3.05	DST	3.01	99	W229829	☐	N17-052	core		☐	☐	☐
247.50	250.54	3.04	DST	3.03	100	W229830	☐	N17-052	core		☐	☐	☐
250.54	252.30	1.76	DST	1.76	100	W229831	☐	N17-052	core		☐	☐	☐
252.30	254.28	1.98	DST	1.97	99	W229832	☐	N17-052	core		☐	☐	☐
252.30	254.28	1.98	DST	1.97	99	W229833	☐	N17-052	core		☐	☑	☐
254.28	256.64	2.36	DST, DMT	2.30	97	W229834	☐	N17-052	core		☐	☐	☐
256.64	259.69	3.05	DMT	2.94	96	W229835	☐	N17-052	core		☐	☐	☐
259.69	262.74	3.05	DMT	2.94	96	W229836	☐	N17-052	core		☐	☐	☐
262.74	265.79	3.05	DMT	3.05	100	W229837	☐	N17-052	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
265.79	268.83	3.04	DMT	2.88	95	W229838	☐	N17-052	core		☐	☐	☐

OS -17-243

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
0.00	13.64	13.64	OVB	--	No recovery from 0.00 - 4.57m; chippy brown and green mudstone; heavily oxidized, weathered, and fractured							
						--	--	---	---	--		
13.64	18.91	5.27	DST	FG	Medium grey, thinly bedded and bleached, brecciated dolostone							
									BLE	4I		
18.91	32.65	13.74	SLC	FG	Dark to medium grey siliciclastic with sandy beds and silty and pyritic laminations							
						DK	GY					
						MD	GY	BD			Py	0.01
32.65	35.05	2.40	INT	MG	Conrad Intrusive							
						LT	GY					
						--	CR					
						--	BG	CR	BLE	2I		
35.05	403.86	368.81	SLC	FG	Dark to medium grey thinly bedded siliciclastic. Beds are composed of black siltstone/shale (50%), light grey siltstone (30%), and light to medium grey quartz arenite(20%).							
						MD	GY					
						DK	GY	BD				

OS -17-243

Nadaleen
Conrad Zone

Archer,Cathro & Associates (1981) Limited

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	4.57	4.57	0	0	0.00	0	--	--	--	
4.57	7.62	3.05	0.67	22	0.00	0	2R	2H	5W	
7.62	10.67	3.05	0.83	27	0.00	0	0R	2H	5W	
10.67	13.72	3.05	1.46	48	0.00	0	0R	2H	5W	
13.72	16.76	3.04	1.76	58	0.10	3	0R	2H	4W	
16.76	19.81	3.05	2.43	80	1.21	40	1R	5H	3W	
19.81	22.86	3.05	2.05	67	0.50	16	0R	4H	2W	
22.86	25.91	3.05	2.19	72	0.74	24	0R	4H	2W	
25.91	28.96	3.05	2.42	79	1.58	52	0R	4H	1W	
28.96	32.00	3.04	2.27	75	0.60	20	0R	3H	2W	
32.00	35.05	3.05	2.03	67	0.83	27	0R	4H	1W	
35.05	38.10	3.05	2.59	85	0.35	11	0R	2H	2W	
38.10	41.15	3.05	2.33	76	0.80	26	0R	2H	1W	
41.15	44.20	3.05	2.59	85	0.47	15	0R	2H	2W	
44.20	47.24	3.04	2.49	82	0.54	18	0R	3H	2W	
47.24	51.82	4.58	3.89	85	1.00	22	0R	2H	1W	
51.82	54.86	3.04	2.3	76	0.70	23	0R	2H	1W	
54.86	57.91	3.05	1.72	56	0.33	11	0R	1H	1W	
57.91	60.96	3.05	2.76	90	0.84	28	0R	1H	1W	
60.96	64.01	3.05	2.51	82	0.73	24	1R	1H	1W	
64.01	67.06	3.05	2.75	90	1.64	54	1R	1H	1W	
67.06	70.10	3.04	3	99	2.67	88	1R	1H	1W	
70.10	74.68	4.58	3.2	70	1.30	28	1R	1H	1W	
74.68	79.25	4.57	2.16	47	0.35	8	1R	1H	1W	
79.25	82.30	3.05	2	66	1.20	39	1R	1H	1W	
82.30	85.34	3.04	2.56	84	1.02	34	1R	1H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
85.34	88.39	3.05	2.44	80	0.84	28	1R	2H	1W	Two joint sets, one cutting along bedding at 60deg .05m apart, second set cutting subperpendicular to bedding at approx. 35deg. Second set less frequent. Overall there is a rubble zone, hence the '5 joint sets' - however there are two discernable sets of joints in moderately competent rock
88.39	91.44	3.05	2.79	91	1.12	37	1R	2H	1W	Similar to above interval with two joint sets. HOWEVER there is one fracture that is parallel to CA, this fracture is not repeated. The '5 joint sets' represents a approx. .3m rubble zone. Rocks is more competent than the number of joint sets indicates.
91.44	94.49	3.05	2.1	69	0.10	3	1R	1H	1W	
94.49	97.54	3.05	3	98	0.96	31	1R	1H	1W	some smaller intevals of more competent core. One interal (95-95.22) with clay infilled joints - structure not repeated in run.
97.54	100.58	3.04	2.47	81	0.89	29	1R	3H	1W	
100.58	103.63	3.05	2.2	72	1.10	36	1R	1H	1W	
103.63	106.68	3.05	1.89	62	0.55	18	0R	2H	1W	bedding parallel joint set towards end of run 105.5-106.68
106.68	109.73	3.05	2.65	87	1.05	34	0R	3H	1W	
109.73	112.78	3.05	2.72	89	1.46	48	1R	2H	1W	
112.78	115.82	3.04	2.61	86	1.14	38	1R	2H	1W	rubble zone from 113.90 - 114.40. bedding parallel jointing approx. .1-.2m apart, 35-45 TCA
115.82	118.87	3.05	2.71	89	1.56	51	1R	2H	1W	bedding parallel joint set, variable angle (15-50 TCA) as bedding exhibits changes in attitude
118.87	121.92	3.05	2.15	70	0.83	27	1R	2H	1W	bedding parallel joint set, variable angles as bedding appears to be folded.
121.92	124.97	3.05	3.05	100	1.58	52	0R	3H	1W	rubble zone from 122.20-122.40 is a joint set parallel to bedding, bedding parallel TCA. Competency difference in the rest of the run due to change in angle TCA of bedding & assoc jointing

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
124.97	128.02	3.05	2.52	83	0.88	29	1R	2H	1W	two tiny rubble zones, less than .1m extremely likely that they are both mechanical
128.02	131.06	3.04	2.3	76	0.68	22	1R	1H	1W	non-mechanical rubble zones. RZ in less competent beds. Overll the interval is hard (3H), and has two joint sets: 30 TCA (|| to bedding) and 75-65 TCA (cutting bedding). Joint sets intersect.
131.06	134.11	3.05	2.72	89	1.17	38	1R	2H	1W	
134.11	137.16	3.05	2.81	92	1.78	58	1R	2H	1W	
137.16	140.21	3.05	3	98	2.28	75	1R	2H	1W	
140.21	143.26	3.05	2.93	96	1.69	55	1R	2H	1W	.1m wide RZ 141.10-.20. fracture surfaces locally from 142.50-143.26
143.26	146.30	3.04	2.49	82	1.57	52	1R	2H	1W	
146.30	149.35	3.05	2.38	78	1.11	36	1R	2H	1W	3 RZ less than .1m wide. In general two sets of joints, one || to bedding w variable angle TCA (bed orinetation changing in interval), second set of joints cutting bedding at a high angle (60-80 deg) TCA.
149.35	152.40	3.05	2.86	94	0.56	18	1R	2H	1W	
152.40	155.45	3.05	3	98	1.40	46	0R	2H	1W	
155.45	158.50	3.05	2.75	90	0.79	26	0R	2H	1W	
158.50	161.54	3.04	3	99	1.93	63	0R	2H	1W	
161.54	164.59	3.05	3.05	100	2.78	91	0R	2H	1W	
164.59	167.64	3.05	2.82	92	2.26	74	0R	2H	1W	
167.64	170.69	3.05	2.75	90	1.23	40	0R	2H	1W	
170.69	173.74	3.05	2.83	93	1.83	60	1R	2H	1W	
173.74	176.78	3.04	3	99	1.73	57	1R	2H	1W	
176.78	179.83	3.05	2.78	91	0.51	17	1R	1H	1W	clay rich significantly less competent between 177-178.31, RZ between 178.5-179.4
179.83	182.88	3.05	2.38	78	1.55	51	1R	2H	1W	
182.88	185.93	3.05	2.29	75	1.69	55	0R	2H	1W	
185.93	188.98	3.05	3.05	100	1.15	38	0R	2H	1W	
188.98	192.02	3.04	2.94	97	1.06	35	0R	2H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
192.02	195.07	3.05	2.4	79	0.28	9	1R	1H	1W	
195.07	198.12	3.05	2.14	70	0.77	25	1R	2H	1W	
198.12	201.17	3.05	3.05	100	2.32	76	1R	2H	1W	
201.17	204.22	3.05	2.56	84	1.43	47	1R	2H	1W	
204.22	207.26	3.04	3.04	100	2.09	69	0R	2H	1W	
207.26	210.31	3.05	2.85	93	1.98	65	1R	2H	1W	
210.31	213.36	3.05	2.56	84	1.81	59	1R	2H	1W	
213.36	216.41	3.05	2.76	90	2.36	77	0R	3H	1W	
216.41	219.46	3.05	3.05	100	2.63	86	1R	2H	1W	
219.46	222.50	3.04	2.81	92	2.48	82	1R	2H	1W	
222.50	225.55	3.05	2.67	88	2.42	79	1R	2H	1W	
225.55	228.60	3.05	3.05	100	1.71	56	1R	2H	1W	
228.60	231.65	3.05	2.85	93	2.48	81	1R	2H	1W	
231.65	234.70	3.05	3	98	2.18	71	1R	2H	1W	
234.70	237.74	3.04	3.01	99	2.81	92	0R	3H	1W	Two single joint orientations (two 0.5's)
237.74	240.79	3.05	2.91	95	2.48	81	1R	3H	1W	
240.79	243.84	3.05	2.92	96	2.89	95	0R	4H	1W	
243.84	246.89	3.05	2.89	95	2.84	93	0R	4H	1W	
246.89	249.94	3.05	2.98	98	2.98	98	0R	4H	1W	
249.94	252.98	3.04	2.9	95	2.90	95	0R	4H	1W	
252.98	256.03	3.05	2.9	95	2.83	93	0R	4H	1W	
256.03	259.08	3.05	2.99	98	2.91	95	0R	4H	1W	Two single joint orientations (two 0.5 sets)
259.08	262.13	3.05	3.02	99	2.78	91	0R	4H	1W	
262.13	265.18	3.05	3.04	100	2.98	98	0R	4H	1W	
265.18	268.22	3.04	2.76	91	2.76	91	1R	4H	1W	
268.22	271.27	3.05	3.05	100	2.92	96	1R	4H	1W	
271.27	274.32	3.05	2.71	89	1.72	56	1R	4H	1W	
274.32	277.37	3.05	2.92	96	2.44	80	1R	4H	1W	
277.37	280.42	3.05	3	98	1.86	61	1R	4H	1W	
280.42	283.46	3.04	2.72	89	2.57	85	1R	4H	1W	
283.46	286.51	3.05	2.99	98	2.65	87	1R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
286.51	289.56	3.05	2.76	90	2.61	86	0R	3H	1W	
289.56	292.61	3.05	2.83	93	2.63	86	0R	3H	1W	RBZ at 292m
292.61	295.66	3.05	3.05	100	2.58	85	0R	3H	1W	
295.66	298.70	3.04	2.94	97	2.66	88	0R	3H	1W	RBZ at 296m
298.70	301.75	3.05	2.89	95	2.62	86	0R	3H	1W	RBZ at 301m
301.75	304.80	3.05	3	98	2.58	85	0R	3H	1W	
304.80	307.85	3.05	2.83	93	2.72	89	0R	3H	1W	
307.85	310.90	3.05	2.91	95	2.79	91	0R	3H	1W	
310.90	313.94	3.04	2.96	97	2.75	90	0R	3H	1W	
313.94	316.99	3.05	3.05	100	3.00	98	0R	3H	1W	
316.99	320.04	3.05	3.05	100	3.00	98	0R	3H	1W	
320.04	323.09	3.05	2.95	97	2.89	95	1R	3H	1W	Joints had slightly reactive infill
323.09	326.14	3.05	3.05	100	3.00	98	0R	3H	1W	
326.14	329.18	3.04	3.04	100	3.00	99	0R	3H	1W	
329.18	332.23	3.05	3.05	100	3.00	98	0R	3H	1W	
332.23	335.28	3.05	3.05	100	3.00	98	0R	3H	1W	
335.28	338.33	3.05	3.05	100	3.00	98	0R	3H	1W	
338.33	341.38	3.05	3.05	100	3.00	98	0R	3H	1W	
341.38	344.42	3.04	2.97	98	2.95	97	0R	3H	1W	
344.42	347.47	3.05	2.96	97	2.88	94	1R	3H	1W	
347.47	350.52	3.05	3.05	100	2.70	89	1R	4H	1W	One fracture, 55 TCA, smooth frac surface, clay infill about 2 mm thick, light grey
350.52	353.57	3.05	2.77	91	2.51	82	0R	3H	1W	
353.57	356.62	3.05	2.86	94	2.81	92	1R	3H	1W	
356.62	359.66	3.04	3.03	100	2.83	93	1R	3H	1W	
359.66	362.71	3.05	3.05	100	2.78	91	0R	4H	1W	
362.71	365.76	3.05	2.96	97	2.56	84	0R	4H	1W	
365.76	368.81	3.05	3.04	100	3.04	100	0R	4H	1W	
368.81	371.86	3.05	3.05	100	2.55	84	0R	3H	1W	2-3mm of clay infilling around a vein that is the fracture plane. One single fracture pair = 1 joint set. Not exciting at all
371.86	374.90	3.04	2.78	91	2.56	84	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
374.90	377.95	3.05	2.98	98	2.90	95	0R	3H	1W	
377.95	381.00	3.05	2.92	96	2.84	93	1R	3H	1W	
381.00	384.05	3.05	2.87	94	2.43	80	1R	3H	1W	
384.05	387.10	3.05	2.79	91	2.20	72	2R	1H	1W	
387.10	390.14	3.04	2.88	95	1.93	63	1R	3H	1W	mechanical fracctures, no real joint sets n.b. run has more mechanical fractures than the top of the bench (from box 121-135)
390.14	393.19	3.05	2.76	90	2.27	74	1R	3H	1W	
393.19	396.24	3.05	2.48	81	1.08	35	0R	3H	1W	
396.24	399.29	3.05	2.32	76	1.27	42	0R	3H	1W	
399.29	402.34	3.05	3	98	2.53	83	0R	3H	1W	
402.34	403.86	1.52	1.3	86	0.90	59	1R	3H	1W	mechanical joint set, however is regular and fracturing along bedding planes

OS -17-243

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W228984	☐	N17-051	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232351	☐	N17-085	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232342	☐	N17-085	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232337	☐	N17-085	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229000	☐	N17-051	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228912	☐	N17-047	core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228987	☐	N17-051	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228969	☐	N17-050	Core	CS5	☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228963	☐	N17-050	Core	CS5	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228954	☐	N17-050	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228944	☐	N17-050	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228935	☐	N17-047	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228932	☐	N17-047	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228917	☐	N17-047	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W228993	☐	N17-051	core		☑	☐	☐
13.64	15.24	1.60	OVB, DST	1.09	68	W228910	☐	N17-047	core		☐	☐	☐
15.24	16.76	1.52	DST	0.97	64	W228911	☐	N17-047	core		☐	☐	☐
16.76	18.91	2.15	DST	1.78	83	W228913	☐	N17-047	core		☐	☐	☐
18.91	21.34	2.43	SLC, DST	1.91	79	W228914	☐	N17-047	core		☐	☐	☐
21.34	22.86	1.52	SLC	1.24	82	W228915	☐	N17-047	core		☐	☐	☐
22.86	25.91	3.05	SLC	2.19	72	W228916	☐	N17-047	core		☐	☐	☐
25.91	27.43	1.52	SLC	1.52	100	W228918	☐	N17-047	core		☐	☐	☐
27.43	30.48	3.05	SLC	1.95	64	W228919	☐	N17-047	core		☐	☐	☐
30.48	32.65	2.17	SLC	1.63	75	W228920	☐	N17-047	core		☐	☐	☐
30.48	32.65	2.17	SLC	1.63	75	W228921	☐	N17-047	core		☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
32.65	35.05	2.40	INT, SLC	1.63	68	W228922	☐	N17-047	core		☐	☐	☐
35.05	38.10	3.05	SLC, INT	2.59	85	W228924	☐	N17-047	core		☐	☐	☐
38.10	41.15	3.05	SLC	2.33	76	W228925	☐	N17-047	core		☐	☐	☐
41.15	44.20	3.05	SLC	2.59	85	W228926	☐	N17-047	core		☐	☐	☐
44.20	47.24	3.04	SLC	2.49	82	W228927	☐	N17-047	core		☐	☐	☐
47.24	50.29	3.05	SLC	2.89	95	W228928	☐	N17-047	core		☐	☐	☐
50.29	51.82	1.53	SLC	1.21	79	W228929	☐	N17-047	core		☐	☐	☐
51.82	53.34	1.52	SLC	1.42	93	W228930	☐	N17-047	core		☐	☐	☐
51.82	53.34	1.52	SLC	1.42	93	W228931	☐	N17-047	core		☐	☑	☐
53.34	56.39	3.05	SLC	2.80	92	W228933	☐	N17-047	core		☐	☐	☐
56.39	59.44	3.05	SLC	2.41	79	W228934	☐	N17-047	core		☐	☐	☐
59.44	62.48	3.04	SLC	2.83	93	W228936	☐	N17-047	core		☐	☐	☐
62.48	65.53	3.05	SLC	3.00	98	W228937	☐	N17-050	Core		☐	☐	☐
65.53	68.58	3.05	SLC	3.05	100	W228938	☐	N17-050	Core		☐	☐	☐
68.58	71.63	3.05	SLC	2.89	95	W228939	☐	N17-050	Core		☐	☐	☐
71.63	74.68	3.05	SLC	2.53	83	W228940	☐	N17-050	Core		☐	☐	☐
74.68	77.72	3.04	SLC	2.44	80	W228941	☐	N17-050	Core		☐	☐	☐
77.72	80.11	2.39	SLC	1.57	66	W228942	☐	N17-050	Core		☐	☐	☐
80.11	82.30	2.19	SLC	2.10	96	W228943	☐	N17-050	Core		☐	☐	☐
82.30	85.34	3.04	SLC	2.82	93	W228945	☐	N17-050	Core		☐	☐	☐
82.30	85.34	3.04	SLC	2.82	93	W228946	☐	N17-050	Core		☐	☐	☑
85.34	88.39	3.05	SLC	2.49	82	W228947	☐	N17-050	Core		☐	☐	☐
88.39	91.44	3.05	SLC	2.05	67	W228948	☐	N17-050	Core		☐	☐	☐
91.44	94.49	3.05	SLC	2.68	88	W228949	☐	N17-050	Core		☐	☐	☐
94.49	97.54	3.05	SLC	3.05	100	W228950	☐	N17-050	Core		☐	☐	☐
97.54	100.58	3.04	SLC	2.47	81	W228951	☐	N17-050	Core		☐	☐	☐
100.58	103.63	3.05	SLC	2.20	72	W228952	☐	N17-050	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
103.63	106.68	3.05	SLC	1.89	62	W228953	☐	N17-050	Core		☐	☐	☐
106.68	109.73	3.05	SLC	2.65	87	W228955	☐	N17-050	Core		☐	☐	☐
109.73	112.78	3.05	SLC	2.72	89	W228956	☐	N17-050	Core		☐	☐	☐
112.78	115.82	3.04	SLC	2.61	86	W228957	☐	N17-050	Core		☐	☐	☐
115.82	118.87	3.05	SLC	2.71	89	W228958	☐	N17-050	Core		☐	☐	☐
118.87	121.92	3.05	SLC	2.15	70	W228959	☐	N17-050	Core		☐	☐	☐
121.92	124.97	3.05	SLC	1.58	52	W228960	☐	N17-050	Core		☐	☐	☐
124.97	128.02	3.05	SLC	2.52	83	W228961	☐	N17-050	Core		☐	☐	☐
128.02	131.06	3.04	SLC	2.30	76	W228962	☐	N17-050	Core		☐	☐	☐
131.06	134.11	3.05	SLC	2.72	89	W228964	☐	N17-050	Core		☐	☐	☐
131.06	134.11	3.05	SLC	2.72	89	W228965	☐	N17-050	Core		☐	☑	☐
134.11	137.16	3.05	SLC	2.81	92	W228966	☐	N17-050	Core		☐	☐	☐
137.16	140.21	3.05	SLC	3.00	98	W228967	☐	N17-050	Core		☐	☐	☐
140.21	143.26	3.05	SLC	2.93	96	W228968	☐	N17-050	Core		☐	☐	☐
143.26	146.30	3.04	SLC	2.49	82	W228970	☐	N17-050	Core		☐	☐	☐
146.30	149.35	3.05	SLC	2.38	78	W228971	☐	N17-050	Core		☐	☐	☐
149.35	152.40	3.05	SLC	2.86	94	W228972	☐	N17-050	Core		☐	☐	☐
152.40	155.45	3.05	SLC	3.00	98	W228973	☐	N17-051	core		☐	☐	☐
155.45	158.50	3.05	SLC	2.75	90	W228974	☐	N17-051	core		☐	☐	☐
155.45	158.50	3.05	SLC	2.75	90	W228975	☐	N17-051	core		☐	☑	☐
158.50	164.60	6.10	SLC	6.10	100	Q010862	☐	N17-C01	Core		☐	☐	☐
164.60	170.69	6.09	SLC	6.09	100	Q010863	☐	N17-C01	Core		☐	☐	☐
170.69	173.74	3.05	SLC	2.83	93	W228976	☐	N17-051	core		☐	☐	☐
173.74	176.78	3.04	SLC	3.00	99	W228977	☐	N17-051	core		☐	☐	☐
176.78	179.83	3.05	SLC	2.78	91	W228978	☐	N17-051	core		☐	☐	☐
179.83	182.88	3.05	SLC	2.38	78	W228979	☐	N17-051	core		☐	☐	☐
182.88	188.98	6.10	SLC	6.10	100	Q010864	☐	N17-C01	Core		☐	☐	☐
188.98	192.02	3.04	SLC	3.04	100	W230041	☐	N17-053	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
192.02	195.07	3.05	SLC	2.40	79	W228980	☐	N17-051	core		☐	☐	☐
195.07	198.12	3.05	SLC	2.14	70	W228981	☐	N17-051	core		☐	☐	☐
198.12	201.17	3.05	SLC	3.05	100	W228982	☐	N17-051	core		☐	☐	☐
201.17	207.26	6.09	SLC	6.09	100	Q010865	☐	N17-C01	Core		☐	☐	☐
207.26	213.36	6.10	SLC	6.10	100	Q010866	☐	N17-C01	Core		☐	☐	☐
213.36	219.46	6.10	SLC	6.10	100	Q010867	☐	N17-C01	Core		☐	☐	☐
219.46	225.55	6.09	SLC	6.09	100	Q010868	☐	N17-C01	Core		☐	☐	☐
225.55	231.65	6.10	SLC	6.10	100	Q010869	☐	N17-C01	Core		☐	☐	☐
231.65	234.70	3.05	SLC	3.00	98	W228983	☐	N17-051	core		☐	☐	☐
234.70	237.74	3.04	SLC	3.01	99	W228985	☐	N17-051	core		☐	☐	☐
237.74	240.79	3.05	SLC	2.91	95	W228986	☐	N17-051	core		☐	☐	☐
240.79	246.89	6.10	SLC	5.96	98	Q010870	☐	N17-C01	Core		☐	☐	☐
246.89	252.98	6.09	SLC	5.92	97	Q010871	☐	N17-C01	Core		☐	☐	☐
252.98	259.08	6.10	SLC	6.06	99	Q010872	☐	N17-C01	Core		☐	☐	☐
259.08	262.13	3.05	SLC	3.02	99	W232333	☐	N17-085	core		☐	☐	☐
259.08	265.18	6.10	SLC	6.10	100	Q010873	☐	N17-C02	Chip		☐	☐	☐
262.13	265.18	3.05	SLC	3.04	100	W232334	☐	N17-085	core		☐	☐	☐
265.18	268.22	3.04	SLC	2.76	91	W232335	☐	N17-085	core		☐	☐	☐
265.18	271.27	6.09	SLC	5.96	98	Q010874	☐	N17-C02	Chip		☐	☐	☐
268.22	271.27	3.05	SLC	3.05	100	W232336	☐	N17-085	core		☐	☐	☐
271.27	274.32	3.05	SLC	2.71	89	W228988	☐	N17-051	core		☐	☐	☐
274.32	276.65	2.33	SLC	2.33	100	W228989	☐	N17-051	core		☐	☐	☐
276.65	278.89	2.24	SLC	2.16	96	W228990	☐	N17-051	core		☐	☐	☐
278.89	280.42	1.53	SLC	1.53	100	W228991	☐	N17-051	core		☐	☐	☐
280.42	281.94	1.52	SLC	1.46	96	W228992	☐	N17-051	core		☐	☐	☐
281.94	283.46	1.52	SLC	1.52	100	W228994	☐	N17-051	core		☐	☐	☐
283.46	286.51	3.05	SLC	2.99	98	W232338	☐	N17-085	core		☐	☐	☐
283.46	288.04	4.58	SLC	4.34	95	Q010875	☐	N17-C02	Chip		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
286.51	289.56	3.05	SLC	2.76	90	W232339	☐	N17-085	core		☐	☐	☐
288.04	291.09	3.05	SLC	2.83	93	Q010876	☐	N17-C02	Chip		☐	☐	☐
289.56	291.09	1.53	SLC	1.52	99	W232340	☐	N17-085	core		☐	☐	☐
291.09	292.61	1.52	SLC	1.35	89	W228995	☐	N17-051	core		☐	☐	☐
292.61	295.66	3.05	SLC	3.05	100	W232341	☐	N17-085	core		☐	☐	☐
292.61	298.70	6.09	SLC	5.99	98	Q010877	☐	N17-C02	Chip		☐	☐	☐
295.66	298.70	3.04	SLC	2.94	97	W232343	☐	N17-085	core		☐	☐	☐
298.70	301.75	3.05	SLC	2.89	95	W232344	☐	N17-085	core		☐	☐	☐
298.70	304.80	6.10	SLC	5.89	97	Q010878	☐	N17-C02	Chip		☐	☐	☐
301.75	304.80	3.05	SLC	3.00	98	W232345	☐	N17-085	core		☐	☐	☐
304.80	310.90	6.10	SLC	5.74	94	Q010879	☐	N17-C02	Chip		☐	☐	☐
304.80	307.85	3.05	SLC	2.83	93	W232346	☐	N17-085	core		☐	☐	☐
304.80	307.85	3.05	SLC	2.83	93	W232347	☐	N17-085	core		☐	☐	☑
307.85	310.90	3.05	SLC	2.91	95	W232348	☐	N17-085	core		☐	☐	☐
310.90	316.99	6.09	SLC	6.01	99	Q010880	☐	N17-C02	Chip		☐	☐	☐
316.99	323.09	6.10	SLC	6.00	98	Q010881	☐	N17-C02	Chip		☐	☐	☐
323.09	329.18	6.09	SLC	6.09	100	Q010882	☐	N17-C02	Chip		☐	☐	☐
329.18	335.28	6.10	SLC	6.10	100	Q010883	☐	N17-C02	Chip		☐	☐	☐
335.28	341.38	6.10	SLC	6.10	100	Q010884	☐	N17-C02	Chip		☐	☐	☐
341.38	347.47	6.09	SLC	5.93	97	Q010885	☐	N17-C02	Chip		☐	☐	☐
347.47	353.57	6.10	SLC	5.82	95	Q010886	☐	N17-C02	Chip		☐	☐	☐
353.57	359.66	6.09	SLC	5.89	97	Q010887	☐	N17-C02	Chip		☐	☐	☐
359.66	365.76	6.10	SLC	6.01	99	Q010888	☐	N17-C02	Chip		☐	☐	☐
365.76	371.86	6.10	SLC	6.09	100	Q010889	☐	N17-C02	Chip		☐	☐	☐
371.86	374.90	3.04	SLC	2.78	91	W232349	☐	N17-085	core		☐	☐	☐
371.86	377.95	6.09	SLC	5.76	95	Q010890	☐	N17-C02	Chip		☐	☐	☐
374.90	377.95	3.05	SLC	2.98	98	W232350	☐	N17-085	core		☐	☐	☐
377.95	381.00	3.05	SLC	2.92	96	W232352	☐	N17-085	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
377.95	382.52	4.57	SLC	4.31	94	Q010891	☐	N17-C02	Chip		☐	☐	☐
381.00	384.05	3.05	SLC	2.87	94	W232359	☐	N17-085	core		☐	☐	☐
382.52	385.57	3.05	SLC	2.86	94	Q010892	☐	N17-C02	Chip		☐	☐	☐
384.05	385.57	1.52	SLC	1.07	70	W232353	☐	N17-085	core		☐	☐	☐
385.57	387.10	1.53	SLC	1.50	98	W228996	☐	N17-051	core		☐	☐	☐
385.57	387.10	1.53	SLC	1.50	98	W228997	☐	N17-051	core		☐	☐	☑
387.10	390.14	3.04	SLC	2.88	95	W228998	☐	N17-051	core		☐	☐	☐
390.14	393.19	3.05	SLC	2.76	90	W228999	☐	N17-051	core		☐	☐	☐
393.19	396.24	3.05	SLC	2.48	81	W230001	☐	N17-051	core		☐	☐	☐
396.24	399.29	3.05	SLC	2.32	76	W230002	☐	N17-051	core		☐	☐	☐
399.29	402.34	3.05	SLC	3.00	98	W230003	☐	N17-051	core		☐	☐	☐
402.34	403.86	1.52	SLC	1.30	86	W230004	☐	N17-051	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

OS -17-244

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	1.22	1.22	0	0	0.00	0	--	--	--	Overburden
1.22	7.32	6.10	0.88	14	0.00	0	2R	3H	2W	mostly ground core. Chips are rarely more than 4cm in length. Individual chips are hard
7.32	11.89	4.57	0.45	10	0.00	0	2R	3H	1W	ground/spun core
11.89	16.46	4.57	0.8	18	0.00	0	2R	3H	1W	ground/spun core
16.46	22.56	6.10	0.63	10	0.00	0	2R	3H	1W	ground/spun core - verging on overburden
22.56	28.65	6.09	1.4	23	0.00	0	2R	2H	1W	mix of groud core with gravel - highly likely that this is still overburden
28.65	33.22	4.57	3	66	0.39	9	0R	2H	1W	lots of clay mixed in with mostly ground core
33.22	36.27	3.05	1.9	62	0.42	14	0R	2H	1W	
36.27	39.32	3.05	2.91	95	0.00	0	1R	2H	1W	thick (2mm) cal on fracture surfaces. Starting to get out of complete rubble zones and trending to a regular set of fractures.
39.32	42.37	3.05	2.3	75	0.22	7	0R	2H	1W	spun core, lots of drilling mud
42.37	45.42	3.05	2.2	72	0.66	22	0R	2H	1W	almost an entire row of drilling mud/mush. Lots of fractured core, doesn't have the rounded edges typically seen with spun core.
45.42	48.46	3.04	2.8	92	0.84	28	0R	2H	1W	
48.46	51.51	3.05	2.97	97	1.63	53	0R	2H	1W	
51.51	54.56	3.05	2.98	98	1.39	46	0R	2H	1W	
54.56	57.61	3.05	3	98	2.54	83	0R	2H	1W	
57.61	60.66	3.05	2.8	92	2.07	68	0R	2H	1W	
60.66	63.70	3.04	3	99	2.36	78	0R	2H	1W	some irregular fractures
63.70	66.75	3.05	2.94	96	1.61	53	0R	2H	1W	one fracture running || TCA, no pair so not counted in joint sets
66.75	69.80	3.05	2.85	93	1.98	65	0R	2H	1W	
69.80	72.85	3.05	2.94	96	2.19	72	0R	2H	1W	
72.85	75.90	3.05	3.05	100	2.80	92	0R	2H	1W	
75.90	78.94	3.04	2.61	86	2.11	69	0R	2H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
78.94	81.99	3.05	2.67	88	1.52	50	0R	2H	1W	
81.99	85.04	3.05	2.79	91	2.12	70	0R	2H	1W	
85.04	88.09	3.05	3.03	99	2.24	73	0R	2H	1W	
88.09	91.14	3.05	2.79	91	1.96	64	0R	2H	1W	
91.14	94.18	3.04	2.95	97	1.42	47	0R	2H	1W	
94.18	97.23	3.05	2.88	94	2.34	77	0R	2H	1W	
97.23	99.97	2.74	2.74	100	2.34	85	0R	2H	1W	
99.97	103.02	3.05	3.03	99	2.90	95	0R	2H	1W	
103.02	106.07	3.05	2.99	98	2.59	85	0R	2H	1W	50deg joint at 104.75m has rock clay infill width of 2cm
106.07	109.12	3.05	2.97	97	2.23	73	0R	2H	1W	
109.12	112.17	3.05	3.05	100	2.18	71	0R	2H	1W	
112.17	115.21	3.04	2.92	96	1.71	56	0R	2H	1W	
115.21	118.26	3.05	2.88	94	1.35	44	0R	2H	1W	
118.26	121.31	3.05	2.83	93	1.29	42	0R	2H	1W	
121.31	124.36	3.05	3	98	2.74	90	4R	3H	1W	
124.36	127.41	3.05	2.89	95	2.10	69	1R	3H	1W	Calcite in 30deg joint is partially replaced by Re.
127.41	130.45	3.04	3.04	100	2.47	81	4R	3H	1W	
130.45	133.50	3.05	2.96	97	2.52	83	3R	3H	1W	
133.50	136.55	3.05	3.04	100	1.95	64	4R	3H	1W	
136.55	139.60	3.05	2.85	93	2.46	81	3R	3H	1W	
139.60	142.64	3.04	2.93	96	2.57	85	4R	3H	1W	
142.64	145.69	3.05	3.05	100	2.64	87	4R	3H	1W	
145.69	148.74	3.05	2.89	95	2.37	78	4R	3H	1W	
148.74	151.79	3.05	2.99	98	2.47	81	4R	3H	1W	
151.79	154.84	3.05	2.74	90	1.38	45	4R	3H	1W	Re in 70deg joint
154.84	157.89	3.05	2.95	97	2.11	69	1R	3H	1W	
157.89	160.93	3.04	3.04	100	2.90	95	4R	3H	1W	
160.93	163.98	3.05	3.01	99	2.70	89	4R	3H	1W	
163.98	167.03	3.05	2.97	97	2.52	83	4R	3H	1W	
167.03	170.08	3.05	2.64	87	1.76	58	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
170.08	173.13	3.05	2.98	98	2.25	74	4R	3H	1W	
173.13	176.17	3.04	3.04	100	2.56	84	4R	3H	1W	
176.17	179.22	3.05	2.61	86	1.71	56	4R	3H	1W	Re in 40deg joints. RBZ 177.80-178.75m.
179.22	182.27	3.05	2.52	83	1.84	60	4R	3H	1W	RBZ 179.60-179.75
182.27	185.32	3.05	2.86	94	2.11	69	4R	3H	1W	Re & Om in 45deg joints
185.32	188.37	3.05	2.97	97	2.38	78	2R	3H	1W	
188.37	191.41	3.04	2.89	95	2.37	78	4R	3H	1W	
191.41	194.46	3.05	2.97	97	1.78	58	4R	3H	1W	
194.46	197.51	3.05	2.95	97	2.64	87	3R	3H	1W	
197.51	200.56	3.05	2.69	88	2.19	72	3R	3H	1W	
200.56	203.61	3.05	2.68	88	1.88	62	3R	3H	1W	
203.61	206.65	3.04	2.84	93	1.59	52	4R	3H	1W	
206.65	209.70	3.05	2.82	92	2.02	66	3R	3H	1W	
209.70	212.75	3.05	2.84	93	2.03	67	3R	3H	1W	
212.75	215.79	3.04	2.84	93	1.61	53	3R	3H	1W	
215.79	218.85	3.06	2.96	97	2.29	75	3R	3H	1W	Two separate joints
218.85	221.89	3.04	3.01	99	2.67	88	2R	3H	1W	
221.89	224.94	3.05	2.71	89	1.75	57	2R	3H	1W	
224.94	227.99	3.05	3.03	99	2.01	66	3R	3H	1W	
227.99	231.04	3.05	3.03	99	1.12	37	3R	3H	1W	
231.04	234.09	3.05	2.89	95	1.87	61	2R	3H	1W	
234.09	237.13	3.04	2.94	97	1.78	59	2R	3H	1W	
237.13	240.18	3.05	2.96	97	1.93	63	2R	3H	1W	
240.18	243.23	3.05	2.9	95	1.97	65	2R	3H	1W	
243.23	246.28	3.05	2.69	88	1.43	47	2R	3H	1W	
246.28	249.33	3.05	3.05	100	0.88	29	3R	3H	1W	RBZ
249.33	252.37	3.04	2.44	80	0.00	0	3R	3H	1W	RBZ
252.37	255.42	3.05	3.01	99	1.44	47	3R	3H	1W	RBZ
255.42	258.47	3.05	3	98	1.62	53	3R	3H	1W	RBZ
258.47	261.52	3.05	3.02	99	2.00	66	3R	3H	1W	
261.52	264.57	3.05	2.89	95	2.72	89	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
264.57	267.61	3.04	3.04	100	2.95	97	3R	3H	1W	
267.61	270.66	3.05	3.03	99	2.73	90	3R	3H	1W	
270.66	273.71	3.05	3.02	99	2.71	89	3R	3H	1W	
273.71	276.76	3.05	2.9	95	2.82	92	4R	3H	1W	
276.76	279.81	3.05	3.04	100	2.78	91	4R	3H	1W	
279.81	282.85	3.04	3.02	99	2.92	96	4R	3H	1W	
282.85	285.90	3.05	2.92	96	2.48	81	3R	3H	1W	
285.90	288.95	3.05	2.96	97	2.34	77	4R	3H	1W	
288.95	292.00	3.05	2.98	98	2.76	90	4R	3H	1W	
292.00	295.05	3.05	3.03	99	2.75	90	4R	3H	1W	
295.05	298.09	3.04	3.02	99	2.79	92	4R	3H	1W	
298.09	301.14	3.05	2.74	90	2.45	80	3R	2H	1W	

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229846	☐	N17-052	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229859	☐	N17-052	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229864	☐	N17-052	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229868	☐	N17-055	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229871	☐	N17-055	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229884	☐	N17-055	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229886	☐	N17-055	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229839	☐	N17-052	core	CS2	☐	☐	☐
1.12	16.46	15.34	OVB	2.13	14	Q010893	☐	N17-C02	Chip		☐	☐	☐
16.46	28.65	12.19	OVB	1.76	14	Q010894	☐	N17-C02	Chip		☐	☐	☐
28.65	33.22	4.57	MST, OVB	3.00	66	Q010895	☐	N17-C02	Chip		☐	☐	☐
33.22	39.32	6.10	MST	4.81	79	Q010896	☐	N17-C02	Chip		☐	☐	☐
39.32	45.42	6.10	MST	4.50	74	Q010897	☐	N17-C02	Chip		☐	☐	☐
45.42	51.51	6.09	MST	5.95	98	Q010898	☐	N17-C02	Chip		☐	☐	☐
51.51	57.61	6.10	MST	5.98	98	Q010899	☐	N17-C02	Chip		☐	☐	☐
57.61	63.70	6.09	MST	5.80	95	Q010900	☐	N17-C02	Chip		☐	☐	☐
63.70	69.80	6.10	MST	5.79	95	Q010901	☐	N17-C02	Chip		☐	☐	☐
69.80	75.90	6.10	MST	5.99	98	Q010902	☐	N17-C02	Chip		☐	☐	☐
75.90	81.99	6.09	MST	5.18	85	Q010903	☐	N17-C02	Chip		☐	☐	☐
81.99	88.09	6.10	MST	5.82	95	Q010904	☐	N17-C02	Chip		☐	☐	☐
88.09	94.18	6.09	MST	5.74	94	Q010905	☐	N17-C02	Chip		☐	☐	☐
94.18	99.97	5.79	MST	5.62	97	Q010906	☐	N17-C02	Chip		☐	☐	☐
99.97	106.07	6.10	MST	6.02	99	Q010907	☐	N17-C02	Chip		☐	☐	☐
106.07	112.17	6.10	MST	6.02	99	Q010908	☐	N17-C02	Chip		☐	☐	☐
112.17	115.21	3.04	MST	2.92	96	W229840	☐	N17-052	core		☐	☐	☐
115.21	118.26	3.05	MST	2.88	94	W229841	☐	N17-052	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
118.26	121.31	3.05	MST	2.83	93	W229842	☐	N17-052	core		☐	☐	☐
121.31	124.36	3.05	LST	3.00	98	W229843	☐	N17-052	core		☐	☐	☐
124.36	127.41	3.05	LST	2.89	95	W229844	☐	N17-052	core		☐	☐	☐
127.41	130.45	3.04	LST	3.04	100	W229845	☐	N17-052	core		☐	☐	☐
130.45	133.50	3.05	LST	2.96	97	W229847	☐	N17-052	core		☐	☐	☐
133.50	136.55	3.05	LST	3.04	100	W229848	☐	N17-052	core		☐	☐	☐
136.55	139.60	3.05	LST	2.85	93	W229849	☐	N17-052	core		☐	☐	☐
139.60	142.64	3.04	LST	2.93	96	W229850	☐	N17-052	core		☐	☐	☐
142.64	145.69	3.05	LST	3.05	100	W229851	☐	N17-052	core		☐	☐	☐
145.69	148.74	3.05	LST	2.89	95	W229852	☐	N17-052	core		☐	☐	☐
148.74	151.79	3.05	LST	2.99	98	W229853	☐	N17-052	core		☐	☐	☐
151.79	154.84	3.05	LST	2.74	90	W229854	☐	N17-052	core		☐	☐	☐
154.84	157.89	3.05	LST	2.95	97	W229855	☐	N17-052	core		☐	☐	☐
157.89	160.93	3.04	LST	3.04	100	W229856	☐	N17-052	core		☐	☐	☐
160.93	163.98	3.05	LST	3.01	99	W229857	☐	N17-052	core		☐	☐	☐
163.98	167.03	3.05	LST	2.97	97	W229858	☐	N17-052	core		☐	☐	☐
167.03	170.08	3.05	LST	2.64	87	W229860	☐	N17-052	core		☐	☐	☐
167.03	170.08	3.05	LST	2.64	87	W229861	☐	N17-052	core		☐	☐	☑
170.08	173.13	3.05	LST	2.98	98	W229862	☐	N17-052	core		☐	☐	☐
173.13	176.17	3.04	LST	3.04	100	W229863	☐	N17-052	core		☐	☐	☐
176.17	179.22	3.05	LST	2.61	86	W229865	☐	N17-055	core		☐	☐	☐
179.22	182.27	3.05	LST	2.52	83	W229866	☐	N17-055	core		☐	☐	☐
182.27	185.32	3.05	LST	2.86	94	W229867	☐	N17-055	core		☐	☐	☐
185.32	188.37	3.05	LST	2.97	97	W229869	☐	N17-055	core		☐	☐	☐
188.37	189.92	1.55	LST	1.55	100	W229870	☐	N17-055	core		☐	☐	☐
189.92	191.41	1.49	LST	1.46	98	W229872	☐	N17-055	core		☐	☐	☐
191.41	194.46	3.05	LST	2.97	97	W229873	☐	N17-055	core		☐	☐	☐
194.46	197.51	3.05	LST	2.95	97	W229874	☐	N17-055	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
197.51	200.56	3.05	LST	2.69	88	W229875	☐	N17-055	core		☐	☐	☐
200.56	203.61	3.05	LST	2.68	88	W229876	☐	N17-055	core		☐	☐	☐
200.56	203.61	3.05	LST	2.68	88	W229877	☐	N17-055	core		☐	☐	☑
203.61	206.65	3.04	LST	2.84	93	W229878	☐	N17-055	core		☐	☐	☐
206.65	209.70	3.05	LST	2.82	92	W229879	☐	N17-055	core		☐	☐	☐
209.70	211.22	1.52	LST	1.49	98	W229880	☐	N17-055	core		☐	☐	☐
211.22	214.06	2.84	LST	2.73	96	W229881	☐	N17-055	core		☐	☐	☐
214.06	217.20	3.14	LST	3.04	97	W229882	☐	N17-055	core		☐	☐	☐
217.20	220.29	3.09	LST	3.00	97	W229883	☐	N17-055	core		☐	☐	☐
220.29	223.27	2.98	LST	2.98	100	W229885	☐	N17-055	core		☐	☐	☐
223.27	225.75	2.48	LST	2.31	93	W229887	☐	N17-055	core		☐	☐	☐
225.75	228.23	2.48	LST	2.48	100	W229888	☐	N17-055	core		☐	☐	☐
228.23	231.04	2.81	LST, DST	2.43	86	W229889	☐	N17-055	core		☐	☐	☐
231.04	234.09	3.05	DST	2.89	95	W229890	☐	N17-055	core		☐	☐	☐
234.09	237.13	3.04	DST	2.94	97	W229891	☐	N17-055	core		☐	☐	☐
237.13	239.23	2.10	DST	2.10	100	W229892	☐	N17-055	core		☐	☐	☐
237.13	239.23	2.10	DST	2.10	100	W229893	☐	N17-055	core		☐	☑	☐
239.23	241.06	1.83	DST	1.77	97	W229894	☐	N17-055	core		☐	☐	☐
241.06	243.23	2.17	DST	2.11	97	W229895	☐	N17-055	core		☐	☐	☐
243.23	246.28	3.05	DST	2.69	88	W229896	☐	N17-055	core		☐	☐	☐
246.28	249.33	3.05	DST	3.05	100	W229897	☐	N17-055	core		☐	☐	☐
249.33	252.37	3.04	DST	2.44	80	W229898	☐	N17-055	core		☐	☐	☐
252.37	255.42	3.05	DST	3.01	99	W229899	☐	N17-055	core		☐	☐	☐
255.42	258.47	3.05	DST	3.00	98	W229900	☐	N17-055	core		☐	☐	☐
258.47	261.52	3.05	DST	3.02	99	W229901	☐	N17-057	core		☐	☐	☐
261.52	264.57	3.05	DST	2.89	95	W229902	☐	N17-057	core		☐	☐	☐
264.57	267.61	3.04	DMT	3.04	100	W229903	☐	N17-057	core		☐	☐	☐
267.61	273.71	6.10	DMT	6.05	99	Q010909	☐	N17-C03	Chips`		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
273.71	279.81	6.10	DMT	5.94	97	Q010910	☐	N17-C03	Chips`		☐	☐	☐
279.81	285.90	6.09	DMT	5.94	98	Q010911	☐	N17-C03	Chips`		☐	☐	☐
285.90	288.95	3.05	DMT	2.96	97	W229904	☐	N17-057	core		☐	☐	☐
288.95	295.05	6.10	DMT	6.01	99	Q010912	☐	N17-C03	Chips`		☐	☐	☐
295.05	301.14	6.09	DMT	5.76	95	Q052516	☐	N17-C08	Chip		☐	☐	☐

OS -17-245

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
12.19	138.17	125.98	SLC	FG	Dark grey, fine grained, interbedded siliclastics							
									OXI	3I		
138.17	420.62	282.45	LST	FG	Medium grey limestone, fine to medium grained, with erratic calcite veining.							
						MD	GY	BD				

OS -17-245

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	4.57	4.57	0.03	1	0.00	0	--	--	--	Overburden
4.57	7.62	3.05	1.36	45	0.22	7	0R	3H	4W	Overburden and RBZ
7.62	10.67	3.05	1.13	37	0.20	7	1R	3H	4W	RBZ
10.67	13.72	3.05	1.34	44	0.77	25	1R	3H	3W	RBZ
13.72	16.76	3.04	0.28	9	0.10	3	0R	3H	2W	No recovery from 13.72 - 15.24m
16.76	19.81	3.05	1.07	35	0.10	3	0R	3H	2W	RBZ
19.81	22.86	3.05	1.51	50	0.21	7	1R	3H	2W	RBZ
22.86	25.91	3.05	2.61	86	1.57	51	1R	2H	2W	
25.91	28.96	3.05	2.82	92	0.42	14	1R	3H	3W	RBZ
28.96	32.00	3.04	2.6	86	1.00	33	1R	3H	2W	RBZ
32.00	35.05	3.05	2.87	94	0.47	15	1R	3H	2W	RBZ
35.05	38.10	3.05	2.69	88	0.90	30	0R	3H	2W	RBZ
38.10	41.15	3.05	3	98	1.67	55	1R	3H	2W	
41.15	44.20	3.05	2.98	98	2.37	78	1R	3H	1W	RBZ
44.20	47.24	3.04	2.82	93	2.32	76	1R	3H	1W	
47.24	50.29	3.05	2.82	92	1.47	48	1R	2H	1W	RBZ
50.29	53.34	3.05	3	98	1.18	39	1R	3H	1W	RBZ
53.34	56.39	3.05	2.69	88	1.66	54	1R	3H	1W	RBZ
56.39	59.44	3.05	2.32	76	0.50	16	1R	3H	1W	RBZ
59.44	62.48	3.04	2.33	77	0.34	11	1R	3H	1W	RBZ
62.48	65.53	3.05	2.81	92	1.82	60	1R	3H	1W	RBZ
65.53	68.58	3.05	2.44	80	1.53	50	1R	3H	1W	RBZ
68.58	71.63	3.05	2.69	88	1.36	45	1R	3H	1W	
71.63	74.68	3.05	2.83	93	2.03	67	1R	3H	1W	
74.68	77.72	3.04	2.82	93	2.28	75	1R	3H	1W	
77.72	80.77	3.05	2.96	97	1.72	56	1R	3H	1W	RBZ
80.77	83.82	3.05	2.75	90	1.26	41	1R	3H	1W	RBZ
83.82	86.87	3.05	2.71	89	1.64	54	1R	3H	1W	RBZ
86.87	89.92	3.05	2.88	94	2.42	79	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
89.92	92.96	3.04	2.62	86	1.88	62	1R	3H	1W	RBZ
92.96	96.01	3.05	3	98	1.86	61	1R	3H	1W	RBZ
96.01	99.06	3.05	3.05	100	2.59	85	1R	3H	1W	RBZ
99.06	102.11	3.05	2.72	89	2.68	88	1R	3H	1W	
102.11	105.16	3.05	2.76	90	2.34	77	1R	3H	1W	
105.16	108.20	3.04	3.03	100	1.67	55	0R	2H	1W	
108.20	111.25	3.05	2.91	95	2.10	69	1R	2H	1W	110.18-111.30 ground core and clay rich interval. 110.50-110.70 rubble zone
111.25	114.30	3.05	2.96	97	2.24	73	0R	2H	1W	112.34-112.59m rubble zone, clay rich fracture surafaces
114.30	117.35	3.05	2.93	96	1.93	63	0R	2H	1W	
117.35	120.40	3.05	2.61	86	0.32	10	0R	3H	1W	
120.40	123.44	3.04	3.02	99	1.09	36	0R	3H	1W	one fracture surface is coated with clay
123.44	126.49	3.05	2.65	87	0.75	25	1R	3H	1W	
126.49	129.54	3.05	3.04	100	1.76	58	0R	3H	1W	some joints cross cut, they have the same attitude TCA. There is an interval at 192.20-.25 clay and fragments, likely spun rods
129.54	132.59	3.05	2.98	98	1.92	63	1R	3H	1W	
132.59	135.64	3.05	3.05	100	1.27	42	0R	3H	1W	gogue from 134.85-134.90m
135.64	138.68	3.04	2.84	93	1.93	63	1R	1H	1W	gogue from 138.24-42. Core extremel soft from 137.46-138.42 (possible fault)
138.68	141.73	3.05	2.91	95	1.65	54	3R	3H	1W	
141.73	144.78	3.05	3.05	100	1.52	50	3R	3H	1W	
144.78	147.83	3.05	2.98	98	1.28	42	3R	3H	1W	
147.83	150.88	3.05	3.05	100	1.28	42	3R	3H	1W	
150.88	153.92	3.04	3.04	100	2.66	88	3R	3H	1W	
153.92	156.97	3.05	3.05	100	1.82	60	3R	4H	1W	
156.97	160.02	3.05	3	98	1.88	62	3R	3H	1W	
160.02	163.07	3.05	3.05	100	1.99	65	3R	3H	1W	also some crb lining fracture surfaces
163.07	166.12	3.05	2.92	96	2.07	68	3R	3H	1W	
166.12	169.16	3.04	3.03	100	1.93	63	3R	3H	1W	
169.16	172.21	3.05	2.89	95	1.71	56	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
172.21	175.26	3.05	3	98	1.89	62	3R	3H	1W	
175.26	178.31	3.05	2.92	96	1.88	62	3R	3H	1W	some fractur surfaces have clay/crb mix, thin layer max 1mm
178.31	181.36	3.05	3.01	99	2.28	75	3R	3H	1W	
181.36	184.40	3.04	2.99	98	2.32	76	3R	3H	1W	
184.40	187.45	3.05	3	98	2.63	86	3R	3H	1W	
187.45	190.50	3.05	2.99	98	2.77	91	3R	3H	1W	
190.50	193.55	3.05	2.9	95	2.24	73	3R	3H	1W	
193.55	196.60	3.05	2.9	95	2.28	75	3R	3H	1W	
196.60	199.64	3.04	3	99	2.72	89	3R	3H	1W	
199.64	202.69	3.05	2.92	96	2.16	71	3R	3H	1W	
202.69	205.74	3.05	3.03	99	2.62	86	3R	3H	1W	
205.74	208.79	3.05	2.91	95	2.14	70	3R	3H	1W	
208.79	211.84	3.05	2.94	96	2.61	86	3R	3H	1W	
211.84	214.88	3.04	3.02	99	2.78	91	4R	3H	1W	
214.88	217.93	3.05	2.9	95	2.22	73	4R	3H	1W	
217.93	220.98	3.05	2.91	95	1.51	50	4R	3H	1W	RBZ
220.98	224.03	3.05	3.01	99	2.64	87	4R	3H	1W	
224.03	227.08	3.05	3.03	99	2.45	80	4R	3H	1W	
227.08	230.12	3.04	2.97	98	1.99	65	4R	3H	1W	
230.12	233.17	3.05	2.91	95	2.50	82	4R	3H	1W	
233.17	236.22	3.05	2.95	97	2.78	91	4R	3H	1W	
236.22	239.27	3.05	2.89	95	2.43	80	4R	3H	1W	
239.27	242.32	3.05	2.92	96	2.82	92	4R	3H	1W	
242.32	245.36	3.04	2.87	94	2.43	80	4R	3H	1W	
245.36	248.41	3.05	2.89	95	2.61	86	4R	3H	1W	
248.41	251.46	3.05	3.04	100	2.87	94	4R	3H	1W	
251.46	254.51	3.05	2.95	97	2.31	76	4R	3H	1W	
254.51	257.56	3.05	2.85	93	2.70	89	4R	3H	1W	
257.56	260.60	3.04	2.95	97	2.59	85	4R	3H	1W	
260.60	263.65	3.05	2.84	93	2.72	89	4R	3H	1W	
263.65	266.70	3.05	3.05	100	3.00	98	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
266.70	269.75	3.05	2.97	97	2.76	90	4R	3H	1W	
269.75	272.80	3.05	2.92	96	2.74	90	4R	3H	1W	
272.80	275.84	3.04	2.78	91	2.78	91	4R	3H	1W	
275.84	278.89	3.05	2.98	98	2.46	81	4R	3H	1W	
278.89	281.94	3.05	3	98	2.94	96	4R	3H	1W	
281.94	284.99	3.05	2.95	97	2.35	77	1R	3H	1W	Mineralized section, decalcified limestone shows weak reactivity to HCL
284.99	288.04	3.05	2.85	93	2.43	80	4R	3H	1W	
288.04	291.08	3.04	3	99	2.73	90	4R	3H	1W	
291.08	294.13	3.05	2.92	96	2.56	84	4R	3H	1W	
294.13	297.18	3.05	3	98	2.46	81	4R	3H	1W	
297.18	300.23	3.05	3.01	99	2.82	92	4R	3H	1W	
300.23	303.28	3.05	3	98	2.78	91	4R	3H	1W	
303.28	305.29	2.01	2.01	100	1.73	86	4R	3H	1W	Reduced to NQ after this section
305.29	307.85	2.56	2.48	97	2.02	79	4R	3H	1W	Beginning of NQ core
307.85	310.90	3.05	2.92	96	2.54	83	4R	3H	1W	
310.90	313.94	3.04	2.93	96	2.93	96	4R	3H	1W	
313.94	316.99	3.05	2.93	96	2.68	88	4R	3H	1W	
316.99	320.04	3.05	2.94	96	2.54	83	4R	3H	1W	
320.04	323.09	3.05	3.05	100	2.73	90	4R	3H	1W	
323.09	326.14	3.05	3.02	99	2.74	90	4R	3H	1W	
326.14	329.18	3.04	2.45	81	1.81	60	3R	3H	1W	Certain sections with black siltstone are only slightly reactive to the HCL
329.18	332.23	3.05	2.96	97	1.97	65	3R	3H	1W	Beds of black siltstone have a slightly weaker hardness and reactivity than the medium grey limestone
332.23	335.28	3.05	2.93	96	2.08	68	3R	3H	1W	
335.28	338.33	3.05	2.97	97	2.19	72	3R	3H	1W	
338.33	341.38	3.05	3.02	99	2.43	80	4R	3H	1W	
341.38	344.42	3.04	2.91	96	2.37	78	3R	3H	1W	Beds of black siltstone have a slightly weaker hardness and reactivity than the medium grey limestone
344.42	347.47	3.05	2.83	93	1.86	61	4R	3H	1W	RBZ

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
347.47	350.52	3.05	2.94	96	1.67	55	3R	3H	1W	Beds of black siltstone have a slightly weaker hardness and reactivity than the medium grey limestone
350.52	353.57	3.05	2.88	94	2.61	86	3R	3H	1W	
353.57	356.62	3.05	2.91	95	2.25	74	4R	3H	1W	
356.62	359.66	3.04	2.87	94	2.44	80	3R	3H	1W	Beds of black siltstone have a slightly weaker hardness and reactivity than the medium grey limestone
359.66	362.71	3.05	2.98	98	2.87	94	3R	3H	1W	
362.71	365.76	3.05	2.96	97	2.63	86	4R	3H	1W	
365.76	368.80	3.04	3.04	100	1.02	34	2R	3H	1W	
368.80	371.85	3.05	3.03	99	1.69	55	3R	3H	1W	clay fracture zone, not rubble. Dark black clay || TCA, core fractured along this plane. No true joint set
371.85	374.90	3.05	3.03	99	2.80	92	3R	3H	1W	
374.90	377.95	3.05	3.05	100	2.86	94	3R	3H	1W	
377.95	381.00	3.05	3.05	100	2.56	84	2R	3H	1W	
381.00	384.05	3.05	3.05	100	1.67	55	2R	3H	1W	
384.05	387.10	3.05	3.05	100	2.87	94	3R	2H	1W	
387.10	390.14	3.04	3.04	100	3.00	99	3R	3H	1W	
390.14	393.19	3.05	3	98	2.93	96	3R	3H	1W	
393.19	396.24	3.05	2.94	96	2.91	95	3R	3H	1W	
396.24	399.29	3.05	3	98	2.80	92	3R	3H	1W	
399.29	402.33	3.04	3.03	100	2.78	91	3R	3H	1W	
402.33	405.38	3.05	3.02	99	2.89	95	3R	3H	1W	
405.38	408.43	3.05	3.05	100	3.01	99	3R	3H	1W	
408.43	411.48	3.05	3.05	100	2.70	89	3R	3H	1W	
411.48	414.53	3.05	3.05	100	2.99	98	3R	3H	1W	
414.53	417.57	3.04	3.02	99	2.75	90	3R	3H	1W	
417.57	420.62	3.05	2.91	95	2.76	90	3R	3H	1W	

OS -17-245

Nadaleen
Conrad Zone

Archer,Cathro & Associates (1981) Limited

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W230100	☐	N17-056	core	CS4	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230167	☐	N17-061	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230164	☐	N17-061	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230151	☐	N17-060	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230141	☐	N17-060	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230138	☐	N17-060	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230121	☐	N17-060	core	CS4	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230015	☐	N17-053	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230114	☐	N17-056	core	CS8	☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230095	☐	N17-056	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230080	☐	N17-054	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230078	☐	N17-054	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230062	☐	N17-054	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230054	☐	N17-054	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230035	☐	N17-053	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230029	☐	N17-053	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230023	☐	N17-053	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230116	☐	N17-056	core	CS8	☐	☐	☐
4.50	10.67	6.17	OVB	2.52	41	W230005	☐	N17-051	core		☐	☐	☐
10.67	19.81	9.14	OVB	2.69	29	W230006	☐	N17-051	core		☐	☐	☐
19.81	22.86	3.05	SLC	1.51	50	W230007	☐	N17-051	core		☐	☐	☐
22.86	25.91	3.05	SLC	2.61	86	W230008	☐	N17-051	core		☐	☐	☐
25.91	28.96	3.05	SLC	2.82	92	W230009	☐	N17-053	core		☐	☐	☐
28.96	32.00	3.04	SLC	2.60	86	W230010	☐	N17-053	core		☐	☐	☐
32.00	35.05	3.05	SLC	2.87	94	W230011	☐	N17-053	core		☐	☐	☐
35.05	38.10	3.05	SLC	2.69	88	W230012	☐	N17-053	core		☐	☐	☐
38.10	41.15	3.05	SLC	3.00	98	W230013	☐	N17-053	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
41.15	44.20	3.05	SLC	2.98	98	W230014	☐	N17-053	core		☐	☐	☐
44.20	47.24	3.04	SLC	2.82	93	W230016	☐	N17-053	core		☐	☐	☐
47.24	50.29	3.05	SLC	2.82	92	W230017	☐	N17-053	core		☐	☐	☐
50.29	53.34	3.05	SLC	3.00	98	W230018	☐	N17-053	core		☐	☐	☐
53.34	56.39	3.05	SLC	2.69	88	W230019	☐	N17-053	core		☐	☐	☐
56.39	59.44	3.05	SLC	2.32	76	W230020	☐	N17-053	core		☐	☐	☐
59.44	62.48	3.04	SLC	2.33	77	W230021	☐	N17-053	core		☐	☐	☐
62.48	65.53	3.05	SLC	2.81	92	W230022	☐	N17-053	core		☐	☐	☐
65.53	68.58	3.05	SLC	2.44	80	W230024	☐	N17-053	core		☐	☐	☐
68.58	71.63	3.05	SLC	2.69	88	W230025	☐	N17-053	core		☐	☐	☐
71.63	74.68	3.05	SLC	2.83	93	W230026	☐	N17-053	core		☐	☐	☐
74.68	77.72	3.04	SLC	2.82	93	W230027	☐	N17-053	core		☐	☐	☐
77.72	80.77	3.05	SLC	2.96	97	W230028	☐	N17-053	core		☐	☐	☐
80.77	83.82	3.05	SLC	2.75	90	W230030	☐	N17-053	core		☐	☐	☐
83.82	86.87	3.05	SLC	2.71	89	W230031	☐	N17-053	core		☐	☐	☐
83.82	86.87	3.05	SLC	2.71	89	W230032	☐	N17-053	core		☐	☐	☑
86.87	89.92	3.05	SLC	2.88	94	W230033	☐	N17-053	core		☐	☐	☐
89.92	92.96	3.04	SLC	2.62	86	W230034	☐	N17-053	core		☐	☐	☐
92.96	96.01	3.05	SLC	3.00	98	W230036	☐	N17-053	core		☐	☐	☐
96.01	99.06	3.05	SLC	3.05	100	W230037	☐	N17-053	core		☐	☐	☐
99.06	102.11	3.05	SLC	2.72	89	W230038	☐	N17-053	core		☐	☐	☐
99.06	102.11	3.05	SLC	2.72	89	W230039	☐	N17-053	core		☐	☑	☐
102.11	105.16	3.05	SLC	2.76	90	W230040	☐	N17-053	core		☐	☐	☐
105.16	108.20	3.04	SLC	3.03	100	W230042	☐	N17-053	core		☐	☐	☐
108.20	111.25	3.05	SLC	2.91	95	W230043	☐	N17-053	core		☐	☐	☐
111.25	114.30	3.05	SLC	2.96	97	W230044	☐	N17-053	core		☐	☐	☐
114.30	117.35	3.05	SLC	2.93	96	W230045	☐	N17-054	Core		☐	☐	☐
117.35	120.40	3.05	SLC	2.61	86	W230046	☐	N17-054	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
120.40	123.44	3.04	SLC	3.02	99	W230047	☐	N17-054	Core		☐	☐	☐
123.44	126.49	3.05	SLC	2.65	87	W230048	☐	N17-054	Core		☐	☐	☐
126.49	129.54	3.05	SLC	3.04	100	W230049	☐	N17-054	Core		☐	☐	☐
129.54	132.59	3.05	SLC	2.98	98	W230050	☐	N17-054	Core		☐	☐	☐
132.59	135.64	3.05	SLC	3.05	100	W230051	☐	N17-054	Core		☐	☐	☐
135.64	138.68	3.04	SLC	2.84	93	W230052	☐	N17-054	Core		☐	☐	☐
138.68	141.73	3.05	LST	2.91	95	W230053	☐	N17-054	Core		☐	☐	☐
141.73	144.78	3.05	LST	3.05	100	W230055	☐	N17-054	Core		☐	☐	☐
141.73	144.78	3.05	LST	3.05	100	W230056	☐	N17-054	Core		☐	☑	☐
144.78	147.83	3.05	LST	2.98	98	W230057	☐	N17-054	Core		☐	☐	☐
147.83	150.88	3.05	LST	3.05	100	W230058	☐	N17-054	Core		☐	☐	☐
150.88	153.92	3.04	LST	3.04	100	W230059	☐	N17-054	Core		☐	☐	☐
153.92	156.97	3.05	LST	3.05	100	W230060	☐	N17-054	Core		☐	☐	☐
156.97	160.02	3.05	LST	3.00	98	W230061	☐	N17-054	Core		☐	☐	☐
160.02	163.07	3.05	LST	3.05	100	W230063	☐	N17-054	Core		☐	☐	☐
163.07	166.12	3.05	LST	2.92	96	W230064	☐	N17-054	Core		☐	☐	☐
166.12	169.16	3.04	LST	3.03	100	W230065	☐	N17-054	Core		☐	☐	☐
169.16	172.21	3.05	LST	2.89	95	W230066	☐	N17-054	Core		☐	☐	☐
172.21	175.26	3.05	LST	3.00	98	W230067	☐	N17-054	Core		☐	☐	☐
172.21	175.26	3.05	LST	3.00	98	W230068	☐	N17-054	Core		☐	☐	☑
175.26	178.31	3.05	LST	2.92	96	W230069	☐	N17-054	Core		☐	☐	☐
178.31	181.36	3.05	LST	3.01	99	W230070	☐	N17-054	Core		☐	☐	☐
181.36	184.40	3.04	LST	2.99	98	W230071	☐	N17-054	Core		☐	☐	☐
184.40	187.45	3.05	LST	3.00	98	W230072	☐	N17-054	Core		☐	☐	☐
187.45	190.50	3.05	LST	2.99	98	W230073	☐	N17-054	Core		☐	☐	☐
190.50	193.55	3.05	LST	2.90	95	W230074	☐	N17-054	Core		☐	☐	☐
193.55	196.60	3.05	LST	2.90	95	W230075	☐	N17-054	Core		☐	☐	☐
196.60	199.64	3.04	LST	3.00	99	W230076	☐	N17-054	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
199.64	202.69	3.05	LST	2.92	96	W230077	☐	N17-054	Core		☐	☐	☐
202.69	205.74	3.05	LST	3.03	99	W230079	☐	N17-054	Core		☐	☐	☐
205.74	208.79	3.05	LST	2.91	95	W230081	☐	N17-056	core		☐	☐	☐
208.79	211.84	3.05	LST	2.94	96	W230082	☐	N17-056	core		☐	☐	☐
211.84	214.88	3.04	LST	3.02	99	W230083	☐	N17-056	core		☐	☐	☐
214.88	217.53	2.65	LST	2.56	97	W230084	☐	N17-056	core		☐	☐	☐
217.53	219.80	2.27	LST	1.97	87	W230085	☐	N17-056	core		☐	☐	☐
219.80	222.50	2.70	LST	2.65	98	W230086	☐	N17-056	core		☐	☐	☐
222.50	225.55	3.05	LST	3.01	99	W230087	☐	N17-056	core		☐	☐	☐
225.55	228.60	3.05	LST	2.97	97	W230088	☐	N17-056	core		☐	☐	☐
228.60	231.65	3.05	LST	2.94	96	W230089	☐	N17-056	core		☐	☐	☐
228.60	231.65	3.05	LST	2.94	96	W230090	☐	N17-056	core		☐	☐	☑
231.65	234.70	3.05	LST	2.95	97	W230091	☐	N17-056	core		☐	☐	☐
234.70	237.37	2.67	LST	2.55	96	W230092	☐	N17-056	core		☐	☐	☐
237.37	238.53	1.16	LST	1.15	99	W230093	☐	N17-056	core		☐	☐	☐
238.53	240.53	2.00	LST	1.99	100	W230094	☐	N17-056	core		☐	☐	☐
240.53	243.34	2.81	LST	2.78	99	W230096	☐	N17-056	core		☐	☐	☐
243.34	245.36	2.02	LST	1.90	94	W230097	☐	N17-056	core		☐	☐	☐
245.36	248.41	3.05	LST	2.89	95	W230098	☐	N17-056	core		☐	☐	☐
248.41	251.46	3.05	LST	3.04	100	W230099	☐	N17-056	core		☐	☐	☐
251.46	254.51	3.05	LST	2.95	97	W230101	☐	N17-056	core		☐	☐	☐
254.51	257.56	3.05	LST	2.85	93	W230102	☐	N17-056	core		☐	☐	☐
257.56	260.60	3.04	LST	2.95	97	W230103	☐	N17-056	core		☐	☐	☐
260.60	263.65	3.05	LST	2.84	93	W230104	☐	N17-056	core		☐	☐	☐
263.65	266.70	3.05	LST	3.05	100	W230105	☐	N17-056	core		☐	☐	☐
266.70	269.75	3.05	LST	2.97	97	W230106	☐	N17-056	core		☐	☐	☐
269.75	272.80	3.05	LST	2.92	96	W230107	☐	N17-056	core		☐	☐	☐
272.80	275.84	3.04	LST	2.78	91	W230108	☐	N17-056	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
272.80	275.84	3.04	LST	2.78	91	W230109	☐	N17-056	core		☐	☑	☐
275.84	278.89	3.05	LST	2.98	98	W230110	☐	N17-056	core		☐	☐	☐
278.89	280.42	1.53	LST	1.53	100	W230111	☐	N17-056	core		☐	☐	☐
280.42	282.13	1.71	LST	1.71	100	W230112	☐	N17-056	core		☐	☐	☐
282.13	284.61	2.48	LST	2.48	100	W230113	☐	N17-056	core		☐	☐	☐
284.61	287.33	2.72	LST	2.67	98	W230115	☐	N17-056	core		☐	☐	☐
287.33	289.83	2.50	LST	2.35	94	W230117	☐	N17-060	core		☐	☐	☐
289.83	292.61	2.78	LST	2.78	100	W230118	☐	N17-060	core		☐	☐	☐
292.61	295.23	2.62	LST	2.55	97	W230119	☐	N17-060	core		☐	☐	☐
295.23	297.28	2.05	LST	2.05	100	W230120	☐	N17-060	core		☐	☐	☐
297.28	300.23	2.95	LST	2.90	98	W230122	☐	N17-060	core		☐	☐	☐
300.23	303.28	3.05	LST	3.00	98	W230123	☐	N17-060	core		☐	☐	☐
303.28	305.29	2.01	LST	2.01	100	W230124	☐	N17-060	core		☐	☐	☐
305.29	307.85	2.56	LST	2.48	97	W230125	☐	N17-060	core		☐	☐	☐
307.85	310.90	3.05	LST	2.92	96	W230126	☐	N17-060	core		☐	☐	☐
307.85	310.90	3.05	LST	2.92	96	W230127	☐	N17-060	core		☐	☐	☑
310.90	313.94	3.04	LST	2.93	96	W230128	☐	N17-060	core		☐	☐	☐
313.94	316.99	3.05	LST	2.93	96	W230129	☐	N17-060	core		☐	☐	☐
316.99	320.04	3.05	LST	2.94	96	W230130	☐	N17-060	core		☐	☐	☐
320.04	323.09	3.05	LST	3.05	100	W230131	☐	N17-060	core		☐	☐	☐
323.09	326.14	3.05	LST	3.02	99	W230132	☐	N17-060	core		☐	☐	☐
323.09	326.14	3.05	LST	3.02	99	W230133	☐	N17-060	core		☐	☑	☐
326.14	329.18	3.04	LST	2.45	81	W230134	☐	N17-060	core		☐	☐	☐
329.18	332.23	3.05	LST	2.96	97	W230135	☐	N17-060	core		☐	☐	☐
332.23	335.28	3.05	LST	2.93	96	W230136	☐	N17-060	core		☐	☐	☐
335.28	338.33	3.05	LST	2.97	97	W230137	☐	N17-060	core		☐	☐	☐
338.33	341.38	3.05	LST	3.02	99	W230139	☐	N17-060	core		☐	☐	☐
341.38	344.42	3.04	LST	2.91	96	W230140	☐	N17-060	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
344.42	347.47	3.05	LST	2.83	93	W230142	☐	N17-060	core		☐	☐	☐
347.47	350.52	3.05	LST	2.94	96	W230143	☐	N17-060	core		☐	☐	☐
350.52	353.57	3.05	LST	2.88	94	W230144	☐	N17-060	core		☐	☐	☐
353.57	356.62	3.05	LST	2.91	95	W230145	☐	N17-060	core		☐	☐	☐
356.62	359.66	3.04	LST	2.87	94	W230146	☐	N17-060	core		☐	☐	☐
359.66	362.71	3.05	LST	2.98	98	W230147	☐	N17-060	core		☐	☐	☐
362.71	365.76	3.05	LST	2.96	97	W230148	☐	N17-060	core		☐	☐	☐
365.76	368.80	3.04	LST	3.04	100	W230149	☐	N17-060	core		☐	☐	☐
368.80	371.85	3.05	LST	3.03	99	W230150	☐	N17-060	core		☐	☐	☐
371.85	374.90	3.05	LST	3.03	99	W230152	☐	N17-060	core		☐	☐	☐
374.90	377.95	3.05	LST	3.05	100	W230153	☐	N17-061	Core		☐	☐	☐
377.95	381.00	3.05	LST	3.05	100	W230154	☐	N17-061	Core		☐	☐	☐
381.00	384.05	3.05	LST	3.05	100	W230155	☐	N17-061	Core		☐	☐	☐
384.05	387.10	3.05	LST	3.05	100	W230156	☐	N17-061	Core		☐	☐	☐
387.10	390.14	3.04	LST	3.04	100	W230157	☐	N17-061	Core		☐	☐	☐
390.14	393.19	3.05	LST	3.00	98	W230158	☐	N17-061	Core		☐	☐	☐
390.14	393.19	3.05	LST	3.00	98	W230159	☐	N17-061	Core		☐	☑	☐
393.19	396.24	3.05	LST	2.94	96	W230160	☐	N17-061	Core		☐	☐	☐
396.24	399.29	3.05	LST	3.00	98	W230161	☐	N17-061	Core		☐	☐	☐
399.29	402.33	3.04	LST	3.03	100	W230162	☐	N17-061	Core		☐	☐	☐
402.33	405.38	3.05	LST	3.02	99	W230163	☐	N17-061	Core		☐	☐	☐
405.38	408.43	3.05	LST	3.05	100	W230165	☐	N17-061	Core		☐	☐	☐
408.43	411.48	3.05	LST	3.05	100	W230166	☐	N17-061	Core		☐	☐	☐
411.48	414.53	3.05	LST	3.05	100	W230168	☐	N17-061	Core		☐	☐	☐
414.53	417.57	3.04	LST	3.02	99	W230169	☐	N17-061	Core		☐	☐	☐
417.57	420.62	3.05	LST	2.91	95	W230170	☐	N17-061	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

OS -17-246

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	7.62	7.62	0.32	4	0.00	0	0R	2H	4W	overburden, no recovery from 0.00-7.29 m. Rubble and clay zone from 7.29 to 7.62 m.
7.62	10.67	3.05	1.66	54	0.68	22	0R	2H	4W	top of hole, weathered to clay and rubbly
10.67	13.72	3.05	1.56	51	0.73	24	0R	2H	4W	interval mostly rubble/clay and fractured mudstone
13.72	16.76	3.04	1.54	51	0.43	14	0R	2H	4W	interval mostly rubble/clay and fractured mudstone
16.76	19.81	3.05	1.46	48	0.54	18	0R	2H	4W	interval mostly rubble/clay and fractured mudstone
19.81	22.86	3.05	1.63	53	0.20	7	0R	2H	3W	interval mostly rubble/clay and fractured mudstone
22.86	25.91	3.05	1.96	64	0.95	31	0R	2H	3W	
25.91	28.96	3.05	1.9	62	0.96	31	0R	1H	3W	
28.96	32.00	3.04	2.08	68	0.40	13	0R	2H	3W	
32.00	35.05	3.05	2.49	82	0.64	21	0R	2H	3W	
35.05	38.10	3.05	1.99	65	0.13	4	0R	2H	3W	
38.10	41.15	3.05	2.89	95	1.12	37	0R	2H	3W	
41.15	44.20	3.05	3.01	99	0.68	22	0R	2H	3W	
44.20	47.24	3.04	2.95	97	1.06	35	0R	2H	3W	
47.24	50.29	3.05	3.04	100	2.33	76	0R	2H	2W	
50.29	53.34	3.05	2.69	88	0.78	26	0R	2H	2W	Reactivity increases to 4R at 52.42
53.34	56.39	3.05	3.05	100	0.93	30	3R	2H	2W	
56.39	59.44	3.05	3.05	100	0.74	24	4R	2H	3W	
59.44	62.48	3.04	2.95	97	1.57	52	4R	2H	2W	
62.48	65.53	3.05	2.63	86	1.26	41	4R	2H	1W	RBZ 63.75-64.15m
65.53	68.58	3.05	2.82	92	1.23	40	4R	2H	1W	
68.58	71.63	3.05	2.59	85	0.66	22	4R	2H	1W	RBZ 70.30-70.75m
71.63	74.68	3.05	3.05	100	1.22	40	4R	2H	1W	
74.68	77.72	3.04	2.82	93	1.01	33	4R	2H	1W	
77.72	80.77	3.05	2.72	89	0.49	16	3R	2H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
80.77	83.82	3.05	2.89	95	1.45	48	2R	2H	1W	
83.82	86.87	3.05	2.97	97	1.58	52	4R	2H	1W	
86.87	89.92	3.05	2.9	95	1.29	42	4R	3H	1W	
89.92	92.96	3.04	2.88	95	0.93	31	4R	3H	1W	
92.96	96.01	3.05	2.71	89	1.04	34	4R	3H	1W	
96.01	99.06	3.05	2.72	89	1.68	55	4R	3H	1W	
99.06	102.11	3.05	2.89	95	1.45	48	4R	2H	1W	
102.11	105.16	3.05	2.85	93	0.88	29	4R	2H	1W	
105.16	106.68	1.52	1.31	86	0.77	51	3R	2H	1W	
106.68	109.73	3.05	2.93	96	1.57	51	4R	2H	1W	
109.73	112.78	3.05	2.85	93	2.22	73	2R	2H	1W	
112.78	115.82	3.04	2.93	96	1.97	65	1R	2H	1W	
115.82	118.87	3.05	2.89	95	1.92	63	1R	2H	1W	
118.87	121.92	3.05	2.5	82	1.26	41	4R	3H	1W	
121.92	124.97	3.05	2.68	88	0.97	32	4R	3H	1W	
124.97	128.02	3.05	3.05	100	2.49	82	4R	3H	1W	
128.02	131.06	3.04	2.81	92	2.81	92	4R	3H	1W	
131.06	134.11	3.05	3.05	100	2.84	93	4R	3H	1W	
134.11	137.16	3.05	2.78	91	1.74	57	4R	3H	1W	
137.16	140.21	3.05	2.8	92	2.40	79	3R	3H	1W	
140.21	143.26	3.05	2.59	85	1.47	48	2R	3H	1W	RBZ 142.5-142.9m
143.26	146.30	3.04	2.83	93	1.28	42	4R	3H	1W	RBZ 144-144.5m
146.30	149.35	3.05	2.79	91	2.35	77	4R	3H	1W	
149.35	152.40	3.05	3	98	2.28	75	4R	3H	1W	
152.40	155.45	3.05	2.56	84	1.40	46	4R	3H	1W	RBZ 155-155.4m. Joints have some patchy weathering.
155.45	158.50	3.05	2.8	92	0.92	30	2R	3H	2W	
158.50	161.54	3.04	2.6	86	1.07	35	3R	3H	1W	RBZ 159.9-160.15m
161.54	164.59	3.05	2.96	97	2.28	75	4R	3H	1W	minor patchy oxidizing on some joints.
164.59	167.64	3.05	3	98	1.93	63	4R	3H	1W	
167.64	170.69	3.05	2.77	91	1.31	43	4R	3H	1W	
170.69	173.74	3.05	2.61	86	1.66	54	4R	3H	1W	RBZ 171.5-172.21 m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
173.74	176.78	3.04	3.04	100	1.88	62	4R	3H	1W	Irregular mechanical fracture pattern
176.78	179.83	3.05	2.62	86	1.45	48	4R	3H	1W	
179.83	182.88	3.05	3.04	100	2.50	82	4R	3H	1W	RBZ 179.55-180 m; clay joint fill contains oxides
182.88	185.93	3.05	3.05	100	3.05	100	4R	4H	1W	
185.93	188.98	3.05	2.51	82	0.63	21	4R	3H	3W	RBZ 186.6-188.98 m; fracture surfaces have slickenlines
188.98	192.02	3.04	2.81	92	1.32	43	4R	3H	2W	RBZ 188.98-189.56 m
192.02	195.07	3.05	2.79	91	0.73	24	4R	3H	2W	RBZ 193.75-194.54 m; joint surfaces are oxidized
195.07	198.12	3.05	3.05	100	1.59	52	3R	3H	1W	
198.12	201.17	3.05	2.85	93	1.20	39	3R	3H	1W	
201.17	204.22	3.05	2.81	92	1.27	42	3R	3H	1W	
204.22	207.26	3.04	2.95	97	0.56	18	3R	3H	1W	
207.26	210.31	3.05	2.8	92	0.93	30	3R	3H	1W	
210.31	213.36	3.05	2.8	92	0.64	21	3R	3H	1W	

OS -17-246

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229965	☐	N17-058	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229925	☐	N17-057	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229927	☐	N17-057	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229935	☐	N17-057	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229938	☐	N17-058	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229955	☐	N17-058	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229958	☐	N17-058	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229916	☐	N17-057	core	CS2	☐	☐	☐
7.29	13.72	6.43	MST	3.55	55	Q010913	☐	N17-C03	Chips`		☐	☐	☐
13.72	19.81	6.09	MST	3.00	49	Q010914	☐	N17-C03	Chips`		☐	☐	☐
19.81	25.91	6.10	MST	3.59	59	Q010915	☐	N17-C03	Chips`		☐	☐	☐
25.91	32.00	6.09	MST	3.98	65	Q010916	☐	N17-C03	Chips`		☐	☐	☐
32.00	38.10	6.10	MST	4.48	73	Q010917	☐	N17-C03	Chips`		☐	☐	☐
38.10	41.15	3.05	MST	2.89	95	W229905	☐	N17-057	core		☐	☐	☐
41.15	44.20	3.05	MST	3.01	99	W229906	☐	N17-057	core		☐	☐	☐
44.20	47.24	3.04	MST	2.95	97	W229907	☐	N17-057	core		☐	☐	☐
47.24	50.29	3.05	MST	3.04	100	W229908	☐	N17-057	core		☐	☐	☐
50.29	53.34	3.05	MST	2.69	88	W229909	☐	N17-057	core		☐	☐	☐
53.34	56.39	3.05	MST	3.05	100	W229910	☐	N17-057	core		☐	☐	☐
56.39	59.44	3.05	LST	3.05	100	W229911	☐	N17-057	core		☐	☐	☐
59.44	62.48	3.04	LST	2.95	97	W229912	☐	N17-057	core		☐	☐	☐
62.48	65.53	3.05	LST	2.63	86	W229913	☐	N17-057	core		☐	☐	☐
65.53	68.58	3.05	LST	2.82	92	W229914	☐	N17-057	core		☐	☐	☐
68.58	71.63	3.05	LST	2.59	85	W229915	☐	N17-057	core		☐	☐	☐
71.63	74.68	3.05	LST	3.05	100	W229917	☐	N17-057	core		☐	☐	☐
74.68	80.77	6.09	LST	5.54	91	Q010918	☐	N17-C03	Chips`		☐	☐	☐
80.77	86.87	6.10	LST	5.86	96	Q010919	☐	N17-C03	Chips`		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
86.87	92.96	6.09	LST	5.78	95	Q010920	☐	N17-C03	Chips`		☐	☐	☐
92.96	99.06	6.10	LST	5.43	89	Q010921	☐	N17-C03	Chips`		☐	☐	☐
99.06	103.63	4.57	LST	4.43	97	Q010922	☐	N17-C03	Chips`		☐	☐	☐
103.63	106.68	3.05	LST	2.82	92	W229918	☐	N17-057	core		☐	☐	☐
106.68	109.73	3.05	LST	2.93	96	W229919	☐	N17-057	core		☐	☐	☐
106.68	109.73	3.05	LST	2.93	96	W229920	☐	N17-057	core		☐	☐	☑
109.73	112.09	2.36	LST	2.36	100	W229921	☐	N17-057	core		☐	☐	☐
112.09	114.30	2.21	LST	2.15	97	W229922	☐	N17-057	core		☐	☐	☐
114.30	117.35	3.05	MST	2.98	98	W229923	☐	N17-057	core		☐	☐	☐
117.35	118.56	1.21	MST	1.21	100	W229924	☐	N17-057	core		☐	☐	☐
118.56	120.40	1.84	LST	1.73	94	W229926	☐	N17-057	core		☐	☐	☐
120.40	123.44	3.04	LST	2.74	90	W229928	☐	N17-057	core		☐	☐	☐
123.44	126.49	3.05	LST	3.05	100	W229929	☐	N17-057	core		☐	☐	☐
126.49	129.54	3.05	LST	2.78	91	W229930	☐	N17-057	core		☐	☐	☐
126.49	129.54	3.05	LST	2.78	91	W229931	☐	N17-057	core		☐	☑	☐
129.54	132.59	3.05	LST	3.05	100	W229932	☐	N17-057	core		☐	☐	☐
132.59	135.64	3.05	LST	3.03	99	W229933	☐	N17-057	core		☐	☐	☐
135.64	138.68	3.04	LST	3.02	99	W229934	☐	N17-057	core		☐	☐	☐
138.68	141.73	3.05	LST	3.04	100	W229936	☐	N17-057	core		☐	☐	☐
141.73	144.78	3.05	LST	2.67	88	W229937	☐	N17-058	Core		☐	☐	☐
144.78	147.83	3.05	LST	2.99	98	W229939	☐	N17-058	Core		☐	☐	☐
147.83	150.88	3.05	LST	3.05	100	W229940	☐	N17-058	Core		☐	☐	☐
150.88	153.92	3.04	LST	3.04	100	W229941	☐	N17-058	Core		☐	☐	☐
153.92	156.97	3.05	LST	3.04	100	W229942	☐	N17-058	Core		☐	☐	☐
156.97	160.02	3.05	LST	3.00	98	W229943	☐	N17-058	Core		☐	☐	☐
160.02	163.07	3.05	LST	2.79	91	W229944	☐	N17-058	Core		☐	☐	☐
163.07	166.12	3.05	LST	2.90	95	W229945	☐	N17-058	Core		☐	☐	☐
166.12	169.16	3.04	LST	2.91	96	W229946	☐	N17-058	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
169.16	172.21	3.05	LST	2.82	92	W229947	☐	N17-058	Core		☐	☐	☐
169.16	172.21	3.05	LST	2.82	92	W229948	☐	N17-058	Core		☐	☐	☑
172.21	175.26	3.05	LST	2.77	91	W229949	☐	N17-058	Core		☐	☐	☐
175.26	178.31	3.05	LST	3.00	98	W229950	☐	N17-058	Core		☐	☐	☐
178.31	181.36	3.05	LST	2.91	95	W229951	☐	N17-058	Core		☐	☐	☐
181.36	184.40	3.04	LST	3.04	100	W229952	☐	N17-058	Core		☐	☐	☐
184.40	186.51	2.11	LST	2.00	95	W229953	☐	N17-058	Core		☐	☐	☐
186.51	189.56	3.05	LST	3.04	100	W229954	☐	N17-058	Core		☐	☐	☐
189.56	192.02	2.46	LST	2.16	88	W229956	☐	N17-058	Core		☐	☐	☐
192.02	195.07	3.05	LST	2.95	97	W229957	☐	N17-058	Core		☐	☐	☐
195.07	198.12	3.05	LST	2.93	96	W229959	☐	N17-058	Core		☐	☐	☐
198.12	201.17	3.05	LST	3.00	98	W229960	☐	N17-058	Core		☐	☐	☐
201.17	204.22	3.05	LST	3.04	100	W229961	☐	N17-058	Core		☐	☐	☐
204.22	207.26	3.04	LST	2.95	97	W229962	☐	N17-058	Core		☐	☐	☐
207.26	210.31	3.05	LST	2.80	92	W229963	☐	N17-058	Core		☐	☐	☐
210.31	213.36	3.05	LST	2.80	92	W229964	☐	N17-058	Core		☐	☐	☐

OS -17-247

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
6.07	13.30	7.23	LST	FG	Medium grey to pale green limestone with dark grey and tan laminations. Resembles O-MST1 but is reactive to HCl							
						--	TN					
						DK	GY					
						MD	GY					
						LT	GN	BD				
13.30	38.71	25.41	DST	FG	Pale grey to taupe dolostone							
						LT	GN					
						--	TN					
						LT	GY					
38.71	79.27	40.56	LST	MG	Medium grey to pale green limestone with dark grey and tan laminations. Resembles O-MST1 but is reactive to HCl							
						--	CR					
						LT	GN					
						--	TN					
						LT	GY					
79.27	179.09	99.82	MST	VF	Predominantly green mudstone with interbedded with dark grey to black mudstone. Characteristic O-MST1.							
						--	BK					
						--	GN	BD				

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	6.07	6.07	0	0	0.00	0	0R	--	--	
6.07	8.22	2.15	1.36	63	0.43	20	4R	3H	2W	
8.22	11.28	3.06	1.86	61	1.35	44	4R	3H	1W	
11.28	14.33	3.05	2.43	80	1.66	54	4R	3H	1W	RBZ 12.35-12.8m
14.33	17.37	3.04	2.72	89	1.52	50	2R	3H	2W	
17.37	20.42	3.05	2	66	0.16	5	2R	3H	3W	RBZ 17.37-18.37m
20.42	23.47	3.05	2.33	76	0.65	21	2R	3H	2W	
23.47	26.52	3.05	2.11	69	0.54	18	2R	3H	2W	RBZ 24-25m
26.52	29.57	3.05	2.35	77	0.44	14	1R	3H	2W	
29.57	32.61	3.04	2.8	92	0.45	15	2R	4H	2W	
32.61	35.66	3.05	2.67	88	1.19	39	2R	3H	2W	
35.66	38.71	3.05	2.54	83	0.40	13	2R	3H	2W	RBZ 38.36-38.71
38.71	41.76	3.05	2.72	89	1.35	44	3R	3H	2W	
41.76	44.81	3.05	3.05	100	1.33	44	3R	3H	1W	1 fracture going against the bedding (maybe mechanical) 2 of the other fractures along bedding have some deep red visible oxidation.
44.81	47.85	3.04	2.68	88	1.91	63	4R	4H	1W	fracture at about 47.38 has clear oxidation along it
47.85	50.90	3.05	3.05	100	0.75	25	4R	3H	1W	core is fractures horizontally quite a bit. Likely mechanical. Some of the fractures exibit light weathering. Maybe some oxidation but not as apparent/visible as the previous intervals with mentioned oxidation. (ie. The color here is light and orange compared to a deep red previously)
50.90	53.95	3.05	2.68	88	1.40	46	2R	3H	1W	
53.95	57.00	3.05	2.69	88	1.69	55	4R	3H	1W	
57.00	60.05	3.05	3.05	100	2.05	67	4R	3H	1W	
60.05	63.09	3.04	2.94	97	2.40	79	4R	3H	1W	
63.09	66.14	3.05	2.67	88	1.82	60	4R	3H	1W	
66.14	69.19	3.05	2.97	97	1.80	59	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
69.19	72.24	3.05	3.05	100	2.05	67	4R	3H	1W	
72.24	75.29	3.05	2.83	93	1.23	40	4R	4H	1W	
75.29	78.33	3.04	2.84	93	1.19	39	4R	4H	1W	
78.33	81.38	3.05	2.46	81	0.75	25	3R	3H	1W	
81.38	84.43	3.05	3.05	100	1.26	41	0R	2H	1W	RBZ 82.91-83.29m
84.43	87.48	3.05	2.89	95	1.61	53	0R	2H	1W	
87.48	90.53	3.05	2.65	87	1.38	45	0R	2H	1W	
90.53	93.57	3.04	2.91	96	1.49	49	0R	2H	1W	
93.57	96.62	3.05	3.01	99	1.62	53	0R	2H	1W	
96.62	99.67	3.05	3.05	100	1.38	45	0R	2H	1W	RBZ 97.32-97.56
99.67	102.72	3.05	2.84	93	0.78	26	0R	2H	1W	
102.72	105.77	3.05	3.05	100	0.63	21	0R	2H	1W	
105.77	108.81	3.04	2.84	93	1.42	47	0R	2H	1W	Very fisile, flakey, fractured rock/clay 106.90-107.47m
108.81	111.86	3.05	2.69	88	0.88	29	0R	2H	1W	RBZ 109.85-110.00m
111.86	114.91	3.05	3.05	100	0.87	29	0R	2H	1W	
114.91	117.96	3.05	2.91	95	1.34	44	0R	2H	1W	
117.96	121.01	3.05	3.03	99	1.21	40	0R	2H	1W	
121.01	124.05	3.04	2.83	93	1.44	47	0R	3H	1W	
124.05	127.10	3.05	3.05	100	1.32	43	0R	2H	1W	RBZ 125.26-125.56m
127.10	130.15	3.05	2.88	94	1.05	34	0R	2H	1W	
130.15	133.20	3.05	3.05	100	1.53	50	0R	2H	1W	
133.20	136.25	3.05	2.78	91	1.63	53	0R	3H	1W	
136.25	139.29	3.04	2.54	84	1.27	42	0R	3H	1W	RBZ 137.58-137.77
139.29	142.34	3.05	3.05	100	2.95	97	0R	3H	1W	
142.34	145.39	3.05	2.76	90	1.90	62	0R	3H	1W	
145.39	148.44	3.05	3.01	99	2.58	85	0R	3H	1W	
148.44	151.49	3.05	2.88	94	1.02	33	0R	3H	1W	
151.49	154.53	3.04	2.71	89	1.33	44	0R	2H	1W	RBZ 153.46 - 154
154.53	157.58	3.05	2.73	90	2.13	70	0R	2H	1W	
157.58	160.63	3.05	2.89	95	1.35	44	0R	3H	1W	RBZ 158.53-158.65
160.63	163.68	3.05	2.71	89	1.59	52	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
163.68	166.73	3.05	2.92	96	2.18	71	0R	3H	1W	
166.73	169.77	3.04	2.93	96	2.93	96	0R	3H	1W	
169.77	172.82	3.05	2.86	94	2.68	88	0R	3H	1W	
172.82	175.87	3.05	2.94	96	2.02	66	0R	3H	1W	
175.87	178.92	3.05	3.01	99	2.33	76	0R	2H	1W	
178.92	181.97	3.05	2.68	88	1.66	54	2R	3H	1W	Joint surfaces in limestone are polished and display slickenlines
181.97	185.01	3.04	3	99	2.00	66	2R	3H	1W	
185.01	188.06	3.05	2.85	93	1.75	57	2R	3H	1W	
188.06	191.11	3.05	2.57	84	1.59	52	3R	3H	1W	RBZ 190.15-190.25 and 190.95-191.11
191.11	194.16	3.05	2.56	84	1.17	38	3R	3H	1W	RBZ 191.11 - 192.11
194.16	197.21	3.05	2.86	94	2.15	70	4R	3H	1W	RBZ 194.77 - 195
197.21	200.25	3.04	2.44	80	1.08	36	4R	3H	1W	
200.25	203.30	3.05	2.98	98	1.43	47	4R	3H	1W	RBZ
203.30	206.35	3.05	2.88	94	1.46	48	2R	3H	1W	Small sections of medium grey limestone with intense reactivity, majority of section is dark grey siltstone with moderate reactivity
206.35	209.40	3.05	2.97	97	1.45	48	2R	3H	1W	
209.40	212.45	3.05	2.93	96	1.85	61	3R	3H	1W	
212.45	215.49	3.04	2.84	93	1.64	54	3R	3H	1W	Section has a mix of dark grey siltstone (moderately reactive to HCL) and medium grey limestone (instense reactivity to HCL)
215.49	218.54	3.05	2.91	95	1.79	59	2R	3H	1W	Section has a mix of dark grey siltstone (moderately reactive to HCL) and medium grey limestone (instense reactivity to HCL)
218.54	221.59	3.05	2.94	96	1.51	50	3R	3H	1W	
221.59	224.64	3.05	3.04	100	2.11	69	4R	3H	1W	
224.64	227.69	3.05	2.92	96	1.61	53	2R	3H	1W	Section has a mix of dark grey siltstone (moderately reactive to HCL) and medium grey limestone (instense reactivity to HCL)
227.69	230.73	3.04	2.78	91	1.52	50	2R	3H	1W	Section has a mix of dark grey siltstone (moderately reactive to HCL) and medium grey limestone (instense reactivity to HCL)

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
230.73	233.78	3.05	3.05	100	2.79	91	2R	3H	1W	Beginning of this section has been reduced to NQ. Section has a mix of dark grey siltstone (moderately reactive to HCL) and medium grey limestone (instense reactivity to HCL)
233.78	236.83	3.05	2.93	96	2.19	72	4R	3H	1W	
236.83	239.88	3.05	2.84	93	2.06	68	2R	3H	1W	Section has a mix of light brown mudstone (weak reaction to HCL) and medium grey limestone (instense reactivity to HCL)
239.88	242.93	3.05	3.01	99	2.76	90	2R	2H	1W	Contact: start of 'osiris debrite'
242.93	245.97	3.04	3	99	3.00	99	4R	2H	1W	
245.97	249.02	3.05	2.05	67	1.50	49	3R	2H	1W	two ~10cm thick rubble sections
249.02	252.07	3.05	2.95	97	2.65	87	4R	2H	1W	
252.07	255.12	3.05	2.72	89	1.77	58	4R	2H	1W	
255.12	258.17	3.05	2.78	91	1.36	45	4R	2H	1W	half of run is rubble
258.17	261.21	3.04	2.95	97	2.79	92	2R	2H	1W	
261.21	264.26	3.05	3	98	2.64	87	4R	2H	1W	
264.26	267.31	3.05	3.01	99	3.01	99	4R	2H	1W	competent af
267.31	270.34	3.03	3.02	100	2.91	96	3R	3H	1W	
270.34	273.41	3.07	3.05	99	3.05	99	3R	3H	1W	competent af
273.41	276.45	3.04	3.02	99	3.02	99	3R	2H	1W	
276.45	279.50	3.05	2.9	95	2.76	90	2R	2H	1W	
279.50	282.55	3.05	2.91	95	2.58	85	4R	2H	1W	
282.55	285.60	3.05	3.02	99	2.93	96	4R	2H	1W	
285.60	288.65	3.05	2.98	98	2.91	95	4R	2H	1W	
288.65	291.69	3.04	2.89	95	2.33	77	4R	2H	1W	
291.69	294.74	3.05	2.9	95	2.55	84	4R	2H	1W	
294.74	297.79	3.05	2.93	96	2.46	81	4R	2H	1W	green arsenic oxide joint coating
297.79	300.84	3.05	3	98	2.47	81	4R	2H	1W	multiple sections of rubble
300.84	303.89	3.05	2.87	94	2.57	84	3R	2H	1W	
303.89	306.93	3.04	2.85	94	2.09	69	4R	2H	1W	30% RUBBLE
306.93	309.98	3.05	2.81	92	1.83	60	3R	2H	1W	green arsenic oxide on joints

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
309.98	313.03	3.05	2.82	92	1.83	60	4R	2H	1W	1/3 OF RUN RUBBLE. Green arsenic oxide on joints that are 60 degrees tca
313.03	316.18	3.15	2.77	88	2.02	64	3R	2H	1W	1/3 of run rubble. Opriment on joint surfaces
316.18	319.13	2.95	2.74	93	1.41	48	2R	2H	1W	incompetent 'gouge' in this run -> associated with decalcification and abundnat realgar. Orpiment on joint surfaces.
319.13	322.17	3.04	2.77	91	0.94	31	4R	2H	1W	brown-green coating on joints (some As-oxide?) -> mixture of clay and oxide coating.
322.17	325.21	3.04	2.97	98	0.93	31	4R	2H	1W	~1/2 of core is rubble. Mixture of As-oxide and clay coating joint surfaces.
325.21	328.27	3.06	2.91	95	2.19	72	4R	2H	1W	difficult to tell if bedding parallel joints are natural or mechanica. If natural there is a lot (~30 frac frequency).
328.27	331.32	3.05	2.8	92	1.65	54	4R	2H	1W	~1/3 OF RUN IS RUBBLE
331.32	334.37	3.05	2.83	93	0.88	29	4R	2H	1W	RBZ at 333.10m and 334.00m
334.37	337.41	3.04	2.45	81	1.36	45	4R	2H	1W	RBZ at 336m
337.41	340.46	3.05	3	98	1.45	48	2R	2H	1W	Section is mainly composed of non-reactive siliciclastics with small sections of intensely reactive limestone
340.46	343.51	3.05	2.87	94	2.31	76	3R	2H	1W	Sections of non-reactive siliciclastics and intensely reactive limestone
343.51	346.56	3.05	2.92	96	1.39	46	3R	2H	1W	Sections of non-reactive siliciclastics and intensely reactive limestone
346.56	349.61	3.05	2.31	76	0.83	27	4R	2H	1W	RBZ at 347.5m and 349m
349.61	352.65	3.04	2.27	75	0.32	11	4R	2H	1W	EOH

OS -17-247

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W229991	☐	N17-059	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232003	☐	N17-059	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232007	☐	N17-059	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232016	☐	N17-062	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232019	☐	N17-062	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232034	☐	N17-062	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232039	☐	N17-062	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232050	☐	N17-064	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W229976	☐	N17-059	Core	CS6	☐	☐	☐
6.07	8.22	2.15	LST, OVB	1.36	63	Q010923	☐	N17-C03	Chips`		☐	☐	☐
8.22	14.33	6.11	LST	4.29	70	Q010924	☐	N17-C03	Chips`		☐	☐	☐
14.33	20.42	6.09	DST	4.33	71	Q010925	☐	N17-C03	Chips`		☐	☐	☐
20.42	26.52	6.10	DST	4.44	73	Q010926	☐	N17-C03	Chips`		☐	☐	☐
26.52	32.61	6.09	DST	5.15	85	Q010927	☐	N17-C03	Chips`		☐	☐	☐
32.61	38.41	5.80	DST	5.18	89	Q010928	☐	N17-C03	Chips`		☐	☐	☐
38.41	44.81	6.40	DST	5.77	90	Q010929	☐	N17-C03	Chips`		☐	☐	☐
44.81	50.90	6.09	LST	5.73	94	Q010930	☐	N17-C03	Chips`		☐	☐	☐
50.90	53.95	3.05	LST	2.68	88	W229966	☐	N17-058	Core		☐	☐	☐
50.90	53.95	3.05	LST	2.68	88	W229967	☐	N17-058	Core	CS2	☐	☑	☐
53.95	57.00	3.05	LST	2.69	88	W229968	☐	N17-058	Core		☐	☐	☐
57.00	60.05	3.05	LST	3.05	100	W229969	☐	N17-058	Core		☐	☐	☐
60.05	63.09	3.04	LST	2.67	88	W229970	☐	N17-058	Core		☐	☐	☐
63.09	66.14	3.05	LST	2.67	88	W229971	☐	N17-058	Core		☐	☐	☐
66.14	69.19	3.05	LST	2.97	97	W229972	☐	N17-058	Core		☐	☐	☐
69.19	72.24	3.05	LST	3.05	100	W229973	☐	N17-059	Core		☐	☐	☐
72.24	75.29	3.05	LST	2.83	93	W229974	☐	N17-059	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
75.29	78.33	3.04	LST	2.84	93	W229975	☐	N17-059	Core		☐	☐	☐
78.33	81.38	3.05	LST	2.46	81	W229977	☐	N17-059	Core		☐	☐	☐
81.38	84.43	3.05	MST	3.05	100	W229978	☐	N17-059	Core		☐	☐	☐
84.43	87.48	3.05	MST	2.89	95	W229979	☐	N17-059	Core		☐	☐	☐
87.48	90.53	3.05	MST	2.65	87	W229980	☐	N17-059	Core		☐	☐	☐
90.53	93.57	3.04	MST	2.91	96	W229981	☐	N17-059	Core		☐	☐	☐
93.57	96.62	3.05	MST	3.01	99	W229982	☐	N17-059	Core		☐	☐	☐
96.62	102.72	6.10	MST	5.89	97	Q010931	☐	N17-C03	Chips`		☐	☐	☐
102.72	108.81	6.09	MST	5.89	97	Q010932	☐	N17-C03	Chips`		☐	☐	☐
108.81	114.91	6.10	MST	5.74	94	Q010933	☐	N17-C03	Chips`		☐	☐	☐
114.91	121.01	6.10	MST	5.94	97	Q010934	☐	N17-C03	Chips`		☐	☐	☐
121.01	127.10	6.09	MST	5.88	97	Q010935	☐	N17-C03	Chips`		☐	☐	☐
127.10	133.20	6.10	MST	5.93	97	Q010936	☐	N17-C03	Chips`		☐	☐	☐
133.20	139.29	6.09	MST	5.32	87	Q010937	☐	N17-C04	chips		☐	☐	☐
139.29	145.39	6.10	MST	5.76	94	Q010938	☐	N17-C04	chips		☐	☐	☐
145.39	151.49	6.10	MST	5.89	97	Q010939	☐	N17-C04	chips		☐	☐	☐
151.49	157.58	6.09	MST	5.44	89	Q010940	☐	N17-C04	chips		☐	☐	☐
157.58	163.68	6.10	MST	5.60	92	Q010941	☐	N17-C04	chips		☐	☐	☐
163.68	169.77	6.09	MST	5.85	96	Q010942	☐	N17-C04	chips		☐	☐	☐
169.77	172.82	3.05	MST	2.86	94	W229983	☐	N17-059	Core		☐	☐	☐
169.77	172.82	3.05	MST	2.86	94	W229984	☐	N17-059	Core		☐	☑	☐
172.82	175.87	3.05	MST	2.94	96	W229985	☐	N17-059	Core		☐	☐	☐
175.87	178.92	3.05	MST	3.01	99	W229986	☐	N17-059	Core		☐	☐	☐
178.92	181.97	3.05	MST	2.68	88	W229987	☐	N17-059	Core		☐	☐	☐
181.97	185.01	3.04	LST	3.00	99	W229988	☐	N17-059	Core		☐	☐	☐
185.01	188.06	3.05	LST	2.85	93	W229989	☐	N17-059	Core		☐	☐	☐
188.06	191.11	3.05	LST	2.57	84	W229990	☐	N17-059	Core		☐	☐	☐
191.11	194.16	3.05	LST	2.56	84	W229992	☐	N17-059	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
194.16	197.21	3.05	LST	2.86	94	W229993	☐	N17-059	Core		☐	☐	☐
197.21	200.25	3.04	LST	2.44	80	W229994	☐	N17-059	Core		☐	☐	☐
200.25	203.30	3.05	LST	2.98	98	W229995	☐	N17-059	Core		☐	☐	☐
203.30	206.35	3.05	LST	2.88	94	W229996	☐	N17-059	Core		☐	☐	☐
203.30	206.35	3.05	LST	2.88	94	W229997	☐	N17-059	Core		☐	☐	☑
206.35	209.40	3.05	LST	2.97	97	W229998	☐	N17-059	Core		☐	☐	☐
209.40	212.45	3.05	LST	2.93	96	W229999	☐	N17-059	Core		☐	☐	☐
212.45	215.49	3.04	LST	2.84	93	W230000	☐	N17-059	Core		☐	☐	☐
215.49	218.54	3.05	LST	2.91	95	W232001	☐	N17-059	Core		☐	☐	☐
218.54	221.59	3.05	LST	2.94	96	W232002	☐	N17-059	Core		☐	☐	☐
221.59	224.64	3.05	LST	3.04	100	W232004	☐	N17-059	Core		☐	☐	☐
224.64	227.69	3.05	LST	2.92	96	W232005	☐	N17-059	Core		☐	☐	☐
227.69	230.73	3.04	LST	2.78	91	W232006	☐	N17-059	Core		☐	☐	☐
230.73	233.78	3.05	DMT	3.05	100	W232008	☐	N17-059	Core		☐	☐	☐
233.78	236.83	3.05	LST	2.93	96	W232009	☐	N17-062	core		☐	☐	☐
236.83	239.88	3.05	LST	2.84	93	W232010	☐	N17-062	core		☐	☐	☐
239.88	242.93	3.05	MST	3.01	99	W232011	☐	N17-062	core		☐	☐	☐
242.93	245.97	3.04	LST	3.00	99	W232012	☐	N17-062	core		☐	☐	☐
245.97	249.02	3.05	LST	2.05	67	W232013	☐	N17-062	core		☐	☐	☐
249.02	252.07	3.05	LST	2.95	97	W232014	☐	N17-062	core		☐	☐	☐
252.07	255.12	3.05	LST	2.72	89	W232015	☐	N17-062	core		☐	☐	☐
255.12	258.17	3.05	LST	2.78	91	W232017	☐	N17-062	core		☐	☐	☐
258.17	261.21	3.04	LST	2.95	97	W232018	☐	N17-062	core		☐	☐	☐
261.21	264.26	3.05	LST	3.00	98	W232020	☐	N17-062	core		☐	☐	☐
264.26	267.31	3.05	LST	3.01	99	W232021	☐	N17-062	core		☐	☐	☐
267.31	270.36	3.05	LST	3.04	100	W232022	☐	N17-062	core		☐	☐	☐
270.36	273.41	3.05	LST	3.05	100	W232023	☐	N17-062	core		☐	☐	☐
270.36	273.41	3.05	LST	3.05	100	W232024	☐	N17-062	core		☐	☑	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
273.41	276.45	3.04	LST	3.02	99	W232025	☐	N17-062	core		☐	☐	☐
276.45	279.50	3.05	LST	2.90	95	W232026	☐	N17-062	core		☐	☐	☐
279.50	282.55	3.05	LST	2.91	95	W232027	☐	N17-062	core		☐	☐	☐
282.55	285.60	3.05	LST	3.02	99	W232028	☐	N17-062	core		☐	☐	☐
285.60	288.65	3.05	LST	2.98	98	W232029	☐	N17-062	core		☐	☐	☐
288.65	291.69	3.04	LST	2.89	95	W232030	☐	N17-062	core		☐	☐	☐
291.69	294.74	3.05	LST	2.90	95	W232031	☐	N17-062	core		☐	☐	☐
294.74	297.79	3.05	LST	2.93	96	W232032	☐	N17-062	core		☐	☐	☐
297.79	300.84	3.05	LST	3.00	98	W232033	☐	N17-062	core		☐	☐	☐
300.84	303.89	3.05	LST	2.87	94	W232035	☐	N17-062	core		☐	☐	☐
303.89	306.93	3.04	LST	2.85	94	W232036	☐	N17-062	core		☐	☐	☐
306.93	309.98	3.05	LST	2.81	92	W232037	☐	N17-062	core		☐	☐	☐
309.98	311.50	1.52	LST	1.41	93	W232038	☐	N17-062	core		☐	☐	☐
311.50	313.03	1.53	LST	1.41	92	W232040	☐	N17-062	core		☐	☐	☐
313.03	316.08	3.05	LST	2.77	91	W232041	☐	N17-062	core		☐	☐	☐
316.08	319.13	3.05	LST	2.74	90	W232042	☐	N17-062	core		☐	☐	☐
319.13	322.17	3.04	LST	2.77	91	W232043	☐	N17-062	core		☐	☐	☐
319.13	322.17	3.04	LST	2.77	91	W232044	☐	N17-062	core		☐	☐	☑
322.17	325.22	3.05	LST	2.97	97	W232045	☐	N17-064	core		☐	☐	☐
325.22	328.27	3.05	LST	2.91	95	W232046	☐	N17-064	core		☐	☐	☐
328.27	331.32	3.05	LST	2.80	92	W232047	☐	N17-064	core		☐	☐	☐
331.32	334.37	3.05	LST	2.83	93	W232048	☐	N17-064	core		☐	☐	☐
334.37	337.41	3.04	LST	2.45	81	W232049	☐	N17-064	core		☐	☐	☐
337.41	340.46	3.05	LST	3.00	98	W232051	☐	N17-064	core	CS2	☐	☐	☐
340.46	343.51	3.05	LST	2.87	94	W232052	☐	N17-064	core		☐	☐	☐
343.51	346.56	3.05	LST	2.92	96	W232053	☐	N17-064	core		☐	☐	☐
343.51	346.56	3.05	LST	2.92	96	W232054	☐	N17-064	core		☐	☐	☑
346.56	349.61	3.05	LST	2.31	76	W232055	☐	N17-064	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
349.61	352.65	3.04	LST	2.27	75	W232056	☐	N17-064	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	7.00	7.00	0	0	0.00	0	--	--	--	
7.00	7.62	0.62	0.28	45	0.00	0	0R	3H	2W	
7.62	10.67	3.05	2.68	88	0.48	16	0R	3H	1W	
10.67	13.72	3.05	2.28	75	0.00	0	0R	3H	1W	
13.72	16.76	3.04	2.89	95	1.88	62	0R	3H	1W	
16.76	19.81	3.05	2.95	97	0.51	17	0R	3H	1W	
19.81	22.86	3.05	3.05	100	2.12	70	0R	3H	1W	
22.86	25.91	3.05	3.05	100	2.67	88	0R	3H	1W	
25.91	28.96	3.05	2.72	89	1.56	51	0R	3H	1W	
28.96	32.00	3.04	3.04	100	2.16	71	0R	3H	1W	RZ: 31.30-31.48m
32.00	35.05	3.05	2.78	91	1.24	41	0R	3H	1W	RZ: 33.70-34.50m
35.05	38.10	3.05	3	98	2.55	84	0R	3H	1W	
38.10	41.15	3.05	3.03	99	2.52	83	0R	3H	1W	
41.15	44.20	3.05	2.78	91	2.33	76	0R	3H	1W	RZ: 43.16-43.54m
44.20	47.24	3.04	3	99	1.95	64	0R	3H	1W	
47.24	50.29	3.05	2.95	97	2.95	97	0R	3H	1W	
50.29	53.34	3.05	3.02	99	2.90	95	0R	3H	1W	51.40m ground core
53.34	56.39	3.05	3.05	100	2.97	97	0R	3H	1W	55.03-55.23 fractured zone, not rubble just quite fractured
56.39	59.44	3.05	3.05	100	2.88	94	0R	3H	1W	
59.44	62.48	3.04	2.95	97	2.90	95	0R	3H	1W	all fractures mechanical
62.48	65.53	3.05	3	98	1.56	51	0R	3H	1W	RZ: 65.00-65.40
65.53	68.58	3.05	2.98	98	2.62	86	0R	4H	1W	mechanical fractures
68.58	71.63	3.05	2.97	97	2.90	95	0R	4H	1W	mecahnical fractures
71.63	74.68	3.05	2.95	97	2.79	91	1R	4H	1W	trace carbonate on some fracture surfaces. All fractures mechanical
74.68	77.73	3.05	3.05	100	3.04	100	1R	3H	1W	tr carbonate (cal) component to stringers, possible carbonate in some fractures. All fractures mechanical. Basically the entire bench is stick rock

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
77.73	80.77	3.04	3	99	2.71	89	1R	4H	1W	tr-5% carbonate (cal) in veinlets. Likely carbonate filling on some fractures. Most of the core breaks are mecahnical.
80.77	83.82	3.05	2.96	97	2.74	90	1R	4H	1W	Tr carbonate in stringers. All fractures mecahnical.
83.82	86.87	3.05	3.04	100	3.01	99	1R	3H	1W	5% carbonate (cal) in veinlets
86.87	89.92	3.05	3.05	100	2.94	96	1R	4H	1W	Tr carbonate (cal) in fractures. All breaks mechanical
89.92	92.96	3.04	2.94	97	2.70	89	1R	4H	1W	Tr carbonate (cal) in stringers and infilling tiny fractures. Most breaks mechanical. Some ground core at 92.69m.
92.96	96.01	3.05	2.84	93	2.75	90	1R	2H	1W	Tr carbonate infilling tiny fractures. Veinlets/stringers do not appear to have a carbonate component. The one fracture that is recorded is likely mechanical, however it can not be perfectly put back together so it is being recorded as an actual fracture.
96.01	99.06	3.05	3.05	100	2.81	92	0R	3H	1W	All breaks mechanical
99.06	102.11	3.05	2.87	94	2.80	92	0R	2H	1W	All breaks mechanical
102.11	105.16	3.05	2.92	96	2.66	87	0R	1H	1W	
105.16	108.20	3.04	2.9	95	2.90	95	0R	2H	1W	Spun rods/ground core below the 106.68m (350 ft) block
108.20	111.25	3.05	3.03	99	2.99	98	1R	2H	1W	spun rods at block 109.73m (360 ft)
111.25	114.30	3.05	2.88	94	2.82	92	1R	3H	1W	Tr carbonate infilling tiny super thin fractures. Spun Rods at 111.225
114.30	117.35	3.05	2.7	89	2.30	75	1R	3H	1W	increase in fractures due to shallow angle of bedding. Tr carbonate infilling little hairline fractuers. \
117.35	120.40	3.05	3.05	100	1.10	36	0R	4H	1W	RZ: 118.5-119.5m
120.40	123.44	3.04	3.03	100	2.15	71	0R	4H	1W	
123.44	126.49	3.05	3	98	2.11	69	0R	4H	1W	
126.49	129.54	3.05	3.05	100	2.80	92	0R	4H	1W	
129.54	131.06	1.52	1.52	100	1.50	99	0R	4H	1W	
131.06	134.11	3.05	3.03	99	2.90	95	1R	3H	1W	man made mecahnical fractures, nice stick rock
134.11	137.16	3.05	3.05	100	2.77	91	0R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
137.16	140.21	3.05	2.95	97	2.53	83	0R	4H	1W	
140.21	143.26	3.05	3.05	100	1.76	58	0R	1H	1W	clay/gogue 141.68-142.90m
143.26	146.30	3.04	3	99	2.06	68	0R	3H	1W	all fractures are mechanical
146.30	149.35	3.05	2.9	95	1.54	50	1R	3H	1W	
149.35	152.40	3.05	3	98	2.08	68	0R	3H	1W	all fractures man made
152.40	155.45	3.05	2.94	96	1.96	64	1R	3H	1W	RZ : 154.8-154.95. Core is broken, all breaks look to be mechanical except for the ruble zone at the end of the interval.
155.45	158.50	3.05	3	98	1.30	43	1R	1H	1W	
158.50	161.54	3.04	3.04	100	2.24	74	1R	3H	1W	
161.54	164.59	3.05	3.05	100	2.08	68	1R	2H	1W	Fractures are likely mechanical, they do not consistute a joint set
164.59	167.64	3.05	3.05	100	2.39	78	1R	3H	1W	mechanical fractues, very competent core
167.64	170.69	3.05	2.95	97	2.82	92	0R	3H	1W	Mechanical Fractures
170.69	173.74	3.05	3.04	100	2.42	79	0R	2H	1W	core fractured along bedding planes, attitude of fractures is variable as the core is variable.
173.74	176.78	3.04	2.75	90	1.00	33	1R	1H	1W	Small rubble zone, rounded core, clay rich
176.78	179.83	3.05	3.05	100	2.87	94	1R	3H	1W	ALL MECHANICAL FRACTURES STICK ROCK
179.83	182.88	3.05	2.99	98	2.60	85	0R	3H	1W	mechanical fractures, highly competent core
182.88	185.93	3.05	2.95	97	2.81	92	1R	3H	1W	all MECH FRAC
185.93	188.98	3.05	3.05	100	3.00	98	1R	3H	1W	MECH FRAC
188.98	192.02	3.04	3.03	100	2.98	98	1R	3H	1W	mech frac, super stick rock
192.02	195.07	3.05	3.02	99	2.74	90	1R	3H	1W	fractures almost parallel TCA
195.07	198.12	3.05	2.95	97	2.73	90	0R	2H	1W	One very weakly reactive fracture: 50TCA, planar, 10mm wide infilling of clay and tr carb
198.12	201.17	3.05	3.03	99	2.68	88	0R	3H	1W	mechanical fractures, stick rock, siliciclastic
201.17	204.22	3.05	2.8	92	1.13	37	2R	1H	1W	First appearnace of lime beds. Small rubble zones around 203.40m
204.22	207.26	3.04	3.01	99	1.00	33	3R	1H	1W	most beds are a 2H however there are a few super soft intervals. Joints are irrelguar, one joint set may be picked out but it is not a strong set.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
207.26	210.31	3.05	3.05	100	1.06	35	3R	2H	1W	Fract parallel TCA are slightly undulating, quite rough, infilling is a thin coating of clay, rock fragments and occasional calcite
210.31	213.36	3.05	2.96	97	1.57	51	3R	2H	1W	
213.36	216.41	3.05	3.05	100	1.65	54	0R	2H	1W	
216.41	219.46	3.05	3.05	100	2.28	75	0R	3H	1W	
219.46	222.50	3.04	2.9	95	1.48	49	2R	2H	1W	RZ: 221.40-80m angular pieces of core
222.50	225.55	3.05	3.05	100	1.05	34	2R	2H	1W	
225.55	228.60	3.05	2.93	96	2.59	85	1R	2H	1W	Only one limestone bed, 10cm wide.
228.60	231.65	3.05	2.88	94	1.90	62	1R	3H	1W	
231.65	234.70	3.05	3.01	99	1.50	49	0R	1H	1W	Clay interval: 232.10-27 Otherwise the interval is hard (4H) and strong (3H). Fractures are irregularly shaped
234.70	237.74	3.04	3.02	99	2.54	84	0R	3H	1W	No naturally occuring joint sets, one irregular made from hammering the core
237.74	240.79	3.05	3.04	100	2.24	73	3R	2H	1W	
240.79	243.84	3.05	3	98	2.80	92	2R	3H	1W	thin interbeds of limestone
243.84	246.89	3.05	3	98	1.90	62	3R	1H	1W	Clay interval: 244.82-245.60m
246.89	249.94	3.05	3.04	100	2.05	67	3R	3H	1W	textbook slickens: 247.63m formed of calcite, 12mm wide, beautiful steps
249.94	252.98	3.04	3	99	2.38	78	3R	3H	1W	Most of the fractures are mechanical
252.98	256.03	3.05	2.99	98	2.25	74	3R	2H	1W	Most of the fractures in the limestone are mechanical. There are a few that look to be natural as in not caused by smashing the core out of the core tube. Only one true joint set, however the attitude of a natural fracture is included in the joint set log
256.03	259.08	3.05	3.03	99	1.00	33	3R	3H	1W	Many of the fractures are mechanical
259.08	262.13	3.05	3.05	100	1.10	36	3R	2H	1W	
262.13	265.18	3.05	3.05	100	1.18	39	3R	2H	1W	joints: dominant set 45TCA, cut by another set parallel to subparallel TCA. In this interval the fractures are rough, they are likely mechanical
265.18	268.22	3.04	3.03	100	1.41	46	3R	3H	1W	
268.22	271.27	3.05	3.05	100	1.74	57	3R	3H	1W	Joints are irregular but not super irregular, just hackley

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
271.27	274.32	3.05	3.02	99	2.14	70	3R	3H	1W	irregular joints, not really undulating but hackley
274.32	277.37	3.05	3.05	100	1.76	58	2R	3H	1W	RZ:276.10-.30 weakly developed zone of increased fracturing. Core pieces are angular points like shivs. Comments on the joint set: the fracture set described in the joint tab are fracctures along planes of calcite, the fracture shape is undulating but not a smooth undulation, it is a hackly undulation.
277.37	280.42	3.05	2.96	97	1.51	50	3R	3H	1W	RZ: 272.20-.86m angular chunks of core.
280.42	283.46	3.04	3.04	100	0.67	22	3R	3H	1W	lots of fractures in extremely hard core. Rare clay on fracture surfaces. Possible that most of the fractures are mechanically induced
283.46	286.51	3.05	3.05	100	0.81	27	3R	3H	1W	
286.51	289.56	3.05	3.03	99	0.64	21	3R	1H	1W	RZ: 288.50-289.00m Hardness is based on the amount of clay in the run as well as a few spots where the core is all clay
289.56	292.61	3.05	3.04	100	0.66	22	3R	3H	1W	RZ: 290.08-.43 fractured calcite vein. Overall the core is broken in this interval - likely due to drilling conditions, this is the last run before reducing to HQ
292.61	295.66	3.05	3.05	100	1.26	41	3R	3H	1W	REDUCED TO NQ IN THIS RUN. One true joint set, one lone fracture that does not follow the trend of the joint set is described in the joint tab. There are mechanical fractures throughout the interval, they look distinctly different from the joint set, they are missing chunks of core/chips out of the top and are a stepped fracture
295.66	298.70	3.04	2.5	82	0.43	14	3R	3H	1W	Highly fractured core, looks mechanical. The obvious joint set is described in the joints tab. Occasional clay on fracture surfaces, very thin light grey.
298.70	301.75	3.05	3.05	100	2.04	67	3R	3H	1W	competent core, the fractures are man made or mechanical
301.75	304.80	3.05	3.05	100	2.01	66	3R	3H	1W	spun rods
304.80	307.85	3.05	3.05	100	2.25	74	3R	3H	1W	mechanical fractures along vuggy veins
307.85	310.90	3.05	3.05	100	2.30	75	3R	2H	1W	3cm wide wedge of clay. Mechanical fractures

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
310.90	313.94	3.04	3.03	100	2.04	67	3R	3H	1W	
313.94	316.99	3.05	3.05	100	1.91	63	1R	2H	1W	silici interbeds within this interval, highly fractured core, but the fractures are definitely due to core being hammered out of the core tube
316.99	320.04	3.05	3.05	100	1.61	53	3R	3H	1W	fracture sets: perpendicular TCA-fractures along cocarse crystaline calicte veins, 35TCA- slightly undulating fractures with poorly developed slicks, 75TCA - sharp planar fractures with trace amounts of clay and poorly developed slicks
320.04	323.09	3.05	2.9	95	1.09	36	3R	3H	1W	
323.09	326.14	3.05	3.05	100	2.61	86	3R	3H	1W	fractures are man made but they are included in the fracture count because they are a regular repeating joint set throughout the entire run
326.14	329.18	3.04	3.04	100	1.88	62	3R	3H	1W	
329.18	332.23	3.05	3.01	99	2.30	75	2R	3H	1W	Section has dark grey siliciclastic beds (non-reactive to HCL) and medium grey limestone beds (strongly reactive to HCL)
332.23	335.28	3.05	2.83	93	1.81	59	2R	3H	1W	Section has dark grey siliciclastic beds (non-reactive to HCL) and medium grey limestone beds (strongly reactive to HCL)
335.28	338.33	3.05	2.82	92	1.55	51	3R	3H	1W	RBZ 337.5m
338.33	341.38	3.05	3.02	99	1.57	51	4R	3H	1W	
341.38	344.42	3.04	2.93	96	2.15	71	3R	3H	1W	Section has dark grey siliciclastic beds (non-reactive to HCL) and medium grey limestone beds (strongly reactive to HCL)
344.42	347.47	3.05	2.79	91	1.82	60	3R	3H	1W	Section has dark grey siliciclastic beds (non-reactive to HCL) and medium grey limestone beds (strongly reactive to HCL)
347.47	350.52	3.05	2.52	83	1.51	50	4R	3H	1W	
350.52	353.57	3.05	0.67	22	0.17	6	4R	3H	1W	Rubbly section, short recovery
353.57	356.62	3.05	3.01	99	2.38	78	4R	3H	1W	
356.62	359.66	3.04	2.94	97	2.60	86	4R	4H	1W	
359.66	362.71	3.05	3.05	100	2.06	68	4R	4H	1W	
362.71	365.76	3.05	2.96	97	1.84	60	4R	4H	1W	
365.76	368.81	3.05	2.86	94	2.07	68	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
368.81	371.86	3.05	3.04	100	2.59	85	4R	3H	1W	
371.86	374.90	3.04	2.87	94	2.05	67	4R	3H	1W	
374.90	377.95	3.05	3.03	99	1.61	53	4R	3H	1W	
377.95	381.00	3.05	3.03	99	2.10	69	4R	3H	1W	
381.00	384.05	3.05	2.94	96	2.50	82	4R	3H	1W	
384.05	387.10	3.05	3.05	100	1.93	63	4R	3H	1W	
387.10	390.14	3.04	2.92	96	1.82	60	4R	3H	1W	
390.14	393.19	3.05	3.04	100	1.90	62	4R	3H	1W	
393.19	396.24	3.05	3.05	100	2.42	79	4R	3H	1W	
396.24	399.29	3.05	2.89	95	2.53	83	4R	3H	1W	
399.29	402.34	3.05	3.02	99	2.82	92	4R	3H	1W	
402.34	405.38	3.04	2.97	98	2.75	90	4R	3H	1W	
405.38	408.43	3.05	2.82	92	2.64	87	2R	2H	1W	Realgar "cheeto" interval.
408.43	411.48	3.05	2.83	93	1.93	63	3R	3H	1W	
411.48	414.53	3.05	2.92	96	1.94	64	4R	3H	1W	
414.53	417.58	3.05	2.98	98	2.02	66	4R	3H	1W	
417.58	420.62	3.04	2.98	98	2.27	75	4R	3H	1W	
420.62	423.67	3.05	2.97	97	2.26	74	4R	3H	1W	
423.67	426.72	3.05	3.05	100	2.11	69	4R	3H	1W	
426.72	429.77	3.05	3.02	99	2.63	86	4R	3H	1W	
429.77	432.82	3.05	2.86	94	2.05	67	4R	3H	1W	
432.82	435.86	3.04	2.87	94	2.43	80	4R	3H	1W	
435.86	438.91	3.05	2.93	96	1.79	59	4R	3H	1W	
438.91	441.96	3.05	3.01	99	0.46	15	2R	3H	1W	one very weakly reactive bed
441.96	445.01	3.05	3.04	100	1.83	60	3R	3H	1W	multiple irregular fractures that do not form a joint set. \
445.01	448.06	3.05	3.03	99	2.00	66	3R	3H	1W	irregular fracture set is fractures along stylolites
448.06	451.10	3.04	3.04	100	1.27	42	3R	3H	1W	
451.10	454.15	3.05	2.97	97	2.18	71	3R	3H	1W	most fractures mechanical
454.15	457.20	3.05	3.02	99	1.41	46	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
457.20	460.25	3.05	3.03	99	0.65	21	2R	2H	1W	mud interbed, weakly reactive, likely siliciclastic with a lime component either from veining or as part of the mud
460.25	463.30	3.05	3	98	0.71	23	2R	1H	1W	
463.30	466.34	3.04	3.03	100	0.49	16	2R	1H	1W	
466.34	469.39	3.05	3.04	100	0.48	16	2R	1H	1W	
469.39	472.44	3.05	2.92	96	0.49	16	2R	1H	1W	
472.44	475.49	3.05	3.05	100	1.15	38	3R	3H	1W	Mix of limestone beds (strongly reactive) and siltstone beds (weak or no reaction to HCL).
475.49	478.54	3.05	3.02	99	0.66	22	3R	3H	1W	Mix of limestone beds (strongly reactive) and siltstone beds (weak or no reaction to HCL).
478.54	481.58	3.04	2.95	97	1.33	44	2R	3H	1W	Mix of limestone beds (strongly reactive) and siltstone beds (weak or no reaction to HCL).
481.58	484.63	3.05	3.03	99	0.46	15	2R	3H	1W	RBZ 483.50-484.63m. Mix of limestone beds (strongly reactive) and siltstone beds (weak or no reaction to HCL).
484.63	487.68	3.05	2.94	96	0.75	25	3R	3H	1W	RBZ 484.63-484.75, 487.30-487.68m.
487.68	490.73	3.05	2.89	95	1.55	51	2R	3H	1W	RBZ 489.40-489.60m. Mix of limestone beds (strongly reactive) and calcareous siltstone beds (weakly reactive).
490.73	493.78	3.05	3	98	0.90	30	2R	3H	1W	RBZ 492.50-492.75m. Mix of limestone beds (strongly reactive) and calcareous siltstone beds (weakly reactive).
493.78	496.82	3.04	3.03	100	0.83	27	2R	3H	1W	RBZ 496.00-496.20m
496.82	499.87	3.05	2.67	88	1.17	38	3R	3H	1W	
499.87	502.92	3.05	2.74	90	1.06	35	4R	3H	1W	
502.92	505.97	3.05	2.72	89	2.07	68	4R	3H	1W	
505.97	509.02	3.05	2.91	95	1.70	56	4R	3H	1W	
509.02	512.06	3.04	2.96	97	1.62	53	4R	3H	1W	
512.06	515.11	3.05	3.01	99	1.59	52	3R	3H	1W	
515.11	518.16	3.05	2.83	93	2.12	70	3R	3H	1W	
518.16	521.21	3.05	2.76	90	1.48	49	3R	3H	1W	Mix of limestone beds (strongly reactive) and siltstone beds (weak/no reaction to HCL).

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
521.21	524.26	3.05	2.85	93	1.88	62	1R	2H	1W	
524.26	527.30	3.04	2.95	97	1.77	58	0R	2H	1W	
527.30	530.35	3.05	3.01	99	1.88	62	1R	2H	1W	Mix of siltstone beds (weak/no reaction to HCL) and small amount of calcite veins and limestone (moderate reaction).
530.35	533.40	3.05	2.86	94	2.23	73	0R	3H	1W	
533.40	536.45	3.05	2.8	92	1.32	43	0R	3H	1W	Very small amounts (<1%) of reactive calcite veinlets
536.45	539.50	3.05	2.99	98	1.36	45	1R	3H	1W	Small amount (<1%) calcite veins
539.50	542.54	3.04	2.91	96	0.90	30	3R	3H	1W	Mix of limestone beds (strongly reactive) and siltstone beds (weak/no reaction to HCL). Joints have progressively higher TCA (moves from 60-80 degrees)near 542.00m,
542.54	545.59	3.05	2.92	96	1.37	45	2R	3H	1W	Mix of limestone beds (strongly reactive) and siltstone beds (weak/no reaction to HCL).
545.59	548.64	3.05	2.98	98	2.07	68	1R	3H	1W	
548.64	551.69	3.05	3.03	99	2.53	83	0R	3H	1W	Small amount of calcite veins (<1%)
551.69	554.74	3.05	3	98	2.18	71	0R	3H	1W	
554.74	557.78	3.04	2.7	89	2.00	66	0R	3H	1W	
557.78	560.83	3.05	2.8	92	2.10	69	0R	3H	1W	RBZ 560.40-560.83m
560.83	563.88	3.05	3.01	99	2.67	88	0R	3H	1W	
563.88	566.93	3.05	2.63	86	2.17	71	0R	3H	1W	EOH

OS -17-248

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W230286	☐	N17-066	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230361	☐	N17-068	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230355	☐	N17-068	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230347	☐	N17-068	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230336	☐	N17-068	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230326	☐	N17-067	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230311	☐	N17-067	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230303	☐	N17-067	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230173	☐	N17-061	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230294	☐	N17-066	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230278	☐	N17-066	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230267	☐	N17-066	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230250	☐	N17-065	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230244	☐	N17-065	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230232	☐	N17-065	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230228	☐	N17-065	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230212	☐	N17-063	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230206	☐	N17-063	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230203	☐	N17-063	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230194	☐	N17-063	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230180	☐	N17-061	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230300	☐	N17-067	Core		☑	☐	☐
7.00	7.62	0.62	SLC, OVB	0.50	81	W230171	☐	N17-061	Core		☐	☐	☐
7.62	10.67	3.05	SLC	2.68	88	W230172	☐	N17-061	Core		☐	☐	☐
10.67	13.72	3.05	SLC	2.28	75	W230174	☐	N17-061	Core		☐	☐	☐
13.72	16.76	3.04	SLC	2.89	95	W230175	☐	N17-061	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
16.76	19.81	3.05	SLC	2.95	97	W230176	☐	N17-061	Core		☐	☐	☐
19.81	22.86	3.05	SLC	3.05	100	W230177	☐	N17-061	Core		☐	☐	☐
22.86	25.91	3.05	SLC	3.05	100	W230178	☐	N17-061	Core		☐	☐	☐
25.91	28.96	3.05	SLC	2.72	89	W230179	☐	N17-061	Core		☐	☐	☐
28.96	35.05	6.09	SLC	5.82	96	Q010943	☐	N17-C04	chips		☐	☐	☐
35.05	41.15	6.10	SLC	6.03	99	Q010944	☐	N17-C04	chips		☐	☐	☐
41.15	47.24	6.09	SLC	5.78	95	Q010945	☐	N17-C04	chips		☐	☐	☐
47.24	53.34	6.10	SLC	5.97	98	Q010946	☐	N17-C04	chips		☐	☐	☐
53.34	59.44	6.10	SLC	6.10	100	Q010947	☐	N17-C04	chips		☐	☐	☐
59.44	65.53	6.09	SLC	5.95	98	Q010948	☐	N17-C04	chips		☐	☐	☐
65.53	71.63	6.10	SLC	5.95	98	Q010949	☐	N17-C04	chips		☐	☐	☐
71.63	77.73	6.10	SLC	6.00	98	Q010950	☐	N17-C04	chips		☐	☐	☐
77.73	83.82	6.09	SLC	5.45	89	Q010951	☐	N17-C04	chips		☐	☐	☐
83.82	89.92	6.10	SLC	6.09	100	Q010952	☐	N17-C04	chips		☐	☐	☐
89.92	96.01	6.09	SLC	5.78	95	Q010953	☐	N17-C04	chips		☐	☐	☐
96.01	102.11	6.10	SLC	5.89	97	Q010954	☐	N17-C04	chips		☐	☐	☐
102.11	108.20	6.09	SLC	5.82	96	Q010955	☐	N17-C04	chips		☐	☐	☐
108.20	114.30	6.10	SLC	5.91	97	Q010956	☐	N17-C04	chips		☐	☐	☐
114.30	117.35	3.05	SLC	2.70	89	W230181	☐	N17-061	Core	CS2	☐	☐	☐
117.35	118.87	1.52	SLC	1.46	96	W230182	☐	N17-061	Core		☐	☐	☐
118.87	120.40	1.53	SLC	1.50	98	W230183	☐	N17-061	Core		☐	☐	☐
120.40	123.44	3.04	SLC	3.03	100	W230184	☐	N17-061	Core		☐	☐	☐
123.44	126.49	3.05	SLC	3.00	98	W230185	☐	N17-061	Core		☐	☐	☐
126.49	129.54	3.05	SLC	3.05	100	W230186	☐	N17-061	Core		☐	☐	☐
126.49	129.54	3.05	SLC	3.05	100	W230187	☐	N17-061	Core		☐	☐	☑
129.54	131.06	1.52	SLC	1.52	100	W230188	☐	N17-061	Core		☐	☐	☐
131.06	134.11	3.05	SLC	3.03	99	W230189	☐	N17-063	Core		☐	☐	☐
134.11	137.16	3.05	SLC	3.05	100	W230190	☐	N17-063	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
137.16	140.21	3.05	SLC	2.95	97	W230191	☐	N17-063	Core		☐	☐	☐
140.21	141.61	1.40	SLC	1.40	100	W230192	☐	N17-063	Core		☐	☐	☐
141.61	143.00	1.39	SLC	1.39	100	W230193	☐	N17-063	Core		☐	☐	☐
143.00	144.78	1.78	SLC	1.76	99	W230195	☐	N17-063	Core		☐	☐	☐
144.78	147.00	2.22	SLC	2.19	99	W230196	☐	N17-063	Core		☐	☐	☐
147.00	148.20	1.20	SLC	1.18	98	W230197	☐	N17-063	Core		☐	☐	☐
148.20	149.35	1.15	SLC	1.10	96	W230198	☐	N17-063	Core		☐	☐	☐
149.35	152.40	3.05	SLC	3.00	98	W230199	☐	N17-063	Core		☐	☐	☐
152.40	155.45	3.05	SLC	2.94	96	W230200	☐	N17-063	Core		☐	☐	☐
152.40	155.45	3.05	SLC	2.94	96	W230201	☐	N17-063	Core		☐	☑	☐
155.45	156.97	1.52	SLC	1.46	96	W230202	☐	N17-063	Core		☐	☐	☐
156.97	158.50	1.53	SLC	1.48	97	W230204	☐	N17-063	Core		☐	☐	☐
158.50	161.54	3.04	SLC	3.04	100	W230205	☐	N17-063	Core		☐	☐	☐
161.54	164.59	3.05	SLC	3.05	100	W230207	☐	N17-063	Core		☐	☐	☐
164.59	167.64	3.05	SLC	3.05	100	W230208	☐	N17-063	Core		☐	☐	☐
167.64	170.69	3.05	SLC	2.95	97	W230209	☐	N17-063	Core		☐	☐	☐
170.69	173.74	3.05	SLC	3.04	100	W230210	☐	N17-063	Core		☐	☐	☐
173.74	175.26	1.52	SLC	1.42	93	W230211	☐	N17-063	Core		☐	☐	☐
175.26	176.78	1.52	SLC	1.32	87	W230213	☐	N17-063	Core		☐	☐	☐
176.78	182.88	6.10	SLC	5.41	89	Q010957	☐	N17-C04	chips		☐	☐	☐
182.88	188.98	6.10	SLC	6.08	100	Q010958	☐	N17-C04	chips		☐	☐	☐
188.98	195.07	6.09	SLC	6.05	99	Q010959	☐	N17-C04	chips		☐	☐	☐
195.07	198.12	3.05	SLC	2.95	97	W230214	☐	N17-063	Core		☐	☐	☐
198.12	201.17	3.05	SLC	3.03	99	W230215	☐	N17-063	Core		☐	☐	☐
201.17	204.22	3.05	SLC	2.80	92	W230216	☐	N17-063	Core		☐	☐	☐
204.22	207.26	3.04	SLC	3.01	99	W230217	☐	N17-063	Core		☐	☐	☐
207.26	210.31	3.05	SLC	3.05	100	W230218	☐	N17-063	Core		☐	☐	☐
210.31	213.36	3.05	SLC	2.96	97	W230219	☐	N17-063	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
210.31	213.36	3.05	SLC	2.96	97	W230220	☐	N17-063	Core		☐	☐	☑
213.36	216.41	3.05	SLC	3.05	100	W230221	☐	N17-063	Core		☐	☐	☐
216.41	219.46	3.05	SLC	3.05	100	W230222	☐	N17-063	Core		☐	☐	☐
219.46	222.50	3.04	SLC	2.90	95	W230223	☐	N17-063	Core		☐	☐	☐
222.50	225.55	3.05	SLC	3.05	100	W230224	☐	N17-063	Core		☐	☐	☐
225.55	228.60	3.05	SLC	2.93	96	W230225	☐	N17-065	Core		☐	☐	☐
228.60	231.65	3.05	SLC	2.88	94	W230226	☐	N17-065	Core		☐	☐	☐
231.65	234.70	3.05	SLC	3.01	99	W230227	☐	N17-065	Core		☐	☐	☐
234.70	237.74	3.04	SLC	3.02	99	W230229	☐	N17-065	Core		☐	☐	☐
237.74	240.79	3.05	SLC	3.04	100	W230230	☐	N17-065	Core		☐	☐	☐
240.79	243.84	3.05	SLC	3.00	98	W230231	☐	N17-065	Core		☐	☐	☐
243.84	246.89	3.05	SLC	3.00	98	W230233	☐	N17-065	Core		☐	☐	☐
246.89	249.94	3.05	LST	3.04	100	W230234	☐	N17-065	Core		☐	☐	☐
249.94	252.98	3.04	LST	3.00	99	W230235	☐	N17-065	Core		☐	☐	☐
252.98	256.03	3.05	LST	2.99	98	W230236	☐	N17-065	Core		☐	☐	☐
252.98	256.03	3.05	LST	2.99	98	W230237	☐	N17-065	Core		☐	☑	☐
256.03	259.08	3.05	LST	3.03	99	W230238	☐	N17-065	Core		☐	☐	☐
259.08	262.13	3.05	LST	3.05	100	W230239	☐	N17-065	Core		☐	☐	☐
262.13	265.18	3.05	LST	3.05	100	W230240	☐	N17-065	Core		☐	☐	☐
265.18	268.22	3.04	LST	3.03	100	W230241	☐	N17-065	Core		☐	☐	☐
268.22	269.75	1.53	LST	1.49	97	W230242	☐	N17-065	Core		☐	☐	☐
269.75	271.27	1.52	LST	1.50	99	W230243	☐	N17-065	Core		☐	☐	☐
271.27	272.80	1.53	LST	1.47	96	W230245	☐	N17-065	Core		☐	☐	☐
272.80	274.32	1.52	LST	1.50	99	W230246	☐	N17-065	Core		☐	☐	☐
272.80	274.32	1.52	LST	1.50	99	W230247	☐	N17-065	Core		☐	☐	☑
274.32	277.37	3.05	LST	3.05	100	W230248	☐	N17-065	Core		☐	☐	☐
277.37	280.42	3.05	LST	2.96	97	W230249	☐	N17-065	Core		☐	☐	☐
280.42	283.46	3.04	LST	3.04	100	W230251	☐	N17-065	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
283.46	286.51	3.05	LST	3.05	100	W230252	☐	N17-065	Core		☐	☐	☐
286.51	289.56	3.05	LST	3.03	99	W230253	☐	N17-065	Core		☐	☐	☐
289.56	292.61	3.05	LST	3.04	100	W230254	☐	N17-065	Core		☐	☐	☐
292.61	295.66	3.05	LST	3.05	100	W230255	☐	N17-065	Core		☐	☐	☐
295.66	298.70	3.04	LST	2.50	82	W230256	☐	N17-065	Core		☐	☐	☐
298.70	301.75	3.05	LST	3.05	100	W230257	☐	N17-065	Core		☐	☐	☐
301.75	304.80	3.05	LST	3.05	100	W230258	☐	N17-065	Core		☐	☐	☐
304.80	307.85	3.05	LST	3.05	100	W230259	☐	N17-065	Core		☐	☐	☐
307.85	310.90	3.05	LST	3.05	100	W230260	☐	N17-065	Core		☐	☐	☐
310.90	313.94	3.04	LST	3.03	100	W230261	☐	N17-066	Core		☐	☐	☐
313.94	316.99	3.05	LST	3.05	100	W230262	☐	N17-066	Core		☐	☐	☐
316.99	320.04	3.05	LST	3.05	100	W230263	☐	N17-066	Core		☐	☐	☐
320.04	323.09	3.05	LST	2.90	95	W230264	☐	N17-066	Core		☐	☐	☐
323.09	326.14	3.05	LST	3.05	100	W230265	☐	N17-066	Core		☐	☐	☐
326.14	329.18	3.04	LST	3.04	100	W230266	☐	N17-066	Core		☐	☐	☐
329.18	332.23	3.05	LST	3.01	99	W230268	☐	N17-066	Core		☐	☐	☐
329.18	332.23	3.05	LST	3.01	99	W230269	☐	N17-066	Core		☐	☑	☐
332.23	335.28	3.05	LST	2.83	93	W230270	☐	N17-066	Core		☐	☐	☐
335.28	338.33	3.05	LST	2.82	92	W230271	☐	N17-066	Core		☐	☐	☐
338.33	341.38	3.05	LST	3.02	99	W230272	☐	N17-066	Core		☐	☐	☐
341.38	344.42	3.04	LST	2.93	96	W230273	☐	N17-066	Core		☐	☐	☐
344.42	347.47	3.05	LST	2.79	91	W230274	☐	N17-066	Core		☐	☐	☐
347.47	350.52	3.05	LST	2.52	83	W230275	☐	N17-066	Core		☐	☐	☐
350.52	353.57	3.05	LST	0.67	22	W230276	☐	N17-066	Core		☐	☐	☐
353.57	356.62	3.05	LST	3.01	99	W230277	☐	N17-066	Core		☐	☐	☐
356.62	359.66	3.04	LST	2.94	97	W230279	☐	N17-066	Core		☐	☐	☐
359.66	362.71	3.05	LST	3.05	100	W230280	☐	N17-066	Core		☐	☐	☐
362.71	365.76	3.05	LST	2.96	97	W230281	☐	N17-066	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
365.76	368.81	3.05	LST	2.86	94	W230282	☐	N17-066	Core		☐	☐	☐
368.81	371.86	3.05	LST	3.04	100	W230283	☐	N17-066	Core		☐	☐	☐
371.86	374.90	3.04	LST	2.87	94	W230284	☐	N17-066	Core		☐	☐	☐
374.90	377.95	3.05	LST	3.03	99	W230285	☐	N17-066	Core		☐	☐	☐
377.95	381.00	3.05	LST	3.03	99	W230287	☐	N17-066	Core		☐	☐	☐
381.00	384.05	3.05	LST	2.94	96	W230288	☐	N17-066	Core		☐	☐	☐
381.00	384.05	3.05	LST	2.94	96	W230289	☐	N17-066	Core		☐	☐	☑
384.05	387.10	3.05	LST	3.05	100	W230290	☐	N17-066	Core		☐	☐	☐
387.10	390.14	3.04	LST	2.92	96	W230291	☐	N17-066	Core		☐	☐	☐
390.14	393.19	3.05	LST	3.04	100	W230292	☐	N17-066	Core		☐	☐	☐
393.19	396.24	3.05	LST	3.05	100	W230293	☐	N17-066	Core		☐	☐	☐
396.24	399.29	3.05	LST	2.89	95	W230295	☐	N17-066	Core		☐	☐	☐
399.29	402.34	3.05	LST	3.02	99	W230296	☐	N17-066	Core		☐	☐	☐
402.34	405.38	3.04	LST	2.97	98	W230297	☐	N17-067	Core		☐	☐	☐
405.38	406.90	1.52	LST	1.52	100	W230298	☐	N17-067	Core		☐	☐	☐
406.90	408.43	1.53	LST	1.53	100	W230299	☐	N17-067	Core		☐	☐	☐
408.43	410.34	1.91	LST	1.91	100	W230301	☐	N17-067	Core		☐	☐	☐
410.34	411.48	1.14	LST	1.14	100	W230302	☐	N17-067	Core		☐	☐	☐
411.48	414.53	3.05	LST	2.92	96	W230304	☐	N17-067	Core		☐	☐	☐
414.53	417.58	3.05	LST	2.98	98	W230305	☐	N17-067	Core		☐	☐	☐
417.58	420.62	3.04	LST	2.98	98	W230306	☐	N17-067	Core		☐	☐	☐
420.62	423.67	3.05	LST	2.97	97	W230307	☐	N17-067	Core		☐	☐	☐
420.62	423.67	3.05	LST	2.97	97	W230308	☐	N17-067	Core		☐	☐	☑
423.67	426.72	3.05	LST	3.05	100	W230309	☐	N17-067	Core		☐	☐	☐
426.72	429.77	3.05	LST	3.02	99	W230310	☐	N17-067	Core		☐	☐	☐
429.77	432.82	3.05	LST	2.86	94	W230312	☐	N17-067	Core		☐	☐	☐
432.82	435.86	3.04	LST	2.87	94	W230313	☐	N17-067	Core		☐	☐	☐
435.86	438.91	3.05	LST	2.93	96	W230314	☐	N17-067	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
438.91	441.96	3.05	LST	3.01	99	W230315	☐	N17-067	Core		☐	☐	☐
441.96	445.01	3.05	LST	3.04	100	W230316	☐	N17-067	Core		☐	☐	☐
445.01	448.06	3.05	LST	3.03	99	W230317	☐	N17-067	Core		☐	☐	☐
445.01	448.06	3.05	LST	3.03	99	W230318	☐	N17-067	Core		☐	☑	☐
448.06	451.10	3.04	LST	3.04	100	W230319	☐	N17-067	Core		☐	☐	☐
451.10	454.15	3.05	LST	2.97	97	W230320	☐	N17-067	Core		☐	☐	☐
454.15	457.20	3.05	LST	3.02	99	W230321	☐	N17-067	Core		☐	☐	☐
457.20	460.25	3.05	LST	3.03	99	W230322	☐	N17-067	Core		☐	☐	☐
460.25	463.30	3.05	LST	3.03	99	W230323	☐	N17-067	Core		☐	☐	☐
463.30	466.34	3.04	LST	3.00	99	W230324	☐	N17-067	Core		☐	☐	☐
466.34	469.39	3.05	LST	3.03	99	W230325	☐	N17-067	Core		☐	☐	☐
469.39	472.44	3.05	LST	2.92	96	W230327	☐	N17-067	Core		☐	☐	☐
472.44	475.49	3.05	LST	3.05	100	W230328	☐	N17-067	Core		☐	☐	☐
475.49	478.54	3.05	LST	3.02	99	W230329	☐	N17-067	Core		☐	☐	☐
478.54	481.58	3.04	LST	2.95	97	W230330	☐	N17-067	Core		☐	☐	☐
481.58	484.63	3.05	LST	3.03	99	W230332	☐	N17-067	Core		☐	☐	☐
484.63	487.68	3.05	LST	2.94	96	W230333	☐	N17-067	Core		☐	☐	☐
487.68	490.73	3.05	LST	2.89	95	W230334	☐	N17-068	core		☐	☐	☐
490.73	493.78	3.05	LST	3.00	98	W230335	☐	N17-068	core		☐	☐	☐
493.78	496.82	3.04	LST	3.03	100	W230337	☐	N17-068	core		☐	☐	☐
496.82	499.87	3.05	LST	2.67	88	W230338	☐	N17-068	core		☐	☐	☐
499.87	502.92	3.05	LST	2.74	90	W230339	☐	N17-068	core		☐	☐	☐
502.92	505.97	3.05	LST	2.72	89	W230340	☐	N17-068	core		☐	☐	☐
505.97	509.02	3.05	LST	2.91	95	W230341	☐	N17-068	core		☐	☐	☐
505.97	509.02	3.05	LST	2.91	95	W230342	☐	N17-068	core		☐	☐	☑
509.02	512.06	3.04	LST	2.96	97	W230343	☐	N17-068	core		☐	☐	☐
512.06	515.11	3.05	LST	3.01	99	W230344	☐	N17-068	core		☐	☐	☐
515.11	518.16	3.05	LST	2.83	93	W230345	☐	N17-068	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
518.16	520.87	2.71	LST	2.60	96	W230346	☐	N17-068	core		☐	☐	☐
520.87	523.00	2.13	LST	1.99	93	W230348	☐	N17-068	core		☐	☐	☐
523.00	524.87	1.87	LST	1.83	98	W230349	☐	N17-068	core		☐	☐	☐
524.87	527.30	2.43	LST, SLC	2.27	93	W230350	☐	N17-068	core		☐	☐	☐
527.30	530.35	3.05	SLC	3.01	99	W230351	☐	N17-068	core		☐	☐	☐
530.35	533.40	3.05	SLC	2.86	94	W230352	☐	N17-068	core		☐	☐	☐
533.40	536.45	3.05	SLC	2.80	92	W230353	☐	N17-068	core		☐	☐	☐
536.45	539.50	3.05	SLC	2.99	98	W230354	☐	N17-068	core		☐	☐	☐
539.50	542.54	3.04	SLC	2.91	96	W230356	☐	N17-068	core		☐	☐	☐
542.54	545.59	3.05	SLC	2.92	96	W230357	☐	N17-068	core		☐	☐	☐
545.59	548.64	3.05	SLC	2.98	98	W230358	☐	N17-068	core		☐	☐	☐
548.64	551.69	3.05	SLC	3.03	99	W230359	☐	N17-068	core		☐	☐	☐
551.69	554.74	3.05	SLC	3.00	98	W230360	☐	N17-068	core		☐	☐	☐
554.74	557.78	3.04	SLC	2.70	89	W230362	☐	N17-068	core		☐	☐	☐
557.78	560.83	3.05	SLC	2.80	92	W230363	☐	N17-068	core		☐	☐	☐
560.83	563.88	3.05	SLC	3.01	99	W230364	☐	N17-068	core		☐	☐	☐
560.83	563.88	3.05	SLC	3.01	99	W230365	☐	N17-068	core		☐	☑	☐
563.88	566.93	3.05	SLC	2.63	86	W230366	☐	N17-068	core		☐	☐	☐

OS -17-249

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
3.60	32.00	28.40	LST	MG	O-LST1 limestone with 5 to 15% silty bedding. Silty beds are thin and typically on a scale of 1mm or less. The rock is fairly competent for being so close to the surface but still has some areas of brittle rock and rubble zones within the first 10m. Limeston is light grey and the silty besds are a medium to dark grey. Bedding is often very lightly undulated in this top area. The bedding is at low angles typically about 5 to 20 degrees from the core axis. Calcite veining is sparse. Small tension gashes seen aat 13.9m. Mokst joints appear weathered and some have minor amounts of iron oxidation on them							
						MD	GY					
						LT	GY	BD	OXI	1I		
72.35	78.40	6.05	MST	FG	transition zone. From limestone to mudstone. Interbedded Gradational contact that gradually becomes more mudstone dominant with depth. Core is still a light to medium grey. Core here is far less reactive.							
						MD	GY					
						LT	GY	BD				

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
78.40	206.00	127.60	MST	FG	Dark / blue-green, laminated mudstone interbedded with grey, laminated siltstone. Mudstone dominates, making up 80%, the remaining 20% is siltstone. Rock is very unreactive, veins and veinlets are comprised predominately of dolomite, <1%. Except for the rare calcite vein or veinlet, <0.5%. Between 84.25-84.75m the mudstone has abundant black veinlets that run through a slightly reactive dolostone. There are some calcite veins here as well but are very localized and are represent the most significant amount of calcite veins at least up to ~130m. Bedding can be difficult to see in some of the darker mudstone but all seems to be on a fine grain scale of mm sized bedding. Bedding also lays shallow relative to the core axis. Average is probably around 25 degrees with some areas steeply dipping near 70 degrees that may be related to the sheared areas. The areas with shear textures are from95-96m and 100-101m. Sporadically there are joints that exibit some minor amounts of deep red oxidation. There doesn't seem to be a pattern except that it is only seen on the joint and broken or chipped pieces of the core. Many joints also show weathered surfuces but that is also minor amounts. Past 104m to 129m the beds are steeper relative to the core axis and they are on average about 40 to 50 degrees.							
						MD	GN					
						MD	GY					
						DK	GY	BD	OXI	2I	Ca	5
206.00	215.19	9.19	MST	FG	light grey OMST mudstone. Shear zone beginning at about 206m and is predominantly mudstone (~85% or more as there is little to no reaction with acid) mudstone ends at 215.19m. Below 215.19m the rock is dominantly limestone (OLST2) as it reacts strogly with the acid. Thextures continue to be heavily sheared up to about 218m. All the rock is light to medium grey with some small areas of fine grained dark grey silty sediment.							
						MD	GY	SH				
						LT	GY	BD	---	--	Ca	15

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
215.19	272.50	57.31	LST	MG	Dominantly limestone as the rock is highly reactive to acid. The rock is strongly sheared up to about 219m. Some shear texture still persists after 219m but is to a far lesser extent. Between 217 and 218m there are 2 calcite veins with some mosaic and brecciated textrures present in minor amounts. They rock is light to medium grey.							
						MD	GY	SH				
						LT	GY	BD	---	--		

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	3.60	3.60	0	0	0.00	0	0R	--	--	
3.60	6.10	2.50	2.12	85	0.45	18	4R	3H	2W	
6.10	9.45	3.35	2.71	81	1.70	51	4R	3H	1W	
9.45	12.50	3.05	1.75	57	0.70	23	3R	3H	2W	RBZ 9.8-10.97m
12.50	15.54	3.04	2.92	96	1.30	43	3R	3H	1W	
15.54	18.59	3.05	3	98	2.15	70	4R	3H	2W	
18.59	21.64	3.05	3.05	100	1.75	57	4R	3H	1W	
21.64	24.69	3.05	2.9	95	1.10	36	4R	3H	1W	
24.69	27.74	3.05	3.05	100	1.79	59	4R	3H	1W	
27.74	30.78	3.04	2.87	94	1.72	57	4R	3H	2W	oxidation on the joints is minor
30.78	33.83	3.05	2.74	90	1.00	33	4R	3H	1W	
33.83	36.88	3.05	2.75	90	1.15	38	4R	2H	2W	RBZ 36-36.2m
36.88	39.93	3.05	2.65	87	1.31	43	3R	3H	1W	many fractures but most look more mechanical
39.93	42.98	3.05	2.88	94	2.50	82	4R	3H	1W	
42.98	46.02	3.04	2.86	94	2.31	76	4R	3H	1W	
46.02	49.07	3.05	3	98	1.95	64	4R	3H	1W	
49.07	52.12	3.05	2.79	91	1.76	58	4R	3H	1W	a joint that looks mechanical has some minor oxidation on it.
52.12	55.17	3.05	2.71	89	1.61	53	4R	3H	2W	
55.17	58.22	3.05	2.63	86	1.42	47	4R	2H	2W	
58.22	61.26	3.04	2.8	92	1.08	36	3R	2H	2W	
61.26	64.31	3.05	2.77	91	1.28	42	3R	2H	2W	
64.31	67.36	3.05	2.94	96	2.33	76	4R	2H	2W	
67.36	70.41	3.05	2.68	88	1.10	36	4R	3H	2W	RBZ 68.2-68.88m
70.41	73.46	3.05	2.89	95	2.30	75	4R	2H	2W	
73.46	76.50	3.04	2.99	98	1.88	62	3R	2H	2W	
76.50	79.55	3.05	2.96	97	2.67	88	2R	2H	1W	
79.55	82.60	3.05	3.05	100	2.19	72	1R	2H	2W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
82.60	85.65	3.05	2.82	92	1.52	50	1R	2H	1W	fractures concentrated at the ends of the core boxes and where the depth intervals are placed so I believe they are likely mechanical.
85.65	88.70	3.05	2.93	96	1.74	57	1R	2H	1W	
88.70	91.75	3.05	2.91	95	1.27	42	0R	2H	1W	
91.75	94.79	3.04	3	99	1.45	48	1R	2H	1W	
94.79	97.84	3.05	2.61	86	0.96	31	1R	2H	1W	RBZ 96.47-96.85m
97.84	100.89	3.05	2.38	78	0.87	29	0R	2H	1W	RBZ 100.23-100.85m
100.89	103.94	3.05	2.65	87	0.79	26	0R	2H	1W	
103.94	106.98	3.04	2.86	94	1.11	37	0R	2H	1W	
106.98	110.03	3.05	2.75	90	1.16	38	0R	2H	1W	
110.03	113.08	3.05	2.88	94	1.15	38	0R	2H	1W	
113.08	116.13	3.05	2.86	94	1.00	33	0R	2H	1W	
116.13	119.18	3.05	2.96	97	0.80	26	0R	2H	1W	
119.18	122.22	3.04	3	99	0.80	26	0R	2H	1W	
122.22	125.27	3.05	2.63	86	0.80	26	0R	2H	1W	some joints look like they have some minor oxidation on them.
125.27	128.32	3.05	2.72	89	1.36	45	0R	2H	1W	
128.32	131.37	3.05	3.03	99	2.68	88	0R	2H	1W	
131.37	134.42	3.05	3.04	100	2.38	78	0R	2H	1W	RBZ from 134.10 m - 134.42 m.
134.42	137.46	3.04	3.04	100	2.21	73	0R	2H	1W	
137.46	140.51	3.05	2.84	93	2.45	80	0R	2H	1W	
140.51	143.56	3.05	3.04	100	1.96	64	0R	2H	1W	RBZ from 142.04 m - 142.35 m.
143.56	146.61	3.05	2.91	95	1.85	61	0R	2H	1W	RBZ from 145.08 m - 145.45 m.
146.61	149.66	3.05	3.05	100	2.24	73	0R	2H	1W	
149.66	152.70	3.04	3.04	100	2.35	77	0R	2H	1W	
152.70	155.75	3.05	2.72	89	2.03	67	0R	2H	1W	RBZ 152.70 m - 152.75 m and 153.20 m - 153.30 m.
155.75	158.80	3.05	3.05	100	2.32	76	0R	2H	1W	
158.80	161.85	3.05	3.05	100	2.15	70	0R	2H	1W	RBZ from 161.70 m - 161.85 m.
161.85	164.90	3.05	3.05	100	2.04	67	0R	2H	1W	RBZ 164.45 m - 164.67 m.
164.90	167.94	3.04	3.04	100	2.80	92	0R	2H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
167.94	170.99	3.05	3.04	100	2.10	69	0R	2H	1W	
170.99	174.04	3.05	2.85	93	1.71	56	0R	2H	1W	
174.04	177.09	3.05	3.05	100	2.52	83	0R	2H	1W	
177.09	180.14	3.05	3.05	100	2.82	92	0R	2H	1W	
180.14	183.18	3.04	3.04	100	3.04	100	0R	2H	1W	
183.18	186.23	3.05	3.05	100	3.02	99	0R	2H	1W	
186.23	189.28	3.05	3.03	99	2.61	86	0R	2H	1W	
189.28	192.33	3.05	3	98	2.18	71	0R	2H	1W	
192.33	195.38	3.05	2.79	91	1.44	47	0R	2H	1W	
195.38	198.42	3.04	2.89	95	1.42	47	0R	2H	1W	
198.42	201.47	3.05	2.95	97	2.70	89	0R	2H	1W	
201.47	204.52	3.05	2.87	94	2.58	85	0R	2H	1W	
204.52	207.57	3.05	2.67	88	1.63	53	0R	2H	1W	shear zone starting just after 206m
207.57	210.62	3.05	2.7	89	0.90	30	1R	2H	1W	sheared zone.
210.62	213.66	3.04	2.82	93	1.67	55	2R	2H	1W	more competent shear zone.
213.66	216.71	3.05	2.68	88	0.92	30	2R	2H	1W	RBZ 215-215.40m
216.71	219.76	3.05	2.62	86	0.54	18	3R	2H	1W	More sheared zone/texture, RBZ 216.19-217.30m
219.76	222.81	3.05	2.89	95	1.88	62	3R	3H	1W	RBZ 220.60-220.68m
222.81	225.87	3.06	2.97	97	2.66	87	4R	3H	1W	Joint set follows bedding
225.87	228.90	3.03	2.77	91	0.97	32	4R	3H	1W	
228.90	231.95	3.05	2.94	96	1.39	46	4R	3H	1W	Joint set follows bedding
231.95	235.00	3.05	2.96	97	2.24	73	3R	3H	1W	RBZ at 232.89-232.965. Joint set follows bedding
235.00	237.74	2.74	2.73	100	0.93	34	4R	3H	1W	Joint set follows bedding
237.74	240.79	3.05	3.05	100	1.42	47	4R	3H	1W	
240.79	243.84	3.05	2.81	92	1.66	54	4R	3H	1W	
243.84	246.89	3.05	3.05	100	1.59	52	4R	3H	1W	
246.89	249.94	3.05	2.78	91	0.67	22	4R	3H	1W	RBZ at 248-248.42m
249.94	252.98	3.04	2.85	94	1.24	41	4R	3H	1W	
252.98	256.03	3.05	2.76	90	1.52	50	4R	3H	1W	RBZ at 253.28-253.88
256.03	259.08	3.05	2.91	95	1.17	38	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
259.08	262.13	3.05	2.77	91	1.86	61	1R	3H	1W	
262.13	265.18	3.05	3.04	100	2.57	84	2R	3H	1W	
265.18	268.22	3.04	2.92	96	2.36	78	1R	3H	1W	
268.22	271.27	3.05	2.93	96	2.27	74	0R	3H	1W	
271.27	274.32	3.05	2.84	93	1.59	52	0R	2H	1W	Gouge zone at 273.24-273.42m
274.32	277.37	3.05	3.03	99	2.47	81	0R	3H	1W	
277.37	280.42	3.05	2.95	97	2.59	85	0R	2H	1W	
280.42	283.46	3.04	3.04	100	2.29	75	0R	2H	1W	
283.46	286.51	3.05	2.91	95	2.47	81	0R	2H	1W	
286.51	289.56	3.05	3.05	100	2.85	93	0R	2H	1W	
289.56	292.61	3.05	2.99	98	2.88	94	0R	2H	1W	
292.61	295.66	3.05	3.05	100	2.54	83	0R	2H	1W	
295.66	298.70	3.04	2.86	94	2.63	87	0R	2H	1W	
298.70	301.75	3.05	2.92	96	2.48	81	2R	2H	1W	Mix of mudstone (no reaction) and limestone (intense reaction to HCL)
301.75	304.80	3.05	2.99	98	2.38	78	2R	3H	1W	Mix of mudstone (no reaction) and limestone (intense reaction to HCL)
304.80	307.85	3.05	3	98	2.23	73	2R	3H	1W	Mix of mudstone (no reaction) and limestone (intense reaction to HCL)
307.85	310.90	3.05	2.98	98	2.73	90	4R	3H	1W	
310.90	313.94	3.04	2.89	95	2.40	79	4R	3H	1W	
313.94	316.99	3.05	2.94	96	2.65	87	3R	3H	1W	
316.99	320.04	3.05	3.01	99	2.63	86	3R	3H	1W	
320.04	323.09	3.05	3.04	100	2.99	98	3R	3H	1W	
323.09	326.14	3.05	3.03	99	2.23	73	3R	3H	1W	
326.14	329.18	3.04	3.03	100	1.95	64	3R	3H	1W	
329.18	332.23	3.05	2.94	96	1.87	61	3R	3H	1W	
332.23	335.28	3.05	2.97	97	1.94	64	1R	2H	1W	Mineralized zone, weak reactivity
335.28	338.33	3.05	2.87	94	2.71	89	2R	2H	1W	Small section of mineralized zone (weak reactivity, soft hardness, weak strength). Rest of section is limestone
338.33	341.38	3.05	2.96	97	2.58	85	3R	3H	1W	
341.38	344.42	3.04	2.92	96	2.23	73	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
344.42	347.47	3.05	2.79	91	1.72	56	3R	3H	1W	
347.47	350.52	3.05	2.86	94	2.39	78	1R	3H	1W	Mineralized zone with small section of limestone (0.5m)
350.52	353.57	3.05	3.03	99	2.85	93	0R	3H	1W	Mineralized zone
353.57	356.62	3.05	2.96	97	2.28	75	1R	3H	1W	Small sections of moderate reactive limestone
356.62	359.66	3.04	3	99	1.84	61	1R	3H	1W	
359.66	362.71	3.05	2.74	90	1.54	50	2R	2H	1W	
362.71	365.76	3.05	2.86	94	1.63	53	3R	2H	1W	
365.76	368.81	3.05	3	98	2.24	73	3R	3H	1W	most fractures look mechanical and are near perpendicular (70-80) to core axis
368.81	371.86	3.05	2.98	98	1.89	62	4R	3H	1W	
371.86	374.90	3.04	2.85	94	0.77	25	4R	3H	1W	RBZ 373.27-373.57m, 374.2-374.90m
374.90	377.95	3.05	2.61	86	0.80	26	4R	3H	1W	RBZ 375.20-375.55m, 376.00-376.45m, core heavily fractured outside of rubble zones
377.95	381.00	3.05	2.48	81	0.28	9	4R	3H	1W	RBZ 377.95-378.50m, 379-379.70m, 380-380.2m, core is heavily fractured outside of the rubble zones.
381.00	384.05	3.05	2.51	82	0.75	25	4R	3H	1W	RBZ 381.14-381.33m, 382.48-383.05m
384.05	387.10	3.05	2.67	88	0.82	27	2R	3H	1W	RBZ 384.05-384.25m
387.10	390.14	3.04	2.78	91	0.78	26	3R	3H	1W	no true rubble zone but core is heavily fractured
390.14	393.19	3.05	2.83	93	0.85	28	4R	3H	1W	RBZ 390.14-390.23m
393.19	396.24	3.05	2.83	93	1.94	64	4R	3H	1W	

OS -17-249

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W232070	☐	N17-064	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232078	☐	N17-064	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232092	☐	N17-069	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232100	☐	N17-069	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232112	☐	N17-069	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232115	☐	N17-069	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232119	☐	N17-070	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232126	☐	N17-070	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232129	☐	N17-070	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232066	☐	N17-064	core		☑	☐	☐
3.60	6.10	2.50	OVB, LST	2.12	85	W232057	☐	N17-064	core		☐	☐	☐
6.10	7.62	1.52	LST	1.52	100	W232058	☐	N17-064	core		☐	☐	☐
7.62	9.45	1.83	LST	1.48	81	W232059	☐	N17-064	core		☐	☐	☐
9.45	12.50	3.05	LST	1.75	57	W232060	☐	N17-064	core		☐	☐	☐
12.50	15.54	3.04	LST	2.92	96	W232061	☐	N17-064	core		☐	☐	☐
15.54	18.59	3.05	LST	3.00	98	W232062	☐	N17-064	core		☐	☐	☐
18.59	21.64	3.05	LST	3.05	100	W232063	☐	N17-064	core		☐	☐	☐
21.64	24.69	3.05	LST	2.90	95	W232064	☐	N17-064	core		☐	☐	☐
24.69	27.74	3.05	LST	3.05	100	W232065	☐	N17-064	core		☐	☐	☐
27.74	30.78	3.04	LST	2.87	94	W232067	☐	N17-064	core		☐	☐	☐
30.78	33.83	3.05	LST	2.74	90	W232068	☐	N17-064	core		☐	☐	☐
33.83	36.88	3.05	LST	2.75	90	W232069	☐	N17-064	core		☐	☐	☐
36.88	39.93	3.05	LST	2.65	87	W232071	☐	N17-064	core		☐	☐	☐
39.93	42.98	3.05	LST	2.88	94	W232072	☐	N17-064	core		☐	☐	☐
42.98	46.02	3.04	LST	2.86	94	W232073	☐	N17-064	core		☐	☐	☐
42.98	46.02	3.04	LST	2.86	94	W232074	☐	N17-064	core		☐	☑	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
46.02	49.07	3.05	LST	3.00	98	W232075	☐	N17-064	core		☐	☐	☐
49.07	52.12	3.05	LST	2.79	91	W232076	☐	N17-064	core		☐	☐	☐
52.12	55.17	3.05	LST	2.71	89	W232077	☐	N17-064	core		☐	☐	☐
55.17	61.26	6.09	LST	5.43	89	Q010960	☐	N17-C04	chips		☐	☐	☐
61.26	67.36	6.10	LST	5.71	94	Q010961	☐	N17-C04	chips		☐	☐	☐
67.36	73.46	6.10	LST	5.57	91	Q010962	☐	N17-C04	chips		☐	☐	☐
73.46	79.55	6.09	MST	5.95	98	Q010963	☐	N17-C04	chips		☐	☐	☐
79.55	85.65	6.10	MST	5.87	96	Q010964	☐	N17-C04	chips		☐	☐	☐
85.65	91.75	6.10	MST	5.84	96	Q010965	☐	N17-C04	chips		☐	☐	☐
91.75	97.84	6.09	MST	5.61	92	Q010966	☐	N17-C04	chips		☐	☐	☐
97.84	103.94	6.10	MST	5.03	82	Q010967	☐	N17-C04	chips		☐	☐	☐
103.94	110.03	6.09	MST	5.61	92	Q010968	☐	N17-C04	chips		☐	☐	☐
110.03	116.13	6.10	MST	5.74	94	Q010969	☐	N17-C04	chips		☐	☐	☐
116.13	122.22	6.09	MST	5.96	98	Q010970	☐	N17-C04	chips		☐	☐	☐
122.22	128.32	6.10	MST	5.35	88	Q010971	☐	N17-C04	chips		☐	☐	☐
128.32	134.42	6.10	MST	3.07	50	Q010972	☐	N17-C04	chips		☐	☐	☐
134.42	140.51	6.09	MST	5.88	97	Q010973	☐	N17-C05	chips		☐	☐	☐
140.51	146.61	6.10	MST	5.95	98	Q010974	☐	N17-C05	chips		☐	☐	☐
146.61	152.70	6.09	MST	6.09	100	Q010975	☐	N17-C05	chips		☐	☐	☐
152.70	158.80	6.10	MST	5.77	95	Q010976	☐	N17-C05	chips		☐	☐	☐
158.80	164.90	6.10	MST	6.10	100	Q010977	☐	N17-C05	chips		☐	☐	☐
164.90	170.99	6.09	MST	6.08	100	Q010978	☐	N17-C05	chips		☐	☐	☐
170.99	177.09	6.10	MST	5.90	97	Q010979	☐	N17-C05	chips		☐	☐	☐
177.09	183.18	6.09	MST	3.09	51	Q010980	☐	N17-C05	chips		☐	☐	☐
183.18	189.28	6.10	MST	3.08	50	Q010981	☐	N17-C05	chips		☐	☐	☐
189.28	195.38	6.10	MST	5.79	95	Q010982	☐	N17-C05	chips		☐	☐	☐
195.38	198.42	3.04	MST	2.89	95	W232079	☐	N17-064	core		☐	☐	☐
198.42	201.47	3.05	MST	2.95	97	W232080	☐	N17-064	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
201.47	204.52	3.05	MST	2.87	94	W232081	☐	N17-069	core		☐	☐	☐
204.52	207.57	3.05	MST	2.67	88	W232082	☐	N17-069	core		☐	☐	☐
207.57	210.62	3.05	MST	2.70	89	W232083	☐	N17-069	core		☐	☐	☐
210.62	213.66	3.04	MST	2.82	93	W232084	☐	N17-069	core		☐	☐	☐
213.66	215.19	1.53	MST	1.50	98	W232085	☐	N17-069	core		☐	☐	☐
215.19	216.71	1.52	MST, LST	1.44	95	W232086	☐	N17-069	core		☐	☐	☐
216.71	219.76	3.05	LST	2.62	86	W232087	☐	N17-069	core		☐	☐	☐
219.76	222.81	3.05	LST	2.89	95	W232088	☐	N17-069	core		☐	☐	☐
222.81	225.87	3.06	LST	2.97	97	W232089	☐	N17-069	core		☐	☐	☐
225.87	228.90	3.03	LST	2.77	91	W232090	☐	N17-069	core		☐	☐	☐
228.90	231.95	3.05	LST	2.94	96	W232091	☐	N17-069	core		☐	☐	☐
231.95	235.00	3.05	LST	2.96	97	W232093	☐	N17-069	core		☐	☐	☐
231.95	235.00	3.05	LST	2.96	97	W232094	☐	N17-069	core		☐	☑	☐
235.00	240.79	5.79	LST	5.78	100	Q010983	☐	N17-C05	chips		☐	☐	☐
240.79	246.89	6.10	LST	5.86	96	Q010984	☐	N17-C05	chips		☐	☐	☐
246.89	252.98	6.09	LST	5.63	92	Q010985	☐	N17-C05	chips		☐	☐	☐
252.98	259.08	6.10	LST	5.67	93	Q010986	☐	N17-C05	chips		☐	☐	☐
259.08	265.18	6.10	LST	5.81	95	Q010987	☐	N17-C05	chips		☐	☐	☐
265.18	266.72	1.54	LST	1.44	94	W232095	☐	N17-069	core		☐	☐	☐
266.72	268.22	1.50	LST	1.48	99	W232096	☐	N17-069	core		☐	☐	☐
268.22	271.27	3.05	LST	2.93	96	W232097	☐	N17-069	core		☐	☐	☐
271.27	272.60	1.33	LST	1.33	100	W232098	☐	N17-069	core		☐	☐	☐
272.60	274.32	1.72	MST	1.53	89	W232099	☐	N17-069	core		☐	☐	☐
274.32	277.37	3.05	MST	3.03	99	W232101	☐	N17-069	core		☐	☐	☐
277.37	283.46	6.09	MST	5.99	98	Q010988	☐	N17-C05	chips		☐	☐	☐
283.46	289.56	6.10	MST	5.96	98	Q010989	☐	N17-C05	chips		☐	☐	☐
289.56	295.66	6.10	MST	6.04	99	Q010990	☐	N17-C05	chips		☐	☐	☐
295.66	298.70	3.04	MST	2.86	94	W232102	☐	N17-069	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
298.70	300.27	1.57	MST	1.44	92	W232103	☐	N17-069	core		☐	☐	☐
300.27	301.75	1.48	MST, LST	1.48	100	W232104	☐	N17-069	core		☐	☐	☐
301.75	304.80	3.05	LST	2.99	98	W232105	☐	N17-069	core		☐	☐	☐
301.75	304.80	3.05	LST	2.99	98	W232106	☐	N17-069	core		☐	☐	☑
304.80	307.85	3.05	LST	3.00	98	W232107	☐	N17-069	core		☐	☐	☐
307.85	310.90	3.05	LST	2.98	98	W232108	☐	N17-069	core		☐	☐	☐
310.90	313.94	3.04	LST	2.89	95	W232109	☐	N17-069	core		☐	☐	☐
313.94	316.99	3.05	LST	2.94	96	W232110	☐	N17-069	core		☐	☐	☐
316.99	320.04	3.05	LST	3.01	99	W232111	☐	N17-069	core		☐	☐	☐
320.04	323.09	3.05	LST	3.04	100	W232113	☐	N17-069	core		☐	☐	☐
323.09	326.14	3.05	LST	3.03	99	W232114	☐	N17-069	core		☐	☐	☐
326.14	329.18	3.04	LST	3.03	100	W232116	☐	N17-069	core		☐	☐	☐
329.18	332.23	3.05	LST	2.94	96	W232117	☐	N17-070	core		☐	☐	☐
332.23	335.28	3.05	LST	2.97	97	W232118	☐	N17-070	core		☐	☐	☐
335.28	336.84	1.56	LST	1.55	99	W232120	☐	N17-070	core		☐	☐	☐
336.84	339.60	2.76	LST	2.71	98	W232121	☐	N17-070	core		☐	☐	☐
339.60	341.38	1.78	LST	1.72	97	W232122	☐	N17-070	core		☐	☐	☐
341.38	344.42	3.04	LST	2.92	96	W232123	☐	N17-070	core		☐	☐	☐
344.42	347.47	3.05	LST	2.79	91	W232124	☐	N17-070	core		☐	☐	☐
347.47	350.52	3.05	LST	2.86	94	W232125	☐	N17-070	core		☐	☐	☐
350.52	353.57	3.05	LST	3.03	99	W232127	☐	N17-070	core		☐	☐	☐
353.57	356.62	3.05	LST	2.96	97	W232128	☐	N17-070	core		☐	☐	☐
356.62	359.66	3.04	LST	3.00	99	W232130	☐	N17-070	core		☐	☐	☐
359.66	362.71	3.05	LST	2.74	90	W232131	☐	N17-070	core		☐	☐	☐
362.71	365.76	3.05	LST	2.86	94	W232132	☐	N17-070	core		☐	☐	☐
365.76	368.81	3.05	LST	3.00	98	W232133	☐	N17-070	core		☐	☐	☐
365.76	368.81	3.05	LST	3.00	98	W232134	☐	N17-070	core		☐	☑	☐
368.81	371.86	3.05	LST	2.98	98	W232135	☐	N17-070	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
371.86	374.90	3.04	LST	2.85	94	W232136	☐	N17-070	core		☐	☐	☐
374.90	377.95	3.05	LST	2.61	86	W232137	☐	N17-070	core		☐	☐	☐
377.95	381.00	3.05	LST	2.48	81	W232138	☐	N17-070	core		☐	☐	☐
381.00	384.05	3.05	LST	2.51	82	W232139	☐	N17-070	core		☐	☐	☐
384.05	387.10	3.05	LST	2.67	88	W232140	☐	N17-070	core		☐	☐	☐
387.10	390.14	3.04	LST	2.78	91	W232141	☐	N17-070	core		☐	☐	☐
390.14	393.19	3.05	LST	2.83	93	W232142	☐	N17-070	core		☐	☐	☐
393.19	396.24	3.05	LST	2.83	93	W232143	☐	N17-070	core		☐	☐	☐

OS -17-250

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
74.25	380.68	306.43	SLC	MG	Light grey, bedded siliciclastic unit. Grain size varying from fine to coarse in different beds.							
						LT	BL					
						MD	GY					
						LT	GY					
380.68	383.48	2.80	INT	MG	Conrad intrusive dyke. Light grey to very light purple aphanitic groundmass hosting phenos of fuchisite, biotite (some altered to pyrite), plagioclase. The dyke is weakly pyritized (replacement of biotite), and there is another alteration that is selective to the plagioclase: altering to a clay mineral, pistahio green							
						LT	BF					
						LT	PU	PO				
383.48	384.34	0.86	SLC	FG	Mudstone, similar to the one above the dyke. Shows some soft sediment deformation. Dark grey to black, fine grained, pyritic laminations are present. There are rare interbeds of coarse grained siliciclastic							
						DK	GY	BD				
393.94	396.75	2.81	INT	FG	Dyke, similar to the one described above.							
						LT	GN					
						LT	GY	PO	BLE	1I	Un	5
396.75	427.79	31.04	SLC	MG	Thinly bedded siliciclastic mudstone. Dark black and dark grey. Pyrite within the interval (tr-3%) bleby or that other texture chris was talking about. Veining rare, when present there is a carbonate component, mostly in stringers. Soft sediment deformation is common, The lower contact is faulted with the intrusive and the carbonate package. Increased veining (calcite) from 425- contact. This is the start of the structure. Fault							
						DK	GY					
						DK	BL	BD				

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	2.80	2.80	0	0	0.00	0	--	--	--	Overburden, no recovery
2.80	3.05	0.25	0.2	80	0.00	0	3R	3H	4W	RBZ
3.05	6.10	3.05	1.36	45	0.00	0	1R	2H	3W	RBZ
6.10	9.14	3.04	1.92	63	1.10	36	0R	2H	3W	RBZ 6-7.50 m
9.14	12.19	3.05	2.59	85	1.51	50	0R	2H	3W	
12.19	15.24	3.05	2.18	71	1.30	43	0R	2H	3W	
15.24	18.29	3.05	2.52	83	1.36	45	0R	2H	3W	
18.29	21.34	3.05	2.27	74	1.77	58	0R	2H	3W	RBZ 18.29-19.00 m
21.34	24.38	3.04	2.7	89	1.50	49	0R	2H	3W	
24.38	27.43	3.05	2.91	95	2.26	74	0R	2H	2W	
27.43	30.48	3.05	2.94	96	2.64	87	0R	2H	2W	
30.48	33.53	3.05	2.83	93	2.26	74	0R	2H	1W	
33.53	36.58	3.05	2.97	97	2.82	92	0R	2H	1W	Mechanical breaks
36.58	39.62	3.04	2.75	90	2.50	82	0R	3H	1W	Mechanical breaks
39.62	42.67	3.05	2.75	90	1.92	63	0R	3H	1W	
42.67	45.72	3.05	2.88	94	2.13	70	0R	3H	1W	
45.72	48.77	3.05	2.84	93	1.88	62	0R	3H	1W	
48.77	51.82	3.05	2.84	93	2.28	75	0R	3H	1W	
51.82	54.86	3.04	3	99	2.36	78	0R	3H	1W	
54.86	57.91	3.05	2.81	92	2.51	82	0R	3H	1W	
57.91	60.96	3.05	3.05	100	2.64	87	0R	3H	1W	RBZ at 59.15 m
60.96	64.01	3.05	2.85	93	2.85	93	0R	3H	1W	Mechanical breaks
64.01	67.06	3.05	2.32	76	1.20	39	0R	3H	1W	RBZ 65.50-67.06 m
67.06	70.10	3.04	2.82	93	1.88	62	0R	3H	1W	
70.10	73.15	3.05	2.24	73	0.11	4	0R	3H	1W	RBZ entire interval with yellow orpiment on rubble surface
73.15	76.20	3.05	2.58	85	1.38	45	0R	3H	1W	
76.20	79.25	3.05	2.97	97	2.20	72	0R	3H	1W	RBZ at 78.70 m
79.25	82.30	3.05	2.6	85	1.72	56	0R	3H	1W	
82.30	85.34	3.04	3.04	100	2.76	91	0R	3H	1W	RZ: 82.50-83.10m large anguar pieces.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
85.34	88.39	3.05	2.98	98	1.63	53	0R	3H	1W	Broken core due to being smashed out of the core tube
88.39	91.44	3.05	3.03	99	2.03	67	0R	2H	1W	RZ: 90.90-91.30m, clay rich, soft core with orpiment along the fracture surfaces.
91.44	94.49	3.05	2.98	98	1.44	47	0R	3H	1W	
94.49	97.54	3.05	3	98	1.79	59	0R	3H	1W	RZ: 96.01-96.20m
97.54	100.58	3.04	3.04	100	2.47	81	0R	3H	1W	mechanically induced joint set.
100.58	103.63	3.05	3.02	99	1.80	59	0R	3H	1W	
103.63	106.68	3.05	2.99	98	2.45	80	0R	3H	1W	all fractures are mechanically induced
106.68	109.73	3.05	2.83	93	1.95	64	0R	3H	1W	majority of the fractures are man made
109.73	112.78	3.05	2.96	97	2.52	83	0R	3H	1W	majority of the fractures are man made
112.78	115.82	3.04	3.04	100	2.49	82	0R	2H	1W	majority of the fractures are man made, however the interval fractures easily along a regular and repeated plane
115.82	118.87	3.05	2.9	95	1.65	54	0R	3H	1W	
118.87	121.92	3.05	2.84	93	2.40	79	0R	3H	1W	
121.92	124.97	3.05	2.42	79	1.25	41	0R	1H	1W	RZ: 123.90-124.90m Clay rich, rectangular blocks with realgar. Thick clay in some fracture fills = the drop in hardness and strength ratings
124.97	128.02	3.05	2.94	96	1.86	61	0R	3H	1W	RZ:125.45-126.00m, 127.05-.28m large angular blocks. Fractures at 50TCA and parallel TCA.
128.02	131.06	3.04	2.88	95	1.15	38	0R	1H	1W	
131.06	134.11	3.05	2.7	89	1.46	48	0R	2H	1W	RZ: 131.10-131.40m, 131.50-132.60m
134.11	137.16	3.05	2	66	1.01	33	0R	1H	1W	RZ: 134.32-1235.83m, 135.64-137.16m
137.16	140.21	3.05	2.64	87	1.00	33	0R	2H	1W	RZ: 137.90-138.02m, 139.24-140.10m
140.21	143.26	3.05	2.86	94	1.75	57	1R	2H	1W	carbonate stringers
143.26	146.30	3.04	2.79	92	1.71	56	1R	1H	1W	Small RZ: 144.25-.37m. Carbonate stringers
146.30	149.35	3.05	3	98	1.37	45	0R	1H	1W	RZ: 146.30-147.10m, planar breaks approxmately 30TCA with other breaks perpendicular to this orientation
149.35	152.40	3.05	2.96	97	2.08	68	0R	1H	1W	RZ: 149.50-.90m, 150.47-63m
152.40	155.45	3.05	3.05	100	2.62	86	1R	2H	1W	carbonate component to stringers
155.45	158.50	3.05	3.05	100	2.13	70	0R	1H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
158.50	161.54	3.04	3.03	100	2.88	95	0R	2H	1W	
161.54	164.59	3.05	2.83	93	2.74	90	0R	2H	1W	all fractures are mechanical
164.59	167.64	3.05	2.9	95	2.44	80	0R	3H	1W	Joint set is from mechanical fractures that are breaking in the same way along the a plane at the same attitude TCA
167.64	170.69	3.05	2.92	96	1.82	60	0R	1H	1W	RZ: 169.50-60m, 169.90-170.00m
170.69	173.74	3.05	3.05	100	2.60	85	0R	3H	1W	
173.74	176.78	3.04	2.9	95	1.86	61	0R	2H	1W	RZ: 175.83-94m, 176.00-10m
176.78	179.83	3.05	2.9	95	2.60	85	0R	2H	1W	
179.83	182.88	3.05	3.03	99	2.60	85	0R	3H	1W	most fractures are mechanical
182.88	185.93	3.05	2.71	89	1.49	49	0R	4H	1W	
185.93	188.98	3.05	2.88	94	2.34	77	0R	3H	1W	
188.98	192.02	3.04	3	99	1.38	45	0R	2H	1W	RZ 191.10-192.02m
192.02	195.07	3.05	2.87	94	2.10	69	0R	4H	1W	
195.07	198.12	3.05	3.05	100	2.51	82	0R	4H	1W	All fractures mechanical
198.12	201.17	3.05	3.04	100	1.70	56	1R	3H	1W	
201.17	204.22	3.05	3.05	100	2.18	71	0R	3H	1W	mechanical fractures
204.22	207.26	3.04	3	99	2.59	85	0R	4H	1W	RZ: 205.10-20m
207.26	210.31	3.05	2.92	96	2.02	66	0R	4H	1W	all fractures mechanical
210.31	213.36	3.05	3.02	99	2.98	98	0R	4H	1W	all fractures mechanical
213.36	216.41	3.05	3.02	99	2.85	93	0R	4H	1W	mech frac
216.41	219.46	3.05	2.86	94	2.14	70	0R	3H	1W	mechanical fractures
219.46	222.50	3.04	2.96	97	2.70	89	0R	3H	1W	
222.50	225.55	3.05	3.05	100	2.77	91	0R	3H	1W	mechanical fractures, not joints
225.55	228.60	3.05	3	98	2.95	97	0R	3H	1W	
228.60	231.65	3.05	2.95	97	2.56	84	0R	3H	1W	
231.65	234.70	3.05	3.05	100	2.93	96	0R	3H	1W	
234.70	237.74	3.04	3.02	99	2.75	90	0R	3H	1W	
237.74	240.79	3.05	3.03	99	2.90	95	0R	3H	1W	mechanical fractures
240.79	243.84	3.05	3	98	2.85	93	0R	3H	1W	
243.84	246.89	3.05	3.03	99	2.78	91	0R	3H	1W	
246.89	249.94	3.05	2.72	89	2.39	78	0R	4H	1W	mechanical fractures

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
249.94	252.98	3.04	3.03	100	2.72	89	0R	2H	1W	
252.98	256.03	3.05	3.05	100	3.01	99	0R	3H	1W	
256.03	259.08	3.05	3.02	99	2.42	79	0R	3H	1W	
259.08	262.13	3.05	3.05	100	2.55	84	0R	3H	1W	fractures are from smashing the core with a hammer, not true joints
262.13	265.18	3.05	3.03	99	2.91	95	1R	3H	1W	calcite stringers
265.18	268.22	3.04	2.79	92	2.75	90	0R	3H	1W	Reduced 32cm into this run. All fractures are mechanical
268.22	271.27	3.05	3.05	100	2.30	75	0R	3H	1W	joint set is a set of mechanical fractures, may not be a true joint set
271.27	274.32	3.05	3	98	2.64	87	0R	3H	1W	joint set is a series of mechanical fractures
274.32	277.37	3.05	3.05	100	2.34	77	0R	3H	1W	one undulating fracture
277.37	280.42	3.05	3	98	2.80	92	0R	3H	1W	RZ: 277.37-278.10m, possibly mechanically induced, fractures are at a low angle TCA. Unable to piece core back together, large angular blocks of core
280.42	283.46	3.04	2.98	98	2.90	95	0R	3H	1W	mechanically induced fractures. The joint set describes two fractures on a regular plane close together (.3cm apart, planar)
283.46	286.51	3.05	3.05	100	2.86	94	0R	2H	1W	
286.51	289.56	3.05	3.05	100	2.65	87	0R	3H	1W	
289.56	292.61	3.05	3.04	100	2.42	79	1R	3H	1W	calcite component to veins within the run
292.61	295.66	3.05	3.05	100	2.50	82	1R	3H	1W	calcite component to veins
295.66	298.70	3.04	2.86	94	1.02	34	1R	3H	1W	RZ: 298.44-298.70m
298.70	301.75	3.05	2.88	94	1.48	49	1R	2H	1W	carbonate component to fracture infill
301.75	304.80	3.05	3.03	99	2.32	76	0R	3H	1W	All fracctures mechanical
304.80	307.85	3.05	2.99	98	2.68	88	1R	3H	1W	carbonate component to fracture infill (super narrow, <<1m)
307.85	310.90	3.05	3.01	99	2.66	87	0R	3H	1W	mechanical fractures in stick rock
310.90	313.94	3.04	2.98	98	2.78	91	0R	3H	3W	mechanical fractures all irregular
313.94	316.99	3.05	3.05	100	2.28	75	0R	3H	1W	
316.99	320.04	3.05	3.05	100	2.87	94	0R	3H	1W	mechanical fractures and signs of spun rods
320.04	323.09	3.05	2.91	95	2.71	89	0R	3H	3W	
323.09	326.14	3.05	2.95	97	2.61	86	0R	3H	3W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
326.14	329.18	3.04	2.85	94	2.56	84	1R	3H	1W	
329.18	332.32	3.14	3.05	97	2.89	92	1R	3H	1W	
332.32	335.28	2.96	2.81	95	2.20	74	1R	3H	1W	no joint set, fractures are along veins and irregular
335.28	338.33	3.05	2.58	85	1.50	49	1R	1H	1W	Fractures that can not be peiced back together, not really a true rubble zone. Likely mechanically induced, however there is some evidence that supports a rubble zone: decreased hardness and an increase in veining
338.33	341.38	3.05	3.04	100	2.15	70	1R	3H	1W	most of the fractures are man made. There is one true joint set, the other orinetations are due to hammering the core
341.38	344.42	3.04	3.03	100	2.15	71	1R	3H	1W	one true joint set, the others are caused by hammering the core. There is a carbonate component in fractures (hairline fractures)
344.42	347.47	3.05	2.8	92	1.59	52	1R	3H	1W	the two joint sets migt actually be the same set. They have a very similar attitude, the difference is in the shape of the fracture. The difference in the shape of the fracture could be due to primary bedding
347.47	350.52	3.05	2.79	91	0.61	20	1R	3H	1W	some rubbly core in an area of realgar and healed fractures - looks like clay gogue but it is more competent than gougue.
350.52	353.57	3.05	2.46	81	0.52	17	1R	3H	1W	Highly fractured core, called a rubble zone however a regular and repeating fracture set can be picked out
353.57	356.62	3.05	3.02	99	1.32	43	1R	3H	1W	
356.62	359.66	3.04	3.04	100	1.92	63	1R	3H	1W	mostly mechanical fractures
359.66	362.71	3.05	2.89	95	1.94	64	0R	3H	1W	
362.71	365.76	3.05	3	98	2.07	68	1R	3H	1W	mostly mechanical fractures, less clay on fracture surfaces than other intervals.
365.76	368.81	3.05	3.04	100	1.54	50	1R	3H	1W	mehanical fractures are perpendicular TCA.
368.81	371.86	3.05	2.7	89	1.07	35	1R	4H	1W	mechanical fractures perpendicular TCA

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
371.86	374.90	3.04	2.75	90	1.86	61	0R	4H	1W	conglomerate and mudstone in this run. Conglomerate is much harder and stronger than the mudstone
374.90	377.95	3.05	2.77	91	0.72	24	1R	1H	1W	rubble zones are intervals of highly fractured core, no rounding, looks like an area with a high density of fractures. There is a realgar mush within this interval. The wall rock is strong
377.95	381.00	3.05	2.87	94	1.22	40	1R	3H	1W	joint set is almost parallel TCA, so there are a lot of fractured bits. This may not be a true rubble zone. There are two true joint sets
381.00	384.05	3.05	3.01	99	1.97	65	0R	4H	1W	fractures are mechanical, or not part of a true joint set
384.05	387.10	3.05	3.04	100	1.33	44	1R	3H	1W	
387.10	390.14	3.04	2.55	84	0.94	31	1R	3H	1W	
390.14	393.19	3.05	2.69	88	1.84	60	1R	2H	1W	bits of soft dark black clay
393.19	396.24	3.05	3.03	99	2.26	74	0R	4H	1W	
396.24	399.29	3.05	2.89	95	1.59	52	1R	2H	1W	
399.29	402.34	3.05	2.41	79	1.16	38	1R	1H	1W	
402.34	405.38	3.04	2.86	94	1.15	38	0R	1H	1W	clay gogue intervals
405.38	408.43	3.05	2.76	90	0.52	17	0R	2H	1W	
408.43	411.48	3.05	2.84	93	1.70	56	0R	2H	1W	
411.48	414.53	3.05	2.8	92	1.55	51	0R	2H	1W	
414.53	417.58	3.05	2.9	95	0.93	30	0R	2H	1W	
417.58	420.62	3.04	2.92	96	1.81	60	0R	2H	1W	
420.62	423.67	3.05	2.78	91	1.82	60	0R	2H	1W	
423.67	426.72	3.05	2.6	85	1.30	43	1R	2H	1W	RBZ - 426-426.72m, 425.42-425.72m
426.72	429.77	3.05	2.49	82	1.01	33	1R	1H	1W	RBZ - 428-428.77m
429.77	432.82	3.05	2.4	79	1.07	35	1R	2H	1W	RBZ - 431.17-431.75m
432.82	435.86	3.04	2.44	80	0.35	12	3R	2H	1W	RBZ - 434.31-434.90m
435.86	438.91	3.05	2.72	89	1.12	37	3R	3H	1W	
438.91	441.96	3.05	3.05	100	1.59	52	4R	3H	1W	
441.96	445.01	3.05	2.95	97	2.47	81	4R	3H	1W	
445.01	448.06	3.05	2.9	95	2.43	80	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
448.06	451.10	3.04	2.98	98	2.34	77	4R	3H	1W	
451.10	454.15	3.05	3.01	99	2.49	82	4R	3H	1W	
454.15	457.20	3.05	2.95	97	2.53	83	4R	3H	1W	
457.20	460.25	3.05	2.88	94	1.63	53	4R	3H	1W	The single irregularly shaped joint has faint slickenlines on it as well. And all slickenlines are fairly faint.
460.25	463.30	3.05	3	98	2.09	69	4R	3H	1W	
463.30	466.34	3.04	2.94	97	2.31	76	4R	3H	1W	
466.34	469.39	3.05	2.91	95	1.87	61	3R	3H	1W	
469.39	472.44	3.05	2.93	96	1.88	62	4R	3H	1W	
472.44	475.49	3.05	2.85	93	1.87	61	4R	3H	1W	
475.49	478.54	3.05	2.93	96	2.75	90	4R	3H	1W	
478.54	481.58	3.04	2.81	92	1.77	58	4R	3H	1W	
481.58	484.63	3.05	2.9	95	2.10	69	4R	3H	1W	
484.63	487.68	3.05	2.85	93	2.25	74	4R	3H	1W	
487.68	490.73	3.05	3.02	99	2.36	77	4R	3H	1W	
490.73	493.78	3.05	2.63	86	2.00	66	4R	3H	1W	
493.78	496.82	3.04	3.04	100	2.78	91	4R	3H	1W	
496.82	499.87	3.05	2.46	81	1.49	49	4R	3H	1W	
499.87	502.92	3.05	3.04	100	2.44	80	4R	3H	1W	
502.92	505.97	3.05	2.82	92	2.02	66	4R	3H	1W	Single joints with various orientations. 1 joint calcite replaced by realgar on joint surface (80 degrees)
505.97	509.02	3.05	2.88	94	2.48	81	3R	3H	1W	
509.02	512.06	3.04	2.87	94	1.98	65	1R	3H	1W	
512.06	515.11	3.05	3.05	100	2.98	98	3R	3H	1W	
515.11	518.16	3.05	3.01	99	2.28	75	4R	3H	1W	
518.16	521.21	3.05	2.97	97	2.53	83	4R	3H	1W	
521.21	524.26	3.05	3.03	99	2.59	85	4R	3H	1W	
524.26	527.30	3.04	2.92	96	2.51	83	4R	3H	1W	
527.30	530.35	3.05	3.03	99	2.73	90	4R	3H	1W	
530.35	533.40	3.05	2.83	93	2.46	81	2R	3H	1W	Mineralized zone.
533.40	536.45	3.05	2.96	97	2.53	83	4R	3H	1W	two single joints

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
536.45	539.50	3.05	2.85	93	2.57	84	4R	3H	1W	
539.50	542.54	3.04	3.03	100	0.68	22	2R	3H	1W	RBZ: 541.20-541.40m. Mineralized zone.
542.54	545.59	3.05	2.93	96	2.14	70	4R	3H	1W	
545.59	548.64	3.05	3.02	99	2.56	84	4R	3H	1W	
548.64	551.69	3.05	2.99	98	2.18	71	4R	3H	1W	
551.69	554.74	3.05	3.05	100	2.28	75	4R	3H	1W	
554.74	557.78	3.04	2.89	95	2.73	90	4R	3H	1W	
557.78	560.83	3.05	2.87	94	2.35	77	4R	3H	1W	
560.83	563.88	3.05	2.72	89	2.28	75	4R	3H	1W	
563.88	566.93	3.05	2.92	96	2.17	71	4R	3H	1W	
566.93	569.98	3.05	2.91	95	2.10	69	4R	3H	1W	Orpiment on single joint surface
569.98	573.02	3.04	2.91	96	2.25	74	4R	3H	1W	
573.02	576.07	3.05	2.83	93	2.15	70	3R	3H	1W	RBZ at 575-576 m
576.07	579.12	3.05	2.68	88	2.40	79	1R	3H	1W	
579.12	582.17	3.05	3.03	99	2.64	87	3R	3H	1W	RBZ at 581.72m
582.17	585.22	3.05	2.93	96	2.62	86	4R	3H	1W	
585.22	588.26	3.04	3	99	2.61	86	3R	3H	1W	
588.26	591.31	3.05	3	98	2.59	85	4R	3H	1W	
591.31	594.36	3.05	2.96	97	1.85	61	2R	3H	1W	
594.36	597.41	3.05	2.93	96	1.86	61	4R	3H	1W	
597.41	600.46	3.05	3.03	99	2.74	90	4R	3H	1W	
600.46	603.50	3.04	2.7	89	2.60	86	4R	3H	1W	E.O.H.

OS -17-250

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W230493	☐	N17-076	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230565	☐	N17-079	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230561	☐	N17-079	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230545	☐	N17-078	core	CS4	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230540	☐	N17-078	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230530	☐	N17-078	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230524	☐	N17-078	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230376	☐	N17-071	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230504	☐	N17-076	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230484	☐	N17-076	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230470	☐	N17-073	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230429	☐	N17-072	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230394	☐	N17-071	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230509	☐	N17-076	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230405	☐	N17-071	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230458	☐	N17-073	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230432	☐	N17-072	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230436	☐	N17-072	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230439	☐	N17-072	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230445	☐	N17-073	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230448	☐	N17-073	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230399	☐	N17-071	Core		☑	☐	☐
2.80	3.05	0.25	OVB	0.20	80	W230367	☐	N17-068	core		☐	☐	☐
3.05	6.10	3.05	OVB	1.36	45	W230368	☐	N17-068	core		☐	☐	☐
6.10	9.14	3.04	SHL	1.92	63	W230369	☐	N17-068	core		☐	☐	☐
9.14	12.19	3.05	SHL	2.59	85	W230370	☐	N17-071	Core		☐	☐	☐
12.19	15.24	3.05	SHL	2.18	71	W230371	☐	N17-071	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
15.24	18.29	3.05	SHL	2.52	83	W230372	☐	N17-071	Core		☐	☐	☐
18.29	21.34	3.05	SHL	2.27	74	W230373	☐	N17-071	Core		☐	☐	☐
21.34	24.38	3.04	SHL	2.70	89	W230374	☐	N17-071	Core		☐	☐	☐
24.38	27.43	3.05	SHL	2.91	95	W230375	☐	N17-071	Core		☐	☐	☐
27.43	30.48	3.05	SHL	2.94	96	W230377	☐	N17-071	Core		☐	☐	☐
30.48	33.53	3.05	SHL	2.83	93	W230378	☐	N17-071	Core		☐	☐	☐
33.53	36.58	3.05	SHL	2.97	97	W230379	☐	N17-071	Core		☐	☐	☐
33.53	36.58	3.05	SHL	2.97	97	W230380	☐	N17-071	Core		☐	☐	☑
36.58	39.62	3.04	SHL	2.75	90	W230381	☐	N17-071	Core		☐	☐	☐
39.62	42.67	3.05	SHL	2.75	90	W230382	☐	N17-071	Core		☐	☐	☐
42.67	45.72	3.05	SHL	2.88	94	W230383	☐	N17-071	Core		☐	☐	☐
45.72	48.77	3.05	SHL	2.84	93	W230384	☐	N17-071	Core		☐	☐	☐
45.72	48.77	3.05	SHL	2.84	93	W230385	☐	N17-071	Core		☐	☑	☐
48.77	51.82	3.05	SHL	2.84	93	W230386	☐	N17-071	Core		☐	☐	☐
51.82	54.86	3.04	SHL	3.00	99	W230387	☐	N17-071	Core		☐	☐	☐
54.86	57.91	3.05	SHL	2.81	92	W230388	☐	N17-071	Core		☐	☐	☐
57.91	60.96	3.05	SHL	3.05	100	W230389	☐	N17-071	Core		☐	☐	☐
60.96	63.00	2.04	SHL	1.98	97	W230390	☐	N17-071	Core		☐	☐	☐
63.00	64.75	1.75	SHL	1.70	97	W230391	☐	N17-071	Core		☐	☐	☐
64.75	66.00	1.25	SHL	1.14	91	W230392	☐	N17-071	Core		☐	☐	☐
66.00	68.58	2.58	DST	2.15	83	W230393	☐	N17-071	Core		☐	☐	☐
68.58	70.10	1.52	DST	1.52	100	W230395	☐	N17-071	Core		☐	☐	☐
70.10	73.15	3.05	DST	2.24	73	W230396	☐	N17-071	Core		☐	☐	☐
73.15	76.20	3.05	DST	2.58	85	W230397	☐	N17-071	Core		☐	☐	☐
76.20	79.25	3.05	SLC	2.97	97	W230398	☐	N17-071	Core		☐	☐	☐
79.25	82.30	3.05	SLC	2.60	85	W230400	☐	N17-071	Core		☐	☐	☐
82.30	85.34	3.04	SLC	3.04	100	W230401	☐	N17-071	Core		☐	☐	☐
85.34	88.39	3.05	SLC	2.98	98	W230402	☐	N17-071	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
88.39	91.44	3.05	SLC	3.03	99	W230403	☐	N17-071	Core		☐	☐	☐
91.44	94.49	3.05	SLC	2.98	98	W230404	☐	N17-071	Core		☐	☐	☐
94.49	97.54	3.05	SLC	3.00	98	W230406	☐	N17-072	core		☐	☐	☐
97.54	103.63	6.09	SLC	6.05	99	Q010991	☐	N17-C05	chips		☐	☐	☐
103.63	109.73	6.10	SLC	5.82	95	Q010992	☐	N17-C05	chips		☐	☐	☐
109.73	115.82	6.09	SLC	6.00	99	Q010993	☐	N17-C05	chips		☐	☐	☐
115.82	118.87	3.05	SLC	2.90	95	Q010994	☐	N17-C05	chips		☐	☐	☐
118.87	121.92	3.05	SLC	2.84	93	W230407	☐	N17-072	core		☐	☐	☐
121.92	124.97	3.05	SLC	2.42	79	W230408	☐	N17-072	core		☐	☐	☐
124.97	128.02	3.05	SLC	2.94	96	W230409	☐	N17-072	core		☐	☐	☐
128.02	131.06	3.04	SLC	2.88	95	W230410	☐	N17-072	core		☐	☐	☐
131.06	134.11	3.05	SLC	2.70	89	W230411	☐	N17-072	core		☐	☐	☐
134.11	137.16	3.05	SLC	2.00	66	W230412	☐	N17-072	core		☐	☐	☐
134.11	137.16	3.05	SLC	2.00	66	W230413	☐	N17-072	core		☐	☐	☑
137.16	140.21	3.05	SLC	2.64	87	W230414	☐	N17-072	core		☐	☐	☐
140.21	143.26	3.05	SLC	2.86	94	W230415	☐	N17-072	core		☐	☐	☐
143.26	146.30	3.04	SLC	2.79	92	W230416	☐	N17-072	core		☐	☐	☐
146.30	149.35	3.05	SLC	3.00	98	W230417	☐	N17-072	core		☐	☐	☐
149.35	152.40	3.05	SLC	2.96	97	W230418	☐	N17-072	core		☐	☐	☐
152.40	155.45	3.05	SLC	3.05	100	W230419	☐	N17-072	core		☐	☐	☐
155.45	158.50	3.05	SLC	3.05	100	W230420	☐	N17-072	core		☐	☐	☐
158.50	161.54	3.04	SLC	3.03	100	W230421	☐	N17-072	core		☐	☐	☐
161.54	164.59	3.05	SLC	2.83	93	W230422	☐	N17-072	core		☐	☐	☐
164.59	167.64	3.05	SLC	2.90	95	W230423	☐	N17-072	core		☐	☐	☐
167.64	170.69	3.05	SLC	2.92	96	W230424	☐	N17-072	core		☐	☐	☐
170.69	172.21	1.52	SLC	1.52	100	W230425	☐	N17-072	core		☐	☐	☐
172.21	178.31	6.10	SLC	6.09	100	Q010995	☐	N17-C05	chips		☐	☐	☐
178.31	184.40	6.09	SLC	5.87	96	Q010996	☐	N17-C05	chips		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
184.40	187.45	3.05	SLC	3.03	99	Q010997	☐	N17-C05	chips		☐	☐	☐
187.45	188.98	1.53	SLC	1.47	96	W230426	☐	N17-072	core		☐	☐	☐
187.45	188.98	1.53	SLC	1.47	96	W230427	☐	N17-072	core		☐	☑	☐
188.98	192.02	3.04	SLC	3.00	99	W230428	☐	N17-072	core		☐	☐	☐
192.02	195.07	3.05	SLC	2.87	94	W230430	☐	N17-072	core		☐	☐	☐
195.07	198.12	3.05	SLC	3.05	100	W230431	☐	N17-072	core		☐	☐	☐
198.12	201.17	3.05	SLC	3.04	100	W230433	☐	N17-072	core		☐	☐	☐
201.17	204.22	3.05	SLC	3.05	100	W230434	☐	N17-072	core		☐	☐	☐
204.22	207.26	3.04	SLC	3.00	99	W230435	☐	N17-072	core		☐	☐	☐
207.26	213.36	6.10	SLC	5.94	97	Q010998	☐	N17-C05	chips		☐	☐	☐
213.36	219.46	6.10	SLC	5.88	96	Q010999	☐	N17-C05	chips		☐	☐	☐
219.46	225.55	6.09	SLC	6.01	99	Q011000	☐	N17-C05	chips		☐	☐	☐
225.55	231.65	6.10	SLC	5.95	98	Q052451	☐	N17-C05	chips		☐	☐	☐
231.65	237.74	6.09	SLC	6.07	100	Q052452	☐	N17-C05	chips		☐	☐	☐
237.74	243.84	6.10	SLC	6.03	99	Q052453	☐	N17-C05	chips		☐	☐	☐
243.84	249.94	6.10	SLC	5.75	94	Q052454	☐	N17-C05	chips		☐	☐	☐
249.94	256.03	6.09	SLC	6.08	100	Q052455	☐	N17-C05	chips		☐	☐	☐
256.03	262.30	6.27	SLC	6.07	97	Q052456	☐	N17-C05	chips		☐	☐	☐
262.30	268.22	5.92	SLC	5.82	98	Q052457	☐	N17-C05	chips		☐	☐	☐
268.22	274.32	6.10	SLC	6.05	99	Q052458	☐	N17-C05	chips		☐	☐	☐
274.32	277.37	3.05	SLC	3.05	100	W230437	☐	N17-072	core		☐	☐	☐
277.37	280.42	3.05	SLC	3.00	98	W230438	☐	N17-072	core		☐	☐	☐
280.42	283.46	3.04	SLC	2.98	98	W230440	☐	N17-072	core		☐	☐	☐
283.46	286.51	3.05	SLC	3.05	100	W230441	☐	N17-072	core		☐	☐	☐
286.51	289.56	3.05	SLC	3.05	100	W230442	☐	N17-073	Core		☐	☐	☐
289.56	292.61	3.05	SLC	3.04	100	W230443	☐	N17-073	Core		☐	☐	☐
292.61	295.66	3.05	SLC	3.05	100	W230444	☐	N17-073	Core		☐	☐	☐
295.66	298.70	3.04	SLC	2.86	94	W230446	☐	N17-073	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
298.70	301.75	3.05	SLC	2.88	94	W230447	☐	N17-073	Core		☐	☐	☐
301.75	304.80	3.05	SLC	3.03	99	W230449	☐	N17-073	Core		☐	☐	☐
304.80	307.85	3.05	SLC	2.99	98	W230450	☐	N17-073	Core		☐	☐	☐
307.85	313.94	6.09	SLC	5.99	98	Q052459	☐	N17-C06	Chip		☐	☐	☐
313.94	320.04	6.10	SLC	6.10	100	Q052460	☐	N17-C06	Chip		☐	☐	☐
320.04	326.14	6.10	SLC	5.86	96	Q052461	☐	N17-C06	Chip		☐	☐	☐
326.14	329.18	3.04	SLC	2.85	94	W230451	☐	N17-073	Core		☐	☐	☐
329.18	332.23	3.05	SLC	2.95	97	W230452	☐	N17-073	Core		☐	☐	☐
332.23	335.28	3.05	SLC	2.95	97	W230453	☐	N17-073	Core		☐	☐	☐
335.28	338.33	3.05	SLC	2.58	85	W230454	☐	N17-073	Core		☐	☐	☐
338.33	341.38	3.05	SLC	3.04	100	W230455	☐	N17-073	Core		☐	☐	☐
341.38	344.42	3.04	SLC	3.03	100	W230456	☐	N17-073	Core		☐	☐	☐
344.42	347.47	3.05	SLC	2.80	92	W230457	☐	N17-073	Core		☐	☐	☐
347.47	350.52	3.05	SLC	2.79	91	W230459	☐	N17-073	Core		☐	☐	☐
347.47	350.52	3.05	SLC	2.79	91	W230460	☐	N17-073	Core		☐	☐	☑
350.52	353.57	3.05	SLC	2.46	81	W230461	☐	N17-073	Core		☐	☐	☐
353.57	356.62	3.05	SLC	3.02	99	W230462	☐	N17-073	Core		☐	☐	☐
356.62	359.66	3.04	SLC	3.04	100	W230463	☐	N17-073	Core		☐	☐	☐
356.62	359.66	3.04	SLC	3.04	100	W230464	☐	N17-073	Core		☐	☑	☐
359.66	362.71	3.05	SLC	2.89	95	W230465	☐	N17-073	Core		☐	☐	☐
362.71	365.76	3.05	SLC	3.00	98	W230466	☐	N17-073	Core		☐	☐	☐
365.76	368.81	3.05	SLC	3.04	100	W230467	☐	N17-073	Core		☐	☐	☐
368.81	371.86	3.05	SLC	2.70	89	W230468	☐	N17-073	Core		☐	☐	☐
371.86	374.90	3.04	SLC	2.75	90	W230469	☐	N17-073	Core		☐	☐	☐
374.90	377.95	3.05	SLC	2.77	91	W230471	☐	N17-073	Core		☐	☐	☐
377.95	380.80	2.85	SLC	2.37	83	W230472	☐	N17-073	Core		☐	☐	☐
380.80	383.45	2.65	INT	2.63	99	W230473	☐	N17-073	Core		☐	☐	☐
383.45	385.00	1.55	INT	1.45	94	W230474	☐	N17-073	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
385.00	387.10	2.10	SLC	1.98	94	W230475	☐	N17-073	Core		☐	☐	☐
387.10	390.14	3.04	SLC	2.55	84	W230476	☐	N17-073	Core		☐	☐	☐
390.14	391.40	1.26	SLC	1.22	97	W230477	☐	N17-073	Core		☐	☐	☐
391.40	393.94	2.54	SLC	2.34	92	W230478	☐	N17-076	core		☐	☐	☐
393.94	396.72	2.78	INT, SLC	2.77	100	W230479	☐	N17-076	core		☐	☐	☐
396.72	399.29	2.57	INT	2.26	88	W230480	☐	N17-076	core		☐	☐	☐
399.29	402.34	3.05	SLC	2.41	79	W230481	☐	N17-076	core		☐	☐	☐
402.34	405.38	3.04	SLC	2.86	94	W230482	☐	N17-076	core		☐	☐	☐
405.38	408.43	3.05	SLC	2.76	90	W230483	☐	N17-076	core		☐	☐	☐
408.43	411.48	3.05	SLC	2.84	93	W230485	☐	N17-076	core		☐	☐	☐
411.48	414.53	3.05	SLC	2.80	92	W230486	☐	N17-076	core		☐	☐	☐
414.53	417.58	3.05	SLC	2.90	95	W230487	☐	N17-076	core		☐	☐	☐
417.58	420.62	3.04	SLC	2.92	96	W230488	☐	N17-076	core		☐	☐	☐
417.58	420.62	3.04	SLC	2.92	96	W230489	☐	N17-076	core		☐	☑	☐
420.62	423.67	3.05	SLC	2.78	91	W230490	☐	N17-076	core		☐	☐	☐
423.67	426.72	3.05	SLC	2.60	85	W230491	☐	N17-076	core		☐	☐	☐
426.72	427.79	1.07	SLC	1.04	97	W230492	☐	N17-076	core		☐	☐	☐
427.79	428.80	1.01	SLC, INT	1.00	99	W230494	☐	N17-076	core		☐	☐	☐
428.80	431.80	3.00	INT	3.00	100	W230495	☐	N17-076	core		☐	☐	☐
431.80	433.34	1.54	INT	1.50	97	W230496	☐	N17-076	core		☐	☐	☐
431.80	433.34	1.54	INT	1.50	97	W230497	☐	N17-076	core		☐	☐	☑
433.34	435.02	1.68	INT	1.17	70	W230498	☐	N17-076	core		☐	☐	☐
435.02	437.00	1.98	LST	1.60	81	W230499	☐	N17-076	core		☐	☐	☐
437.00	438.91	1.91	LST	1.74	91	W230500	☐	N17-076	core		☐	☐	☐
438.91	441.96	3.05	LST	3.05	100	W230501	☐	N17-076	core		☐	☐	☐
441.96	445.01	3.05	LST	2.95	97	W230502	☐	N17-076	core		☐	☐	☐
445.01	448.06	3.05	LST	2.90	95	W230503	☐	N17-076	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
448.06	451.10	3.04	LST	2.98	98	W230505	☐	N17-076	core		☐	☐	☐
451.10	454.15	3.05	LST	3.01	99	W230506	☐	N17-076	core		☐	☐	☐
454.15	457.20	3.05	LST	2.95	97	W230507	☐	N17-076	core		☐	☐	☐
457.20	460.25	3.05	LST	2.88	94	W230508	☐	N17-076	core		☐	☐	☐
460.25	463.30	3.05	LST	3.00	98	W230510	☐	N17-076	core		☐	☐	☐
463.30	466.34	3.04	LST	2.94	97	W230511	☐	N17-076	core		☐	☐	☐
466.34	469.39	3.05	LST	2.91	95	W230512	☐	N17-076	core		☐	☐	☐
469.39	472.44	3.05	LST	2.93	96	W230513	☐	N17-076	core		☐	☐	☐
472.44	475.49	3.05	LST	2.85	93	W230514	☐	N17-078	core		☐	☐	☐
475.49	478.54	3.05	LST	2.93	96	W230515	☐	N17-078	core		☐	☐	☐
478.54	481.58	3.04	LST	2.81	92	W230516	☐	N17-078	core		☐	☐	☐
481.58	484.63	3.05	LST	2.90	95	W230517	☐	N17-078	core		☐	☐	☐
484.63	487.68	3.05	LST	2.85	93	W230518	☐	N17-078	core		☐	☐	☐
487.68	490.73	3.05	LST	3.02	99	W230519	☐	N17-078	core		☐	☐	☐
490.73	493.78	3.05	LST	2.63	86	W230520	☐	N17-078	core		☐	☐	☐
490.73	493.78	3.05	LST	2.63	86	W230521	☐	N17-078	core		☐	☐	☑
493.78	496.82	3.04	LST	3.04	100	W230522	☐	N17-078	core		☐	☐	☐
496.82	499.87	3.05	LST	2.46	81	W230523	☐	N17-078	core		☐	☐	☐
499.87	502.92	3.05	LST	3.04	100	W230525	☐	N17-078	core		☐	☐	☐
502.92	505.00	2.08	LST	1.82	88	W230526	☐	N17-078	core		☐	☐	☐
505.00	507.71	2.71	LST	2.66	98	W230527	☐	N17-078	core		☐	☐	☐
507.71	510.26	2.55	LST	2.04	80	W230528	☐	N17-078	core		☐	☐	☐
510.26	512.64	2.38	LST	2.38	100	W230529	☐	N17-078	core		☐	☐	☐
512.64	515.11	2.47	LST	2.45	99	W230531	☐	N17-078	core		☐	☐	☐
515.11	518.16	3.05	LST	3.01	99	W230532	☐	N17-078	core		☐	☐	☐
518.16	521.21	3.05	LST	2.97	97	W230533	☐	N17-078	core		☐	☐	☐
521.21	524.26	3.05	LST	3.03	99	W230534	☐	N17-078	core		☐	☐	☐
521.21	524.26	3.05	LST	3.03	99	W230535	☐	N17-078	core		☐	☑	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
524.26	527.30	3.04	LST	2.92	96	W230536	☐	N17-078	core		☐	☐	☐
527.30	530.35	3.05	LST	3.03	99	W230537	☐	N17-078	core		☐	☐	☐
530.35	531.76	1.41	LST	1.40	99	W230538	☐	N17-078	core		☐	☐	☐
531.76	533.40	1.64	LST	1.58	96	W230539	☐	N17-078	core		☐	☐	☐
533.40	536.45	3.05	LST	2.96	97	W230541	☐	N17-078	core		☐	☐	☐
536.45	538.13	1.68	LST	1.58	94	W230542	☐	N17-078	core		☐	☐	☐
538.13	540.08	1.95	LST	1.95	100	W230543	☐	N17-078	core		☐	☐	☐
540.08	541.13	1.05	LST	1.05	100	W230544	☐	N17-078	core		☐	☐	☐
541.13	542.54	1.41	LST	1.29	91	W230546	☐	N17-078	core		☐	☐	☐
542.54	545.59	3.05	LST	2.93	96	W230547	☐	N17-078	core		☐	☐	☐
545.59	548.64	3.05	LST	3.02	99	W230548	☐	N17-078	core		☐	☐	☐
548.64	551.69	3.05	LST	2.99	98	W230549	☐	N17-078	core		☐	☐	☐
551.69	554.74	3.05	LST	3.05	100	W230550	☐	N17-079	core		☐	☐	☐
554.74	557.78	3.04	LST	2.89	95	W230551	☐	N17-079	core		☐	☐	☐
557.78	560.83	3.05	LST	2.87	94	W230552	☐	N17-079	core		☐	☐	☐
560.83	563.88	3.05	LST	2.72	89	W230553	☐	N17-079	core		☐	☐	☐
560.83	563.88	3.05	LST	2.72	89	W230554	☐	N17-079	core		☐	☐	☑
563.88	566.93	3.05	LST	2.92	96	W230555	☐	N17-079	core		☐	☐	☐
566.93	569.98	3.05	LST	2.91	95	W230556	☐	N17-079	core		☐	☐	☐
569.98	573.02	3.04	LST	2.91	96	W230557	☐	N17-079	core		☐	☐	☐
569.98	573.02	3.04	LST	2.91	96	W230558	☐	N17-079	core		☐	☑	☐
573.02	576.07	3.05	LST	2.83	93	W230559	☐	N17-079	core		☐	☐	☐
576.07	579.12	3.05	LST	2.68	88	W230560	☐	N17-079	core		☐	☐	☐
579.12	582.17	3.05	LST	3.03	99	W230562	☐	N17-079	core		☐	☐	☐
582.17	585.22	3.05	LST	2.93	96	W230563	☐	N17-079	core		☐	☐	☐
585.22	588.26	3.04	LST	3.00	99	W230564	☐	N17-079	core		☐	☐	☐
588.26	591.31	3.05	LST	3.00	98	W230566	☐	N17-079	core		☐	☐	☐
591.31	594.36	3.05	LST	2.96	97	W230567	☐	N17-079	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
594.36	597.41	3.05	LST	2.93	96	W230568	☐	N17-079	core		☐	☐	☐
597.41	600.46	3.05	LST	3.03	99	W230569	☐	N17-079	core		☐	☐	☐
600.46	603.50	3.04	LST	2.70	89	W230570	☐	N17-079	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	3.66	3.66	0	0	0.00	0	--	--	--	Overburden. No recovery
3.66	6.71	3.05	1.98	65	0.51	17	0R	2H	4W	RBZ
6.71	9.75	3.04	2.43	80	0.44	14	0R	2H	4W	RBZ
9.75	12.80	3.05	2.32	76	0.73	24	0R	2H	4W	RBZ
12.80	15.85	3.05	2.06	68	0.36	12	0R	2H	4W	RBZ
15.85	18.90	3.05	2.22	73	0.59	19	0R	2H	4W	RBZ
18.90	21.95	3.05	2.03	67	0.14	5	0R	2H	4W	RBZ
21.95	24.99	3.04	2.75	90	1.29	42	0R	3H	3W	
24.99	28.04	3.05	2.69	88	0.56	18	0R	2H	3W	RBZ at 26 and 28 m
28.04	31.09	3.05	2.31	76	0.63	21	0R	3H	2W	
31.09	34.14	3.05	2.72	89	0.98	32	0R	2H	2W	
34.14	37.18	3.04	2.43	80	1.09	36	0R	3H	2W	RBZ at 35 and 37 m
37.18	40.23	3.05	2.43	80	1.07	35	0R	3H	2W	
40.23	43.28	3.05	3	98	1.21	40	0R	3H	2W	
43.28	46.33	3.05	2.51	82	1.12	37	0R	3H	2W	
46.33	49.38	3.05	2.7	89	1.34	44	0R	3H	2W	
49.38	52.43	3.05	2.59	85	1.10	36	0R	2H	2W	
52.43	55.47	3.04	2.85	94	1.56	51	3R	3H	2W	
55.47	58.52	3.05	2.86	94	1.47	48	2R	3H	2W	
58.52	61.57	3.05	2.81	92	0.79	26	3R	3H	2W	
61.57	64.62	3.05	2.61	86	1.03	34	1R	3H	2W	
64.62	67.67	3.05	2.77	91	1.73	57	4R	3H	1W	
67.67	70.71	3.04	2.55	84	0.99	33	2R	3H	1W	
70.71	73.76	3.05	2.53	83	0.52	17	4R	3H	1W	
73.76	76.81	3.05	2.77	91	0.95	31	1R	3H	1W	
76.81	79.86	3.05	2.62	86	1.52	50	0R	3H	1W	
79.86	82.91	3.05	2.72	89	1.45	48	0R	3H	1W	
82.91	85.95	3.04	2.74	90	1.11	37	0R	3H	1W	RBZ 83.50-84 m
85.95	89.00	3.05	2.93	96	1.78	58	0R	3H	1W	RBZ 88-89m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
89.00	92.05	3.05	2.4	79	1.13	37	0R	2H	1W	RBZ at 89.50-89.60m, 89.75-90.00m, 91.75-92.05m.
92.05	95.10	3.05	2.99	98	2.76	90	0R	2H	1W	RBZ cemented by gouge clay at 93.95-94.30m
95.10	98.15	3.05	2.96	97	2.85	93	0R	2H	1W	
98.15	101.19	3.04	3.03	100	2.15	71	1R	3H	1W	RBZ at 100.55-100.90m
101.19	104.24	3.05	2.91	95	2.51	82	3R	3H	1W	RBZ at 103.70-103.80m
104.24	107.29	3.05	2.74	90	2.00	66	4R	3H	1W	
107.29	110.34	3.05	3.05	100	2.68	88	4R	3H	1W	
110.34	113.38	3.04	2.95	97	2.17	71	4R	3H	1W	RBZ at 113.0-113.05m,113.10-113.15m, 112.60-112.65m
113.38	116.43	3.05	3.05	100	2.43	80	4R	3H	1W	
116.43	119.48	3.05	2.67	88	1.70	56	4R	3H	1W	RBZ at 118.95-119.48m
119.48	122.53	3.05	2.84	93	2.01	66	4R	3H	1W	RBZ at 120.10-120.05,121.01m
122.53	125.58	3.05	3.05	100	1.99	65	4R	3H	1W	RBZ at 123.20m,125.48-125.58m
125.58	128.63	3.05	3.05	100	3.05	100	4R	3H	1W	
128.63	131.67	3.04	3.04	100	2.80	92	4R	3H	1W	
131.67	134.72	3.05	2.96	97	2.81	92	4R	3H	1W	
134.72	137.77	3.05	3.05	100	3.05	100	4R	3H	1W	
137.77	140.82	3.05	3.05	100	2.82	92	4R	3H	1W	RBZ at 138.15-138.40m, 139.80-140.00m,
140.82	143.87	3.05	3.03	99	2.21	72	4R	3H	1W	
143.87	146.91	3.04	2.98	98	2.61	86	4R	3H	1W	
146.91	149.96	3.05	2.98	98	2.77	91	4R	3H	1W	
149.96	153.01	3.05	2.78	91	2.72	89	4R	3H	1W	
153.01	156.06	3.05	3.05	100	2.46	81	4R	3H	1W	RBZ at 153.70-153.90m, 155.05-155.60m.
156.06	159.11	3.05	2.97	97	2.51	82	4R	3H	1W	
159.11	162.15	3.04	3.04	100	2.89	95	4R	3H	1W	
162.15	165.20	3.05	2.94	96	2.17	71	2R	3H	1W	Mix of limestone (highly reactive) and siliciclastic (weak/non-reactive)
165.20	168.25	3.05	3.03	99	2.42	79	4R	3H	1W	
168.25	171.30	3.05	3.04	100	2.07	68	2R	3H	1W	Mineralized section in interval
171.30	174.35	3.05	3	98	2.73	90	3R	3H	1W	
174.35	177.39	3.04	2.92	96	2.69	88	2R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
177.39	180.44	3.05	3.05	100	2.53	83	3R	3H	1W	
180.44	183.49	3.05	3.01	99	2.16	71	4R	3H	1W	
183.49	186.54	3.05	2.84	93	1.60	52	4R	3H	1W	
186.54	189.59	3.05	2.98	98	2.57	84	4R	3H	1W	
189.59	192.63	3.04	2.94	97	2.26	74	2R	3H	1W	
192.63	195.68	3.05	2.83	93	2.13	70	3R	3H	1W	
195.68	198.73	3.05	2.95	97	2.59	85	3R	3H	1W	
198.73	201.78	3.05	2.74	90	1.62	53	3R	3H	1W	
201.78	204.83	3.05	2.82	92	1.89	62	3R	3H	1W	Mix of limestone (strongly reactive) and dark grey siltstone (weak/non-reactive)
204.83	207.87	3.04	2.87	94	2.17	71	2R	3H	1W	
207.87	210.92	3.05	2.95	97	2.39	78	2R	3H	1W	
210.92	213.97	3.05	2.89	95	1.45	48	2R	3H	1W	
213.97	217.02	3.05	2.88	94	1.87	61	3R	3H	1W	
217.02	220.07	3.05	2.69	88	1.88	62	3R	3H	1W	
220.07	223.11	3.04	2.89	95	2.31	76	3R	3H	1W	
223.11	226.16	3.05	2.76	90	2.29	75	3R	3H	1W	

OS -17-251

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W232159	☐	N17-074	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232165	☐	N17-074	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232173	☐	N17-074	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232188	☐	N17-074	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232201	☐	N17-075	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232202	☐	N17-075	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232215	☐	N17-075	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232222	☐	N17-075	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232234	☐	N17-077	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232149	☐	N17-070	core	CS6	☐	☐	☐
3.66	6.71	3.05	MST, OVB	1.98	65	W232144	☐	N17-070	core		☐	☐	☐
6.71	9.75	3.04	MST	2.43	80	W232145	☐	N17-070	core		☐	☐	☐
9.75	12.80	3.05	MST	2.32	76	W232146	☐	N17-070	core		☐	☐	☐
12.80	15.85	3.05	MST	2.06	68	W232147	☐	N17-070	core		☐	☐	☐
15.85	18.90	3.05	MST	2.22	73	W232148	☐	N17-070	core		☐	☐	☐
18.90	21.95	3.05	MST	2.03	67	W232150	☐	N17-070	core		☐	☐	☐
18.90	21.95	3.05	MST	2.03	67	W232151	☐	N17-070	core		☐	☐	☑
21.95	24.99	3.04	MST	2.75	90	W232152	☐	N17-070	core		☐	☐	☐
24.99	28.04	3.05	MST	2.69	88	W232153	☐	N17-074	core		☐	☐	☐
28.04	31.09	3.05	MST	2.31	76	W232154	☐	N17-074	core		☐	☐	☐
31.09	34.14	3.05	MST	2.72	89	W232155	☐	N17-074	core		☐	☐	☐
34.14	37.18	3.04	MST	2.43	80	W232156	☐	N17-074	core		☐	☐	☐
37.18	40.23	3.05	MST	2.43	80	W232157	☐	N17-074	core		☐	☐	☐
40.23	43.28	3.05	MST	3.00	98	W232158	☐	N17-074	core		☐	☐	☐
43.28	46.33	3.05	MST	2.51	82	W232160	☐	N17-074	core		☐	☐	☐
46.33	48.64	2.31	MST	1.81	78	W232161	☐	N17-074	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
48.64	50.90	2.26	LST	2.02	89	W232162	☐	N17-074	core		☐	☐	☐
48.64	50.90	2.26	LST	2.02	89	W232163	☐	N17-074	core		☐	☐	☑
50.90	53.95	3.05	LST	2.95	97	W232164	☐	N17-074	core		☐	☐	☐
53.95	55.47	1.52	LST	1.19	78	W232166	☐	N17-074	core		☐	☐	☐
55.47	58.52	3.05	LST	2.86	94	W232167	☐	N17-074	core		☐	☐	☐
58.52	61.57	3.05	LST	2.81	92	W232168	☐	N17-074	core		☐	☐	☐
61.57	64.62	3.05	LST	2.61	86	W232169	☐	N17-074	core		☐	☐	☐
64.62	67.67	3.05	DMT	2.77	91	W232170	☐	N17-074	core		☐	☐	☐
67.67	70.04	2.37	DMT	1.88	79	W232171	☐	N17-074	core		☐	☐	☐
70.04	72.24	2.20	LST, DMT	1.74	79	W232172	☐	N17-074	core		☐	☐	☐
72.24	75.29	3.05	LST	2.49	82	W232174	☐	N17-074	core		☐	☐	☐
75.29	76.81	1.52	LST	1.45	95	W232175	☐	N17-074	core		☐	☐	☐
76.81	79.86	3.05	LST	2.62	86	W232176	☐	N17-074	core		☐	☐	☐
79.86	82.91	3.05	LST	2.72	89	W232177	☐	N17-074	core		☐	☐	☐
82.91	85.95	3.04	LST	2.74	90	W232178	☐	N17-074	core		☐	☐	☐
85.95	89.00	3.05	LST	2.93	96	W232179	☐	N17-074	core		☐	☐	☐
89.00	92.05	3.05	MST	2.40	79	W232180	☐	N17-074	core		☐	☐	☐
92.05	95.10	3.05	MST	2.99	98	W232181	☐	N17-074	core		☐	☐	☐
95.10	98.15	3.05	MST	2.96	97	W232182	☐	N17-074	core		☐	☐	☐
95.10	98.15	3.05	MST	2.96	97	W232183	☐	N17-074	core		☐	☑	☐
98.15	101.19	3.04	MST	3.03	100	W232184	☐	N17-074	core		☐	☐	☐
101.19	104.24	3.05	MST	2.91	95	W232185	☐	N17-074	core		☐	☐	☐
104.24	107.29	3.05	LST	2.74	90	W232186	☐	N17-074	core		☐	☐	☐
107.29	110.34	3.05	LST	3.05	100	W232187	☐	N17-074	core		☐	☐	☐
110.34	113.38	3.04	LST	2.95	97	W232189	☐	N17-075	Core		☐	☐	☐
113.38	116.43	3.05	LST	3.05	100	W232190	☐	N17-075	Core		☐	☐	☐
116.43	119.48	3.05	LST	2.67	88	W232191	☐	N17-075	Core		☐	☐	☐
119.48	122.53	3.05	LST	2.84	93	W232192	☐	N17-075	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
122.53	125.58	3.05	LST	3.05	100	W232193	☐	N17-075	Core		☐	☐	☐
122.53	125.58	3.05	LST	3.05	100	W232194	☐	N17-075	Core		☐	☐	☑
125.58	128.63	3.05	LST	3.05	100	W232195	☐	N17-075	Core		☐	☐	☐
128.63	131.67	3.04	LST	3.04	100	W232196	☐	N17-075	Core		☐	☐	☐
131.67	134.72	3.05	LST	2.96	97	W232197	☐	N17-075	Core		☐	☐	☐
134.72	137.77	3.05	LST	3.05	100	W232198	☐	N17-075	Core		☐	☐	☐
137.77	139.73	1.96	LST	1.92	98	W232199	☐	N17-075	Core		☐	☐	☐
139.73	141.60	1.87	LST	1.80	96	W232200	☐	N17-075	Core		☐	☐	☐
141.60	143.87	2.27	LST	2.27	100	W232203	☐	N17-075	Core		☐	☐	☐
143.87	146.91	3.04	LST	2.98	98	W232204	☐	N17-075	Core		☐	☐	☐
146.91	149.96	3.05	LST	2.98	98	W232205	☐	N17-075	Core		☐	☐	☐
146.91	149.96	3.05	LST	2.98	98	W232206	☐	N17-075	Core		☐	☑	☐
149.96	153.01	3.05	LST	2.78	91	W232207	☐	N17-075	Core		☐	☐	☐
153.01	156.06	3.05	LST	3.05	100	W232208	☐	N17-075	Core		☐	☐	☐
156.06	159.11	3.05	LST	2.97	97	W232209	☐	N17-075	Core		☐	☐	☐
159.11	162.15	3.04	LST	3.04	100	W232210	☐	N17-075	Core		☐	☐	☐
162.15	165.20	3.05	LST	2.94	96	W232211	☐	N17-075	Core		☐	☐	☐
165.20	166.73	1.53	LST	1.53	100	W232212	☐	N17-075	Core		☐	☐	☐
166.73	168.46	1.73	LST	1.62	94	W232213	☐	N17-075	Core		☐	☐	☐
168.46	169.58	1.12	LST	1.12	100	W232214	☐	N17-075	Core		☐	☐	☐
169.58	171.30	1.72	LST	1.71	99	W232216	☐	N17-075	Core		☐	☐	☐
171.30	174.35	3.05	LST	3.00	98	W232217	☐	N17-075	Core		☐	☐	☐
174.35	177.39	3.04	LST	2.92	96	W232218	☐	N17-075	Core		☐	☐	☐
177.39	180.44	3.05	LST	3.05	100	W232219	☐	N17-075	Core		☐	☐	☐
180.44	183.49	3.05	LST	3.01	99	W232220	☐	N17-075	Core		☐	☐	☐
183.49	186.54	3.05	LST	2.84	93	W232221	☐	N17-075	Core		☐	☐	☐
186.54	189.59	3.05	LST	2.98	98	W232223	☐	N17-075	Core		☐	☐	☐
189.59	192.63	3.04	LST	2.94	97	W232224	☐	N17-075	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
192.63	195.68	3.05	LST	2.83	93	W232225	☐	N17-077	core		☐	☐	☐
195.68	198.73	3.05	LST	2.95	97	W232226	☐	N17-077	core		☐	☐	☐
198.73	201.78	3.05	LST	2.74	90	W232227	☐	N17-077	core		☐	☐	☐
201.78	204.83	3.05	LST	2.82	92	W232228	☐	N17-077	core		☐	☐	☐
201.78	204.83	3.05	LST	2.82	92	W232229	☐	N17-077	core		☐	☐	☑
204.83	207.87	3.04	LST	2.87	94	W232230	☐	N17-077	core		☐	☐	☐
207.87	210.92	3.05	LST	2.95	97	W232231	☐	N17-077	core		☐	☐	☐
210.92	213.97	3.05	LST	2.89	95	W232232	☐	N17-077	core		☐	☐	☐
213.97	217.02	3.05	LST	2.88	94	W232233	☐	N17-077	core		☐	☐	☐
217.02	220.07	3.05	LST	2.69	88	W232235	☐	N17-077	core		☐	☐	☐
220.07	223.11	3.04	LST	2.89	95	W232236	☐	N17-077	core		☐	☐	☐
223.11	226.16	3.05	LST	2.76	90	W232237	☐	N17-077	core		☐	☐	☐

OS -17-252

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
10.09	74.00	63.91	MST	VF	Fine grained, green-grey laminated mudstone, showing signs of weathering and oxidation throughout.							
						MD	GY	BD	CLY	3I		

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	10.09	10.09	0	0	0.00	0	--	--	--	OVB, no recovery.
10.09	12.80	2.71	2.71	100	1.79	66	0R	3H	3W	RBZ 10.09 - 10.80m.
12.80	15.85	3.05	2.83	93	0.87	29	0R	2H	3W	RBZ for entire interval.
15.85	18.90	3.05	2.85	93	1.62	53	0R	3H	2W	RBZ 15.85 - 17.80m.
18.90	21.95	3.05	2.58	85	1.85	61	0R	3H	3W	RBZ 19.30 - 19.80m.
21.95	24.99	3.04	2.67	88	1.41	46	0R	3H	3W	RBZ 22.90 - 23.47m.
24.99	28.04	3.05	2.48	81	0.48	16	0R	3H	2W	RBZ 26.0 - 28.0m.
28.04	31.09	3.05	2.9	95	1.36	45	0R	3H	2W	RBZ 29.70 - 30.50m.
31.09	34.14	3.05	2.43	80	1.44	47	0R	3H	1W	
34.14	37.19	3.05	2.34	77	0.29	10	0R	3H	3W	RBZ entire interval.
37.19	40.23	3.04	2.9	95	1.29	42	0R	2H	1W	RBZ for nearly entire interval.
40.23	43.28	3.05	1.49	49	0.33	11	0R	2H	3W	RBZ 40.23-40.38m, 41-41.50m, 43.05-43.10m. Joints have clear weathering on them
43.28	46.33	3.05	2.48	81	1.00	33	0R	2H	2W	RBZ - 45-45.30m weathering on the joints
46.33	49.38	3.05	2.83	93	1.47	48	0R	2H	2W	
49.38	52.43	3.05	2.73	90	1.81	59	0R	2H	2W	RBZ - 49.70-50.30m ->not a true rubble zone but close to it. Area is heavily fractured and muddy
52.43	55.47	3.04	2.89	95	1.55	51	0R	2H	1W	
55.47	58.52	3.05	2.78	91	1.02	33	1R	2H	2W	RBZ - 58-58.15m
58.52	61.57	3.05	2.87	94	1.54	50	1R	2H	2W	RBZ - 58.52-58.75m, joints all have the same orientation and some have light iron oxidation on them
61.57	64.62	3.05	2.79	91	1.33	44	1R	2H	1W	
64.62	67.66	3.04	2.72	89	1.15	38	2R	2H	1W	RBZ - 67.25-67.36m
67.66	70.71	3.05	2.89	95	0.96	31	2R	2H	1W	RBZ - 68.80-69.19m
70.71	73.76	3.05	2.76	90	0.54	18	2R	2H	1W	RBZ - 71.66-72.24m. Zone is heavily fractured. Mix of rubble and slightly larger pieces
73.76	76.81	3.05	2.68	88	0.78	26	3R	2H	1W	RBZ - 73.76-73.78m
76.81	79.86	3.05	2.78	91	0.82	27	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
79.86	82.91	3.05	3.05	100	1.52	50	3R	3H	1W	
82.91	85.95	3.04	2.63	87	1.43	47	2R	2H	2W	Rubbly zone
85.95	89.00	3.05	2.7	89	1.36	45	3R	3H	1W	
89.00	92.05	3.05	3.05	100	1.70	56	3R	3H	1W	
92.05	95.10	3.05	2.84	93	0.14	5	3R	3H	2W	Rubble zone
95.10	98.15	3.05	2.77	91	1.68	55	1R	3H	1W	non-carbonate contact
98.15	101.19	3.04	3.04	100	3.04	100	0R	3H	1W	
101.19	104.24	3.05	2.54	83	2.21	72	0R	3H	1W	
104.24	107.29	3.05	3.05	100	2.52	83	0R	3H	1W	
107.29	110.34	3.05	2.42	79	1.28	42	0R	3H	1W	
110.34	113.38	3.04	2.95	97	1.18	39	0R	3H	1W	
113.38	116.43	3.05	3.03	99	1.31	43	0R	3H	1W	Rubble Zone
116.43	119.48	3.05	2.93	96	2.42	79	0R	3H	1W	
119.48	122.53	3.05	3.04	100	2.12	70	2R	3H	1W	Carbonate contact
122.53	125.58	3.05	2.96	97	2.80	92	4R	3H	1W	
125.58	128.63	3.05	3	98	1.66	54	3R	3H	1W	
128.63	131.67	3.04	2.86	94	2.13	70	3R	3H	1W	
131.67	134.72	3.05	3.05	100	1.48	49	2R	3H	1W	
134.72	137.77	3.05	3.05	100	2.36	77	2R	3H	1W	
137.77	140.82	3.05	2.87	94	1.88	62	2R	3H	1W	
140.82	143.87	3.05	3.04	100	2.48	81	2R	3H	1W	
143.87	146.91	3.04	3.04	100	2.06	68	1R	3H	1W	
146.91	149.96	3.05	3	98	1.54	50	1R	3H	1W	Rubble Zone
149.96	153.01	3.05	2.96	97	1.10	36	1R	3H	1W	Rubble zone
153.01	156.06	3.05	3.04	100	1.48	49	1R	3H	1W	Rubble Zone
156.06	159.11	3.05	2.86	94	2.00	66	3R	3H	1W	
159.11	162.15	3.04	2.92	96	2.68	88	2R	3H	1W	
162.15	165.20	3.05	3.05	100	2.70	89	2R	3H	1W	
165.20	168.25	3.05	3.03	99	2.51	82	3R	3H	1W	
168.25	171.30	3.05	3	98	2.82	92	3R	3H	1W	
171.30	174.34	3.04	3.01	99	2.42	80	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
174.34	177.39	3.05	2.93	96	2.03	67	3R	3H	1W	
177.39	180.44	3.05	3.03	99	2.72	89	3R	3H	1W	
180.44	183.49	3.05	3.05	100	3.05	100	3R	3H	1W	
183.49	186.54	3.05	2.97	97	2.97	97	3R	3H	1W	
186.54	189.59	3.05	2.94	96	2.52	83	3R	3H	1W	
189.59	192.63	3.04	2.92	96	1.86	61	3R	3H	1W	
192.63	195.68	3.05	3.05	100	2.79	91	3R	3H	1W	Mineralized zone at 195.45m
195.68	198.73	3.05	2.83	93	2.71	89	3R	3H	1W	Mineralized zone
198.73	201.78	3.05	3.03	99	1.13	37	3R	3H	1W	RBZ 200.25m
201.78	204.83	3.05	2.86	94	1.16	38	4R	3H	1W	RBZ 202.50-202.65m
204.83	207.87	3.04	2.75	90	2.22	73	3R	3H	1W	RBZ 206.00-206.20m
207.87	210.92	3.05	2.78	91	2.28	75	3R	3H	1W	RBZ 207.87m, 208.50m
210.92	213.97	3.05	2.97	97	2.31	76	3R	3H	1W	
213.97	217.02	3.05	3.05	100	2.72	89	3R	3H	1W	
217.02	220.07	3.05	3.05	100	3.00	98	2R	3H	1W	
220.07	223.11	3.04	3.01	99	2.56	84	3R	3H	1W	
223.11	226.16	3.05	2.93	96	2.63	86	3R	3H	1W	
226.16	229.21	3.05	2.96	97	2.85	93	2R	3H	1W	
229.21	232.26	3.05	3.05	100	2.96	97	4R	3H	1W	
232.26	235.31	3.05	3.05	100	2.63	86	4R	3H	1W	
235.31	238.35	3.04	2.89	95	2.38	78	4R	3H	1W	
238.35	241.40	3.05	2.95	97	2.62	86	3R	3H	1W	
241.40	244.45	3.05	3.04	100	2.34	77	1R	3H	1W	
244.45	247.50	3.05	2.98	98	2.51	82	2R	3H	1W	
247.50	250.55	3.05	3.05	100	1.72	56	3R	4H	1W	
250.55	253.59	3.04	3.04	100	2.99	98	3R	4H	1W	
253.59	256.64	3.05	3	98	2.29	75	2R	4H	1W	
256.64	259.69	3.05	3.05	100	2.57	84	2R	4H	1W	
259.69	262.74	3.05	2.93	96	2.39	78	2R	4H	1W	
262.74	265.79	3.05	3.05	100	3.05	100	3R	4H	1W	
265.79	268.83	3.04	3.04	100	2.55	84	3R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
268.83	271.88	3.05	2.95	97	2.35	77	3R	4H	1W	
271.88	274.93	3.05	3.05	100	3.03	99	1R	4H	1W	

OS -17-252

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W232252	☐	N17-077	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232258	☐	N17-077	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232281	☐	N17-080	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232283	☐	N17-080	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232291	☐	N17-080	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232295	☐	N17-080	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232301	☐	N17-081	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232320	☐	N17-081	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232323	☐	N17-081	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232329	☐	N17-081	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232244	☐	N17-077	core		☑	☐	☐
10.09	15.85	5.76	OVB, MST	5.54	96	Q052462	☐	N17-C06	Chip		☐	☐	☐
15.85	21.95	6.10	MST	5.43	89	Q052463	☐	N17-C06	Chip		☐	☐	☐
21.95	28.04	6.09	MST	5.15	85	Q052464	☐	N17-C06	Chip		☐	☐	☐
28.04	34.14	6.10	MST	5.33	87	Q052465	☐	N17-C06	Chip		☐	☐	☐
34.14	40.23	6.09	MST	5.24	86	Q052466	☐	N17-C06	Chip		☐	☐	☐
40.23	46.33	6.10	MST	3.97	65	Q052467	☐	N17-C06	Chip		☐	☐	☐
46.33	52.43	6.10	MST	5.56	91	Q052468	☐	N17-C06	Chip		☐	☐	☐
52.43	58.52	6.09	MST	5.67	93	Q052469	☐	N17-C06	Chip		☐	☐	☐
58.52	61.57	3.05	MST	2.87	94	W232238	☐	N17-077	core		☐	☐	☐
61.57	64.62	3.05	MST	2.79	91	W232239	☐	N17-077	core		☐	☐	☐
64.62	67.66	3.04	MST	2.72	89	W232240	☐	N17-077	core		☐	☐	☐
67.66	70.71	3.05	MST	2.89	95	W232241	☐	N17-077	core		☐	☐	☐
70.71	73.76	3.05	MST	2.76	90	W232242	☐	N17-077	core		☐	☐	☐
73.76	76.81	3.05	MST	2.68	88	W232243	☐	N17-077	core		☐	☐	☐
76.81	79.86	3.05	LST	2.78	91	W232245	☐	N17-077	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
79.86	82.91	3.05	LST	3.05	100	W232246	☐	N17-077	core		☐	☐	☐
82.91	85.95	3.04	LST	2.63	87	W232247	☐	N17-077	core		☐	☐	☐
85.95	89.00	3.05	LST	2.70	89	W232248	☐	N17-077	core		☐	☐	☐
89.00	92.05	3.05	LST	3.05	100	W232249	☐	N17-077	core		☐	☐	☐
92.05	95.10	3.05	LST	2.84	93	W232250	☐	N17-077	core		☐	☐	☐
95.10	96.62	1.52	LST	1.29	85	W232251	☐	N17-077	core		☐	☐	☐
96.62	98.15	1.53	MST	1.53	100	W232253	☐	N17-077	core		☐	☐	☐
98.15	101.19	3.04	MST	3.04	100	W232254	☐	N17-077	core		☐	☐	☐
98.15	101.19	3.04	MST	3.04	100	W232255	☐	N17-077	core		☐	☑	☐
101.19	104.24	3.05	MST	2.54	83	W232256	☐	N17-077	core		☐	☐	☐
104.24	107.29	3.05	MST	3.05	100	W232257	☐	N17-077	core		☐	☐	☐
107.29	110.34	3.05	MST	2.42	79	W232259	☐	N17-077	core		☐	☐	☐
110.34	113.38	3.04	MST	2.95	97	W232260	☐	N17-077	core		☐	☐	☐
113.38	116.43	3.05	MST	3.03	99	W232261	☐	N17-080	core		☐	☐	☐
116.43	119.48	3.05	MST	2.93	96	W232262	☐	N17-080	core		☐	☐	☐
119.48	121.38	1.90	MST	1.90	100	W232263	☐	N17-080	core		☐	☐	☐
121.38	122.53	1.15	LST	1.15	100	W232264	☐	N17-080	core		☐	☐	☐
122.53	125.58	3.05	LST	2.96	97	W232265	☐	N17-080	core		☐	☐	☐
125.58	128.63	3.05	LST	3.00	98	W232266	☐	N17-080	core		☐	☐	☐
128.63	131.67	3.04	LST	2.86	94	W232267	☐	N17-080	core		☐	☐	☐
131.67	134.72	3.05	LST	3.05	100	W232268	☐	N17-080	core		☐	☐	☐
134.72	137.77	3.05	LST	3.05	100	W232269	☐	N17-080	core		☐	☐	☐
137.77	140.82	3.05	LST	2.87	94	W232270	☐	N17-080	core		☐	☐	☐
140.82	143.87	3.05	LST	3.04	100	W232271	☐	N17-080	core		☐	☐	☐
143.87	146.91	3.04	LST	3.04	100	W232272	☐	N17-080	core		☐	☐	☐
146.91	149.96	3.05	LST	3.00	98	W232273	☐	N17-080	core		☐	☐	☐
149.96	153.01	3.05	LST	2.96	97	W232274	☐	N17-080	core		☐	☐	☐
153.01	156.06	3.05	LST	3.04	100	W232275	☐	N17-080	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
156.06	159.11	3.05	LST	2.86	94	W232276	☐	N17-080	core		☐	☐	☐
159.11	162.15	3.04	LST	2.92	96	W232277	☐	N17-080	core		☐	☐	☐
159.11	162.15	3.04	LST	2.92	96	W232278	☐	N17-080	core		☐	☑	☐
162.15	165.20	3.05	LST	3.05	100	W232279	☐	N17-080	core		☐	☐	☐
165.20	168.25	3.05	LST	3.03	99	W232280	☐	N17-080	core		☐	☐	☐
168.25	171.30	3.05	LST	3.00	98	W232282	☐	N17-080	core		☐	☐	☐
171.30	174.34	3.04	LST	3.01	99	W232284	☐	N17-080	core		☐	☐	☐
174.34	177.39	3.05	LST	2.93	96	W232285	☐	N17-080	core		☐	☐	☐
174.34	177.39	3.05	LST	2.93	96	W232286	☐	N17-080	core		☐	☐	☑
177.39	180.44	3.05	LST	3.03	99	W232287	☐	N17-080	core		☐	☐	☐
180.44	183.49	3.05	LST	3.05	100	W232288	☐	N17-080	core		☐	☐	☐
183.49	186.54	3.05	LST	2.97	97	W232289	☐	N17-080	core		☐	☐	☐
186.54	189.59	3.05	LST	2.94	96	W232290	☐	N17-080	core		☐	☐	☐
189.59	192.63	3.04	LST	2.92	96	W232292	☐	N17-080	core		☐	☐	☐
192.63	195.39	2.76	LST	2.75	100	W232293	☐	N17-080	core		☐	☐	☐
195.39	196.54	1.15	LST	1.15	100	W232294	☐	N17-080	core		☐	☐	☐
196.54	198.73	2.19	LST	1.94	89	W232296	☐	N17-080	core		☐	☐	☐
198.73	201.78	3.05	LST	3.03	99	W232297	☐	N17-081	Core		☐	☐	☐
201.78	203.30	1.52	LST	1.52	100	W232298	☐	N17-081	Core		☐	☐	☐
203.30	205.10	1.80	LST	1.70	94	W232299	☐	N17-081	Core		☐	☐	☐
205.10	206.43	1.33	LST	1.14	86	W232300	☐	N17-081	Core		☐	☐	☐
206.43	207.87	1.44	LST	1.44	100	W232302	☐	N17-081	Core		☐	☐	☐
207.87	210.92	3.05	LST	2.78	91	W232303	☐	N17-081	Core		☐	☐	☐
210.92	213.97	3.05	LST	2.97	97	W232304	☐	N17-081	Core		☐	☐	☐
213.97	217.02	3.05	LST	3.05	100	W232305	☐	N17-081	Core		☐	☐	☐
217.02	220.07	3.05	LST	3.05	100	W232306	☐	N17-081	Core		☐	☐	☐
217.02	220.07	3.05	LST	3.05	100	W232307	☐	N17-081	Core		☐	☐	☑
220.07	223.11	3.04	LST	3.01	99	W232308	☐	N17-081	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
223.11	226.16	3.05	LST	2.93	96	W232309	☐	N17-081	Core		☐	☐	☐
226.16	229.21	3.05	LST	2.96	97	W232310	☐	N17-081	Core		☐	☐	☐
229.21	232.26	3.05	LST	3.05	100	W232311	☐	N17-081	Core		☐	☐	☐
232.26	235.31	3.05	LST	3.05	100	W232312	☐	N17-081	Core		☐	☐	☐
235.31	238.35	3.04	LST	2.89	95	W232313	☐	N17-081	Core		☐	☐	☐
238.35	241.40	3.05	LST	2.95	97	W232314	☐	N17-081	Core		☐	☐	☐
238.35	241.40	3.05	LST	3.04	100	W232315	☐	N17-081	Core		☐	☑	☐
241.40	244.45	3.05	LST	3.04	100	W232316	☐	N17-081	Core		☐	☐	☐
244.45	247.50	3.05	LST	2.98	98	W232317	☐	N17-081	Core		☐	☐	☐
247.50	250.55	3.05	LST	3.05	100	W232318	☐	N17-081	Core		☐	☐	☐
250.55	253.59	3.04	LST	3.04	100	W232319	☐	N17-081	Core		☐	☐	☐
253.59	256.64	3.05	LST	3.00	98	W232321	☐	N17-081	Core		☐	☐	☐
256.64	259.69	3.05	LST	3.05	100	W232322	☐	N17-081	Core		☐	☐	☐
259.69	262.74	3.05	LST	2.93	96	W232324	☐	N17-081	Core		☐	☐	☐
262.74	265.79	3.05	LST	3.05	100	W232325	☐	N17-081	Core		☐	☐	☐
265.79	268.83	3.04	LST	3.04	100	W232326	☐	N17-081	Core		☐	☐	☐
268.83	271.88	3.05	LST	2.95	97	W232327	☐	N17-081	Core		☐	☐	☐
271.88	274.93	3.05	LST	3.05	100	W232328	☐	N17-081	Core		☐	☐	☐

OS -17-253

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
10.06	93.80	83.74	LST	FG	Dark grey, fine grained limestone, interbedded with grey siliclastic beds. The less calcerous siliciclastic beds are composed of dark grey mudstone, medium grained sandstone and a pebble conglomerate with clast 0.2 to 1.5 cm in size.							
						MD	GY	BD	---	--	--	0
110.18	207.26	97.08	SHL	FG	Conrad Black Shale. Fine grained, dark black, beds thin and poorly formed. Quartz veining makes up a total of 3-5% of the interval. There is a minor lime component in the upper 2m of the interval.							
						LT	GN					
						MD	GY					
						DK	BL	MA				
207.26	221.06	13.80	DST	MG	Conrad Dolostone. Medium grained, gritty, light grey to light purple (grey with a purple tone), massive to thinly bedded, abundant dolomite veining (black, 1-3mm wide, stringy appearance). Realgar on some fracture sufaces. Occasional graphite on fraccture surfaces.							
								BD			Gr	0.5
						LT	GY	MA	DOL	3I	Re	5

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	10.06	10.06	0	0	0.00	0	0R	--	--	OVB No Recovery
10.06	12.19	2.13	1	47	0.00	0	0R	3H	3W	OVB
12.19	15.24	3.05	2.92	96	1.45	48	1R	3H	3W	RBZ from 13.00-13.43m
15.24	18.29	3.05	2.75	90	1.50	49	1R	3H	2W	RBZ 15.50-15.60m core here is multiply fractured (pebble sized).
18.29	21.34	3.05	2.13	70	0.35	11	2R	3H	1W	RBZ 18.70-18.80m, 19.03-19.60m,20.30-20.40m.
21.34	24.38	3.04	3.04	100	1.77	58	0R	2H	1W	
24.38	27.43	3.05	2.45	80	1.07	35	2R	3H	1W	RBZ at 26.00-23.80m
27.43	30.48	3.05	2.43	80	1.27	42	2R	3H	1W	RBZ at 28.30-28.75m,29.00-29.10m, 30.00-30.20m.
30.48	33.53	3.05	2.67	88	0.96	31	0R	3H	1W	RBZ at 32.80-32.90m, 29.90-30.10m,
33.53	36.58	3.05	3.05	100	2.00	66	3R	3H	1W	
36.58	39.62	3.04	2.76	91	1.22	40	4R	3H	1W	
39.62	42.67	3.05	3.05	100	2.37	78	4R	3H	1W	
42.67	45.72	3.05	2.69	88	1.46	48	4R	3H	1W	
45.72	48.77	3.05	2.89	95	2.00	66	3R	3H	1W	
48.77	51.82	3.05	3	98	1.02	33	3R	3H	1W	
51.82	54.86	3.04	2.85	94	0.76	25	3R	3H	1W	RBZ at52.25-52.30m, 53.07-53.34m.
54.86	57.91	3.05	2.84	93	0.58	19	4R	3H	1W	Multiply fracture core from 56.45-57.20m
57.91	60.96	3.05	2.55	84	0.79	26	3R	1H	1W	siliciclastic interbeds <1m length. One true joint set, clay rich intervals have multiple fractures with no preferred orientation.
60.96	64.01	3.05	3.02	99	0.80	26	3R	3H	1W	siliciclastic interbeds, some soft sections. Lots of fractures.
64.01	67.06	3.05	2.72	89	1.25	41	3R	3H	1W	
67.06	70.10	3.04	2.63	87	1.32	43	3R	1H	1W	wide intervals of clay and angular clasts of wall rock
70.10	73.15	3.05	3.05	100	2.08	68	3R	3H	1W	
73.15	76.20	3.05	2.94	96	1.00	33	3R	1H	1W	RZ 74.09-74.15 Very soft rock 74.72-74.77
76.20	79.25	3.05	2.99	98	1.88	62	3R	3H	1W	
79.25	82.30	3.05	2.92	96	2.29	75	3R	3H	1W	RZ 81.95-81.98

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
82.30	85.34	3.04	2.98	98	1.87	62	3R	3H	1W	
85.34	88.39	3.05	2.77	91	2.38	78	3R	1H	1W	RZ 88.30-88.39
88.39	91.44	3.05	3	98	2.05	67	3R	1H	1W	RZ 90.03-90.12, 90.57-68
91.44	94.44	3.00	2.97	99	2.23	74	3R	1H	1W	
94.44	97.54	3.10	2.99	96	2.83	91	3R	3H	1W	
97.54	100.58	3.04	3.01	99	2.35	77	4R	3H	1W	
100.58	103.63	3.05	2.86	94	2.14	70	4R	3H	1W	
103.63	106.68	3.05	2.97	97	1.70	56	3R	3H	1W	RZ 104.40-104.77m
106.68	109.73	3.05	2.93	96	2.14	70	3R	3H	1W	
109.73	112.78	3.05	2.99	98	1.42	47	2R	2H	1W	
112.78	115.82	3.04	3.01	99	1.53	50	1R	2H	1W	
115.82	118.87	3.05	2.98	98	1.08	35	1R	2H	1W	
118.87	121.92	3.05	3.02	99	1.44	47	1R	2H	1W	
121.92	124.97	3.05	2.95	97	0.73	24	1R	2H	1W	fractures look to be along bedding
124.97	128.02	3.05	2.92	96	1.41	46	1R	2H	1W	
128.02	131.06	3.04	2.72	89	1.41	46	1R	2H	1W	
131.06	134.11	3.05	3.05	100	1.90	62	1R	2H	1W	RBZ 131.23-131.47m
134.11	137.16	3.05	2.97	97	1.66	54	1R	2H	1W	
137.16	140.21	3.05	2.82	92	2.35	77	1R	2H	1W	
140.21	143.26	3.05	2.95	97	1.42	47	1R	2H	1W	
143.26	146.30	3.04	2.99	98	2.03	67	1R	2H	1W	
146.30	149.35	3.05	2.94	96	1.92	63	1R	2H	1W	
149.35	152.40	3.05	2.77	91	1.69	55	1R	2H	1W	RBZ 152-152.10m
152.40	155.45	3.05	2.99	98	1.25	41	1R	2H	1W	RBZ 153.51-153.64m
155.45	158.50	3.05	2.69	88	1.15	38	1R	2H	1W	RBZ 157.57-158.31m rubble with 2 larger 5-10cm chunks in it
158.50	161.54	3.04	2.89	95	2.40	79	1R	2H	1W	
161.54	164.59	3.05	3.03	99	2.35	77	1R	2H	1W	
164.59	167.64	3.05	3.05	100	2.16	71	0R	2H	1W	
167.64	170.69	3.05	2.97	97	1.79	59	0R	1H	1W	
170.69	173.74	3.05	3.05	100	2.54	83	0R	1H	1W	
173.74	176.78	3.04	3	99	2.19	72	0R	1H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
176.78	179.83	3.05	2.74	90	1.19	39	0R	2H	1W	
179.83	182.88	3.05	3.04	100	2.28	75	0R	1H	1W	
182.88	185.93	3.05	2.95	97	1.94	64	1R	2H	1W	
185.93	188.98	3.05	2.93	96	2.78	91	0R	3H	1W	
188.98	192.02	3.04	2.77	91	2.05	67	0R	1H	1W	fractured core at the end of the run is mechanical
192.02	195.07	3.05	2.87	94	2.19	72	0R	1H	1W	two little rips of clay, one at the start of the run, the other infilling a fracture. Most of the breaks in this run are mechaical
195.07	198.12	3.05	3.02	99	1.95	64	1R	2H	1W	
198.12	201.17	3.05	2.86	94	1.87	61	1R	1H	1W	
201.17	204.22	3.05	2.64	87	1.34	44	0R	3H	1W	
204.22	207.26	3.04	2.98	98	1.54	51	0R	1H	1W	
207.26	210.31	3.05	2.9	95	2.48	81	1R	3H	1W	
210.31	213.36	3.05	2.98	98	2.36	77	1R	3H	1W	
213.36	216.41	3.05	2.95	97	2.28	75	1R	3H	1W	
216.41	219.46	3.05	3.05	100	2.25	74	0R	3H	1W	
219.46	222.50	3.04	2.91	96	2.01	66	1R	3H	1W	RZ: 220.65-220.84m
222.50	225.55	3.05	3.05	100	2.02	66	0R	3H	1W	
225.55	228.60	3.05	2.85	93	1.76	58	1R	1H	1W	clay zone at the end of the run
228.60	231.65	3.05	3.04	100	1.04	34	2R	1H	1W	clay rich run, there is a carbonate component to the clay
231.65	234.70	3.05	2.93	96	2.61	86	1R	3H	1W	all breaks are mechanical
234.70	237.74	3.04	3.03	100	1.58	52	1R	1H	1W	clay intervals, very minor carbonate component to clays
237.74	240.79	3.05	2.86	94	1.63	53	1R	2H	1W	RZ: 238.25-238.40m
240.79	243.84	3.05	3.04	100	2.14	70	0R	1H	1W	30cm of clay at the top of the run
243.84	246.89	3.05	3.05	100	2.03	67	1R	3H	1W	
246.89	248.41	1.52	1.51	99	1.24	82	0R	3H	1W	
248.41	251.46	3.05	2.78	91	0.97	32	0R	3H	1W	
251.46	254.51	3.05	2.93	96	2.10	69	0R	3H	1W	
254.51	257.56	3.05	2.95	97	1.85	61	0R	3H	1W	
257.56	260.60	3.04	2.95	97	1.63	54	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
260.60	263.65	3.05	3.05	100	2.76	90	0R	4H	1W	
263.65	266.70	3.05	2.99	98	2.06	68	0R	4H	1W	
266.70	269.75	3.05	3	98	2.75	90	0R	2H	1W	
269.75	272.80	3.05	2.91	95	2.00	66	0R	2H	1W	
272.80	275.84	3.04	3.03	100	2.23	73	0R	3H	1W	
275.84	278.89	3.05	2.95	97	1.31	43	1R	2H	1W	
278.89	281.94	3.05	3.03	99	1.92	63	1R	2H	1W	
281.94	284.99	3.05	3.03	99	2.21	72	1R	4H	1W	
284.99	288.04	3.05	3.05	100	2.33	76	1R	4H	1W	
288.04	291.08	3.04	3.01	99	2.34	77	1R	4H	1W	
291.08	294.13	3.05	2.92	96	2.02	66	0R	4H	1W	
294.13	297.18	3.05	2.84	93	2.05	67	0R	4H	1W	
297.18	300.23	3.05	2.99	98	2.20	72	0R	4H	1W	
300.23	303.28	3.05	2.98	98	2.21	72	0R	4H	1W	
303.28	306.32	3.04	3.04	100	2.21	73	0R	4H	1W	
306.32	309.37	3.05	3.05	100	3.05	100	0R	3H	1W	
309.37	312.42	3.05	2.9	95	2.24	73	0R	3H	1W	
312.42	315.47	3.05	2.97	97	2.97	97	0R	3H	1W	
315.47	318.52	3.05	3	98	1.46	48	0R	3H	1W	RBZ at 315.90-316.00m, 317.15-317.30m. Core is multiply fractured over much of this interval.
318.52	321.56	3.04	3.04	100	1.86	61	0R	3H	1W	
321.56	324.61	3.05	3.05	100	1.95	64	0R	3H	1W	
324.61	327.66	3.05	3.04	100	3.04	100	0R	3H	1W	
327.66	330.71	3.05	2.97	97	2.97	97	0R	3H	1W	
330.71	333.76	3.05	2.98	98	2.74	90	0R	3H	1W	
333.76	336.80	3.04	2.87	94	2.00	66	0R	3H	1W	
336.80	339.85	3.05	3.04	100	2.96	97	0R	3H	1W	
339.85	342.90	3.05	3.05	100	2.81	92	0R	3H	1W	
342.90	345.95	3.05	3.04	100	2.66	87	0R	4H	1W	
345.95	349.00	3.05	2.67	88	1.91	63	0R	4H	1W	RBZ at 348.15-348.4m, 348.50-348.65m.
349.00	352.04	3.04	3.03	100	1.92	63	0R	4H	1W	RBZ at 349-349.10m, 349.40-349.60m.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
352.04	355.09	3.05	3.01	99	2.80	92	0R	4H	1W	
355.09	358.14	3.05	2.98	98	2.93	96	0R	4H	1W	
358.14	361.19	3.05	3.05	100	2.65	87	0R	4H	1W	RBZ at 359.85-359.95m.
361.19	364.24	3.05	2.88	94	1.97	65	0R	3H	1W	
364.24	367.28	3.04	3.04	100	2.93	96	0R	4H	1W	RBZ at 365.50-365.70m.
367.28	370.33	3.05	3.05	100	2.87	94	0R	4H	1W	
370.33	373.38	3.05	2.96	97	2.96	97	0R	4H	1W	
373.38	376.43	3.05	3.05	100	2.77	91	0R	4H	1W	
376.43	379.48	3.05	2.95	97	2.95	97	0R	4H	1W	
379.48	382.52	3.04	3.04	100	2.46	81	0R	4H	1W	RBZ from 380.65-380.80m
382.52	385.57	3.05	3.03	99	2.53	83	0R	3H	1W	
385.57	388.62	3.05	2.81	92	1.73	57	0R	4H	1W	RBZ at 386.00-386.10m, 386.40-386.50m.
388.62	391.67	3.05	2.88	94	2.08	68	0R	4H	1W	RBZ held together with gouge at 390.40-390.80
391.67	394.72	3.05	2.97	97	1.72	56	0R	3H	1W	RBZ at 391.67-393.00m
394.72	397.76	3.04	2.77	91	1.31	43	0R	3H	1W	RBZ: 394.72-394.80m
397.76	400.81	3.05	3.03	99	1.17	38	0R	3H	1W	RBZ: 400.45-400.81m. From 400.25-400.81, section of soft hardness and weak strength
400.81	403.86	3.05	3.01	99	2.54	83	0R	1H	1W	RBZ: 403.40-403.86m
403.86	406.91	3.05	3.02	99	1.67	55	0R	2H	1W	RBZ: 406.60-406.91m
406.91	409.96	3.05	2.94	96	0.95	31	0R	2H	1W	RBZ: 408.30-408.60m
409.96	413.00	3.04	3.02	99	0.87	29	0R	3H	1W	RBZ: 410.00-411.00m
413.00	416.05	3.05	2.78	91	1.39	46	0R	3H	1W	
416.05	419.10	3.05	2.91	95	0.60	20	0R	2H	1W	RBZ: 416.05-418.00m
419.10	422.15	3.05	2.97	97	1.78	58	0R	2H	1W	RBZ: 420.75-420.85m
422.15	425.20	3.05	2.99	98	1.75	57	0R	2H	1W	RBZ: 423.50-423.65m
425.20	428.24	3.04	2.92	96	1.08	36	0R	3H	1W	
428.24	431.13	2.89	2.89	100	2.41	83	0R	4H	1W	
431.13	434.34	3.21	2.93	91	1.16	36	0R	4H	1W	RBZ 432.20 to 434.34 m.
434.34	437.39	3.05	3.05	100	2.18	71	0R	4H	1W	
437.39	440.44	3.05	3.05	100	2.36	77	0R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
440.44	443.48	3.04	3.04	100	2.85	94	0R	3H	1W	
443.48	446.53	3.05	3.05	100	2.86	94	0R	3H	1W	
446.53	449.58	3.05	3	98	2.43	80	0R	3H	1W	
449.58	452.63	3.05	3.05	100	2.90	95	0R	3H	1W	
452.63	455.68	3.05	3.03	99	1.97	65	0R	3H	1W	
455.68	458.72	3.04	3.04	100	2.58	85	0R	3H	1W	
458.72	461.77	3.05	3.05	100	1.87	61	0R	3H	1W	
461.77	464.82	3.05	2.86	94	2.31	76	0R	3H	1W	
464.82	467.87	3.05	2.9	95	2.17	71	0R	3H	1W	RBZ 466.95 to 467.87 m.
467.87	470.92	3.05	3.05	100	1.28	42	0R	3H	1W	RBZ 467.87 to 470.60 m.
470.92	473.96	3.04	2.94	97	2.27	75	0R	3H	1W	
473.96	477.01	3.05	3.05	100	2.43	80	0R	3H	1W	
477.01	480.06	3.05	2.82	92	1.74	57	2R	3H	1W	
480.06	483.11	3.05	3.05	100	2.87	94	4R	3H	1W	
483.11	486.16	3.05	3.05	100	2.88	94	4R	3H	1W	
486.16	489.20	3.04	3.04	100	2.92	96	4R	3H	1W	
489.20	492.25	3.05	3.05	100	2.70	89	4R	3H	1W	
492.25	495.30	3.05	3.05	100	2.46	81	4R	3H	1W	
495.30	498.35	3.05	3.05	100	2.71	89	4R	3H	1W	
498.35	501.40	3.05	3.02	99	2.97	97	4R	3H	1W	
501.40	504.44	3.04	2.95	97	2.19	72	4R	3H	1W	
504.44	507.49	3.05	3.02	99	2.95	97	4R	3H	1W	
507.49	510.54	3.05	2.88	94	2.65	87	4R	3H	1W	
510.54	513.59	3.05	3	98	2.84	93	4R	3H	1W	
513.59	516.64	3.05	3.05	100	2.78	91	4R	3H	1W	Fractures follow bedding and become parellel to core axis at 514.95.
516.64	519.68	3.04	3.04	100	2.83	93	4R	3H	1W	
519.68	522.73	3.05	2.95	97	2.95	97	4R	3H	1W	
522.73	525.78	3.05	2.85	93	2.17	71	4R	3H	1W	core has multiple fractures and is softer at 525.65 and 523.90
525.78	528.83	3.05	3.05	100	2.66	87	4R	3H	1W	
528.83	531.88	3.05	2.92	96	2.42	79	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
531.88	534.92	3.04	3.04	100	1.56	51	4R	3H	1W	fractures follow bedding
534.92	537.97	3.05	3.05	100	2.22	73	4R	3H	1W	fractuing follows bedding and is highly fratured at 535.75 and 536.20
537.97	541.02	3.05	3.05	100	2.31	76	4R	3H	1W	
541.02	544.07	3.05	2.99	98	1.68	55	4R	3H	1W	
544.07	547.12	3.05	2.92	96	2.30	75	4R	3H	1W	
547.12	550.16	3.04	2.94	97	2.05	67	4R	3H	1W	
550.16	553.21	3.05	3.05	100	2.86	94	4R	3H	1W	
553.21	556.26	3.05	3.05	100	2.92	96	4R	3H	1W	
556.26	559.31	3.05	2.94	96	2.71	89	4R	3H	1W	
559.31	562.36	3.05	3.03	99	2.35	77	4R	3H	1W	
562.36	565.40	3.04	3	99	2.77	91	4R	3H	1W	
565.40	568.45	3.05	2.86	94	2.16	71	4R	3H	1W	
568.45	571.50	3.05	3.05	100	2.70	89	4R	3H	1W	
571.50	574.55	3.05	2.97	97	2.39	78	4R	3H	1W	
574.55	577.60	3.05	2.84	93	2.08	68	4R	3H	1W	
577.60	580.64	3.04	3.04	100	2.98	98	4R	3H	1W	
580.64	583.69	3.05	2.97	97	2.38	78	3R	3H	1W	some fractures are sub-parallel to core axis
583.69	586.74	3.05	2.92	96	2.19	72	4R	3H	1W	RBZ at 586.10
586.74	589.79	3.05	2.99	98	2.29	75	3R	3H	1W	
589.79	592.84	3.05	2.98	98	2.22	73	4R	3H	1W	
592.84	595.88	3.04	3.04	100	2.73	90	3R	3H	1W	
595.88	598.93	3.05	3.05	100	2.56	84	4R	3H	1W	
598.93	601.98	3.05	3.05	100	2.69	88	3R	3H	1W	
601.98	605.03	3.05	2.99	98	2.95	97	4R	3H	1W	
605.03	608.08	3.05	2.99	98	2.39	78	4R	3H	1W	
608.08	611.12	3.04	3.04	100	2.50	82	3R	2H	1W	
611.12	614.17	3.05	3.05	100	2.80	92	4R	3H	1W	
614.17	617.22	3.05	3.05	100	2.92	96	4R	3H	1W	
617.22	620.26	3.04	3.01	99	2.89	95	4R	3H	1W	
620.26	623.31	3.05	3.05	100	2.75	90	4R	3H	1W	
623.31	626.36	3.05	2.98	98	2.82	92	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
626.36	629.41	3.05	3.05	100	2.01	66	3R	3H	1W	
629.41	632.46	3.05	3.05	100	2.96	97	4R	3H	1W	
632.46	635.51	3.05	2.86	94	2.32	76	4R	3H	1W	
635.51	638.56	3.05	3.05	100	2.57	84	4R	3H	1W	
638.56	641.60	3.04	3.04	100	2.74	90	4R	3H	1W	
641.60	644.65	3.05	3.05	100	2.81	92	4R	3H	1W	
644.65	647.70	3.05	2.82	92	2.79	91	4R	3H	1W	
647.70	650.75	3.05	3.05	100	2.75	90	4R	3H	1W	RBZ 648.80 to 649.10 m.
650.75	653.80	3.05	3.05	100	2.30	75	4R	3H	1W	
653.80	656.84	3.04	2.85	94	2.40	79	4R	3H	1W	
656.84	659.59	2.75	2.75	100	2.52	92	4R	3H	1W	

OS -17-253

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W230711	☐	N17-086	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230835	☐	N17-091	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230815	☐	N17-091	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230810	☐	N17-091	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230805	☐	N17-091	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230801	☐	N17-090	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230795	☐	N17-090	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230785	☐	N17-090	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230775	☐	N17-090	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230763	☐	N17-087	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230749	☐	N17-087	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230736	☐	N17-087	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230731	☐	N17-087	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230577	☐	N17-079	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230722	☐	N17-086	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230641	☐	N17-083	DDH Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230585	☐	N17-079	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230592	☐	N17-082	core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230594	☐	N17-082	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230611	☐	N17-082	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230729	☐	N17-086	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230632	☐	N17-083	DDH Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230652	☐	N17-083	DDH Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230655	☐	N17-083	DDH Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230661	☐	N17-084	Core		☑	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W230665	☐	N17-084	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230671	☐	N17-084	Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230680	☐	N17-084	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230706	☐	N17-086	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230616	☐	N17-082	core	CS2	☐	☐	☐
10.06	12.19	2.13	OVB, LST	1.00	47	W230571	☐	N17-079	core		☐	☐	☐
12.19	15.24	3.05	LST	2.92	96	W230572	☐	N17-079	core		☐	☐	☐
15.24	18.29	3.05	LST	2.75	90	W230573	☐	N17-079	core		☐	☐	☐
18.29	21.34	3.05	LST	2.13	70	W230574	☐	N17-079	core		☐	☐	☐
21.34	24.38	3.04	LST	3.04	100	W230575	☐	N17-079	core		☐	☐	☐
24.38	27.43	3.05	LST	2.45	80	W230576	☐	N17-079	core		☐	☐	☐
27.43	30.48	3.05	LST	2.43	80	W230578	☐	N17-079	core		☐	☐	☐
30.48	33.53	3.05	LST	2.67	88	W230579	☐	N17-079	core		☐	☐	☐
33.53	36.58	3.05	LST	3.05	100	W230580	☐	N17-079	core		☐	☐	☐
36.58	39.62	3.04	LST	2.76	91	W230581	☐	N17-079	core		☐	☐	☐
39.62	42.67	3.05	LST	3.05	100	W230582	☐	N17-079	core		☐	☐	☐
42.67	45.72	3.05	LST	2.69	88	W230583	☐	N17-079	core		☐	☐	☐
45.72	48.77	3.05	LST	2.89	95	W230584	☐	N17-079	core		☐	☐	☐
48.77	51.82	3.05	LST	3.00	98	W230586	☐	N17-082	core		☐	☐	☐
51.82	54.86	3.04	LST	2.85	94	W230587	☐	N17-082	core		☐	☐	☐
54.86	57.91	3.05	LST	2.84	93	W230588	☐	N17-082	core		☐	☐	☐
57.91	60.96	3.05	LST	2.55	84	W230589	☐	N17-082	core		☐	☐	☐
60.96	64.01	3.05	LST	3.02	99	W230590	☐	N17-082	core		☐	☐	☐
64.01	67.06	3.05	LST	2.72	89	W230591	☐	N17-082	core		☐	☐	☐
67.06	70.10	3.04	LST	2.63	87	W230593	☐	N17-082	core		☐	☐	☐
70.10	73.15	3.05	LST	3.05	100	W230595	☐	N17-082	core		☐	☐	☐
73.15	76.20	3.05	LST	2.94	96	W230596	☐	N17-082	core		☐	☐	☐
76.20	79.25	3.05	LST	2.99	98	W230597	☐	N17-082	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
79.25	82.30	3.05	LST	2.92	96	W230598	☐	N17-082	core		☐	☐	☐
79.25	82.30	3.05	LST	2.92	96	W230599	☐	N17-082	core		☐	☑	☐
82.30	85.34	3.04	LST	2.98	98	W230600	☐	N17-082	core		☐	☐	☐
85.34	88.39	3.05	LST	2.77	91	W230601	☐	N17-082	core		☐	☐	☐
88.39	91.44	3.05	LST	3.00	98	W230602	☐	N17-082	core		☐	☐	☐
88.39	91.44	3.05	LST	3.00	98	W230603	☐	N17-082	core		☐	☐	☑
91.44	94.49	3.05	LST	2.97	97	W230604	☐	N17-082	core		☐	☐	☐
94.49	97.54	3.05	DMT	2.99	98	W230605	☐	N17-082	core		☐	☐	☐
97.54	100.58	3.04	DMT	3.01	99	W230606	☐	N17-082	core		☐	☐	☐
100.58	103.63	3.05	DMT	2.86	94	W230607	☐	N17-082	core		☐	☐	☐
103.63	106.01	2.38	DMT	2.38	100	W230608	☐	N17-082	core		☐	☐	☐
106.01	107.76	1.75	DMT	1.75	100	W230609	☐	N17-082	core		☐	☐	☐
107.76	110.18	2.42	DMT	2.31	95	W230610	☐	N17-082	core		☐	☐	☐
110.18	112.78	2.60	SHL, DMT	2.47	95	W230612	☐	N17-082	core		☐	☐	☐
112.78	115.82	3.04	SHL	3.01	99	W230613	☐	N17-082	core		☐	☐	☐
115.82	118.87	3.05	SHL	2.98	98	W230614	☐	N17-082	core		☐	☐	☐
118.87	121.92	3.05	SHL	3.02	99	W230615	☐	N17-082	core		☐	☐	☐
121.92	124.97	3.05	SHL	2.95	97	W230617	☐	N17-082	core		☐	☐	☐
124.97	128.02	3.05	SHL	2.92	96	W230618	☐	N17-082	core		☐	☐	☐
128.02	131.06	3.04	SHL	2.72	89	W230619	☐	N17-082	core		☐	☐	☐
131.06	134.11	3.05	SHL	3.05	100	W230620	☐	N17-082	core		☐	☐	☐
134.11	137.16	3.05	SHL	2.97	97	W230621	☐	N17-082	core		☐	☐	☐
137.16	140.21	3.05	SHL	2.82	92	W230622	☐	N17-083	DDH Core		☐	☐	☐
140.21	143.26	3.05	SHL	2.95	97	W230623	☐	N17-083	DDH Core		☐	☐	☐
143.26	146.30	3.04	SHL	2.99	98	W230624	☐	N17-083	DDH Core		☐	☐	☐
146.30	149.35	3.05	SHL	2.94	96	W230625	☐	N17-083	DDH Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
146.30	149.35	3.05	SHL	2.94	96	W230626	☐	N17-083	DDH Core		☐	☑	☐
149.35	152.40	3.05	SHL	2.77	91	W230627	☐	N17-083	DDH Core		☐	☐	☐
152.40	155.45	3.05	SHL	2.99	98	W230628	☐	N17-083	DDH Core		☐	☐	☐
155.45	158.50	3.05	SHL	2.69	88	W230629	☐	N17-083	DDH Core		☐	☐	☐
158.50	161.54	3.04	SHL	2.89	95	W230630	☐	N17-083	DDH Core		☐	☐	☐
161.54	164.59	3.05	SHL	3.03	99	W230631	☐	N17-083	DDH Core		☐	☐	☐
164.59	167.64	3.05	SHL	3.05	100	W230633	☐	N17-083	DDH Core		☐	☐	☐
167.64	170.69	3.05	SHL	2.97	97	W230634	☐	N17-083	DDH Core		☐	☐	☐
170.69	173.74	3.05	SHL	3.05	100	W230635	☐	N17-083	DDH Core		☐	☐	☐
173.74	176.78	3.04	SHL	3.00	99	W230636	☐	N17-083	DDH Core		☐	☐	☐
176.78	179.83	3.05	SHL	2.74	90	W230637	☐	N17-083	DDH Core		☐	☐	☐
179.83	182.88	3.05	SHL	3.04	100	W230638	☐	N17-083	DDH Core		☐	☐	☐
182.88	185.93	3.05	SHL	2.95	97	W230639	☐	N17-083	DDH Core		☐	☐	☐
185.93	188.98	3.05	SHL	2.93	96	W230640	☐	N17-083	DDH Core	CS2	☐	☐	☐
188.98	192.02	3.04	SHL	2.77	91	W230642	☐	N17-083	DDH Core		☐	☐	☐
192.02	195.07	3.05	SHL	2.87	94	W230643	☐	N17-083	DDH Core		☐	☐	☐
195.07	198.12	3.05	SHL	3.02	99	W230644	☐	N17-083	DDH Core		☐	☐	☐
195.07	198.12	3.05	SHL	3.02	99	W230645	☐	N17-083	DDH Core		☐	☐	☑
198.12	201.17	3.05	SHL	2.86	94	W230646	☐	N17-083	DDH Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
201.17	203.00	1.83	SHL	1.46	80	W230647	☐	N17-083	DDH Core		☐	☐	☐
203.00	205.48	2.48	SHL	2.35	95	W230648	☐	N17-083	DDH Core		☐	☐	☐
205.48	207.26	1.78	SHL	1.74	98	W230649	☐	N17-083	DDH Core		☐	☐	☐
207.26	210.31	3.05	SHL, DST	2.90	95	W230650	☐	N17-083	DDH Core		☐	☐	☐
210.31	213.36	3.05	DST	2.98	98	W230651	☐	N17-083	DDH Core		☐	☐	☐
213.36	216.41	3.05	DST	2.95	97	W230653	☐	N17-083	DDH Core		☐	☐	☐
216.41	219.46	3.05	DST	3.05	100	W230654	☐	N17-083	DDH Core		☐	☐	☐
219.46	221.13	1.67	DST	1.67	100	W230656	☐	N17-083	DDH Core		☐	☐	☐
221.13	224.03	2.90	SLC	2.83	98	W230657	☐	N17-083	DDH Core		☐	☐	☐
224.03	227.08	3.05	SLC	2.86	94	W230658	☐	N17-084	Core		☐	☐	☐
227.08	228.30	1.22	SLC	1.21	99	W230659	☐	N17-084	Core		☐	☐	☐
228.30	230.20	1.90	SLC	1.68	88	W230660	☐	N17-084	Core		☐	☐	☐
230.20	233.17	2.97	SLC	2.97	100	W230662	☐	N17-084	Core		☐	☐	☐
233.17	236.22	3.05	SLC	2.99	98	W230663	☐	N17-084	Core		☐	☐	☐
236.22	239.27	3.05	SLC	3.01	99	W230664	☐	N17-084	Core		☐	☐	☐
239.27	242.32	3.05	SLC	2.92	96	W230666	☐	N17-084	Core		☐	☐	☐
242.32	245.36	3.04	SLC	3.04	100	W230667	☐	N17-084	Core		☐	☐	☐
245.36	248.41	3.05	SLC	3.05	100	W230668	☐	N17-084	Core		☐	☐	☐
245.36	248.41	3.05	SLC	3.05	100	W230669	☐	N17-084	Core		☐	☐	☑
248.41	251.46	3.05	SLC	2.78	91	W230670	☐	N17-084	Core		☐	☐	☐
251.46	254.51	3.05	SLC	2.93	96	W230672	☐	N17-084	Core		☐	☐	☐
254.51	257.56	3.05	SLC	2.95	97	W230673	☐	N17-084	Core		☐	☐	☐
257.56	260.60	3.04	SLC	2.95	97	W230674	☐	N17-084	Core		☐	☐	☐
260.60	263.65	3.05	SLC	3.05	100	W230675	☐	N17-084	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
263.65	266.70	3.05	SLC	2.99	98	W230676	☐	N17-084	Core		☐	☐	☐
266.70	269.75	3.05	SLC	3.00	98	W230677	☐	N17-084	Core		☐	☐	☐
269.75	272.80	3.05	SLC	2.91	95	W230678	☐	N17-084	Core		☐	☐	☐
272.80	275.84	3.04	SLC	3.03	100	W230679	☐	N17-084	Core		☐	☐	☐
275.84	278.89	3.05	SLC	2.95	97	W230681	☐	N17-084	Core		☐	☐	☐
278.89	281.94	3.05	SLC	3.03	99	W230682	☐	N17-084	Core		☐	☐	☐
281.94	284.99	3.05	SLC	3.03	99	W230683	☐	N17-084	Core		☐	☐	☐
284.99	288.04	3.05	SLC	3.05	100	W230684	☐	N17-084	Core		☐	☐	☐
288.04	291.08	3.04	SLC	3.01	99	W230685	☐	N17-084	Core		☐	☐	☐
291.08	294.13	3.05	SLC	2.92	96	W230686	☐	N17-084	Core		☐	☐	☐
294.13	297.18	3.05	SLC	2.84	93	W230687	☐	N17-084	Core		☐	☐	☐
297.18	300.23	3.05	SLC	2.99	98	W230688	☐	N17-084	Core		☐	☐	☐
300.23	303.28	3.05	SLC	2.98	98	W230689	☐	N17-084	Core		☐	☐	☐
303.28	306.32	3.04	SLC	3.04	100	W230690	☐	N17-084	Core		☐	☐	☐
306.32	309.37	3.05	SLC	3.05	100	W230691	☐	N17-084	Core		☐	☐	☐
306.32	309.37	3.05	SLC	3.05	100	W230692	☐	N17-084	Core		☐	☑	☐
309.37	312.42	3.05	SLC	2.90	95	W230693	☐	N17-084	Core		☐	☐	☐
312.42	315.47	3.05	SLC	2.97	97	W230694	☐	N17-086	Core		☐	☐	☐
315.47	318.52	3.05	SLC	3.00	98	W230695	☐	N17-086	Core		☐	☐	☐
318.52	321.56	3.04	SLC	3.04	100	W230696	☐	N17-086	Core		☐	☐	☐
321.56	324.61	3.05	SLC	3.05	100	W230697	☐	N17-086	Core		☐	☐	☐
324.61	327.66	3.05	SLC	3.04	100	W230698	☐	N17-086	Core		☐	☐	☐
327.66	330.71	3.05	SLC	2.97	97	W230699	☐	N17-086	Core		☐	☐	☐
327.66	330.71	3.05	SLC	2.97	97	W230700	☐	N17-086	Core		☐	☑	☐
330.71	333.76	3.05	SLC	2.98	98	W230701	☐	N17-086	Core		☐	☐	☐
333.76	336.80	3.04	SLC	2.87	94	W230702	☐	N17-086	Core		☐	☐	☐
336.80	339.85	3.05	SLC	3.04	100	W230703	☐	N17-086	Core		☐	☐	☐
339.85	342.90	3.05	SLC	3.05	100	W230704	☐	N17-086	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
342.90	345.95	3.05	SLC	3.04	100	W230705	☐	N17-086	Core		☐	☐	☐
345.95	349.00	3.05	SLC	2.67	88	W230707	☐	N17-086	Core		☐	☐	☐
349.00	352.04	3.04	SLC	3.03	100	W230708	☐	N17-086	Core		☐	☐	☐
352.04	355.09	3.05	SLC	3.01	99	W230709	☐	N17-086	Core		☐	☐	☐
355.09	358.14	3.05	SLC	2.98	98	W230710	☐	N17-086	Core		☐	☐	☐
358.14	361.19	3.05	SLC	3.05	100	W230712	☐	N17-086	Core		☐	☐	☐
358.14	361.19	3.05	SLC	3.05	100	W230713	☐	N17-086	Core		☐	☐	☑
361.19	364.24	3.05	SLC	2.88	94	W230714	☐	N17-086	Core		☐	☐	☐
364.24	367.28	3.04	SLC	3.04	100	W230715	☐	N17-086	Core		☐	☐	☐
367.28	370.33	3.05	SLC	3.05	100	W230716	☐	N17-086	Core		☐	☐	☐
370.33	373.38	3.05	SLC	2.96	97	W230717	☐	N17-086	Core		☐	☐	☐
373.38	376.43	3.05	SLC	3.05	100	W230718	☐	N17-086	Core		☐	☐	☐
376.43	379.48	3.05	SLC	2.95	97	W230719	☐	N17-086	Core		☐	☐	☐
379.48	382.52	3.04	SLC	3.04	100	W230720	☐	N17-086	Core		☐	☐	☐
382.52	385.57	3.05	SLC	3.03	99	W230721	☐	N17-086	Core		☐	☐	☐
385.57	388.62	3.05	SLC	2.81	92	W230723	☐	N17-086	Core		☐	☐	☐
388.62	391.67	3.05	SLC	2.88	94	W230724	☐	N17-086	Core		☐	☐	☐
391.67	394.72	3.05	SLC	2.97	97	W230725	☐	N17-086	Core		☐	☐	☐
394.72	397.76	3.04	SLC	2.77	91	W230726	☐	N17-086	Core		☐	☐	☐
397.76	400.81	3.05	SLC	3.03	99	W230727	☐	N17-086	Core		☐	☐	☐
400.81	403.86	3.05	SLC	3.01	99	W230728	☐	N17-086	Core		☐	☐	☐
403.86	406.59	2.73	SLC	2.73	100	W230730	☐	N17-087	core		☐	☐	☐
406.59	409.64	3.05	SLC	3.00	98	W230732	☐	N17-087	core		☐	☐	☐
409.64	412.00	2.36	SLC	2.35	100	W230733	☐	N17-087	core		☐	☐	☐
412.00	415.00	3.00	SLC	2.95	98	W230734	☐	N17-087	core		☐	☐	☐
415.00	418.05	3.05	SLC	2.97	97	W230735	☐	N17-087	core		☐	☐	☐
418.05	420.00	1.95	SLC	1.82	93	W230737	☐	N17-087	core		☐	☐	☐
420.00	422.15	2.15	SLC	2.15	100	W230738	☐	N17-087	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
422.15	425.20	3.05	SLC	2.99	98	W230739	☐	N17-087	core		☐	☐	☐
422.15	425.20	3.05	SLC	2.99	98	W230740	☐	N17-087	core		☐	☐	☑
425.20	428.24	3.04	SLC	2.92	96	W230741	☐	N17-087	core		☐	☐	☐
428.24	431.29	3.05	SLC	2.89	95	W230742	☐	N17-087	core		☐	☐	☐
431.29	434.34	3.05	SLC	2.93	96	W230743	☐	N17-087	core		☐	☐	☐
434.34	437.39	3.05	SLC	3.05	100	W230744	☐	N17-087	core		☐	☐	☐
437.39	440.44	3.05	SLC	3.05	100	W230745	☐	N17-087	core		☐	☐	☐
440.44	443.48	3.04	SLC	3.04	100	W230746	☐	N17-087	core		☐	☐	☐
443.48	446.53	3.05	SLC	3.05	100	W230747	☐	N17-087	core		☐	☐	☐
446.53	449.58	3.05	SLC	3.00	98	W230748	☐	N17-087	core		☐	☐	☐
449.58	452.63	3.05	SLC	3.05	100	W230750	☐	N17-087	core		☐	☐	☐
452.63	455.68	3.05	SLC	3.03	99	W230751	☐	N17-087	core		☐	☐	☐
455.68	458.72	3.04	SLC	3.04	100	W230752	☐	N17-087	core		☐	☐	☐
458.72	461.77	3.05	SLC	3.05	100	W230753	☐	N17-087	core		☐	☐	☐
461.77	464.82	3.05	SLC	2.86	94	W230754	☐	N17-087	core		☐	☐	☐
461.77	464.82	3.05	SLC	2.86	94	W230755	☐	N17-087	core		☐	☑	☐
464.82	467.87	3.05	SLC	2.90	95	W230756	☐	N17-087	core		☐	☐	☐
467.87	470.92	3.05	SLC	3.05	100	W230757	☐	N17-087	core		☐	☐	☐
470.92	473.96	3.04	SLC	2.94	97	W230758	☐	N17-087	core		☐	☐	☐
473.96	477.01	3.05	SLC	3.05	100	W230759	☐	N17-087	core		☐	☐	☐
477.01	479.60	2.59	SLC	2.30	89	W230760	☐	N17-087	core		☐	☐	☐
479.60	481.45	1.85	SLC, LST	1.85	100	W230761	☐	N17-087	core		☐	☐	☐
481.45	483.11	1.66	LST	1.66	100	W230762	☐	N17-087	core		☐	☐	☐
483.11	486.16	3.05	LST	3.05	100	W230764	☐	N17-087	core		☐	☐	☐
486.16	489.20	3.04	LST	3.04	100	W230765	☐	N17-087	core		☐	☐	☐
489.20	492.25	3.05	LST	3.05	100	W230766	☐	N17-090	Core		☐	☐	☐
492.25	495.30	3.05	LST	3.05	100	W230767	☐	N17-090	Core		☐	☐	☐
495.30	498.35	3.05	LST	3.05	100	W230768	☐	N17-090	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
498.35	501.40	3.05	LST	3.02	99	W230769	☐	N17-090	Core		☐	☐	☐
501.40	504.44	3.04	LST	2.95	97	W230770	☐	N17-090	Core		☐	☐	☐
504.44	507.49	3.05	LST	3.02	99	W230771	☐	N17-090	Core		☐	☐	☐
507.49	510.54	3.05	LST	2.88	94	W230772	☐	N17-090	Core		☐	☐	☐
510.54	513.59	3.05	LST	3.00	98	W230773	☐	N17-090	Core		☐	☐	☐
513.59	516.64	3.05	LST	3.05	100	W230774	☐	N17-090	Core		☐	☐	☐
516.64	519.68	3.04	LST	3.04	100	W230776	☐	N17-090	Core		☐	☐	☐
516.64	519.68	3.04	LST	3.04	100	W230777	☐	N17-090	Core		☐	☑	☐
519.68	522.73	3.05	LST	2.95	97	W230778	☐	N17-090	Core		☐	☐	☐
522.73	525.78	3.05	LST	2.85	93	W230779	☐	N17-090	Core		☐	☐	☐
525.78	528.83	3.05	LST	3.05	100	W230780	☐	N17-090	Core		☐	☐	☐
528.83	531.88	3.05	LST	2.92	96	W230781	☐	N17-090	Core		☐	☐	☐
531.88	534.92	3.04	LST	3.04	100	W230782	☐	N17-090	Core		☐	☐	☐
534.92	537.97	3.05	LST	3.05	100	W230783	☐	N17-090	Core		☐	☐	☐
537.97	541.02	3.05	LST	3.05	100	W230784	☐	N17-090	Core		☐	☐	☐
541.02	544.07	3.05	LST	2.99	98	W230786	☐	N17-090	Core		☐	☐	☐
544.07	547.12	3.05	LST	2.92	96	W230787	☐	N17-090	Core		☐	☐	☐
547.12	550.16	3.04	LST	2.94	97	W230788	☐	N17-090	Core		☐	☐	☐
550.16	553.21	3.05	LST	3.05	100	W230789	☐	N17-090	Core		☐	☐	☐
553.21	556.26	3.05	LST	3.05	100	W230790	☐	N17-090	Core		☐	☐	☐
556.26	559.31	3.05	LST	2.94	96	W230791	☐	N17-090	Core		☐	☐	☐
559.31	561.30	1.99	LST	1.99	100	W230792	☐	N17-090	Core		☐	☐	☐
561.30	563.14	1.84	LST	1.75	95	W230793	☐	N17-090	Core		☐	☐	☐
563.14	565.40	2.26	LST	2.21	98	W230794	☐	N17-090	Core		☐	☐	☐
565.40	568.45	3.05	LST	2.86	94	W230796	☐	N17-090	Core		☐	☐	☐
568.45	571.50	3.05	LST	3.05	100	W230797	☐	N17-090	Core		☐	☐	☐
568.45	571.50	3.05	LST	3.05	100	W230798	☐	N17-090	Core		☐	☐	☑
571.50	574.55	3.05	LST	2.97	97	W230799	☐	N17-090	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
574.55	577.60	3.05	LST	2.84	93	W230800	☐	N17-090	Core		☐	☐	☐
577.60	579.23	1.63	LST	1.61	99	W230802	☐	N17-091	core		☐	☐	☐
579.23	580.64	1.41	LST	1.41	100	W230803	☐	N17-091	core		☐	☐	☐
580.64	582.73	2.09	LST	2.09	100	W230804	☐	N17-091	core		☐	☐	☐
582.73	583.69	0.96	LST	0.96	100	W230806	☐	N17-091	core		☐	☐	☐
582.73	583.69	0.96	LST	0.96	100	W230807	☐	N17-091	core		☐	☐	☑
583.69	585.68	1.99	LST	1.99	100	W230808	☐	N17-091	core		☐	☐	☐
585.68	586.80	1.12	LST	1.09	97	W230809	☐	N17-091	core		☐	☐	☐
586.80	589.79	2.99	LST	2.99	100	W230811	☐	N17-091	core		☐	☐	☐
589.79	592.84	3.05	LST	2.98	98	W230812	☐	N17-091	core		☐	☐	☐
592.84	594.37	1.53	LST	1.53	100	W230813	☐	N17-091	core		☐	☐	☐
594.37	596.88	2.51	LST	2.51	100	W230814	☐	N17-091	core		☐	☐	☐
596.88	598.93	2.05	LST	2.05	100	W230816	☐	N17-091	core		☐	☐	☐
598.93	601.98	3.05	LST	3.05	100	W230817	☐	N17-091	core		☐	☐	☐
601.98	605.03	3.05	LST	2.99	98	W230818	☐	N17-091	core		☐	☐	☐
605.03	608.08	3.05	LST	2.99	98	W230819	☐	N17-091	core		☐	☐	☐
608.08	611.12	3.04	LST	3.04	100	W230820	☐	N17-091	core		☐	☐	☐
611.12	614.17	3.05	LST	3.05	100	W230821	☐	N17-091	core		☐	☐	☐
614.17	617.22	3.05	LST	3.05	100	W230822	☐	N17-091	core		☐	☐	☐
617.22	620.26	3.04	LST	3.01	99	W230823	☐	N17-091	core		☐	☐	☐
620.26	623.31	3.05	LST	3.05	100	W230824	☐	N17-091	core		☐	☐	☐
623.31	626.36	3.05	LST	2.98	98	W230825	☐	N17-091	core		☐	☐	☐
623.31	626.36	3.05	LST	2.98	98	W230826	☐	N17-091	core		☐	☑	☐
626.36	629.41	3.05	LST	3.05	100	W230827	☐	N17-091	core		☐	☐	☐
629.41	632.46	3.05	LST	3.05	100	W230828	☐	N17-091	core		☐	☐	☐
632.46	635.51	3.05	LST	2.86	94	W230829	☐	N17-091	core		☐	☐	☐
635.51	638.56	3.05	LST	3.05	100	W230830	☐	N17-091	core		☐	☐	☐
638.56	641.60	3.04	LST	3.04	100	W230831	☐	N17-091	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
641.60	644.65	3.05	LST	3.05	100	W230832	☐	N17-091	core		☐	☐	☐
644.65	647.70	3.05	LST	2.82	92	W230833	☐	N17-091	core		☐	☐	☐
647.70	650.75	3.05	LST	3.05	100	W230834	☐	N17-091	core		☐	☐	☐
650.75	653.80	3.05	LST	3.05	100	W230836	☐	N17-091	core		☐	☐	☐
653.80	656.84	3.04	LST	2.85	94	W230837	☐	N17-091	core		☐	☐	☐
656.84	659.59	2.75	LST	2.75	100	W230838	☐	N17-093	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
2.40	146.09	143.69	MST	FG	Fine grained mudstone (O-MST1) very few veins of any kind. Mudstone is purple and green/grey. The 2 colors of mudstone are interbedded up to 16.30m. Downhole from 16.30m to 123m is all green/grey in color. Grey mudstone from ~120-146m. 2 small pieces of limestone that look to be dolomitic at 133.10-133.36m and 146.63-146.73m. One at 133.10m contains small circular ooid like looking structures.							
						MD	GY					
						LT	GN					
						MD	PU	BD				
146.09	190.00	43.91	LST	MG	interbedded limestone and mudstone. Dominantly limestone but some areas are less reactive than others. All reactions are about a 3 (strong) or 4 (intense). Medium grey in color. Some areas nearest contacts show convoluted bedding/ minor small scale folding. (slumping?)							
						MD	GY	BD	DOL	3I		
190.00	213.17	23.17	MST	FG	bedded mudstone (O-MST1) green grey and purple in color. Non reactive to acid. Fine-grained disseminated sulphide mineralization (maily pyrite) can be see from 205.55 m to contact, gaining in abundance with depth to contact at 213.17m.							
						LT	GN					
						LT	PU					
						MD	GY	BD				
213.17	407.18	194.01	LST	MG	A fine-to medium grained, medium-grey to dark-grey unit that alters between poorly calcareous to strongly calcareous. Tends to get more calcareous with depth. Unit shows bedding/ thin laminations at ~25 degrees, has pervassive calcite/dolomitized veining and minor realgar mineralization close to the upper fine-grained mudstone unit. First area showing lots of realgar and other arsenic oxides appears at 302.75m, the last visible arsenic oxides are seen at 327.00m. Zones of mineralization are from 302.75-307.64m, 311.57-311.94m, 323.05-324.00m. Area of most intense zone of realgar mineralization is 302.75-307.64m							
									ASO	5I		

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	2.40	2.40	0	0	0.00	0	--	--	--	
2.40	4.27	1.87	0.73	39	0.00	0	1R	3H	2W	RBZ 2.4-4.27m entire zone is rubble with very poor recovery
4.27	7.32	3.05	1.97	65	0.00	0	1R	3H	2W	RBZ 5.79-6m, core is highly fractured
7.32	10.36	3.04	1.99	65	0.00	0	1R	3H	2W	RBZ 8-8.17m, 9.25-9.40m
10.36	13.41	3.05	2.89	95	0.36	12	1R	3H	2W	No true rubble zone but core is heavily fractured.
13.41	16.46	3.05	2.4	79	0.44	14	0R	3H	2W	Heavily fractured.
16.46	19.51	3.05	2.47	81	0.63	21	0R	3H	1W	RBZ 18.80-19.25m
19.51	22.56	3.05	2.24	73	0.22	7	0R	3H	1W	RBZ 19.85-20m, 21.85-22.10m. Joints and rubble show weahtering and light oxidation
22.56	25.60	3.04	2.62	86	1.01	33	0R	2H	1W	RBZ 24.10-24.26m, 24.55-24.73m, 24.87-25m.
25.60	28.65	3.05	2	66	0.25	8	0R	2H	2W	RBZ 25.60-25.80m, 26.50-26.90m, 27.27-28.19m
28.65	31.70	3.05	2.28	75	0.55	18	0R	3H	2W	RBZ 29.28-30.18m, 31.20-31.38m
31.70	34.75	3.05	2.45	80	0.60	20	0R	2H	2W	RBZ 32.10-33.22m, heavily fractured and rubbly mixed with some mud (likely from the drill) rubble is lightyl weathered.
34.75	37.80	3.05	2.83	93	1.05	34	0R	3H	2W	RBZ 37.00-37.29m, 37.40-37.50m
37.80	40.84	3.04	1.45	48	0.45	15	0R	3H	2W	RBZ 38-39.37m, 39.82-39.92m, 40.09-40.31m,
40.84	43.89	3.05	2.36	77	0.26	9	0R	3H	1W	No true rubble zone but core is heavily fractured into small chunks in most places.
43.89	46.94	3.05	2.1	69	0.21	7	0R	3H	1W	RBZ
46.94	49.99	3.05	2.85	93	0.57	19	0R	3H	1W	RBZ
49.99	53.04	3.05	2.52	83	0.26	9	0R	2H	1W	RBZ
53.04	56.08	3.04	2.54	84	0.13	4	0R	2H	1W	RBZ and soft, clay at 53.45m
56.08	59.13	3.05	2.54	83	1.06	35	0R	3H	1W	RBZ
59.13	62.18	3.05	2.41	79	0.21	7	0R	2H	1W	RBZ and soft, clay material at 60.66m
62.18	65.23	3.05	2.87	94	0.23	8	0R	3H	1W	RBZ
65.23	68.28	3.05	2.28	75	0.66	22	0R	3H	1W	RBZ

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
68.28	71.32	3.04	2.41	79	0.94	31	0R	2H	1W	RBZ
71.32	74.37	3.05	1.87	61	0.15	5	0R	2H	1W	RBZ
74.37	77.42	3.05	2.81	92	0.75	25	0R	3H	1W	
77.42	80.47	3.05	2.58	85	0.54	18	0R	3H	1W	
80.47	83.52	3.05	2.4	79	0.24	8	0R	3H	1W	
83.52	86.56	3.04	2.85	94	0.26	9	0R	3H	1W	
86.56	89.61	3.05	2.31	76	0.60	20	0R	3H	1W	
89.61	92.66	3.05	2.57	84	1.46	48	0R	3H	1W	
92.66	95.71	3.05	2.49	82	0.88	29	0R	3H	1W	
95.71	98.76	3.05	2.58	85	0.94	31	0R	3H	1W	
98.76	101.80	3.04	2.82	93	2.33	77	0R	3H	1W	
101.80	104.85	3.05	3.02	99	2.77	91	0R	3H	1W	
104.85	107.90	3.05	2.63	86	2.00	66	0R	3H	1W	
107.90	110.95	3.05	2.54	83	0.77	25	0R	3H	1W	
110.95	114.00	3.05	2.88	94	2.23	73	0R	3H	1W	
114.00	117.04	3.04	2.55	84	1.45	48	0R	3H	1W	RBZ with single joints
117.04	120.09	3.05	2.83	93	1.91	63	0R	3H	1W	
120.09	123.14	3.05	2.92	96	2.21	72	0R	3H	1W	
123.14	126.19	3.05	2.97	97	1.23	40	0R	3H	1W	RBZ 123.85-124.09m, 124.47-124.57m
126.19	129.24	3.05	2.89	95	1.78	58	0R	3H	1W	
129.24	132.28	3.04	2.84	93	1.96	64	0R	3H	1W	RBZ 131.68-131.77m
132.28	135.33	3.05	3.01	99	1.38	45	1R	3H	1W	
135.33	138.38	3.05	2.98	98	2.37	78	0R	3H	1W	
138.38	141.43	3.05	3.04	100	2.09	69	0R	3H	1W	
141.43	144.48	3.05	2.88	94	2.23	73	1R	3H	1W	
144.48	147.52	3.04	3.03	100	1.86	61	1R	3H	1W	
147.52	150.57	3.05	2.95	97	1.32	43	1R	3H	1W	
150.57	153.62	3.05	2.98	98	1.95	64	1R	3H	1W	
153.62	156.67	3.05	2.89	95	1.70	56	2R	3H	1W	
156.67	159.72	3.05	2.9	95	1.52	50	3R	3H	1W	
159.72	162.76	3.04	2.95	97	2.02	66	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
162.76	165.81	3.05	2.84	93	1.69	55	3R	3H	1W	
165.81	168.86	3.05	2.79	91	1.53	50	3R	3H	1W	
168.86	171.91	3.05	2.9	95	1.51	50	3R	3H	1W	RBZ 170.15-170.38m
171.91	174.96	3.05	2.93	96	1.71	56	2R	3H	1W	RBZ 172.50-172.71m, 172.93-173.00m
174.96	178.00	3.04	2.97	98	1.84	61	3R	3H	1W	
178.00	181.05	3.05	2.97	97	2.33	76	4R	3H	1W	
181.05	184.10	3.05	2.98	98	2.54	83	3R	3H	1W	
184.10	187.14	3.04	3	99	1.91	63	4R	3H	1W	
187.14	190.20	3.06	2.89	94	1.92	63	3R	3H	1W	
190.20	193.24	3.04	2.9	95	1.52	50	1R	2H	1W	RBZ 192.00-192.14m
193.24	196.29	3.05	2.79	91	2.12	70	0R	3H	1W	
196.29	199.34	3.05	2.98	98	2.60	85	1R	3H	1W	
199.34	202.39	3.05	3.02	99	2.94	96	1R	3H	1W	
202.39	205.44	3.05	3.05	100	3.05	100	0R	3H	1W	
205.44	208.48	3.04	3.03	100	2.78	91	0R	3H	1W	
208.48	211.53	3.05	2.99	98	2.84	93	0R	3H	1W	
211.53	214.58	3.05	2.94	96	2.35	77	0R	3H	1W	
214.58	217.63	3.05	3.05	100	1.23	40	1R	3H	1W	Broken up rubble zone from vugs/miarolitic cavities and veins of calcite and realgar
217.63	220.68	3.05	3	98	2.00	66	0R	3H	1W	Zones of broken up highly fractured material
220.68	223.72	3.04	2.65	87	1.22	40	1R	2H	1W	Rubbly zone with gouge material
223.72	226.77	3.05	3.01	99	0.86	28	1R	3H	1W	Rubble zone
226.77	229.82	3.05	2.89	95	1.73	57	1R	3H	1W	
229.82	232.87	3.05	3.05	100	1.04	34	1R	3H	1W	Rubble Zones
232.87	235.92	3.05	3.02	99	1.70	56	1R	3H	1W	Rubble zone until 234.15m
235.92	238.96	3.04	2.98	98	2.80	92	1R	3H	1W	
238.96	242.01	3.05	2.97	97	2.60	85	2R	3H	1W	Rock becomes more reactive to HCL
242.01	245.06	3.05	2.82	92	2.34	77	2R	3H	1W	Rock goes back and forth from highly reactive to poorly reactive
245.06	248.11	3.05	2.92	96	2.80	92	3R	3H	1W	
248.11	251.16	3.05	3.03	99	2.60	85	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
251.16	254.20	3.04	2.93	96	2.52	83	3R	3H	1W	
254.20	257.25	3.05	2.94	96	2.84	93	2R	3H	1W	Rock stops reacting after 256.00m
257.25	260.30	3.05	3.03	99	3.03	99	1R	3H	1W	
260.30	263.35	3.05	3.05	100	2.57	84	2R	3H	1W	
263.35	266.40	3.05	2.88	94	2.76	90	3R	3H	1W	
266.40	269.44	3.04	2.65	87	2.02	66	3R	3H	1W	
269.44	272.49	3.05	2.8	92	2.12	70	2R	3H	1W	
272.49	275.54	3.05	3.05	100	2.90	95	2R	3H	1W	
275.54	278.59	3.05	2.97	97	1.65	54	3R	3H	1W	Vuggy/rubbly zone
278.59	280.11	1.52	1.32	87	1.05	69	4R	3H	1W	
280.11	282.85	2.74	2.6	95	1.25	46	4R	3H	1W	
282.85	285.90	3.05	2.96	97	1.23	40	4R	3H	1W	RBZ 282.85-283.00m, heavily fractured (nearly rubble) from 284.23-284.28m and 284.44-284.55m
285.90	288.95	3.05	2.94	96	1.32	43	4R	3H	1W	heavily fractured in a few places. No true rubble zone. Heavy fracturing probably mechanical
288.95	292.00	3.05	3.03	99	1.81	59	4R	3H	1W	RBZ 290.36-290.54m
292.00	295.05	3.05	2.87	94	2.24	73	4R	3H	1W	
295.05	298.09	3.04	3.04	100	2.72	89	4R	3H	1W	
298.09	301.14	3.05	3.01	99	2.65	87	4R	3H	1W	
301.14	304.19	3.05	2.92	96	1.15	38	4R	3H	1W	
304.19	307.24	3.05	2.75	90	1.87	61	4R	3H	1W	mineralized zone. Arsenic sulphides on the joints
307.24	310.29	3.05	3.05	100	1.73	57	4R	3H	1W	
310.29	313.33	3.04	3.04	100	2.16	71	4R	3H	1W	
313.33	316.38	3.05	3.05	100	1.67	55	4R	3H	1W	
316.38	319.43	3.05	3.02	99	1.25	41	4R	3H	1W	
319.43	322.48	3.05	2.88	94	1.76	58	4R	3H	1W	
322.48	325.53	3.05	3.02	99	2.10	69	3R	3H	1W	orpiment on some joints
325.53	328.57	3.04	2.94	97	1.60	53	4R	3H	1W	
328.57	331.62	3.05	3.04	100	2.48	81	4R	3H	1W	heavily fractured from 330.00-330.25m
331.62	334.67	3.05	2.62	86	1.47	48	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
334.67	337.72	3.05	2.37	78	1.22	40	4R	3H	1W	
337.72	340.76	3.04	2.64	87	1.27	42	4R	3H	1W	
340.76	343.81	3.05	2.58	85	1.08	35	4R	3H	1W	
343.81	346.86	3.05	3.04	100	1.44	47	4R	3H	1W	
346.86	349.91	3.05	2.83	93	2.01	66	4R	3H	1W	
349.91	352.96	3.05	2.77	91	0.97	32	4R	3H	1W	Slight rubble zone at end of interval
352.96	356.01	3.05	3	98	1.79	59	4R	3H	1W	RBZ from 353 to 354 m, interval 90% replaced by realgar
356.01	359.05	3.04	2.93	96	2.31	76	2R	3H	1W	
359.05	362.10	3.05	3.02	99	1.34	44	2R	3H	1W	
362.10	365.15	3.05	3.01	99	2.33	76	3R	3H	1W	
365.15	368.20	3.05	2.89	95	2.51	82	4R	3H	1W	
368.20	371.25	3.05	2.97	97	2.26	74	1R	3H	1W	
371.25	374.29	3.04	2.85	94	1.17	38	4R	3H	1W	
374.29	377.34	3.05	2.75	90	1.61	53	1R	3H	1W	Decalcification and realgar replacement of calcite veinlets throughout interval
377.34	380.39	3.05	2.92	96	2.24	73	3R	3H	1W	
380.39	383.44	3.05	3	98	1.92	63	4R	3H	1W	
383.44	386.49	3.05	2.79	91	1.80	59	4R	3H	1W	
386.49	389.53	3.04	2.86	94	2.00	66	4R	3H	1W	Orpiment and realgar on fracture surfaces and as veinlets
389.53	392.58	3.05	2.64	87	0.81	27	1R	3H	1W	RBZ 391-392 m. Orpiment and realgar on fracture surfaces and as veinlets throughout.
392.58	395.63	3.05	2.81	92	1.15	38	3R	3H	1W	RBZ 393.00-393.67 m
395.63	398.68	3.05	2.77	91	0.83	27	4R	3H	1W	RBZ 397-398 m with orpiment on fracture surfaces
398.68	401.73	3.05	2.52	83	1.38	45	4R	3H	1W	
401.73	404.77	3.04	2.79	92	0.82	27	2R	3H	1W	highly fractured interval
404.77	407.82	3.05	2.51	82	1.16	38	2R	3H	1W	highly fractured interval
407.82	410.87	3.05	3.03	99	2.62	86	0R	3H	1W	
410.87	413.92	3.05	3.05	100	2.95	97	2R	3H	1W	
413.92	416.97	3.05	3	98	2.22	73	3R	3H	1W	RBZ 416.20 to 416.35 m.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
416.97	420.01	3.04	3.04	100	2.90	95	0R	3H	1W	
420.01	423.06	3.05	2.74	90	2.51	82	0R	3H	1W	

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W232444	☐	N17-092	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232477	☐	N17-094	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232474	☐	N17-094	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232466	☐	N17-092	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232371	☐	N17-088	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232450	☐	N17-092	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232424	☐	N17-089	DDH Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232420	☐	N17-089	DDH Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232414	☐	N17-089	DDH Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232408	☐	N17-089	DDH Core	CS1	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232391	☐	N17-088	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232387	☐	N17-088	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232384	☐	N17-088	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232462	☐	N17-092	core	CS6	☐	☐	☐
2.40	7.32	4.92	OVB, MST	2.70	55	Q052470	☐	N17-C06	Chip		☐	☐	☐
7.32	13.41	6.09	MST	4.88	80	Q052471	☐	N17-C06	Chip		☐	☐	☐
13.41	19.51	6.10	MST	4.87	80	Q052472	☐	N17-C06	Chip		☐	☐	☐
19.51	25.60	6.09	MST	4.86	80	Q052473	☐	N17-C06	Chip		☐	☐	☐
25.60	31.70	6.10	MST	4.28	70	Q052474	☐	N17-C06	Chip		☐	☐	☐
31.70	37.80	6.10	MST	5.28	87	Q052475	☐	N17-C06	Chip		☐	☐	☐
37.80	43.89	6.09	MST	3.81	63	Q052476	☐	N17-C06	Chip		☐	☐	☐
43.89	49.99	6.10	MST	4.95	81	Q052477	☐	N17-C06	Chip		☐	☐	☐
49.99	56.08	6.09	MST	5.06	83	Q052478	☐	N17-C06	Chip		☐	☐	☐
56.08	62.18	6.10	MST	4.95	81	Q052479	☐	N17-C06	Chip		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
62.18	68.28	6.10	MST	5.15	84	Q052480	☐	N17-C06	Chip		☐	☐	☐
68.28	74.37	6.09	MST	4.28	70	Q052481	☐	N17-C06	Chip		☐	☐	☐
74.37	80.47	6.10	MST	5.39	88	Q052482	☐	N17-C06	Chip		☐	☐	☐
80.47	86.56	6.09	MST	5.25	86	Q052483	☐	N17-C06	Chip		☐	☐	☐
86.56	92.66	6.10	MST	4.88	80	Q052484	☐	N17-C06	Chip		☐	☐	☐
92.66	98.76	6.10	MST	5.07	83	Q052485	☐	N17-C06	Chip		☐	☐	☐
98.76	104.85	6.09	MST	5.84	96	Q052486	☐	N17-C06	Chip		☐	☐	☐
104.85	110.95	6.10	MST	5.17	85	Q052487	☐	N17-C06	Chip		☐	☐	☐
110.95	117.04	6.09	MST	5.43	89	Q052488	☐	N17-C06	Chip		☐	☐	☐
117.04	123.14	6.10	MST	5.75	94	Q052489	☐	N17-C06	Chip		☐	☐	☐
123.14	129.24	6.10	MST	5.86	96	Q052490	☐	N17-C06	Chip		☐	☐	☐
129.24	135.33	6.09	MST	5.85	96	Q052491	☐	N17-C06	Chip		☐	☐	☐
135.33	141.43	6.10	MST	6.02	99	Q052492	☐	N17-C06	Chip		☐	☐	☐
141.43	147.52	6.09	MST	5.91	97	Q052493	☐	N17-C06	Chip		☐	☐	☐
147.52	150.57	3.05	LST	2.95	97	W232330	☐	N17-081	Core		☐	☐	☐
150.57	153.62	3.05	LST	2.98	98	W232331	☐	N17-081	Core		☐	☐	☐
153.62	156.67	3.05	LST	2.89	95	W232332	☐	N17-081	Core		☐	☐	☐
156.67	159.72	3.05	LST	2.90	95	W232360	☐	N17-088	core		☐	☐	☐
159.72	162.76	3.04	LST	2.95	97	W232361	☐	N17-088	core		☐	☐	☐
162.76	165.81	3.05	LST	2.84	93	W232362	☐	N17-088	core		☐	☐	☐
165.81	168.86	3.05	LST	2.79	91	W232363	☐	N17-088	core		☐	☐	☐
168.86	171.91	3.05	LST	2.90	95	W232364	☐	N17-088	core		☐	☐	☐
171.91	174.96	3.05	LST	2.93	96	W232365	☐	N17-088	core		☐	☐	☐
174.96	178.00	3.04	LST	2.97	98	W232366	☐	N17-088	core		☐	☐	☐
178.00	181.05	3.05	LST	2.97	97	W232367	☐	N17-088	core		☐	☐	☐
181.05	184.10	3.05	LST	2.98	98	W232368	☐	N17-088	core		☐	☐	☐
184.10	187.15	3.05	LST	3.00	98	W232369	☐	N17-088	core		☐	☐	☐
187.15	190.20	3.05	LST	2.89	95	W232370	☐	N17-088	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
190.20	193.24	3.04	MST	2.90	95	W232372	☐	N17-088	core		☐	☐	☐
193.24	196.29	3.05	MST	2.79	91	W232373	☐	N17-088	core		☐	☐	☐
196.29	199.34	3.05	MST	2.98	98	W232374	☐	N17-088	core		☐	☐	☐
199.34	202.39	3.05	MST	3.02	99	W232375	☐	N17-088	core		☐	☐	☐
199.34	202.39	3.05	MST	3.02	99	W232376	☐	N17-088	core		☐	☑	☐
202.39	205.44	3.05	MST	3.05	100	W232377	☐	N17-088	core		☐	☐	☐
205.44	208.48	3.04	MST	3.03	100	W232378	☐	N17-088	core		☐	☐	☐
208.48	211.53	3.05	MST	2.99	98	W232379	☐	N17-088	core		☐	☐	☐
211.53	213.17	1.64	MST	1.52	93	W232380	☐	N17-088	core		☐	☐	☐
211.53	213.17	1.64	MST	1.52	93	W232381	☐	N17-088	core		☐	☐	☑
213.17	215.23	2.06	LST, MST	1.94	94	W232382	☐	N17-088	core		☐	☐	☐
215.23	217.63	2.40	LST	2.31	96	W232383	☐	N17-088	core		☐	☐	☐
217.63	220.68	3.05	LST	3.00	98	W232385	☐	N17-088	core		☐	☐	☐
220.68	223.72	3.04	LST	2.65	87	W232386	☐	N17-088	core		☐	☐	☐
223.72	226.77	3.05	LST	3.01	99	W232388	☐	N17-088	core		☐	☐	☐
226.77	229.82	3.05	LST	2.89	95	W232389	☐	N17-088	core		☐	☐	☐
229.82	232.87	3.05	LST	3.05	100	W232390	☐	N17-088	core		☐	☐	☐
232.87	235.92	3.05	LST	3.02	99	W232392	☐	N17-088	core		☐	☐	☐
235.92	238.96	3.04	LST	2.98	98	W232393	☐	N17-088	core		☐	☐	☐
238.96	242.01	3.05	LST	2.97	97	W232394	☐	N17-088	core		☐	☐	☐
242.01	245.06	3.05	LST	2.82	92	W232395	☐	N17-088	core		☐	☐	☐
245.06	248.11	3.05	LST	2.92	96	W232396	☐	N17-089	DDH Core		☐	☐	☐
248.11	251.16	3.05	LST	3.03	99	W232397	☐	N17-089	DDH Core		☐	☐	☐
251.16	254.20	3.04	LST	2.93	96	W232398	☐	N17-089	DDH Core		☐	☐	☐
254.20	257.25	3.05	LST	2.94	96	W232399	☐	N17-089	DDH Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
257.25	260.30	3.05	LST	3.03	99	W232400	☐	N17-089	DDH Core		☐	☐	☐
257.25	260.30	3.05	LST	3.03	99	W232401	☐	N17-089	DDH Core		☐	☑	☐
260.30	263.35	3.05	LST	3.05	100	W232402	☐	N17-089	DDH Core		☐	☐	☐
263.35	266.40	3.05	LST	2.88	94	W232403	☐	N17-089	DDH Core		☐	☐	☐
266.40	269.44	3.04	LST	2.65	87	W232404	☐	N17-089	DDH Core		☐	☐	☐
269.44	272.49	3.05	LST	2.80	92	W232405	☐	N17-089	DDH Core		☐	☐	☐
272.49	275.54	3.05	LST	3.05	100	W232406	☐	N17-089	DDH Core		☐	☐	☐
275.54	278.59	3.05	LST	2.97	97	W232407	☐	N17-089	DDH Core		☐	☐	☐
278.59	280.11	1.52	LST	1.32	87	W232433	☐	N17-092	core		☐	☐	☐
280.11	282.85	2.74	LST	2.60	95	W232409	☐	N17-089	DDH Core		☐	☐	☐
282.85	285.90	3.05	LST	2.96	97	W232410	☐	N17-089	DDH Core		☐	☐	☐
285.90	288.95	3.05	LST	2.94	96	W232411	☐	N17-089	DDH Core		☐	☐	☐
288.95	292.00	3.05	LST	3.03	99	W232412	☐	N17-089	DDH Core		☐	☐	☐
292.00	295.05	3.05	LST	2.87	94	W232413	☐	N17-089	DDH Core		☐	☐	☐
295.05	298.09	3.04	LST	3.04	100	W232415	☐	N17-089	DDH Core		☐	☐	☐
298.09	300.12	2.03	LST	2.02	100	W232416	☐	N17-089	DDH Core		☐	☐	☐
300.12	302.74	2.62	LST	2.53	97	W232417	☐	N17-089	DDH Core		☐	☐	☐
302.74	304.19	1.45	LST	1.26	87	W232418	☐	N17-089	DDH Core		☐	☐	☐
304.19	306.85	2.66	LST	2.27	85	W232419	☐	N17-089	DDH Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
306.85	308.81	1.96	LST	1.96	100	W232421	☐	N17-089	DDH Core		☐	☐	☐
308.81	311.56	2.75	LST	2.69	98	W232422	☐	N17-089	DDH Core		☐	☐	☐
311.56	312.00	0.44	LST	0.43	98	W232423	☐	N17-089	DDH Core		☐	☐	☐
312.00	314.12	2.12	LST	2.12	100	W232425	☐	N17-089	DDH Core		☐	☐	☐
314.12	316.80	2.68	LST	2.68	100	W232426	☐	N17-089	DDH Core		☐	☐	☐
316.80	319.23	2.43	LST	2.43	100	W232427	☐	N17-089	DDH Core		☐	☐	☐
319.23	320.40	1.17	LST	1.17	100	W232428	☐	N17-089	DDH Core		☐	☐	☐
320.40	322.64	2.24	LST	2.14	96	W232429	☐	N17-089	DDH Core		☐	☐	☐
322.64	323.95	1.31	LST	1.31	100	W232430	☐	N17-089	DDH Core		☐	☐	☐
322.64	323.95	1.31	LST	1.31	100	W232431	☐	N17-089	DDH Core		☐	☐	☑
323.95	325.53	1.58	LST	1.58	100	W232432	☐	N17-092	core		☐	☐	☐
325.53	326.66	1.13	LST	1.13	100	W232434	☐	N17-092	core		☐	☐	☐
326.66	328.57	1.91	LST	1.83	96	W232435	☐	N17-092	core		☐	☐	☐
328.57	331.62	3.05	LST	3.04	100	W232436	☐	N17-092	core		☐	☐	☐
331.62	334.67	3.05	LST	2.62	86	W232437	☐	N17-092	core		☐	☐	☐
334.67	337.72	3.05	LST	2.37	78	W232438	☐	N17-092	core		☐	☐	☐
337.72	340.76	3.04	LST	2.64	87	W232439	☐	N17-092	core		☐	☐	☐
340.76	343.81	3.05	LST	2.58	85	W232440	☐	N17-092	core		☐	☐	☐
343.81	346.86	3.05	LST	3.04	100	W232441	☐	N17-092	core		☐	☐	☐
346.86	349.91	3.05	LST	2.83	93	W232442	☐	N17-092	core		☐	☐	☐
349.91	352.96	3.05	LST	2.77	91	W232443	☐	N17-092	core		☐	☐	☐
352.96	353.95	0.99	LST	0.99	100	W232445	☐	N17-092	core		☐	☐	☐
353.95	356.37	2.42	LST	2.38	98	W232446	☐	N17-092	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
356.37	357.16	0.79	LST	0.71	90	W232447	☐	N17-092	core		☐	☐	☐
356.37	357.16	0.79	LST	0.71	90	W232448	☐	N17-092	core		☐	☐	☑
357.16	359.05	1.89	LST	1.78	94	W232449	☐	N17-092	core		☐	☐	☐
359.05	362.10	3.05	LST	3.02	99	W232451	☐	N17-092	core		☐	☐	☐
362.10	365.15	3.05	LST	3.01	99	W232452	☐	N17-092	core		☐	☐	☐
365.15	368.20	3.05	LST	2.89	95	W232453	☐	N17-092	core		☐	☐	☐
368.20	371.25	3.05	LST	2.97	97	W232454	☐	N17-092	core		☐	☐	☐
371.25	374.29	3.04	LST	2.85	94	W232455	☐	N17-092	core		☐	☐	☐
374.29	376.96	2.67	LST	2.67	100	W232456	☐	N17-092	core		☐	☐	☐
376.96	379.24	2.28	LST	2.07	91	W232457	☐	N17-092	core		☐	☐	☐
379.24	381.88	2.64	LST	2.40	91	W232458	☐	N17-092	core		☐	☐	☐
379.24	381.88	2.64	LST	2.40	91	W232459	☐	N17-092	core		☐	☑	☐
381.88	383.44	1.56	LST	1.43	92	W232460	☐	N17-092	core		☐	☐	☐
383.44	386.49	3.05	LST	2.79	91	W232461	☐	N17-092	core		☐	☐	☐
386.49	389.53	3.04	LST	2.86	94	W232463	☐	N17-092	core		☐	☐	☐
389.53	391.47	1.94	LST	1.77	91	W232464	☐	N17-092	core		☐	☐	☐
391.47	393.82	2.35	LST	2.00	85	W232465	☐	N17-092	core		☐	☐	☐
393.82	395.63	1.81	LST	1.81	100	W232467	☐	N17-092	core		☐	☐	☐
395.63	398.68	3.05	LST	2.77	91	W232468	☐	N17-094	core		☐	☐	☐
398.68	401.73	3.05	LST	2.52	83	W232469	☐	N17-094	core		☐	☐	☐
401.73	404.77	3.04	LST	2.79	92	W232470	☐	N17-094	core		☐	☐	☐
404.77	407.82	3.05	LST	2.51	82	W232471	☐	N17-094	core		☐	☐	☐
407.82	410.87	3.05	MST	3.03	99	W232472	☐	N17-094	core		☐	☐	☐
410.87	413.92	3.05	MST	3.05	100	W232473	☐	N17-094	core		☐	☐	☐
413.92	415.98	2.06	LST	2.02	98	W232475	☐	N17-094	core		☐	☐	☐
415.98	417.10	1.12	LST	1.12	100	W232476	☐	N17-094	core		☐	☐	☐
417.10	420.01	2.91	LST, MST	2.91	100	W232478	☐	N17-094	core		☐	☐	☐
420.01	423.06	3.05	MST	2.74	90	W232479	☐	N17-094	core		☐	☐	☐

OS -17-255

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
85.71	139.40	53.69	SLC	FG	Starry night conglomerate with occasional bedding, often crosscut by thin calcite veinlets/stringers. Occasional interbeds of limestone near the contact. Disseminated pyrite throughout, with rare larger 1 cm blebs of pyrite. Quartz veining begins around 115 m, often quite irregularly banded with some fine ankerite grains. Quartz veining is accompanied by 2-4 cm wide limestone interbeds that fizz violently. Realgar follows bedding and calcite veining, becoming intense around 125 m. Realgar is pervasive at 136 m. Dark, softened gouge zone border the major areas of realgar mineralization.							
						MD	GY					
						DK	BK	BD				

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	2.56	2.56	0	0	0.00	0	--	--	--	
2.56	3.05	0.49	0.25	51	0.00	0	0R	3H	2W	casing and ovrburden
3.05	6.10	3.05	1.29	42	0.39	13	4R	3H	1W	casing
6.10	9.14	3.04	2.42	80	1.50	49	4R	3H	1W	casing rubbe zone at the start of the interval
9.14	12.19	3.05	1.06	35	0.52	17	3R	1H	1W	clay at end of run
12.19	15.24	3.05	1.12	37	0.00	0	0R	1H	1W	oxidized clay mush
15.24	18.29	3.05	1	33	0.20	7	0R	1H	1W	oxidized clay mush
18.29	21.34	3.05	1.56	51	0.00	0	0R	2H	1W	oxidized clay mush
21.34	24.38	3.04	1.44	47	0.00	0	0R	2H	1W	oxidized clay mush
24.38	27.43	3.05	1.54	50	0.00	0	1R	2H	1W	oxidized at top of run, highly fractured, fraturd pieces are becoming more angular
27.43	30.48	3.05	2.35	77	0.28	9	0R	2H	1W	siliciclastic clay from 27.43-28.60m
30.48	33.53	3.05	1.82	60	0.00	0	0R	1H	1W	Siliciclastic clay mush until 33.00m where the run beomes competent core that is highly fratured
33.53	36.58	3.05	1.88	62	0.00	0	0R	2H	1W	competent core mixed with silic clay
36.58	39.62	3.04	2.1	69	0.97	32	0R	3H	1W	
39.62	41.15	1.53	1.52	99	0.12	8	1R	3H	1W	
41.15	42.67	1.52	1.17	77	0.00	0	1R	3H	1W	
42.67	44.20	1.53	1.37	90	0.44	29	1R	2H	1W	
44.20	47.24	3.04	2.47	81	0.89	29	1R	3H	1W	
47.24	50.29	3.05	2.79	91	1.53	50	0R	2H	1W	
50.29	53.34	3.05	1.97	65	1.05	34	0R	1H	1W	
53.34	56.39	3.05	2.59	85	1.52	50	0R	1H	1W	
56.39	59.44	3.05	2.66	87	1.25	41	0R	2H	1W	
59.44	62.48	3.04	2.42	80	1.24	41	0R	2H	1W	
62.48	65.53	3.05	2.83	93	1.25	41	0R	2H	1W	
65.53	68.58	3.05	2.78	91	2.01	66	0R	2H	1W	
68.58	71.63	3.05	2.98	98	2.07	68	0R	2H	1W	
71.63	74.68	3.05	2.55	84	0.33	11	0R	1H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
74.68	77.72	3.04	2.45	81	0.91	30	1R	1H	1W	
77.72	80.77	3.05	2.35	77	1.08	35	1R	2H	1W	
80.77	83.82	3.05	2.52	83	1.27	42	1R	2H	1W	
83.82	85.34	1.52	1.52	100	0.70	46	0R	2H	1W	
85.34	86.87	1.53	1.53	100	0.60	39	0R	2H	1W	
86.87	89.92	3.05	2.97	97	2.39	78	0R	3H	1W	
89.92	92.96	3.04	3.04	100	1.97	65	0R	3H	1W	
92.96	96.01	3.05	2.97	97	2.29	75	0R	3H	1W	
96.01	99.06	3.05	2.83	93	1.92	63	0R	3H	1W	
99.06	102.11	3.05	2.84	93	2.06	68	0R	3H	1W	
102.11	105.16	3.05	2.78	91	2.02	66	0R	3H	1W	
105.16	108.20	3.04	2.95	97	2.39	79	0R	3H	1W	
108.20	111.25	3.05	2.83	93	1.47	48	0R	4H	1W	
111.25	114.30	3.05	2.89	95	1.76	58	0R	3H	1W	
114.30	117.35	3.05	3.02	99	2.33	76	0R	4H	1W	
117.35	120.40	3.05	3.03	99	2.48	81	0R	3H	1W	
120.40	123.44	3.04	2.69	88	1.46	48	3R	3H	1W	
123.44	126.49	3.05	2.92	96	2.55	84	3R	4H	1W	
126.49	129.54	3.05	2.92	96	1.79	59	0R	3H	1W	
129.54	132.59	3.05	2.8	92	1.33	44	1R	2H	1W	
132.59	135.64	3.05	2.81	92	1.48	49	1R	3H	1W	
135.64	138.68	3.04	3.04	100	2.58	85	0R	3H	1W	
138.68	141.73	3.05	2.97	97	2.48	81	3R	4H	1W	
141.73	144.78	3.05	3.05	100	2.18	71	4R	4H	1W	
144.78	147.83	3.05	3.05	100	2.82	92	4R	4H	1W	
147.83	150.88	3.05	2.97	97	2.76	90	4R	4H	1W	
150.88	153.92	3.04	3.04	100	2.95	97	4R	4H	1W	
153.92	156.97	3.05	3	98	2.83	93	4R	4H	1W	
156.97	160.02	3.05	2.86	94	2.49	82	4R	4H	1W	
160.02	163.07	3.05	3.05	100	2.56	84	4R	4H	1W	
163.07	166.12	3.05	3.05	100	2.52	83	4R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
166.12	169.16	3.04	2.99	98	2.51	83	4R	4H	1W	
169.16	172.21	3.05	3.05	100	2.71	89	4R	4H	1W	
172.21	175.26	3.05	2.88	94	2.19	72	4R	4H	1W	
175.26	178.31	3.05	3.05	100	2.58	85	4R	4H	1W	
178.31	181.36	3.05	2.98	98	1.95	64	4R	4H	1W	
181.36	184.40	3.04	3	99	2.63	87	4R	4H	1W	
184.40	187.45	3.05	3.04	100	2.72	89	4R	4H	1W	
187.45	190.50	3.05	2.99	98	2.49	82	4R	4H	1W	
190.50	193.55	3.05	2.98	98	2.39	78	4R	4H	1W	
193.55	196.60	3.05	2.98	98	2.03	67	4R	4H	1W	
196.60	199.64	3.04	3.04	100	2.66	88	4R	4H	1W	
199.64	202.69	3.05	2.88	94	2.25	74	4R	3H	1W	
202.69	205.74	3.05	2.99	98	2.82	92	4R	3H	1W	
205.74	208.79	3.05	3.05	100	2.80	92	4R	3H	1W	a few ~80-90 degree mechanical fractures
208.79	211.84	3.05	2.94	96	2.57	84	4R	3H	1W	a few ~80-90 degree mechanical fractures
211.84	214.88	3.04	2.98	98	2.29	75	4R	3H	1W	
214.88	217.93	3.05	2.95	97	2.37	78	4R	3H	1W	
217.93	220.98	3.05	2.81	92	2.18	71	4R	3H	1W	
220.98	224.03	3.05	2.79	91	1.99	65	4R	3H	1W	
224.03	227.08	3.05	2.82	92	1.91	63	4R	3H	1W	
227.08	230.12	3.04	2.93	96	2.40	79	4R	3H	1W	
230.12	233.17	3.05	2.95	97	2.61	86	4R	3H	1W	
233.17	236.22	3.05	3.02	99	1.52	50	4R	3H	1W	
236.22	239.27	3.05	2.47	81	1.11	36	4R	3H	1W	RBZ 237.00-237.11m, 237.64-237.74m, 238.04-238.11m
239.27	242.31	3.04	2.81	92	2.38	78	4R	3H	1W	
242.31	245.36	3.05	2.98	98	1.73	57	4R	3H	1W	
245.36	248.41	3.05	2.95	97	2.05	67	4R	3H	1W	
248.41	251.46	3.05	2.69	88	1.29	42	4R	3H	1W	
251.46	254.50	3.04	2.88	95	1.22	40	4R	3H	1W	
254.50	257.55	3.05	2.98	98	1.51	50	4R	3H	1W	
257.55	260.60	3.05	2.83	93	1.57	51	4R	3H	1W	Heavily fractured from 260.20-260.60m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
260.60	263.65	3.05	2.9	95	2.14	70	4R	3H	1W	
263.65	265.18	1.53	1.53	100	1.08	71	4R	3H	1W	
265.18	268.22	3.04	3	99	2.44	80	4R	3H	1W	
268.22	271.27	3.05	3.05	100	2.89	95	4R	3H	1W	
271.27	274.32	3.05	3.05	100	2.37	78	4R	3H	1W	
274.32	277.36	3.04	2.94	97	1.45	48	4R	3H	1W	
277.36	280.41	3.05	3.02	99	1.93	63	4R	3H	1W	
280.41	283.46	3.05	2.99	98	2.16	71	4R	3H	1W	
283.46	286.51	3.05	3.02	99	2.95	97	4R	3H	1W	Small 5-10cm sections of moderately reactive black calcareous siltstone
286.51	289.56	3.05	3.05	100	2.83	93	4R	3H	1W	
289.56	292.61	3.05	3.01	99	2.61	86	4R	3H	1W	
292.61	295.66	3.05	2.94	96	2.22	73	4R	3H	1W	
295.66	298.70	3.04	3.02	99	2.77	91	4R	3H	1W	
298.70	301.75	3.05	2.87	94	2.17	71	4R	3H	1W	
301.75	304.80	3.05	3	98	2.58	85	4R	3H	1W	RBZ 304.60-304.70
304.80	307.85	3.05	2.59	85	1.70	56	4R	3H	1W	RBZ 305.60-305.70m
307.85	310.90	3.05	2.98	98	2.56	84	4R	3H	1W	
310.90	313.94	3.04	3.04	100	2.77	91	4R	3H	1W	
313.94	316.99	3.05	2.92	96	2.62	86	4R	3H	1W	
316.99	320.04	3.05	3.03	99	2.43	80	4R	3H	1W	
320.04	323.09	3.05	3.04	100	2.15	70	4R	3H	1W	
323.09	326.14	3.05	3.05	100	2.53	83	4R	4H	1W	
326.14	329.18	3.04	2.94	97	2.68	88	4R	4H	1W	
329.18	332.23	3.05	2.91	95	1.63	53	4R	4H	1W	
332.23	335.28	3.05	3.05	100	1.70	56	4R	4H	1W	
335.28	338.33	3.05	3.05	100	0.99	32	4R	3H	1W	
338.33	341.38	3.05	3.04	100	1.23	40	4R	2H	1W	
341.38	344.42	3.04	2.91	96	1.51	50	4R	3H	1W	
344.42	347.47	3.05	3.05	100	0.90	30	4R	3H	1W	
347.47	350.52	3.05	3.05	100	1.74	57	4R	3H	1W	
350.52	353.57	3.05	2.92	96	1.48	49	2R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
353.57	356.62	3.05	3.05	100	2.23	73	2R	2H	1W	
356.62	357.98	1.36	1.29	95	0.28	21	1R	2H	1W	

OS -17-255

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W230921	☐	N17-096	CORE		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230986	☐	N17-100	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230976	☐	N17-098	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230970	☐	N17-098	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230962	☐	N17-098	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230950	☐	N17-098	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230945	☐	N17-096	CORE	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230844	☐	N17-093	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230935	☐	N17-096	CORE	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230905	☐	N17-095	core	CS8	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230900	☐	N17-095	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230895	☐	N17-095	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230877	☐	N17-095	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230863	☐	N17-093	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230860	☐	N17-093	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230849	☐	N17-093	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W230943	☐	N17-096	CORE		☑	☐	☐
3.21	6.10	2.89	FLR, OVB	1.10	38	W230839	☐	N17-093	Core		☐	☐	☐
6.10	8.45	2.35	FLR	2.01	86	W230840	☐	N17-093	Core		☐	☐	☐
8.45	10.67	2.22	FLR	1.34	60	W230841	☐	N17-093	Core		☐	☐	☐
10.67	13.72	3.05	SLC	1.28	42	W230842	☐	N17-093	Core		☐	☐	☐
13.72	16.76	3.04	SLC	1.05	35	W230843	☐	N17-093	Core		☐	☐	☐
16.76	19.81	3.05	SLC	1.20	39	W230845	☐	N17-093	Core		☐	☐	☐
19.81	22.86	3.05	SLC	2.15	70	W230846	☐	N17-093	Core		☐	☐	☐
22.86	24.38	1.52	SLC	1.01	66	W230847	☐	N17-093	Core		☐	☐	☐
24.38	25.91	1.53	SLC	0.90	59	W230848	☐	N17-093	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
25.91	27.43	1.52	SLC	0.92	61	W230850	☐	N17-093	Core		☐	☐	☐
27.43	28.96	1.53	SLC	1.02	67	W230851	☐	N17-093	Core		☐	☐	☐
28.96	32.00	3.04	SLC	2.58	85	W230852	☐	N17-093	Core		☐	☐	☐
32.00	35.05	3.05	SLC	2.18	71	W230853	☐	N17-093	Core		☐	☐	☐
35.05	38.10	3.05	SLC	2.37	78	W230854	☐	N17-093	Core		☐	☐	☐
38.10	41.15	3.05	SLC	2.27	74	W230855	☐	N17-093	Core		☐	☐	☐
41.15	44.20	3.05	SLC	2.47	81	W230856	☐	N17-093	Core		☐	☐	☐
44.20	47.24	3.04	SLC	2.88	95	W230857	☐	N17-093	Core		☐	☐	☐
47.24	48.77	1.53	SLC	1.50	98	W230858	☐	N17-093	Core		☐	☐	☐
48.77	50.70	1.93	SLC	1.83	95	W230859	☐	N17-093	Core		☐	☐	☐
50.70	51.82	1.12	SLC	1.06	95	W230861	☐	N17-093	Core		☐	☐	☐
51.82	54.86	3.04	SLC	2.18	72	W230862	☐	N17-093	Core		☐	☐	☐
54.86	57.91	3.05	SLC	2.50	82	W230864	☐	N17-093	Core		☐	☐	☐
57.91	60.96	3.05	SLC	3.00	98	W230865	☐	N17-093	Core		☐	☐	☐
57.91	60.96	3.05	SLC	3.00	98	W230866	☐	N17-093	Core		☐	☑	☐
60.96	64.01	3.05	SLC	2.58	85	W230867	☐	N17-093	Core		☐	☐	☐
64.01	67.06	3.05	SLC	2.96	97	W230868	☐	N17-093	Core		☐	☐	☐
67.06	70.10	3.04	SLC	2.95	97	W230869	☐	N17-093	Core		☐	☐	☐
70.10	73.15	3.05	SLC	2.77	91	W230870	☐	N17-093	Core		☐	☐	☐
73.15	76.20	3.05	SLC	2.79	91	W230871	☐	N17-093	Core		☐	☐	☐
73.15	76.20	3.05	SLC	2.79	91	W230872	☐	N17-093	Core		☐	☐	☑
76.20	79.25	3.05	SLC	2.70	89	W230873	☐	N17-093	Core		☐	☐	☐
79.25	82.30	3.05	SLC	2.46	81	W230874	☐	N17-095	core		☐	☐	☐
82.30	85.34	3.04	SLC	2.67	88	W230875	☐	N17-095	core		☐	☐	☐
85.34	87.61	2.27	SLC	2.26	100	W230876	☐	N17-095	core		☐	☐	☐
87.61	89.92	2.31	SLC	2.30	100	W230878	☐	N17-095	core	CS6	☐	☐	☐
89.92	92.96	3.04	SLC	3.04	100	W230879	☐	N17-095	core		☐	☐	☐
92.96	96.01	3.05	SLC	2.97	97	W230880	☐	N17-095	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
96.01	99.06	3.05	SLC	2.83	93	W230881	☐	N17-095	core		☐	☐	☐
99.06	102.11	3.05	SLC	2.84	93	W230882	☐	N17-095	core		☐	☐	☐
102.11	105.16	3.05	SLC	2.78	91	W230883	☐	N17-095	core		☐	☐	☐
105.16	108.20	3.04	SLC	2.95	97	W230884	☐	N17-095	core		☐	☐	☐
108.20	111.25	3.05	SLC	2.83	93	W230885	☐	N17-095	core		☐	☐	☐
111.25	114.30	3.05	SLC	2.89	95	W230886	☐	N17-095	core		☐	☐	☐
114.30	117.35	3.05	SLC	3.02	99	W230887	☐	N17-095	core		☐	☐	☐
117.35	119.56	2.21	SLC	2.18	99	W230888	☐	N17-095	core		☐	☐	☐
119.56	121.30	1.74	SLC	1.67	96	W230889	☐	N17-095	core		☐	☐	☐
121.30	123.44	2.14	SLC	2.03	95	W230890	☐	N17-095	core		☐	☐	☐
123.44	124.97	1.53	SLC	1.49	97	W230891	☐	N17-095	core		☐	☐	☐
124.97	126.88	1.91	SLC	1.87	98	W230892	☐	N17-095	core		☐	☐	☐
124.97	126.88	1.91	SLC	1.87	98	W230893	☐	N17-095	core		☐	☑	☐
126.88	128.89	2.01	SLC	1.88	94	W230894	☐	N17-095	core		☐	☐	☐
128.89	130.24	1.35	SLC	1.34	99	W230896	☐	N17-095	core		☐	☐	☐
130.24	131.75	1.51	SLC	1.32	87	W230897	☐	N17-095	core		☐	☐	☐
131.75	133.38	1.63	SLC	1.58	97	W230898	☐	N17-095	core		☐	☐	☐
133.38	135.87	2.49	SLC	2.33	94	W230899	☐	N17-095	core		☐	☐	☐
135.87	137.70	1.83	SLC	1.83	100	W230901	☐	N17-095	core		☐	☐	☐
137.70	139.16	1.46	SLC	1.45	99	W230902	☐	N17-095	core		☐	☐	☐
137.70	139.16	1.46	SLC	1.45	99	W230903	☐	N17-095	core		☐	☐	☑
139.16	142.17	3.01	SLC	2.98	99	W230904	☐	N17-095	core		☐	☐	☐
142.17	145.00	2.83	LST	2.83	100	W230906	☐	N17-095	core		☐	☐	☐
145.00	147.83	2.83	LST	2.83	100	W230907	☐	N17-095	core		☐	☐	☐
147.83	150.88	3.05	LST	2.97	97	W230908	☐	N17-095	core		☐	☐	☐
150.88	153.92	3.04	LST	3.04	100	W230909	☐	N17-095	core		☐	☐	☐
153.92	156.97	3.05	LST	3.00	98	W230910	☐	N17-096	CORE		☐	☐	☐
156.97	160.02	3.05	LST	2.86	94	W230911	☐	N17-096	CORE		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
160.02	163.07	3.05	LST	3.05	100	W230912	☐	N17-096	CORE		☐	☐	☐
163.07	166.12	3.05	LST	3.05	100	W230913	☐	N17-096	CORE		☐	☐	☐
166.12	169.16	3.04	LST	2.99	98	W230914	☐	N17-096	CORE		☐	☐	☐
169.16	172.21	3.05	LST	3.05	100	W230915	☐	N17-096	CORE		☐	☐	☐
169.16	172.21	3.05	LST	3.05	100	W230916	☐	N17-096	CORE		☐	☑	☐
172.21	175.26	3.05	LST	2.88	94	W230917	☐	N17-096	CORE		☐	☐	☐
175.26	178.31	3.05	LST	3.05	100	W230918	☐	N17-096	CORE		☐	☐	☐
178.31	181.36	3.05	LST	2.98	98	W230919	☐	N17-096	CORE		☐	☐	☐
181.36	184.40	3.04	LST	3.00	99	W230920	☐	N17-096	CORE		☐	☐	☐
184.40	187.45	3.05	LST	3.04	100	W230922	☐	N17-096	CORE		☐	☐	☐
187.45	190.50	3.05	LST	2.99	98	W230923	☐	N17-096	CORE		☐	☐	☐
190.50	193.55	3.05	LST	2.98	98	W230924	☐	N17-096	CORE		☐	☐	☐
193.55	196.60	3.05	LST	2.98	98	W230925	☐	N17-096	CORE		☐	☐	☐
193.55	196.60	3.05	LST	2.98	98	W230926	☐	N17-096	CORE		☐	☐	☑
196.60	199.64	3.04	LST	3.04	100	W230927	☐	N17-096	CORE		☐	☐	☐
199.64	202.69	3.05	LST	2.88	94	W230928	☐	N17-096	CORE		☐	☐	☐
202.69	205.74	3.05	LST	2.99	98	W230929	☐	N17-096	CORE		☐	☐	☐
205.74	208.79	3.05	LST	3.05	100	W230930	☐	N17-096	CORE		☐	☐	☐
208.79	211.84	3.05	LST	2.94	96	W230931	☐	N17-096	CORE		☐	☐	☐
211.84	214.88	3.04	LST	2.98	98	W230932	☐	N17-096	CORE		☐	☐	☐
214.88	217.93	3.05	LST	2.95	97	W230933	☐	N17-096	CORE		☐	☐	☐
217.93	220.98	3.05	LST	2.81	92	W230934	☐	N17-096	CORE		☐	☐	☐
220.98	224.03	3.05	LST	2.79	91	W230936	☐	N17-096	CORE		☐	☐	☐
224.03	227.08	3.05	LST	2.82	92	W230937	☐	N17-096	CORE		☐	☐	☐
227.08	230.12	3.04	LST	2.93	96	W230938	☐	N17-096	CORE		☐	☐	☐
230.12	233.17	3.05	LST	2.95	97	W230939	☐	N17-096	CORE		☐	☐	☐
233.17	236.22	3.05	LST	3.02	99	W230940	☐	N17-096	CORE		☐	☐	☐
236.22	239.27	3.05	LST	2.47	81	W230941	☐	N17-096	CORE		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
239.27	242.31	3.04	LST	2.81	92	W230942	☐	N17-096	CORE		☐	☐	☐
242.31	245.36	3.05	LST	2.98	98	W230944	☐	N17-096	CORE		☐	☐	☐
245.36	248.41	3.05	LST	2.95	97	W230946	☐	N17-098	Core		☐	☐	☐
248.41	251.46	3.05	LST	2.69	88	W230947	☐	N17-098	Core		☐	☐	☐
251.46	252.98	1.52	LST	1.52	100	W230948	☐	N17-098	Core		☐	☐	☐
252.98	256.03	3.05	LST	3.04	100	W230949	☐	N17-098	Core		☐	☐	☐
256.03	259.08	3.05	LST	2.94	96	W230951	☐	N17-098	Core		☐	☐	☐
259.08	262.12	3.04	LST	2.93	96	W230952	☐	N17-098	Core		☐	☐	☐
262.12	265.17	3.05	LST	2.89	95	W230953	☐	N17-098	Core		☐	☐	☐
265.17	268.22	3.05	LST	3.00	98	W230954	☐	N17-098	Core		☐	☐	☐
265.17	268.22	3.05	LST	3.00	98	W230955	☐	N17-098	Core		☐	☑	☐
268.22	271.27	3.05	LST	3.05	100	W230956	☐	N17-098	Core		☐	☐	☐
271.27	274.32	3.05	LST	3.05	100	W230957	☐	N17-098	Core		☐	☐	☐
274.32	277.36	3.04	LST	2.94	97	W230958	☐	N17-098	Core		☐	☐	☐
277.36	280.41	3.05	LST	3.02	99	W230959	☐	N17-098	Core		☐	☐	☐
280.41	282.16	1.75	LST	1.62	93	W230960	☐	N17-098	Core		☐	☐	☐
282.16	283.00	0.84	LST	0.84	100	W230961	☐	N17-098	Core		☐	☐	☐
283.00	285.46	2.46	LST	2.39	97	W230963	☐	N17-098	Core		☐	☐	☐
283.00	285.46	2.46	LST	2.39	97	W230964	☐	N17-098	Core		☐	☐	☑
285.46	288.04	2.58	LST	2.55	99	W230965	☐	N17-098	Core		☐	☐	☐
288.04	291.08	3.04	LST	3.04	100	W230966	☐	N17-098	Core		☐	☐	☐
291.08	294.13	3.05	LST	3.02	99	W230967	☐	N17-098	Core		☐	☐	☐
294.13	297.18	3.05	LST	2.97	97	W230968	☐	N17-098	Core		☐	☐	☐
297.18	299.31	2.13	LST	2.08	98	W230969	☐	N17-098	Core		☐	☐	☐
299.31	301.75	2.44	LST	2.29	94	W230971	☐	N17-098	Core		☐	☐	☐
301.75	304.80	3.05	LST	3.00	98	W230972	☐	N17-098	Core		☐	☐	☐
304.80	307.85	3.05	LST	2.59	85	W230973	☐	N17-098	Core		☐	☐	☐
307.85	310.90	3.05	LST	2.98	98	W230974	☐	N17-098	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
310.90	313.94	3.04	LST	3.04	100	W230975	☐	N17-098	Core		☐	☐	☐
313.94	316.99	3.05	LST	2.92	96	W230977	☐	N17-098	Core		☐	☐	☐
316.99	320.04	3.05	LST	3.03	99	W230978	☐	N17-098	Core		☐	☐	☐
320.04	323.09	3.05	LST	3.04	100	W230979	☐	N17-098	Core		☐	☐	☐
323.09	326.14	3.05	LST	3.05	100	W230980	☐	N17-098	Core		☐	☐	☐
326.14	329.18	3.04	LST	2.94	97	W230981	☐	N17-098	Core		☐	☐	☐
329.18	332.23	3.05	LST	2.91	95	W230982	☐	N17-100	core		☐	☐	☐
332.23	335.28	3.05	LST	3.05	100	W230983	☐	N17-100	core		☐	☐	☐
335.28	338.33	3.05	LST	3.05	100	W230984	☐	N17-100	core		☐	☐	☐
338.33	341.38	3.05	LST	3.04	100	W230985	☐	N17-100	core		☐	☐	☐
341.38	344.42	3.04	LST	2.91	96	W230987	☐	N17-100	core		☐	☐	☐
344.42	347.47	3.05	LST	3.05	100	W230988	☐	N17-100	core		☐	☐	☐
347.47	350.52	3.05	LST	3.05	100	W230989	☐	N17-100	core		☐	☐	☐
350.52	353.57	3.05	LST	2.92	96	W230990	☐	N17-100	core		☐	☐	☐
353.57	356.62	3.05	LST	3.05	100	W230991	☐	N17-100	core		☐	☐	☐
356.62	357.98	1.36	LST	1.29	95	W230992	☐	N17-100	core		☐	☐	☐

OS -17-256

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
0.00	46.19	46.19	OVB	--	No recovery 0 - 6.5 m. A reddish-brown to brown clayey highly fractured unconsolidated rubble zone (of overburden?) that is generally strongly calcareous with fractured/rubbly pieces of angular calcareous limestone throughout. About 50/50 angular pieces to clayey material. Material generally gets darker brown with depth (most prominent at 42.0m and deeper) and has a 25.0 cm zone (at 44.81m) of fractured dolostone.							
						MD	BN					
46.19	103.47	57.28	MST	VF	Wide intersection of maroon-grey Osiris mudstone but by rare calcite/quartz veinlets. Reduced from HQ to NQ at 47.85 m. Dominated by maroon mudstone with thin light grey bands. At 91.80 m, the maroon mudstone disappears and is entirely light-medium grey mudstone. Pyrite occurs along bedding at 99.40 m.							
						MD	GY					
						LT	GY					
						MD	RD	BD				
235.94	288.05	52.11	DST	FG	Medium grey, thinly bedded dolostone with sections of rudstone, float stone, and dark grey silty interbeds. Frequent stylolites are typically parallel to bedding. Calcite veinlets crosscut bedding and realgar often follows fine fractures. Occasional crystalline-massive realgar along fractures and within calcite veinlets.							
						MD	GY	BD			Re	0.1
288.05	309.40	21.35	DMT	FG	Osiris diamictite with clasts of limestone, pyrite-bearing quartz veins, siltstone, and massive pyrite. Clasts are generally sub-angular to angular with poor sorting. Average clast size is under 1 cm and show preferential alignment through most of the interval. Matrix is light-medium grey calcareous silt. Limited calcite veining, up to 2 per metre or <1% of recovery. Limited realgar, focused around 305-309 m depth along short gouge seams and more intense calcite veinlets. No stylolites present, but thin black infill along micro fractures.							
											Py	0.5
											Re	0.5

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
309.40	332.12	22.72	SLT	FG	Dark-medium grey non-calcareous siltstone with some interbeds of diamictite. Overall thinly bedded at 30-40 degrees TCA with limited calcite veining (1 per metre or <1%). Calcite veinlets/stringers at the start of the interval host minor realgar. Occasional black infill along fractures.							
											Re	0.1

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	6.50	6.50	0	0	0.00	0	--	--	--	Top of hole, no recovery
6.50	8.23	1.73	0.4	23	0.00	0	4R	3H	2W	Rubble zone, poor recovery
8.23	11.28	3.05	0.33	11	0.00	0	4R	3H	2W	Rubble zone
11.28	14.33	3.05	1.07	35	0.00	0	4R	3H	2W	Rubble Zone
14.33	17.37	3.04	0.53	17	0.00	0	3R	1H	2W	Rubble zone
17.37	20.42	3.05	0.91	30	0.33	11	2R	1H	3W	Rubble/ gravel zone with clay
20.42	23.47	3.05	1.35	44	0.00	0	3R	1H	2W	Clay, mud, gravel zone
23.47	26.52	3.05	2.2	72	0.00	0	3R	1H	2W	clay, mud, gravel/rubble zone
26.52	29.57	3.05	1.83	60	0.00	0	3R	2H	2W	Gravel/ rubble zone
29.57	32.61	3.04	1.95	64	0.00	0	3R	3H	2W	Rubble zone
32.61	35.66	3.05	1.44	47	0.00	0	3R	3H	2W	Rubble zone
35.66	38.71	3.05	1.36	45	0.00	0	3R	3H	2W	Rubble zone
38.71	41.76	3.05	2.41	79	0.00	0	2R	1H	2W	Rubble/clay zone
41.76	44.81	3.05	1.97	65	0.00	0	2R	1H	2W	Rubble/ clay zone
44.81	47.85	3.04	1.66	55	0.11	4	2R	2H	2W	overburden/clay
47.85	49.07	1.22	0.08	7	0.00	0	0R	2H	1W	
49.07	52.12	3.05	0.93	30	0.16	5	0R	2H	1W	
52.12	55.17	3.05	2.06	68	0.71	23	0R	2H	1W	
55.17	58.22	3.05	2.72	89	1.53	50	0R	2H	1W	
58.22	61.26	3.04	2.91	96	2.34	77	0R	2H	1W	
61.26	64.31	3.05	2.97	97	2.09	69	0R	2H	1W	
64.31	67.36	3.05	2.96	97	2.59	85	0R	2H	1W	
67.36	70.41	3.05	2.77	91	2.00	66	0R	2H	1W	
70.41	73.46	3.05	2.8	92	1.82	60	0R	2H	1W	rz: 71.00-71.50m
73.46	76.50	3.04	2.92	96	2.00	66	0R	2H	1W	
76.50	79.55	3.05	2.91	95	2.62	86	0R	2H	1W	
79.55	82.60	3.05	2.96	97	1.19	39	0R	2H	1W	
82.60	85.65	3.05	2.74	90	2.17	71	0R	2H	1W	
85.65	88.70	3.05	2.97	97	2.10	69	0R	2H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
88.70	91.74	3.04	2.98	98	2.64	87	0R	2H	1W	
91.74	94.79	3.05	2.95	97	1.70	56	0R	2H	1W	
94.79	97.84	3.05	2.85	93	1.66	54	0R	2H	1W	
97.84	100.89	3.05	3.03	99	1.61	53	0R	2H	1W	
100.89	103.94	3.05	2.51	82	0.94	31	3R	2H	1W	
103.94	106.99	3.05	2.86	94	1.77	58	3R	2H	1W	
106.99	110.03	3.04	2.98	98	2.36	78	3R	2H	1W	
110.03	113.08	3.05	2.86	94	1.88	62	3R	2H	1W	
113.08	116.13	3.05	2.97	97	2.49	82	3R	2H	1W	
116.13	119.18	3.05	3.05	100	2.17	71	3R	2H	1W	
119.18	122.22	3.04	3.04	100	2.88	95	3R	2H	1W	
122.22	125.27	3.05	2.8	92	1.74	57	4R	2H	1W	
125.27	128.32	3.05	3.04	100	1.80	59	4R	2H	1W	
128.32	131.37	3.05	2.91	95	2.17	71	4R	3H	1W	fractures along bedding very common
131.37	134.42	3.05	2.96	97	1.34	44	4R	3H	1W	fractures along bedding very common.
134.42	137.46	3.04	3.04	100	1.42	47	4R	3H	1W	
137.46	140.51	3.05	3.05	100	2.74	90	4R	3H	1W	30cm section of weakly reactive decalcified limestone
140.51	143.56	3.05	3.03	99	2.42	79	3R	3H	1W	
143.56	146.61	3.05	2.97	97	2.57	84	1R	3H	1W	Majority of joints have massive orange realgar infill
146.61	149.66	3.05	2.89	95	2.05	67	3R	3H	1W	
149.66	152.70	3.04	3.02	99	2.15	71	4R	3H	1W	
152.70	155.75	3.05	2.92	96	2.25	74	4R	3H	1W	
155.75	158.80	3.05	2.99	98	2.32	76	4R	3H	1W	
158.80	161.85	3.05	2.97	97	2.60	85	4R	3H	1W	
161.85	164.90	3.05	2.99	98	2.20	72	4R	3H	1W	
164.90	167.94	3.04	3	99	2.45	81	4R	3H	1W	
167.94	170.99	3.05	2.96	97	2.65	87	4R	3H	1W	
170.99	174.04	3.05	2.93	96	1.99	65	4R	3H	1W	
174.04	177.09	3.05	2.92	96	1.87	61	4R	3H	1W	
177.09	180.14	3.05	3.05	100	1.56	51	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
180.14	183.18	3.04	3.04	100	2.10	69	4R	3H	1W	
183.18	186.23	3.05	3	98	2.33	76	2R	3H	1W	
186.23	189.28	3.05	3.05	100	2.66	87	2R	3H	1W	
189.28	192.33	3.05	3.05	100	2.24	73	2R	3H	1W	
192.33	195.38	3.05	2.97	97	1.82	60	3R	3H	1W	
195.38	198.42	3.04	2.95	97	2.37	78	3R	3H	1W	
198.42	201.47	3.05	2.8	92	2.15	70	4R	3H	1W	
201.47	204.52	3.05	3.02	99	2.10	69	4R	3H	1W	
204.52	207.57	3.05	3.05	100	2.61	86	4R	3H	1W	
207.57	210.62	3.05	2.94	96	2.70	89	3R	3H	1W	
210.62	213.67	3.05	3.05	100	2.03	67	3R	2H	1W	realgar fraccture splitting the core into 2
213.67	216.71	3.04	3.02	99	1.80	59	3R	2H	1W	
216.71	219.76	3.05	3.02	99	1.41	46	3R	2H	1W	
219.76	222.81	3.05	2.92	96	1.23	40	3R	3H	1W	
222.81	225.86	3.05	2.92	96	1.63	53	3R	2H	1W	
225.86	228.90	3.04	3	99	1.10	36	3R	2H	1W	
228.90	231.95	3.05	2.92	96	1.55	51	3R	1H	1W	
231.95	235.00	3.05	3.05	100	2.35	77	4R	3H	1W	
235.00	238.05	3.05	2.92	96	2.26	74	1R	3H	1W	realgar on joint surfaces
238.05	241.10	3.05	2.87	94	2.05	67	0R	3H	1W	
241.10	244.14	3.04	2.89	95	1.61	53	1R	2H	1W	
244.14	247.19	3.05	2.93	96	2.30	75	0R	3H	1W	
247.19	250.24	3.05	2.94	96	2.70	89	0R	3H	1W	
250.24	253.29	3.05	2.99	98	2.27	74	0R	3H	1W	
253.29	256.34	3.05	2.9	95	1.71	56	0R	3H	1W	
256.34	259.38	3.04	2.76	91	2.00	66	0R	3H	1W	
259.38	262.43	3.05	2.15	70	0.17	6	0R	3H	1W	
262.43	265.48	3.05	1.24	41	0.62	20	0R	3H	1W	
265.48	268.53	3.05	2.97	97	2.11	69	0R	3H	1W	
268.53	271.58	3.05	2.69	88	1.43	47	0R	3H	1W	
271.58	274.62	3.04	2.68	88	2.25	74	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
274.62	277.67	3.05	3.02	99	2.85	93	0R	3H	1W	
277.67	280.72	3.05	3	98	2.69	88	0R	3H	1W	
280.72	283.77	3.05	2.97	97	1.24	41	0R	3H	1W	
283.77	286.82	3.05	2.92	96	1.53	50	0R	3H	1W	
286.82	289.86	3.04	3.04	100	2.60	86	0R	3H	1W	
289.86	292.91	3.05	2.85	93	1.95	64	0R	3H	1W	
292.91	295.96	3.05	3.04	100	2.52	83	0R	3H	1W	
295.96	299.01	3.05	3.01	99	2.78	91	1R	3H	1W	
299.01	302.06	3.05	3.05	100	2.41	79	1R	3H	1W	
302.06	305.10	3.04	3.04	100	2.57	85	1R	2H	1W	super small gouge interval from 304.65-.85m
305.10	308.15	3.05	3.05	100	1.77	58	1R	3H	1W	
308.15	311.20	3.05	3.02	99	1.65	54	0R	2H	1W	
311.20	314.25	3.05	2.92	96	1.75	57	0R	2H	1W	
314.25	317.30	3.05	2.92	96	1.61	53	0R	2H	1W	
317.30	320.34	3.04	2.99	98	1.99	65	0R	2H	1W	
320.34	323.39	3.05	2.32	76	1.66	54	0R	2H	1W	small rz: 322.90-322.98m
323.39	326.44	3.05	2.95	97	2.00	66	0R	2H	1W	
326.44	329.49	3.05	3.05	100	2.28	75	0R	2H	1W	
329.49	332.54	3.05	3.03	99	1.72	56	0R	2H	1W	
332.54	335.58	3.04	3	99	2.09	69	2R	2H	1W	
335.58	338.63	3.05	2.72	89	2.05	67	2R	2H	1W	
338.63	341.68	3.05	3.04	100	2.47	81	2R	2H	1W	
341.68	344.73	3.05	2.72	89	1.79	59	2R	3H	1W	
344.73	346.86	2.13	1.86	87	0.47	22	2R	3H	1W	

OS -17-256

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W232551	☐	N17-099	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232598	☐	N17-101	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232593	☐	N17-101	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232589	☐	N17-101	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232584	☐	N17-101	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232495	☐	N17-094	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232556	☐	N17-099	Core	CS8	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232545	☐	N17-099	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232526	☐	N17-097	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232523	☐	N17-097	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232514	☐	N17-097	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232510	☐	N17-097	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232502	☐	N17-094	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232574	☐	N17-099	Core		☑	☐	☐
6.50	8.23	1.73	OVB	0.40	23	W232480	☐	N17-094	core		☐	☐	☐
8.23	11.28	3.05	OVB	0.33	11	W232481	☐	N17-094	core		☐	☐	☐
11.28	14.33	3.05	OVB	1.07	35	W232482	☐	N17-094	core		☐	☐	☐
14.33	17.37	3.04	OVB	0.53	17	W232483	☐	N17-094	core		☐	☐	☐
17.37	20.42	3.05	OVB	0.91	30	W232484	☐	N17-094	core		☐	☐	☐
20.42	23.47	3.05	OVB	1.35	44	W232485	☐	N17-094	core		☐	☐	☐
23.47	26.52	3.05	OVB	2.20	72	W232486	☐	N17-094	core		☐	☐	☐
26.52	29.57	3.05	OVB	1.83	60	W232487	☐	N17-094	core		☐	☐	☐
29.57	32.61	3.04	OVB	1.95	64	W232488	☐	N17-094	core		☐	☐	☐
32.61	35.66	3.05	OVB	1.44	47	W232489	☐	N17-094	core		☐	☐	☐
35.66	38.71	3.05	OVB	1.36	45	W232490	☐	N17-094	core		☐	☐	☐
38.71	41.76	3.05	OVB	2.41	79	W232491	☐	N17-094	core		☐	☐	☐
38.71	41.76	3.05	OVB	2.41	79	W232492	☐	N17-094	core		☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
41.76	44.81	3.05	OVB	1.97	65	W232493	☐	N17-094	core		☐	☐	☐
44.81	49.07	4.26	OVB	1.97	46	Q052494	☐	N17-C08	Chip		☐	☐	☐
49.07	55.17	6.10	MST	3.06	50	Q052495	☐	N17-C08	Chip		☐	☐	☐
55.17	61.26	6.09	MST	5.74	94	Q052496	☐	N17-C08	Chip		☐	☐	☐
61.26	67.36	6.10	MST	6.05	99	Q052497	☐	N17-C08	Chip		☐	☐	☐
67.36	73.46	6.10	MST	5.83	96	Q052498	☐	N17-C08	Chip		☐	☐	☐
73.46	79.55	6.09	MST	5.95	98	Q052499	☐	N17-C08	Chip		☐	☐	☐
79.55	85.65	6.10	MST	5.51	90	Q052500	☐	N17-C08	Chip		☐	☐	☐
85.65	91.74	6.09	MST	5.91	97	Q052501	☐	N17-C08	Chip		☐	☐	☐
91.74	94.79	3.05	MST	2.95	97	W232494	☐	N17-094	core		☐	☐	☐
94.79	97.84	3.05	MST	2.85	93	W232496	☐	N17-094	core		☐	☐	☐
97.84	100.89	3.05	MST	3.03	99	W232497	☐	N17-094	core		☐	☐	☐
100.89	103.94	3.05	MST	2.51	82	W232498	☐	N17-094	core		☐	☐	☐
103.94	106.99	3.05	LST	2.86	94	W232499	☐	N17-094	core		☐	☐	☐
103.94	106.99	3.05	LST	2.86	94	W232500	☐	N17-094	core		☐	☑	☐
106.99	110.03	3.04	LST	2.98	98	W232501	☐	N17-094	core		☐	☐	☐
110.03	113.08	3.05	LST	2.86	94	W232503	☐	N17-094	core		☐	☐	☐
113.08	116.13	3.05	LST	2.97	97	W232504	☐	N17-097	core		☐	☐	☐
116.13	119.18	3.05	LST	3.05	100	W232505	☐	N17-097	core		☐	☐	☐
116.13	119.18	3.05	LST	3.05	100	W232506	☐	N17-097	core		☐	☑	☐
119.18	122.22	3.04	LST	3.04	100	W232507	☐	N17-097	core		☐	☐	☐
122.22	125.27	3.05	LST	2.80	92	W232508	☐	N17-097	core		☐	☐	☐
125.27	128.32	3.05	LST	3.04	100	W232509	☐	N17-097	core		☐	☐	☐
128.32	131.37	3.05	LST	2.91	95	W232511	☐	N17-097	core		☐	☐	☐
131.37	133.43	2.06	LST	2.00	97	W232512	☐	N17-097	core		☐	☐	☐
133.43	135.09	1.66	LST	1.58	95	W232513	☐	N17-097	core		☐	☐	☐
135.09	136.59	1.50	LST	1.49	99	W232515	☐	N17-097	core		☐	☐	☐
136.59	138.70	2.11	LST	2.10	100	W232516	☐	N17-097	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
138.70	141.06	2.36	LST	2.36	100	W232517	☐	N17-097	core		☐	☐	☐
138.70	141.06	2.36	LST	2.36	100	W232518	☐	N17-097	core		☐	☐	☑
141.06	143.68	2.62	LST	2.47	94	W232519	☐	N17-097	core		☐	☐	☐
143.68	145.13	1.45	LST	1.43	99	W232520	☐	N17-097	core		☐	☐	☐
145.13	146.85	1.72	LST	1.72	100	W232521	☐	N17-097	core		☐	☐	☐
146.85	147.86	1.01	LST	0.98	97	W232522	☐	N17-097	core		☐	☐	☐
147.86	149.66	1.80	LST	1.75	97	W232524	☐	N17-097	core		☐	☐	☐
149.66	152.70	3.04	LST	3.00	99	W232525	☐	N17-097	core		☐	☐	☐
152.70	155.26	2.56	LST	2.47	96	W232527	☐	N17-097	core		☐	☐	☐
155.26	157.75	2.49	LST	2.33	94	W232528	☐	N17-097	core		☐	☐	☐
157.75	159.04	1.29	LST	1.28	99	W232529	☐	N17-097	core		☐	☐	☐
159.04	161.85	2.81	LST	2.81	100	W232530	☐	N17-097	core		☐	☐	☐
161.85	164.90	3.05	LST	2.99	98	W232531	☐	N17-097	core		☐	☐	☐
164.90	167.94	3.04	LST	3.04	100	W232532	☐	N17-097	core		☐	☐	☐
167.94	170.99	3.05	LST	3.05	100	W232533	☐	N17-097	core		☐	☐	☐
170.99	174.04	3.05	LST	3.00	98	W232534	☐	N17-097	core		☐	☐	☐
174.04	177.09	3.05	LST	2.95	97	W232535	☐	N17-097	core		☐	☐	☐
177.09	180.14	3.05	LST	3.05	100	W232536	☐	N17-097	core		☐	☐	☐
180.14	183.18	3.04	LST	3.04	100	W232537	☐	N17-097	core		☐	☐	☐
183.18	186.23	3.05	LST	2.96	97	W232538	☐	N17-097	core		☐	☐	☐
186.23	189.28	3.05	LST	3.05	100	W232539	☐	N17-097	core		☐	☐	☐
189.28	192.33	3.05	LST	3.05	100	W232540	☐	N17-099	Core		☐	☐	☐
192.33	195.38	3.05	LST	2.97	97	W232541	☐	N17-099	Core		☐	☐	☐
195.38	198.42	3.04	LST	2.96	97	W232542	☐	N17-099	Core		☐	☐	☐
198.42	201.47	3.05	LST	2.83	93	W232543	☐	N17-099	Core		☐	☐	☐
201.47	204.52	3.05	LST	3.00	98	W232544	☐	N17-099	Core		☐	☐	☐
204.52	207.57	3.05	LST	3.05	100	W232546	☐	N17-099	Core		☐	☐	☐
207.57	210.62	3.05	LST	3.03	99	W232547	☐	N17-099	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
210.62	211.97	1.35	LST	1.34	99	W232548	☐	N17-099	Core		☐	☐	☐
211.97	214.12	2.15	LST	2.15	100	W232549	☐	N17-099	Core		☐	☐	☐
214.12	214.97	0.85	LST	0.85	100	W232550	☐	N17-099	Core		☐	☐	☐
214.97	217.05	2.08	LST	1.97	95	W232552	☐	N17-099	Core		☐	☐	☐
217.05	220.08	3.03	LST	2.98	98	W232553	☐	N17-099	Core		☐	☐	☐
220.08	222.81	2.73	LST	2.65	97	W232554	☐	N17-099	Core		☐	☐	☐
222.81	225.86	3.05	LST	2.76	90	W232555	☐	N17-099	Core		☐	☐	☐
225.86	228.90	3.04	LST	3.01	99	W232557	☐	N17-099	Core		☐	☐	☐
228.90	230.00	1.10	LST	1.08	98	W232558	☐	N17-099	Core		☐	☐	☐
230.00	231.95	1.95	LST	1.81	93	W232559	☐	N17-099	Core		☐	☐	☐
230.00	231.95	1.95	LST	1.81	93	W232560	☐	N17-099	Core		☐	☐	☑
231.95	234.30	2.35	LST	2.30	98	W232561	☐	N17-099	Core		☐	☐	☐
234.30	235.00	0.70	LST	0.69	99	W232562	☐	N17-099	Core		☐	☐	☐
235.00	235.90	0.90	LST	0.90	100	W232563	☐	N17-099	Core		☐	☐	☐
235.90	238.05	2.15	LST	2.04	95	W232564	☐	N17-099	Core		☐	☐	☐
235.90	238.05	2.15	LST	2.04	95	W232565	☐	N17-099	Core		☐	☑	☐
238.05	241.10	3.05	DST	2.82	92	W232566	☐	N17-099	Core		☐	☐	☐
241.10	244.14	3.04	DST	2.90	95	W232567	☐	N17-099	Core		☐	☐	☐
244.14	247.19	3.05	DST	2.95	97	W232568	☐	N17-099	Core		☐	☐	☐
247.19	250.24	3.05	DST	2.94	96	W232569	☐	N17-099	Core		☐	☐	☐
250.24	253.29	3.05	DST	2.99	98	W232570	☐	N17-099	Core		☐	☐	☐
253.29	256.34	3.05	DST	2.90	95	W232571	☐	N17-099	Core		☐	☐	☐
256.34	259.38	3.04	DST	2.76	91	W232572	☐	N17-099	Core		☐	☐	☐
259.38	262.43	3.05	DST	2.15	70	W232573	☐	N17-099	Core		☐	☐	☐
262.43	265.48	3.05	DST	1.24	41	W232575	☐	N17-099	Core		☐	☐	☐
265.48	268.53	3.05	DST	2.97	97	W232576	☐	N17-101	Core		☐	☐	☐
268.53	271.58	3.05	DST	2.69	88	W232577	☐	N17-101	Core		☐	☐	☐
271.58	274.62	3.04	DST	2.68	88	W232578	☐	N17-101	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
274.62	277.67	3.05	DST	3.02	99	W232579	☐	N17-101	Core		☐	☐	☐
274.62	277.67	3.05	DST	3.00	98	W232580	☐	N17-101	Core		☐	☑	☐
277.67	280.72	3.05	DST	3.00	98	W232581	☐	N17-101	Core		☐	☐	☐
280.72	283.77	3.05	DST	2.97	97	W232582	☐	N17-101	Core		☐	☐	☐
283.77	286.82	3.05	DST	2.92	96	W232583	☐	N17-101	Core		☐	☐	☐
286.82	289.86	3.04	DST	3.04	100	W232585	☐	N17-101	Core		☐	☐	☐
289.86	292.91	3.05	DMT	2.85	93	W232586	☐	N17-101	Core		☐	☐	☐
292.91	295.96	3.05	DMT	3.04	100	W232587	☐	N17-101	Core		☐	☐	☐
295.96	299.01	3.05	DMT	3.01	99	W232588	☐	N17-101	Core		☐	☐	☐
299.01	302.06	3.05	DMT	3.05	100	W232590	☐	N17-101	Core		☐	☐	☐
302.06	304.22	2.16	DMT	2.08	96	W232591	☐	N17-101	Core		☐	☐	☐
304.22	305.74	1.52	DMT	1.49	98	W232592	☐	N17-101	Core		☐	☐	☐
305.74	307.93	2.19	DMT	2.17	99	W232594	☐	N17-101	Core		☐	☐	☐
305.74	307.93	2.19	DMT	2.17	99	W232595	☐	N17-101	Core		☐	☐	☑
307.93	309.32	1.39	DMT	1.38	99	W232596	☐	N17-101	Core		☐	☐	☐
309.32	311.20	1.88	DMT	1.84	98	W232597	☐	N17-101	Core		☐	☐	☐
311.20	314.25	3.05	SLT	2.92	96	W232599	☐	N17-101	Core		☐	☐	☐
314.25	317.30	3.05	SLT	2.92	96	W232600	☐	N17-101	Core		☐	☐	☐
317.30	320.34	3.04	SLT	2.99	98	W232601	☐	N17-101	Core		☐	☐	☐
320.34	322.89	2.55	SLT	2.03	80	W232602	☐	N17-101	Core		☐	☐	☐
322.89	324.33	1.44	SLT	1.39	97	W232603	☐	N17-101	Core		☐	☐	☐
324.33	327.08	2.75	SLT	1.75	64	W232604	☐	N17-101	Core		☐	☐	☐
327.08	330.02	2.94	SLT	2.94	100	W232605	☐	N17-101	Core		☐	☐	☐
330.02	332.67	2.65	SLT	2.10	79	W232606	☐	N17-101	Core		☐	☐	☐
332.67	335.58	2.91	LST	2.89	99	W232607	☐	N17-101	Core		☐	☐	☐
335.58	338.63	3.05	LST	2.72	89	W232608	☐	N17-101	Core		☐	☐	☐
338.63	341.68	3.05	LST	3.04	100	W232609	☐	N17-101	Core		☐	☐	☐
341.68	344.73	3.05	LST	2.72	89	W232610	☐	N17-101	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
344.73	346.86	2.13	LST	1.86	87	W232611	☐	N17-101	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
7.54	16.76	9.22	MST	FG	Light to medium grey mudstone. Heavy weathering, especially on joints. Weathering appears light brown in color. Rock is heavily fractured and is mostly rubble with very few pieces of core greater than 10cm in length. Around 13.10m there is some small amounts of dark purple/black oxidation material on the rock.							
						MD	GY					
						LT	GY	BD			Ca	1
16.76	78.16	61.40	SLT	FG	Heavily altered siltstone in the nadaleen fault zone. The fine grained rock is medium to dark grey. Textures are often poorly visible due to the heavy alteration in the rock. Box 3 (22.86-25.91m) shows the best shear zone textures. The bedding in that area is broken, folded and heavily deformed. The rock is very soft and most of it can be indented and marked with a fingernail or easily peeled/cut with a knife. Much of the rock is now clay material and agrilicious alteration of the siltstone sediments. From 29.20m-29.85m and 30.48m-30.65m there is a bit of limestone within the altered siltstone. This is clear as the rock reacts intensely with acid. There is visible red arsenic oxides on the core from ~31.10-31.45m and 32.23-33.25m. The aresenic oxides are a bright and easily visible orange to light red in color. The arsenic oxides are a small maybe ~5% of the altererd silstone rock. No apparent or visible calcite veins from 35.05-48.76m and any visible veins, intact or broken and sheared, are all non reactive to the acid and are likely quartz veins in heavily altered siltstone. More arsenic oxides seen as patchy and replacement texture between 36 and 36.57m. This is still only minor amounts of visible. Pyrite beings to appear at approximately 52 m parallel to bedding planes as fine depositional laminae. Thin white quartz/decarbonized carbonate stringers and veinlets occur from 53.5-57 m. Siliciclastic regains coherence and loses alteration at 62.48 m, with primary textures becoming visible and overall competence increase. Starry night conglomerate becomes prominent between 103.5-141 m.							

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
									CLY	5I		
						DK	GY		ASO	2I	Ca	10
						MD	GY	SH	ARG	4I	Re	5

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	7.54	7.54	0	0	0.00	0	0R	--	--	
7.54	9.14	1.60	1.31	82	0.31	19	0R	3H	5W	RBZ 7.54-7.93m, 8.16-8.75m, 9.10-9.14m
9.14	12.19	3.05	1.87	61	0.00	0	1R	3H	5W	RBZ 9.14-12.19m. Entire interval is rubble
12.19	15.24	3.05	1.76	58	0.00	0	0R	3H	5W	RBZ 12.19-15.24m, .entire interval is rubble. Some very minor oxidation on joints visible.
15.24	18.29	3.05	0.51	17	0.00	0	0R	3H	4W	RBZ 15.24-18.29m. Entire interval is rubble. Very poor recovery.
18.29	21.34	3.05	1.96	64	1.38	45	0R	1H	1W	RBZ 18.29-19.00m
21.34	24.38	3.04	2.76	91	2.31	76	0R	1H	1W	
24.38	27.43	3.05	2	66	1.18	39	0R	2H	1W	RBZ 26.12-27.00m
27.43	30.48	3.05	1.68	55	0.31	10	1R	2H	1W	RBZ 27.68-27.84m, 28.00-28.12m, 28.45-28.95m, 30.00-30.30m
30.48	33.52	3.04	2.12	70	0.34	11	1R	2H	1W	RBZ 30.70-31.30m, 31.65-32.00m, 32.40-33.24m
33.52	36.57	3.05	2.35	77	0.31	10	0R	2H	1W	RBZ 34.37-34.63m, 35.15-35.30m, 35.75-36.00m
36.57	39.62	3.05	0.92	30	0.00	0	0R	2H	1W	RBZ 36.57-36.74m, 37.00-39.62m
39.62	42.67	3.05	1.1	36	0.13	4	0R	2H	1W	RBZ 39.62-41.87m, 42.20-42.67m,
42.67	45.72	3.05	1.9	62	0.20	7	0R	2H	1W	RBZ 42.67-43.72m, 44.00-45.10m, 45.35-45.72m
45.72	48.77	3.05	2.58	85	1.10	36	0R	1H	1W	RBZ 45.72-45.90m, 47.24-47.55m, 48.16-48.36m,
48.77	51.82	3.05	1.24	41	0.12	4	0R	1H	1W	
51.82	54.87	3.05	1.87	61	0.11	4	0R	1H	1W	
54.87	57.91	3.04	2.27	75	0.78	26	0R	1H	1W	
57.91	60.96	3.05	1.48	49	0.00	0	0R	1H	1W	
60.96	64.01	3.05	1.64	54	0.21	7	0R	1H	1W	
64.01	67.06	3.05	1.62	53	0.00	0	0R	1H	1W	
67.06	70.10	3.04	2.89	95	1.71	56	0R	1H	1W	
70.10	73.15	3.05	2.48	81	0.85	28	0R	1H	1W	
73.15	76.20	3.05	2.33	76	0.30	10	0R	1H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
76.20	79.24	3.04	2.77	91	1.05	35	0R	2H	1W	
79.24	82.29	3.05	3.05	100	2.25	74	0R	3H	1W	
82.29	85.34	3.05	2.98	98	1.36	45	0R	3H	1W	
85.34	88.39	3.05	3.05	100	1.65	54	0R	3H	1W	
88.39	91.44	3.05	2.95	97	1.58	52	0R	3H	1W	
91.44	94.48	3.04	2.9	95	0.74	24	0R	2H	1W	
94.48	97.53	3.05	3.04	100	0.13	4	0R	3H	1W	
97.53	100.58	3.05	3.05	100	0.55	18	0R	3H	1W	
100.58	103.63	3.05	2.72	89	1.40	46	0R	3H	1W	
103.63	106.68	3.05	3.02	99	1.57	51	0R	3H	1W	
106.68	109.72	3.04	2.71	89	1.18	39	0R	2H	1W	
109.72	112.77	3.05	3.01	99	1.86	61	0R	2H	1W	
112.77	115.82	3.05	3.05	100	1.04	34	0R	3H	1W	
115.82	118.87	3.05	2.91	95	1.66	54	0R	3H	1W	
118.87	121.92	3.05	3.05	100	2.06	68	0R	3H	1W	
121.92	124.96	3.04	3.04	100	1.90	63	0R	2H	1W	
124.96	128.01	3.05	2.64	87	1.52	50	0R	3H	1W	
128.01	131.06	3.05	2.85	93	0.90	30	0R	4H	1W	
131.06	134.11	3.05	2.62	86	0.91	30	0R	3H	1W	
134.11	137.16	3.05	2.47	81	0.68	22	0R	4H	1W	
137.16	140.20	3.04	3.04	100	1.72	57	0R	3H	1W	
140.20	143.25	3.05	2.93	96	1.09	36	0R	3H	1W	
143.25	146.30	3.05	3.05	100	1.98	65	0R	3H	1W	
146.30	149.35	3.05	2.69	88	2.15	70	0R	3H	1W	
149.35	152.40	3.05	2.96	97	2.47	81	0R	3H	1W	
152.40	155.44	3.04	3.04	100	2.80	92	0R	3H	1W	
155.44	158.49	3.05	2.89	95	2.17	71	0R	3H	1W	
158.49	161.54	3.05	2.92	96	2.29	75	0R	3H	1W	
161.54	164.59	3.05	3.03	99	2.23	73	0R	3H	1W	
164.59	167.64	3.05	3.04	100	2.37	78	0R	3H	1W	
167.64	170.68	3.04	2.85	94	1.47	48	0R	3H	1W	RBZ 169.60m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
170.68	173.73	3.05	2.88	94	2.54	83	0R	3H	1W	RBZ 173.40m
173.73	176.78	3.05	2.72	89	2.15	70	0R	3H	1W	RBZ 176.50-176.78m
176.78	179.83	3.05	3.05	100	2.02	66	0R	3H	1W	
179.83	182.88	3.05	2.98	98	2.15	70	0R	3H	1W	
182.88	185.92	3.04	3.04	100	2.03	67	0R	3H	1W	
185.92	188.98	3.06	3.05	100	2.18	71	0R	3H	1W	
188.98	192.02	3.04	3.04	100	3.04	100	0R	3H	1W	
192.02	195.07	3.05	2.92	96	1.58	52	0R	3H	1W	
195.07	198.12	3.05	2.91	95	2.20	72	0R	3H	1W	
198.12	201.17	3.05	2.99	98	2.75	90	0R	3H	1W	
201.17	204.22	3.05	3.05	100	2.91	95	0R	3H	1W	
204.22	207.26	3.04	3.04	100	2.29	75	0R	3H	1W	
207.26	210.31	3.05	3.04	100	2.86	94	0R	3H	1W	
210.31	213.36	3.05	3.05	100	2.38	78	0R	3H	1W	
213.36	216.41	3.05	3.02	99	2.72	89	0R	3H	1W	
216.41	219.46	3.05	3.05	100	2.29	75	0R	3H	1W	
219.46	222.50	3.04	3.04	100	2.86	94	0R	3H	1W	
222.50	225.55	3.05	3.05	100	3.05	100	0R	3H	1W	
225.55	228.60	3.05	3.03	99	2.83	93	0R	3H	1W	
228.60	231.65	3.05	2.96	97	1.25	41	0R	3H	1W	
231.65	234.70	3.05	3.05	100	2.64	87	0R	3H	1W	
234.70	237.74	3.04	3.04	100	2.72	89	0R	3H	1W	
237.74	240.79	3.05	2.98	98	2.17	71	0R	3H	1W	
240.79	243.84	3.05	3.03	99	2.76	90	0R	3H	1W	
243.84	246.89	3.05	2.95	97	2.52	83	0R	3H	1W	
246.89	249.94	3.05	3.05	100	2.62	86	0R	3H	1W	
249.94	252.98	3.04	3.04	100	2.50	82	0R	3H	1W	
252.98	256.03	3.05	3.05	100	2.47	81	0R	3H	1W	
256.03	259.08	3.05	2.79	91	1.85	61	0R	3H	1W	
259.08	262.13	3.05	3.05	100	2.28	75	0R	3H	1W	
262.13	265.17	3.04	3.02	99	2.03	67	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
265.17	268.22	3.05	2.98	98	2.58	85	0R	3H	1W	
268.22	271.27	3.05	3.05	100	2.43	80	0R	3H	1W	
271.27	274.32	3.05	3.05	100	3.05	100	0R	3H	1W	
274.32	277.37	3.05	3.05	100	3.05	100	0R	3H	1W	
277.37	280.42	3.05	2.9	95	2.75	90	0R	3H	1W	
280.42	283.46	3.04	3.02	99	2.91	96	0R	3H	1W	
283.46	286.51	3.05	3.05	100	1.70	56	0R	3H	1W	
286.51	289.56	3.05	3.05	100	2.48	81	0R	3H	1W	
289.56	292.61	3.05	3.05	100	2.80	92	0R	3H	1W	
292.61	295.66	3.05	2.91	95	2.62	86	0R	3H	1W	
295.66	298.70	3.04	2.9	95	2.12	70	0R	3H	1W	
298.70	301.75	3.05	2.86	94	2.22	73	0R	2H	1W	
301.75	304.80	3.05	2.94	96	1.71	56	0R	3H	1W	

OS -17-257

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W231011	☐	N17-100	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231016	☐	N17-100	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231021	☐	N17-102	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231029	☐	N17-102	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231038	☐	N17-102	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231042	☐	N17-102	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231058	☐	N17-104	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231066	☐	N17-104	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231080	☐	N17-104	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231082	☐	N17-104	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231093	☐	N17-105	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231003	☐	N17-100	core		☑	☐	☐
7.54	9.14	1.60	MST, OVB	1.31	82	W230993	☐	N17-100	core		☐	☐	☐
9.14	12.19	3.05	MST	1.87	61	W230994	☐	N17-100	core		☐	☐	☐
12.19	15.24	3.05	MST	1.76	58	W230995	☐	N17-100	core		☐	☐	☐
15.24	16.76	1.52	MST	0.25	16	W230996	☐	N17-100	core		☐	☐	☐
16.76	18.29	1.53	SLT, MST	0.26	17	W230997	☐	N17-100	core		☐	☐	☐
18.29	21.34	3.05	SLT	1.96	64	W230998	☐	N17-100	core		☐	☐	☐
21.34	24.38	3.04	SLT	2.76	91	W230999	☐	N17-100	core		☐	☐	☐
24.38	27.43	3.05	SLT	2.00	66	W231000	☐	N17-100	core		☐	☐	☐
27.43	30.48	3.05	SLT	1.68	55	W231001	☐	N17-100	core		☐	☐	☐
30.48	33.52	3.04	SLT	2.12	70	W231002	☐	N17-100	core		☐	☐	☐
33.52	36.57	3.05	SLT	2.35	77	W231004	☐	N17-100	core		☐	☐	☐
33.52	36.57	3.05	SLT	2.35	77	W231005	☐	N17-100	core		☐	☐	☑
36.57	39.62	3.05	SLT	0.92	30	W231006	☐	N17-100	core		☐	☐	☐
39.62	42.67	3.05	SLT	1.10	36	W231007	☐	N17-100	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
42.67	45.72	3.05	SLT	1.90	62	W231008	☐	N17-100	core		☐	☐	☐
45.72	48.77	3.05	SLT	2.58	85	W231009	☐	N17-100	core		☐	☐	☐
48.77	51.82	3.05	SLT	1.24	41	W231010	☐	N17-100	core		☐	☐	☐
51.82	54.87	3.05	SLT	1.87	61	W231012	☐	N17-100	core		☐	☐	☐
51.82	54.87	3.05	SLT	1.87	61	W231013	☐	N17-100	core		☐	☑	☐
54.87	57.91	3.04	SLT	2.27	75	W231014	☐	N17-100	core		☐	☐	☐
57.91	60.96	3.05	SLT	1.48	49	W231015	☐	N17-100	core		☐	☐	☐
60.96	64.01	3.05	SLT	1.64	54	W231017	☐	N17-100	core		☐	☐	☐
64.01	65.53	1.52	SLT	0.33	22	W231018	☐	N17-102	core		☐	☐	☐
65.53	68.00	2.47	SLT	2.13	86	W231019	☐	N17-102	core		☐	☐	☐
68.00	69.98	1.98	SLT	1.87	94	W231020	☐	N17-102	core		☐	☐	☐
69.98	71.63	1.65	SLT	1.59	96	W231022	☐	N17-102	core		☐	☐	☐
71.63	73.99	2.36	SLT	1.73	73	W231023	☐	N17-102	core		☐	☐	☐
71.63	73.99	2.36	SLT	1.73	73	W231024	☐	N17-102	core		☐	☐	☑
73.99	76.20	2.21	SLT	1.35	61	W231025	☐	N17-102	core		☐	☐	☐
76.20	79.24	3.04	SLT	2.77	91	W231026	☐	N17-102	core		☐	☐	☐
79.24	82.29	3.05	SLC	3.05	100	W231027	☐	N17-102	core		☐	☐	☐
82.29	85.34	3.05	SLC	2.98	98	W231028	☐	N17-102	core		☐	☐	☐
85.34	88.39	3.05	SLC	3.05	100	W231030	☐	N17-102	core		☐	☐	☐
88.39	91.44	3.05	SLC	2.95	97	W231031	☐	N17-102	core		☐	☐	☐
91.44	94.48	3.04	SLC	2.90	95	W231032	☐	N17-102	core		☐	☐	☐
94.48	97.53	3.05	SLC	3.04	100	W231033	☐	N17-102	core		☐	☐	☐
97.53	100.58	3.05	SLC	3.05	100	W231034	☐	N17-102	core		☐	☐	☐
100.58	103.63	3.05	SLC	2.72	89	W231035	☐	N17-102	core		☐	☐	☐
103.63	106.68	3.05	SLC	3.02	99	W231036	☐	N17-102	core		☐	☐	☐
106.68	109.72	3.04	SLC	2.71	89	W231037	☐	N17-102	core		☐	☐	☐
109.72	112.77	3.05	SLC	3.01	99	W231039	☐	N17-102	core		☐	☐	☐
112.77	115.82	3.05	SLC	3.05	100	W231040	☐	N17-102	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
115.82	118.87	3.05	SLC	2.91	95	W231041	☐	N17-102	core		☐	☐	☐
118.87	121.92	3.05	SLC	3.05	100	W231043	☐	N17-102	core		☐	☐	☐
121.92	124.96	3.04	SLC	3.04	100	W231044	☐	N17-102	core		☐	☐	☐
121.92	124.96	3.04	SLC	3.04	100	W231045	☐	N17-102	core		☐	☑	☐
124.96	128.01	3.05	SLC	2.64	87	W231046	☐	N17-102	core		☐	☐	☐
128.01	131.06	3.05	SLC	2.85	93	W231047	☐	N17-102	core		☐	☐	☐
131.06	134.11	3.05	SLC	2.62	86	W231048	☐	N17-102	core		☐	☐	☐
134.11	137.16	3.05	SLC	2.47	81	W231049	☐	N17-102	core		☐	☐	☐
137.16	140.20	3.04	SLC	3.04	100	W231050	☐	N17-102	core		☐	☐	☐
140.20	143.25	3.05	SLC	2.93	96	W231051	☐	N17-102	core		☐	☐	☐
143.25	146.30	3.05	SLC	3.05	100	W231052	☐	N17-102	core		☐	☐	☐
146.30	149.35	3.05	SLC	2.69	88	W231053	☐	N17-102	core		☐	☐	☐
149.35	152.40	3.05	SLC	2.96	97	W231054	☐	N17-104	core		☐	☐	☐
152.40	155.44	3.04	SLC	3.04	100	W231055	☐	N17-104	core		☐	☐	☐
155.44	158.49	3.05	SLC	2.89	95	W231056	☐	N17-104	core		☐	☐	☐
158.49	161.54	3.05	SLC	2.92	96	W231057	☐	N17-104	core		☐	☐	☐
161.54	164.59	3.05	SLC	3.03	99	W231059	☐	N17-104	core		☐	☐	☐
164.59	167.64	3.05	SLC	3.04	100	W231060	☐	N17-104	core		☐	☐	☐
167.64	170.68	3.04	SLC	2.85	94	W231061	☐	N17-104	core		☐	☐	☐
170.68	173.73	3.05	SLC	2.88	94	W231062	☐	N17-104	core		☐	☐	☐
173.73	176.78	3.05	SLC	2.72	89	W231063	☐	N17-104	core		☐	☐	☐
176.78	179.83	3.05	SLC	3.05	100	W231064	☐	N17-104	core		☐	☐	☐
179.83	182.88	3.05	SLC	2.80	92	W231065	☐	N17-104	core		☐	☐	☐
182.88	185.93	3.05	SLC	3.04	100	W231067	☐	N17-104	core		☐	☐	☐
185.93	188.98	3.05	SLC	3.04	100	W231068	☐	N17-104	core		☐	☐	☐
188.98	192.02	3.04	SLC	2.76	91	W231069	☐	N17-104	core		☐	☐	☐
192.02	195.07	3.05	SLC	2.76	90	W231070	☐	N17-104	core		☐	☐	☐
192.02	195.07	3.05	SLC	2.76	90	W231071	☐	N17-104	core		☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
195.07	198.12	3.05	SLC	2.94	96	W231072	☐	N17-104	core		☐	☐	☐
198.12	201.17	3.05	SLC	2.97	97	W231073	☐	N17-104	core		☐	☐	☐
201.17	204.22	3.05	SLC	3.05	100	W231074	☐	N17-104	core		☐	☐	☐
201.17	204.22	3.05	SLC	3.05	100	W231075	☐	N17-104	core		☐	☑	☐
204.22	207.26	3.04	SLC	3.04	100	W231076	☐	N17-104	core		☐	☐	☐
207.26	210.31	3.05	SLC	3.03	99	W231077	☐	N17-104	core		☐	☐	☐
210.31	213.36	3.05	SLC	2.96	97	W231078	☐	N17-104	core		☐	☐	☐
213.36	216.41	3.05	SLC	2.99	98	W231079	☐	N17-104	core		☐	☐	☐
216.41	219.46	3.05	SLC	3.05	100	W231081	☐	N17-104	core		☐	☐	☐
219.46	222.50	3.04	SLC	3.03	100	W231083	☐	N17-104	core		☐	☐	☐
222.50	225.55	3.05	SLC	3.05	100	W231084	☐	N17-104	core		☐	☐	☐
225.55	228.60	3.05	SLC	3.04	100	W231085	☐	N17-104	core		☐	☐	☐
228.60	231.65	3.05	SLC	2.77	91	W231086	☐	N17-104	core		☐	☐	☐
231.65	234.70	3.05	SLC	3.05	100	W231087	☐	N17-104	core		☐	☐	☐
234.70	237.74	3.04	SLC	2.91	96	W231088	☐	N17-104	core		☐	☐	☐
237.74	240.79	3.05	SLC	2.83	93	W231089	☐	N17-104	core		☐	☐	☐
240.79	243.84	3.05	SLC	2.96	97	W231090	☐	N17-105	core		☐	☐	☐
243.84	246.89	3.05	SLC	2.95	97	W231091	☐	N17-105	core		☐	☐	☐
246.89	249.94	3.05	SLC	3.02	99	W231092	☐	N17-105	core		☐	☐	☐
249.94	252.98	3.04	SLC	3.00	99	W231094	☐	N17-105	core		☐	☐	☐
252.98	256.03	3.05	SLC	2.97	97	W231095	☐	N17-105	core		☐	☐	☐
256.03	259.08	3.05	SLC	2.67	88	W231096	☐	N17-105	core		☐	☐	☐
259.08	262.13	3.05	SLC	3.05	100	W231097	☐	N17-105	core		☐	☐	☐
262.13	265.17	3.04	SLC	2.91	96	W231098	☐	N17-105	core		☐	☐	☐
265.17	268.22	3.05	SLC	2.85	93	W231099	☐	N17-105	core		☐	☐	☐
265.17	268.22	3.05	SLC	2.85	93	W231100	☐	N17-105	core		☐	☑	☐
268.22	271.27	3.05	SLC	3.05	100	W231101	☐	N17-105	core		☐	☐	☐
271.27	274.32	3.05	SLC	3.05	100	W231102	☐	N17-105	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
274.32	277.37	3.05	SLC	3.05	100	W231103	☐	N17-105	core		☐	☐	☐
277.37	280.42	3.05	SLC	2.90	95	W231104	☐	N17-105	core		☐	☐	☐
280.42	283.46	3.04	SLC	3.02	99	W231105	☐	N17-105	core		☐	☐	☐
283.46	286.51	3.05	SLC	3.05	100	W231106	☐	N17-105	core		☐	☐	☐
286.51	289.56	3.05	SLC	3.05	100	W231107	☐	N17-105	core		☐	☐	☐
289.56	292.61	3.05	SLC	3.05	100	W231108	☐	N17-105	core		☐	☐	☐
292.61	295.66	3.05	SLC	2.91	95	W231109	☐	N17-105	core		☐	☐	☐
295.66	298.70	3.04	SLC	2.90	95	W231110	☐	N17-105	core		☐	☐	☐
298.70	301.75	3.05	SLC	2.86	94	W231111	☐	N17-105	core		☐	☐	☐
301.75	304.80	3.05	SLC	2.94	96	W231112	☐	N17-105	core		☐	☐	☐

OS -17-258

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
13.41	121.62	108.21	MST	VF	Fine grained, laminated mudstone with colour variations (light greenish-grey to maroon). Core is heavily fractured and mostly rubble up to about 35-40m depth. The core tends to becoem lighter grey with depth and still with a light green hue to it. There is oxidation downhole between 50-52m on all of the joints. Oxidation is a light to medium brown in color. There is a small shear zone between 68-71m, 76-76.80m, and 79.40-49.86m. There are some clasts of mudstone bedding within the softer sheared material. The sheared materail itself is a darker greenish grey, very soft and can be scratched by a fingernail. There are few veinlets of quartz and even fewer quartz veins in the mudstoen unit (up to 80.52m). Overall the mudstone looks quite uniform. Light green grey mudstone continues up to 121.62m where we some into the purple mudstone (still OMST1) sharp contact where the purple mudstone and green grey mudstone is interbeded.							
						LT	GN					
						MD	GY					
						LT	GY	BD	OXI	2I	Qz	4
121.62	166.95	45.33	MST	VF	Interbedded purple mudstone with the green grey mudstone, both OMST1. some areas starting around 128m up to about 144.50m show a convoluted and brecciated texture. This may be from some fluid alteration and is only seen in the grey green colored mudstone that is still interbedded with the purple colored mudstone unit. More quartz veins are seen as depth increases but they are mostly found within the mudstone areas that look like they have possibly been altered.							
						LT	GN					
						LT	GY					
						MD	PU	BD			Qz	12

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
166.95	320.43	153.48	LST	MG	OLST1 limestone unit with a sharp contact just before 167m from the mudstone to limestone. Contact is very clear when core is wet. Limestone is light to medium grey and interbedded. Limestone reacts strongly to acid. There area a few larger veins of calcite bewteen 169.40-169.75m. Massize calcite veins and vein breccias appear far more frequently with depth. Between 178.38-205.00m there are a few that are 2-4cm wide. Stylolytes are commonly seen near or surrounding these larger calcite veins but they are not the easiest to see as the stylolytes tend to be faint. There is some mudstone interbedded between 170-171.30m (looks to be the last appearance of mudstone) Some of the limestone beds are more silty and have little to no acid reaction even when scratched to a powder for testing. OLST1 is light to medium grey on average but the more silty beds are a dark grey. Majority of the calcite veins cross cut the limestone bedding. There is some alteration in the limestone (probably altered to some clay material) occuring at ~170.23m and at 198.20m. Realgar in quartz veins between 249.02-262.74 m, with some crystalline realgar on fracture surfaces. There is a higher silt component associated with the realgar, as the limestone is only weakly effervescent. Realgar present along fractures from 273-285 m, appearing more pervsive than realgar in quartz veins seen previously. Interbedding of weakly reactive darker grey dolostone begins at approximately 279 m, continuing until the contact. There are two 20-30 cm wide rudstone interbeds from 296.62-297.48 m. Realgar along fractures continues from 292 towards the contact, but is weaker in general.							
						DK	GY					
						LT	GY					
						MD	GY	BD				

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
320.43	365.54	45.11	DST	MG	O-DST dolostone. Medium grey with thin silty interbeds and stylolites with black infill. Bedding is often disturbed, showing soft sediment deformation, strain, and offset along microfaults. Realgar is hosted along fracture faces and in some white quartz-calcite veinlets and stringers. Most realgar is found in fractures, not veinlets. Large blebs of pyrite are found between (not continued as we are waiting for blocks to be confirmed)							
											Re	0.5
											Py	0.5
365.54	393.37	27.83	DMT	MG	O-DMT diamictite with interbedded contact with O-DST1 dolostone. Diamictite is non calcareous, with dark grey silty matrix and poorly sorted, sub angular clasts. Clasts range from coarse sand size to 20 cm wide cobbles. Clasts consist of dolostone, bedded limestone, quartz-carbonate-pyrite veins, and massive pyrite. Clasts occasionally show preferential orientation with a general bedding, but bedding is overall poorly defined at 35 degrees TCA. Some realgar on few fracture surfaces, but overall only trace realgar in this section. There is an interbedded gradational contact with the underlying O-DMT siltstone.							
											Re	0.1
393.37	404.77	11.40	SLT	FG	MAYBE BELONGS TO OLST2. Dark grey-greenish thinly bedded noncalcareous siltstone underlying the diamictite. Thin bedding is generally at 30-40 degrees TCA. Grey-greenish beds are non calcareous, with the darker grey beds showing some effervescence. Rare pyritic beds, focused around 398.2 m with some alteration and clay development. Very few white quartz-calcite veinlets that are nearly perpendicular to bedding orientation. Short 17 cm diamictite section at 403 m. Thin interbeds with OLST-2 limestone begin at 401.77 m and continue until the complete transition to limestone at 404.77 m.							
											Py	0.1

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	5.05	5.05	0	0	0.00	0	--	--	--	Casing - no recovery
5.05	6.71	1.66	0.2	12	0.00	0	--	--	--	Cave
6.71	9.75	3.04	0.32	11	0.00	0	0R	3H	3W	Cave
9.75	12.04	2.29	0.82	36	0.00	0	0R	3H	3W	Rubble and cave
12.04	14.33	2.29	1.44	63	0.00	0	0R	3H	3W	Rubble and cave
14.33	17.37	3.04	1.29	42	0.00	0	0R	3H	3W	Rubble and cave
17.37	20.27	2.90	2.51	87	0.24	8	0R	3H	3W	Rubble and cave
20.27	22.86	2.59	1.56	60	0.31	12	0R	3H	3W	Rubble and cave
22.86	24.99	2.13	0.35	16	0.13	6	0R	3H	3W	
24.99	26.52	1.53	1.08	71	0.12	8	0R	3H	3W	
26.52	29.57	3.05	2.48	81	0.34	11	0R	3H	2W	
29.57	32.61	3.04	3	99	1.09	36	0R	3H	2W	
32.61	35.66	3.05	2.91	95	0.93	30	1R	3H	1W	
35.66	38.71	3.05	3.05	100	1.48	49	0R	3H	1W	
38.71	41.76	3.05	3.05	100	1.66	54	0R	3H	1W	
41.76	44.81	3.05	3.05	100	1.99	65	0R	3H	1W	
44.81	47.85	3.04	3.03	100	1.12	37	0R	1H	1W	
47.85	50.90	3.05	2.94	96	0.85	28	0R	3H	1W	
50.90	53.95	3.05	3.03	99	1.95	64	0R	3H	1W	
53.95	57.00	3.05	3	98	1.29	42	0R	3H	1W	
57.00	60.05	3.05	2.88	94	1.75	57	0R	3H	1W	
60.05	63.09	3.04	3	99	1.20	39	0R	3H	1W	
63.09	66.14	3.05	3.05	100	2.49	82	0R	3H	1W	
66.14	69.19	3.05	3.05	100	2.76	90	0R	2H	1W	
69.19	72.24	3.05	2.63	86	1.81	59	0R	1H	2W	
72.24	75.29	3.05	2.98	98	1.19	39	0R	3H	1W	
75.29	78.33	3.04	3.04	100	1.66	55	1R	3H	1W	
78.33	81.38	3.05	2.45	80	1.36	45	0R	3H	1W	RBZ 81.00-81.38m
81.38	84.43	3.05	2.1	69	0.64	21	0R	3H	1W	RBZ 81.80-81.90m, 82.45-82.80m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
84.43	87.48	3.05	2.74	90	1.41	46	0R	3H	1W	
87.48	90.53	3.05	2.82	92	1.46	48	0R	3H	1W	
90.53	93.57	3.04	2.75	90	1.06	35	0R	3H	1W	
93.57	96.63	3.06	3.05	100	2.30	75	0R	3H	1W	
96.63	99.67	3.04	2.99	98	1.99	65	0R	3H	1W	
99.67	102.72	3.05	2.9	95	1.84	60	0R	3H	1W	
102.72	105.77	3.05	3	98	2.54	83	0R	3H	1W	
105.77	108.81	3.04	3.01	99	2.47	81	0R	3H	1W	
108.81	111.86	3.05	2.93	96	2.73	90	0R	3H	1W	
111.86	114.91	3.05	2.98	98	2.33	76	0R	3H	1W	
114.91	117.96	3.05	2.93	96	2.36	77	0R	3H	1W	
117.96	121.01	3.05	2.87	94	1.69	55	0R	3H	1W	
121.01	124.05	3.04	2.97	98	1.47	48	0R	3H	1W	
124.05	127.10	3.05	2.94	96	2.02	66	0R	3H	1W	
127.10	130.14	3.04	2.76	91	1.40	46	0R	3H	1W	
130.14	133.19	3.05	2.94	96	2.22	73	0R	3H	1W	
133.19	136.24	3.05	3.01	99	2.17	71	0R	3H	1W	
136.24	139.29	3.05	2.86	94	0.71	23	0R	3H	1W	
139.29	142.34	3.05	2.77	91	2.04	67	0R	3H	1W	
142.34	145.38	3.04	2.92	96	1.34	44	0R	3H	1W	
145.38	148.43	3.05	3.03	99	1.21	40	0R	3H	1W	
148.43	151.48	3.05	2.95	97	1.77	58	0R	3H	1W	
151.48	154.53	3.05	2.85	93	2.38	78	0R	3H	1W	
154.53	157.58	3.05	3.03	99	1.95	64	0R	3H	1W	
157.58	160.62	3.04	2.83	93	2.43	80	0R	3H	1W	
160.62	163.67	3.05	2.9	95	2.12	70	1R	3H	1W	
163.67	166.72	3.05	2.88	94	2.31	76	2R	3H	1W	
166.72	169.77	3.05	3.05	100	2.09	69	3R	3H	1W	
169.77	172.82	3.05	3.05	100	2.30	75	2R	3H	1W	
172.82	175.87	3.05	3.05	100	2.49	82	3R	4H	1W	
175.87	178.92	3.05	3.05	100	2.33	76	3R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
178.92	181.97	3.05	2.98	98	2.56	84	3R	3H	1W	
181.97	185.01	3.04	3.04	100	2.82	93	3R	3H	1W	
185.01	188.06	3.05	2.99	98	2.90	95	2R	3H	1W	
188.06	191.11	3.05	2.99	98	2.32	76	3R	4H	1W	
191.11	194.16	3.05	3.05	100	2.00	66	3R	4H	1W	
194.16	197.21	3.05	3.04	100	1.89	62	3R	4H	1W	
197.21	200.25	3.04	3	99	2.32	76	3R	3H	1W	
200.25	203.30	3.05	3.05	100	2.23	73	3R	3H	1W	
203.30	206.35	3.05	2.85	93	1.59	52	3R	3H	1W	
206.35	209.40	3.05	3.05	100	1.92	63	3R	3H	1W	
209.40	212.45	3.05	3.03	99	2.36	77	4R	3H	1W	
212.45	215.49	3.04	2.93	96	1.13	37	4R	3H	1W	
215.49	218.54	3.05	3.05	100	2.04	67	4R	3H	1W	
218.54	221.59	3.05	3.05	100	2.26	74	4R	3H	1W	
221.59	224.64	3.05	2.9	95	2.22	73	4R	3H	1W	
224.64	227.69	3.05	3.05	100	2.00	66	4R	3H	1W	
227.69	230.73	3.04	3.04	100	1.89	62	4R	3H	1W	
230.73	233.78	3.05	3.02	99	2.21	72	3R	3H	1W	
233.78	236.83	3.05	2.91	95	2.36	77	3R	3H	1W	
236.83	239.88	3.05	3.05	100	2.53	83	4R	3H	1W	
239.88	242.93	3.05	3.05	100	2.57	84	4R	3H	1W	
242.93	245.97	3.04	3.04	100	2.46	81	4R	3H	1W	
245.97	249.02	3.05	3.05	100	2.42	79	3R	4H	1W	
249.02	252.07	3.05	2.68	88	1.49	49	4R	3H	1W	
252.07	255.12	3.05	2.86	94	1.13	37	2R	3H	1W	Multiple Rubbly broken zones in this interval
255.12	258.17	3.05	3.05	100	2.66	87	3R	3H	1W	
258.17	261.21	3.04	3.04	100	2.44	80	4R	4H	1W	
261.21	264.26	3.05	2.88	94	2.57	84	4R	4H	1W	
264.26	267.31	3.05	3.05	100	2.78	91	4R	4H	1W	
267.31	270.36	3.05	3	98	2.79	91	4R	3H	1W	
270.36	273.41	3.05	3.05	100	2.89	95	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
273.41	276.14	2.73	2.71	99	2.71	99	3R	3H	1W	
276.14	279.19	3.05	2.92	96	2.51	82	3R	3H	1W	
279.19	282.24	3.05	2.84	93	1.69	55	2R	3H	1W	
282.24	285.29	3.05	3	98	2.37	78	2R	3H	1W	
285.29	288.34	3.05	2.87	94	2.65	87	3R	3H	1W	
288.34	291.38	3.04	3.01	99	2.91	96	4R	3H	1W	
291.38	294.43	3.05	2.88	94	2.59	85	4R	3H	1W	
294.43	297.48	3.05	3.05	100	2.89	95	4R	3H	1W	
297.48	300.53	3.05	2.81	92	2.14	70	2R	3H	1W	
300.53	303.58	3.05	3.03	99	2.20	72	2R	3H	1W	
303.58	306.62	3.04	2.93	96	2.11	69	2R	3H	1W	
306.62	309.67	3.05	3.05	100	2.63	86	2R	3H	1W	
309.67	312.72	3.05	2.85	93	1.58	52	2R	3H	1W	
312.72	315.77	3.05	3	98	2.14	70	4R	3H	1W	
315.77	318.82	3.05	3	98	1.99	65	4R	3H	1W	
318.82	321.86	3.04	2.99	98	1.67	55	4R	3H	1W	
321.86	324.91	3.05	2.85	93	1.83	60	2R	3H	1W	
324.91	327.96	3.05	2.92	96	1.05	34	0R	3H	1W	
327.96	331.01	3.05	2.96	97	1.15	38	0R	3H	1W	
331.01	334.06	3.05	2.97	97	2.03	67	0R	3H	1W	
334.06	337.11	3.05	3.02	99	2.79	91	0R	3H	1W	
337.11	340.16	3.05	2.67	88	1.37	45	0R	3H	1W	
340.16	343.20	3.04	3.04	100	2.45	81	0R	3H	1W	
343.20	346.25	3.05	2.85	93	1.64	54	0R	3H	1W	
346.25	349.30	3.05	3.01	99	2.81	92	0R	3H	1W	
349.30	352.35	3.05	2.96	97	2.43	80	0R	3H	1W	
352.35	355.40	3.05	2.76	90	2.07	68	0R	3H	1W	
355.40	358.44	3.04	2.95	97	2.20	72	0R	3H	1W	
358.44	361.49	3.05	3.03	99	2.62	86	0R	3H	1W	
361.49	364.54	3.05	2.8	92	1.34	44	0R	3H	1W	0.25m RBZ
364.54	367.59	3.05	3.05	100	2.70	89	0R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
367.59	370.64	3.05	3.02	99	2.64	87	1R	3H	1W	
370.64	373.68	3.04	2.96	97	2.78	91	4R	3H	1W	
373.68	376.73	3.05	3.02	99	2.94	96	4R	3H	1W	
376.73	379.78	3.05	2.93	96	2.70	89	4R	3H	1W	
379.78	382.83	3.05	3	98	2.62	86	4R	3H	1W	
382.83	385.88	3.05	2.99	98	2.90	95	4R	3H	1W	
385.88	388.92	3.04	3.04	100	2.85	94	4R	3H	1W	
388.92	391.97	3.05	2.17	71	1.35	44	2R	3H	1W	
391.97	395.02	3.05	2.94	96	2.58	85	1R	3H	1W	
395.02	398.07	3.05	3.05	100	2.72	89	0R	3H	1W	
398.07	401.12	3.05	2.88	94	2.24	73	0R	3H	1W	
401.12	404.16	3.04	3.03	100	3.03	100	1R	3H	1W	
404.16	407.21	3.05	2.87	94	2.66	87	4R	3H	1W	
407.21	410.26	3.05	3.03	99	2.82	92	4R	3H	1W	
410.26	413.31	3.05	3.05	100	3.00	98	4R	3H	1W	
413.31	416.36	3.05	3.05	100	2.87	94	0R	3H	1W	
416.36	419.40	3.04	2.99	98	2.68	88	4R	3H	1W	
419.40	422.45	3.05	2.95	97	2.72	89	4R	3H	1W	

OS -17-258

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W232695	☐	N17-107	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232759	☐	N17-111	Core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232744	☐	N17-109	Core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232739	☐	N17-109	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232728	☐	N17-109	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232724	☐	N17-109	Core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232620	☐	N17-103	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232706	☐	N17-107	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232687	☐	N17-107	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232678	☐	N17-106	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232673	☐	N17-106	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232670	☐	N17-106	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232658	☐	N17-106	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232647	☐	N17-103	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232646	☐	N17-103	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232640	☐	N17-103	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232712	☐	N17-107	Core	CS2	☐	☐	☐
5.05	8.10	3.05	OVB	0.81	27	W232612	☐	N17-103	core		☐	☐	☐
8.10	11.00	2.90	OVB	2.43	84	W232613	☐	N17-103	core		☐	☐	☐
11.00	14.00	3.00	OVB	3.00	100	W232614	☐	N17-103	core		☐	☐	☐
14.00	16.95	2.95	MST	2.95	100	W232615	☐	N17-103	core		☐	☐	☐
16.95	20.00	3.05	MST	3.05	100	W232616	☐	N17-103	core		☐	☐	☐
20.00	22.81	2.81	MST	2.75	98	W232617	☐	N17-103	core		☐	☐	☐
22.81	25.41	2.60	MST	1.40	54	W232618	☐	N17-103	core		☐	☐	☐
25.41	26.52	1.11	MST	1.11	100	W232619	☐	N17-103	core		☐	☐	☐
26.52	29.57	3.05	MST	2.48	81	W232621	☐	N17-103	core		☐	☐	☐
29.57	32.61	3.04	MST	3.00	99	W232622	☐	N17-103	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
32.61	35.66	3.05	MST	2.91	95	W232623	☐	N17-103	core		☐	☐	☐
35.66	38.71	3.05	MST	3.05	100	W232624	☐	N17-103	core		☐	☐	☐
38.71	44.81	6.10	MST	6.10	100	Q052512	☐	N17-C08	Chip		☐	☐	☐
44.81	50.90	6.09	MST	5.97	98	Q052513	☐	N17-C08	Chip		☐	☐	☐
50.90	57.00	6.10	MST	6.03	99	Q052514	☐	N17-C08	Chip		☐	☐	☐
57.00	63.09	6.09	MST	5.88	97	Q052515	☐	N17-C08	Chip		☐	☐	☐
63.09	66.14	3.05	MST	3.05	100	W232625	☐	N17-103	core		☐	☐	☐
66.14	69.19	3.05	MST	3.05	100	W232626	☐	N17-103	core		☐	☐	☐
69.19	72.24	3.05	MST	2.63	86	W232627	☐	N17-103	core		☐	☐	☐
72.24	75.29	3.05	MST	2.98	98	W232628	☐	N17-103	core		☐	☐	☐
75.29	78.33	3.04	MST	3.04	100	W232629	☐	N17-103	core		☐	☐	☐
78.33	81.38	3.05	MST	2.45	80	W232630	☐	N17-103	core		☐	☐	☐
81.38	84.43	3.05	MST	2.10	69	W232631	☐	N17-103	core		☐	☐	☐
84.43	87.48	3.05	MST	2.74	90	W232632	☐	N17-103	core		☐	☐	☐
87.48	90.53	3.05	MST	2.82	92	W232633	☐	N17-103	core		☐	☐	☐
90.53	93.57	3.04	MST	2.75	90	W232634	☐	N17-103	core		☐	☐	☐
93.57	96.63	3.06	MST	3.05	100	W232635	☐	N17-103	core		☐	☐	☐
96.63	99.67	3.04	MST	2.99	98	W232636	☐	N17-103	core		☐	☐	☐
99.67	105.77	6.10	MST	5.90	97	Q052517	☐	N17-C08	Chip		☐	☐	☐
105.77	111.86	6.09	MST	5.94	98	Q052518	☐	N17-C08	Chip		☐	☐	☐
111.86	117.96	6.10	MST	5.91	97	Q052519	☐	N17-C08	Chip		☐	☐	☐
117.96	121.01	3.05	MST	2.87	94	Q052520	☐	N17-C08	Chip		☐	☐	☐
121.01	125.58	4.57	MST	4.55	100	Q052521	☐	N17-C08	Chip		☐	☐	☐
125.58	128.62	3.04	MST	2.79	92	W232637	☐	N17-103	core		☐	☐	☐
125.58	128.62	3.04	MST	2.79	92	W232638	☐	N17-103	core		☐	☐	☑
128.62	131.67	3.05	MST	2.87	94	W232639	☐	N17-103	core		☐	☐	☐
131.67	134.72	3.05	MST	2.92	96	W232641	☐	N17-103	core		☐	☐	☐
134.72	137.76	3.04	MST	2.85	94	W232642	☐	N17-103	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
137.76	140.81	3.05	MST	2.86	94	W232643	☐	N17-103	core		☐	☐	☐
137.76	140.81	3.05	MST	2.86	94	W232644	☐	N17-103	core		☐	☑	☐
140.81	143.86	3.05	MST	2.70	89	W232645	☐	N17-103	core		☐	☐	☐
143.86	146.91	3.05	MST	2.88	94	W232648	☐	N17-106	core		☐	☐	☐
146.91	149.96	3.05	MST	2.75	90	W232649	☐	N17-106	core		☐	☐	☐
149.96	153.00	3.04	MST	2.84	93	W232650	☐	N17-106	core		☐	☐	☐
153.00	156.05	3.05	MST	2.89	95	W232651	☐	N17-106	core		☐	☐	☐
156.05	159.10	3.05	MST	2.87	94	W232652	☐	N17-106	core		☐	☐	☐
159.10	162.15	3.05	MST	3.00	98	W232653	☐	N17-106	core		☐	☐	☐
162.15	165.20	3.05	MST	2.90	95	W232654	☐	N17-106	core		☐	☐	☐
165.20	168.24	3.04	MST	2.94	97	W232655	☐	N17-106	core		☐	☐	☐
168.24	169.77	1.53	LST	1.51	99	W232656	☐	N17-106	core		☐	☐	☐
169.77	172.82	3.05	LST	3.05	100	W232657	☐	N17-106	core		☐	☐	☐
172.82	175.87	3.05	LST	3.05	100	W232659	☐	N17-106	core		☐	☐	☐
175.87	178.92	3.05	LST	3.05	100	W232660	☐	N17-106	core		☐	☐	☐
178.92	181.97	3.05	LST	2.98	98	W232661	☐	N17-106	core		☐	☐	☐
181.97	185.01	3.04	LST	3.04	100	W232662	☐	N17-106	core		☐	☐	☐
185.01	188.06	3.05	LST	2.99	98	W232663	☐	N17-106	core		☐	☐	☐
188.06	191.11	3.05	LST	2.99	98	W232664	☐	N17-106	core		☐	☐	☐
191.11	194.16	3.05	LST	3.05	100	W232665	☐	N17-106	core		☐	☐	☐
194.16	197.21	3.05	LST	3.04	100	W232666	☐	N17-106	core		☐	☐	☐
197.21	200.25	3.04	LST	3.00	99	W232667	☐	N17-106	core		☐	☐	☐
197.21	200.25	3.04	LST	3.00	99	W232668	☐	N17-106	core		☐	☐	☑
200.25	203.30	3.05	LST	3.05	100	W232669	☐	N17-106	core		☐	☐	☐
203.30	206.35	3.05	LST	2.85	93	W232671	☐	N17-106	core		☐	☐	☐
206.35	209.40	3.05	LST	3.05	100	W232672	☐	N17-106	core		☐	☐	☐
209.40	212.45	3.05	LST	3.03	99	W232674	☐	N17-106	core		☐	☐	☐
212.45	215.49	3.04	LST	2.93	96	W232675	☐	N17-106	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
215.49	218.54	3.05	LST	3.05	100	W232676	☐	N17-106	core		☐	☐	☐
218.54	221.59	3.05	LST	3.05	100	W232677	☐	N17-106	core		☐	☐	☐
221.59	224.64	3.05	LST	2.90	95	W232679	☐	N17-106	core		☐	☐	☐
224.64	227.69	3.05	LST	3.05	100	W232680	☐	N17-106	core		☐	☐	☐
227.69	230.73	3.04	LST	3.04	100	W232681	☐	N17-106	core		☐	☐	☐
230.73	233.78	3.05	LST	3.02	99	W232682	☐	N17-106	core		☐	☐	☐
230.73	233.78	3.05	LST	3.02	99	W232683	☐	N17-106	core		☐	☑	☐
233.78	236.83	3.05	LST	2.91	95	W232684	☐	N17-107	Core		☐	☐	☐
236.83	239.88	3.05	LST	3.05	100	W232685	☐	N17-107	Core		☐	☐	☐
239.88	242.93	3.05	LST	3.05	100	W232686	☐	N17-107	Core		☐	☐	☐
242.93	245.97	3.04	LST	3.04	100	W232688	☐	N17-107	Core		☐	☐	☐
245.97	249.02	3.05	LST	3.05	100	W232689	☐	N17-107	Core		☐	☐	☐
249.02	250.55	1.53	LST	1.32	86	W232690	☐	N17-107	Core		☐	☐	☐
250.55	252.57	2.02	LST	1.64	81	W232691	☐	N17-107	Core		☐	☐	☐
252.57	253.59	1.02	LST	0.66	65	W232692	☐	N17-107	Core		☐	☐	☐
252.57	253.59	1.02	LST	0.66	65	W232693	☐	N17-107	Core		☐	☐	☑
253.59	255.12	1.53	LST	1.42	93	W232694	☐	N17-107	Core		☐	☐	☐
255.12	258.17	3.05	LST	3.05	100	W232696	☐	N17-107	Core		☐	☐	☐
258.17	259.69	1.52	LST	1.39	91	W232697	☐	N17-107	Core		☐	☐	☐
259.69	262.74	3.05	LST	2.83	93	W232698	☐	N17-107	Core		☐	☐	☐
262.74	265.79	3.05	LST	3.05	100	W232699	☐	N17-107	Core		☐	☐	☐
265.79	268.83	3.04	LST	3.04	100	W232700	☐	N17-107	Core		☐	☐	☐
268.83	271.88	3.05	LST	2.92	96	W232701	☐	N17-107	Core		☐	☐	☐
271.88	274.93	3.05	LST	3.05	100	W232702	☐	N17-107	Core		☐	☐	☐
271.88	274.93	3.05	LST	3.05	100	W232703	☐	N17-107	Core		☐	☑	☐
274.93	277.98	3.05	LST	2.27	74	W232704	☐	N17-107	Core		☐	☐	☐
277.98	280.26	2.28	LST	1.63	71	W232705	☐	N17-107	Core		☐	☐	☐
280.26	283.03	2.77	LST	2.55	92	W232707	☐	N17-107	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
283.03	285.29	2.26	LST	2.20	97	W232708	☐	N17-107	Core		☐	☐	☐
285.29	288.34	3.05	LST	2.87	94	W232709	☐	N17-107	Core		☐	☐	☐
288.34	291.38	3.04	LST	3.01	99	W232710	☐	N17-107	Core		☐	☐	☐
291.38	294.43	3.05	LST	2.88	94	W232711	☐	N17-107	Core		☐	☐	☐
294.43	297.48	3.05	LST	3.05	100	W232713	☐	N17-107	Core		☐	☐	☐
297.48	300.53	3.05	LST	2.81	92	W232714	☐	N17-107	Core		☐	☐	☐
300.53	303.58	3.05	LST	3.03	99	W232715	☐	N17-107	Core		☐	☐	☐
303.58	306.62	3.04	LST	2.93	96	W232716	☐	N17-107	Core		☐	☐	☐
306.62	309.67	3.05	LST	3.05	100	W232717	☐	N17-107	Core		☐	☐	☐
309.67	312.72	3.05	LST	2.85	93	W232718	☐	N17-107	Core		☐	☐	☐
312.72	315.77	3.05	LST	3.00	98	W232719	☐	N17-107	Core		☐	☐	☐
315.77	318.82	3.05	LST	3.00	98	W232720	☐	N17-109	Core		☐	☐	☐
318.82	321.86	3.04	LST	2.99	98	W232721	☐	N17-109	Core		☐	☐	☐
321.86	324.91	3.05	DST	2.85	93	W232722	☐	N17-109	Core		☐	☐	☐
324.91	327.96	3.05	DST	2.92	96	W232723	☐	N17-109	Core		☐	☐	☐
327.96	331.01	3.05	DST	2.96	97	W232725	☐	N17-109	Core		☐	☐	☐
331.01	334.06	3.05	DST	2.97	97	W232726	☐	N17-109	Core		☐	☐	☐
334.06	337.11	3.05	DST	3.02	99	W232727	☐	N17-109	Core		☐	☐	☐
337.11	340.16	3.05	DST	2.67	88	W232729	☐	N17-109	Core		☐	☐	☐
340.16	342.05	1.89	DST	1.52	80	W232730	☐	N17-109	Core		☐	☐	☐
340.16	342.05	1.89	DST	1.52	80	W232731	☐	N17-109	Core		☐	☑	☐
342.05	343.88	1.83	DST	1.32	72	W232732	☐	N17-109	Core		☐	☐	☐
343.88	345.56	1.68	DST	1.52	90	W232733	☐	N17-109	Core		☐	☐	☐
345.56	348.07	2.51	DST	2.47	98	W232734	☐	N17-109	Core		☐	☐	☐
345.56	348.07	2.51	DST	2.47	98	W232735	☐	N17-109	Core		☐	☐	☑
348.07	349.30	1.23	DST	1.23	100	W232736	☐	N17-109	Core		☐	☐	☐
349.30	352.35	3.05	DST	2.96	97	W232737	☐	N17-109	Core		☐	☐	☐
352.35	355.40	3.05	DST	2.76	90	W232738	☐	N17-109	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
355.40	358.44	3.04	DST	2.95	97	W232740	☐	N17-109	Core		☐	☐	☐
358.44	361.49	3.05	DST	3.03	99	W232741	☐	N17-109	Core		☐	☐	☐
361.49	362.97	1.48	DST	1.36	92	W232742	☐	N17-109	Core		☐	☐	☐
362.97	364.54	1.57	DST	1.53	97	W232743	☐	N17-109	Core		☐	☐	☐
364.54	367.59	3.05	DST	3.05	100	W232745	☐	N17-109	Core		☐	☐	☐
367.59	370.64	3.05	DMT	3.02	99	W232746	☐	N17-109	Core		☐	☐	☐
370.64	373.68	3.04	DMT	2.96	97	W232747	☐	N17-109	Core		☐	☐	☐
373.68	376.73	3.05	DMT	3.02	99	W232748	☐	N17-109	Core		☐	☐	☐
376.73	379.78	3.05	DMT	2.93	96	W232749	☐	N17-109	Core		☐	☐	☐
379.78	382.83	3.05	DMT	3.00	98	W232750	☐	N17-109	Core		☐	☐	☐
382.83	385.88	3.05	DMT	2.99	98	W232751	☐	N17-109	Core		☐	☐	☐
385.88	388.92	3.04	DMT	3.04	100	W232752	☐	N17-109	Core		☐	☐	☐
388.92	391.36	2.44	DMT	2.36	97	W232753	☐	N17-109	Core		☐	☐	☐
391.36	393.32	1.96	DMT	1.92	98	W232754	☐	N17-109	Core		☐	☐	☐
393.32	395.02	1.70	DMT	1.46	86	W232755	☐	N17-109	Core		☐	☐	☐
395.02	398.07	3.05	SLT	3.05	100	W232756	☐	N17-111	Core		☐	☐	☐
398.07	399.84	1.77	SLT	1.71	97	W232757	☐	N17-111	Core		☐	☐	☐
399.84	401.77	1.93	SLT	1.93	100	W232758	☐	N17-111	Core		☐	☐	☐
401.77	404.77	3.00	SLT	2.79	93	W232760	☐	N17-111	Core		☐	☐	☐
404.77	407.21	2.44	LST, SLT	2.12	87	W232761	☐	N17-111	Core		☐	☐	☐
407.21	410.26	3.05	LST	3.03	99	W232762	☐	N17-111	Core		☐	☐	☐
410.26	413.31	3.05	LST	3.05	100	W232763	☐	N17-111	Core		☐	☐	☐
413.31	416.36	3.05	LST	3.05	100	W232764	☐	N17-111	Core		☐	☐	☐
416.36	419.40	3.04	LST	2.99	98	W232765	☐	N17-111	Core		☐	☐	☐
419.40	422.45	3.05	LST	2.95	97	W232766	☐	N17-111	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.
186.86	396.24	209.38	LST	FG	Conrad limestone 1. Intensely altered limestone with lots of alteration of the host rock. Realgar, arsenic oxides, black clay alteration from decarbonatization. This extends from 186.86-198.00m where the arsenic oxideds and alteration textures end quite abruptly leading back into calcite veined conrad limestone 1 rock. Relatively clean looking rock (little to no arsenic oxides visible) from 198-220m however there are still some areas with dark grey material that are likely altered rock. At 220m we enter back into an area of altered rock with strong arsenic oxides and alteration. This doccurs between 220m and 223.70m. From 224 to 260.40 the limestone has little arsenic oxides and only a few areas of dark grey to black gougy looking materal which is likely altered rock. There are massive amounts of calcite veining, veinlets and breccia veins present often on the scale of several cm's. A second mineralized zone is present from 337.5-343.4 m, with black, soft stylolites/gouge seams and realgar. Not as impressive as the first mineralized zone. From there the hole is simpler grey bedded limestone with stylolites and occasional dark and soft stylolites with crosscutting white quartz-calcite veining hosting minor disseminated-blebby realgar. Occasional thin pyrite beds around 382 m.							
									DCA	4I	Ca	18
									ASO	5I	Fl	1

OS -17-259

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	4.36	4.36	0	0	0.00	0	--	--	--	No Recovery
4.36	4.57	0.21	0.21	100	0.00	0	2R	3H	3W	Rubble zone for entire interval
4.57	6.10	1.53	0.73	48	0.00	0	2R	2H	4W	Rubble zone
6.10	9.14	3.04	1.81	60	0.00	0	1R	1H	3W	Rubble zone
9.14	12.19	3.05	2.13	70	0.48	16	1R	3H	3W	Rubbly sections
12.19	15.24	3.05	2.68	88	0.76	25	1R	1H	3W	Rubbly sections
15.24	18.29	3.05	2.2	72	0.15	5	0R	2H	3W	Rubbly section
18.29	21.34	3.05	2.93	96	1.03	34	1R	2H	3W	Rubbly section
21.34	24.38	3.04	2.82	93	0.55	18	0R	2H	3W	Rubbly section
24.38	27.43	3.05	2.9	95	0.00	0	0R	2H	3W	Rubbly Section
27.43	30.48	3.05	0.88	29	0.00	0	0R	2H	3W	Rubbly Section
30.48	33.53	3.05	2.72	89	0.13	4	0R	2H	3W	Rubbly section
33.53	36.58	3.05	2.92	96	0.42	14	0R	2H	3W	Rubbly Section
36.58	39.62	3.04	2.71	89	0.52	17	4R	2H	3W	Rubbly section
39.62	42.67	3.05	2.55	84	0.12	4	4R	2H	3W	Rubbly section
42.67	45.72	3.05	2.26	74	0.12	4	4R	2H	3W	Rubbly section
45.72	48.77	3.05	1.74	57	0.11	4	0R	2H	3W	Rubbly Section
48.77	51.81	3.04	1.45	48	0.33	11	0R	2H	3W	Rubbly Section
51.81	54.86	3.05	2.13	70	1.89	62	0R	2H	3W	Rubbly section
54.86	57.91	3.05	3.02	99	2.63	86	0R	2H	2W	
57.91	60.96	3.05	3	98	2.45	80	0R	2H	2W	
60.96	64.01	3.05	2.95	97	2.17	71	0R	2H	2W	
64.01	67.06	3.05	2.96	97	2.31	76	0R	2H	2W	
67.06	70.10	3.04	3.04	100	2.80	92	1R	2H	2W	
70.10	73.15	3.05	2.94	96	2.69	88	0R	2H	2W	
73.15	76.20	3.05	2.93	96	2.53	83	0R	2H	2W	
76.20	79.25	3.05	2.8	92	2.18	71	0R	2H	2W	
79.25	82.29	3.04	2.4	79	1.27	42	0R	2H	2W	
82.29	85.34	3.05	3	98	1.17	38	2R	2H	2W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
85.34	88.39	3.05	2.92	96	2.19	72	2R	2H	2W	
88.39	91.44	3.05	2.91	95	2.18	71	4R	2H	2W	
91.44	94.49	3.05	2.75	90	1.59	52	2R	2H	2W	
94.49	97.54	3.05	3	98	1.55	51	0R	3H	1W	
97.54	100.58	3.04	2.9	95	1.67	55	0R	3H	1W	
100.58	103.63	3.05	3.01	99	2.65	87	2R	4H	1W	
103.63	106.68	3.05	2.56	84	2.50	82	0R	4H	1W	
106.68	109.73	3.05	3.05	100	2.90	95	0R	4H	1W	
109.73	112.78	3.05	3.05	100	2.54	83	0R	3H	1W	
112.78	115.82	3.04	2.98	98	2.37	78	0R	4H	1W	
115.82	118.87	3.05	2.99	98	2.73	90	0R	4H	1W	
118.87	121.92	3.05	2.99	98	2.74	90	0R	4H	1W	
121.92	124.97	3.05	2.67	88	2.08	68	0R	4H	1W	
124.97	128.02	3.05	2.85	93	2.12	70	0R	4H	1W	
128.02	131.06	3.04	3.04	100	2.18	72	0R	4H	1W	
131.06	134.11	3.05	2.96	97	2.75	90	0R	4H	1W	
134.11	137.16	3.05	2.79	91	2.25	74	0R	4H	1W	
137.16	140.21	3.05	3.05	100	2.65	87	0R	4H	1W	
140.21	143.26	3.05	3.05	100	2.20	72	0R	3H	1W	
143.26	146.30	3.04	3.01	99	2.53	83	0R	3H	1W	
146.30	149.35	3.05	2.88	94	0.96	31	0R	3H	1W	
149.35	152.40	3.05	3.04	100	1.65	54	0R	4H	1W	
152.40	155.45	3.05	3.05	100	1.83	60	0R	3H	1W	
155.45	158.50	3.05	3.05	100	1.96	64	0R	3H	1W	
158.50	161.54	3.04	3.04	100	2.93	96	0R	4H	1W	
161.54	164.59	3.05	3.05	100	3.05	100	0R	3H	1W	
164.59	167.64	3.05	3.03	99	3.03	99	0R	3H	1W	
167.64	170.69	3.05	3.04	100	2.84	93	0R	4H	1W	
170.69	173.74	3.05	3.05	100	2.76	90	2R	3H	1W	
173.74	176.78	3.04	3.02	99	2.63	87	1R	3H	1W	
176.78	179.83	3.05	3.01	99	2.92	96	3R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
179.83	182.88	3.05	3.02	99	1.63	53	4R	3H	1W	
182.88	185.93	3.05	2.99	98	1.89	62	4R	2H	1W	Rubble Zone - Realgar
185.93	188.97	3.04	3.03	100	1.90	63	0R	3H	1W	
188.97	192.02	3.05	3.04	100	2.57	84	0R	3H	1W	
192.02	195.07	3.05	2.88	94	2.36	77	2R	3H	1W	
195.07	198.12	3.05	2.9	95	2.59	85	4R	3H	1W	
198.12	201.17	3.05	3.03	99	2.63	86	4R	4H	1W	
201.17	204.22	3.05	2.9	95	1.83	60	4R	3H	1W	
204.22	207.26	3.04	3.04	100	2.74	90	4R	3H	1W	
207.26	210.31	3.05	3.05	100	2.89	95	4R	4H	1W	
210.31	213.36	3.05	2.96	97	2.52	83	4R	4H	1W	
213.36	216.41	3.05	3	98	3.00	98	4R	4H	1W	
216.41	219.46	3.05	3.04	100	2.98	98	4R	4H	1W	
219.46	222.50	3.04	3	99	1.77	58	4R	4H	1W	
222.50	225.55	3.05	3	98	2.24	73	4R	4H	1W	
225.55	228.60	3.05	2.79	91	2.47	81	4R	4H	1W	
228.60	231.65	3.05	3.01	99	2.54	83	4R	4H	1W	
231.65	234.69	3.04	2.8	92	1.80	59	4R	4H	1W	
234.69	237.74	3.05	3.04	100	2.55	84	4R	4H	1W	
237.74	240.79	3.05	2.98	98	2.69	88	4R	4H	1W	
240.79	243.84	3.05	2.96	97	1.41	46	3R	4H	1W	
243.84	246.89	3.05	2.92	96	1.18	39	4R	4H	1W	
246.89	249.94	3.05	3.05	100	1.18	39	4R	4H	1W	
249.94	252.98	3.04	3.04	100	1.10	36	4R	4H	1W	
252.98	256.03	3.05	3.02	99	0.92	30	4R	4H	1W	
256.03	259.08	3.05	3.05	100	0.96	31	4R	4H	1W	
259.08	262.13	3.05	3.02	99	2.26	74	4R	3H	1W	
262.13	265.18	3.05	3.04	100	2.64	87	4R	3H	1W	
265.18	268.22	3.04	2.92	96	2.83	93	4R	3H	1W	
268.22	271.27	3.05	2.82	92	2.33	76	4R	3H	1W	
271.27	274.32	3.05	2.95	97	0.90	30	4R	3H	1W	RBZ at 271.27-271.40m. Fractures follow bedding at low angle to core axis.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
274.32	277.37	3.05	3.05	100	2.57	84	4R	3H	1W	
277.37	280.42	3.05	2.84	93	1.73	57	4R	3H	1W	
280.42	283.46	3.04	2.89	95	2.27	75	4R	3H	1W	
283.46	286.51	3.05	3.05	100	3.01	99	4R	3H	1W	
286.51	289.56	3.05	3.05	100	3.05	100	4R	3H	1W	
289.56	292.61	3.05	2.95	97	2.46	81	4R	3H	1W	RBZ at 292.18-292.28m
292.61	295.66	3.05	2.96	97	2.58	85	4R	3H	1W	
295.66	298.70	3.04	2.72	89	1.53	50	4R	3H	2W	RBZ at 297.50-298.70m.
298.70	301.75	3.05	2.65	87	1.77	58	4R	3H	2W	
301.75	304.80	3.05	3.04	100	2.46	81	4R	3H	1W	
304.80	307.85	3.05	3.05	100	2.77	91	4R	3H	1W	
307.85	310.90	3.05	3.04	100	3.04	100	4R	3H	1W	
310.90	313.94	3.04	3.04	100	2.87	94	4R	3H	1W	
313.94	316.99	3.05	3.05	100	2.92	96	4R	3H	1W	
316.99	320.04	3.05	3.05	100	2.53	83	4R	3H	1W	
320.04	323.09	3.05	2.93	96	2.87	94	4R	3H	1W	
323.09	326.14	3.05	3.05	100	3.03	99	4R	3H	1W	
326.14	329.18	3.04	3.04	100	2.44	80	4R	4H	1W	RBZ at 327.70-327.80m
329.18	332.23	3.05	3.05	100	2.70	89	4R	4H	1W	
332.23	335.28	3.05	2.99	98	2.30	75	4R	4H	1W	
335.28	338.33	3.05	3.04	100	2.10	69	4R	4H	1W	
338.33	341.38	3.05	2.66	87	1.40	46	4R	3H	2W	RBZ at 340.20-340.25 and 341.28-341.38
341.38	344.42	3.04	2.58	85	1.73	57	4R	3H	3W	RBZ at 341.38-341.80m
344.42	347.47	3.05	3.05	100	2.86	94	4R	4H	1W	
347.47	350.52	3.05	2.94	96	2.16	71	4R	3H	1W	RBZ at 349.95-350.52m
350.52	353.57	3.05	2.53	83	2.31	76	4R	3H	1W	
353.57	356.62	3.05	3.05	100	2.46	81	4R	4H	1W	
356.62	359.66	3.04	2.88	95	2.07	68	4R	4H	1W	
359.66	362.71	3.05	2.75	90	1.96	64	4R	4H	1W	
362.71	365.76	3.05	2.94	96	2.10	69	4R	4H	1W	
365.76	368.81	3.05	2.89	95	1.85	61	4R	4H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
368.81	371.86	3.05	2.79	91	1.78	58	4R	4H	1W	RBZ at 370.60-371m
371.86	374.90	3.04	2.85	94	0.67	22	4R	4H	1W	RBZ at 371.90-392.50m and 373.15-373.25m. Highly fractured along bedding an has multiple low angle fractures to core axis.
374.90	377.95	3.05	3.05	100	1.85	61	4R	4H	1W	
377.95	381.00	3.05	2.54	83	1.24	41	4R	4H	1W	
381.00	384.05	3.05	3.03	99	1.32	43	4R	4H	1W	
384.05	387.10	3.05	3.05	100	1.02	33	4R	4H	1W	
387.10	390.14	3.04	3.01	99	1.93	63	4R	4H	1W	
390.14	393.19	3.05	2.87	94	2.68	88	4R	4H	1W	
393.19	396.24	3.05	3.05	100	2.69	88	4R	4H	1W	

OS -17-259

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00	-QC-	0.00	0	W231197	☐	N17-110	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231296	☐	N17-114		CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231277	☐	N17-114			☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231272	☐	N17-114		CS8	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231268	☐	N17-113	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231263	☐	N17-113	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231255	☐	N17-113	core	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231250	☐	N17-113	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231228	☐	N17-112	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231217	☐	N17-112	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231116	☐	N17-105	core	CS6	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231207	☐	N17-112	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231189	☐	N17-110	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231183	☐	N17-110	core	CS8	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231167	☐	N17-110	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231156	☐	N17-108	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231151	☐	N17-108	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231139	☐	N17-108	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231130	☐	N17-108	core	CS4	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231124	☐	N17-105	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231118	☐	N17-105	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231209	☐	N17-112	core		☑	☐	☐
4.36	4.57	0.21	MST, OVB	0.21	100	W231113	☐	N17-105	core		☐	☐	☐
4.57	6.10	1.53	MST	0.73	48	W231114	☐	N17-105	core		☐	☐	☐
6.10	9.14	3.04	MST	1.81	60	W231115	☐	N17-105	core		☐	☐	☐
9.14	12.19	3.05	MST	2.13	70	W231117	☐	N17-105	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
12.19	15.24	3.05	MST	2.68	88	W231119	☐	N17-105	core		☐	☐	☐
15.24	18.29	3.05	MST	2.20	72	W231120	☐	N17-105	core		☐	☐	☐
15.24	18.29	3.05	MST	2.20	72	W231121	☐	N17-105	core		☐	☐	☑
18.29	21.34	3.05	MST	2.93	96	W231122	☐	N17-105	core		☐	☐	☐
21.34	24.38	3.04	MST	2.82	93	W231123	☐	N17-105	core		☐	☐	☐
24.38	27.43	3.05	MST	2.90	95	W231125	☐	N17-105	core		☐	☐	☐
27.43	30.48	3.05	MST, LST	0.88	29	W231126	☐	N17-108	core		☐	☐	☐
30.48	33.53	3.05	LST	2.72	89	W231127	☐	N17-108	core		☐	☐	☐
33.53	36.58	3.05	LST	2.92	96	W231128	☐	N17-108	core		☐	☐	☐
36.58	39.62	3.04	LST	2.71	89	W231129	☐	N17-108	core		☐	☐	☐
39.62	42.67	3.05	LST	2.55	84	W231131	☐	N17-108	core		☐	☐	☐
42.67	45.72	3.05	LST	2.26	74	W231132	☐	N17-108	core		☐	☐	☐
45.72	48.77	3.05	LST	1.74	57	W231133	☐	N17-108	core		☐	☐	☐
48.77	51.81	3.04	LST	1.45	48	W231134	☐	N17-108	core		☐	☐	☐
51.81	54.86	3.05	LST	2.13	70	W231135	☐	N17-108	core		☐	☐	☐
54.86	56.39	1.53	LST	1.48	97	W231136	☐	N17-108	core		☐	☐	☐
54.86	56.39	1.53	LST	1.48	97	W231137	☐	N17-108	core		☐	☐	☑
56.39	57.91	1.52	LST	1.52	100	W231138	☐	N17-108	core		☐	☐	☐
57.91	59.44	1.53	LST	1.44	94	W231140	☐	N17-108	core		☐	☐	☐
57.91	59.44	1.53	LST	1.44	94	W231141	☐	N17-108	core		☐	☑	☐
59.44	60.96	1.52	LST	1.50	99	W231142	☐	N17-108	core		☐	☐	☐
60.96	62.48	1.52	LST	1.50	99	W231143	☐	N17-108	core		☐	☐	☐
62.48	64.01	1.53	LST	1.37	90	W231144	☐	N17-108	core		☐	☐	☐
64.01	65.53	1.52	LST	1.49	98	W231145	☐	N17-108	core		☐	☐	☐
65.53	67.06	1.53	LST	1.45	95	W231146	☐	N17-108	core		☐	☐	☐
67.06	68.58	1.52	LST	1.43	94	W231147	☐	N17-108	core		☐	☐	☐
68.58	70.10	1.52	LST	1.50	99	W231148	☐	N17-108	core		☐	☐	☐
70.10	71.63	1.53	LST	1.50	98	W231149	☐	N17-108	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
71.63	73.15	1.52	LST	1.42	93	W231150	☐	N17-108	core		☐	☐	☐
73.15	74.68	1.53	LST	1.46	95	W231152	☐	N17-108	core		☐	☐	☐
74.68	76.20	1.52	LST	1.51	99	W231153	☐	N17-108	core		☐	☐	☐
76.20	77.72	1.52	LST	1.22	80	W231154	☐	N17-108	core		☐	☐	☐
77.72	79.25	1.53	LST	1.51	99	W231155	☐	N17-108	core		☐	☐	☐
79.25	80.77	1.52	LST	0.96	63	W231157	☐	N17-108	core		☐	☐	☐
80.77	82.29	1.52	LST	1.19	78	W231158	☐	N17-108	core		☐	☐	☐
82.29	83.82	1.53	LST	1.33	87	W231159	☐	N17-108	core		☐	☐	☐
83.82	85.34	1.52	LST	1.50	99	W231160	☐	N17-108	core		☐	☐	☐
85.34	88.39	3.05	LST	2.92	96	W231161	☐	N17-108	core		☐	☐	☐
88.39	91.44	3.05	LST	2.91	95	W231162	☐	N17-110	core		☐	☐	☐
91.44	94.49	3.05	LST	2.75	90	W231163	☐	N17-110	core		☐	☐	☐
94.49	97.54	3.05	LST	3.00	98	W231164	☐	N17-110	core		☐	☐	☐
97.54	99.06	1.52	SLC	1.29	85	W231165	☐	N17-110	core		☐	☐	☐
99.06	100.58	1.52	SLC	1.50	99	W231166	☐	N17-110	core		☐	☐	☐
100.58	103.63	3.05	SLC	3.01	99	W231168	☐	N17-110	core		☐	☐	☐
103.63	106.68	3.05	SLC	2.56	84	W231169	☐	N17-110	core		☐	☐	☐
106.68	109.73	3.05	SLC	3.05	100	W231170	☐	N17-110	core		☐	☐	☐
109.73	112.78	3.05	SLC	3.05	100	W231171	☐	N17-110	core		☐	☐	☐
112.78	115.82	3.04	SLC	2.98	98	W231172	☐	N17-110	core		☐	☐	☐
115.82	118.87	3.05	SLC	2.99	98	W231173	☐	N17-110	core		☐	☐	☐
118.87	121.92	3.05	SLC	2.99	98	W231174	☐	N17-110	core		☐	☐	☐
121.92	124.97	3.05	SLC	2.67	88	W231175	☐	N17-110	core		☐	☐	☐
124.97	128.02	3.05	SLC	2.85	93	W231176	☐	N17-110	core		☐	☐	☐
128.02	131.06	3.04	SLC	3.04	100	W231177	☐	N17-110	core		☐	☐	☐
131.06	134.11	3.05	SLC	2.96	97	W231178	☐	N17-110	core		☐	☐	☐
134.11	137.16	3.05	SLC	2.79	91	W231179	☐	N17-110	core		☐	☐	☐
137.16	140.21	3.05	SLC	3.05	100	W231180	☐	N17-110	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
140.21	143.26	3.05	SLC	3.05	100	W231181	☐	N17-110	core		☐	☐	☐
143.26	146.30	3.04	SLC	3.01	99	W231182	☐	N17-110	core		☐	☐	☐
146.30	149.35	3.05	SLC	2.88	94	W231184	☐	N17-110	core		☐	☐	☐
149.35	152.40	3.05	SLC	3.04	100	W231185	☐	N17-110	core		☐	☐	☐
152.40	155.45	3.05	SLC	3.05	100	W231186	☐	N17-110	core		☐	☐	☐
155.45	158.50	3.05	SLC	3.05	100	W231187	☐	N17-110	core		☐	☐	☐
158.50	161.54	3.04	SLC	3.04	100	W231188	☐	N17-110	core		☐	☐	☐
161.54	164.59	3.05	SLC	3.05	100	W231190	☐	N17-110	core		☐	☐	☐
164.59	167.64	3.05	SLC	3.03	99	W231191	☐	N17-110	core		☐	☐	☐
167.64	170.69	3.05	SLC	3.04	100	W231192	☐	N17-110	core		☐	☐	☐
170.69	173.74	3.05	SLC	3.05	100	W231193	☐	N17-110	core		☐	☐	☐
170.69	173.74	3.05	SLC	3.05	100	W231194	☐	N17-110	core		☐	☐	☑
173.74	176.78	3.04	SLC	3.02	99	W231195	☐	N17-110	core		☐	☐	☐
173.74	176.78	3.04	SLC	3.02	99	W231196	☐	N17-110	core		☐	☑	☐
176.78	179.83	3.05	SLC	3.01	99	W231198	☐	N17-112	core		☐	☐	☐
179.83	180.88	1.05	SLC	0.95	90	W231199	☐	N17-112	core		☐	☐	☐
180.88	182.88	2.00	SLC	1.78	89	W231200	☐	N17-112	core		☐	☐	☐
182.88	185.19	2.31	SLC, INT	2.11	91	W231201	☐	N17-112	core		☐	☐	☐
185.19	186.85	1.66	LST	1.56	94	W231202	☐	N17-112	core		☐	☐	☐
186.85	188.97	2.12	INT	2.10	99	W231203	☐	N17-112	core		☐	☐	☐
188.97	190.56	1.59	LST	1.53	96	W231204	☐	N17-112	core		☐	☐	☐
188.97	190.56	1.59	LST	1.53	96	W231205	☐	N17-112	core		☐	☐	☑
190.56	192.02	1.46	LST	1.40	96	W231206	☐	N17-112	core		☐	☐	☐
192.02	193.60	1.58	LST	1.45	92	W231208	☐	N17-112	core		☐	☐	☐
193.60	195.07	1.47	LST	1.39	95	W231210	☐	N17-112	core		☐	☐	☐
195.07	195.90	0.83	LST	0.82	99	W231211	☐	N17-112	core		☐	☐	☐
195.07	195.90	0.83	LST	0.82	99	W231212	☐	N17-112	core		☐	☑	☐
195.90	197.25	1.35	LST	1.21	90	W231213	☐	N17-112	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
197.25	198.15	0.90	LST	0.83	92	W231214	☐	N17-112	core		☐	☐	☐
198.15	201.17	3.02	LST	2.95	98	W231215	☐	N17-112	core		☐	☐	☐
201.17	204.22	3.05	LST	2.90	95	W231216	☐	N17-112	core		☐	☐	☐
204.22	207.26	3.04	LST	3.04	100	W231218	☐	N17-112	core		☐	☐	☐
207.26	210.31	3.05	LST	3.05	100	W231219	☐	N17-112	core		☐	☐	☐
210.31	213.36	3.05	LST	2.96	97	W231220	☐	N17-112	core		☐	☐	☐
213.36	216.41	3.05	LST	3.00	98	W231221	☐	N17-112	core		☐	☐	☐
216.41	219.36	2.95	LST	2.89	98	W231222	☐	N17-112	core		☐	☐	☐
219.36	220.70	1.34	LST	1.21	90	W231223	☐	N17-112	core		☐	☐	☐
220.70	222.50	1.80	LST	1.69	94	W231224	☐	N17-112	core		☐	☐	☐
222.50	223.74	1.24	LST	1.19	96	W231225	☐	N17-112	core		☐	☐	☐
223.74	225.55	1.81	LST	1.70	94	W231226	☐	N17-112	core		☐	☐	☐
225.55	228.60	3.05	LST	2.79	91	W231227	☐	N17-112	core		☐	☐	☐
228.60	231.65	3.05	LST	3.01	99	W231229	☐	N17-112	core		☐	☐	☐
231.65	234.69	3.04	LST	2.80	92	W231230	☐	N17-112	core		☐	☐	☐
234.69	237.74	3.05	LST	3.04	100	W231231	☐	N17-112	core		☐	☐	☐
237.74	240.79	3.05	LST	2.98	98	W231232	☐	N17-112	core		☐	☐	☐
240.79	243.84	3.05	LST	2.96	97	W231233	☐	N17-112	core		☐	☐	☐
243.84	245.10	1.26	LST	1.26	100	W231234	☐	N17-113	core		☐	☐	☐
245.10	246.89	1.79	LST	1.38	77	W231235	☐	N17-113	core		☐	☐	☐
246.89	249.94	3.05	LST	3.05	100	W231236	☐	N17-113	core		☐	☐	☐
249.94	252.98	3.04	LST	3.04	100	W231237	☐	N17-113	core		☐	☐	☐
252.98	256.03	3.05	LST	3.02	99	W231238	☐	N17-113	core		☐	☐	☐
256.03	259.08	3.05	LST	3.05	100	W231239	☐	N17-113	core		☐	☐	☐
259.08	262.13	3.05	LST	3.02	99	W231240	☐	N17-113	core		☐	☐	☐
262.13	265.18	3.05	LST	3.04	100	W231241	☐	N17-113	core		☐	☐	☐
265.18	268.22	3.04	LST	2.92	96	W231242	☐	N17-113	core		☐	☐	☐
268.22	271.27	3.05	LST	2.82	92	W231243	☐	N17-113	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
271.27	274.32	3.05	LST	2.95	97	W231244	☐	N17-113	core		☐	☐	☐
274.32	277.37	3.05	LST	3.05	100	W231245	☐	N17-113	core		☐	☐	☐
277.37	280.42	3.05	LST	2.84	93	W231246	☐	N17-113	core		☐	☐	☐
277.37	280.42	3.05	LST	2.84	93	W231247	☐	N17-113	core		☐	☑	☐
280.42	283.46	3.04	LST	2.89	95	W231248	☐	N17-113	core		☐	☐	☐
283.46	286.51	3.05	LST	3.05	100	W231249	☐	N17-113	core		☐	☐	☐
286.51	289.56	3.05	LST	3.05	100	W231251	☐	N17-113	core		☐	☐	☐
289.56	292.61	3.05	LST	2.95	97	W231252	☐	N17-113	core		☐	☐	☐
292.61	295.66	3.05	LST	2.96	97	W231253	☐	N17-113	core		☐	☐	☐
295.66	298.70	3.04	LST	2.72	89	W231254	☐	N17-113	core		☐	☐	☐
298.70	301.75	3.05	LST	2.65	87	W231256	☐	N17-113	core		☐	☐	☐
301.75	304.80	3.05	LST	3.04	100	W231297	☐	N17-113	core		☐	☐	☐
304.80	307.85	3.05	LST	3.05	100	W231257	☐	N17-113	core		☐	☐	☐
307.85	310.90	3.05	LST	3.04	100	W231258	☐	N17-113	core		☐	☐	☐
310.90	313.94	3.04	LST	3.04	100	W231259	☐	N17-113	core		☐	☐	☐
310.90	313.94	3.04	LST	3.04	100	W231260	☐	N17-113	core		☐	☐	☑
313.94	316.99	3.05	LST	3.05	100	W231261	☐	N17-113	core		☐	☐	☐
316.99	320.04	3.05	LST	3.05	100	W231262	☐	N17-113	core		☐	☐	☐
320.04	323.09	3.05	LST	2.93	96	W231264	☐	N17-113	core		☐	☐	☐
323.09	326.14	3.05	LST	3.05	100	W231265	☐	N17-113	core		☐	☐	☐
326.14	329.18	3.04	LST	3.04	100	W231266	☐	N17-113	core		☐	☐	☐
329.18	332.23	3.05	LST	3.05	100	W231267	☐	N17-113	core		☐	☐	☐
332.23	335.28	3.05	LST	2.99	98	W231269	☐	N17-114			☐	☐	☐
335.28	337.30	2.02	LST	2.00	99	W231270	☐	N17-114			☐	☐	☐
337.30	338.85	1.55	LST	1.54	99	W231271	☐	N17-114			☐	☐	☐
338.85	340.16	1.31	LST	1.07	82	W231273	☐	N17-114			☐	☐	☐
340.16	342.02	1.86	LST	1.81	97	W231274	☐	N17-114			☐	☐	☐
340.16	342.02	1.86	LST	1.81	97	W231275	☐	N17-114			☐	☐	☑

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
342.02	344.42	2.40	LST	1.99	83	W231276	☐	N17-114			☐	☐	☐
344.42	347.47	3.05	LST	3.05	100	W231278	☐	N17-114			☐	☐	☐
347.47	350.52	3.05	LST	2.94	96	W231279	☐	N17-114			☐	☐	☐
350.52	351.37	0.85	LST	0.80	94	W231280	☐	N17-114			☐	☐	☐
351.37	353.57	2.20	LST	1.73	79	W231281	☐	N17-114			☐	☐	☐
353.57	356.62	3.05	LST	3.05	100	W231282	☐	N17-114			☐	☐	☐
356.62	359.66	3.04	LST	2.88	95	W231283	☐	N17-114			☐	☐	☐
359.66	362.71	3.05	LST	2.75	90	W231284	☐	N17-114			☐	☐	☐
362.71	365.76	3.05	LST	2.94	96	W231285	☐	N17-114			☐	☐	☐
365.76	368.81	3.05	LST	2.89	95	W231286	☐	N17-114			☐	☐	☐
368.81	371.86	3.05	LST	2.79	91	W231287	☐	N17-114			☐	☐	☐
371.86	374.90	3.04	LST	2.85	94	W231288	☐	N17-114			☐	☐	☐
374.90	377.95	3.05	LST	3.05	100	W231289	☐	N17-114			☐	☐	☐
377.95	381.00	3.05	LST	2.54	83	W231290	☐	N17-114			☐	☐	☐
381.00	384.05	3.05	LST	3.03	99	W231291	☐	N17-114			☐	☐	☐
384.05	387.10	3.05	LST	3.05	100	W231292	☐	N17-114			☐	☐	☐
387.10	390.14	3.04	LST	3.01	99	W231293	☐	N17-114			☐	☐	☐
390.14	393.19	3.05	LST	2.87	94	W231294	☐	N17-114			☐	☐	☐
393.19	396.24	3.05	LST	3.05	100	W231295	☐	N17-114			☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Description	Shade	Colour	Texture	Alteration	Intensity	Mineral	Conc.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	1.00	1.00	0	0	0.00	0	--	--	--	
1.00	3.04	2.04	0.5	25	0.00	0	3R	3H	5W	overburden. Very poor recovery. Variable reactivity
3.04	5.48	2.44	0.99	41	0.00	0	2R	3H	5W	overburden. Variable reactivity
5.48	8.53	3.05	0.8	26	0.00	0	2R	3H	5W	overburden, variable reactivity
8.53	11.58	3.05	1.34	44	0.00	0	2R	2H	5W	overburden. More abundance of clay, variable acid reactivity.
11.58	14.63	3.05	1.65	54	0.00	0	2R	2H	5W	overburden. Lots of clay. Variable acid reactivity
14.63	17.67	3.04	2.1	69	0.00	0	1R	1H	4W	Overburden. Variable acid reactivity.
17.67	20.72	3.05	1.67	55	0.00	0	2R	1H	4W	overburden, variable acid reactivity. Lots fo clay
20.72	23.77	3.05	2.05	67	0.49	16	1R	2H	4W	overburden.
23.77	26.51	2.74	1.49	54	0.00	0	1R	1H	4W	overburden. Variable but low acid reactivity.
26.51	28.95	2.44	1.19	49	0.00	0	1R	1H	4W	overburden nearly all clay and rubble.
28.95	32.30	3.35	1.6	48	0.15	4	2R	2H	4W	overburden. Highly variable acid reactivity.
32.30	35.05	2.75	1.71	62	0.40	15	3R	3H	3W	partially overburden. Contact to limestone around 33.00m. RBZ 32.30-34.20m
35.05	37.18	2.13	2.06	97	0.26	12	4R	3H	2W	many more fractures but they appear mechanical and along bedding. Some of the joints show visible yellow arsenic oxides
37.18	39.01	1.83	1.81	99	1.14	62	4R	3H	1W	most look like mechanical fracturing along bedding.
39.01	42.06	3.05	1.52	50	1.33	44	4R	3H	1W	mostly mechanical fractures along bedding.
42.06	45.11	3.05	3.05	100	1.66	54	4R	3H	1W	maybe another 10 mechanical looking breaks along bedding.
45.11	48.16	3.05	2.8	92	1.03	34	3R	3H	1W	RBZ 97.10-97.85m
48.16	51.21	3.05	2.86	94	1.29	42	1R	3H	1W	
51.21	54.25	3.04	2.57	85	0.92	30	1R	3H	1W	RBZ 51.33-51.60m
54.25	57.30	3.05	2.92	96	1.49	49	1R	3H	1W	quite a few more mechanical breaks typically along bedding.

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
57.30	60.35	3.05	2.81	92	1.77	58	4R	3H	1W	a few more mechanical breaks as well.
60.35	63.40	3.05	2.99	98	2.02	66	4R	3H	1W	a few more breaks that look mechanical along bedding.
63.40	64.92	1.52	1.52	100	1.40	92	4R	3H	1W	
64.92	67.97	3.05	2.94	96	2.80	92	4R	3H	1W	
67.97	71.02	3.05	2.97	97	2.90	95	2R	3H	1W	
71.02	74.07	3.05	3.03	99	2.59	85	2R	3H	1W	
74.07	77.11	3.04	3.02	99	3.02	99	3R	3H	1W	last 30cm of run is a black non-calcareous mineralized zone
77.11	80.16	3.05	3.05	100	2.61	86	1R	3H	1W	First 90cm of run in mineralized zone
80.16	83.21	3.05	3.05	100	2.81	92	1R	3H	1W	Mineralized zones of realgar throughout run
83.21	86.26	3.05	3.05	100	2.84	93	0R	3H	1W	Mineralized zones of realgar
86.26	87.78	1.52	1.52	100	1.33	88	0R	3H	1W	Realgar mineralized zones throughout run and often along fractures
87.78	89.31	1.53	1.48	97	1.16	76	0R	3H	1W	Fractures along dissolution seams
89.31	92.35	3.04	3.04	100	2.80	92	0R	3H	1W	Some rubble zones with mineralized realgar
92.35	95.40	3.05	3.05	100	2.54	83	0R	3H	1W	Realgar mineralization on fracture surfaces
95.40	98.45	3.05	3.05	100	2.17	71	0R	3H	1W	Fractured up rubbly zone with realgar mineralization
98.45	101.50	3.05	3.03	99	1.99	65	0R	3H	1W	Fractured up zones with realgar
101.50	104.55	3.05	2.94	96	2.47	81	0R	3H	1W	Fractured zone with realgar often on fractures
104.55	107.59	3.04	3	99	2.34	77	0R	3H	1W	Fractured zone with realgar often on fractures
107.59	110.64	3.05	3.05	100	1.38	45	0R	3H	1W	Highly fractured rubbly zone with realgar
110.64	113.69	3.05	2.9	95	1.15	38	0R	3H	1W	Highly fractured rubble zones.
113.69	116.74	3.05	3	98	0.35	11	0R	3H	1W	Highly fractured rubble zones
116.74	119.79	3.05	2.98	98	0.69	23	0R	3H	1W	High fractured rubble zone
119.79	122.83	3.04	2.92	96	1.97	65	0R	3H	1W	Highly fractured zone
122.83	125.88	3.05	3.05	100	2.28	75	0R	3H	1W	
125.88	128.93	3.05	2.85	93	2.01	66	0R	3H	1W	
128.93	131.98	3.05	3.05	100	2.57	84	0R	3H	1W	Fractured with realgar mineralization

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
131.98	135.03	3.05	3.05	100	1.41	46	0R	3H	1W	Highly fractured rubble zones
135.03	138.07	3.04	2.68	88	1.85	61	0R	3H	1W	Broken up fractured zone
138.07	141.12	3.05	3.05	100	3.00	98	0R	3H	1W	
141.12	144.17	3.05	3.05	100	2.84	93	0R	3H	1W	
144.17	147.22	3.05	3.05	100	2.07	68	0R	3H	1W	
147.22	150.27	3.05	3	98	2.59	85	0R	3H	1W	
150.27	153.31	3.04	2.85	94	2.11	69	0R	3H	1W	Realgar on most fracture surfaces
153.31	156.36	3.05	2.94	96	1.91	63	0R	3H	1W	Realgar on most fracture surfaces
156.36	159.41	3.05	2.92	96	2.39	78	0R	3H	1W	
159.41	162.46	3.05	2.99	98	2.64	87	0R	3H	1W	
162.46	165.51	3.05	3.05	100	2.05	67	0R	3H	1W	
165.51	168.55	3.04	3.04	100	2.64	87	0R	3H	1W	
168.55	171.60	3.05	2.84	93	2.28	75	0R	3H	1W	
171.60	174.65	3.05	2.99	98	2.78	91	0R	3H	1W	
174.65	177.70	3.05	3.02	99	2.97	97	0R	3H	1W	
177.70	180.75	3.05	3	98	2.74	90	1R	3H	1W	
180.75	183.79	3.04	2.83	93	2.68	88	4R	3H	1W	
183.79	186.84	3.05	3.05	100	2.55	84	4R	3H	1W	
186.84	189.89	3.05	2.9	95	2.90	95	2R	3H	1W	
189.89	192.94	3.05	3.05	100	2.91	95	3R	3H	1W	
192.94	195.99	3.05	3.03	99	3.03	99	2R	3H	1W	
195.99	199.04	3.05	2.88	94	2.88	94	0R	3H	1W	
199.04	202.08	3.04	3.04	100	3.04	100	0R	3H	1W	
202.08	205.13	3.05	3.05	100	2.93	96	2R	3H	1W	
205.13	208.18	3.05	3.05	100	3.05	100	2R	3H	1W	
208.18	211.23	3.05	2.89	95	2.82	92	0R	3H	1W	
211.23	214.27	3.04	2.96	97	2.96	97	0R	3H	1W	
214.27	217.32	3.05	3.05	100	2.76	90	0R	3H	1W	
217.32	220.37	3.05	3.03	99	3.03	99	0R	3H	1W	
220.37	223.11	2.74	2.63	96	2.63	96	2R	3H	1W	

OS -17-260

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	3.04	3.04	-QC-	0.50	16	W231298	☐	N17-114			☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232780	☐	N17-111	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232789	☐	N17-111	Core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232790	☐	N17-111	Core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232800	☐	N17-115	core	CS3	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232809	☐	N17-115	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232815	☐	N17-115	core	CS7	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232826	☐	N17-115	core		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232837	☐	N17-116	CORE		☑	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W232844	☐	N17-116	CORE	CS2	☐	☐	☐
0.00	0.00	0.00	-QC-	0.00	0	W231305	☐	N17-114			☑	☐	☐
3.04	5.48	2.44	OVB	0.99	41	W231299	☐	N17-114			☐	☐	☐
5.48	8.53	3.05	OVB	0.80	26	W231300	☐	N17-114			☐	☐	☐
8.53	11.58	3.05	OVB	1.34	44	W231301	☐	N17-114			☐	☐	☐
11.58	14.63	3.05	OVB	1.65	54	W231302	☐	N17-114			☐	☐	☐
14.63	17.67	3.04	OVB	2.10	69	W231303	☐	N17-114			☐	☐	☐
14.63	17.67	3.04	OVB	2.10	69	W231304	☐	N17-114			☐	☑	☐
17.67	20.72	3.05	OVB	1.67	55	W232767	☐	N17-111	Core		☐	☐	☐
20.72	23.77	3.05	OVB	2.05	67	W232768	☐	N17-111	Core		☐	☐	☐
23.77	26.51	2.74	OVB	1.49	54	W232769	☐	N17-111	Core		☐	☐	☐
26.51	28.95	2.44	OVB	1.19	49	W232770	☐	N17-111	Core		☐	☐	☐
28.95	32.00	3.05	OVB	1.50	49	W232771	☐	N17-111	Core		☐	☐	☐
32.00	35.05	3.05	OVB	1.81	59	W232772	☐	N17-111	Core		☐	☐	☐
35.05	37.18	2.13	LST	2.06	97	W232773	☐	N17-111	Core		☐	☐	☐
37.18	39.01	1.83	LST	1.81	99	W232774	☐	N17-111	Core		☐	☐	☐
39.01	42.06	3.05	LST	1.52	50	W232775	☐	N17-111	Core		☐	☐	☐
42.06	45.11	3.05	LST	3.05	100	W232776	☐	N17-111	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
45.11	46.19	1.08	LST	1.08	100	W232777	☐	N17-111	Core		☐	☐	☐
46.19	47.19	1.00	LST	1.00	100	W232778	☐	N17-111	Core		☐	☐	☐
47.19	48.16	0.97	LST	0.91	94	W232779	☐	N17-111	Core		☐	☐	☐
48.16	49.68	1.52	LST	1.50	99	W232781	☐	N17-111	Core		☐	☐	☐
48.16	49.68	1.52	LST	1.50	99	W232782	☐	N17-111	Core		☐	☐	☑
49.68	51.21	1.53	LST	1.22	80	W232783	☐	N17-111	Core		☐	☐	☐
51.21	52.49	1.28	LST	0.95	74	W232784	☐	N17-111	Core		☐	☐	☐
52.49	54.25	1.76	LST	1.68	95	W232785	☐	N17-111	Core		☐	☐	☐
54.25	57.30	3.05	LST	2.92	96	W232786	☐	N17-111	Core		☐	☐	☐
54.25	57.30	3.05	LST	2.92	96	W232787	☐	N17-111	Core		☐	☑	☐
57.30	58.82	1.52	LST	1.38	91	W232788	☐	N17-111	Core		☐	☐	☐
58.82	61.87	3.05	LST	2.98	98	W232791	☐	N17-111	Core		☐	☐	☐
61.87	64.92	3.05	LST	3.05	100	W232792	☐	N17-115	core		☐	☐	☐
64.92	67.97	3.05	LST	2.94	96	W232793	☐	N17-115	core		☐	☐	☐
67.97	71.02	3.05	DST	2.97	97	W232794	☐	N17-115	core		☐	☐	☐
71.02	74.07	3.05	DST	3.03	99	W232795	☐	N17-115	core		☐	☐	☐
74.07	76.78	2.71	LST	2.70	100	W232796	☐	N17-115	core		☐	☐	☐
76.78	78.08	1.30	DST, LST	1.30	100	W232797	☐	N17-115	core		☐	☐	☐
76.78	78.08	1.30	DST, LST	1.30	100	W232798	☐	N17-115	core		☐	☑	☐
78.08	80.16	2.08	DST	2.08	100	W232799	☐	N17-115	core		☐	☐	☐
80.16	81.87	1.71	LST	1.67	98	W232801	☐	N17-115	core		☐	☐	☐
81.87	83.45	1.58	LST, DST	1.58	100	W232802	☐	N17-115	core		☐	☐	☐
81.87	83.45	1.58	LST, DST	1.58	100	W232803	☐	N17-115	core		☐	☐	☑
83.45	86.26	2.81	DST	2.81	100	W232804	☐	N17-115	core		☐	☐	☐
86.26	89.31	3.05	DST	3.00	98	W232805	☐	N17-115	core		☐	☐	☐
89.31	92.35	3.04	DST	3.04	100	W232806	☐	N17-115	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
92.35	95.40	3.05	DST	3.05	100	W232807	☐	N17-115	core		☐	☐	☐
95.40	98.45	3.05	DST	3.05	100	W232808	☐	N17-115	core		☐	☐	☐
98.45	101.50	3.05	DST	3.03	99	W232810	☐	N17-115	core		☐	☐	☐
101.50	104.55	3.05	DST	2.94	96	W232811	☐	N17-115	core		☐	☐	☐
104.55	107.59	3.04	DST	3.00	99	W232812	☐	N17-115	core		☐	☐	☐
107.59	109.45	1.86	DST	1.85	99	W232813	☐	N17-115	core		☐	☐	☐
109.45	110.64	1.19	DST	1.19	100	W232814	☐	N17-115	core		☐	☐	☐
110.64	112.17	1.53	DST	1.40	92	W232816	☐	N17-115	core		☐	☐	☐
112.17	113.69	1.52	DST	1.52	100	W232817	☐	N17-115	core		☐	☐	☐
113.69	116.74	3.05	DST	3.00	98	W232818	☐	N17-115	core		☐	☐	☐
116.74	119.79	3.05	DST	2.98	98	W232819	☐	N17-115	core		☐	☐	☐
119.79	122.83	3.04	DST	2.92	96	W232820	☐	N17-115	core		☐	☐	☐
122.83	125.88	3.05	DST	3.05	100	W232821	☐	N17-115	core		☐	☐	☐
125.88	128.93	3.05	DST	2.85	93	W232822	☐	N17-115	core		☐	☐	☐
128.93	131.98	3.05	DST	3.05	100	W232823	☐	N17-115	core		☐	☐	☐
131.98	135.03	3.05	DST	3.05	100	W232824	☐	N17-115	core		☐	☐	☐
135.03	138.07	3.04	DST	2.68	88	W232825	☐	N17-115	core		☐	☐	☐
138.07	141.12	3.05	DST	3.05	100	W232827	☐	N17-115	core		☐	☐	☐
141.12	144.17	3.05	DST	3.05	100	W232828	☐	N17-116	CORE		☐	☐	☐
144.17	147.22	3.05	DST	3.05	100	W232829	☐	N17-116	CORE		☐	☐	☐
147.22	150.27	3.05	DST	3.00	98	W232830	☐	N17-116	CORE		☐	☐	☐
150.27	153.31	3.04	DST	2.85	94	W232831	☐	N17-116	CORE		☐	☐	☐
153.31	156.36	3.05	DST	2.94	96	W232832	☐	N17-116	CORE		☐	☐	☐
156.36	159.41	3.05	DST	2.92	96	W232833	☐	N17-116	CORE		☐	☐	☐
156.36	159.41	3.05	DST	2.92	96	W232834	☐	N17-116	CORE		☐	☐	☑
159.41	162.46	3.05	DST	2.99	98	W232835	☐	N17-116	CORE		☐	☐	☐
162.46	165.51	3.05	DST	3.05	100	W232836	☐	N17-116	CORE		☐	☐	☐
165.51	168.55	3.04	DST	3.04	100	W232838	☐	N17-116	CORE		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
168.55	171.60	3.05	DST	2.84	93	W232839	☐	N17-116	CORE		☐	☐	☐
171.60	174.65	3.05	DST	2.99	98	W232840	☐	N17-116	CORE		☐	☐	☐
171.60	174.65	3.05	DST	2.99	98	W232841	☐	N17-116	CORE		☐	☑	☐
174.65	177.70	3.05	DST	3.02	99	W232842	☐	N17-116	CORE		☐	☐	☐
177.70	180.75	3.05	DST	3.00	98	W232843	☐	N17-116	CORE		☐	☐	☐
180.75	183.79	3.04	DMT	2.83	93	W232845	☐	N17-116	CORE		☐	☐	☐
183.79	186.84	3.05	DMT	3.05	100	W232846	☐	N17-116	CORE		☐	☐	☐
186.84	192.94	6.10	DMT	5.95	98	Q052527	☐	N17-C07	chips		☐	☐	☐
192.94	199.03	6.09	DMT	6.00	99	Q052528	☐	N17-C07	chips		☐	☐	☐
199.03	205.13	6.10	DMT	3.10	51	Q052529	☐	N17-C07	chips		☐	☐	☐
205.13	211.18	6.05	DMT	5.96	99	Q052530	☐	N17-C07	chips		☐	☐	☐
211.18	217.32	6.14	DMT	5.98	97	Q052531	☐	N17-C07	chips		☐	☐	☐
217.32	223.11	5.79	DMT	5.66	98	Q052532	☐	N17-C07	chips		☐	☐	☐

HoleID:		BDO-17-001	
ProjectCode:		ORION	
From	To	Comments	LoggedBy
0.00	16.27	This interval consists of overburden. It has a lot of clay, pieces of limestone (5 cm - 15cm) and conglomerates with clasts ranging in size from 0.1 cm - 3 cm.	Hiba
16.27	58.47	Massive limestone unit (slightly dolomitized, less fizz than a pure limestone) with iron oxidation can be seen at fractures and locally in the rock. White calcite veins and veinlets occur between 16.27 m - 45.11 m and range in size from 0.1 cm to 7 cm. Black calcite veinlets (0.5 mm - 1 mm) are prevalent from 16.27 m - 24.53 m, 32.87 m - 33.53 m, 36.12 m - 36.66 m, 43.39 m - 43.59 m and 45.90 m - 55.78 m . A 4 cm brecciated calcite vein with clasts ranging in size from 1 mm - 1cm occurs at 38.14 m. A large calcite vein (38 cm) occurs at 39.23 m. Stylolites can also be observed in this interval. A section of vuggy limestone occurs at 23.85 m - 24.00 m. Vugs range in size from 1 mm - 2 mm. Recrystallized limestone occurs from 23.40 m - 24.09 m, 39.50 m - 39.85 m, 45.11 m - 46 m, and 56.75 m - 57.30 m . Rubbly zones are also present from 27.95 m - 28.20 m, 41.29 m - 42.06 m, 48.95 m - 49.68 m, 50.50 m - 51.48 m, and 56 m - 56.80 m. Two intervals of completely clay altered limestone occur at 39.85 m - 40.05 m and at 43.39 m - 43. 59 m and have remnant limestone clasts ranging in size from 0.5 mm - 3 cm. Bedding ranges from 180-200 strike and 65-76 dip (based on	Hiba
58.47	101.66	Massive dolostone unit consisting of large bioturbated sections, with weak to strong oxidation throughout this interval. Some sections of the dolostone are bleached. A large 8 cm calcite vein occurs at 59.40 m - 59.48 m. And dolostone intervals 62.78 m - 63 m , 65.33 m - 66.69, 69.54 m - 70.85 m, 83.43 m - 83.70 m, 87.93 m - 88.03 m, 94.06 m - 94.36 m contain very small vugs infilled with black calcite crystals. Heavily bioturbated bed that is oxidized occurs at 66.02 m - 66.69 m. Fault (offsets beds) and bed replacement can be observed at 76.42 m - 76.91 m. And interval 92.73 m - 93.12 m has bleached dolomite with large blobs of black dolomite that may have been burrows at one point. Birds eye texture sparry calcite in small vugs in the dolomite 94-95 m. Bedding ranges from 181-202 strike and 66-82 dip (based on planned orentation)	Hiba
101.66	105.80	Gray to tan dolomitic limestone typically massive with local areas of bioturbated wispy bedding	Nathan
105.80	106.10	Small fault zone milled limestone with weak clay and moderate yellow-orange FeOX. The fault is 25 to CA not able to match marks to orient	Nathan
106.10	133.30	Gray to tan dolomitic limestone typically massive with local areas of bioturbated wispy bedding. Areas of birds-eye texture sparry calcite filling vugs in the wispy dolomitic limestone from 130-132 m. Moderate calcite veining (10/m) 107-113m. Scattered irregular stylolites. Fractures with thin (<1 cm) seams of oxidized clay every 2-4 m locally oxidation spreads into wallrock adjacent to the oxidized fractures 5-10 cm. Bedding ranges from 199-207 strike and 65-77 dip (based on planned orentation)	Nathan
133.30	134.70	Gray to tan dolomitic limestone with dark thin calcite veins in a crackle texture. Dark calcite veins cut earlier milky white calcite	Nathan
134.70	146.20	Gray to tan dolomitic limestone typically massive with local areas of bioturbated wispy bedding. Scattered irregular stylolites some with oxidized fillings. Fractures with thin (<1 cm) seams of oxidized clay every 1-2 m locally oxidation spreads into wallrock adjacent to the oxidized fractures 5-10 cm. Two small flecks of realgar in stylolite at 139.5	Nathan
146.20	146.70	Gray to tan dolomitic limestone bioturbated wispy bedding areas of brachiopod wackestone, thin wall (~1mm) brachs up to 1 cm in diameter .	Nathan

146.70	160.10	Gray to tan dolomitic limestone typically massive with local areas of bioturbated wispy bedding. Scattered irregular stylolites some with oxidized fillings. Fractures with thin (<1 cm) seams of oxidized clay every 0.5-1 m locally oxidation spreads into wallrock adjacent to the oxidized fractures 5-10 cm. Some small <1 cm diameter thin wall brachs at 156 m. Punky gray limestone with oxide filled vugs 158.0-158.2m.	Nathan
160.10	161.20	Orange to read oxidized limestone prevasive oxidation through limestone and along fractures	Nathan
161.20	168.50	Gray to tan dolomitic limestone typically massive with local areas of bioturbated wispy bedding. Patchy oxidation adjacent to fractures as well as within the wall rock.	Nathan
168.50	174.00	Gray tan dolomitic limestone wispy bioturbated laminations with areas of fenestral texture sparry calcite in small (1-5 mm vugs) minor oxidation on fractures	Nathan
174.00	174.65	Gray tan dolomitic limestone punky texture with orange to red oxides filling voids	Nathan
174.65	183.79	Gray tan dolomitic limestone wispy bioturbated laminations with areas of fenestral texture sparry calcite in small (1-5 mm vugs) minor oxidation on fractures	Nathan
183.79	194.30	Gray to tan dolomitic limestone typically massive with local areas of bioturbated wispy bedding. Small zones (10-50cm) of punky textured oxidized orange-red carbonate every 2-3 m.	Nathan
194.30	202.25	Gray to dark gray limestone with thin wispy laminations, and intervals of bedding parallel sparry calcite	Nathan
202.25	209.67	Gray to tan dolomitic limestone, fenestral birds eye texture in some of the more dolomitic layers tan brown dolomite with sparry white calcite filling small (<5 mm) vugs.	Nathan
209.67	212.80	Tan to brown dolomitic limestone bioturbated disrupted bedding locally areas of small vugs, minor oxidation along some stylolites. Calcite cemented clast supported breccia from 206-208 m	Nathan
212.80	218.54	Gray to tan dolomitic limestone, fenestral birds eye texture in some of the more dolomitic layers tan brown dolomite with sparry white calcite filling small (<5 mm) vugs. Increased stylolites with thicker infills 2-3mm. Thin calcite + sphalerite veins 215.49-215.75	Nathan
218.54	233.78	Tan to gray dolomite increased hardness typically massive locally thin wispy bedding areas of fenestral birds eay texture with sparry calcite filling small vugs in the tan-gray dolomite. Minor brassy pyrite along stylolites 218-221. Minor oxidation along fractures from	Nathan
233.78	247.65	Gray to tan dolomitic limestone thin wispy bedding locally massive with areas of fenestral birds eay texture with sparry calcite filling small vugs. Stylolites 234.7-242.2 some with thicker infills with minor brassy pyrite.	Nathan
247.65	249.02	Gray to tan dolomitic limestone with bioturbated thin wispy bedding, intervals pockmarked with small 1-5mm open vugs some minor oxidation along stylolites	Nathan
249.02	256.50	Gray dolomite to dolomitic limestone	Nathan
256.50	260.50	Tan gray dolomitic limestone. Wavey 1 cm beds bounded by stylolites 257.60 to 261.48 m rare fine brassy pyrite along stylolites	Nathan
260.50	265.10	Tan gray dolomitic limestone typically thin laminated. Local birds eye fenestral texture. Minor weak oxidation on fractures and stylolites at 262m.	Nathan
265.10	269.90	Tan gray dolomite locally weak fizz with HCl gennerally wispy laminations locally dark irregular blotchy texture disrupting bedding	Nathan
269.90	270.10	Thin calcite vein 0.5-1 cm with minor sphalerite 1-2% and trace realgar, orpiment, and galena. Vein cut by later dark calcite vein	Nathan
270.10	276.10	Tan gray dolomite locally weak fizz with HCl gennerally wispy laminations locally more massive with fenestral birds eye texture	Nathan

276.10	286.10	Gray tan dolomitic limestone typically wispy thin laminations. Local birds eye fenestral texture.	Nathan
286.10	305.67	Gray tan dolomite weak crackle texture with dark hairline calcite veins	Nathan
305.67	306.17	1-2 cm rebrecciated calcite vein with minor realgar and trace sphalerite followed by and yellow orange oxidized zone, weak reaction with HCl cut by late calcite vein.	Nathan
306.17	308.70	Gray tan dolomitic limestone wispy to massive texture	Nathan
308.70	309.90	Gray tan dolomitic limestone with weakly developed crackle breccia texture with calcite vein infill, some of the calcite veins contain sphalerite and orpiment with rare realgar. Graphitic slickens on some fracture surfaces	Nathan
309.90	316.20	Gray tan dolomitic limestone gennerally wispy laminations locally more massive with fenestral birds eye texture trace calcite veins with rare sphalerite, one with realgar at 313.2, white calcite veins cut earlier dark hairline crackle veins	Nathan
316.20	316.80	Gray tan dolomitic limestone with crackle breccia texture with calcite vein infill and less commonly dark carbonaceous clay infill, some of the calcite veins contain sphalerite and orpiment the carbonaceous infill portions contain more orpiment with rare realgar. Graphitic slickens on some fracture surfaces	Nathan
316.80	337.41	Gray tan dolomitic limestone typically massive local thin wispy thin laminations. Local birds eye fenestral texture. Areas of stylolites sub parallel to bedding. Small interval with increased brassy pyrite 330.5-330.7 faint healed breccia texture with a pale green color in the surrounding ~1 m.	Nathan
337.41	340.46	Gray tan dolomite weak to no reaction with HCl, minor calcite viening calcite vein with sphalerite at 338.2 m	Nathan
340.46	367.10	Gray tan dolomitic limestone typically massive with birds eye fenestral texture, locally thin wispy bedding. Areas of stylolites sub parallel to bedding.	Nathan
367.10	371.70	Gray tan dolomitic limestone typically wispy thin laminations. Local birds eye fenestral texture. Minor thin (1-3 mm) calcite veins often with trace amounts of sphalerite, one larger vein at 368.8 to 368.92 with 10% sphalerite. Areas of stylolites sub parallel to	Nathan
371.10	378.90	Gray tan dolomitic limestone typically wispy thin laminations. Local birds eye fenestral texture. Areas of stylolites sub parallel to	Nathan
378.90	382.20	Gray tan dolomitic limestone typically wispy thin laminations. Local birds eye fenestral texture. Areas of stylolites sub parallel to bedding. Areas of weak to moderate yellow-orange oxidation 378.9-379.3 m and 381.4-381.8 with other minor oxidation along fractures. Minor fault at 381.4 not able to oreint but appears to be sub-parallel to bedding	Nathan
382.20	392.00	Gray tan dolomitic limestone typically wispy thin laminations. Local birds eye fenestral texture. Areas of stylolites sub parallel to bedding. Increased calcite veining 388-389 m one calcite vein at 388.65 with realgar	Nathan
392.00	397.25	Gray tan dolomite typically wispy thin laminations. Local birds eye fenestral texture. Areas of stylolites sub parallel to bedding. Thin calcite veins with trace sphalerite 395.11-395.77 m.	Nathan
397.25	401.50	Light gray massive limestone with thin stylolites, strong reaction with HCl	Nathan
401.50	404.50	Gray tan dolomite typically wispy thin laminations. Local birds eye fenestral texture. Areas of stylolites sub parallel to bedding. Thin calcite veins with trace sphalerite 395.11-395.77 m.	Nathan
404.50	416.66	Light gray massive limestone with thin stylolites, strong reaction with HCl. Oxidation and weak clay on fractures 409-416.66	Nathan
416.66	431.60		Nathan

431.60	432.60	Light gray dolomite with calcite veining at low angle to core axis. Calcite veins contain minor reddish sphalerite and clots of hard amorphis black material (pyrobitumin?)	Nathan
432.60	472.10	Light gray massive dolomite locally faint wispy bedding and areas of fenestral fabric. Minor oxidation at 441.1 m	Nathan
472.10	477.62	Gray dolomitic limestone	Nathan
477.62	494.42	Gray dolomite typically massive with local fenestral texture and areas of faint wispy bedding. From 492-495.75 small 1-3 mm patches of fine brassy pyrite, the surrounding dolomite takes on a gray green color.	Nathan
494.42	494.87	Small fault zone milled dolomite/limestone with weak clay minor brassy pyrite. Areas of crackle breccia in adjacent rock	Nathan
494.87	507.10	Light gray to gray stylotitic limestone to dolomitic limestone. Stylolites in the interval are at various orientation not just parallel to	Nathan
507.10	510.20	Gray dolomitic limestone crackle breccia texture with calcite infill	Nathan
510.20	520.80	Light gray to gray stylotitic limestone to dolomitic limestone. Some larger calcite veins locally calcite terminating into open space	Nathan
520.80	522.20	Light gray dolomitic limestone with crackle breccia texture infilled with calcite	Nathan
522.20	524.90	Light gray dolomitic limestone	Nathan
524.90	525.65	Light gray limestone with crackle breccia texture consisting of dark hairline fractures and some late calcite veining, trace realgar in some of the calcite veining	Nathan
525.65	540.00	Light gray dolomite typically massive areas of fenestral texture local areas of wispy bedding	Nathan
540.00	542.10	Light gray stylolitic limestone	Nathan
542.10	547.43	Gray massive dolomite with areas of fenestral texture. Small amounts of calcite veining some with trace sphalerite	Nathan
547.43	566.00	Gray massive dolomite with areas of fenestral texture	Nathan
566.00	581.00	Gray massive dolomite with areas of fenestral texture. Areas with fine to coarse brassy pyrite associated with some minor shears and breccia zones, the dolomite adjacent to the sulfides takes on a pale green color	Nathan
581.00	587.21	Gray massive dolomite with areas of fenestral texture	Nathan
587.21	587.71	Light grey dolostone with black calcite veinlets that have no orientation and are 0.5 mm - 1 mm in thickness	Hiba
587.71	588.00	Light grey mottled dolostone with burrows (chondrites, thalassinoides, planolites) and thin wispy calcite veinlets (0.25 mm - 0.5 mm in thickness)	Hiba
588.00	588.75	Light grey mottled dolostone with burrows (chondrites, thalassinoides, planolites) with lots of thin wispy black calcite veinlets that have no orientation (0.5 mm - 1 mm in thickness). Blebs of dolomite and pyrite are also found in this interval.	Hiba
588.75	589.46	Medium grey limestone with few thin wispy black and white calcite veinlets (0.25 mm - 0.5 mm in thickness). Disseminated, blebs and thin veinlets of pyrite are found in this section.	Hiba
589.46	589.66	Light grey mottled dolostone with burrows (chondrites, thalassinoides). Blebs and thin veinlets of pyrite are found in this section.	Hiba
589.66	590.48	Dark grey dolostone with alternating light grey and dark grey veds (1 mm in thickness) with trace evidence of burrows. Blebs and thin veinlets of pyrite are found in this section.	Hiba
590.48	591.05	Medium grey limestone with few thin calcite veinlets (0.10 mm - 0.40 mm in thickness). Disseminated, blebs and thin veinlets of pyrite are found in this section.	Hiba
591.11	591.23	Greenish grey dolostone with disseminated, blebs and thin veinlets of pyrite.	Hiba

591.23	598.40	Light grey mottled dolostone with burrows (chondrites, thalassinoides, planolites) with thin calcite veinlets (0.25 mm - 0.5 mm). Some burrows and beds are oxidized (red) and bioturbation is evident in this section. Disseminated, blebs and thin veinlets are found in this section.	Hiba
598.40	598.87	Light grey dolostone with lots of thin, black unidirectional calcite veinlets (0.25 mm - 0.5 mm in thickness) and some white calcite veinlets are seen in this section.	Hiba
598.87	605.52	Light grey mottled dolostone with burrows (thalassinoides, chondrites) with some areas of black and white calcite veinlets (0.1 cm - 0.5 cm in thickness).	Hiba
605.52	605.60	Greenish grey dolostone with very fine calcite veinlets (0.2 - 0.25 mm). Very fissile, breaks along bedding planes.	Hiba
605.60	605.68	Light grey dolostone with some bioturbation.	Hiba
605.68	605.82	Dark grey dolostone.	Hiba
605.82	606.65	Medium grey dolostone with lots of stylolitic seams and some areas of intense bioturbation.	Hiba
606.65	608.87	Light grey dolostone with very few calcite veinlets (0.25 mm - 0.5 mm in thickness). Faint evidence of burrows.	Hiba
608.87	609.13	Greenish grey dolostone that is very brittle and has very fine calcite veinlets - shear zone.	Hiba
609.13	611.00	Light grey dolostone with very few calcite veinlets. Faint evidence of burrows and flew blebs of pyrites are found in this section. Some of the burrows are oxidized (red).	Hiba
611.00	612.00	Light grey dolostone with lots of thin, black calcite veinlets (0.25 mm - 0.5 mm in thickness) that have no orientation. Faint evidence of burrows and some burrows are oxidized (red).	Hiba
612.00	614.84	Light grey dolostone with faint evidence of burrows. Some burrows and beds are oxidized (red).	Hiba
614.84	615.00	Light grey dolostone with lots of thin, black calcite veinlets (0.25 mm - 0.5 mm in thickness) that have no orientation. Some beds are oxidized and pyrite veinlets are also seen in this secton.	Hiba
615.00	623.93	Light grey dolostone with faint evidence of burrows. Lots of calcite veinlets are found in this section. Blebs of pyrite also present.	Hiba
623.93	624.37	Medium grey mottled dolostone with burrows (thalassinoides) and very fine calcite veinlets (0.24 mm in thickness).	Hiba
624.37	625.13	Crackled breccia with specks of realgar, orpiment, sphalerite and tetrahedrite (??). Lots of calcite veinlets and veins present in this section (0.1 cm - 2 cm in thickness).	Hiba
625.13	625.66	Lots of black calcite veinlets creating a crackled texture in the dolostone. Specks of sphalerite and pyrite are found in this section.	Hiba
625.66	626.70	Medium grey mottled dolostone with burrows (thalassinoides) and very fine calcite veinlets (0.25 mm).	Hiba
626.70	626.76	Fissile dolostone breaks along bedding planes.	Hiba
626.76	627.66	Greenish grey dolostone that contains faint evidence of burrows. It also contains potassium phyllosilicates (??), specks of realgar, disseminated, blebs and veinlets of pyrite.	Hiba
627.66	628.24	Medium grey dolostone with lots of calcite veins, veinlets (1 mm - 1 cm) and blebs of calcite.	Hiba
628.24	629.83	Medium grey mottled dolostone with burrows (thalassinoides) and fne calcite veinlets (0.5 mm - 1 mm) and blebs of calcite are present in this section.	Hiba
629.83	629.93	Fissile dolostone breaks along bedding planes. Trace evidence of burrows.	Hiba

629.93	632.06	Light grey mottled dolostone with burrows (thalassinoides) and few calcite veinlets (0.25 mm - 0.5 mm). Some burrows are oxidized (red) and blebs of pyrite are also found int his section.	Hiba
632.06	632.40	Greenish grey dolostone that contains blebs of pyrite. Potassium phyllosilicates (??) are also present in this section.	Hiba
632.40	634.76	Light grey limestone with potassium phyllosilicates (??) blebs and veinlets present in this section. Lots of black calcite veinlets with no orientation and disseminated and blebs of pyrite are also present.	Hiba
634.76	634.90	Greenish grey dolostone with faint evidence of burrows and with few blebs of pyrite.	Hiba
634.90	637.00	Light grey dolostone with faint evidence of burrows in some areas. It has a few calcie veinlets (0.5 mm - 1mm in thickness).	Hiba
637.00	640.24	Greenish grey dolostone with a few black and white veinelts 90.25 mm - 0.5 mm in thickness). Faint evidence of burrows and bioturbation.	Hiba
640.24	641.35	Crackled greenish grey dolostone with faint evidence of burrows. Burrows and other areas are oxidized red). Calcite veins with no orinetation give the dolostone the crackled texture.	Hiba
641.35	645.70	Greenish grey dolostone with faint evidence of burrows (planolites, chondrites) and fossils (brachiopods). Few black and white calcite veinlets (1 mm), as well as calcite clasts ranging in size from 0.15 cm - 0.25 cm are present in this section. Few blebs of pyrite are also present.	Hiba
645.70	646.17	Crackled light grey dolostone. Lots of black calcite veinlets and a few white calcite veinlets give the crackled texture to the dolostone (0.15 mm - 0.25 mm in thickness).	Hiba
646.17	646.58	Greenish grey dolostone with faint evidence of burrows and heavy bioturbation. Specks of pyrite found in this section, with very few calcite veinlets (0.25 mm - 0.5 mm in thickness).	Hiba
646.58	649.14	Greenish grey dolostone with very fine calcite veinlets (0.25 mm) and some faint evidence of burrows. Disseminated, blebs and veinlets of pyrite are found in this section. Oxidation of burrows and other areas are also seen (red).	Hiba
649.14	651.72	Light grey to dark grey crackled dolomitic limestone. Lots of black and white calcite veinlets (0.5 mm - 0.5 mm in thickness) give the dolostone the crackled texture. From 651.07 m - 651.36 m disseminated and veinlets of pyrite are observed.	Hiba
651.72	658.20	Medium grey to dark grey dolomitic limestone with very few fine calcite veinlets (0.25 mm - 0.5 mm in thickness). Few blebs of pyrite also found in this section.	Hiba
658.20	659.03	Dark grey dolostone with faint evidence of bioturbation and fossils (crinoids). Very fine calcite veinlets (0.25 mm - 0.5 mm in thickness) are observed in this section. Stylolites, blebs and veinlets of pyrite are also seen in this section.	Hiba
659.03	663.55	Dark grey dolostone with faint evidence of bioturbation. Some blebs of calcite are also observed in this section.	Hiba
663.55	664.58	Dark grey dolostone with faint evidence of bioturbation. Very few calcite veinlets (0.25 mm - 0.5 mm in thickness) and blebs of calcite are seen in this section. From 664.32 m - 664.58 m there are three brecciated calcite veins (2 cm - 3 cm in thickness) with clasts ranging in size from 0.25 cm - 1 cm. Few blebs of pyrite also observed.	Hiba
664.58	665.97	Dark grey dolostone with few blebs of calcite. Disseminated and veinlets of pyrite are also seen in this section.	Hiba
665.97	667.44	Fossilifeous light grey to medium grey limestone with irregular, discontinuous folded beds (slump) with fossils fragments of crinoids, brachiopods, rugose corals and gastropods. Blebs and veinlets of pyrite also present. Green potassium phyllosilicates (??) also seen in this section.	Hiba

667.44	669.65	Crackled dolomitic limestone with few fossil fragments of brachiopods and rugose corals. Few stylolites and some disseminated pyrite also observed in this section.	Hiba
669.65	671.10	Medium grey to dark grey limestone with irregular, discontinuous folded beds (slump). It has a few fossil fragments of brachiopods and rugose corals. Some blebs of pyrite are also observed in this section.	Hiba
671.10	672.46	Crackled light grey dolomitic limestone with irregular, discontinuous folded beds (slump) with some calcite granules (may be fossils). Black and white calcite veinlets (0.25 mm - 0,5 mm in thickness) with no orinetation give the dolostone the crackled texture.	Hiba
672.46	674.40	Light grey dolomitic limestone with irregular, discontinuous folded beds (slump). Evidence of trace fossils and some calcite veinlets as well as granules are present. This section also has a lot of stylolites.	Hiba
674.40	675.77	Medium to dark grey dolomitic limestone with irregular, discontinuous folded beds (slump) and faint evidence of fossils (crinoids) in some areas. Lots of blebs and infill of calcite with very few, fine calcite veinlets (0.15 mm in thickness). Lots of stylolites present in this section with carbonaceous infill. Specks of pyrite also found in this section.	Hiba
675.77	676.30	Medium grey to light grey dolostone with faint evidence of burrows and fossil fragments. Few veinlets (0.15 mm - 0.25 mm in thickness) and blebs of calcite as well as disseminated pyrite are also present in this section.	Hiba
676.30	678.10	Light grey dolostone with blebs, infills, veins and veinlets of black and white calcite present (0.25 - 0.5 mm in thickness). Irregular, discontinuous folded beds (slump) and crackled dolostone are also found in this section. Black calcite veinlets with no orientation give the dolostone the crackled texture.	Hiba
678.10	678.60	Brecciated dolostone with clasts ranging in size from 0.15 cm - 5 cm are found in this section.	Hiba
678.60	680.89	Dark brown - grey dolomitic limestone with intensely irregular, discontinuous folded beds (slump) with faint evidence of fossils (crinoids, sponges - amphipora?). Blebs, granules as well as black and white calcite veinlets (0.15 mm - 0.5 mm) are also observed in this section. Some stylolites are also seen.	Hiba
680.89	683.00	Brownish - grey, crackled dolomitic limestone with irregular, discontinuous folded beds (slump) with faint evidence of fossils (crinoids, brachiopods). White calcite veinlets (0.15 mm - 0.5 mm in thickness) with no orientation give the dolomitic limestone the crackled texture. Blebs and granules of calcite as well as few specks of pyrite are also observed in this section.	Hiba
683.00	684.26	Medium grey dolomitic limestone with very few calcite veinlets (0.15 mm - 0.25 mm) with faint evidence of fossils. Blebs and granules of calcite as well as some stylolites are also present.	Hiba
684.26	689.91	Medium grey to dark grey dolomitic limestone with fossils (crinoids, brachiopods, rugose corals) and evidence of bioturbation. Some areas have irregular, discontinuous folded beds (slump). A couple of calcite veins (0.5 cm - 1 cm) as well as blebs and granules (more common between 634.26 m - 634.50) are seen in this section. A few sections also have the crackled texture due to lots of calcite veinlets (0.25 mm in thickness) and some areas are brecciated with clasts ranging from 0.1 cm to 1 cm).	Hiba
689.91	690.98	Medium grey dolomitic limestone with irregular, discontinuous folded beds. Some areas are brecciated and have clasts ranging in size from 0.25 cm - 3 cm. Some blebs, granules and calcite veinlets are seen in this section (0.25 mm - 0.5 mm in thickness).	Hiba
690.98	692.00	Dark brown intensely crackled dolostone with blebs and granules of calcite. Calcite veinlets (0.15 mm - 0.25 mm) with no orientation give the dolomitic limestone the crackled texture. This section is probably a fault.	Hiba

692.00	693.00	Dark grey crackled, brecciated dolomitic limestone with irregular, discontinuous folds (slump). The calcite veinlets with no orientation give the dolomitic limestone the crackled texture and are disjointed due to mini-faults (692.54 m) in this section. Blebs, infills and granules of calcite also observed in this section. Few stylolites are also seen.	Hiba
693.00	694.28	Dark grey dolomitic limestone with faint evidence of fossils. Very fine calcite veinlets (0.15 mm - 0.25 mm) are also observed. Few areas in this section are brecciated and have clasts ranging in size from 0.25 cm - 1 cm.	Hiba
694.28	694.87	Dark grey brecciated dolostone with large clasts of limestone (up to 8 cm) are observed in this section. Some stylolites, blebs and veinlets (0.25 mm - 1 mm) of calcite are also seen in this section.	Hiba
694.87	695.28	Medium grey crackled dolomitic limestone with evidence of fossils (gastropods). Very fine calcite veinlets (0.15 mm in thickness) with no orientation give the dolomitic limestone the crackled texture. Stylolites, blebs and granules of calcite are also observed in	Hiba
695.28	697.47	Medium grey dolomitic limestone with fine calcite veinlets (0.15 mm - 0.25 mm in thickness) and specks of calcite with faint evidence of fossil fragments. Stylolites have carbonaecous infill in this section.	Hiba
697.47	698.95	Light grey dolostone with black and white calcite veinlets (0.15 mm - 1 mm in thickness) and faint evidence of beds and fossils are observed in this section.	Hiba
698.95	701.26	Dark grey to medium grey dolomitic limestone with fossils (gastropods, rugose corals, brachiopods, sponges - amphipora?). Few veinlets (0.15 mm - 0.25 mm in thickness) and blebs of calcite are seen. Some stylolites are also observed along with disseminated, specks, blebs and veinlets of pyrite.	Hiba
701.26	702.38	Medium grey to light grey dolostone with large limestone clasts (up to 5 cm) with fossils (gastropods, crinoids, rugose corals, brachiopods). Few calcite veinlets (0.15 mm - 0.25 mm in thickness), lots of stylolites as well as disseminated and specks of pyrite are also observed in this section.	Hiba
702.38	702.80	Crackled light grey dolostone with few white calcite veinlets (0.25 mm - 0.5 mm) and fossils (rugose corals, brachiopods, sponges - amphipora?). Black calcite veinlets (0.15 mm - 0.5 mm) with no orientation give the dolostone the crackled texture. Specks of pyrite are also seen.	Hiba
702.80	702.88	Fault	Hiba
702.88	704.86	Dark grey to medium grey dolostone with irregular, discontinuous folded beds (slump), large clasts of limestone (1mm - 7 cm) and fossils (brachiopods, crinoids, rugose corals, sponges, gastropods). Soft sediment deformation and stylolites are also observed.	Hiba
704.68	706.92	Light grey limestone with potassium phyllosilicates (??), specks of pyrite, few calcite veinlets (0.15 mm - 0.5 mm in thickness), some stylolites and fossils (brachiopods, rugose corals, gastropods) are observed in this section.	Hiba
706.92	709.05	Medium grey to light grey limestone with irregular, discontinuous folded beds and soft sediment deformation is observed. Lots of stylolites with carbonaecous infill, few calcite veinlets (0.15 mm - 0.25 mm in thickness), specks of pyrite and fossils (brachiopods, gastropods, rugose corals) are also observed in this section.	Hiba
709.05	709.27	Light grey limestone with few fossil fragments (brachiopods), few black calcite veinlets and stylolites observed in this section.	Hiba
		END OF HOLE	Hiba

BDO-17-001

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	14.71	14.71	0	0	0.00	0	--	--	--	overburden no recovery
14.71	16.23	1.52	0	0	0.00	0	--	--	--	overburden rubble
361.80	364.85	3.05	3.05	100	2.95	97	3R	4H	1W	
364.85	367.89	3.04	2.95	97	2.79	92	3R	4H	1W	
367.89	370.94	3.05	3.05	100	2.74	90	2R	4H	1W	
370.94	373.99	3.05	3.05	100	2.91	95	2R	3H	1W	
373.99	377.04	3.05	3.05	100	2.82	92	2R	3H	1W	
377.04	380.09	3.05	2.6	85	2.09	69	2R	3H	2W	
380.09	383.13	3.04	2.36	78	1.45	48	2R	3H	2W	
383.13	386.18	3.05	2.93	96	2.33	76	2R	3H	1W	
386.18	389.23	3.05	3.05	100	2.36	77	3R	3H	1W	
389.23	392.28	3.05	3.05	100	2.96	97	2R	2H	1W	
392.28	395.33	3.05	3.05	100	3.01	99	2R	3H	1W	
395.33	398.37	3.04	2.89	95	2.08	68	2R	3H	1W	
398.37	401.42	3.05	2.63	86	2.49	82	2R	3H	1W	
401.42	404.47	3.05	2.64	87	2.56	84	3R	3H	1W	
404.47	407.52	3.05	3.05	100	2.82	92	3R	3H	1W	
407.52	410.57	3.05	2.76	90	1.63	53	4R	3H	1W	RBZ 408.8-408.95
410.57	413.61	3.04	2.26	74	0.68	22	4R	3H	1W	RBZ 412.00-412.20
413.61	416.66	3.05	1.78	58	0.90	30	4R	3H	1W	RBZ 414.87-416.15
416.66	419.71	3.05	2.66	87	2.45	80	2R	3H	1W	
419.71	422.76	3.05	3.02	99	2.76	90	2R	3H	1W	
422.76	425.81	3.05	2.93	96	2.85	93	2R	3H	1W	
425.81	428.85	3.04	2.96	97	2.71	89	2R	3H	1W	
428.85	431.90	3.05	3.04	100	2.96	97	1R	3H	1W	
431.90	434.95	3.05	3.01	99	3.00	98	2R	3H	1W	
434.95	438.00	3.05	3.05	100	2.93	96	2R	3H	1W	
438.00	441.05	3.05	3.05	100	3.05	100	2R	3H	1W	
441.05	444.09	3.04	2.8	92	2.80	92	1R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
444.09	447.14	3.05	2.81	92	2.79	91	1R	3H	1W	
447.14	450.19	3.05	3.05	100	2.78	91	1R	3H	1W	
450.19	453.24	3.05	2.92	96	2.92	96	1R	3H	1W	
453.24	456.29	3.05	3.05	100	2.94	96	1R	3H	1W	
456.29	459.33	3.04	2.97	98	2.79	92	1R	3H	1W	
459.33	462.38	3.05	3.05	100	3.05	100	1R	3H	1W	
462.38	465.43	3.05	3.03	99	2.86	94	1R	3H	1W	
465.43	468.48	3.05	3.02	99	2.60	85	1R	3H	1W	
468.48	471.53	3.05	3.05	100	2.72	89	2R	3H	1W	
471.53	474.57	3.04	3	99	2.81	92	3R	3H	1W	
474.57	477.62	3.05	2.93	96	2.65	87	3R	3H	1W	
477.62	480.67	3.05	3.05	100	2.98	98	2R	3H	1W	
480.67	483.72	3.05	2.65	87	2.56	84	1R	3H	1W	
483.72	486.77	3.05	3.05	100	2.64	87	1R	3H	1W	Long run, ground core towards end of interval
486.77	489.81	3.04	2.82	93	2.63	87	1R	3H	1W	
489.81	492.86	3.05	3.05	100	2.58	85	2R	3H	1W	fracture || TCA
492.86	495.91	3.05	3.03	99	1.98	65	1R	3H	1W	494-495.91m core is less competent but not rubble
495.91	498.96	3.05	3.04	100	2.04	67	3R	3H	1W	
498.96	502.00	3.04	3.04	100	2.86	94	3R	3H	1W	
502.00	505.05	3.05	3.05	100	2.63	86	3R	3H	1W	
505.05	508.10	3.05	2.98	98	2.76	90	2R	3H	1W	507.70-80m small rubble zone
508.10	511.15	3.05	3.03	99	2.55	84	2R	3H	1W	Almost all of the fractures look mechanical
511.15	514.20	3.05	2.9	95	1.37	45	1R	3H	1W	
514.20	517.25	3.05	3.02	99	2.11	69	2R	3H	1W	
517.25	520.29	3.04	3.04	100	2.23	73	2R	3H	1W	
520.29	523.34	3.05	3.02	99	2.72	89	2R	3H	1W	
584.30	587.35	3.05	3.05	100	2.97	97	2R	3H	1W	
587.35	590.40	3.05	3.05	100	2.68	88	2R	3H	1W	
590.40	593.45	3.05	3.02	99	2.84	93	2R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
593.45	596.49	3.04	2.97	98	2.15	71	2R	3H	1W	one true joint set, two distinct fractures. 594.95-595.08 fissle clay interval
605.64	608.69	3.05	3.04	100	2.81	92	2R	3H	1W	
608.69	611.73	3.04	3	99	2.57	85	2R	3H	1W	
611.73	614.78	3.05	3.05	100	2.93	96	2R	3H	1W	
614.78	617.83	3.05	2.98	98	2.81	92	2R	3H	1W	small amount of ground core
617.83	620.88	3.05	3.05	100	3.05	100	3R	3H	1W	all fractures look mechanical
620.88	623.93	3.05	3.04	100	3.01	99	3R	3H	1W	all fractures look mechanical
623.93	626.97	3.04	2.97	98	2.59	85	3R	3H	1W	
626.97	630.02	3.05	3.05	100	2.11	69	4R	3H	1W	
630.02	633.07	3.05	3.01	99	2.86	94	2R	3H	1W	
633.07	636.12	3.05	3.05	100	2.69	88	4R	3H	1W	
636.12	639.17	3.05	3.05	100	3.05	100	2R	3H	1W	
639.17	642.21	3.04	2.87	94	1.58	52	2R	3H	1W	joints are cross cutting (X shape) at 30 TCA. Mix if sulphides (Py) and clay
642.21	645.26	3.05	3.02	99	2.55	84	2R	3H	1W	642.27-.37 "rubble zone" interval of regularly fractured clay
645.26	648.31	3.05	3.05	100	2.94	96	1R	3H	1W	
648.31	651.36	3.05	3.02	99	3.02	99	0R	3H	1W	
651.36	654.41	3.05	2.98	98	2.88	94	0R	3H	1W	
654.41	657.45	3.04	3.04	100	3.04	100	0R	4H	1W	
657.45	660.50	3.05	2.98	98	2.98	98	1R	4H	1W	Some of the steep angle joints have visible slickenlines.
660.50	663.55	3.05	2.92	96	2.75	90	1R	4H	1W	RBZ at 661.95 with high anlge fractures.
663.55	666.60	3.05	3.05	100	3.05	100	2R	4H	1W	
666.60	669.65	3.05	3.05	100	3.05	100	4R	3H	1W	
669.65	672.69	3.04	3.01	99	3.01	99	2R	3H	1W	
672.69	675.74	3.05	3	98	3.00	98	1R	4H	1W	
675.74	678.79	3.05	3.05	100	3.05	100	2R	4H	1W	
678.79	681.84	3.05	2.98	98	1.69	55	3R	4H	1W	
681.84	684.89	3.05	2.7	89	1.66	54	2R	3H	1W	

BDO-17-001

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00		0.00	0	K289116	☐	O17-001	Core	OX7	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289154	☐	O17-002	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	K289163	☐	O17-002	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289192	☐	O17-003	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	K289215	☐	O17-003	Core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289232	☐	O17-004	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	K289260	☐	O17-004	Core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289275	☐	O17-005	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	K289290	☐	O17-005	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289312	☐	O17-006	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	K289325	☐	O17-006	Core	OX7	☐	☐	☐
0.00	10.06	10.06		6.50	65	K289101	☐	O17-001	Core		☐	☐	☐
0.00	0.00	0.00		0.00	0	K289111	☐	O17-001	Core		☑	☐	☐
10.06	16.60	6.54		6.54	100	K289102	☐	O17-001	Core		☐	☐	☐
16.60	20.73	4.13		4.13	100	K289103	☐	O17-001	Core		☐	☐	☐
20.73	23.77	3.04		2.95	97	K289104	☐	O17-001	Core		☐	☐	☐
23.77	26.82	3.05		2.66	87	K289105	☐	O17-001	Core		☐	☐	☐
26.82	29.87	3.05		2.37	78	K289106	☐	O17-001	Core		☐	☐	☐
29.87	32.92	3.05		2.90	95	K289107	☐	O17-001	Core		☐	☐	☐
32.92	35.97	3.05		2.73	90	K289108	☐	O17-001	Core		☐	☐	☐
35.97	39.01	3.04		2.95	97	K289109	☐	O17-001	Core		☐	☐	☐
39.01	42.06	3.05		2.80	92	K289110	☐	O17-001	Core		☐	☐	☐
42.06	45.11	3.05		2.67	88	K289112	☐	O17-001	Core		☐	☐	☐
45.11	48.16	3.05		2.83	93	K289113	☐	O17-001	Core		☐	☐	☐
48.16	51.21	3.05		1.40	46	K289114	☐	O17-001	Core		☐	☐	☐
51.21	54.25	3.04		2.94	97	K289115	☐	O17-001	Core		☐	☐	☐
54.25	57.30	3.05		2.36	77	K289117	☐	O17-001	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
57.30	60.35	3.05		2.96	97	K289118	☐	O17-001	Core		☐	☐	☐
60.35	63.40	3.05		2.92	96	K289119	☐	O17-001	Core		☐	☐	☐
63.40	66.45	3.05		2.68	88	K289120	☐	O17-001	Core		☐	☐	☐
66.45	69.49	3.04		2.96	97	K289121	☐	O17-001	Core		☐	☐	☐
69.49	72.54	3.05		2.70	89	K289122	☐	O17-001	Core		☐	☐	☐
72.54	75.59	3.05		2.88	94	K289123	☐	O17-001	Core		☐	☐	☐
75.59	78.64	3.05		2.70	89	K289124	☐	O17-001	Core		☐	☐	☐
78.64	81.69	3.05		2.08	68	K289125	☐	O17-001	Core		☐	☐	☐
81.69	84.73	3.04		2.69	88	K289126	☐	O17-001	Core		☐	☐	☐
84.73	87.78	3.05		2.67	88	K289127	☐	O17-001	Core		☐	☐	☐
87.78	90.83	3.05		2.83	93	K289128	☐	O17-001	Core		☐	☐	☐
87.78	90.83	3.05		2.83	93	K289129	☐	O17-001	Core		☐	☑	☐
90.83	93.88	3.05		2.82	92	K289130	☐	O17-001	Core		☐	☐	☐
93.88	96.93	3.05		2.97	97	K289131	☐	O17-001	Core		☐	☐	☐
96.93	99.97	3.04		2.75	90	K289132	☐	O17-001	Core		☐	☐	☐
99.97	103.02	3.05		2.82	92	K289133	☐	O17-001	Core		☐	☐	☐
103.02	106.07	3.05		2.29	75	K289134	☐	O17-001	Core		☐	☐	☐
106.07	109.12	3.05		2.99	98	K289135	☐	O17-001	Core		☐	☐	☐
109.12	112.17	3.05		2.87	94	K289136	☐	O17-001	Core		☐	☐	☐
112.17	115.21	3.04		2.94	97	K289137	☐	O17-001	Core		☐	☐	☐
115.21	118.26	3.05		3.02	99	K289138	☐	O17-001	Core		☐	☐	☐
118.26	121.31	3.05		2.30	75	K289139	☐	O17-001	Core		☐	☐	☐
121.31	124.36	3.05		2.45	80	K289140	☐	O17-001	Core		☐	☐	☐
124.36	127.41	3.05		2.96	97	K289141	☐	O17-002	core		☐	☐	☐
127.41	130.45	3.04		2.72	89	K289142	☐	O17-002	core		☐	☐	☐
130.45	133.50	3.05		2.80	92	K289143	☐	O17-002	core		☐	☐	☐
133.50	136.55	3.05		2.85	93	K289144	☐	O17-002	core		☐	☐	☐
136.55	139.60	3.05		2.91	95	K289145	☐	O17-002	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
139.60	142.65	3.05		2.44	80	K289146	☐	O17-002	core		☐	☐	☐
142.65	145.69	3.04		2.43	80	K289147	☐	O17-002	core		☐	☐	☐
145.69	148.74	3.05		2.85	93	K289148	☐	O17-002	core		☐	☐	☐
148.74	151.79	3.05		2.14	70	K289149	☐	O17-002	core		☐	☐	☐
151.79	154.84	3.05		2.75	90	K289150	☐	O17-002	core		☐	☐	☐
154.84	157.89	3.05		2.80	92	K289151	☐	O17-002	core		☐	☐	☐
157.89	160.93	3.04		2.21	73	K289152	☐	O17-002	core		☐	☐	☐
160.93	163.98	3.05		1.35	44	K289153	☐	O17-002	core		☐	☐	☐
163.98	167.03	3.05		2.97	97	K289155	☐	O17-002	core		☐	☐	☐
167.03	170.08	3.05		3.04	100	K289156	☐	O17-002	core		☐	☐	☐
170.08	173.13	3.05		2.88	94	K289157	☐	O17-002	core		☐	☐	☐
173.13	176.17	3.04		2.42	80	K289158	☐	O17-002	core		☐	☐	☐
176.17	179.22	3.05		2.05	67	K289159	☐	O17-002	core		☐	☐	☐
179.22	182.27	3.05		1.85	61	K289160	☐	O17-002	core		☐	☐	☐
182.27	185.32	3.05		2.50	82	K289161	☐	O17-002	core		☐	☐	☐
185.32	188.37	3.05		2.82	92	K289162	☐	O17-002	core		☐	☐	☐
188.37	191.41	3.04		2.35	77	K289164	☐	O17-002	core		☐	☐	☐
191.41	194.46	3.05		2.36	77	K289165	☐	O17-002	core		☐	☐	☐
194.46	197.51	3.05		2.51	82	K289166	☐	O17-002	core		☐	☐	☐
197.51	200.56	3.05		3.04	100	K289167	☐	O17-002	core		☐	☐	☐
200.56	203.30	2.74		2.44	89	K289168	☐	O17-002	core		☐	☐	☐
203.30	206.35	3.05		2.58	85	K289169	☐	O17-002	core		☐	☐	☐
206.35	209.40	3.05		2.83	93	K289170	☐	O17-002	core		☐	☐	☐
209.40	212.45	3.05		2.75	90	K289171	☐	O17-002	core		☐	☐	☐
212.45	215.49	3.04		2.41	79	K289172	☐	O17-002	core		☐	☐	☐
215.49	218.54	3.05		2.31	76	K289173	☐	O17-002	core		☐	☐	☐
218.54	221.59	3.05		3.00	98	K289174	☐	O17-002	core		☐	☐	☐
221.59	224.64	3.05		3.05	100	K289175	☐	O17-002	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
224.64	227.69	3.05		3.04	100	K289176	☐	O17-002	core		☐	☐	☐
227.69	230.73	3.04		3.01	99	K289177	☐	O17-002	core		☐	☐	☐
230.73	233.78	3.05		3.01	99	K289178	☐	O17-002	core		☐	☐	☐
233.78	236.83	3.05		2.13	70	K289179	☐	O17-002	core		☐	☐	☐
233.78	236.83	3.05		2.13	70	K289180	☐	O17-002	core		☐	☑	☐
236.83	239.88	3.05		3.05	100	K289181	☐	O17-003	Core		☐	☐	☐
239.88	242.93	3.05		2.93	96	K289182	☐	O17-003	Core		☐	☐	☐
242.93	245.97	3.04		2.95	97	K289183	☐	O17-003	Core		☐	☐	☐
245.97	249.02	3.05		2.85	93	K289184	☐	O17-003	Core		☐	☐	☐
249.02	252.07	3.05		3.05	100	K289185	☐	O17-003	Core		☐	☐	☐
252.07	255.12	3.05		3.05	100	K289186	☐	O17-003	Core		☐	☐	☐
255.12	258.17	3.05		3.03	99	K289187	☐	O17-003	Core		☐	☐	☐
258.17	261.21	3.04		2.82	93	K289188	☐	O17-003	Core		☐	☐	☐
261.21	264.26	3.05		3.01	99	K289189	☐	O17-003	Core		☐	☐	☐
264.26	267.31	3.05		3.00	98	K289190	☐	O17-003	Core		☐	☐	☐
267.31	270.36	3.05		2.96	97	K289191	☐	O17-003	Core		☐	☐	☐
270.36	273.41	3.05		2.82	92	K289193	☐	O17-003	Core		☐	☐	☐
273.41	276.45	3.04		2.95	97	K289194	☐	O17-003	Core		☐	☐	☐
276.45	279.50	3.05		2.99	98	K289195	☐	O17-003	Core		☐	☐	☐
279.50	282.55	3.05		3.02	99	K289196	☐	O17-003	Core		☐	☐	☐
282.55	285.60	3.05		2.89	95	K289197	☐	O17-003	Core		☐	☐	☐
285.60	288.65	3.05		2.76	90	K289198	☐	O17-003	Core		☐	☐	☐
285.60	288.65	3.05		2.76	90	K289199	☐	O17-003	Core		☐	☑	☐
288.65	291.69	3.04		3.00	99	K289200	☐	O17-003	Core		☐	☐	☐
291.69	294.74	3.05		2.74	90	K289201	☐	O17-003	Core		☐	☐	☐
294.74	297.78	3.04		2.95	97	K289202	☐	O17-003	Core		☐	☐	☐
297.78	300.84	3.06		2.86	93	K289203	☐	O17-003	Core		☐	☐	☐
300.84	303.89	3.05		2.96	97	K289204	☐	O17-003	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
303.89	306.93	3.04		2.94	97	K289205	☐	O17-003	Core		☐	☐	☐
306.93	309.98	3.05		3.05	100	K289206	☐	O17-003	Core		☐	☐	☐
309.98	313.03	3.05		2.71	89	K289207	☐	O17-003	Core		☐	☐	☐
313.03	316.08	3.05		3.04	100	K289208	☐	O17-003	Core		☐	☐	☐
316.08	319.13	3.05		2.97	97	K289209	☐	O17-003	Core		☐	☐	☐
319.13	322.17	3.04		2.92	96	K289210	☐	O17-003	Core		☐	☐	☐
322.17	325.22	3.05		2.68	88	K289211	☐	O17-003	Core		☐	☐	☐
325.22	328.27	3.05		3.05	100	K289212	☐	O17-003	Core		☐	☐	☐
328.27	331.32	3.05		3.05	100	K289213	☐	O17-003	Core		☐	☐	☐
331.32	334.37	3.05		3.01	99	K289214	☐	O17-003	Core		☐	☐	☐
334.37	337.41	3.04		3.03	100	K289216	☐	O17-003	Core		☐	☐	☐
337.41	340.46	3.05		3.05	100	K289217	☐	O17-003	Core		☐	☐	☐
340.46	343.51	3.05		2.96	97	K289218	☐	O17-003	Core		☐	☐	☐
343.51	346.56	3.05		3.01	99	K289219	☐	O17-003	Core		☐	☐	☐
346.56	349.61	3.05		2.97	97	K289220	☐	O17-003	Core		☐	☐	☐
349.61	352.65	3.04		3.04	100	K289221	☐	O17-004	Core		☐	☐	☐
352.65	355.70	3.05		3.01	99	K289222	☐	O17-004	Core		☐	☐	☐
355.70	358.75	3.05		2.97	97	K289223	☐	O17-004	Core		☐	☐	☐
358.75	361.80	3.05		3.05	100	K289224	☐	O17-004	Core		☐	☐	☐
361.80	364.85	3.05		3.05	100	K289225	☐	O17-004	Core		☐	☐	☐
364.85	367.89	3.04		2.95	97	K289226	☐	O17-004	Core		☐	☐	☐
367.89	370.94	3.05		3.05	100	K289227	☐	O17-004	Core		☐	☐	☐
370.94	373.99	3.05		3.05	100	K289228	☐	O17-004	Core		☐	☐	☐
373.99	377.04	3.05		3.05	100	K289229	☐	O17-004	Core		☐	☐	☐
377.04	380.09	3.05		2.60	85	K289230	☐	O17-004	Core		☐	☐	☐
380.09	383.13	3.04		2.36	78	K289231	☐	O17-004	Core		☐	☐	☐
383.13	386.18	3.05		2.93	96	K289233	☐	O17-004	Core		☐	☐	☐
386.18	389.23	3.05		3.05	100	K289234	☐	O17-004	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
389.23	392.28	3.05		3.05	100	K289235	☐	O17-004	Core		☐	☐	☐
392.28	395.33	3.05		3.05	100	K289236	☐	O17-004	Core		☐	☐	☐
395.33	398.37	3.04		2.89	95	K289237	☐	O17-004	Core		☐	☐	☐
398.37	401.42	3.05		2.63	86	K289238	☐	O17-004	Core		☐	☐	☐
401.42	404.47	3.05		2.64	87	K289239	☐	O17-004	Core		☐	☐	☐
404.47	407.52	3.05		3.05	100	K289240	☐	O17-004	Core		☐	☐	☐
407.52	410.57	3.05		2.76	90	K289241	☐	O17-004	Core		☐	☐	☐
410.57	413.61	3.04		2.26	74	K289242	☐	O17-004	Core		☐	☐	☐
413.61	416.66	3.05		1.78	58	K289243	☐	O17-004	Core		☐	☐	☐
416.66	419.71	3.05		2.66	87	K289244	☐	O17-004	Core		☐	☐	☐
419.71	422.76	3.05		3.02	99	K289245	☐	O17-004	Core		☐	☐	☐
422.76	425.81	3.05		2.93	96	K289246	☐	O17-004	Core		☐	☐	☐
425.81	428.85	3.04		2.96	97	K289247	☐	O17-004	Core		☐	☐	☐
428.85	431.90	3.05		3.04	100	K289248	☐	O17-004	Core		☐	☐	☐
431.90	434.95	3.05		3.01	99	K289249	☐	O17-004	Core		☐	☐	☐
434.95	438.00	3.05		3.05	100	K289250	☐	O17-004	Core		☐	☐	☐
438.00	441.05	3.05		3.05	100	K289251	☐	O17-004	Core		☐	☐	☐
441.05	444.09	3.04		2.80	92	K289252	☐	O17-004	Core		☐	☐	☐
444.09	447.14	3.05		2.81	92	K289253	☐	O17-004	Core		☐	☐	☐
447.14	450.19	3.05		3.05	100	K289254	☐	O17-004	Core		☐	☐	☐
450.19	453.24	3.05		2.92	96	K289255	☐	O17-004	Core		☐	☐	☐
453.24	456.29	3.05		3.05	100	K289256	☐	O17-004	Core		☐	☐	☐
456.29	459.33	3.04		2.97	98	K289257	☐	O17-004	Core		☐	☐	☐
456.29	459.33	3.04		2.97	98	K289258	☐	O17-004	Core		☐	☑	☐
459.33	462.38	3.05		3.05	100	K289259	☐	O17-004	Core		☐	☐	☐
462.38	465.43	3.05		3.03	99	K289261	☐	O17-005	core		☐	☐	☐
465.43	468.48	3.05		3.02	99	K289262	☐	O17-005	core		☐	☐	☐
468.48	471.53	3.05		3.05	100	K289263	☐	O17-005	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
471.53	474.57	3.04		3.00	99	K289264	☐	O17-005	core		☐	☐	☐
474.57	477.62	3.05		2.93	96	K289265	☐	O17-005	core		☐	☐	☐
477.62	480.67	3.05		3.05	100	K289266	☐	O17-005	core		☐	☐	☐
480.67	483.72	3.05		2.65	87	K289267	☐	O17-005	core		☐	☐	☐
483.72	486.77	3.05		3.05	100	K289268	☐	O17-005	core		☐	☐	☐
486.77	489.81	3.04		2.82	93	K289269	☐	O17-005	core		☐	☐	☐
489.81	492.86	3.05		3.05	100	K289270	☐	O17-005	core		☐	☐	☐
492.86	495.91	3.05		3.03	99	K289271	☐	O17-005	core		☐	☐	☐
495.91	498.96	3.05		3.04	100	K289272	☐	O17-005	core		☐	☐	☐
498.96	502.00	3.04		3.04	100	K289273	☐	O17-005	core		☐	☐	☐
502.00	505.05	3.05		3.05	100	K289274	☐	O17-005	core		☐	☐	☐
505.05	508.10	3.05		2.98	98	K289276	☐	O17-005	core		☐	☐	☐
508.10	511.15	3.05		3.03	99	K289277	☐	O17-005	core		☐	☐	☐
511.15	514.20	3.05		2.90	95	K289278	☐	O17-005	core		☐	☐	☐
514.20	517.25	3.05		3.02	99	K289279	☐	O17-005	core		☐	☐	☐
517.25	520.29	3.04		3.04	100	K289280	☐	O17-005	core		☐	☐	☐
520.29	523.34	3.05		3.02	99	K289281	☐	O17-005	core		☐	☐	☐
523.34	526.39	3.05		3.05	100	K289282	☐	O17-005	core		☐	☐	☐
526.39	529.44	3.05		2.92	96	K289283	☐	O17-005	core		☐	☐	☐
529.44	532.49	3.05		2.98	98	K289284	☐	O17-005	core		☐	☐	☐
532.49	535.53	3.04		3.04	100	K289285	☐	O17-005	core		☐	☐	☐
535.53	538.58	3.05		2.93	96	K289286	☐	O17-005	core		☐	☐	☐
538.58	541.63	3.05		2.97	97	K289287	☐	O17-005	core		☐	☐	☐
541.63	544.68	3.05		3.05	100	K289288	☐	O17-005	core		☐	☐	☐
544.68	547.73	3.05		3.05	100	K289289	☐	O17-005	core		☐	☐	☐
547.73	550.77	3.04		2.94	97	K289291	☐	O17-005	core		☐	☐	☐
550.77	553.82	3.05		2.98	98	K289292	☐	O17-005	core		☐	☐	☐
550.77	553.82	3.05		2.98	98	K289293	☐	O17-005	core		☐	☑	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
553.82	556.87	3.05		2.98	98	K289294	☐	O17-005	core		☐	☐	☐
556.87	559.92	3.05		3.05	100	K289295	☐	O17-005	core		☐	☐	☐
559.92	562.97	3.05		2.94	96	K289296	☐	O17-005	core		☐	☐	☐
562.97	566.01	3.04		2.97	98	K289297	☐	O17-005	core		☐	☐	☐
566.01	569.06	3.05		3.02	99	K289298	☐	O17-005	core		☐	☐	☐
569.06	572.11	3.05		2.95	97	K289299	☐	O17-005	core		☐	☐	☐
572.11	575.16	3.05		3.01	99	K289300	☐	O17-005	core		☐	☐	☐
575.16	578.21	3.05		3.04	100	K289301	☐	O17-006	Core		☐	☐	☐
578.21	581.25	3.04		2.99	98	K289302	☐	O17-006	Core		☐	☐	☐
581.25	584.30	3.05		2.97	97	K289303	☐	O17-006	Core		☐	☐	☐
584.30	587.35	3.05		3.05	100	K289304	☐	O17-006	Core		☐	☐	☐
587.35	590.40	3.05		3.05	100	K289305	☐	O17-006	Core		☐	☐	☐
590.40	593.45	3.05		3.02	99	K289306	☐	O17-006	Core		☐	☐	☐
593.45	596.49	3.04		2.97	98	K289307	☐	O17-006	Core		☐	☐	☐
596.49	599.54	3.05		3.05	100	K289308	☐	O17-006	Core		☐	☐	☐
599.54	602.59	3.05		3.02	99	K289309	☐	O17-006	Core		☐	☐	☐
602.59	605.64	3.05		3.02	99	K289310	☐	O17-006	Core		☐	☐	☐
605.64	608.69	3.05		3.04	100	K289311	☐	O17-006	Core		☐	☐	☐
608.69	611.73	3.04		3.00	99	K289313	☐	O17-006	Core		☐	☐	☐
611.73	614.78	3.05		3.05	100	K289314	☐	O17-006	Core		☐	☐	☐
614.78	617.83	3.05		2.98	98	K289315	☐	O17-006	Core		☐	☐	☐
617.83	620.88	3.05		3.05	100	K289316	☐	O17-006	Core		☐	☐	☐
620.88	623.93	3.05		3.04	100	K289317	☐	O17-006	Core		☐	☐	☐
623.93	626.97	3.04		2.97	98	K289318	☐	O17-006	Core		☐	☐	☐
626.97	630.02	3.05		3.05	100	K289319	☐	O17-006	Core		☐	☐	☐
630.02	633.07	3.05		3.01	99	K289320	☐	O17-006	Core		☐	☐	☐
633.07	636.12	3.05		3.05	100	K289321	☐	O17-006	Core		☐	☐	☐
636.12	639.17	3.05		3.05	100	K289322	☐	O17-006	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
639.17	642.21	3.04		2.87	94	K289323	☐	O17-006	Core		☐	☐	☐
642.21	645.26	3.05		3.02	99	K289324	☐	O17-006	Core		☐	☐	☐
645.26	648.31	3.05		3.05	100	K289326	☐	O17-006	Core		☐	☐	☐
648.31	651.36	3.05		3.02	99	K289327	☐	O17-006	Core		☐	☐	☐
648.31	651.36	3.05		3.02	99	K289328	☐	O17-006	Core		☐	☑	☐
651.36	654.41	3.05		2.98	98	K289329	☐	O17-006	Core		☐	☐	☐
654.41	657.45	3.04		3.04	100	K289330	☐	O17-006	Core		☐	☐	☐
657.45	660.51	3.06		2.98	97	K289331	☐	O17-006	Core		☐	☐	☐
660.51	663.55	3.04		2.92	96	K289332	☐	O17-006	Core		☐	☐	☐
663.55	666.60	3.05		3.05	100	K289333	☐	O17-006	Core		☐	☐	☐
666.60	669.65	3.05		3.05	100	K289334	☐	O17-006	Core		☐	☐	☐
669.65	672.69	3.04		3.01	99	K289335	☐	O17-006	Core		☐	☐	☐
672.69	675.74	3.05		3.00	98	K289336	☐	O17-006	Core		☐	☐	☐
675.74	678.79	3.05		3.05	100	K289337	☐	O17-006	Core		☐	☐	☐
678.79	681.84	3.05		2.98	98	K289338	☐	O17-006	Core		☐	☐	☐
681.84	684.89	3.05		2.70	89	K289339	☐	O17-006	Core		☐	☐	☐
684.89	687.93	3.04		3.03	100	K289340	☐	O17-006	Core		☐	☐	☐
687.93	690.98	3.05		3.01	99	K289341	☐	O17-007	core		☐	☐	☐
690.98	694.03	3.05		2.90	95	K289342	☐	O17-007	core		☐	☐	☐
694.03	697.08	3.05		3.04	100	K289343	☐	O17-007	core		☐	☐	☐
697.08	700.13	3.05		3.05	100	K289344	☐	O17-007	core		☐	☐	☐
700.13	703.17	3.04		2.82	93	K289345	☐	O17-007	core		☐	☐	☐
703.17	706.22	3.05		3.00	98	K289346	☐	O17-007	core		☐	☐	☐
706.22	709.27	3.05		3.05	100	K289347	☐	O17-007	core		☐	☐	☐

HoleID:		BDO-17-002	
ProjectCode:		ORION	
From	To	Comments	LoggedBy
0	15.2	The overburden is composed of different lithic fragments (limestone, calcareous mudstone, dolostone clasts and siliciclastic mudstone) and is very heavily oxidized. The bedding angles change very rapidly over short distances and it is veru blocky, disoriented, and disjointed.	Hiba
15.2	19.92	Very coarse grained, medium grey siliclastic that is heavily oxidized. It has a few quartz veinlets (0.15 mm - 1 mm). It has fossil fragmens of brachiopods, crinoids, rugose corals and other coral fragments. It may also have chlorite crystals in it (?).	Hiba
19.92	30.95	Medium grey to dark grey brecciated, very fine-grained siliciclastic mudstone with limestone clasts ranging in size from 0.20 cm - 7 cm in length. This unit also has fossils fragments of rugose corals, crinoids, brachiopods, and graptolites (?) as well as clay infills. Disseminated pyrite, calcite veinlets (0.15 mm -0.25 mm), calcite veins (1 cm) and calcite infills are also observed. Some section sof this interval are heavily brecciated (19.91 m - 20.19 m) and have disoriented, disjointed and irregular beds that are more composed of more coarse grained siliclastic and are heavily fossilized (rugose corals, crinoids, brachiopids, fragments of other corals). This section is also very oxidized.	Hiba
32.6	39.32	Dark grey limestone interbedded with massive calcareous mudstone. Folds are seen in the calcareous mudstone from 32.60 m - 33 m. Disseminated pyrite, veinlets of pyrite and some fossils fragments (rugose corals) are also seen in this section.	Hiba
40.13	55.2	Medium grey to dark grey laminated lime mudstone with couplets of massive lime mudstone (dark beds interbedded with light beds - that may be fining upwards?). Calcite veinlets, veins (0.15 mm - 2 cm) and infills are also observed in this section. Late stage pyrite infill, blebs and laminations as well as fossils (crinoids, brachiopods, corals - amphipora?) are also seen. Some sections are extremely folded, disjointed, irregular and brittle and may be shear zones.	Hiba
55.2	56.51	Medium grey to dark grey limestone with lots of calcite veins (1 cm - 4.5 cm). Fossil fragments, hexagonal corals, sponges - amphipora?, and crinoids are found in this section. Specks and disseminated pyrite are also found in this section.	Hiba
56.51	60.66	Coarse grained medium grey to dark grey limestone with fossil fragments, air vessicles (amydaloids) and some calcite infills. Infills and disseminated pyrite is also observed in this section. Green minerals seen: fuchsite and chlorite.	Hiba
60.66	61.66	Shear zone: folded, irregular, disjointed, brecciated beds with a late mini fault that runs through this section that offsets the beds and folds.	Hiba

61.66	107	Light tan-green-grey angular to rounded fragmental rock, with fragments ranging in size from 0.5 cm - 10 cm that is locally foliated. Air vessicles (0.15 mm - 2mm) are seen throughout this interval (amygdules - more pervasive in the beginning and more clast and sheared at the end of this interval), and are largely infilled with calcite. Mini faults are also observed throughout and they offset calcite infills, clasts and the air vessicles. Disseminated, blebby and veinlets of pyrites seen throughout. Blebs, granules, pebble size calcite as well as large calcite veins (up to 20 cm in length and 3 cm in width) are also observed. At 87.88 m you see a large beef calcite vein that is 18 cm in length and some smaller ones (1 cm). Between 96.87 m - 103 m large calcite veins (up to 7 cm have a slight pink to tan tinge. Massive limestone beds and clasts 9 up to 10 cm) appear after 91.14 m. Minerals present: biotite, chlorite, fuchisite and unknown red mineral.	Hiba
107	123.58	Fine-grained, clay rich shear zone that has irregular, discontinuous and disjointed folds (slumps). This section does not react to HCL unless calcite clasts (granules, pebbles in size) are present. Disseminated, blebby and veinlets of pyrites seen throughout.	Hiba
123.58	145.78	Light tan-green-grey angular to rounded fragmental rock, with fragments ranging in size from 0.5 cm - 10 cm that is irregular, disjointed and folded with large multi-lithic clasts (limestone, pepperite, siliceous mud). Mini faults are also observed throughout and they offset calcite infills, clasts and the air vessicles. Disseminated, blebs and veinlets of pyrites seen throughout. Blebs, granules, pebble size calcite as well as calcite veinlets and veins (0.5 cm - 1 cm) are also observed. Minerals present: biotite, chlorite, fuchisite and unknown red mineral.	Hiba
145.78	168.8	Light grey volcanoclastic that has fewer air vessicles than previous sections, but also has large black non-calcareous clasts with very small air vessicles in them (maybe of volcanic origin). Clast size ranges between 0.5 cm - 35 cm. Late stage infills of calcite and pyrite is seen throughout this section. Pieces of volcanic glass, and large clasts with greenish-grey rims are observed. Some smaller clasts of quartz and calcite have pyrite rims. Phenocrysts of feldspars , quartz/calcite pebbles and mini-faults are also observed in this section.	Hiba
168.8	169.74	Disjointed, disoriented, irregular folded beds are observed in this shear zone.	Hiba
169.74	185.62	Light grey volcanoclastic that has fewer air vessicles than previous sections, but also has large black non-calcareous clasts with very small air vessicles in them (maybe of volcanic origin). Clast size ranges between 0.5 cm - 35 cm. Late stage infills of calcite and pyrite is seen throughout this section. Pieces of volcanic glass, and large clasts with greenish-grey rims are observed. Some smaller clasts of quartz and calcite have pyrite rims. Phenocrysts of feldspars , quartz/calcite pebbles and mini-faults are also observed in this section.	Hiba
185.62	189.62	Disjointed, disoriented, irregular folded beds are observed in this shear zone.	Hiba
189.62	196	Fault. Dark grey black, clay gouge with few angular to rounded rock fragments. Graphite is seen on most fractures and slickensides.	Hiba
196	199.95	Siliceous black carbonaceous mudstone with calcite and quartz veinlets (0.15 mm - 1 mm) and in some areas these calcite/quartz veinlets form a crackled siliceous black carbonaceous mudstone. Pyrite occurs in this section as blebs, specks, veinlets, stringers and infills. In most cases along fractures, graphite is observed.	Hiba

199.95	200.56	Fault. Dark grey black, clay gouge with few angular to rounded rock fragments. Graphite is seen on most fractures and slickensides.	Hiba
200.56	223.07	Siliceous black carbonaceous, laminated mudstone with calcite and quartz veinlets (0.15 mm - 1 mm) and in some areas these calcite/quartz veinlets form a crackled siliceous black carbonaceous mudstone. Pyrite occurs in this section as blebs, specks, veinlets, stringers and infills. In most cases along fractures, graphite is observed. Several stages of pyrite over printing are observed on pyrite blebs and laminations. Mini-faults (offsets laminations) and folds are also observed in this section.	Hiba
223.07	223.87	Fault. Dark grey black, clay gouge with few angular to rounded rock fragments. Graphite is seen on most fractures and slickensides.	Hiba
223.87	247.78	Siliceous black carbonaceous, laminated mudstone with calcite and quartz veinlets (0.15 mm - 1 mm) and in some areas these calcite/quartz veinlets form a crackled siliceous black carbonaceous mudstone. Pyrite occurs in this section as blebs, specks, veinlets, stringers and infills. In most cases along fractures, graphite is observed. Several stages of pyrite over printing are observed on pyrite blebs and laminations. Mini-faults (offsets laminations) and folds are also observed in this section.	Hiba
247.78	271	Volcanoclastic conglomerate with clasts that are subangular to subrounded and range in size from 0. 5 cm - 13 cm. The matrix has some phenocrysts, the clasts have no orientation and most clasts are altered with light tan colored rims around them. Some clasts have air vessicles in them and are multi-lithic (chlorite clasts, elongated siliceous mudstone clasts, limestone clasts and pyrite clasts). Mini faults and some slickensides on jointes are observed.	Hiba
271	316.38	This interval begins with limestone breccia debris flow with multi-lithic clasts that are between 1 mm - 13 cm and are composed of limestone clasts, volcanic clasts, siliceous mudstone clasts that are subangular, subrounded and/or elongated and moves into a turbidite sequence. The turbidite sequence has 10 cm - 127 cm turbidite beds that are graded and fining uphole (in some sections you can observe the complete Bouma sequence). The finer sequence of turbidite beds or pelites have fossil fragments, dewatering structures, bioturbation, dish structures, coarser grain lenses, parallel laminae and cross bedding. The coarser grained sequence (sand size particles) have wavy laminae, fossils (crinoids, brachiopods, rugose corals, amphipora?), scour marks, ooids and grades into granular clasts of elongated siliceous mudstone. Some of these elonagted siliceous mudstone clasts are imbricated. Mini folds and faults (offset laminae) are observed. Lots of late stage disseminated, blebs, veinlets, and infills of pyrite are observed. In some of the limestone clasts, the original bedding (laminations, cross bedding, wispy wedding) are seen. Stylolites, mini folds, faults and chlorite are also observed in this section. The siliceous mudstone and coarse grained beds do not react to HCl but the limestone and calcite do react.	Hiba

316.75	320.1	Medium grey to light grey laminated lime mudstone unit with some coarse grained clasts. Alternating beds of coarse grains and fine grains is seen in this section. Some calcite veins and veinlets (0.25 mm - 13 cm) as well as calcite infills are observed. Mini-faults and folds (offset laminations) and disjointed, disoriented, irregular beds are also observed. Soft sediment deformation and faint evidence of biotubation as well as disseminated, specks and blebs of pyrite are also observed in this interval.	Hiba
320.1	321	Shear zone: folded, sheared, disjointed, disoriented beds with dissemited and blebby pyrite.	Hiba
321	342	Medium grey to light grey laminated lime mudstone unit with some coarse grained clasts. Alternating beds of coarse grains and fine grains is seen in this section. Some calcite veins and veinlets (0.25 mm - 13 cm) as well as calcite infills are observed. Mini-faults and folds (offset laminations) and disjointed, disoriented, irregular beds are also observed. Soft sediment deformation and faint evidence of biotubation as well as disseminated, specks and blebs of pyrite are also observed in this interval.	Hiba
342	413.92	Black to dark grey carbonaceous lime mudstone with lots of calcite infill. Some sections have discontinuous, disjointed, irregualr beds and locally disrupted shears (soft sediment deformation). It has disseminated, specks and stringers of pyrite as well as fragments of fossils.	Hiba
413.92	414.85	Fault	Hiba
414.85	426.41	Black to dark grey carbonaceous lime mudstone with lots of calcite infill. Some sections have discontinuous, disjointed, irregualr beds and locally disrupted shears (soft sediment deformation). It has disseminated, specks and stringers of pyrite, fragments of fossils and faint evidence of bioturbation. Localized mini-faults, black siliceous mudstone clasts (0.25 cm - 1 cm) with rims is also observed. Flame structures indicate evidence for soft sediment deformation.	Hiba
426.41	430.56	Irregular, discontinuous, convoluted beds (soft sediment deformation that is extremely sheared) with lots of calcite and stylolites. This section also has multi-lithic fragments (quartz, siliceous mudstone) as well as late stage pyrite infill (several stages of pyrite infill are observed in this section).	Hiba
430.56	461.83	Laminated sericitic mudstone interbedded with siliceous mudstone. The massive siliceous mudstone unit has a lot of soft sediment deformation, fossil fragments (hexagonal coral, rugose coral), blebs, disseminated and stringers of pyrite. Soft sediment deformation structures observed in this section include: simple load casts, conculted beds, dish and pillar structures, synsedimentary faults, and water escape cusps. Multi-lithic clasts that rainge in size between 1 cm - 7 cm and dessication cracks are also observed. Bedding is parallel to stylolites towards the end of this interval.	Hiba
461.83	465.25	Laminated sericitic beds interbedded with laminated siliceous mudstone beds very closely together (banded). Some areas have undergone soft sediment deformation, evidenced by disjointed, disoriented and convoluted beds. Late stage blebs, infills and disseminated pyrite is also observed in this section.	Hiba

465.25	468.78	Laminated siliceous mudstone interbedded with laminated light grey lime mudstone very closely together (banded). Pyrite blebs and laminations seen in this section. Localized mini faults, flame structures and concoluted bedding show evidence of soft sediment deformation in this interval. Blebs, infills, veinlets of calcite (0.25 mm - 0.5 mm in thickness) and beef calcite are also observed. Some stylolites are also seen in this section.	Hiba
468.78	575.22	Laminated medium-dark grey to black thinly bedded non-calcareous mudstone with moderately silicified limestone interbeds (up to 10 cm). Some sections are light grey and/or brown in color with some beds that are very coarse grained (sandstone). Lots of stylolites as well as soft sediment deformation is also seen in this section. Quartz-calcite veinlets (0.15 mm - 4 mm), blebs, infills are observed throughout this section. Some quartz-calcite veinlets have dolomite in them and some have vugs with druse (druzy) quartz in them. Mini faults and folds are very prevalent in this section. The interval from 477.50 m - 479.50 m is very silicified, has a lot of quartz and is quite deformed. Soft sediment deformation structures seen in this section are: synsedimentary faults, clastic dykes, pendulous loads casts, simple load casts. Dispersed siliceous mudstone clasts and sericite (green?) clasts are also observed. Towards the last couple of meters you see large sections of limestone beds and laminations. From 568.34 to 575.22 m it is a coarse grained limestone section with lots of calcite veinlets (0.5 mm - 1 mm). Disseminated, blebs, specks, veinlets and infills of pyrite seen throughout this section. This unit forms a very sharp contact with the next unit.	Hiba
575.22	576.22	Dark grey detrital mud and lime mud matrix conglomerate with volcanoclastics (sericite), calcite, quartz, and siliceous mudstone clasts. Clasts range in size from 1 mm - 4 cm. Fossils (brachiopods, crinoids, rugose corals) and fossil fragments are seen in this section. Disseminated and blebs of pyrite also observed.	Hiba
576.22	579.55	Siliceous mudstone that is dark grey-black in color and is composed of few multi-lithic clasts (quartz, calcite, sericite) that range in size from 1 mm - 13 cm. Blebs of pyrite, and soft sediment structures: convoluted bedding, synsedimentary faults and simple loads casts are observed in this section. From 577.76 m - 579.55 m a lot of calcite-quartz infills and veinlets (0.5 mm - 1 mm) are observed.	Hiba
579.55	581.12	Dark grey detrital mud and lime mud matrix conglomerate with volcanoclastics (sericite), pyrite, quartz, and limestone clasts. Clasts range in size from 0.5 mm - 9 cm. Fossils (crinoids, rugose corals) and fossil fragments are seen in this section. Disseminated and blebs of pyrite also observed.	Hiba
581.12	585.2	Siliceous mudstone that is dark grey-black in color and is composed of few multi-lithic clasts (quartz, calcite, sericite) that range in size from 1 mm - 13 cm. Blebs of pyrite, and soft sediment structures: convoluted bedding, synsedimentary faults and simple loads casts are observed in this section. Local faults and folds are also observed in this section.	Hiba
585.2	586.93	Dark grey detrital mud and lime mud matrix conglomerate with volcanoclastics (sericite), pyrite, quartz, dolostone, and limestone clasts. Clasts range in size from 1 mm - 8 cm. Fossil fragments are seen in this section. Disseminated and blebs of pyrite also observed.	Hiba

586.93	591.34	Siliceous mudstone that is dark grey-black in color and is composed of fewer multi-lithic clasts (quartz, calcite, sericite, pyrite, limestone) dispersed throughout this section that range in size from 0.5 cm - 16 cm. Blebs of pyrite, and soft sediment structures: convoluted bedding, synsedimentary faults and simple loads casts are observed in this section. Local faults and folds are also observed in this section.	Hiba
591.34	623.82	This section is a mixture of all the sections above. It is a dark grey to medium grey siliceous mudstone that has soft sediment deformation and is drilled down bedding. Soft sediment deformation structures observed in this section are: synsedimentary faults, local mini faults, convoluted bedding, dish and pillar structures. Some sections have a lot of disjointed, disoriented, irregular beds (slumping). Few 5 cm - 10 cm beds are composed of lime mud and detrital mud conglomerate and clasts range in size from 0.5 cm - 7 cm). Massive limestone beds and thin limestone laminations are observed in this section. Quartz - calcite infills are seen throughout this section and very little pyrite is observed.	Hiba
623.95	669.95	It is a dark grey to medium grey siliceous mudstone that has soft sediment deformation and is drilled down bedding. Soft sediment deformation structures observed in this section are: synsedimentary faults, local mini faults, convoluted bedding, dish and pillar structures. Some sections have a lot of disjointed, disoriented, irregular beds (slumping). Few 5 cm - 10 cm beds are composed of lime mud and detrital mud conglomerate and clasts range in size from 0.5 cm - 7 cm). Massive limestone beds (662 m - 663.32) and thin limestone laminations are observed in this section. Quartz - calcite infills, blebs and veinlets (0.15 mm - 1 mm) are seen throughout this section and some have dolomite in them. Some veinlets and infills are brecciated and have 1 mm - 3 mm clasts in them. A lot of pyrite is observed. Slickensides and slickenlines occur on some fracture surfaces and have graphite. Lots of stylolites are observed from 657.72 m - 669 m.	Hiba

BDO-17-002

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	4.27	4.27	0.48	11	0.13	3	4R	3H	2W	Overburden
4.27	7.32	3.05	1.63	53	0.37	12	4R	3H	2W	RBZ 6.47-6.74m
7.32	10.36	3.04	2.79	92	0.26	9	1R	1H	4W	Highly fractured rock with clay throughout interval
10.36	13.41	3.05	2.41	79	0.39	13	3R	1H	4W	RBZ 11.11-11.23m & 12.71-13.41m
13.41	16.46	3.05	2.19	72	0.12	4	2R	1H	3W	RBZ 13.41-13.62m, 13.87-15.89m, & 16.18-16.46m
16.46	19.51	3.05	2.23	73	0.53	17	3R	2H	2W	RBZ 16.46-16.63m & 19.00-19.51m
19.51	22.56	3.05	2.19	72	1.09	36	4R	3H	1W	RBZ 20.18-20.40m
22.56	25.60	3.04	2.85	94	1.38	45	3R	3H	1W	RBZ 23.29-23.41m
25.60	28.65	3.05	2.8	92	1.13	37	3R	3H	1W	RBZ 27.80-27.91m
28.65	31.70	3.05	3.05	100	2.18	71	3R	3H	1W	RBZ 31.51-31.61m
31.70	34.75	3.05	2.76	90	0.69	23	2R	3H	1W	RBZ 31.70-32.43m
34.75	37.79	3.04	2.97	98	0.65	21	4R	3H	1W	RBZ 36.69-37.55m
37.79	40.84	3.05	2.98	98	0.50	16	3R	3H	1W	RBZ 38.42-38.53m & 38.89-39.57m
40.84	43.89	3.05	3.01	99	0.71	23	4R	3H	1W	
43.89	46.94	3.05	2.96	97	1.48	49	4R	3H	1W	
46.94	49.99	3.05	2.9	95	1.76	58	4R	3H	1W	
49.99	53.04	3.05	2.98	98	2.26	74	2R	3H	1W	
53.04	56.08	3.04	2.87	94	1.96	64	3R	3H	1W	
56.08	59.13	3.05	3.05	100	1.52	50	4R	3H	1W	
59.13	62.18	3.05	3.02	99	1.89	62	4R	3H	1W	
62.18	65.23	3.05	3.05	100	3.05	100	4R	3H	1W	
65.23	68.28	3.05	3.05	100	2.22	73	4R	3H	1W	
68.28	71.32	3.04	3.04	100	2.95	97	4R	3H	1W	
71.32	74.37	3.05	2.98	98	2.87	94	4R	3H	1W	
74.37	77.42	3.05	3.05	100	3.01	99	4R	3H	1W	
77.42	80.47	3.05	3.05	100	2.63	86	4R	3H	1W	
80.47	83.52	3.05	2.95	97	2.78	91	4R	3H	1W	
83.52	86.56	3.04	3.01	99	2.85	94	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
86.56	89.61	3.05	3.05	100	2.75	90	4R	3H	1W	
89.61	92.66	3.05	3.02	99	2.65	87	4R	3H	1W	
92.66	95.71	3.05	3.03	99	2.99	98	4R	3H	1W	
95.71	98.76	3.05	3.04	100	2.96	97	4R	3H	1W	
98.76	101.80	3.04	3.04	100	2.79	92	4R	3H	1W	
101.80	104.85	3.05	3.03	99	2.70	89	4R	3H	1W	
104.85	107.90	3.05	3	98	2.54	83	4R	3H	1W	
107.90	110.95	3.05	3.05	100	2.71	89	4R	3H	1W	
110.95	114.00	3.05	2.98	98	2.54	83	4R	3H	1W	
114.00	117.04	3.04	3.04	100	2.51	83	4R	1H	1W	
117.04	120.09	3.05	3.05	100	3.01	99	4R	2H	1W	
120.09	123.14	3.05	2.92	96	2.77	91	4R	2H	1W	
123.14	126.19	3.05	3.05	100	2.75	90	4R	3H	1W	
126.19	129.24	3.05	3.05	100	2.83	93	4R	3H	1W	
129.24	132.28	3.04	3.04	100	3.01	99	4R	3H	1W	
132.28	135.33	3.05	2.88	94	2.62	86	4R	3H	1W	
135.33	138.38	3.05	3.02	99	2.99	98	4R	3H	1W	
138.38	141.43	3.05	3.05	100	2.95	97	4R	3H	1W	
141.43	144.48	3.05	3.02	99	2.91	95	4R	3H	1W	
144.48	147.52	3.04	3.02	99	2.76	91	4R	2H	1W	
147.52	150.57	3.05	2.91	95	2.52	83	4R	2H	1W	
150.57	153.62	3.05	3.05	100	2.53	83	4R	2H	1W	
153.62	156.67	3.05	3.05	100	2.99	98	4R	2H	1W	
156.67	159.72	3.05	2.93	96	2.70	89	4R	3H	1W	
159.72	162.76	3.04	3.04	100	3.04	100	4R	3H	1W	
162.76	165.81	3.05	3.05	100	3.05	100	4R	3H	1W	
165.81	168.86	3.05	2.98	98	2.98	98	4R	3H	1W	
168.86	171.91	3.05	3.05	100	2.85	93	4R	3H	1W	
171.91	174.96	3.05	3.05	100	2.97	97	4R	3H	1W	
174.96	178.00	3.04	3.04	100	2.96	97	4R	3H	1W	
178.00	181.05	3.05	2.8	92	2.52	83	4R	3H	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
181.05	184.10	3.05	3.05	100	3.05	100	3R	3H	1W	
184.10	187.15	3.05	3.05	100	2.31	76	4R	2H	1W	
187.15	190.20	3.05	2.65	87	2.06	68	0R	1H	1W	RBZ 189.80-189.97m
190.20	193.24	3.04	1.74	57	0.24	8	0R	2H	1W	RBZ 192.05-192.30m & 192.95-193.24
193.24	196.29	3.05	2.01	66	0.41	13	0R	4H	1W	RBZ 193.24-193.40m & 194.00-195.10m
196.29	199.34	3.05	2.29	75	0.15	5	0R	4H	1W	RBZ at 197.81m
199.34	200.56	1.22	1.11	91	0.40	33	0R	4H	1W	Switch from HQ to NQ halfway through section.
200.56	203.61	3.05	1.14	37	0.33	11	0R	4H	1W	RBZ at 203.00m
203.61	206.65	3.04	2.21	73	0.00	0	0R	4H	1W	RBZ throughout section
206.65	209.70	3.05	2.32	76	0.45	15	0R	4H	1W	RBZ 207.00-208.00m
209.70	212.75	3.05	2.36	77	0.62	20	0R	4H	1W	RBZ 212.10-212.30m
212.75	215.80	3.05	2.34	77	0.95	31	0R	4H	1W	RBZ 213.00m
215.80	218.85	3.05	1.79	59	0.10	3	0R	4H	1W	RBZ 217.80-218.85m
218.85	221.89	3.04	1.12	37	0.00	0	0R	4H	1W	RBZ 218.85-221.89m
484.02	487.07	3.05	3.05	100	2.10	69	--	--	1W	
487.07	490.12	3.05	2.99	98	1.65	54	--	--	1W	
490.12	493.17	3.05	2.99	98	2.68	88	--	--	1W	
493.17	496.21	3.04	3	99	2.08	68	--	--	1W	
496.21	499.26	3.05	3.01	99	2.39	78	--	--	1W	mechanical breaks along bedding
499.26	502.31	3.05	2.98	98	1.82	60	--	--	1W	
502.31	505.36	3.05	2.92	96	2.21	72	--	--	1W	
505.36	508.41	3.05	3.05	100	2.57	84	--	--	1W	
508.41	511.45	3.04	3.04	100	2.95	97	--	--	1W	2 mechanical breaks
511.45	514.50	3.05	3	98	2.70	89	--	--	1W	mechanical breaks
514.50	517.55	3.05	3.05	100	2.94	96	--	--	1W	
517.55	520.60	3.05	3.05	100	2.95	97	--	--	1W	
520.60	523.65	3.05	2.92	96	1.29	42	--	--	1W	many breaks appear mechanical.
523.65	526.69	3.04	2.75	90	1.28	42	--	--	1W	RBZ 524.8-525m
526.69	529.74	3.05	2.79	91	2.22	73	--	--	1W	RBZ 529.23-529.34m
529.74	532.79	3.05	3.04	100	2.63	86	--	--	1W	mostly mechanical fracturing
532.79	535.84	3.05	3.05	100	2.68	88	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
535.84	538.89	3.05	2.98	98	2.88	94	--	--	1W	
538.89	541.93	3.04	3.03	100	2.87	94	--	--	1W	
541.93	544.98	3.05	3.05	100	3.05	100	--	--	1W	very competent core. Only mechanical fractures that fit very well
544.98	548.03	3.05	3.03	99	2.77	91	--	--	1W	
548.03	551.08	3.05	3.02	99	2.96	97	--	--	1W	fractures appear mechanical. Joint measures were input but were for the next interval. Unsure how to delete them.
551.08	554.13	3.05	3.04	100	2.94	96	--	--	1W	
554.13	557.17	3.04	3.03	100	2.93	96	--	--	1W	
557.17	560.22	3.05	3.01	99	2.61	86	--	--	1W	
560.22	563.27	3.05	2.98	98	2.68	88	--	--	1W	
563.27	566.32	3.05	2.94	96	2.88	94	--	--	1W	
566.32	569.37	3.05	3.04	100	3.04	100	--	--	1W	
569.37	572.41	3.04	3.04	100	3.04	100	--	--	1W	
572.41	575.46	3.05	3.02	99	3.02	99	--	--	1W	
575.46	578.51	3.05	3.03	99	3.03	99	--	--	1W	
578.51	581.56	3.05	2.97	97	2.97	97	--	--	1W	
581.56	584.61	3.05	3.05	100	3.05	100	--	--	1W	
584.61	587.65	3.04	3	99	3.00	99	--	--	1W	
587.65	590.70	3.05	3.03	99	3.03	99	--	--	1W	
590.70	593.75	3.05	3.05	100	2.94	96	--	--	1W	
593.75	596.80	3.05	3.03	99	2.85	93	--	--	1W	
596.80	599.85	3.05	3	98	2.44	80	--	--	1W	RBZ from 597.05-597.20m,599.30-599.45m.
599.85	602.89	3.04	2.81	92	2.54	84	--	--	1W	
602.89	605.94	3.05	3	98	2.47	81	--	--	1W	RBZ at 603.60m
605.94	608.99	3.05	3.04	100	2.76	90	--	--	1W	RBZ at608.30-608.35m,608.90m
608.99	612.04	3.05	2.98	98	2.22	73	--	--	1W	RBZ at 609.25-610m.
612.04	615.09	3.05	3.01	99	3.01	99	--	--	1W	
615.09	618.13	3.04	3.04	100	3.04	100	--	--	1W	
618.13	621.18	3.05	3.05	100	3.03	99	--	--	1W	
621.18	624.23	3.05	2.95	97	2.29	75	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
624.23	627.28	3.05	2.9	95	2.42	79	--	--	1W	
627.28	630.33	3.05	2.84	93	2.12	70	--	--	1W	
630.33	633.37	3.04	2.82	93	2.02	66	--	--	1W	
633.37	636.42	3.05	2.84	93	1.67	55	--	--	1W	
636.42	639.47	3.05	2.87	94	1.27	42	--	--	1W	several more (6) mechanical looking fractures near perpendicular to the core axis are present
639.47	642.52	3.05	2.86	94	1.85	61	--	--	1W	RBZ 642.10-642.52m
642.52	645.57	3.05	3.03	99	1.47	48	--	--	1W	RBZ 642.52-642.62m
645.57	648.61	3.04	2.99	98	1.73	57	--	--	1W	
648.61	651.66	3.05	3	98	1.43	47	--	--	1W	RBZ 649.38-649.52m, 651.47-651.52
651.66	654.71	3.05	2.97	97	1.28	42	--	--	1W	
654.71	657.76	3.05	3.02	99	1.36	45	--	--	1W	handful of mechanical fractures as well
657.76	660.81	3.05	2.87	94	1.28	42	--	--	1W	RBZ 659-659.38m
660.81	663.85	3.04	2.88	95	1.23	40	--	--	1W	RBZ 661.80-661.97m
663.85	666.90	3.05	2.79	91	2.38	78	--	--	1W	
666.90	669.95	3.05	2.99	98	1.30	43	--	--	1W	

BDO-17-002

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00		0.00	0	K289380	☐	O17-007	core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289391	☐	O17-008	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	K289397	☐	O17-008	core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765040	☐	O17-009	core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765057	☐	O17-009	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765079	☐	O17-010	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765090	☐	O17-010	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765134	☐	O17-011	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765140	☐	O17-011	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765151	☐	O17-012	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765165	☐	O17-012	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	K289369	☐	O17-007	core		☑	☐	☐
3.82	7.32	3.50		2.11	60	K289348	☐	O17-007	core		☐	☐	☐
7.32	10.36	3.04		2.79	92	K289349	☐	O17-007	core		☐	☐	☐
10.36	13.41	3.05		2.41	79	K289350	☐	O17-007	core		☐	☐	☐
13.41	16.46	3.05		2.19	72	K289351	☐	O17-007	core		☐	☐	☐
16.46	19.51	3.05		2.23	73	K289352	☐	O17-007	core		☐	☐	☐
19.51	22.56	3.05		2.19	72	K289353	☐	O17-007	core		☐	☐	☐
22.56	25.60	3.04		2.85	94	K289354	☐	O17-007	core		☐	☐	☐
25.60	28.65	3.05		2.80	92	K289355	☐	O17-007	core		☐	☐	☐
28.65	31.70	3.05		3.05	100	K289356	☐	O17-007	core		☐	☐	☐
31.70	34.75	3.05		2.76	90	K289357	☐	O17-007	core		☐	☐	☐
34.75	37.79	3.04		2.97	98	K289358	☐	O17-007	core		☐	☐	☐
37.79	40.84	3.05		2.98	98	K289359	☐	O17-007	core		☐	☐	☐
40.84	43.89	3.05		3.01	99	K289360	☐	O17-007	core		☐	☐	☐
43.89	46.94	3.05		2.96	97	K289361	☐	O17-007	core		☐	☐	☐
46.94	49.99	3.05		2.90	95	K289362	☐	O17-007	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
49.99	53.04	3.05		2.98	98	K289363	☐	O17-007	core		☐	☐	☐
53.04	56.08	3.04		2.87	94	K289364	☐	O17-007	core		☐	☐	☐
56.08	59.13	3.05		3.05	100	K289365	☐	O17-007	core		☐	☐	☐
59.13	62.18	3.05		3.02	99	K289366	☐	O17-007	core		☐	☐	☐
62.18	65.23	3.05		3.05	100	K289367	☐	O17-007	core		☐	☐	☐
62.18	65.23	3.05		3.05	100	K289368	☐	O17-007	core		☐	☑	☐
65.23	68.28	3.05		3.05	100	K289370	☐	O17-007	core		☐	☐	☐
68.28	71.32	3.04		3.04	100	K289371	☐	O17-007	core		☐	☐	☐
71.32	74.37	3.05		2.98	98	K289372	☐	O17-007	core		☐	☐	☐
74.37	77.42	3.05		3.05	100	K289373	☐	O17-007	core		☐	☐	☐
77.42	80.47	3.05		3.05	100	K289374	☐	O17-007	core		☐	☐	☐
80.47	83.52	3.05		2.95	97	K289375	☐	O17-007	core		☐	☐	☐
83.52	86.56	3.04		3.01	99	K289376	☐	O17-007	core		☐	☐	☐
86.56	89.61	3.05		3.05	100	K289377	☐	O17-007	core		☐	☐	☐
89.61	92.66	3.05		3.02	99	K289378	☐	O17-007	core		☐	☐	☐
92.66	95.71	3.05		3.03	99	K289379	☐	O17-007	core		☐	☐	☐
95.71	98.76	3.05		3.04	100	K289381	☐	O17-008	core		☐	☐	☐
98.76	101.80	3.04		3.04	100	K289382	☐	O17-008	core		☐	☐	☐
101.80	104.85	3.05		3.03	99	K289383	☐	O17-008	core		☐	☐	☐
104.85	107.90	3.05		3.00	98	K289384	☐	O17-008	core		☐	☐	☐
107.90	110.95	3.05		3.05	100	K289385	☐	O17-008	core		☐	☐	☐
110.95	114.00	3.05		2.98	98	K289386	☐	O17-008	core		☐	☐	☐
114.00	117.04	3.04		3.04	100	K289387	☐	O17-008	core		☐	☐	☐
117.04	120.09	3.05		3.05	100	K289388	☐	O17-008	core		☐	☐	☐
120.09	123.14	3.05		2.92	96	K289389	☐	O17-008	core		☐	☐	☐
123.14	126.19	3.05		3.05	100	K289390	☐	O17-008	core		☐	☐	☐
126.19	129.24	3.05		3.05	100	K289392	☐	O17-008	core		☐	☐	☐
129.24	132.28	3.04		3.04	100	K289393	☐	O17-008	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
132.28	135.33	3.05		2.88	94	K289394	☐	O17-008	core		☐	☐	☐
135.33	138.38	3.05		3.02	99	K289395	☐	O17-008	core		☐	☐	☐
138.38	141.43	3.05		3.05	100	K289396	☐	O17-008	core		☐	☐	☐
141.43	144.48	3.05		3.02	99	K289398	☐	O17-008	core		☐	☐	☐
144.48	147.52	3.04		3.02	99	K289399	☐	O17-008	core		☐	☐	☐
147.52	150.57	3.05		2.91	95	K289400	☐	O17-008	core		☐	☐	☐
150.57	153.62	3.05		3.05	100	V765001	☐	O17-008	core		☐	☐	☐
153.62	156.67	3.05		3.05	100	V765002	☐	O17-008	core		☐	☐	☐
156.67	159.72	3.05		2.93	96	V765003	☐	O17-008	core		☐	☐	☐
159.72	162.76	3.04		3.04	100	V765004	☐	O17-008	core		☐	☐	☐
162.76	165.81	3.05		3.05	100	V765005	☐	O17-008	core		☐	☐	☐
162.76	165.81	3.05		3.05	100	V765006	☐	O17-008	core		☐	☑	☐
165.81	168.86	3.05		2.98	98	V765007	☐	O17-008	core		☐	☐	☐
168.86	171.91	3.05		3.05	100	V765008	☐	O17-008	core		☐	☐	☐
171.91	174.96	3.05		3.05	100	V765009	☐	O17-008	core		☐	☐	☐
174.96	178.00	3.04		3.04	100	V765010	☐	O17-008	core		☐	☐	☐
178.00	181.05	3.05		2.80	92	V765011	☐	O17-008	core		☐	☐	☐
181.05	184.10	3.05		3.05	100	V765012	☐	O17-008	core		☐	☐	☐
184.10	187.15	3.05		3.05	100	V765013	☐	O17-008	core		☐	☐	☐
187.15	190.20	3.05		2.65	87	V765014	☐	O17-008	core		☐	☐	☐
190.20	193.24	3.04		1.74	57	V765015	☐	O17-008	core		☐	☐	☐
193.24	196.29	3.05		2.01	66	V765016	☐	O17-008	core		☐	☐	☐
196.29	197.81	1.52		1.40	92	V765017	☐	O17-008	core		☐	☐	☐
197.81	199.95	2.14		1.69	79	V765018	☐	O17-008	core		☐	☐	☐
199.95	201.00	1.05		0.93	89	V765019	☐	O17-008	core		☐	☐	☐
201.00	203.61	2.61		0.87	33	V765020	☐	O17-008	core		☐	☐	☐
203.61	206.65	3.04		2.21	73	V765021	☐	O17-009	core		☐	☐	☐
206.65	209.70	3.05		2.32	76	V765022	☐	O17-009	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
209.70	212.75	3.05		2.36	77	V765023	☐	O17-009	core		☐	☐	☐
212.75	215.80	3.05		2.34	77	V765024	☐	O17-009	core		☐	☐	☐
215.80	218.85	3.05		1.79	59	V765025	☐	O17-009	core		☐	☐	☐
218.85	221.89	3.04		1.12	37	V765026	☐	O17-009	core		☐	☐	☐
221.89	224.94	3.05		1.30	43	V765027	☐	O17-009	core		☐	☐	☐
224.94	227.99	3.05		1.39	46	V765028	☐	O17-009	core		☐	☐	☐
227.99	231.04	3.05		1.85	61	V765029	☐	O17-009	core		☐	☐	☐
231.04	234.09	3.05		0.93	30	V765030	☐	O17-009	core		☐	☐	☐
234.09	237.13	3.04		2.91	96	V765031	☐	O17-009	core		☐	☐	☐
237.13	240.18	3.05		2.97	97	V765032	☐	O17-009	core		☐	☐	☐
240.18	243.23	3.05		3.00	98	V765033	☐	O17-009	core		☐	☐	☐
243.23	246.28	3.05		2.97	97	V765034	☐	O17-009	core		☐	☐	☐
246.28	249.33	3.05		2.95	97	V765035	☐	O17-009	core		☐	☐	☐
249.33	252.37	3.04		3.04	100	V765036	☐	O17-009	core		☐	☐	☐
252.37	255.42	3.05		3.03	99	V765037	☐	O17-009	core		☐	☐	☐
255.42	258.47	3.05		3.03	99	V765038	☐	O17-009	core		☐	☐	☐
258.47	261.52	3.05		3.02	99	V765039	☐	O17-009	core		☐	☐	☐
261.52	264.57	3.05		3.01	99	V765041	☐	O17-009	core		☐	☐	☐
264.57	267.61	3.04		3.03	100	V765042	☐	O17-009	core		☐	☐	☐
267.61	270.66	3.05		3.05	100	V765043	☐	O17-009	core		☐	☐	☐
270.66	273.71	3.05		3.04	100	V765044	☐	O17-009	core		☐	☐	☐
273.71	276.76	3.05		3.05	100	V765045	☐	O17-009	core		☐	☐	☐
276.76	279.81	3.05		3.04	100	V765046	☐	O17-009	core		☐	☐	☐
279.81	282.85	3.04		3.04	100	V765047	☐	O17-009	core		☐	☐	☐
282.85	285.90	3.05		3.05	100	V765048	☐	O17-009	core		☐	☐	☐
285.90	288.95	3.05		2.99	98	V765049	☐	O17-009	core		☐	☐	☐
285.90	288.95	3.05		2.99	98	V765050	☐	O17-009	core		☐	☑	☐
288.95	292.00	3.05		3.04	100	V765051	☐	O17-009	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
292.00	295.05	3.05		3.05	100	V765052	☐	O17-009	core		☐	☐	☐
295.05	298.09	3.04		3.04	100	V765053	☐	O17-009	core		☐	☐	☐
298.09	301.14	3.05		2.94	96	V765054	☐	O17-009	core		☐	☐	☐
301.14	304.19	3.05		3.05	100	V765055	☐	O17-009	core		☐	☐	☐
304.19	307.24	3.05		3.05	100	V765056	☐	O17-009	core		☐	☐	☐
307.24	310.28	3.04		2.87	94	V765058	☐	O17-009	core		☐	☐	☐
310.28	313.33	3.05		3.05	100	V765059	☐	O17-009	core		☐	☐	☐
313.33	316.38	3.05		3.03	99	V765060	☐	O17-009	core		☐	☐	☐
316.38	319.43	3.05		2.95	97	V765061	☐	O17-010	core		☐	☐	☐
319.43	322.48	3.05		2.98	98	V765062	☐	O17-010	core		☐	☐	☐
322.48	325.53	3.05		3.05	100	V765063	☐	O17-010	core		☐	☐	☐
325.53	328.57	3.04		2.99	98	V765064	☐	O17-010	core		☐	☐	☐
325.53	328.57	3.04		2.99	98	V765065	☐	O17-010	core		☐	☑	☐
328.57	331.62	3.05		2.96	97	V765066	☐	O17-010	core		☐	☐	☐
331.62	334.67	3.05		2.91	95	V765067	☐	O17-010	core		☐	☐	☐
334.67	337.72	3.05		3.05	100	V765068	☐	O17-010	core		☐	☐	☐
337.72	340.77	3.05		2.94	96	V765069	☐	O17-010	core		☐	☐	☐
340.77	343.81	3.04		2.89	95	V765070	☐	O17-010	core		☐	☐	☐
343.81	346.86	3.05		3.00	98	V765071	☐	O17-010	core		☐	☐	☐
346.86	349.91	3.05		2.91	95	V765072	☐	O17-010	core		☐	☐	☐
349.91	352.96	3.05		3.00	98	V765073	☐	O17-010	core		☐	☐	☐
352.96	356.01	3.05		2.93	96	V765074	☐	O17-010	core		☐	☐	☐
356.01	359.05	3.04		2.99	98	V765075	☐	O17-010	core		☐	☐	☐
359.05	362.10	3.05		3.00	98	V765076	☐	O17-010	core		☐	☐	☐
362.10	365.15	3.05		3.01	99	V765077	☐	O17-010	core		☐	☐	☐
365.15	368.20	3.05		2.79	91	V765078	☐	O17-010	core		☐	☐	☐
368.20	371.25	3.05		2.95	97	V765080	☐	O17-010	core		☐	☐	☐
371.25	374.29	3.04		2.88	95	V765081	☐	O17-010	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
374.29	377.34	3.05		2.98	98	V765082	☐	O17-010	core		☐	☐	☐
377.34	380.39	3.05		3.04	100	V765083	☐	O17-010	core		☐	☐	☐
380.39	383.44	3.05		2.94	96	V765084	☐	O17-010	core		☐	☐	☐
383.44	386.49	3.05		2.96	97	V765085	☐	O17-010	core		☐	☐	☐
386.49	389.53	3.04		3.03	100	V765086	☐	O17-010	core		☐	☐	☐
389.53	392.58	3.05		2.90	95	V765087	☐	O17-010	core		☐	☐	☐
392.58	395.63	3.05		2.92	96	V765088	☐	O17-010	core		☐	☐	☐
395.63	398.68	3.05		2.97	97	V765089	☐	O17-010	core		☐	☐	☐
398.68	401.73	3.05		2.95	97	V765091	☐	O17-010	core		☐	☐	☐
401.73	404.77	3.04		2.96	97	V765092	☐	O17-010	core		☐	☐	☐
404.77	407.82	3.05		2.94	96	V765093	☐	O17-010	core		☐	☐	☐
407.82	410.87	3.05		2.87	94	V765094	☐	O17-010	core		☐	☐	☐
410.87	413.92	3.05		2.49	82	V765095	☐	O17-010	core		☐	☐	☐
413.92	416.97	3.05		1.89	62	V765096	☐	O17-010	core		☐	☐	☐
416.97	420.01	3.04		2.62	86	V765097	☐	O17-010	core		☐	☐	☐
420.01	423.06	3.05		2.67	88	V765098	☐	O17-010	core		☐	☐	☐
423.06	426.11	3.05		2.37	78	V765099	☐	O17-010	core		☐	☐	☐
426.11	429.16	3.05		2.60	85	V765100	☐	O17-010	core		☐	☐	☐
429.16	432.21	3.05		2.71	89	V765101	☐	O17-011	core		☐	☐	☐
432.21	435.25	3.04		2.93	96	V765102	☐	O17-011	core		☐	☐	☐
435.25	438.30	3.05		2.81	92	V765103	☐	O17-011	core		☐	☐	☐
438.30	441.35	3.05		3.02	99	V765104	☐	O17-011	core		☐	☐	☐
441.35	444.40	3.05		2.56	84	V765105	☐	O17-011	core		☐	☐	☐
444.40	447.45	3.05		3.00	98	V765106	☐	O17-011	core		☐	☐	☐
447.45	450.49	3.04		2.47	81	V765107	☐	O17-011	core		☐	☐	☐
450.49	453.54	3.05		3.05	100	V765108	☐	O17-011	core		☐	☐	☐
453.54	456.59	3.05		2.90	95	V765109	☐	O17-011	core		☐	☐	☐
456.59	459.64	3.05		3.03	99	V765110	☐	O17-011	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
459.64	462.69	3.05		3.01	99	V765111	☐	O17-011	core		☐	☐	☐
462.69	465.73	3.04		2.78	91	V765112	☐	O17-011	core		☐	☐	☐
465.73	468.78	3.05		2.85	93	V765113	☐	O17-011	core		☐	☐	☐
468.78	471.83	3.05		2.74	90	V765114	☐	O17-011	core		☐	☐	☐
471.83	474.88	3.05		2.85	93	V765115	☐	O17-011	core		☐	☐	☐
474.88	477.93	3.05		2.80	92	V765116	☐	O17-011	core		☐	☐	☐
477.93	480.97	3.04		2.73	90	V765117	☐	O17-011	core		☐	☐	☐
480.97	484.02	3.05		2.97	97	V765118	☐	O17-011	core		☐	☐	☐
484.02	487.07	3.05		3.05	100	V765119	☐	O17-011	core		☐	☐	☐
487.07	490.12	3.05		2.99	98	V765120	☐	O17-011	core		☐	☐	☐
490.12	493.17	3.05		2.99	98	V765121	☐	O17-011	core		☐	☐	☐
493.17	496.21	3.04		3.00	99	V765122	☐	O17-011	core		☐	☐	☐
496.21	499.26	3.05		3.01	99	V765123	☐	O17-011	core		☐	☐	☐
499.26	502.31	3.05		2.98	98	V765124	☐	O17-011	core		☐	☐	☐
502.31	505.36	3.05		2.92	96	V765125	☐	O17-011	core		☐	☐	☐
505.36	508.41	3.05		3.05	100	V765126	☐	O17-011	core		☐	☐	☐
508.41	511.45	3.04		3.04	100	V765127	☐	O17-011	core		☐	☐	☐
511.45	514.50	3.05		3.00	98	V765128	☐	O17-011	core		☐	☐	☐
514.50	517.55	3.05		3.05	100	V765129	☐	O17-011	core		☐	☐	☐
517.55	520.60	3.05		3.05	100	V765130	☐	O17-011	core		☐	☐	☐
520.60	523.65	3.05		2.92	96	V765131	☐	O17-011	core		☐	☐	☐
523.65	526.69	3.04		2.75	90	V765132	☐	O17-011	core		☐	☐	☐
526.69	529.74	3.05		2.79	91	V765133	☐	O17-011	core		☐	☐	☐
529.74	532.79	3.05		3.04	100	V765135	☐	O17-011	core		☐	☐	☐
532.79	535.84	3.05		3.05	100	V765136	☐	O17-011	core		☐	☐	☐
535.84	538.89	3.05		2.98	98	V765137	☐	O17-011	core		☐	☐	☐
535.84	538.89	3.05		2.98	98	V765138	☐	O17-011	core		☐	☑	☐
538.89	541.93	3.04		3.03	100	V765139	☐	O17-011	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
541.93	544.98	3.05		3.05	100	V765141	☐	O17-012	core		☐	☐	☐
544.98	548.03	3.05		3.03	99	V765142	☐	O17-012	core		☐	☐	☐
548.03	551.08	3.05		3.02	99	V765143	☐	O17-012	core		☐	☐	☐
551.08	554.13	3.05		3.04	100	V765144	☐	O17-012	core		☐	☐	☐
554.13	557.17	3.04		3.03	100	V765145	☐	O17-012	core		☐	☐	☐
557.17	560.22	3.05		3.01	99	V765146	☐	O17-012	core		☐	☐	☐
560.22	563.27	3.05		2.98	98	V765147	☐	O17-012	core		☐	☐	☐
563.27	566.32	3.05		2.94	96	V765148	☐	O17-012	core		☐	☐	☐
566.32	569.37	3.05		3.04	100	V765149	☐	O17-012	core		☐	☐	☐
569.37	572.41	3.04		3.04	100	V765150	☐	O17-012	core		☐	☐	☐
572.41	575.46	3.05		3.02	99	V765152	☐	O17-012	core		☐	☐	☐
575.46	578.51	3.05		3.03	99	V765153	☐	O17-012	core		☐	☐	☐
578.51	581.56	3.05		2.97	97	V765154	☐	O17-012	core		☐	☐	☐
581.56	584.61	3.05		3.05	100	V765155	☐	O17-012	core		☐	☐	☐
584.61	587.65	3.04		3.00	99	V765156	☐	O17-012	core		☐	☐	☐
587.65	590.70	3.05		3.03	99	V765157	☐	O17-012	core		☐	☐	☐
587.65	590.70	3.05		3.03	99	V765158	☐	O17-012	core		☐	☑	☐
590.70	593.75	3.05		3.05	100	V765159	☐	O17-012	core		☐	☐	☐
593.75	596.80	3.05		3.03	99	V765160	☐	O17-012	core		☐	☐	☐
596.80	599.85	3.05		3.00	98	V765161	☐	O17-012	core		☐	☐	☐
599.85	602.89	3.04		2.81	92	V765162	☐	O17-012	core		☐	☐	☐
602.89	605.94	3.05		3.00	98	V765163	☐	O17-012	core		☐	☐	☐
605.94	608.99	3.05		3.04	100	V765164	☐	O17-012	core		☐	☐	☐
608.99	612.04	3.05		2.98	98	V765166	☐	O17-012	core		☐	☐	☐
612.04	615.09	3.05		3.01	99	V765167	☐	O17-012	core		☐	☐	☐
615.09	618.13	3.04		3.04	100	V765168	☐	O17-012	core		☐	☐	☐
618.13	621.18	3.05		3.05	100	V765169	☐	O17-012	core		☐	☐	☐
621.18	624.23	3.05		2.95	97	V765170	☐	O17-012	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
624.23	627.28	3.05		2.90	95	V765171	☐	O17-012	core		☐	☐	☐
627.28	630.33	3.05		2.84	93	V765172	☐	O17-012	core		☐	☐	☐
630.33	633.37	3.04		2.82	93	V765173	☐	O17-012	core		☐	☐	☐
633.37	636.42	3.05		2.84	93	V765174	☐	O17-012	core		☐	☐	☐
636.42	639.47	3.05		2.87	94	V765175	☐	O17-012	core		☐	☐	☐
639.47	642.52	3.05		2.86	94	V765176	☐	O17-012	core		☐	☐	☐
642.52	645.57	3.05		3.03	99	V765177	☐	O17-012	core		☐	☐	☐
645.57	648.61	3.04		2.99	98	V765178	☐	O17-012	core		☐	☐	☐
648.61	651.66	3.05		3.00	98	V765179	☐	O17-012	core		☐	☐	☐
651.66	654.71	3.05		2.97	97	V765180	☐	O17-012	core		☐	☐	☐
654.71	657.76	3.05		3.02	99	V765181	☐	O17-013	core		☐	☐	☐
657.76	660.81	3.05		2.87	94	V765182	☐	O17-013	core		☐	☐	☐
660.81	663.85	3.04		2.88	95	V765183	☐	O17-013	core		☐	☐	☐
663.85	666.90	3.05		2.79	91	V765184	☐	O17-013	core		☐	☐	☐
666.90	669.95	3.05		2.99	98	V765185	☐	O17-013	core		☐	☐	☐

HoleID:		BDO-17-003	
ProjectCode:		ORION	
From	To	Comments	LoggedBy
4.72	8.92	Dark grey, blocky carbonaceous siliceous mudstone. Graphite, slickensides and some iron oxidation occurs along most fractures.	Hiba
8.92	13.83	Dark grey carbonaceous siliceous mudstone with quite a few synsedimentary faults and local mini faults. Graphite, slickensides and some iron oxidation occurs along most fractures. Some disseminated pyrite occurs along bedding. Thin up to 1 cm sandy to silty light grey beds occur in this section.	Hiba
13.83	16	Dark grey carbonaceous siliceous mudstone with a few synsedimentary faults. It has blebs and disseminated pyrite. Graphite and iron oxidation occurs along most fractures.	Hiba
16	16.28	Fault	Hiba
16.28	23.02	Coarse grained dark grey lithic sandstone interbedded with dark grey siliceous mudstone. The sandstone has very few 1 mm quartz veinlets and some chert. The siliceous mudstone has some disseminated pyrite and weak oxidation along some fracture. It also has graphite and slickensides along most fractures.	Hiba
23.02	25.34	Dark grey carbonaceous siliceous mudstone that is heavily oxidized (iron) along fractures and has disseminated and large blebs of pyrite.	Hiba
25.34	27.74	Dark grey carbonaceous siliceous mudstone with high angle shear zones that are sub-paralel to core axis and have 1 mm - 3 mm carbonaceous clay along open fractures. Moderate iron oxidation occurs along fractures and blebs of pyrite are seen seen in this section. Graphite and slickensides occur along most fractures.	Hiba
27.74	42.15	Dark grey carbonaceous siliceous mudstone with a lot of local mini faults and a few synsedimentary faults. Disseminated pyrite occurs along beds, as infills and blebs in this section. Graphite and carbonaceous clay occur along some fractures. This section has moderate iron oxidation until 38.39 and then there is no oxidation. Few thin up to 1 cm sandy to silty light grey beds occur in this section.	Hiba
42.15	42.35	Soft gougy zone with lots of quartz infill.	Hiba
42.35	103.23	Dark grey carbonaceous siliceous mudstone with a few local mini faults. Disseminated pyrite occurs along beds, as stringers, specks, infills and blebs. Moderate amounts of carbonaceous clay (0.5 cm - 3 cm in thickness) occurs along quite a few fractures. Few thin up to 2 cm sandy to silty light grey beds seen in this section. Quartz infills and few veinlets (0.15 mm - 1 cm in thickness) seen throughout this section. Slickensides and graphite seen on few fractures. This section also has small fault zones and shear zones. A few synsedimentary faults and small sections of convoluted, disjointed and disoriented bedding are also observed.	Hiba
103.23	105.21	Fault	Hiba

105.21	201.47	Dark grey carbonaceous siliceous mudstone with some sandy to silty beds up to 4 cm. Disseminated, specks, large blebs, stringers and beds of pyrite are observed in this section. Some local mini faults and high angle bedding parallel to core axis is also seen. At about 134.75 m you start seeing bedding almost perpendicular to core axis, however, there are a few small sections that have varied angle beds. Quartz infills and few veinlets (0.15 mm - 1 cm in thickness) are also seen throughout this section.	Hiba
201.47	230.12	Dark grey carbonaceous siliceous mudstone with sandy to silty beds that are up to 1 cm. Disseminated, blebs, specks, stringers and beds of pyrite are observed. Carbonaceous clay (0.5 cm - 3 cm) is seen on some fractures as well in this section. Graphite is seen along some fractures. Calcite infills and blebs are also observed throughout this section. Small fault zones and shear zones are seen in this interval.	Hiba
230.12	234.17	This section is exactly similar to the section above (201.47 m - 230.12 m) but has a lot of calcite stringers and infills that cause it to have a slightly crackled texture.	Hiba
236.22	299.12	Dark grey carbonaceous siliceous mudstone with sandy to silty beds that are up to 1 cm. Disseminated, blebs, specks, stringers and beds of pyrite are observed. Carbonaceous clay (0.5 cm - 3 cm), graphite and slickensides are also seen on fractures in this section. Graphite is seen along some fractures. Calcite infills and blebs are observed throughout this section. Small fault zones and shear zones are seen in this interval.	Hiba
299.12	311.63	Dark grey to black carbonaceous siliceous mudstone that is very brittle. Lots of slickensides and graphite are present on fractures. Disseminated, blebs and specks of pyrite seen throughout this section.	Hiba
311.63	336.7	Dark grey to black carbonaceous siliceous mudstone. Lots of slickensides and graphite are present on fractures. Few calcite and quartz stringers and infills are observed in this section. In some areas the calcite infills and stringers are sheared and create a crackled texture. Disseminated, blebs and specks of pyrite seen throughout this section.	Hiba
336.7	343.5	Dark grey to black carbonaceous siliceous mudstone that is very brittle. Lots of slickensides and graphite are present on fractures. Disseminated, blebs and specks of pyrite seen throughout this section.	Hiba
343.5	353	Shear zone. Dark grey to black siliceous mudstone with lots of slickensides and graphite along fractures. Few calcite and quartz stringers and infills. Blelbs, specks of pyrite are seen in this section. In some areas the calcite infills and stringers are sheared and create a crackled texture.	Hiba
353	366	Dark grey to black carbonaceous siliceous mudstone. Lots of slickensides and graphite are present along fractures. Few calcite and quartz stringers and infills are observed in this section. Pyrite blebs and specks are also seen. In some areas the calcite and quartz stringers give it a crackled texture.	Hiba
366	368.14	Shear zone. Sheared dark grey to black siliceous mudstone with lots of slickensides and graphite along fractures. Few calcite and quartz stringers and infills. Blelbs, specks of pyrite are seen in this section. In some areas the calcite infills and stringers are sheared and create a crackled texture.	Hiba
368.14	373	Fault. Highly sheared zone that has cataclasite, sheared quartz veinlets and infills. There are two beds measuring 17 cm and 60 cm in thickenss that have really small angular fragments that range in size from 2 mm - 4 cm. This unit has a high fracture frequency and lots of graphite and slickensides are found along fractures.	Hiba

373	386	Shear zone. Sheared dark grey to black siliceous mudstone with lots of slickensides and graphite along fractures. Few calcite and quartz stringers and infills. In some areas the calcite infills and stringers are sheared and create a crackled texture. Blelbs, specks of pyrite are seen in this section.	Hiba
386	387	Dark grey to black carbonaceous lime mudstone with few calcite and quartz infills & stringers. Some of the original beds are still preserved and can be seen in this section. In some areas the calcite infills and stringers create a crackled texture.Weak pyrite and mini-folds are observed. Lots of slickensides and graphite occur along fractures.	Hiba
387	394.75	Dark grey carbonaceous lime mudstone interbedded with light grey limestone. Lots of calcite veinlets (0.5 mm - 1mm), infills and stringers are seen in this section and create a crackled texture. Lots of local mini-faults and folds are seen in this section. A few synsedimentary faults are also observed. Section 387.95 m - 388.02 m is a fossiliferous limestone bed (it is a storm bed as the fossil and fossil fragments are aligned and oriented in largely one direction). Fossils observed in this section are: crinoids, brachiopods, amphipora and two hole crinoid. Fossils are seen in other parts of this section as well. Slickensides and graphite occur along fractures. Pyrite specks and blebs are observed in this section. Soft sediment deformation is also observed (flame strctures, simple loads casts, water escape cusps, disturbed laminites and convolute laminations). Dessication cracks are seen in this unit.	Hiba
394.75	395.05	Shear zone. Sheared dark grey to black siliceous mudstone with lots of slickensides and graphite along fractures. Few calcite and quartz stringers and infills. In some areas the calcite infills and stringers are sheared and create a crackled texture. Blelbs, specks of pyrite are seen in this section.	Hiba
395.05	400	Dark grey carbonaceous lime mudstone interbedded with light grey to medium grey limestone. Local mini-faults, stylolites and dessication cracks are observed. Some of these stylolites are filled with carbonaceous mud and/or pyrite. The limestone beds are fossiliferous. Fossils identified in this section are: crinoids, brachiopods, bivalves and sponges (amphipora?). Graphite and slickensides occurs along fractures. Sheared calcite veinlets, regular calcite veinlets, infills and	Hiba
400	419.05	Dark grey to black carbonaceous lime mudstone with few interbeds of light grey limestone. Sheared veinlets and infills are seen in this section and provide the crackled texture. Original beds can still be seen in some areas. Slickensides and graphite occur along most fractures. Specks, blebs and stringers of pyrite are seen. A lot of local mini-faults and dessication cracks are also observed.	Hiba
419.05	437.39	Possible fault. Black carbonaceous mudstone with potential gougy fault rock. Zone of high fracture and low recovery.	Hiba

437.39	448.37	Dark grey to black carbonaceous lime mudstone interbedded with light grey limestone. Graphite and slickensides occur along fractures. Calcite veinlets (0.15 mm - 3 mm), infills and blebs are observed in this section. Calcite is largely seen in in the mudstone more than in the limestone. Dessication cracks also seen. In the black carbonaceous lime mudstone there are fossil fragments beds and stringers - these beds range in thickness from 0.5 cm - 4 cm. Most of these fossil rich beds are storm beds as the fragments are aligned and oriented in a particular direction. The brachiopod stringers have either all concave up or concave down alignments in different storm beds. The mudstone has very few clasts and they range in size from 1 cm - 6 cm. The limestone however, has quite a few clasts that range in size from 1 cm - 4 cm. The limestone interbeds are very fossiliferous. Fossils observed in this section include graptolites (didymograptus, dicranograptus), sponges - amphipora?, syringopora?, tabulate coral, bryozoans, bivalves, cephalopods, algae and gastropods.	Hiba
448.37	454.52	Light grey fossiliferous limestone (fossiliferous debris flow - no particular orientation and/or alignment). Fossils observed: rugose coral, brachiopods, crinoids (large, two-hole, regular), syringopora?, bivalves, bryozoans, sponges and tabulate coral (several varieties). Few calcite veinlets (1 mm - 5 mm) also seen. Multi-lithic clasts composed of lime mudstone and limestone ranging in size from 1 cm - 11 cm as well as a few dessication cracks in the limestone are also observed.	Hiba
454.52	461.21	Light grey fossiliferous limestone (fossiliferous debris flow - no particular orientation and/or alignment) interbedded with carbonaceous lime mudstone. Fossils observed: rugose coral, brachiopods, corals, sponges (amphipora?), crinoids (large, two-hole, regular, star), bivalves, sponges and tabulate coral (several varities). It also has a few calcite infills and veinlets (0.15 mm - 1 mm). The carbonaceous lime mudstone has a few fossils amdn may have stromatoporoids? and/or stromatolites?. The limestone beds have clasts that range in size from 0.5 cm - 15 cm and are subrounded to subangular. Some beds are congolmerates composed of limestone clasts and mudstone clasts with fossil fragments in them; these fragments are subrounded to subangular. Individual beds can be seen in some section. Dessication cracks and local mini faults are present in this section. Graphite and slickensides are also seen on a few fractures.	Hiba
461.21	471.03	Medium grey limestone with 1 cm - 7 cm beds of carbonaceous lime mudstone. The carbonaceous lime mudstone and the limestone have a few fossil fragments (Stromatoporoids?, stromatolites?). Lots of chaotic calcite veining seen in this section and the calcite veinlets range in thickness from 0.15 mm - 1 mm). Lots of dessication cracks and some folds are observed in this section. Most of the beds are perpendicular to the core axis but a few sections have sub-parallel beds. 1 cm - 4 cm beds of fossiliferous limestone are also observed in this section. Graphite and slickensides are present along a	Hiba
471.03	473.96	Light grey to medium grey bleached limestone and cataclasite with sheared veining. Graphite and slickensides occur along fractures. A 7 cm interbed composed of black carbonaceous lime mudstone is also intensely sheared. This section is blocky and has a medium fracture frequency.	Hiba
473.96	476.71	Shear zone. Dark grey to black carbonaceous lime mudstone. Sheared calcite veinlets and infills seen in some sections - create a crackled texture. Graphite and slickensides present along most fractures. High fracture frequency observed.	Hiba

476.71	487.88	Bleached fossilifeous limestone with lots of calcite veining. Fossils identified: crinoids (regular, large and 2 hole), brachiopods, bivalves, coral fragments, sponge fragments (amphipora?). Some fractures have 5 mm - 2 cm of carbonaceous mud and graphite. Clasts of limestone and carbonaceous lime mudstone with fossils are also seen, ranging in size from 0.5 cm - 11 cm. Dessication cracks and stylolites are also seen throughout this section. Orpiment and realgar occur along fracture starting at 487.94 m. Bleached limestone with clasts of fossilifeous limestone occur between 486.55 m	Hiba
487.88	488.5	Black carbonaceous lime mudstone with intensely sheared calcite veinlets (1 mm - 3 mm). High fracture frequency and some fractures have realgar and orpiment on them.	Hiba
488.5	498.35	Fault. Gougy, has some fragments of the crackled black carbonaceous lime mudstone. You can see realgar and orpiment in the mudstone. From 490 m - 495 m there is low core recovery.	Hiba
498.35	503.11	Decalcified black lime mudstone with specks, blebs and stringers of realgar and orpiment. Pyrite is also observed in this section. Sheared calcite stringers, infills and large blebs are observed. From 502.80 m to 503.80 m you see massive realgar and orpiment deposit. Graphite, slickensides, realgar and orpiment are found along fractures.	Hiba
503.11	524.62	Light grey to medium grey bleached limestone with several generations of calcite veins. Some of the original limestone can be observed between 506.87 m - 511.60 m. Calcite infills, veins and veinlets range in thickeness between 0.15 mm - 11 cm. Lots of stylolites and dessication cracks are seen throughout this section. Orpiment and realgar are found along fractures, in the rock and in calcite veinlets. Vugs are found between 508.73 m - 511 m and range from 0.25 cm - 2 cm in size; some of these vugs are calcite infilled. Fossil fragments are also seen in this section, but are more prominent where the original limestone is preserved. Fossils identified: crinoids (regular, 2 holed crinoids), brachiopods, sponges (amphipora?), different types of coral fragments. Between 508.15 m - 508.58 m there is an unknown brick red mineral (composed of multiple elements; garbage mineral?). Spahelerite specks and blebs are seen throughout this section.	Hiba
524.62	546.56	Bleached light grey to medium grey crackled limestone with specks of realgar, orpiment and sphalerite. The crackled texture comes from tiny cracks in the limestone. Lots of stylolites and dessication cracks seen throughout this section. Lots of calcite veins, veinlets (0.15 mm - 4 cm) and infills are also seen in this section. You also see beds of limestone with no crackled texture that has faint outlines of fossil fragments.	Hiba
546.56	557.13	Bleached light grey to medium grey crackled limestone with lots of stylolites and dessication cracks. The crackled texture comes from tiny cracks in the limestone. Lots of calcite veins, veinlets (0.15 mm - 1 m) and infills seen in this section. A large calcite vein occurs from 547.09 m - 549.44 m. Very high fracture frequency is observed in this section.	Hiba
557.13	563	Medium grey to dark grey vuggy limestone with lots of sheared calcite veinlets. Gougy rock up to 5 cm in length is also seen in this section. Very high fracture frequency and some areas show the cracked texture that comes from tiny cracks in the limestone.	Hiba
563	594.36	Bleached light grey to medium grey crackled limestone with lots of stylolites and dessication cracks. The crackled texture comes from tiny cracks in the limestone. Lots of calcite veins, veinlets (0.15 mm - 30 cm) and infills seen in this section. A large calcite vein occurs from 592.84 m - 593.14 m. This section also has specks of relagar along fracture and in thin calcite veinlets. Very high fracture frequency is also observed in this section.	Hiba

BDO-17-003

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	4.75	4.75	0	0	0.00	0	--	--	--	
4.75	6.40	1.65	1.6	97	0.00	0	--	--	4W	RBZ 4.75-6.4m
6.40	9.45	3.05	2.5	82	0.36	12	--	--	3W	RBZ - 6.85-9.00m
9.45	12.50	3.05	2.69	88	0.70	23	--	--	3W	RBZ - 10.6-10.97m, some joints look to have slickenlines on them but unsure of orientation measures as the rock is heavily fractured
12.50	15.54	3.04	2.61	86	0.24	8	--	--	2W	RBZ - 12.63-12.82m, 13.17-13.85m, rock is brittle and heavily fractured
15.54	18.59	3.05	2.48	81	0.87	29	--	--	2W	RBZ - 17.83-17.93m
18.59	21.64	3.05	2.78	91	0.43	14	--	--	1W	RBZ - 21.34-21.45m
21.64	24.69	3.05	2.8	92	0.45	15	--	--	1W	RBZ - 23.10-23.39m rocok is heavily fractured
24.69	27.74	3.05	2.59	85	0.29	10	--	--	1W	RBZ - 24.69-24.80m, 26.00-26.21m
27.74	30.78	3.04	2.98	98	1.15	38	--	--	1W	RZ: 27.74-.80m, 29.05-20m, 29.98-30.03m
33.83	36.88	3.05	3.03	99	0.37	12	--	--	1W	clay rubble zones, most of the core is highly fractured by a set of 85-90TCA joints and niot rubbly chunks
36.88	39.93	3.05	3.04	100	0.72	24	--	--	1W	RZ: 38.58-78m, 39.41-79m
39.93	42.98	3.05	2.91	95	1.18	39	--	--	1W	RZ: 41.51-67, 47.76-88m
42.98	46.02	3.04	3.03	100	2.16	71	--	--	1W	many of the fractures are mechanical
46.02	49.07	3.05	2.99	98	1.88	62	--	--	1W	
70.41	73.46	3.05	3.02	99	0.69	23	--	--	1W	RZ: 72.00-73.00m
73.46	76.50	3.04	2.96	97	1.07	35	--	--	1W	RZ: 74.85-75.15m
76.50	79.55	3.05	2.84	93	0.83	27	--	--	1W	RZ: 77.75-79.50m
79.55	82.60	3.05	2.9	95	0.90	30	--	--	1W	RZ: 81.08-81.25, 82.00-82.30m
82.60	85.65	3.05	2.92	96	1.60	52	--	--	1W	RZ: 83.55-83.85m
85.65	88.70	3.05	2.63	86	1.00	33	--	--	1W	RZ: 85.87-86.10m
88.70	91.75	3.05	2.81	92	2.18	71	--	--	1W	RZ: 88.70-88.88, 90.10-90.22,91.55-91.75m
91.75	94.79	3.04	2.98	98	1.99	65	--	--	1W	
94.79	97.84	3.05	2.92	96	2.29	75	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
97.84	100.89	3.05	3.05	100	2.11	69	--	--	1W	
100.89	103.94	3.05	2.87	94	1.36	45	--	--	1W	RBZ - 103.45-103.94m a muddy rubble zone. Core pieces held together with mud
103.94	106.98	3.04	2.7	89	0.28	9	--	--	1W	RBZ - 103.94-105.15m muddy rubble zone. Broken pieces of core held together with mud
106.98	110.03	3.05	2.78	91	1.62	53	--	--	1W	RBZ - 107.65-108m. This piece of core looks competent but is brittle, held together with some mud and collapses in your hand with little to no pressure.
110.03	113.08	3.05	2.93	96	1.03	34	--	--	1W	RBZ - 112.27-112.60m. Zone of brittle rock held together with mud. Rock crumbles and fractures easily with light pressure.
113.08	116.13	3.05	2.93	96	0.98	32	--	--	1W	
116.13	119.18	3.05	2.84	93	0.71	23	--	--	1W	RBZ - 116.76-117.12m and 117.65-117.82m
119.18	122.22	3.04	2.82	93	2.08	68	--	--	1W	
122.22	125.27	3.05	2.8	92	1.29	42	--	--	1W	RBZ - 124.95-125.05m
125.27	128.32	3.05	2.81	92	1.12	37	--	--	1W	RBZ - 124.83-128m.
128.32	131.37	3.05	2.94	96	1.28	42	--	--	1W	
131.37	134.42	3.05	2.37	78	0.84	28	--	--	1W	RBZ - 132.40-133.25m 0
134.42	137.46	3.04	2.96	97	1.39	46	--	--	1W	
137.46	140.51	3.05	2.89	95	1.69	55	--	--	1W	RBZ - 137.66-137.75m, 139.13-139.32m
140.51	143.56	3.05	2.75	90	1.32	43	--	--	1W	RBZ - 142.77-142.87m, 143.05-143.11m mix of a few ~3cm chunks with mostly small rubble
143.56	146.61	3.05	2.86	94	0.95	31	--	--	1W	RBZ - 146.07-146.32m
146.61	149.65	3.04	2.98	98	0.69	23	--	--	1W	
149.65	152.70	3.05	3	98	1.81	59	--	--	1W	
152.70	155.75	3.05	3	98	1.65	54	--	--	1W	
155.75	158.80	3.05	3	98	1.98	65	--	--	1W	RBZ - 155.78-155.88m
158.80	161.85	3.05	3	98	1.26	41	--	--	1W	RBZ - 160.60-160.75m small zone of rubble.
161.85	164.89	3.04	3.01	99	1.36	45	--	--	1W	RBZ - 162.80-162.95m
164.89	167.94	3.05	2.96	97	1.71	56	--	--	1W	RBZ - 166.38-166.60m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
167.94	170.99	3.05	3.05	100	2.32	76	--	--	1W	
170.99	174.04	3.05	3.02	99	2.02	66	--	--	1W	
174.04	177.09	3.05	3.02	99	2.12	70	--	--	1W	RBZ - 175.30-175.70m
177.09	180.14	3.05	2.95	97	2.23	73	--	--	1W	
180.14	183.18	3.04	2.96	97	2.06	68	--	--	1W	RBZ - 182.68-182.76m
183.18	186.23	3.05	3.02	99	2.82	92	--	--	1W	
186.23	189.28	3.05	3.04	100	2.72	89	--	--	1W	
189.28	192.33	3.05	3.03	99	2.34	77	--	--	1W	
192.33	195.38	3.05	3.04	100	2.64	87	--	--	1W	
195.38	198.42	3.04	3.04	100	2.95	97	--	--	1W	
198.42	201.47	3.05	3.02	99	2.62	86	--	--	1W	
201.47	203.61	2.14	2.14	100	2.03	95	--	--	1W	Poor recovery, reduced to nq at 203.61 m.
203.61	205.74	2.13	2.13	100	2.13	100	--	--	1W	
205.74	208.79	3.05	3.02	99	2.75	90	--	--	1W	
208.79	211.84	3.05	3.05	100	3.05	100	--	--	1W	
211.84	214.88	3.04	2.98	98	2.23	73	--	--	1W	
214.88	217.93	3.05	3.05	100	2.69	88	--	--	1W	
217.93	220.98	3.05	2.92	96	2.63	86	--	--	1W	
220.98	224.03	3.05	3	98	2.55	84	--	--	1W	RBZ 220.98 to 221.30 m.
224.03	227.08	3.05	2.92	96	2.26	74	--	--	1W	
227.08	230.12	3.04	2.71	89	0.67	22	--	--	1W	RBZ for nearly entire interval.
230.12	233.17	3.05	2.92	96	2.80	92	--	--	1W	
233.17	236.22	3.05	3	98	1.55	51	--	--	1W	RBZ - 235.60-235.93m
236.22	239.26	3.04	2.93	96	2.41	79	--	--	1W	236.22-236.68m Heavily fractured area but not rubble.
239.26	242.31	3.05	3.01	99	2.57	84	--	--	1W	
242.31	245.36	3.05	3.02	99	2.89	95	--	--	1W	
245.36	248.41	3.05	2.9	95	2.42	79	--	--	1W	
248.41	251.46	3.05	2.7	89	1.18	39	--	--	1W	RBZ - 250.82-250.91m
251.46	254.51	3.05	2.89	95	0.63	21	--	--	1W	RBZ - 252.73-252.85m. The rest of the core in this section is heavily fractured.
254.51	257.55	3.04	2.39	79	1.86	61	--	--	1W	RBZ - 256.67-257.55m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
257.55	260.60	3.05	1.93	63	0.42	14	--	--	1W	RBZ - 257.55-258.90m poor recovery, likely loss of core through large rubble zone
260.60	263.65	3.05	2.45	80	0.48	16	--	--	1W	RBZ 261.35 to 263.65m.
263.65	266.70	3.05	2.74	90	1.26	41	--	--	1W	RBZ 263.65 to 264.0 m.
266.70	269.75	3.05	3	98	1.28	42	--	--	1W	RBZ 268.18 to 268.61 m.
269.75	272.80	3.05	2.49	82	0.24	8	--	--	1W	RBZ 269.75 to 272.39 m.
272.80	275.84	3.04	2.69	88	1.54	51	--	--	1W	RBZ 273.0 to 274.0 m.
275.84	278.89	3.05	3.01	99	2.43	80	--	--	1W	
278.89	281.94	3.05	2.23	73	0.70	23	--	--	1W	RBZ 279.20 to 281.94 m.
281.94	284.99	3.05	2.2	72	1.34	44	--	--	1W	RBZ 281.94 to 283.0 m.
284.99	288.04	3.05	3.05	100	2.11	69	--	--	1W	
288.04	291.08	3.04	3	99	2.27	75	--	--	1W	
291.08	294.13	3.05	3.05	100	2.02	66	--	--	1W	
294.13	297.18	3.05	3.05	100	1.78	58	--	--	1W	
297.18	300.23	3.05	1.56	51	0.00	0	--	--	1W	RBZ for entire interval.
300.23	303.28	3.05	1.37	45	0.00	0	--	--	1W	RBZ for entire interval.
303.28	306.32	3.04	2.14	70	0.17	6	--	--	1W	RBZ for entire interval.
306.32	309.37	3.05	0.2	7	0.00	0	--	--	1W	RBZ for entire interval.
309.37	312.42	3.05	2.17	71	0.63	21	--	--	1W	RBZ 309.37 to 312.0 m.
312.42	315.47	3.05	2.82	92	2.09	69	--	--	1W	
315.47	318.52	3.05	2.88	94	1.28	42	--	--	1W	
318.52	321.56	3.04	2.94	97	1.56	51	--	--	1W	
321.56	324.61	3.05	2.58	85	0.82	27	--	--	1W	RBZ 321.75-322.00m
324.61	327.66	3.05	1.89	62	0.81	27	--	--	1W	RBZ 325.69-325.79m, 326.70-327.15m
327.66	330.71	3.05	2.44	80	1.01	33	--	--	1W	RBZ 328.50-328.70m, 330.00-330.50m
330.71	333.76	3.05	2.35	77	0.68	22	--	--	1W	RBZ 330.75-331.00m, 333.35-333.76m
333.76	336.80	3.04	1.89	62	0.10	3	--	--	1W	RBZ 335.00-336.00m
336.80	339.85	3.05	2.32	76	0.20	7	--	--	1W	RBZ for entire interval
339.85	342.90	3.05	1.04	34	0.00	0	--	--	1W	RBZ 339.85-340.00m, 341.00-342.90m
342.90	345.95	3.05	1.85	61	0.00	0	--	--	1W	RBZ 342.90-343.56m
345.95	348.99	3.04	0.89	29	0.10	3	--	--	1W	RBZ 345.95-347.00m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
348.99	352.04	3.05	1.94	64	0.24	8	--	--	1W	RBZ 348.99-349.10m, 351.50-351.55m
352.04	355.09	3.05	2.79	91	1.21	40	--	--	1W	RBZ 352.14-325.30m
355.09	358.14	3.05	2.36	77	0.38	12	--	--	1W	RBZ 356.28-356.58m, 357.80-358.14m
358.14	361.19	3.05	2.9	95	1.47	48	--	--	1W	RBZ 361.10-361.19m
361.19	364.24	3.05	1.88	62	0.62	20	--	--	1W	RZ: 363.00-364.14m
364.24	367.28	3.04	1.94	64	0.48	16	--	--	1W	RZ: 364.30-366.00m
367.28	370.33	3.05	1.37	45	0.11	4	--	--	1W	RZ: 368.17-370.00m
370.33	373.38	3.05	1.35	44	0.50	16	--	--	1W	RZ: 370.50-373.00m
373.38	376.43	3.05	2	66	0.85	28	--	--	1W	RZ: 375.00-375.60m, 375.80-376.43m
376.43	379.48	3.05	0.25	8	0.00	0	--	--	1W	RZ: 376.43-379.48m
379.48	382.52	3.04	1.18	39	0.19	6	--	--	1W	RZ: 379.48-380.90m
382.52	385.57	3.05	1.54	50	0.20	7	--	--	1W	RZ: 382.52-385.57m, there are some competent intervals through out the run (only 20 cm)
385.57	388.62	3.05	2.61	86	1.22	40	--	--	1W	RZ: 387.30-387.90m
388.62	391.67	3.05	2.92	96	1.16	38	--	--	1W	
391.67	394.72	3.05	2.95	97	1.03	34	--	--	1W	RZ: 394.25-397.66m
394.72	397.76	3.04	1.95	64	0.64	21	--	--	1W	RBZ: 394.72-395.05m
397.76	400.81	3.05	2.6	85	0.77	25	--	--	1W	RBZ: 400.10-400.50m
400.81	403.86	3.05	2.98	98	1.47	48	--	--	1W	RBZ: 400.81-401.00, 402.80-403.00m
403.86	406.91	3.05	2.09	69	0.10	3	--	--	1W	RBZ: 404.74-406.60m
406.91	409.96	3.05	0.52	17	0.15	5	--	--	1W	RBZ: 407.00-408.00,409.00-409.96m
409.96	413.00	3.04	0.44	14	0.00	0	--	--	1W	RBZ: 410.00-412.00m
413.00	416.05	3.05	0.3	10	0.00	0	--	--	1W	RBZ: throughout entire interval
416.05	419.10	3.05	2.41	79	0.51	17	--	--	1W	RBZ: 417.00-417.40m
419.10	422.15	3.05	0.8	26	0.00	0	--	--	1W	RBZ: throughout entire interval
422.15	425.20	3.05	0.13	4	0.00	0	--	--	1W	RBZ: throughout entire interval
425.20	428.24	3.04	0.82	27	0.00	0	--	--	1W	RBZ: throughout entire interval
428.24	431.29	3.05	0.88	29	0.00	0	--	--	1W	RBZ: throughout entire interval
431.29	434.34	3.05	0.78	26	0.12	4	--	--	1W	RBZ at 434 m
434.34	437.39	3.05	0.94	31	0.00	0	--	--	1W	Soft, black sandy clay

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
437.39	440.44	3.05	0.88	29	0.22	7	--	--	1W	Rubbly interval with dominant fracture point of 80 degrees
440.44	443.48	3.04	2.86	94	1.79	59	--	--	1W	
443.48	446.53	3.05	2.25	74	1.22	40	--	--	1W	
446.53	449.58	3.05	2.74	90	2.04	67	--	--	1W	
449.58	452.63	3.05	2.95	97	2.69	88	--	--	1W	Mechanical breaks in competent fossiliferous limestone
452.63	455.68	3.05	2.98	98	2.92	96	--	--	1W	Mechanical breaks and 3 single joints
455.68	458.72	3.04	2.9	95	1.97	65	--	--	1W	
458.72	461.77	3.05	2.69	88	1.94	64	--	--	1W	
461.77	464.82	3.05	2.89	95	1.38	45	--	--	1W	
464.82	467.87	3.05	2.68	88	1.29	42	--	--	1W	
467.87	470.92	3.05	2.5	82	1.58	52	--	--	1W	
470.92	473.96	3.04	1.57	52	0.21	7	--	--	1W	Highly fractured and rubbly interval
473.96	477.01	3.05	1.24	41	0.24	8	--	--	1W	Highly fractured interval
477.01	480.06	3.05	2.84	93	1.49	49	--	--	1W	
480.06	483.11	3.05	2.77	91	1.34	44	--	--	1W	RBZ 480.30 m
483.11	486.16	3.05	2.81	92	1.76	58	--	--	1W	orpiment on fracture surfaces at 486 m
486.16	489.20	3.04	2.57	85	1.10	36	--	--	1W	RBZ 487.85 to 489.20 m
489.20	492.25	3.05	0.6	20	0.00	0	--	--	1W	Entire interval black, soft, gritty material. Potential fault gouge.
492.25	495.30	3.05	0.88	29	0.00	0	--	--	1W	Entire interval black, soft, gritty material. Potential fault gouge.
495.30	498.35	3.05	1.03	34	0.00	0	--	--	1W	Entire interval black, soft, gritty material. Potential fault gouge.
498.35	501.40	3.05	2.64	87	1.77	58	--	--	1W	RBZ at 501 m
501.40	504.44	3.04	2.83	93	1.14	38	--	--	1W	RBZ from 503 to 504 m
504.44	507.49	3.05	2.84	93	1.16	38	--	--	1W	Interval fractured but appears to be mechanical breaks, no joint sets.
507.49	510.54	3.05	2.35	77	0.53	17	--	--	1W	Interval highly fractured, majority of fractures potentially mechanical
510.54	513.59	3.05	2.72	89	1.52	50	--	--	1W	RBZ 513.00m
513.59	516.64	3.05	2.83	93	1.03	34	--	--	1W	RBZ 515.65m
516.64	519.68	3.04	2.83	93	1.28	42	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
519.68	522.73	3.05	3.04	100	1.94	64	--	--	1W	RBZ 522.00m
522.73	525.78	3.05	2.94	96	2.28	75	--	--	1W	
525.78	528.83	3.05	2.81	92	2.07	68	--	--	1W	
528.83	531.88	3.05	2.85	93	0.96	31	--	--	1W	RBZ 529.80m
531.88	534.92	3.04	2.64	87	1.32	43	--	--	1W	
534.92	537.97	3.05	2.84	93	2.01	66	--	--	1W	RBZ 535.00m
537.97	541.02	3.05	2.73	90	2.19	72	--	--	1W	RBZ 540.50m
541.02	544.07	3.05	2.02	66	0.40	13	--	--	1W	RBZ 542.00-542.50m, 543.75-544.00m
544.07	547.12	3.05	2.35	77	0.89	29	--	--	1W	RBZ 544.15m,546.56-546.85m
547.12	550.16	3.04	2.4	79	0.25	8	--	--	1W	RBZ 547.12-548.50m, 548.80-549.05m, 549.50m
550.16	553.21	3.05	2.2	72	0.27	9	--	--	1W	RBZ 550.16-550.60m
553.21	556.26	3.05	2.75	90	0.36	12	--	--	1W	RBZ 553.21-553.65m, 555.25m
556.26	559.31	3.05	1.99	65	0.00	0	--	--	1W	RBZ 556.80-557.00m, 558.40-558.80m
559.31	562.36	3.05	2.04	67	0.27	9	--	--	1W	RBZ 581.00m, 561.10-562.00m
562.36	565.40	3.04	2.36	78	0.25	8	--	--	1W	RBZ 562.50-563.20m, 563.50-563.90m
565.40	568.45	3.05	2.6	85	0.40	13	--	--	1W	RBZ 566.50-567.00m, 567.80m
568.45	571.50	3.05	1.15	38	0.00	0	--	--	1W	RBZ 568.50-570.50m, 571.25-571.50m
571.50	574.55	3.05	1.83	60	0.10	3	--	--	1W	RBZ 571.50-572.50m, 573.50m
574.55	577.60	3.05	1.86	61	0.23	8	--	--	1W	RBZ 574.60-575.50m, 576.25m, 576.50m
577.60	580.64	3.04	1.57	52	0.10	3	--	--	1W	RBZ 578.00-580.00m
580.64	583.69	3.05	2.35	77	0.49	16	--	--	1W	RBZ 581.30-581.45m
583.69	586.74	3.05	2.99	98	0.37	12	--	--	1W	RBZ 584.15-584.35m,585.50-585.75m,586.25-586.45m
586.74	589.79	3.05	2.1	69	0.00	0	--	--	1W	RBZ 587.00-589.47m
589.79	592.84	3.05	1.78	58	0.12	4	--	--	1W	RBZ 589.79-592.75m
592.84	594.36	1.52	0.96	63	0.00	0	--	--	1W	RBZ 592.84-594.36m

BDO-17-003

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00		0.00	0	V765403	☐	O17-018	core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765211	☐	O17-013	core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765233	☐	O17-014	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765243	☐	O17-014	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765278	☐	O17-015	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765293	☐	O17-015	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765308	☐	O17-016	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765315	☐	O17-016	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765336	☐	O17-016	core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765367	☐	O17-017	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765372	☐	O17-017	Core	SR5	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765387	☐	O17-018	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765193	☐	O17-013	core		☑	☐	☐
4.75	6.40	1.65		1.60	97	V765186	☐	O17-013	core		☐	☐	☐
6.40	9.45	3.05		2.50	82	V765187	☐	O17-013	core		☐	☐	☐
9.45	12.50	3.05		2.69	88	V765188	☐	O17-013	core		☐	☐	☐
12.50	15.54	3.04		2.61	86	V765189	☐	O17-013	core		☐	☐	☐
15.54	18.59	3.05		2.48	81	V765190	☐	O17-013	core		☐	☐	☐
18.59	21.64	3.05		2.78	91	V765191	☐	O17-013	core		☐	☐	☐
21.64	24.69	3.05		2.80	92	V765192	☐	O17-013	core		☐	☐	☐
24.69	27.74	3.05		2.59	85	V765194	☐	O17-013	core		☐	☐	☐
27.74	30.78	3.04		2.98	98	V765195	☐	O17-013	core		☐	☐	☐
30.78	33.83	3.05		2.87	94	V765196	☐	O17-013	core		☐	☐	☐
33.83	36.88	3.05		3.03	99	V765197	☐	O17-013	core		☐	☐	☐
36.88	39.93	3.05		3.04	100	V765198	☐	O17-013	core		☐	☐	☐
39.93	42.98	3.05		2.91	95	V765199	☐	O17-013	core		☐	☐	☐
42.98	46.02	3.04		3.03	100	V765200	☐	O17-013	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
46.02	49.07	3.05		2.99	98	V765201	☐	O17-013	core		☐	☐	☐
49.07	52.12	3.05		3.04	100	V765202	☐	O17-013	core		☐	☐	☐
52.12	55.17	3.05		2.77	91	V765203	☐	O17-013	core		☐	☐	☐
52.12	55.17	3.05		2.77	91	V765204	☐	O17-013	core		☐	☑	☐
55.17	58.22	3.05		3.05	100	V765205	☐	O17-013	core		☐	☐	☐
58.22	61.26	3.04		2.97	98	V765206	☐	O17-013	core		☐	☐	☐
61.26	64.31	3.05		2.74	90	V765207	☐	O17-013	core		☐	☐	☐
64.31	67.36	3.05		2.30	75	V765208	☐	O17-013	core		☐	☐	☐
67.36	70.41	3.05		2.90	95	V765209	☐	O17-013	core		☐	☐	☐
70.41	73.46	3.05		3.02	99	V765210	☐	O17-013	core		☐	☐	☐
73.46	76.50	3.04		2.96	97	V765212	☐	O17-013	core		☐	☐	☐
76.50	79.55	3.05		2.84	93	V765213	☐	O17-013	core		☐	☐	☐
79.55	82.60	3.05		2.90	95	V765214	☐	O17-013	core		☐	☐	☐
82.60	85.65	3.05		2.92	96	V765215	☐	O17-013	core		☐	☐	☐
85.65	88.70	3.05		2.63	86	V765216	☐	O17-013	core		☐	☐	☐
88.70	91.75	3.05		2.81	92	V765217	☐	O17-013	core		☐	☐	☐
91.75	94.79	3.04		2.98	98	V765218	☐	O17-013	core		☐	☐	☐
94.79	97.84	3.05		2.92	96	V765219	☐	O17-013	core		☐	☐	☐
97.84	100.89	3.05		3.05	100	V765220	☐	O17-013	core		☐	☐	☐
100.89	103.94	3.05		2.87	94	V765221	☐	O17-014	core		☐	☐	☐
103.94	106.98	3.04		2.70	89	V765222	☐	O17-014	core		☐	☐	☐
106.98	110.03	3.05		2.78	91	V765223	☐	O17-014	core		☐	☐	☐
110.03	113.08	3.05		2.93	96	V765224	☐	O17-014	core		☐	☐	☐
113.08	116.13	3.05		2.93	96	V765225	☐	O17-014	core		☐	☐	☐
116.13	119.18	3.05		2.84	93	V765226	☐	O17-014	core		☐	☐	☐
119.18	122.22	3.04		2.82	93	V765227	☐	O17-014	core		☐	☐	☐
122.22	125.27	3.05		2.80	92	V765228	☐	O17-014	core		☐	☐	☐
125.27	128.32	3.05		2.81	92	V765229	☐	O17-014	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
128.32	131.37	3.05		2.94	96	V765230	☐	O17-014	core		☐	☐	☐
131.37	134.42	3.05		2.37	78	V765231	☐	O17-014	core		☐	☐	☐
134.42	137.46	3.04		2.96	97	V765232	☐	O17-014	core		☐	☐	☐
137.46	140.51	3.05		2.89	95	V765234	☐	O17-014	core		☐	☐	☐
140.51	143.56	3.05		2.75	90	V765235	☐	O17-014	core		☐	☐	☐
143.56	146.61	3.05		2.86	94	V765236	☐	O17-014	core		☐	☐	☐
146.61	149.65	3.04		2.98	98	V765237	☐	O17-014	core		☐	☐	☐
149.65	152.70	3.05		3.00	98	V765238	☐	O17-014	core		☐	☐	☐
152.70	155.75	3.05		3.00	98	V765239	☐	O17-014	core		☐	☐	☐
155.75	158.80	3.05		3.00	98	V765240	☐	O17-014	core		☐	☐	☐
158.80	161.85	3.05		3.00	98	V765241	☐	O17-014	core		☐	☐	☐
161.85	164.89	3.04		3.01	99	V765242	☐	O17-014	core		☐	☐	☐
164.89	167.94	3.05		2.96	97	V765244	☐	O17-014	core		☐	☐	☐
167.94	170.99	3.05		3.05	100	V765245	☐	O17-014	core		☐	☐	☐
170.99	174.04	3.05		3.02	99	V765246	☐	O17-014	core		☐	☐	☐
174.04	177.09	3.05		3.02	99	V765247	☐	O17-014	core		☐	☐	☐
177.09	180.14	3.05		2.95	97	V765248	☐	O17-014	core		☐	☐	☐
180.14	183.18	3.04		2.96	97	V765249	☐	O17-014	core		☐	☐	☐
183.18	186.23	3.05		3.02	99	V765250	☐	O17-014	core		☐	☐	☐
183.18	186.23	3.05		3.02	99	V765251	☐	O17-014	core		☐	☑	☐
186.23	189.28	3.05		3.04	100	V765252	☐	O17-014	core		☐	☐	☐
189.28	192.33	3.05		3.03	99	V765253	☐	O17-014	core		☐	☐	☐
192.33	195.38	3.05		3.04	100	V765254	☐	O17-014	core		☐	☐	☐
195.38	198.42	3.04		3.04	100	V765255	☐	O17-014	core		☐	☐	☐
198.42	201.47	3.05		3.02	99	V765256	☐	O17-014	core		☐	☐	☐
201.47	203.61	2.14		2.14	100	V765257	☐	O17-014	core		☐	☐	☐
203.61	205.74	2.13		2.13	100	V765258	☐	O17-014	core		☐	☐	☐
205.74	208.79	3.05		3.02	99	V765259	☐	O17-014	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
208.79	211.84	3.05		3.05	100	V765260	☐	O17-014	core		☐	☐	☐
211.84	214.88	3.04		2.98	98	V765261	☐	O17-015	core		☐	☐	☐
214.88	217.93	3.05		3.05	100	V765262	☐	O17-015	core		☐	☐	☐
217.93	220.98	3.05		2.92	96	V765263	☐	O17-015	core		☐	☐	☐
220.98	224.03	3.05		3.00	98	V765264	☐	O17-015	core		☐	☐	☐
224.03	227.08	3.05		2.92	96	V765265	☐	O17-015	core		☐	☐	☐
227.08	230.12	3.04		2.71	89	V765266	☐	O17-015	core		☐	☐	☐
230.12	233.17	3.05		2.92	96	V765267	☐	O17-015	core		☐	☐	☐
233.17	236.22	3.05		3.00	98	V765268	☐	O17-015	core		☐	☐	☐
236.22	239.26	3.04		2.93	96	V765269	☐	O17-015	core		☐	☐	☐
239.26	242.31	3.05		3.01	99	V765270	☐	O17-015	core		☐	☐	☐
242.31	245.36	3.05		3.02	99	V765271	☐	O17-015	core		☐	☐	☐
242.32	245.36	3.04		3.02	99	V765272	☐	O17-015	core		☐	☑	☐
245.36	248.41	3.05		2.90	95	V765273	☐	O17-015	core		☐	☐	☐
248.41	251.46	3.05		2.70	89	V765274	☐	O17-015	core		☐	☐	☐
251.46	254.51	3.05		2.89	95	V765275	☐	O17-015	core		☐	☐	☐
254.51	257.55	3.04		2.39	79	V765276	☐	O17-015	core		☐	☐	☐
257.55	260.60	3.05		1.93	63	V765277	☐	O17-015	core		☐	☐	☐
260.60	263.65	3.05		2.45	80	V765279	☐	O17-015	core		☐	☐	☐
263.65	266.70	3.05		2.74	90	V765280	☐	O17-015	core		☐	☐	☐
266.70	269.75	3.05		3.00	98	V765281	☐	O17-015	core		☐	☐	☐
269.75	272.80	3.05		2.49	82	V765282	☐	O17-015	core		☐	☐	☐
272.80	275.84	3.04		2.69	88	V765283	☐	O17-015	core		☐	☐	☐
275.84	278.89	3.05		3.01	99	V765284	☐	O17-015	core		☐	☐	☐
278.89	281.94	3.05		2.23	73	V765285	☐	O17-015	core		☐	☐	☐
281.94	284.99	3.05		2.20	72	V765286	☐	O17-015	core		☐	☐	☐
284.99	288.04	3.05		3.05	100	V765287	☐	O17-015	core		☐	☐	☐
288.04	291.08	3.04		3.00	99	V765288	☐	O17-015	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
291.08	294.13	3.05		3.05	100	V765289	☐	O17-015	core		☐	☐	☐
294.13	297.18	3.05		3.05	100	V765290	☐	O17-015	core		☐	☐	☐
297.18	300.23	3.05		1.56	51	V765291	☐	O17-015	core		☐	☐	☐
300.23	303.28	3.05		1.37	45	V765292	☐	O17-015	core		☐	☐	☐
303.28	306.32	3.04		2.14	70	V765294	☐	O17-015	core		☐	☐	☐
306.32	309.37	3.05		0.20	7	V765295	☐	O17-015	core		☐	☐	☐
309.37	312.42	3.05		2.17	71	V765296	☐	O17-015	core		☐	☐	☐
312.42	315.47	3.05		2.82	92	V765297	☐	O17-015	core		☐	☐	☐
315.47	318.52	3.05		2.88	94	V765298	☐	O17-015	core		☐	☐	☐
318.52	321.56	3.04		2.94	97	V765299	☐	O17-015	core		☐	☐	☐
321.56	324.61	3.05		2.58	85	V765300	☐	O17-015	core		☐	☐	☐
324.61	327.66	3.05		1.89	62	V765301	☐	O17-016	core		☐	☐	☐
327.66	330.71	3.05		2.44	80	V765302	☐	O17-016	core		☐	☐	☐
330.71	333.76	3.05		2.35	77	V765303	☐	O17-016	core		☐	☐	☐
333.76	336.80	3.04		1.89	62	V765304	☐	O17-016	core		☐	☐	☐
336.80	339.85	3.05		2.32	76	V765305	☐	O17-016	core		☐	☐	☐
339.85	342.90	3.05		1.04	34	V765306	☐	O17-016	core		☐	☐	☐
342.90	345.95	3.05		1.85	61	V765307	☐	O17-016	core		☐	☐	☐
345.95	348.99	3.04		0.89	29	V765309	☐	O17-016	core		☐	☐	☐
348.99	352.04	3.05		1.94	64	V765310	☐	O17-016	core		☐	☐	☐
352.04	355.09	3.05		2.79	91	V765311	☐	O17-016	core		☐	☐	☐
355.09	358.14	3.05		2.36	77	V765312	☐	O17-016	core		☐	☐	☐
358.14	361.19	3.05		2.90	95	V765313	☐	O17-016	core		☐	☐	☐
361.19	364.24	3.05		1.88	62	V765314	☐	O17-016	core		☐	☐	☐
364.24	367.28	3.04		1.94	64	V765316	☐	O17-016	core		☐	☐	☐
367.28	370.33	3.05		1.37	45	V765317	☐	O17-016	core		☐	☐	☐
370.33	373.38	3.05		1.35	44	V765318	☐	O17-016	core		☐	☐	☐
373.38	376.43	3.05		2.00	66	V765319	☐	O17-016	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
376.43	379.48	3.05		0.25	8	V765320	☐	O17-016	core		☐	☐	☐
379.48	382.52	3.04		1.18	39	V765321	☐	O17-016	core		☐	☐	☐
382.52	385.57	3.05		1.54	50	V765322	☐	O17-016	core		☐	☐	☐
385.57	387.00	1.43		1.32	92	V765323	☐	O17-016	core		☐	☐	☐
387.00	388.62	1.62		1.34	83	V765324	☐	O17-016	core		☐	☐	☐
388.62	391.67	3.05		2.92	96	V765325	☐	O17-016	core		☐	☐	☐
391.67	394.72	3.05		2.95	97	V765326	☐	O17-016	core		☐	☐	☐
394.72	397.76	3.04		1.95	64	V765327	☐	O17-016	core		☐	☐	☐
397.76	400.81	3.05		2.60	85	V765328	☐	O17-016	core		☐	☐	☐
400.81	403.86	3.05		2.98	98	V765329	☐	O17-016	core		☐	☐	☐
400.81	403.86	3.05		2.98	98	V765330	☐	O17-016	core		☐	☑	☐
403.86	406.91	3.05		2.09	69	V765331	☐	O17-016	core		☐	☐	☐
406.91	409.96	3.05		0.52	17	V765332	☐	O17-016	core		☐	☐	☐
409.96	413.00	3.04		0.44	14	V765333	☐	O17-016	core		☐	☐	☐
413.00	416.05	3.05		0.30	10	V765334	☐	O17-016	core		☐	☐	☐
416.05	419.10	3.05		2.41	79	V765335	☐	O17-016	core		☐	☐	☐
419.10	422.15	3.05		0.80	26	V765337	☐	O17-016	core		☐	☐	☐
422.15	425.20	3.05		0.13	4	V765338	☐	O17-016	core		☐	☐	☐
425.20	428.24	3.04		0.82	27	V765339	☐	O17-016	core		☐	☐	☐
428.24	431.29	3.05		0.88	29	V765340	☐	O17-016	core		☐	☐	☐
431.29	434.34	3.05		0.78	26	V765341	☐	O17-017	Core		☐	☐	☐
434.34	437.39	3.05		0.94	31	V765342	☐	O17-017	Core		☐	☐	☐
437.39	440.44	3.05		0.88	29	V765343	☐	O17-017	Core		☐	☐	☐
440.44	443.48	3.04		2.86	94	V765344	☐	O17-017	Core		☐	☐	☐
443.48	446.53	3.05		2.25	74	V765345	☐	O17-017	Core		☐	☐	☐
446.53	449.58	3.05		2.74	90	V765346	☐	O17-017	Core		☐	☐	☐
449.58	452.63	3.05		2.95	97	V765347	☐	O17-017	Core		☐	☐	☐
452.63	455.68	3.05		2.98	98	V765348	☐	O17-017	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
455.68	458.72	3.04		2.90	95	V765349	☐	O17-017	Core		☐	☐	☐
458.72	461.77	3.05		2.69	88	V765350	☐	O17-017	Core		☐	☐	☐
458.72	461.77	3.05		2.69	88	V765351	☐	O17-017	Core		☐	☑	☐
461.77	464.82	3.05		2.89	95	V765352	☐	O17-017	Core		☐	☐	☐
464.82	467.87	3.05		2.68	88	V765353	☐	O17-017	Core		☐	☐	☐
467.87	470.92	3.05		2.50	82	V765354	☐	O17-017	Core		☐	☐	☐
470.92	473.96	3.04		1.57	52	V765355	☐	O17-017	Core		☐	☐	☐
473.96	476.67	2.71		0.80	30	V765356	☐	O17-017	Core		☐	☐	☐
476.67	478.12	1.45		1.42	98	V765357	☐	O17-017	Core		☐	☐	☐
478.12	480.06	1.94		1.90	98	V765358	☐	O17-017	Core		☐	☐	☐
480.06	483.11	3.05		2.77	91	V765359	☐	O17-017	Core		☐	☐	☐
483.11	486.16	3.05		2.81	92	V765360	☐	O17-017	Core		☐	☐	☐
486.16	487.81	1.65		1.65	100	V765361	☐	O17-017	Core		☐	☐	☐
487.81	489.20	1.39		0.80	58	V765362	☐	O17-017	Core		☐	☐	☐
489.20	492.25	3.05		0.60	20	V765363	☐	O17-017	Core		☐	☐	☐
492.25	495.30	3.05		0.88	29	V765364	☐	O17-017	Core		☐	☐	☐
495.30	498.35	3.05		1.03	34	V765365	☐	O17-017	Core		☐	☐	☐
498.35	501.40	3.05		2.64	87	V765366	☐	O17-017	Core		☐	☐	☐
501.40	503.78	2.38		1.93	81	V765368	☐	O17-017	Core		☐	☐	☐
503.78	506.16	2.38		2.12	89	V765369	☐	O17-017	Core		☐	☐	☐
506.16	507.49	1.33		1.25	94	V765370	☐	O17-017	Core		☐	☐	☐
507.49	510.54	3.05		2.35	77	V765371	☐	O17-017	Core		☐	☐	☐
510.54	513.59	3.05		2.72	89	V765373	☐	O17-017	Core		☐	☐	☐
513.59	516.64	3.05		2.83	93	V765374	☐	O17-017	Core		☐	☐	☐
516.64	519.68	3.04		2.83	93	V765375	☐	O17-017	Core		☐	☐	☐
519.68	522.73	3.05		3.04	100	V765376	☐	O17-017	Core		☐	☐	☐
522.73	525.78	3.05		2.94	96	V765377	☐	O17-017	Core		☐	☐	☐
525.78	528.83	3.05		2.81	92	V765378	☐	O17-017	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
528.83	531.88	3.05		2.85	93	V765379	☐	O17-017	Core		☐	☐	☐
531.88	534.92	3.04		2.64	87	V765380	☐	O17-017	Core		☐	☐	☐
534.92	537.97	3.05		2.84	93	V765381	☐	O17-018	core		☐	☐	☐
537.97	541.02	3.05		2.73	90	V765382	☐	O17-018	core		☐	☐	☐
541.02	544.07	3.05		2.02	66	V765383	☐	O17-018	core		☐	☐	☐
544.07	547.12	3.05		2.35	77	V765384	☐	O17-018	core		☐	☐	☐
547.12	549.44	2.32		1.99	86	V765385	☐	O17-018	core		☐	☐	☐
549.44	550.60	1.16		1.09	94	V765386	☐	O17-018	core		☐	☐	☐
550.60	553.21	2.61		1.86	71	V765388	☐	O17-018	core		☐	☐	☐
553.21	555.86	2.65		2.60	98	V765389	☐	O17-018	core		☐	☐	☐
555.86	557.25	1.39		1.17	84	V765390	☐	O17-018	core		☐	☐	☐
557.25	559.37	2.12		1.35	64	V765391	☐	O17-018	core		☐	☐	☐
559.37	562.36	2.99		2.47	83	V765392	☐	O17-018	core		☐	☐	☐
562.36	565.40	3.04		2.36	78	V765393	☐	O17-018	core		☐	☐	☐
565.40	568.45	3.05		2.60	85	V765394	☐	O17-018	core		☐	☐	☐
568.45	571.50	3.05		1.15	38	V765395	☐	O17-018	core		☐	☐	☐
571.50	574.55	3.05		1.83	60	V765396	☐	O17-018	core		☐	☐	☐
574.55	577.60	3.05		1.86	61	V765397	☐	O17-018	core		☐	☐	☐
577.60	580.64	3.04		1.57	52	V765398	☐	O17-018	core		☐	☐	☐
580.64	583.69	3.05		2.35	77	V765399	☐	O17-018	core		☐	☐	☐
583.69	586.74	3.05		2.99	98	V765400	☐	O17-018	core		☐	☐	☐
586.74	589.79	3.05		2.10	69	V765401	☐	O17-018	core		☐	☐	☐
589.79	592.84	3.05		1.78	58	V765402	☐	O17-018	core		☐	☐	☐
592.84	594.36	1.52		0.96	63	V765404	☐	O17-018	core		☐	☐	☐

HoleID:		BDO-17-004	
ProjectCode:		ORION	
From	To	Comments	LoggedBy
2.35	29.09	tan to beige to light grey dolostone interbedded with light to medium grey dolomitic limestone. The dolostone has a crackled texture and dendritic texture. The dolostone is crackled due to hairline fractures. There are a few brecciated dolostone and limestone beds composed of angular to subangular clasts that range in size from 0.25 cm - 4 cm. Calcite infills, veins, veinlets 0.15 mm - 12 cm) and blebs are seen throughout. Stylolites, vugs, and local mini faults are alo seen. Clay is found along most fractures. Realgar is found in the rock and in calcite veinlets from 16.93 m.	Hiba
29.09	34.73	Decalcified tan to light grey dolostone interbedded with light grey to medium grey dolomitic limestone. Calcite veins, veinlets (0.15 mm - 7 cm), infills and blebs are seen throughout this section. Specks of realgar seen in both dolostone and limestone. Local mini faults and stylolites are also observed throughout. Some areas of the dolostone and limestone are crackled breccias and clast breccias. Crackled breccias form from hairline fractures and fine calcite veinlets. Clast supported breccias have angular to subangular clasts ranging in size from 0.25 cm - 2 cm.	Hiba
34.73	57.59	Beige to tan to light grey dolostone interbedded with light to medium grey dolomitic limestone. The dolostone has both a crackled texture and dendritic texture in some areas. The limestone has both a crackled texture and is brecciated in some areas. The crackled texture occurs due to hairline fractures and calcite veinlets. Calcite veins, veinlets (0.15 mm - 1 cm), infills and blebs are seen thoughout this section. Clay seams are found along some fractures. Local faults and stylolites are also observed throughout this section. The limestone breccia has angular to subangular clasts ranging in size from 0.25 cm - 4 cm. Some sections of the dolostone are moderately decalcified and vugs are also seen in some sections. Some areas of this section have high fracture frequency. Specks of realgar are seen throughout some sections.	Hiba
57.59	108.16	Tan-beige to light-medium grey dolostone with lots of calcite veins, veinlets (0.15 mm - 1 cm), infills and blebs. Some sections of the dolostone have the crackled texture and some sections have the dendritic texture. The crackled texture occurs due to both hairline fractures and calcite veinlets. Clay is found along some fractures. High fracture frequency is observed until 91 m. Stylolites, local mini-faults, vugs, realgar specks and sphalerite specks are also observed throughout this section. Bedding goes from perpendicular to core axis to sub-parallel to core axis from 72.31 m.	Hiba

108.16	131.45	Light to medium grey limestone interbedded with tan-beige to light grey dolostone. The dolostone has a crackled texture due to both hairline fractures and calcite veinlets (0.15 mm - 1 mm). Calcite infills (3 cm - 50 cm) and blebs are observed throughout this section. Lots of stylolites are seen throughout the section and some of the stylolites have carbonaceous clay infill. Carbonaceous clay and slickensides are also found along some fractures. Specks of realgar and cinnarbar are also seen in this section.	Hiba
131.45	396.02	Tan to light-dark grey dolostone with very few small interbeds of medium-dark grey limestone. The dolostone has a crackled texture due to hairline fractures and calcite veinlets. Some of the crackled dolostone amd calcite veins are brecciated and have angular to subangular clats ranging in size from 0.1 cm to 1 cm. Calcite veins (1 cm - 51 cm), veinlets (0.15 mm - 1 mm), infills and blebs are seen throughout this section. Sheared calcite veinlets are also observed. Very high fracture frequency is observed in some areas, and these areas are sheared. Carbonaceous clay occurs as segments of up to 15 cm and also occurs along some fractures. Graphitic slickensides occur along some fractures. Stylolites and realgar specks are also seen throughout this section. From 274.21 m - 274.88 m a limestone debris flow composed of angular to subangular clasts ranging in size from 1 mm - 4 mm is also observed.	Hiba
396.02	439.1	Gray-green to dark gray dolomite. Crackle tecture with dark hairline fractures throughout. Bedding is genneraly obscured. Interval is cut by small shears 1-5 mm with carbonaceous clay infill. pXRF shows that these zones are anomalous for As 300-500 ppm. Weak clacite veins throughout, rare calcite veins with realgar. Massive brassy pyrite 437.39-437.59 (low As on the pXRF 342 ppm on solid pyrite)	NEck
439.1	459.89	Gray to dark gray limestone wackestone to packstone. Debris flow with fossil and limestone lithic clasts 70/30 lithic/fossil clasts. Dominant fossils are crinoids with less common clasts of hexagonal corals. Fossil textures locally obscured by the over printing weak crackle breccia with thin hairline fractures. Weak to moderate calcite veining throught the interval, rare clacite veins with realgar.	NEck
459.89	474.09	Dark gray limestone with common thin 1-10 mm seams of carbonaceous clay along shear planes typically at low angles to sub-parallel to core axis. pXRF on the carbonaceous clay seams shows elevated As 200-500 ppm. Moderate to strong calcite veining through the interval from hairline to 2 cm in width	NEck
474.09	485.81	Gray to dark gray limestone clast supported breccia with calcite infill. Contacts between the limestone clasts and calcite infill are typically coated with 1-10 mm of fine bronzy pyrite. The bronzy pyrite runs up to 4.45% As on the pXRF. One limestone clast contains calcite veins with realgar that are clearly truncated by the pyrite and calcite cementing the clasts.	NEck

485.81	488.3	Sheared carbonaceous rubbly gouge abrupt change from brecciated limestone above.	Hiba
488.3	529.13	Sheared slightly locally clay altered, carbonaceous dark grey to black mudstone with specks and blebs of pyrite. Some sections have sheared calcite veinlets. This section is very brittle.	Hiba

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
0.00	2.35	2.35	0	0	0.00	0	--	--	--	
2.35	5.18	2.83	2.6	92	0.92	33	--	--	2W	RBZ 2.35-2.45m,3.00-3.30m
5.18	8.23	3.05	2.89	95	1.05	34	--	--	2W	RBZ 5.38m, 6.40m
8.23	11.28	3.05	3.02	99	1.52	50	--	--	2W	
11.28	14.33	3.05	2.88	94	1.39	46	--	--	1W	RBZ 11.28-11.49m, 12.50-12.65m
14.33	17.37	3.04	2.75	90	1.64	54	--	--	1W	RBZ 14.65m, 14.85m
17.37	20.42	3.05	2.79	91	1.01	33	--	--	1W	RBZ 18.40-18.60m, 19.60-19.80m
20.42	23.47	3.05	2.86	94	1.93	63	--	--	1W	RBZ 21.70-21.75m
23.47	26.52	3.05	2.83	93	1.72	56	--	--	1W	RBZ 26.20m, 26.50m
26.52	29.57	3.05	2.8	92	1.63	53	--	--	1W	RBZ 28.04-28.25m
29.57	32.61	3.04	2.69	88	1.54	51	--	--	1W	RBZ 29.70-29.80m, 31.50-31.55m
32.61	35.66	3.05	2.71	89	2.16	71	--	--	1W	RBZ 34.60-34.70m
35.66	38.71	3.05	2.91	95	2.40	79	--	--	1W	
38.71	41.76	3.05	2.52	83	1.61	53	--	--	2W	Gouge seam 40.66-40.76 m
41.76	44.81	3.05	2.92	96	1.37	45	--	--	2W	RBZ 42.86-43.22 m
44.81	47.85	3.04	2.22	73	0.53	17	--	--	2W	RBZ 44.91-47.85 m
47.85	50.90	3.05	2.47	81	0.63	21	--	--	2W	RBZ 48.86-48.98 m and 49.38-49.48 m
50.90	53.94	3.04	2.56	84	0.80	26	--	--	2W	RBZ 50.90-51.25 m
53.94	57.00	3.06	2.54	83	1.56	51	--	--	1W	RBZ 54.00-54.68 m, 55.96-56.37 m
57.00	60.05	3.05	2.51	82	0.78	26	--	--	2W	RBZ 57.93-58.36 m
60.05	63.09	3.04	2.29	75	0.63	21	--	--	2W	RBZ 62.35-62.85 m
63.09	66.14	3.05	1.83	60	0.51	17	--	--	2W	RBZ 63.20-64.29 m
66.14	69.19	3.05	2.39	78	1.58	52	--	--	2W	RBZ 67.88-68.01 m
69.19	72.24	3.05	2.5	82	1.11	36	--	--	1W	RBZ 71.45-71.93 m
72.24	75.29	3.05	2.54	83	1.39	46	--	--	1W	
75.29	78.33	3.04	2.35	77	1.94	64	--	--	2W	RBZ 76.07-76.71 m, gouge at 76.89-76.96 m
78.33	81.38	3.05	2.64	87	1.70	56	--	--	1W	RBZ 80.22-80.55 m
81.38	84.43	3.05	1.71	56	0.88	29	--	--	2W	RBZ 82.25-84.43 m
84.43	87.48	3.05	1.3	43	0.51	17	--	--	2W	RBZ 85.12-85.44 m

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
87.48	90.53	3.05	2.74	90	1.61	53	--	--	2W	RBZ 87.48-87.68 m
90.53	93.57	3.04	2.64	87	1.66	55	--	--	1W	
93.57	96.62	3.05	2.78	91	1.73	57	--	--	2W	
96.62	99.67	3.05	1.98	65	1.17	38	--	--	2W	RBZ 98.30-98.40 m
99.67	102.71	3.04	2.77	91	1.68	55	--	--	2W	RBZ 101.72-101.89 m
102.71	105.76	3.05	2.62	86	1.74	57	--	--	2W	
105.76	108.81	3.05	2.9	95	2.41	79	--	--	1W	
108.81	111.86	3.05	2.77	91	2.07	68	--	--	1W	
111.86	114.91	3.05	2.72	89	1.94	64	--	--	1W	
114.91	117.96	3.05	2.68	88	1.74	57	--	--	2W	
117.96	121.01	3.05	2.59	85	1.00	33	--	--	2W	RBZ 118.16-118.25m, 118.50-118.98m
121.01	124.05	3.04	2.73	90	1.64	54	--	--	1W	
124.05	127.10	3.05	2.89	95	1.81	59	--	--	1W	
127.10	130.14	3.04	2.4	79	1.32	43	--	--	1W	
130.14	133.19	3.05	2.57	84	1.17	38	--	--	1W	RBZ 131.95-132.05m, 132.62-132.85m
133.19	136.25	3.06	1.95	64	0.48	16	--	--	1W	RBZ 133.19-133.30m, 133.50-133.63, 134.50-134.72m
136.25	139.29	3.04	2.5	82	1.06	35	--	--	1W	RBZ 139.18-139.29m
139.29	142.34	3.05	2.09	69	0.71	23	--	--	1W	RBZ 141.17-141.98 m
142.34	145.39	3.05	2.41	79	1.75	57	--	--	1W	
145.39	148.43	3.04	2.77	91	2.03	67	--	--	1W	
148.43	151.48	3.05	2.91	95	2.43	80	--	--	1W	RBZ 150.22-150.39 M
151.48	154.53	3.05	2.76	90	1.55	51	--	--	1W	
154.53	157.58	3.05	3.05	100	1.43	47	--	--	1W	
157.58	160.62	3.04	2.89	95	2.24	74	--	--	1W	
160.62	163.67	3.05	2.93	96	2.43	80	--	--	1W	
163.67	166.72	3.05	2.75	90	1.92	63	--	--	1W	
166.72	169.77	3.05	2.66	87	2.34	77	--	--	1W	
169.77	172.82	3.05	2.75	90	2.21	72	--	--	1W	
172.82	175.87	3.05	1.72	56	1.47	48	--	--	1W	
175.87	178.91	3.04	2.79	92	2.65	87	--	--	1W	
178.91	181.96	3.05	2.85	93	2.53	83	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
181.96	185.01	3.05	2.69	88	2.62	86	--	--	1W	RBZ 184.35-184.41 M
185.01	188.06	3.05	2.7	89	1.75	57	--	--	1W	RBZ 187.75m, 187.85m
188.06	191.11	3.05	2.66	87	2.31	76	--	--	1W	
191.11	194.16	3.05	2.76	90	2.55	84	--	--	1W	
194.16	197.21	3.05	2.84	93	2.40	79	--	--	1W	
197.21	200.25	3.04	2.89	95	2.45	81	--	--	1W	
200.25	203.30	3.05	3	98	2.50	82	--	--	1W	RBZ 202.80-203.00m
203.30	206.35	3.05	2.56	84	1.49	49	--	--	1W	RBZ 206.00-206.20m
206.35	209.40	3.05	2.59	85	2.06	68	--	--	1W	RBZ 207.50-207.60m
209.40	212.45	3.05	2.9	95	2.82	92	--	--	1W	
212.45	215.49	3.04	2.9	95	2.48	82	--	--	1W	
215.49	218.54	3.05	2.92	96	2.76	90	--	--	1W	
218.54	221.59	3.05	2.91	95	2.30	75	--	--	1W	RBZ 218.54-218.75m
221.59	224.64	3.05	2.97	97	2.70	89	--	--	1W	
224.64	227.69	3.05	2.9	95	2.46	81	--	--	1W	
227.69	230.73	3.04	2.98	98	2.98	98	--	--	1W	
230.73	233.78	3.05	2.91	95	2.76	90	--	--	1W	
233.78	236.83	3.05	2.77	91	2.01	66	--	--	1W	RBZ 236.50-236.83m
236.83	239.88	3.05	2.91	95	2.56	84	--	--	1W	RBZ 236.83-237.00m
239.88	242.62	2.74	2.7	99	2.31	84	--	--	1W	
242.62	245.67	3.05	2.96	97	2.60	85	--	--	1W	
245.67	248.72	3.05	3.03	99	2.68	88	--	--	1W	
248.72	251.76	3.04	2.98	98	2.86	94	--	--	1W	
251.76	254.81	3.05	2.9	95	2.62	86	--	--	1W	
254.81	257.86	3.05	2.92	96	2.66	87	--	--	1W	
257.86	260.91	3.05	2.95	97	2.55	84	--	--	1W	
260.91	263.96	3.05	2.9	95	2.27	74	--	--	1W	
263.96	267.01	3.05	2.96	97	2.70	89	--	--	1W	
267.01	270.05	3.04	2.75	90	2.60	86	--	--	1W	
270.05	273.10	3.05	2.8	92	2.08	68	--	--	1W	
273.10	276.15	3.05	2.98	98	2.15	70	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
276.15	279.20	3.05	2.6	85	1.91	63	--	--	1W	
279.20	282.25	3.05	2.92	96	2.61	86	--	--	1W	
282.25	285.29	3.04	2.94	97	2.79	92	--	--	1W	
285.29	288.34	3.05	3.02	99	2.88	94	--	--	1W	
288.34	291.39	3.05	2.92	96	2.30	75	--	--	1W	
291.39	294.44	3.05	3.03	99	2.48	81	--	--	1W	
294.44	297.49	3.05	2.9	95	2.58	85	--	--	1W	
297.49	300.53	3.04	2.97	98	2.39	79	--	--	1W	
300.53	303.58	3.05	2.72	89	2.20	72	--	--	1W	
303.58	306.63	3.05	2.69	88	2.27	74	--	--	1W	
306.63	309.68	3.05	2.66	87	2.06	68	--	--	1W	
309.68	312.73	3.05	3	98	2.64	87	--	--	1W	
312.73	315.77	3.04	2.97	98	2.54	84	--	--	1W	
315.77	318.82	3.05	2.95	97	2.55	84	--	--	1W	
318.82	321.87	3.05	2.89	95	2.71	89	--	--	1W	
321.87	324.92	3.05	3.02	99	2.91	95	--	--	1W	
324.92	327.97	3.05	2.85	93	2.50	82	--	--	1W	
327.97	331.01	3.04	2.8	92	2.40	79	--	--	1W	
331.01	334.06	3.05	2.73	90	2.17	71	--	--	1W	
334.06	337.11	3.05	2.22	73	1.34	44	--	--	1W	RBZ at 336.15-336.30
337.11	340.16	3.05	2.89	95	2.61	86	--	--	1W	RBZ at 337.21-337.27
340.16	343.20	3.04	2.98	98	2.98	98	--	--	1W	
343.20	346.25	3.05	3.05	100	3.05	100	--	--	1W	
346.25	349.30	3.05	2.89	95	2.60	85	--	--	1W	RBZ at 347.95-348.02
349.30	352.35	3.05	2.53	83	1.77	58	--	--	3W	multiple small >5cm RBZ at 349.85,350.10, 351.60
352.35	355.40	3.05	2.41	79	1.54	50	--	--	3W	RBZ at 353.05-353.25
355.40	358.44	3.04	3	99	2.92	96	--	--	1W	
358.44	361.49	3.05	3.03	99	3.03	99	--	--	1W	
361.49	364.54	3.05	3.05	100	2.81	92	--	--	1W	
364.54	367.59	3.05	3	98	2.88	94	--	--	1W	
367.59	370.64	3.05	2.98	98	2.83	93	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
370.64	373.68	3.04	2.96	97	2.84	93	--	--	1W	
373.68	376.73	3.05	3.04	100	2.78	91	--	--	1W	
376.73	379.78	3.05	3.02	99	2.93	96	--	--	1W	
379.78	382.83	3.05	3.03	99	2.98	98	--	--	1W	
382.83	385.88	3.05	2.99	98	2.51	82	--	--	1W	
385.88	388.92	3.04	2.82	93	2.46	81	--	--	1W	
388.92	391.97	3.05	2.98	98	2.68	88	--	--	1W	
391.97	395.02	3.05	3.05	100	2.68	88	--	--	1W	
395.02	398.07	3.05	3.03	99	2.68	88	--	--	1W	
398.07	401.12	3.05	3.04	100	2.94	96	--	--	1W	
401.12	404.16	3.04	2.93	96	2.61	86	--	--	1W	
404.16	407.21	3.05	2.95	97	2.67	88	--	--	1W	
407.21	410.26	3.05	2.98	98	2.67	88	--	--	1W	
410.26	413.31	3.05	2.8	92	2.22	73	--	--	1W	
413.31	416.36	3.05	2.94	96	2.39	78	--	--	1W	
416.36	419.40	3.04	3.04	100	2.95	97	--	--	1W	
419.40	422.45	3.05	2.89	95	2.70	89	--	--	1W	
422.45	425.50	3.05	2.97	97	2.84	93	--	--	1W	
425.50	428.55	3.05	3.05	100	3.05	100	--	--	1W	
428.55	431.60	3.05	2.98	98	2.98	98	--	--	1W	
431.60	434.64	3.04	3.04	100	3.01	99	--	--	1W	
434.64	437.69	3.05	3	98	3.00	98	--	--	1W	
437.69	440.74	3.05	3	98	2.98	98	--	--	1W	
440.74	443.79	3.05	3.05	100	2.94	96	--	--	1W	
443.79	446.84	3.05	3.03	99	3.03	99	--	--	1W	
446.84	449.88	3.04	2.82	93	2.82	93	--	--	1W	
449.88	452.93	3.05	3.05	100	3.05	100	--	--	1W	
452.93	455.98	3.05	2.99	98	2.92	96	--	--	1W	
455.98	459.03	3.05	2.65	87	2.17	71	--	--	1W	
459.03	462.08	3.05	2.19	72	1.62	53	--	--	1W	Core loss due to washing the hole
462.08	465.12	3.04	2.97	98	2.17	71	--	--	1W	

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery %	RQD	RQD %	Reactivity	Hardness	Weathering	Comments
465.12	468.17	3.05	3	98	3.00	98	--	--	1W	
468.17	471.22	3.05	3.05	100	3.05	100	--	--	1W	
471.22	474.27	3.05	1.34	44	0.14	5	--	--	1W	Significant core loss due to washing the hole.
474.27	477.32	3.05	2.56	84	1.57	51	--	--	1W	
477.32	480.36	3.04	2.42	80	0.79	26	--	--	1W	
480.36	483.41	3.05	2.3	75	0.14	5	--	--	1W	RBZ 480.36-481.00m
483.41	486.46	3.05	2.24	73	1.06	35	--	--	1W	RBZ 484.00-484.25m, 485.00-485.15m
486.46	489.50	3.04	3.03	100	2.46	81	--	--	1W	
489.50	492.55	3.05	2.94	96	1.01	33	--	--	1W	
492.55	495.60	3.05	2.39	78	0.89	29	--	--	1W	
495.60	498.65	3.05	2.94	96	0.23	8	--	--	1W	
498.65	501.70	3.05	1.01	33	0.00	0	--	--	1W	
501.70	504.74	3.04	2.6	86	0.82	27	--	--	1W	
504.74	507.79	3.05	3	98	0.87	29	--	--	1W	
507.79	510.84	3.05	3	98	1.30	43	--	--	1W	
510.84	513.89	3.05	2.6	85	1.34	44	--	--	1W	
513.89	516.94	3.05	3.02	99	2.34	77	--	--	1W	
516.94	519.99	3.05	1.05	34	0.00	0	--	--	1W	
519.99	523.04	3.05	2.63	86	0.54	18	--	--	1W	
523.04	526.08	3.04	2.89	95	1.82	60	--	--	1W	
526.08	529.13	3.05	2.58	85	1.81	59	--	--	1W	

BDO-17-004

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
0.00	0.00	0.00		0.00	0	V765457	☐	O17-019	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765469	☐	O17-020	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765480	☐	O17-020	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765512	☐	O17-021	core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765529	☐	O17-021	core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765546	☐	O17-022	Core	OX6	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765552	☐	O17-022	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765585	☐	O17-023	Core	OX7	☐	☐	☐
0.00	0.00	0.00		0.00	0	V765590	☐	O17-023	Core		☑	☐	☐
0.00	0.00	0.00		0.00	0	V765433	☐	O17-019	Core	SR5	☐	☐	☐
2.35	5.18	2.83		2.60	92	V765405	☐	O17-018	core		☐	☐	☐
5.18	8.23	3.05		2.89	95	V765406	☐	O17-018	core		☐	☐	☐
8.23	11.28	3.05		3.02	99	V765407	☐	O17-018	core		☐	☐	☐
11.28	14.33	3.05		2.88	94	V765408	☐	O17-018	core		☐	☐	☐
14.33	17.37	3.04		2.75	90	V765409	☐	O17-018	core		☐	☐	☐
17.37	20.42	3.05		2.79	91	V765410	☐	O17-018	core		☐	☐	☐
20.42	23.47	3.05		2.86	94	V765411	☐	O17-018	core		☐	☐	☐
23.47	26.52	3.05		2.83	93	V765412	☐	O17-018	core		☐	☐	☐
26.52	29.57	3.05		2.80	92	V765413	☐	O17-018	core		☐	☐	☐
29.57	32.61	3.04		2.69	88	V765414	☐	O17-018	core		☐	☐	☐
32.61	35.66	3.05		2.71	89	V765415	☐	O17-018	core		☐	☐	☐
35.66	38.71	3.05		2.91	95	V765416	☐	O17-018	core		☐	☐	☐
38.71	41.76	3.05		2.52	83	V765417	☐	O17-018	core		☐	☐	☐
41.76	44.81	3.05		2.92	96	V765418	☐	O17-018	core		☐	☐	☐
44.81	47.85	3.04		2.22	73	V765419	☐	O17-018	core		☐	☐	☐
44.81	47.85	3.04		2.22	73	V765489	☐	O17-018	core		☐	☑	☐
47.85	50.90	3.05		2.47	81	V765420	☐	O17-020	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
50.90	53.95	3.05		2.56	84	V765421	☐	O17-019	Core		☐	☐	☐
53.95	57.00	3.05		2.54	83	V765422	☐	O17-019	Core		☐	☐	☐
57.00	60.05	3.05		2.51	82	V765423	☐	O17-019	Core		☐	☐	☐
60.05	63.09	3.04		2.29	75	V765424	☐	O17-019	Core		☐	☐	☐
63.09	66.14	3.05		1.83	60	V765425	☐	O17-019	Core		☐	☐	☐
66.14	69.19	3.05		2.39	78	V765426	☐	O17-019	Core		☐	☐	☐
69.19	72.24	3.05		2.50	82	V765427	☐	O17-019	Core		☐	☐	☐
72.24	75.29	3.05		2.54	83	V765428	☐	O17-019	Core		☐	☐	☐
75.29	78.33	3.04		2.35	77	V765429	☐	O17-019	Core		☐	☐	☐
78.33	81.38	3.05		2.64	87	V765430	☐	O17-019	Core		☐	☐	☐
81.38	84.43	3.05		1.71	56	V765431	☐	O17-019	Core		☐	☐	☐
84.43	87.48	3.05		1.30	43	V765432	☐	O17-019	Core		☐	☐	☐
87.48	90.53	3.05		2.74	90	V765434	☐	O17-019	Core		☐	☐	☐
90.53	93.57	3.04		2.64	87	V765435	☐	O17-019	Core		☐	☐	☐
93.57	96.62	3.05		2.78	91	V765436	☐	O17-019	Core		☐	☐	☐
96.62	99.67	3.05		1.98	65	V765437	☐	O17-019	Core		☐	☐	☐
99.67	102.71	3.04		2.77	91	V765438	☐	O17-019	Core		☐	☐	☐
102.71	105.76	3.05		2.62	86	V765439	☐	O17-019	Core		☐	☐	☐
105.76	108.81	3.05		2.90	95	V765440	☐	O17-019	Core		☐	☐	☐
105.76	108.81	3.05		2.90	95	V765441	☐	O17-019	Core		☐	☑	☐
108.81	111.86	3.05		2.77	91	V765442	☐	O17-019	Core		☐	☐	☐
111.86	114.91	3.05		2.72	89	V765443	☐	O17-019	Core		☐	☐	☐
114.91	117.96	3.05		2.68	88	V765444	☐	O17-019	Core		☐	☐	☐
117.96	121.01	3.05		2.59	85	V765445	☐	O17-019	Core		☐	☐	☐
121.01	124.05	3.04		2.73	90	V765446	☐	O17-019	Core		☐	☐	☐
124.05	127.10	3.05		2.89	95	V765447	☐	O17-019	Core		☐	☐	☐
127.10	130.14	3.04		2.40	79	V765448	☐	O17-019	Core		☐	☐	☐
130.14	133.19	3.05		2.57	84	V765449	☐	O17-019	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
133.19	136.24	3.05		1.95	64	V765450	☐	O17-019	Core		☐	☐	☐
136.24	139.29	3.05		2.50	82	V765451	☐	O17-019	Core		☐	☐	☐
139.29	142.34	3.05		2.09	69	V765452	☐	O17-019	Core		☐	☐	☐
142.34	145.39	3.05		2.41	79	V765453	☐	O17-019	Core		☐	☐	☐
145.39	148.43	3.04		2.77	91	V765454	☐	O17-019	Core		☐	☐	☐
148.43	151.48	3.05		2.91	95	V765455	☐	O17-019	Core		☐	☐	☐
151.48	154.53	3.05		2.76	90	V765456	☐	O17-019	Core		☐	☐	☐
154.53	157.58	3.05		3.05	100	V765458	☐	O17-019	Core		☐	☐	☐
157.58	160.62	3.04		2.89	95	V765459	☐	O17-019	Core		☐	☐	☐
160.62	163.67	3.05		2.93	96	V765460	☐	O17-019	Core		☐	☐	☐
163.67	166.72	3.05		2.75	90	V765461	☐	O17-020	core		☐	☐	☐
166.72	169.72	3.00		2.66	89	V765462	☐	O17-020	core		☐	☐	☐
166.72	169.77	3.05		2.66	87	V765463	☐	O17-020	core		☐	☑	☐
169.77	172.82	3.05		2.75	90	V765464	☐	O17-020	core		☐	☐	☐
172.82	175.87	3.05		1.72	56	V765465	☐	O17-020	core		☐	☐	☐
175.87	178.91	3.04		2.79	92	V765466	☐	O17-020	core		☐	☐	☐
178.91	181.96	3.05		2.85	93	V765467	☐	O17-020	core		☐	☐	☐
181.96	185.01	3.05		2.69	88	V765468	☐	O17-020	core		☐	☐	☐
185.01	188.06	3.05		2.70	89	V765470	☐	O17-020	core		☐	☐	☐
188.06	191.11	3.05		2.66	87	V765471	☐	O17-020	core		☐	☐	☐
191.11	194.16	3.05		2.76	90	V765472	☐	O17-020	core		☐	☐	☐
194.16	197.21	3.05		2.84	93	V765473	☐	O17-020	core		☐	☐	☐
197.21	200.25	3.04		2.89	95	V765474	☐	O17-020	core		☐	☐	☐
200.25	203.30	3.05		3.00	98	V765475	☐	O17-020	core		☐	☐	☐
203.30	206.35	3.05		2.56	84	V765476	☐	O17-020	core		☐	☐	☐
206.35	209.40	3.05		2.59	85	V765477	☐	O17-020	core		☐	☐	☐
209.40	212.45	3.05		2.90	95	V765478	☐	O17-020	core		☐	☐	☐
212.45	215.49	3.04		2.90	95	V765479	☐	O17-020	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
215.49	218.54	3.05		2.92	96	V765481	☐	O17-020	core		☐	☐	☐
218.54	221.59	3.05		2.91	95	V765482	☐	O17-020	core		☐	☐	☐
221.59	224.64	3.05		2.97	97	V765483	☐	O17-020	core		☐	☐	☐
224.64	227.69	3.05		2.90	95	V765484	☐	O17-020	core		☐	☐	☐
227.69	230.73	3.04		2.98	98	V765485	☐	O17-020	core		☐	☐	☐
230.73	233.78	3.05		2.91	95	V765486	☐	O17-020	core		☐	☐	☐
233.78	236.83	3.05		2.77	91	V765487	☐	O17-020	core		☐	☐	☐
236.83	239.88	3.05		2.91	95	V765488	☐	O17-020	core		☐	☐	☐
239.88	242.62	2.74		2.70	99	V765490	☐	O17-020	core		☐	☐	☐
242.62	245.67	3.05		2.96	97	V765491	☐	O17-020	core		☐	☐	☐
245.67	248.72	3.05		3.03	99	V765500	☐	O17-020	core		☐	☐	☐
248.72	251.76	3.04		2.98	98	V765492	☐	O17-020	core		☐	☐	☐
251.76	254.81	3.05		2.90	95	V765493	☐	O17-020	core		☐	☐	☐
254.81	257.86	3.05		2.92	96	V765494	☐	O17-020	core		☐	☐	☐
257.86	260.91	3.05		2.95	97	V765495	☐	O17-020	core		☐	☐	☐
260.91	263.96	3.05		2.90	95	V765496	☐	O17-020	core		☐	☐	☐
263.96	267.01	3.05		2.96	97	V765497	☐	O17-020	core		☐	☐	☐
267.01	270.05	3.04		2.75	90	V765498	☐	O17-020	core		☐	☐	☐
270.05	273.10	3.05		2.80	92	V765499	☐	O17-020	core		☐	☐	☐
273.10	276.15	3.05		2.98	98	V765501	☐	O17-021	core		☐	☐	☐
276.15	279.20	3.05		2.60	85	V765502	☐	O17-021	core		☐	☐	☐
279.20	282.25	3.05		2.92	96	V765503	☐	O17-021	core		☐	☐	☐
282.25	285.29	3.04		2.94	97	V765504	☐	O17-021	core		☐	☐	☐
282.25	285.29	3.04		2.94	97	V765505	☐	O17-021	core		☐	☑	☐
285.29	288.34	3.05		3.02	99	V765506	☐	O17-021	core		☐	☐	☐
288.34	291.39	3.05		2.92	96	V765507	☐	O17-021	core		☐	☐	☐
291.39	294.44	3.05		3.03	99	V765508	☐	O17-021	core		☐	☐	☐
294.44	297.49	3.05		2.90	95	V765509	☐	O17-021	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
297.49	300.53	3.04		2.97	98	V765510	☐	O17-021	core		☐	☐	☐
300.53	303.58	3.05		2.72	89	V765511	☐	O17-021	core		☐	☐	☐
303.58	306.63	3.05		2.69	88	V765513	☐	O17-021	core		☐	☐	☐
306.63	309.68	3.05		2.66	87	V765514	☐	O17-021	core		☐	☐	☐
309.68	312.73	3.05		3.00	98	V765515	☐	O17-021	core		☐	☐	☐
312.73	315.77	3.04		2.97	98	V765516	☐	O17-021	core		☐	☐	☐
315.77	318.82	3.05		2.95	97	V765517	☐	O17-021	core		☐	☐	☐
318.82	321.87	3.05		2.89	95	V765518	☐	O17-021	core		☐	☐	☐
321.87	324.92	3.05		3.02	99	V765519	☐	O17-021	core		☐	☐	☐
324.92	327.97	3.05		2.85	93	V765520	☐	O17-021	core		☐	☐	☐
327.97	331.01	3.04		2.80	92	V765521	☐	O17-021	core		☐	☐	☐
331.01	334.06	3.05		2.73	90	V765522	☐	O17-021	core		☐	☐	☐
334.06	337.11	3.05		2.22	73	V765523	☐	O17-021	core		☐	☐	☐
337.11	340.16	3.05		2.89	95	V765524	☐	O17-021	core		☐	☐	☐
340.16	343.20	3.04		2.98	98	V765525	☐	O17-021	core		☐	☐	☐
343.20	346.25	3.05		3.05	100	V765526	☐	O17-021	core		☐	☐	☐
346.25	349.30	3.05		2.89	95	V765527	☐	O17-021	core		☐	☐	☐
349.30	352.35	3.05		2.53	83	V765528	☐	O17-021	core		☐	☐	☐
352.35	355.40	3.05		2.41	79	V765530	☐	O17-021	core		☐	☐	☐
355.40	358.44	3.04		3.00	99	V765531	☐	O17-021	core		☐	☐	☐
358.44	361.49	3.05		3.03	99	V765532	☐	O17-021	core		☐	☐	☐
361.49	364.54	3.05		3.05	100	V765533	☐	O17-021	core		☐	☐	☐
364.54	367.59	3.05		3.00	98	V765534	☐	O17-021	core		☐	☐	☐
367.59	370.64	3.05		2.98	98	V765535	☐	O17-021	core		☐	☐	☐
370.64	373.68	3.04		2.96	97	V765536	☐	O17-021	core		☐	☐	☐
373.68	376.73	3.05		3.04	100	V765537	☐	O17-021	core		☐	☐	☐
376.73	379.78	3.05		3.02	99	V765538	☐	O17-021	core		☐	☐	☐
379.78	382.83	3.05		3.03	99	V765539	☐	O17-021	core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
382.83	385.88	3.05		2.99	98	V765540	☐	O17-021	core		☐	☐	☐
385.88	388.92	3.04		2.82	93	V765541	☐	O17-022	Core		☐	☐	☐
388.92	391.97	3.05		2.98	98	V765542	☐	O17-022	Core		☐	☐	☐
391.97	395.02	3.05		3.05	100	V765543	☐	O17-022	Core		☐	☐	☐
395.02	398.07	3.05		3.03	99	V765544	☐	O17-022	Core		☐	☐	☐
398.07	401.12	3.05		3.04	100	V765545	☐	O17-022	Core		☐	☐	☐
401.12	404.16	3.04		2.93	96	V765547	☐	O17-022	Core		☐	☐	☐
404.16	407.21	3.05		2.95	97	V765548	☐	O17-022	Core		☐	☐	☐
407.21	410.26	3.05		2.98	98	V765549	☐	O17-022	Core		☐	☐	☐
410.26	413.31	3.05		2.80	92	V765550	☐	O17-022	Core		☐	☐	☐
413.31	416.36	3.05		2.94	96	V765551	☐	O17-022	Core		☐	☐	☐
416.36	419.40	3.04		3.04	100	V765553	☐	O17-022	Core		☐	☐	☐
419.40	422.45	3.05		2.89	95	V765554	☐	O17-022	Core		☐	☐	☐
422.45	425.50	3.05		2.97	97	V765555	☐	O17-022	Core		☐	☐	☐
425.50	428.55	3.05		3.05	100	V765556	☐	O17-022	Core		☐	☐	☐
428.55	431.60	3.05		2.98	98	V765557	☐	O17-022	Core		☐	☐	☐
428.55	431.60	3.05		2.98	98	V765558	☐	O17-022	Core		☐	☑	☐
431.60	434.64	3.04		3.04	100	V765559	☐	O17-022	Core		☐	☐	☐
434.64	437.69	3.05		3.00	98	V765560	☐	O17-022	Core		☐	☐	☐
437.69	440.74	3.05		3.00	98	V765561	☐	O17-022	Core		☐	☐	☐
440.74	443.79	3.05		3.05	100	V765562	☐	O17-022	Core		☐	☐	☐
443.79	446.84	3.05		3.03	99	V765563	☐	O17-022	Core		☐	☐	☐
446.84	449.88	3.04		2.82	93	V765564	☐	O17-022	Core		☐	☐	☐
449.88	452.93	3.05		3.05	100	V765565	☐	O17-022	Core		☐	☐	☐
452.93	455.98	3.05		2.99	98	V765566	☐	O17-022	Core		☐	☐	☐
455.98	459.03	3.05		2.65	87	V765567	☐	O17-022	Core		☐	☐	☐
459.03	462.08	3.05		2.19	72	V765568	☐	O17-022	Core		☐	☐	☐
462.08	465.12	3.04		2.97	98	V765569	☐	O17-022	Core		☐	☐	☐

From (m)	To (m)	Interval (m)	Rock Type	Recovery (m)	Recovery %	Sample Number	Not Sampled	BatchName	Batch Class	Standard	Blank	1/4 Dup	Coarse Dup
465.12	468.17	3.05		3.00	98	V765570	☐	O17-022	Core		☐	☐	☐
468.17	471.22	3.05		3.05	100	V765571	☐	O17-022	Core		☐	☐	☐
471.22	474.27	3.05		1.34	44	V765572	☐	O17-022	Core		☐	☐	☐
474.27	477.32	3.05		2.56	84	V765573	☐	O17-022	Core		☐	☐	☐
477.32	480.36	3.04		2.42	80	V765574	☐	O17-022	Core		☐	☐	☐
480.36	483.41	3.05		2.30	75	V765575	☐	O17-022	Core		☐	☐	☐
483.41	485.77	2.36		1.68	71	V765576	☐	O17-022	Core		☐	☐	☐
485.77	487.73	1.96		1.90	97	V765577	☐	O17-022	Core		☐	☐	☐
487.73	489.50	1.77		1.77	100	V765578	☐	O17-022	Core		☐	☐	☐
489.50	492.55	3.05		2.94	96	V765579	☐	O17-022	Core		☐	☐	☐
492.55	495.60	3.05		2.39	78	V765580	☐	O17-022	Core		☐	☐	☐
495.60	498.65	3.05		2.94	96	V765581	☐	O17-023	Core		☐	☐	☐
498.65	501.70	3.05		1.01	33	V765582	☐	O17-023	Core		☐	☐	☐
501.70	504.74	3.04		2.60	86	V765583	☐	O17-023	Core		☐	☐	☐
504.74	507.79	3.05		3.00	98	V765584	☐	O17-023	Core		☐	☐	☐
507.79	510.84	3.05		3.00	98	V765586	☐	O17-023	Core		☐	☐	☐
510.84	513.89	3.05		2.60	85	V765587	☐	O17-023	Core		☐	☐	☐
513.89	516.94	3.05		3.02	99	V765588	☐	O17-023	Core		☐	☐	☐
516.94	519.99	3.05		1.05	34	V765589	☐	O17-023	Core		☐	☐	☐
519.99	523.04	3.05		2.63	86	V765591	☐	O17-023	Core		☐	☐	☐
523.04	526.08	3.04		2.89	95	V765592	☐	O17-023	Core		☐	☐	☐
526.08	529.13	3.05		2.58	85	V765593	☐	O17-023	Core		☐	☐	☐

APPENDIX V

DIAMOND DRILLING - CERTIFICATES OF ANALYSIS

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- JUL- 2017
Account: RCM

CERTIFICATE WH17114395

Project: Nadaleen

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
LOG- 23	Pulp Login - Rcvd with Barcode
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate
WSH- 21	"Wash" crushers

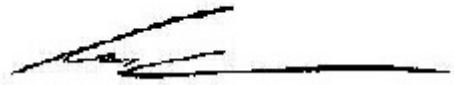
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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VANCOUVER BC V6B 1L8

Finalized Date: 12-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17114395

Sample Description	Method	WEI-21	Au-AA25	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
W228001		5.89	<0.01	0.03	0.73	100.5	140	0.28	0.04	33.2	0.10	10.20	3.1	6	2.25	9.9
W228002		8.25	<0.01	0.03	1.11	183.5	180	0.37	0.06	31.5	0.04	17.00	3.8	9	5.00	10.3
W228003		6.99	<0.01	0.01	0.36	61.2	110	0.17	0.02	34.6	<0.02	6.77	1.5	3	1.44	3.7
W228004		0.28	8.36	1.68	1.80	>10000	90	0.33	0.51	6.93	0.83	30.0	6.3	45	3.26	29.0
W228005		6.79	<0.01	0.01	0.59	131.0	130	0.29	0.03	34.1	0.03	10.10	2.0	6	2.41	5.8
W228006		2.47	<0.01	0.45	4.63	910	330	1.43	0.26	15.80	0.13	56.5	14.3	43	20.8	42.5
W228007		5.45	<0.01	0.36	4.24	1125	240	1.20	0.23	18.55	0.13	54.0	13.7	41	17.15	39.0
W228008		8.58	0.01	0.02	1.03	327	140	0.39	0.05	31.8	0.04	16.00	3.7	9	3.44	8.7
W228009		10.14	0.01	0.02	0.64	429	170	0.24	0.04	34.7	0.04	11.25	2.8	5	2.71	6.9
W228010		9.65	0.02	0.01	0.37	154.5	80	0.15	0.03	35.0	0.04	7.76	1.6	4	1.43	3.6
W228011		4.78	0.02	0.01	0.41	204	90	0.20	0.02	35.0	0.06	8.09	1.8	4	1.55	4.0
W228012		9.89	0.01	0.01	0.50	147.0	80	0.22	0.03	34.8	0.06	10.05	2.2	4	1.82	4.8
W228013		9.09	0.01	0.02	0.54	570	90	0.20	0.03	34.9	0.04	10.25	2.4	5	1.95	5.5
W228014		7.17	<0.01	0.02	0.07	1.0	30	0.07	0.03	20.9	0.07	1.10	0.8	<1	0.21	6.2
W228015		10.22	<0.01	0.01	0.40	339	110	0.21	0.02	35.7	0.03	8.96	1.9	4	1.65	4.0
W228016		7.97	0.01	0.03	1.07	2030	130	0.32	0.06	32.4	0.15	18.30	4.2	10	4.06	10.2
W228017		9.73	2.17	0.43	0.72	3080	90	0.24	0.04	22.7	0.10	11.65	2.9	6	1.97	5.2
W228018		10.33	10.20	4.43	1.66	>10000	80	0.33	0.12	19.50	0.50	18.90	6.6	18	5.17	13.7
W228019		10.64	2.42	0.68	0.90	1945	70	0.20	0.05	31.6	0.21	14.20	3.5	9	2.55	8.7
W228020		10.31	0.39	0.10	1.21	183.0	120	0.35	0.06	32.1	0.11	18.20	4.2	11	3.66	11.0
W228021		12.43	0.61	0.09	0.70	124.5	150	0.24	0.04	35.3	0.14	12.75	2.8	7	1.69	6.8
W228022		10.36	4.32	0.49	3.00	804	200	0.47	0.15	20.6	0.55	37.3	10.0	27	7.58	26.9
W228023		10.23	2.75	0.19	0.76	315	110	0.18	0.04	28.7	0.34	11.55	3.0	8	2.00	7.5
W228024		7.35	6.65	0.18	1.89	997	300	0.35	0.09	19.45	0.71	25.7	6.6	20	5.06	18.0
W228025		7.03	0.01	0.01	0.05	2.9	30	0.07	0.03	20.4	0.07	0.99	0.7	<1	0.33	2.2
W228026		5.27	5.87	0.06	2.42	860	330	0.45	0.12	17.40	0.42	26.6	8.4	25	5.88	25.2
W228027		10.06	8.44	0.06	3.49	985	320	0.48	0.17	6.79	0.64	37.1	11.8	39	8.84	35.7
W228028		8.78	1.81	0.06	1.71	360	250	0.36	0.09	25.8	0.59	23.2	6.1	17	4.77	17.4
W228029		11.81	1.38	0.07	0.77	181.5	130	0.19	0.04	31.4	0.27	13.25	2.9	8	2.64	7.5
W228030		8.48	1.96	0.10	1.18	243	140	0.25	0.06	29.1	0.19	18.85	4.2	12	4.77	11.5
W228031		10.14	0.53	0.05	0.81	107.5	120	0.25	0.05	33.3	0.20	14.35	3.2	8	2.96	8.2
W228032		0.28	12.90	1.54	3.05	>10000	120	0.60	0.34	7.99	0.85	44.2	11.3	45	9.51	32.4
W228033		9.87	0.47	0.07	0.83	199.0	130	0.25	0.05	33.3	0.14	15.15	3.2	8	2.87	8.0
W228034		<0.02	0.44	0.08	0.81	129.0	130	0.21	0.04	33.0	0.15	14.95	3.1	8	2.71	7.7
W228035		10.44	0.52	0.05	0.94	118.0	120	0.27	0.05	32.8	0.20	16.25	3.5	9	2.75	9.1
W228036		11.47	0.26	0.02	0.65	67.7	120	0.33	0.04	34.2	0.14	11.15	2.5	6	2.11	6.6

***** See Appendix Page for comments regarding this certificate *****

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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17114395

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Hg-MS42	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W228001		0.76	2.09	<0.05	0.4	0.294	0.014	0.28	4.9	6.1	0.54	356	0.14	0.02	1.1	4.4
W228002		0.78	3.03	0.06	0.5	0.340	0.015	0.51	8.3	5.5	0.61	196	0.16	0.01	1.6	5.8
W228003		0.28	0.99	<0.05	0.2	0.249	0.005	0.16	3.3	2.2	0.33	137	0.13	0.01	0.5	2.0
W228004		2.44	5.30	0.13	0.9	15.05	0.045	0.80	14.5	28.2	0.16	329	6.12	0.01	2.5	18.2
W228005		0.47	1.61	<0.05	0.3	0.556	0.007	0.27	4.8	3.0	0.33	174	0.44	0.01	0.9	3.3
W228006		2.97	12.60	0.09	2.4	5.38	0.050	2.21	29.7	15.3	0.59	315	3.26	0.03	7.1	25.3
W228007		2.78	11.50	0.08	2.1	5.99	0.044	2.00	30.0	15.5	0.91	461	2.36	0.03	6.2	23.6
W228008		0.88	2.66	<0.05	0.5	1.930	0.014	0.48	7.9	4.0	0.49	387	0.37	0.01	1.4	6.0
W228009		0.46	1.85	0.05	0.3	1.240	0.010	0.30	6.0	3.0	0.41	170	0.63	0.01	0.9	4.9
W228010		0.34	1.04	<0.05	0.2	0.648	0.005	0.17	3.9	2.0	0.50	169	0.32	0.01	0.6	2.2
W228011		0.35	1.16	<0.05	0.2	0.695	0.007	0.18	4.1	2.1	0.46	169	0.28	0.01	0.6	2.3
W228012		0.44	1.44	<0.05	0.3	0.809	0.007	0.23	5.0	2.8	0.66	201	0.29	0.01	0.8	2.8
W228013		0.47	1.52	0.05	0.3	1.210	0.009	0.24	5.3	2.6	0.52	234	0.29	0.01	0.8	3.6
W228014		0.47	0.25	0.10	<0.1	0.016	<0.005	0.03	0.5	1.1	12.60	201	0.08	0.01	0.4	1.6
W228015		0.37	1.17	0.05	0.2	0.822	0.007	0.18	4.5	2.5	0.66	234	0.22	0.01	0.6	2.6
W228016		0.81	2.99	0.06	0.5	3.11	0.014	0.49	9.1	4.7	0.71	341	0.59	0.01	1.5	6.3
W228017		1.31	2.13	0.05	0.4	14.90	0.019	0.27	5.8	4.0	9.12	1620	0.35	0.01	1.0	4.7
W228018		2.02	5.26	0.11	0.9	24.3	0.060	0.74	9.6	7.0	3.61	1820	1.06	0.01	2.5	11.0
W228019		0.76	2.69	<0.05	0.5	6.43	0.014	0.39	6.5	4.3	0.42	4910	0.49	0.01	1.4	5.6
W228020		0.81	3.43	<0.05	0.6	3.95	0.011	0.52	8.8	4.5	0.35	597	0.66	0.01	1.8	7.3
W228021		0.49	2.15	0.05	0.4	2.71	0.012	0.27	6.2	3.0	0.24	893	0.30	0.01	1.0	4.3
W228022		1.94	8.73	0.06	1.6	19.05	0.024	1.34	21.3	10.5	0.31	2430	1.45	0.02	4.5	17.4
W228023		0.58	2.31	<0.05	0.4	7.87	0.015	0.33	5.9	6.1	0.19	5780	0.32	0.01	1.2	4.9
W228024		1.51	5.85	0.06	1.0	22.8	0.022	0.81	12.4	10.9	0.24	1780	0.92	0.01	3.5	11.4
W228025		0.46	0.22	0.10	<0.1	0.210	<0.005	0.03	0.5	1.2	12.40	210	0.10	0.01	0.2	1.5
W228026		1.69	7.15	0.07	1.3	20.8	0.022	1.08	14.5	11.7	0.26	2460	1.49	0.01	3.6	14.4
W228027		2.36	10.50	0.07	1.8	28.6	0.018	1.55	19.4	18.3	0.29	603	1.81	0.01	5.2	20.5
W228028		1.11	5.03	0.05	0.9	10.10	0.032	0.75	11.5	7.5	0.24	855	1.00	0.02	2.5	10.0
W228029		0.52	2.26	<0.05	0.4	3.98	0.008	0.34	6.3	4.3	0.25	1190	0.37	0.01	1.1	4.3
W228030		0.83	3.60	<0.05	0.6	6.16	0.014	0.53	9.3	5.7	0.23	2480	0.64	0.01	1.8	6.7
W228031		0.59	2.46	<0.05	0.4	2.43	0.009	0.35	6.9	3.8	0.33	680	0.50	0.01	1.2	4.7
W228032		3.03	8.83	0.13	1.7	22.9	0.062	1.40	24.4	16.9	1.93	1070	4.61	0.02	4.9	24.9
W228033		0.59	2.45	<0.05	0.5	3.22	0.010	0.37	7.4	3.1	0.23	872	0.40	0.01	1.3	4.9
W228034		0.57	2.41	0.05	0.4	3.22	0.010	0.36	7.2	3.1	0.22	839	0.42	0.01	1.2	4.7
W228035		0.64	2.77	<0.05	0.5	3.46	0.011	0.43	7.8	3.6	0.26	672	0.57	0.01	1.5	5.4
W228036		0.51	1.85	<0.05	0.3	2.04	0.007	0.29	5.7	2.9	0.37	580	0.46	0.01	1.0	3.6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17114395

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W228001		380	3.4	12.4	<0.002	0.11	0.32	2.5	2	0.3	1440	0.07	0.05	0.99	0.048	0.39
W228002		170	9.2	22.5	<0.002	0.13	0.55	3.2	1	0.5	1770	0.11	0.06	1.77	0.060	0.55
W228003		410	2.3	7.0	<0.002	0.06	0.19	1.2	1	<0.2	1565	<0.05	0.06	0.61	0.020	0.18
W228004		500	10.8	40.1	0.002	4.52	156.5	3.1	1	1.3	340	0.17	0.12	3.06	0.097	40.6
W228005		320	2.7	11.9	0.002	0.13	0.42	1.8	<1	0.2	1695	0.06	0.06	0.97	0.032	0.29
W228006		230	19.2	96.7	0.006	0.05	2.55	10.7	<1	1.5	920	0.49	0.09	7.92	0.266	2.44
W228007		320	14.9	87.7	<0.002	0.05	2.53	10.7	<1	1.4	859	0.43	0.08	6.92	0.238	2.60
W228008		370	4.0	20.2	<0.002	0.17	2.09	2.8	1	0.4	1535	0.10	<0.05	1.68	0.055	1.48
W228009		190	4.2	13.5	0.002	0.17	1.76	1.8	2	0.2	1800	0.07	<0.05	1.04	0.035	1.51
W228010		320	2.2	7.5	0.002	0.12	0.87	1.1	1	0.2	1315	<0.05	<0.05	0.58	0.020	1.23
W228011		370	2.4	8.4	<0.002	0.12	0.97	1.2	1	0.2	1420	<0.05	<0.05	0.64	0.022	1.33
W228012		280	3.0	10.2	0.002	0.16	1.14	1.5	1	0.2	1315	0.05	<0.05	0.83	0.027	1.56
W228013		540	2.9	11.0	0.002	0.15	1.30	1.7	1	0.2	1330	0.06	0.05	0.87	0.030	2.59
W228014		170	1.3	1.2	<0.002	<0.01	<0.05	0.2	<1	<0.2	51.8	<0.05	<0.05	0.06	<0.005	<0.02
W228015		330	2.1	8.2	0.002	0.14	0.58	1.2	1	<0.2	1580	<0.05	0.05	0.65	0.020	1.74
W228016		200	7.6	21.9	0.002	0.28	4.02	2.8	3	0.4	963	0.11	0.05	1.82	0.057	6.67
W228017		450	4.8	12.5	0.002	0.34	29.6	1.9	2	0.4	564	0.07	0.05	1.14	0.038	50.8
W228018		410	16.9	37.0	0.004	4.60	272	3.3	3	0.8	557	0.19	0.13	2.76	0.091	124.5
W228019		340	6.4	19.4	<0.002	0.82	23.4	4.8	1	0.4	928	0.10	0.08	1.44	0.050	23.8
W228020		200	5.3	24.7	0.003	0.84	5.56	3.1	1	0.4	1455	0.13	0.06	1.91	0.067	8.48
W228021		700	3.7	12.8	<0.002	0.48	4.68	5.1	1	0.3	1695	0.07	0.05	1.17	0.037	6.27
W228022		520	11.4	61.3	0.004	2.16	38.7	10.2	1	1.0	984	0.32	0.09	4.62	0.168	50.8
W228023		410	3.8	15.6	<0.002	0.60	19.25	9.2	2	0.3	962	0.09	0.05	1.25	0.045	22.7
W228024		700	12.9	39.2	0.003	1.61	66.7	5.8	1	0.9	980	0.23	0.08	2.94	0.120	82.7
W228025		160	1.1	2.1	<0.002	<0.01	0.15	0.2	<1	<0.2	49.1	<0.05	<0.05	0.05	<0.005	0.33
W228026		940	14.9	51.5	0.005	1.88	67.4	8.9	1	0.9	664	0.26	0.10	3.75	0.135	82.1
W228027		1190	17.1	73.5	0.005	2.60	81.1	4.8	2	1.5	704	0.38	0.10	5.41	0.196	97.9
W228028		430	7.7	37.1	0.002	1.20	25.5	4.8	1	0.6	1530	0.17	0.09	2.65	0.092	32.6
W228029		260	4.2	15.8	<0.002	0.54	9.59	5.5	2	0.3	1395	0.08	0.05	1.21	0.041	13.25
W228030		430	6.5	26.7	0.002	0.91	14.90	9.6	2	0.4	1215	0.13	0.06	1.95	0.064	20.1
W228031		200	5.7	16.6	0.002	0.58	4.15	3.0	1	0.3	1655	0.08	0.07	1.33	0.045	7.03
W228032		350	19.8	69.6	0.002	5.10	203	6.0	4	1.4	192.0	0.36	0.21	4.98	0.176	73.5
W228033		280	4.4	17.9	0.002	0.61	5.85	4.1	2	0.3	1610	0.09	0.05	1.41	0.046	8.83
W228034		320	4.4	16.9	0.003	0.60	5.49	3.8	1	0.3	1590	0.09	0.09	1.38	0.045	8.79
W228035		300	5.4	20.2	<0.002	0.68	5.86	3.9	1	0.3	1500	0.10	0.07	1.59	0.053	9.02
W228036		270	3.7	13.5	<0.002	0.48	2.89	2.3	1	0.2	1565	0.07	0.06	1.07	0.037	5.05

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17114395

Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001
W228001		1.6	15	0.3	8.8	19	14.3	
W228002		1.8	18	0.3	12.1	18	20.5	
W228003		1.6	7	0.2	5.9	9	7.3	
W228004		4.8	36	6.8	16.1	64	31.4	7.23
W228005		2.1	12	0.2	7.6	10	11.9	
W228006		3.6	82	4.6	21.2	62	85.6	
W228007		3.0	72	5.9	22.7	67	74.6	
W228008		1.7	17	1.0	12.8	18	18.7	
W228009		1.9	11	0.7	10.8	10	12.1	
W228010		1.6	7	0.4	9.0	10	6.9	
W228011		1.7	8	0.4	9.2	12	7.9	
W228012		1.7	9	0.5	11.4	9	9.6	
W228013		1.9	10	0.6	11.2	9	10.6	
W228014		0.7	3	0.1	0.8	16	<0.5	
W228015		1.6	8	0.4	10.0	5	7.6	
W228016		2.6	18	1.0	16.1	27	18.9	
W228017		2.6	13	0.8	10.3	8	13.0	
W228018		4.3	30	1.6	13.7	38	29.8	7.15
W228019		2.9	16	2.5	16.7	25	17.0	
W228020		2.9	20	1.3	12.9	15	21.3	
W228021		2.9	14	0.8	17.9	16	14.5	
W228022		3.4	52	3.1	22.6	90	55.4	
W228023		3.0	14	0.9	23.7	28	15.4	
W228024		5.5	35	2.3	25.8	68	36.3	
W228025		1.2	3	0.1	0.8	16	<0.5	
W228026		6.2	43	2.5	28.1	30	45.9	
W228027		9.1	63	3.7	35.2	61	61.4	
W228028		5.4	30	1.7	23.4	57	29.3	
W228029		3.0	14	0.7	16.3	26	14.3	
W228030		3.3	21	1.1	18.9	20	22.1	
W228031		2.7	15	0.8	13.9	26	14.9	
W228032		6.7	55	6.0	19.9	115	61.5	7.80
W228033		2.9	15	0.8	15.0	15	16.4	
W228034		3.0	15	0.8	14.8	17	15.5	
W228035		2.8	16	1.0	14.8	29	17.5	
W228036		1.9	12	0.7	9.8	18	12.6	

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 12- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17114395

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 7- JUL- 2017
Account: RCM

CERTIFICATE WH17117321

Project: Nadaleen

P.O. No.: N17- 002

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 12- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

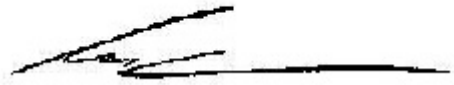
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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VANCOUVER BC V6B 1L8

Finalized Date: 7-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117321

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA25 Au ppm 0.01	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
W229001		0.97	0.21	7.72	8.24	1475	560	2.63	0.34	0.29	0.41	88.4	25.3	83	44.9	97.3
W229002		3.80	0.19	1.50	4.23	2310	270	1.09	0.18	1.55	0.23	45.6	17.1	56	19.30	51.6
W229003		4.19	0.32	17.95	6.22	>10000	310	1.47	0.28	0.58	0.26	64.0	16.5	81	27.2	117.5
W229004		9.53	0.51	0.57	7.43	9400	250	1.70	0.31	1.31	0.27	78.9	27.9	77	34.0	68.5
W229005		11.42	0.67	0.46	6.44	>10000	200	1.30	0.25	0.98	0.33	65.0	26.0	73	24.3	71.3
W229006		7.10	<0.01	0.01	0.07	48.6	40	0.07	0.02	21.5	0.07	1.46	0.8	1	0.21	1.4
W229007		11.73	1.63	0.21	4.32	>10000	160	0.66	0.16	1.19	0.35	39.9	20.4	67	11.30	69.8
W229008		11.26	1.25	0.71	3.14	>10000	200	0.53	0.12	1.17	0.28	33.4	14.1	57	8.46	48.3
W229009		4.66	0.76	4.87	7.21	>10000	340	1.52	0.30	0.93	0.14	73.3	19.0	74	20.0	67.0
W229010		6.73	0.08	0.31	5.54	952	320	1.11	0.24	2.50	0.06	59.4	18.7	61	15.05	56.0
W229011		0.27	2.59	0.19	4.07	6530	220	0.99	0.14	12.95	0.15	44.8	12.9	47	11.15	38.6
W229012		10.95	0.04	0.08	6.10	427	260	1.27	0.24	3.10	0.03	65.0	20.2	65	17.95	53.1
W229013		11.14	0.16	0.09	5.58	826	160	1.27	0.22	1.78	0.07	57.8	20.7	62	17.40	53.8
W229014		10.38	0.03	0.08	5.61	270	160	1.44	0.22	1.95	0.04	57.3	18.0	62	21.0	45.5
W229015		6.99	<0.01	<0.01	0.11	13.6	30	0.09	0.03	21.4	0.06	1.31	0.7	<1	0.97	2.0
W229016		11.22	0.08	0.06	6.69	329	200	1.66	0.27	2.18	0.05	70.2	18.6	67	25.2	52.8
W229017		11.20	0.56	0.07	6.19	1855	270	1.39	0.26	2.65	0.09	64.9	17.4	65	24.9	56.2
W229018		5.72	2.00	0.09	5.30	6880	300	1.02	0.72	1.72	0.16	54.5	16.4	61	16.80	57.8
W229019		10.96	0.60	0.06	5.55	1315	210	1.18	0.23	2.27	0.09	58.2	16.7	62	18.55	50.6
W229020		11.76	0.02	0.07	5.82	315	210	1.52	0.23	1.72	0.07	59.5	18.1	67	24.0	48.4
W229021		11.58	0.01	0.09	5.58	259	290	1.21	0.22	2.09	0.05	59.8	16.7	65	16.60	48.0
W229022		11.58	0.04	0.07	5.83	231	340	1.25	0.26	1.88	0.08	57.6	17.1	64	16.30	48.6
W229023		5.69	0.05	0.07	6.10	261	350	1.36	0.27	2.01	0.10	61.2	18.2	68	17.65	53.4
W229024		11.11	0.01	0.12	5.39	314	370	1.30	0.23	2.32	0.11	56.6	25.7	64	16.50	44.8
W229025		12.20	0.01	0.06	6.50	114.5	290	1.68	0.28	2.14	0.06	66.9	18.1	71	25.7	58.7
W229026		12.14	0.02	0.07	5.52	239	210	1.48	0.23	1.93	0.06	57.0	18.8	64	22.8	48.8
W229027		11.95	0.03	0.05	6.47	209	200	1.72	0.27	2.39	0.09	68.0	18.6	71	31.1	54.5
W229028		12.15	0.05	0.05	5.99	435	160	1.52	0.23	1.93	0.05	60.8	17.3	69	29.9	53.2
W229029		0.27	0.50	0.11	3.70	2640	210	0.84	0.15	19.40	0.12	39.3	12.1	42	11.15	44.0
W229030		11.64	0.01	0.09	5.31	123.0	300	1.04	0.21	4.22	0.08	53.4	17.6	56	21.8	50.2
W229031		6.68	0.02	0.11	5.97	264	210	1.56	0.24	2.06	0.07	60.5	23.4	64	29.3	51.6
W229032		4.64	0.02	0.06	4.63	241	250	0.90	0.18	4.12	0.06	46.9	16.0	51	17.45	40.1
W229033		11.28	0.01	0.04	6.27	131.5	240	1.63	0.26	2.01	0.10	64.9	16.9	70	32.4	54.5
W229034		12.05	0.05	0.08	4.15	260	340	0.92	0.17	3.58	0.07	44.4	17.5	55	16.85	31.9
W229035		<0.02	0.06	0.08	3.94	280	330	0.82	0.16	3.64	0.07	41.2	16.2	55	15.85	29.5
W229036		11.65	0.07	0.03	3.69	519	180	0.71	0.15	3.89	0.04	37.9	10.4	49	13.70	35.3

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 7- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117321

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W229001		6.17	23.1	0.16	3.8	5.86	0.087	3.79	41.4	18.4	0.55	393	0.82	0.03	14.4	44.6
W229002		4.42	11.40	0.11	2.1	6.11	0.046	1.90	21.8	17.0	0.79	706	0.54	0.02	7.3	30.2
W229003		4.09	17.65	0.17	3.2	10.05	0.062	2.83	30.7	18.6	0.56	287	2.54	0.03	11.0	33.5
W229004		5.82	20.8	0.15	3.8	9.18	0.071	3.44	37.7	15.1	0.94	708	0.73	0.03	13.9	53.6
W229005		5.93	18.10	0.15	3.1	16.90	0.069	2.92	30.4	14.0	0.76	514	0.58	0.02	11.4	52.9
W229006		0.49	0.25	0.10	<0.1	0.023	0.005	0.03	0.7	1.0	13.70	199	0.14	0.01	0.2	1.8
W229007		5.13	12.10	0.10	2.3	19.70	0.053	1.85	19.3	16.6	0.72	713	0.54	0.01	7.6	37.5
W229008		3.50	9.28	0.08	1.9	15.15	0.039	1.42	16.5	10.9	0.66	795	0.72	0.01	5.6	27.0
W229009		4.21	20.6	0.14	3.8	7.98	0.062	3.35	35.6	11.6	0.80	617	1.27	0.03	12.9	38.8
W229010		4.63	15.40	0.12	2.9	3.06	0.058	2.58	27.9	13.1	1.31	688	0.42	0.02	9.8	35.3
W229011		3.14	11.25	0.10	2.2	14.80	0.036	1.92	23.1	11.2	2.81	1210	2.01	0.02	6.6	28.3
W229012		4.86	17.10	0.12	3.2	2.06	0.064	2.83	31.7	11.2	1.66	760	0.36	0.02	11.3	36.7
W229013		4.68	15.65	0.11	3.0	2.44	0.056	2.63	28.7	9.4	1.07	847	0.41	0.02	9.8	36.1
W229014		4.56	15.75	0.10	3.0	1.375	0.059	2.63	28.2	11.9	1.16	467	0.44	0.02	9.7	33.4
W229015		0.49	0.38	0.11	<0.1	0.019	<0.005	0.06	0.6	1.5	13.70	203	0.15	<0.01	0.6	1.6
W229016		4.78	18.90	0.12	3.3	1.845	0.074	3.16	34.2	11.6	1.29	612	0.50	0.03	11.7	36.1
W229017		5.35	17.20	0.13	3.2	4.30	0.063	2.83	32.1	12.0	1.52	946	0.34	0.02	11.0	35.9
W229018		4.42	14.35	0.11	2.8	12.55	0.053	2.44	26.3	8.8	1.02	1070	0.31	0.02	9.4	31.6
W229019		4.84	15.70	0.11	3.0	3.97	0.058	2.58	28.2	9.4	1.29	861	0.31	0.02	9.7	32.5
W229020		4.97	16.45	0.11	3.0	1.075	0.064	2.67	29.3	17.4	1.08	470	0.33	0.03	10.0	34.9
W229021		4.98	15.75	0.11	2.9	0.902	0.057	2.59	28.9	16.7	1.19	724	0.37	0.02	10.0	32.0
W229022		4.78	15.80	0.13	2.8	0.957	0.055	2.71	28.3	14.6	1.14	515	0.40	0.02	9.8	32.7
W229023		5.35	16.65	0.14	3.0	1.055	0.058	2.83	29.9	14.7	1.21	549	0.44	0.03	10.4	35.0
W229024		4.74	14.95	0.12	2.8	1.020	0.056	2.49	27.6	24.3	1.26	518	0.77	0.02	9.1	37.3
W229025		5.33	17.85	0.13	3.4	0.863	0.068	2.95	32.1	42.1	1.30	640	0.34	0.03	11.4	35.2
W229026		4.66	14.90	0.11	2.7	0.942	0.062	2.52	27.5	30.9	1.08	593	0.34	0.02	9.6	32.8
W229027		5.01	17.80	0.12	3.3	1.230	0.069	3.00	32.6	24.1	1.38	605	0.32	0.03	11.3	33.8
W229028		4.87	16.45	0.12	3.2	1.205	0.064	2.75	29.3	23.5	1.14	572	0.40	0.02	10.4	34.3
W229029		3.16	10.05	0.10	1.9	3.55	0.037	1.74	19.6	7.6	1.49	1190	1.70	0.02	6.3	24.8
W229030		5.34	13.85	0.11	2.6	0.859	0.057	2.28	25.7	22.4	1.84	1100	0.44	0.02	9.0	31.8
W229031		4.53	16.70	0.12	3.0	1.020	0.058	2.68	29.5	16.8	1.15	524	0.51	0.02	9.8	39.6
W229032		5.58	12.70	0.11	2.4	0.962	0.051	1.67	23.0	23.5	1.89	1150	0.30	0.02	7.8	28.5
W229033		5.25	17.60	0.12	3.2	0.631	0.067	2.83	31.7	39.9	1.19	579	0.37	0.02	11.1	34.4
W229034		3.85	11.35	0.10	2.3	0.800	0.043	1.87	21.8	16.3	1.55	907	0.43	0.02	7.1	25.8
W229035		3.87	10.55	0.09	2.1	0.796	0.039	1.77	20.5	15.9	1.55	924	0.42	0.02	6.5	24.6
W229036		4.17	9.88	0.09	2.2	1.445	0.037	1.65	18.6	17.3	1.63	1030	0.37	0.02	6.1	20.7

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 7- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117321

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W229001		880	14.8	193.0	0.002	3.14	10.15	27.8	3	2.7	220	0.94	0.05	13.20	0.597	21.4
W229002		370	15.5	95.6	<0.002	2.98	13.15	13.5	2	1.5	129.5	0.48	<0.05	6.58	0.387	27.8
W229003		410	14.2	141.0	0.002	3.74	33.4	17.1	2	2.9	150.0	0.74	0.05	9.86	0.498	39.3
W229004		610	12.6	175.5	<0.002	5.90	37.2	20.5	2	2.5	147.0	0.92	0.06	12.20	0.599	57.9
W229005		510	12.0	146.5	<0.002	6.29	69.9	15.2	2	2.5	151.5	0.75	0.07	9.73	0.532	81.2
W229006		210	1.3	1.5	<0.002	0.02	0.18	0.3	<1	<0.2	50.1	<0.05	<0.05	0.10	<0.005	0.13
W229007		370	12.2	92.9	<0.002	5.47	69.4	9.9	1	3.6	140.5	0.49	<0.05	6.06	0.433	95.3
W229008		230	15.0	69.3	<0.002	3.65	57.2	8.8	1	1.8	77.5	0.38	<0.05	4.99	0.345	62.8
W229009		510	13.4	164.0	<0.002	4.21	33.9	18.5	1	2.7	171.5	0.85	0.07	11.75	0.551	41.0
W229010		540	15.8	123.5	<0.002	4.07	7.02	17.1	2	2.9	198.0	0.64	<0.05	9.28	0.456	11.65
W229011		480	11.0	91.1	0.002	2.78	26.3	11.8	2	1.8	338	0.45	<0.05	6.77	0.277	48.8
W229012		510	14.7	141.5	<0.002	4.15	4.26	18.5	1	2.3	175.0	0.74	0.05	10.05	0.489	8.22
W229013		400	19.8	131.5	<0.002	4.45	8.35	16.7	1	2.8	75.4	0.66	<0.05	9.23	0.452	12.10
W229014		400	14.4	136.5	<0.002	4.26	2.52	17.3	1	2.1	83.6	0.65	<0.05	9.06	0.455	4.25
W229015		210	1.2	5.1	<0.002	0.01	0.09	0.2	<1	0.3	50.0	0.07	<0.05	0.09	<0.005	0.07
W229016		510	14.9	158.5	<0.002	4.34	3.89	19.4	1	2.4	106.0	0.77	<0.05	11.00	0.500	7.44
W229017		490	14.4	150.5	<0.002	5.08	15.80	18.3	1	2.1	126.5	0.74	0.05	10.10	0.496	25.1
W229018		510	16.9	119.5	<0.002	4.05	38.3	16.8	1	1.9	186.0	0.62	0.05	8.35	0.452	56.9
W229019		460	15.4	132.0	<0.002	4.54	13.35	17.5	1	2.0	149.0	0.64	<0.05	9.34	0.449	20.3
W229020		410	17.7	138.5	<0.002	4.87	1.23	17.9	1	1.9	119.5	0.66	<0.05	9.67	0.462	4.27
W229021		450	15.2	125.5	<0.002	4.70	1.51	17.1	1	1.9	166.5	0.66	<0.05	9.27	0.461	4.01
W229022		480	13.5	122.0	<0.002	4.50	2.64	16.6	2	2.0	156.5	0.67	0.05	9.28	0.460	3.96
W229023		480	14.6	129.5	<0.002	5.01	2.98	18.0	1	2.1	162.0	0.72	0.06	9.83	0.490	4.28
W229024		410	20.7	113.5	<0.002	4.08	2.36	15.5	1	1.9	247	0.63	0.06	8.48	0.452	4.40
W229025		500	14.1	147.0	<0.002	5.26	0.57	18.7	1	2.2	132.5	0.83	0.05	10.50	0.534	5.60
W229026		530	19.5	124.5	<0.002	4.36	1.26	16.3	1	1.9	108.5	0.66	<0.05	8.70	0.470	4.34
W229027		760	14.3	153.5	<0.002	4.64	1.50	19.0	1	2.1	91.3	0.78	0.06	10.45	0.529	4.89
W229028		460	11.9	147.5	<0.002	4.66	2.49	17.3	1	1.9	80.4	0.75	<0.05	9.66	0.513	6.03
W229029		380	9.4	81.0	<0.002	2.62	9.69	9.4	1	1.4	739	0.45	0.05	5.76	0.265	11.05
W229030		570	13.0	112.5	<0.002	4.04	0.89	15.9	1	1.7	176.5	0.62	<0.05	7.84	0.455	4.58
W229031		460	28.0	138.0	<0.002	4.02	1.51	17.6	2	2.0	101.0	0.70	0.05	9.36	0.466	4.26
W229032		360	13.9	84.0	<0.002	4.74	1.19	14.3	1	1.6	155.0	0.55	<0.05	7.07	0.388	5.71
W229033		500	11.5	145.5	<0.002	4.95	0.67	18.4	2	2.1	90.3	0.78	0.05	10.25	0.511	3.88
W229034		340	14.6	93.4	<0.002	2.38	1.54	11.9	1	1.5	114.0	0.50	<0.05	6.78	0.371	2.88
W229035		330	13.3	87.3	<0.002	2.34	1.53	11.0	1	1.4	113.0	0.47	0.05	6.27	0.354	2.86
W229036		300	7.6	81.9	<0.002	2.61	2.78	10.4	<1	1.3	100.5	0.45	<0.05	6.12	0.350	7.30

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 7- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117321

Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001
W229001		2.7	169	67.4	31.0	100	128.5	
W229002		1.4	99	16.8	15.9	76	81.8	
W229003		2.0	139	144.0	20.5	72	104.5	1.150
W229004		2.4	156	14.1	26.6	99	132.0	
W229005		2.1	148	14.1	22.3	129	109.0	2.99
W229006		0.7	2	0.1	0.9	17	0.5	
W229007		1.3	126	9.5	14.6	109	77.3	2.89
W229008		1.1	101	10.2	11.6	91	63.3	3.15
W229009		2.4	153	54.7	23.9	73	127.5	1.135
W229010		1.9	126	9.7	20.1	63	97.6	
W229011		7.4	89	8.6	20.1	50	74.5	
W229012		2.1	131	8.2	22.4	69	109.5	
W229013		1.9	127	7.1	19.7	66	98.2	
W229014		1.8	127	6.0	20.0	70	99.0	
W229015		0.6	1	0.1	0.9	17	<0.5	
W229016		2.2	140	6.3	24.0	72	114.5	
W229017		2.0	134	7.4	22.7	68	107.5	
W229018		1.7	123	9.3	17.8	70	98.7	
W229019		1.9	126	7.1	20.7	69	96.4	
W229020		2.0	132	3.9	20.9	75	101.0	
W229021		1.9	127	5.7	19.7	69	97.8	
W229022		1.8	129	7.3	18.8	71	99.6	
W229023		1.9	135	7.8	20.2	83	108.0	
W229024		1.8	130	5.8	18.1	73	102.0	
W229025		2.1	143	2.0	22.6	78	122.0	
W229026		1.8	129	3.0	20.1	71	99.6	
W229027		2.1	144	3.4	25.0	81	116.0	
W229028		2.0	141	2.9	20.6	75	109.0	
W229029		2.4	76	5.4	16.8	51	67.3	
W229030		1.6	125	3.3	21.1	103	93.3	
W229031		1.9	135	3.1	20.6	62	105.0	
W229032		1.5	107	4.2	17.4	63	83.0	
W229033		2.1	142	2.3	22.3	73	116.5	
W229034		1.4	104	3.4	15.1	51	80.1	
W229035		1.3	100	3.2	14.6	50	74.9	
W229036		1.3	97	2.1	14.3	47	73.0	

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 7- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17117321

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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VANCOUVER BC V6B 1L8

Finalized Date: 14- JUL- 2017
Account: RCM

CERTIFICATE WH17117325

Project: Nadaleen

P.O. No.: N17- 003

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 12- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

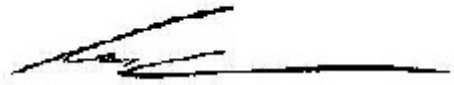
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17117325

Sample Description	Method	WEI- 21	Au- AA25	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
W228037		10.78	0.28	0.10	1.33	143.0	140	0.29	0.11	30.7	0.15	24.4	4.7	15	5.46	22.0
W228038		10.31	0.02	0.03	1.22	105.0	170	0.35	0.07	29.8	0.19	19.30	4.4	14	4.90	14.1
W228039		10.64	<0.01	0.02	0.65	76.3	140	0.25	0.03	33.7	0.05	11.65	2.4	8	2.22	7.4
W228040		10.72	0.01	0.03	1.39	415	130	0.37	0.07	30.7	0.12	20.0	5.0	16	3.49	14.6
W228041		10.19	0.37	0.08	3.55	1240	190	0.69	0.17	20.0	0.36	45.3	12.3	39	9.75	37.5
W228042		6.93	<0.01	0.01	0.06	1.8	30	0.05	0.01	20.8	0.06	1.23	0.7	2	0.17	1.5
W228043		10.36	<0.01	0.02	0.83	90.5	110	0.31	0.04	32.5	0.11	12.65	3.3	11	2.31	9.4
W228044		10.10	<0.01	0.01	0.76	37.9	140	0.33	0.03	31.8	0.16	12.85	2.8	10	2.58	8.5
W228045		11.40	0.01	0.02	1.00	52.1	180	0.34	0.04	31.9	0.09	16.85	3.5	12	4.13	10.3
W228046		10.14	0.13	0.02	0.98	71.2	130	0.26	0.04	31.4	0.12	16.40	3.4	12	3.49	9.5
W228047		10.78	0.02	0.01	0.52	46.9	130	0.22	0.02	34.9	0.05	9.95	2.1	7	1.90	5.8
W228048		10.77	0.01	0.02	0.99	57.1	560	0.36	0.04	32.7	0.09	18.10	3.7	12	5.90	10.0
W228049		11.21	0.01	0.01	0.47	38.8	120	0.19	0.02	34.6	0.04	9.49	1.9	7	1.79	4.7
W228050		<0.02	0.02	0.01	0.48	40.3	120	0.22	0.02	34.9	0.06	9.67	1.9	7	1.82	5.0
W228051		11.09	0.01	0.02	0.84	50.8	330	0.27	0.03	33.2	0.05	14.90	3.0	10	3.95	8.3
W228052		10.54	0.02	0.02	0.53	48.3	130	0.18	0.02	34.9	0.08	10.35	2.1	7	1.81	6.8
W228053		0.27	2.74	0.19	3.76	6220	210	0.92	0.11	12.05	0.14	41.2	12.0	44	11.10	36.6
W228054		10.72	0.01	0.01	0.71	45.8	110	0.24	0.03	31.4	0.05	12.45	2.7	9	2.51	7.3
W228055		10.51	<0.01	0.06	0.43	28.4	620	0.20	0.01	34.4	0.08	8.20	1.8	6	1.66	4.8
W228056		10.93	0.01	0.02	0.56	38.8	190	0.21	0.02	32.5	0.70	10.30	2.1	7	2.15	5.5
W228057		11.39	0.01	0.02	0.94	48.1	800	0.40	0.03	31.0	0.13	15.75	3.4	11	3.35	8.9
W228058		10.62	0.02	0.03	2.35	134.0	180	0.80	0.11	25.7	0.07	32.3	7.7	24	12.50	20.7
W228059		11.82	0.11	0.05	4.10	208	250	1.03	0.19	17.10	0.12	51.6	13.2	42	16.70	34.8
W228060		10.29	0.15	0.03	1.42	208	140	0.43	0.05	30.2	0.07	20.2	4.6	16	4.74	14.6
W228061		10.48	0.20	0.03	1.55	205	140	0.39	0.06	30.4	0.05	20.7	5.3	18	5.35	14.7
W228062		11.45	0.01	0.02	1.67	91.9	160	0.41	0.08	28.1	0.02	23.1	6.0	18	5.62	17.4
W228063		12.24	0.21	0.02	1.68	147.5	120	0.44	0.07	27.8	0.05	22.3	6.0	17	5.01	15.6
W228064		10.34	0.14	0.03	2.66	269	160	0.63	0.11	20.1	0.07	37.5	9.6	25	7.45	19.7
W228065		13.01	0.15	0.02	1.47	92.2	120	0.42	0.06	28.3	0.04	19.85	5.2	16	5.04	13.1
W228066		6.94	<0.01	0.01	0.03	0.4	40	<0.05	<0.01	19.80	0.06	0.98	0.6	1	0.11	1.6
W228067		12.10	<0.01	0.01	1.13	36.5	130	0.40	0.04	30.2	0.02	15.55	4.1	13	3.95	10.6
W228068		0.28	2.76	0.63	1.76	>10000	140	0.58	2.71	24.3	0.14	27.4	5.0	26	6.21	15.5
W228069		12.16	<0.01	0.01	1.61	58.5	140	0.49	0.07	28.6	<0.02	21.9	5.9	17	8.33	14.9
W228070		5.03	<0.01	0.02	1.15	37.8	140	0.38	0.04	31.3	0.02	17.15	4.3	12	5.16	11.2
W228071		10.61	<0.01	0.01	0.71	16.3	110	0.30	0.01	33.2	<0.02	11.40	2.6	8	3.16	6.5
W228072		6.47	<0.01	0.01	0.49	9.3	910	0.21	0.01	33.4	<0.02	8.73	2.0	6	2.23	4.9

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 14- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117325

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W228037		0.94	3.68	0.05	0.7	3.53	0.016	0.59	10.4	4.9	0.32	566	0.97	0.01	2.0	7.5
W228038		0.86	3.61	0.07	0.6	1.760	0.017	0.56	10.0	4.2	0.43	237	0.77	0.01	1.7	7.4
W228039		0.53	1.91	0.05	0.3	1.200	0.009	0.30	6.0	2.5	0.35	204	0.39	0.01	0.9	3.2
W228040		1.00	4.05	0.07	0.7	8.27	0.016	0.63	10.0	3.4	0.31	352	0.71	0.01	2.0	8.4
W228041		2.36	10.35	0.10	1.7	21.8	0.035	1.62	24.1	8.7	0.50	960	2.54	0.02	4.7	22.4
W228042		0.46	0.20	0.09	<0.1	0.039	<0.005	0.03	0.6	0.8	12.85	197	<0.05	0.01	0.2	1.3
W228043		0.68	2.44	0.07	0.4	1.455	0.010	0.38	6.5	2.7	0.78	617	0.70	0.01	1.1	5.3
W228044		0.60	2.21	0.06	0.4	0.675	0.007	0.35	6.4	2.8	0.63	303	0.59	0.01	1.0	4.4
W228045		0.76	2.84	0.08	0.5	1.075	0.012	0.45	8.4	4.0	0.64	307	0.64	0.01	1.4	5.7
W228046		0.72	2.79	0.09	0.5	1.660	0.009	0.45	8.5	3.1	0.31	329	0.63	0.01	1.3	5.5
W228047		0.43	1.51	0.06	0.3	0.846	0.006	0.24	5.1	2.0	0.29	187	0.43	0.01	0.8	2.6
W228048		0.73	2.89	0.09	0.5	1.350	0.011	0.47	9.4	4.1	0.42	116	0.49	0.01	1.4	5.5
W228049		0.38	1.34	0.06	0.3	0.621	0.006	0.22	4.6	1.8	0.28	153	0.16	0.01	0.7	2.1
W228050		0.39	1.41	0.08	0.3	0.646	0.007	0.22	4.8	1.8	0.28	153	0.21	0.01	0.7	2.2
W228051		0.60	2.43	0.07	0.4	1.005	0.013	0.39	7.5	3.7	0.44	142	0.38	0.01	1.2	4.4
W228052		0.45	1.53	0.07	0.3	0.920	0.007	0.24	5.3	1.9	0.43	209	0.24	0.01	0.8	2.4
W228053		2.91	10.65	0.09	2.0	14.55	0.037	1.80	21.9	11.2	2.57	1170	1.91	0.02	5.5	26.5
W228054		0.54	2.08	0.07	0.4	0.729	0.010	0.34	6.6	2.7	0.45	169	0.41	0.01	1.0	3.9
W228055		0.36	1.29	0.06	0.2	0.379	0.006	0.20	4.3	2.0	0.47	186	0.26	0.01	0.6	2.1
W228056		0.44	1.76	0.06	0.3	0.977	0.013	0.26	5.5	2.4	0.34	151	0.28	0.01	0.8	2.8
W228057		0.75	2.78	0.07	0.5	1.500	0.009	0.46	8.7	3.6	0.53	282	0.33	0.01	1.3	5.2
W228058		1.69	6.73	0.09	1.1	3.46	0.026	1.12	18.7	8.2	1.07	421	0.92	0.02	3.2	13.0
W228059		2.83	11.50	0.11	2.0	5.87	0.035	1.97	30.8	12.5	1.37	524	2.32	0.02	5.5	23.6
W228060		1.12	4.03	0.08	0.7	3.02	0.022	0.67	10.7	4.4	0.57	608	0.94	0.01	1.9	7.8
W228061		1.14	4.40	0.08	0.9	3.26	0.013	0.73	11.1	5.2	0.49	463	1.00	0.01	2.2	9.5
W228062		1.10	4.83	0.09	0.9	2.07	0.017	0.81	12.4	5.9	0.54	205	0.43	0.02	2.3	9.3
W228063		1.13	4.78	0.08	0.9	3.14	0.020	0.81	12.5	4.8	0.63	535	0.87	0.01	2.2	8.7
W228064		1.95	7.30	0.09	1.9	4.01	0.025	1.27	21.4	6.2	0.66	407	1.07	0.02	4.6	12.9
W228065		1.05	4.25	0.08	0.8	2.01	0.015	0.70	11.1	5.3	0.77	330	0.82	0.01	2.0	7.8
W228066		0.43	0.14	0.08	<0.1	0.010	<0.005	0.01	0.5	0.7	12.15	191	0.06	<0.01	0.1	1.2
W228067		0.83	3.22	0.07	0.6	0.797	0.013	0.53	8.6	4.2	0.57	193	0.29	0.01	1.6	5.8
W228068		1.32	5.17	0.08	0.9	6.18	0.023	0.88	14.0	8.5	0.85	2130	1.80	0.01	2.4	13.1
W228069		1.03	4.62	0.07	0.9	0.436	0.015	0.79	11.6	6.4	0.57	191	0.26	0.01	2.3	9.0
W228070		0.79	3.28	0.08	0.6	0.308	0.016	0.56	9.3	4.8	0.48	180	0.18	0.01	1.6	6.1
W228071		0.51	2.02	0.06	0.4	0.234	0.008	0.34	6.2	3.1	0.38	146	0.11	0.01	1.0	3.4
W228072		0.37	1.47	0.07	0.3	0.087	0.007	0.23	4.6	2.3	0.31	125	0.12	0.01	0.7	2.2

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 14- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117325

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W228037		170	9.7	29.3	0.004	0.98	6.08	4.4	1	0.4	1450	0.14	0.06	2.35	0.076	11.50
W228038		200	8.7	28.9	0.002	0.86	1.48	3.2	1	0.4	1720	0.14	0.06	2.00	0.069	6.60
W228039		100	5.3	14.3	<0.002	0.47	0.36	2.0	1	0.2	1820	0.07	<0.05	1.10	0.036	3.16
W228040		330	9.1	32.5	0.004	1.04	0.96	3.5	2	0.5	1320	0.16	0.08	2.31	0.081	17.20
W228041		450	12.6	83.6	0.009	2.56	9.10	8.0	2	1.2	865	0.37	0.09	5.40	0.201	48.0
W228042		260	1.6	1.3	<0.002	<0.01	<0.05	0.2	1	<0.2	49.9	<0.05	<0.05	0.08	<0.005	0.07
W228043		230	3.3	19.4	0.003	0.55	0.47	2.3	1	0.3	1360	0.09	<0.05	1.38	0.046	4.23
W228044		500	3.1	17.6	0.002	0.52	0.18	2.3	1	0.3	1725	0.09	<0.05	1.29	0.043	2.92
W228045		360	3.8	22.6	0.002	0.68	0.45	3.0	1	0.3	1810	0.11	<0.05	1.69	0.056	3.93
W228046		290	3.8	22.7	0.003	0.71	2.55	2.7	1	0.3	1920	0.11	0.06	1.67	0.056	4.93
W228047		200	2.2	11.9	<0.002	0.36	0.53	1.6	1	0.2	2180	0.06	0.06	0.92	0.031	2.62
W228048		100	3.7	23.7	<0.002	0.67	0.50	3.1	1	0.3	2070	0.10	0.05	1.70	0.058	4.27
W228049		260	2.1	10.4	<0.002	0.30	0.26	1.4	1	0.2	2240	0.05	<0.05	0.85	0.027	1.57
W228050		270	2.2	10.9	0.002	0.32	0.26	1.4	1	0.2	2240	0.05	0.05	0.87	0.028	1.69
W228051		170	3.5	19.6	<0.002	0.53	0.40	2.4	1	0.3	1990	0.09	0.05	1.46	0.047	2.12
W228052		440	4.3	11.2	<0.002	0.39	0.47	1.6	1	0.2	1650	0.06	<0.05	0.95	0.031	1.26
W228053		440	11.2	85.9	<0.002	2.59	23.5	10.2	2	1.6	314	0.45	0.05	5.75	0.267	44.0
W228054		220	4.1	15.5	0.002	0.50	0.49	2.0	1	0.3	1455	0.08	<0.05	1.25	0.040	1.27
W228055		440	3.3	9.5	<0.002	0.30	0.41	1.3	1	0.2	1485	0.05	<0.05	0.80	0.025	0.71
W228056		200	3.5	12.3	0.002	0.40	0.45	1.8	1	0.2	1840	0.06	<0.05	0.97	0.031	1.07
W228057		470	5.5	20.7	<0.002	0.62	0.56	2.7	1	0.3	1450	0.10	0.06	1.68	0.053	1.94
W228058		190	8.7	54.7	0.002	1.51	0.74	5.8	2	0.8	1205	0.26	0.05	3.82	0.132	4.64
W228059		220	14.6	89.9	0.006	2.72	3.46	10.0	2	1.4	889	0.44	0.09	6.45	0.235	7.15
W228060		270	6.0	32.5	0.003	1.09	2.06	4.1	2	0.5	1320	0.16	<0.05	2.27	0.080	4.24
W228061		280	6.0	34.3	0.003	1.10	2.36	3.8	1	0.5	1395	0.18	0.08	2.46	0.090	4.82
W228062		140	6.0	38.4	<0.002	1.03	0.59	4.2	1	0.6	1500	0.19	0.06	2.71	0.096	3.21
W228063		140	6.0	37.5	0.002	1.04	2.44	4.2	1	0.7	1260	0.19	<0.05	2.58	0.094	5.45
W228064		130	11.2	61.8	<0.002	1.79	3.80	6.2	1	1.0	960	0.41	<0.05	4.91	0.187	8.00
W228065		150	5.2	34.1	<0.002	0.91	0.92	4.0	1	0.6	1305	0.16	<0.05	2.31	0.082	3.82
W228066		160	1.6	0.8	<0.002	<0.01	<0.05	0.1	1	<0.2	48.3	<0.05	<0.05	0.06	<0.005	0.02
W228067		140	4.3	24.8	<0.002	0.69	0.24	3.1	1	0.4	1575	0.13	<0.05	1.87	0.064	2.36
W228068		320	7.3	41.3	0.003	1.37	44.3	5.7	2	0.7	982	0.20	0.06	3.27	0.083	23.8
W228069		170	6.0	37.5	<0.002	0.96	0.27	3.9	1	0.6	1535	0.19	0.06	2.64	0.095	2.53
W228070		170	4.4	25.8	<0.002	0.71	0.19	3.2	1	0.5	1665	0.13	0.05	1.93	0.065	1.76
W228071		200	2.9	15.3	<0.002	0.45	0.12	2.0	1	0.3	1585	0.08	<0.05	1.22	0.039	0.68
W228072		240	2.2	10.7	<0.002	0.35	0.08	1.4	1	0.2	1640	0.05	<0.05	0.89	0.027	0.42

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Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001
W228037		3.1	22	1.5	16.7	35	22.7	
W228038		2.8	20	1.5	16.0	33	21.3	
W228039		1.8	11	0.9	11.2	9	12.0	
W228040		3.0	23	2.5	14.5	22	27.1	
W228041		3.6	63	6.4	18.9	64	62.4	
W228042		0.7	2	0.1	0.9	16	<0.5	
W228043		1.6	16	1.3	9.6	14	15.7	
W228044		2.1	14	0.8	10.5	17	14.9	
W228045		2.3	18	0.8	13.0	16	18.9	
W228046		2.9	17	1.4	13.1	21	18.3	
W228047		2.0	10	0.6	10.5	6	10.3	
W228048		2.4	17	1.1	13.7	14	17.7	
W228049		2.1	8	0.5	11.2	5	9.6	
W228050		2.1	8	0.6	11.4	8	9.9	
W228051		2.5	14	1.0	13.7	8	15.6	
W228052		2.1	9	0.7	10.9	13	11.4	
W228053		6.5	83	8.2	18.7	48	72.8	
W228054		2.1	12	0.7	11.5	7	13.4	
W228055		1.8	7	0.4	8.6	10	8.9	
W228056		2.0	9	0.5	10.5	288	11.5	
W228057		2.1	15	0.8	12.3	21	17.7	
W228058		2.7	37	2.7	20.8	33	42.8	
W228059		3.2	69	5.7	21.9	61	74.8	
W228060		2.5	24	2.1	11.3	30	26.3	
W228061		2.4	26	2.4	10.7	26	29.0	
W228062		2.1	26	1.9	12.7	16	30.4	
W228063		2.1	25	2.1	12.0	32	29.6	
W228064		2.6	40	4.2	17.3	31	66.7	
W228065		2.3	23	1.8	11.6	24	27.7	
W228066		0.7	1	0.1	0.7	15	<0.5	
W228067		1.9	17	1.3	10.5	10	21.5	
W228068		6.3	30	19.8	15.1	22	31.1	1.370
W228069		2.1	24	0.7	11.9	6	29.6	
W228070		2.0	17	0.5	11.5	8	21.4	
W228071		1.9	10	0.2	8.5	6	13.1	
W228072		1.9	7	0.1	6.9	4	9.8	

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117325

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

CRU- 31	CRU- QC	LOG- 21	LOG- 21d
LOG- 23	PUL- 31	PUL- 31d	PUL- QC
SPL- 21	SPL- 21d	WEI- 21	WSH- 21
WSH- 22			

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- JUL- 2017
Account: RCM

CERTIFICATE WH17117344

Project: Nadaleen

P.O. No.: N17- 004

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 12- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

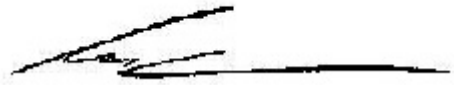
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
Ag- OG62	Ore Grade Ag - Four Acid	ICP- AES
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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VANCOUVER BC V6B 1L8

Finalized Date: 15-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117344

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA25 Au ppm 0.01	Ag-OG62 Ag ppm 1	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05
W228073		9.29	<0.01		0.03	1.44	52.4	150	0.45	0.07	30.0	0.09	22.4	4.4	22	5.48
W228074		7.09	<0.01		<0.01	0.05	<0.2	20	0.08	0.02	20.2	0.07	1.17	0.7	5	0.18
W228075		7.99	0.02		0.08	6.11	261	240	1.51	0.30	7.63	0.14	80.5	20.4	62	24.6
W228076		11.68	0.01		0.02	2.00	70.5	200	0.71	0.10	28.0	0.04	31.2	6.5	22	7.23
W228077		10.84	<0.01		0.02	1.34	44.2	190	0.40	0.07	30.2	0.07	21.5	4.4	16	5.41
W228078		11.90	<0.01		0.02	0.63	29.9	160	0.25	0.03	33.5	0.02	11.45	2.4	9	2.37
W228079		12.17	<0.01		0.02	0.38	25.6	100	0.12	0.02	34.4	0.04	7.74	1.7	6	1.19
W228080		11.58	0.01		0.02	0.76	40.1	120	0.27	0.04	32.5	0.03	13.15	3.0	13	2.56
W228081		12.47	<0.01		0.01	0.81	53.9	170	0.23	0.04	31.2	0.08	13.95	3.0	11	2.84
W228082		10.25	<0.01		0.01	1.23	296	200	0.22	0.06	30.2	0.08	19.75	4.4	16	4.48
W228083		<0.02	<0.01		0.01	1.10	311	210	0.32	0.05	30.2	0.09	17.75	4.0	16	3.93
W228084		12.49	<0.01		0.01	1.35	75.5	150	0.33	0.07	29.9	0.07	23.3	5.0	18	5.53
W228085		11.68	<0.01		0.01	0.76	42.1	1100	0.28	0.04	32.9	0.04	12.85	2.9	12	2.68
W228086		11.02	<0.01		0.01	0.72	34.0	140	0.23	0.04	32.1	0.06	12.70	2.7	10	2.84
W228087		0.27	0.50		0.09	3.52	2440	200	0.83	0.12	17.90	0.13	40.1	11.0	43	10.55
W228088		11.58	<0.01		0.03	1.14	25.2	160	0.33	0.06	30.8	0.07	16.05	3.9	14	4.61
W228089		8.80	<0.01	173	>100	0.78	28.9	180	0.28	0.04	32.2	0.09	13.50	3.1	12	2.90
W228090		7.51	<0.01	232	>100	1.06	32.7	210	0.27	0.06	32.6	0.08	17.95	4.1	13	4.16
W228091		8.05	<0.01		0.74	0.42	26.6	190	0.15	0.02	35.5	0.04	7.58	1.6	5	1.23
W228092		7.56	<0.01		0.47	0.64	49.6	370	0.25	0.04	32.8	0.06	11.00	2.3	7	1.60
W228093		3.35	<0.01		0.04	0.58	46.2	260	0.22	0.03	34.4	0.04	9.69	2.0	7	1.48
W228094		5.50	<0.01		0.02	0.51	34.3	120	0.22	0.03	34.0	0.04	10.00	1.7	6	1.63
W228095		8.61	0.03		0.02	0.65	61.3	170	0.25	0.04	33.9	0.04	11.05	2.2	8	2.02
W228096		6.06	<0.01		0.05	0.72	42.6	330	0.28	0.03	33.1	0.06	13.15	2.5	9	2.25
W228097		4.86	<0.01		0.02	0.69	58.7	210	0.30	0.04	34.6	0.07	12.95	2.3	8	1.95
W228098		7.62	<0.01		0.03	1.12	55.2	170	0.39	0.05	31.4	0.08	18.60	3.3	13	3.42
W228099		8.15	0.05		0.04	1.37	128.0	310	0.43	0.07	30.5	0.13	22.0	4.2	16	4.54
W228100		3.85	0.08		0.03	0.92	170.0	120	0.29	0.04	33.3	0.09	14.95	3.1	11	3.00
W228101		7.89	0.03		0.02	0.69	152.5	130	0.28	0.03	34.2	0.07	12.90	2.3	9	1.74
W228102		0.28	0.59		0.67	7.05	469	230	2.49	0.23	2.36	0.34	65.4	21.5	94	39.0
W228103		7.50	<0.01		0.03	0.84	59.6	130	0.31	0.04	34.6	0.06	14.95	2.7	10	2.78
W228104		3.89	<0.01		0.02	0.63	54.6	170	0.27	0.03	34.6	0.11	12.65	2.3	8	2.16
W228105		7.73	<0.01		0.03	2.71	124.0	230	0.86	0.14	25.6	0.07	37.2	8.6	27	12.65
W228106		8.16	0.01		0.01	0.60	46.4	120	0.24	0.03	33.3	0.03	9.65	2.1	7	1.80
W228107		7.08	<0.01		0.01	0.06	<0.2	30	0.07	0.02	20.6	0.05	1.05	0.6	1	0.27
W228108		7.52	<0.01		0.01	1.14	30.5	160	0.42	0.06	31.9	0.03	16.35	3.6	12	4.78

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117344

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1
W228073		12.6	0.99	3.99	0.07	0.8	1.105	0.018	0.68	11.0	14.5	0.58	229	1.18	0.02	2.1
W228074		1.7	0.45	0.21	0.07	<0.1	0.007	0.006	0.02	0.6	9.0	12.70	199	0.13	<0.01	0.2
W228075		56.7	3.57	17.55	0.13	3.0	7.42	0.060	2.95	47.9	27.2	1.77	465	3.52	0.03	9.2
W228076		18.2	1.50	5.53	0.09	1.0	2.04	0.025	0.96	17.3	13.7	1.12	413	0.83	0.02	2.9
W228077		12.3	0.91	3.87	0.07	0.7	0.542	0.017	0.64	11.1	11.5	0.51	208	0.74	0.01	2.0
W228078		6.4	0.48	1.80	0.08	0.3	0.656	0.009	0.29	6.0	9.2	0.41	141	0.46	0.01	0.9
W228079		4.4	0.31	1.11	0.08	0.2	0.660	<0.005	0.18	3.9	7.6	0.33	114	0.22	0.01	0.6
W228080		8.2	0.56	2.26	0.08	0.4	0.862	0.012	0.36	6.8	8.5	0.65	148	0.48	0.01	1.2
W228081		8.7	0.61	2.36	0.08	0.4	0.943	0.009	0.39	7.5	8.4	0.57	161	0.54	0.01	1.2
W228082		12.4	0.82	3.51	0.06	0.6	1.575	0.012	0.58	10.2	9.3	0.60	154	0.66	0.01	1.8
W228083		10.9	0.74	3.08	0.10	0.6	1.485	0.015	0.52	9.3	8.9	0.59	153	0.54	0.01	1.6
W228084		14.4	0.90	3.92	0.08	0.7	1.650	0.017	0.64	11.8	9.4	0.49	123	1.04	0.01	2.1
W228085		8.1	0.56	2.13	0.08	0.4	1.395	0.009	0.35	6.6	6.8	0.57	165	0.46	0.01	1.1
W228086		7.5	0.51	2.05	0.07	0.4	1.185	0.008	0.34	6.3	7.0	0.53	141	0.35	0.01	1.1
W228087		42.5	2.93	9.78	0.10	1.9	3.58	0.042	1.69	19.6	11.8	1.35	1160	1.64	0.02	6.1
W228088		10.6	0.72	3.17	0.08	0.5	0.606	0.009	0.54	8.3	8.8	0.53	169	0.63	0.02	1.7
W228089		377	0.71	2.22	0.06	0.4	0.473	0.007	0.37	6.8	6.8	0.36	132	0.71	0.01	1.1
W228090		687	0.78	2.71	0.08	0.5	0.419	0.021	0.50	8.4	4.3	0.45	219	1.01	0.01	0.6
W228091		8.1	0.40	1.03	0.07	0.2	0.425	0.010	0.18	3.7	1.7	0.34	210	0.63	0.01	0.6
W228092		8.7	0.48	1.57	0.07	0.3	1.550	0.010	0.27	5.3	2.3	0.57	162	0.46	0.01	0.9
W228093		6.7	0.46	1.43	0.08	0.3	1.415	0.010	0.25	4.8	2.3	0.54	168	0.44	0.01	0.8
W228094		5.5	0.38	1.27	0.07	0.2	1.105	0.006	0.23	4.6	2.7	0.43	129	0.26	0.01	0.7
W228095		7.0	0.51	1.58	0.07	0.3	1.970	0.011	0.29	5.2	2.8	0.46	194	0.46	0.01	0.9
W228096		7.8	0.53	1.78	0.09	0.3	1.230	0.009	0.32	6.0	3.6	0.37	156	0.41	0.01	1.0
W228097		7.7	0.61	1.71	0.08	0.3	1.030	0.010	0.29	5.8	3.3	0.48	242	0.51	0.01	1.0
W228098		11.4	0.83	2.69	0.08	0.5	1.295	0.013	0.52	9.3	4.8	0.73	200	0.60	0.01	1.4
W228099		14.9	1.04	3.22	0.09	0.6	2.66	0.016	0.62	11.0	6.2	0.78	372	0.90	0.01	1.8
W228100		10.8	0.80	2.20	0.08	0.4	2.53	0.011	0.40	6.6	3.7	0.57	543	0.61	0.01	1.2
W228101		7.7	0.70	1.66	0.07	0.4	16.25	0.012	0.29	5.3	2.1	0.48	387	0.50	0.01	0.9
W228102		66.8	6.52	16.70	0.14	2.5	3.22	0.070	3.37	31.6	20.3	0.81	647	4.63	0.03	8.9
W228103		8.7	0.68	2.01	0.07	0.4	1.810	0.012	0.38	7.0	3.6	0.50	243	0.51	0.01	1.1
W228104		7.3	0.55	1.62	0.07	0.3	1.335	0.010	0.29	5.9	2.8	0.48	201	0.44	0.01	0.9
W228105		26.6	1.92	6.63	0.10	1.3	3.14	0.027	1.28	20.7	11.0	1.02	413	1.53	0.02	3.8
W228106		6.3	0.48	1.54	0.06	0.3	1.105	0.008	0.28	4.8	2.5	0.36	262	0.24	0.01	0.9
W228107		1.4	0.46	0.17	0.09	<0.1	0.013	<0.005	0.02	0.5	1.2	12.75	201	0.17	<0.01	0.1
W228108		10.4	0.80	2.79	0.09	0.6	1.040	0.012	0.55	8.1	5.3	0.45	170	0.26	0.01	1.6

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VANCOUVER BC V6B 1L8

Finalized Date: 15- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117344

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005
W228073		8.0	260	4.9	29.9	0.003	0.91	0.29	3.5	1	0.5	1600	0.15	<0.05	2.51	0.080
W228074		1.7	170	1.3	1.0	<0.002	<0.01	<0.05	0.1	1	<0.2	50.7	<0.05	<0.05	0.07	<0.005
W228075		35.0	250	20.0	137.5	0.009	3.43	1.29	14.0	2	2.4	415	0.70	0.10	10.70	0.350
W228076		10.9	190	6.6	44.4	<0.002	1.24	0.32	4.9	1	0.8	1570	0.22	<0.05	3.48	0.111
W228077		7.5	270	4.9	28.4	0.002	0.85	0.18	3.1	1	0.6	1300	0.15	<0.05	2.56	0.073
W228078		3.4	260	2.6	13.0	0.002	0.43	0.14	1.7	1	0.3	1765	0.07	<0.05	1.22	0.035
W228079		2.2	400	1.8	7.7	0.002	0.30	0.09	1.1	1	0.2	1505	<0.05	<0.05	0.80	0.023
W228080		5.4	320	3.3	15.7	0.003	0.50	0.24	1.8	1	0.3	1320	0.09	<0.05	1.48	0.045
W228081		4.9	310	4.1	16.4	0.003	0.55	0.25	2.0	1	0.3	1345	0.09	<0.05	1.60	0.048
W228082		6.9	190	4.6	25.7	<0.002	0.85	0.30	2.7	1	0.5	1390	0.14	0.05	2.20	0.069
W228083		6.4	170	4.0	22.7	0.003	0.77	0.28	2.6	1	0.4	1400	0.12	<0.05	1.97	0.063
W228084		8.2	140	5.2	29.6	0.005	0.93	0.23	3.1	1	0.6	1480	0.16	<0.05	2.58	0.078
W228085		4.2	310	3.0	15.5	0.002	0.53	0.17	1.9	1	0.3	1685	0.08	<0.05	1.46	0.044
W228086		4.0	640	2.8	14.9	<0.002	0.47	0.22	1.8	1	0.3	1720	0.09	<0.05	1.37	0.042
W228087		24.4	380	8.5	78.8	<0.002	2.49	9.81	8.6	2	1.4	701	0.43	<0.05	5.76	0.264
W228088		6.2	180	4.2	24.5	0.002	0.66	0.20	2.5	1	0.4	1835	0.13	<0.05	2.04	0.065
W228089		4.9	440	3.1	16.7	0.011	0.48	0.16	2.1	1	0.3	1990	0.07	<0.05	1.51	0.046
W228090		10.6	160	8.2	22.8	0.006	0.69	0.26	2.6	1	0.5	1900	0.06	<0.05	2.10	0.064
W228091		3.8	220	3.8	7.6	0.002	0.30	0.17	1.2	1	0.3	1960	<0.05	<0.05	0.82	0.025
W228092		3.3	520	3.6	11.7	<0.002	0.46	0.24	1.8	1	0.3	1950	0.06	<0.05	1.25	0.038
W228093		3.0	430	3.1	10.7	0.002	0.41	0.23	1.6	1	0.3	1810	0.06	<0.05	1.13	0.034
W228094		2.3	420	2.7	9.9	<0.002	0.35	0.17	1.5	1	0.3	1580	0.05	<0.05	0.99	0.029
W228095		3.4	160	3.3	13.4	0.002	0.44	0.65	1.7	1	0.3	1430	0.07	<0.05	1.24	0.038
W228096		3.7	270	3.4	15.0	<0.002	0.49	0.28	1.9	1	0.3	1885	0.07	<0.05	1.37	0.043
W228097		3.7	510	3.4	14.0	0.002	0.51	0.28	2.0	1	0.3	2170	0.07	<0.05	1.36	0.040
W228098		5.6	240	4.5	23.0	0.002	0.69	0.28	3.0	1	0.5	1850	0.10	<0.05	2.04	0.061
W228099		7.5	560	6.0	27.4	0.004	0.91	1.06	3.3	1	0.5	1715	0.14	<0.05	2.57	0.079
W228100		5.2	330	4.4	18.5	<0.002	0.60	1.10	2.4	1	0.5	1615	0.09	<0.05	1.67	0.054
W228101		3.6	1870	4.8	12.5	<0.002	0.48	0.70	1.9	1	0.4	2230	0.07	<0.05	1.31	0.040
W228102		44.2	230	52.0	165.0	0.003	4.62	5.16	19.9	1	2.6	94.0	0.59	<0.05	10.25	0.414
W228103		4.1	280	7.5	17.4	0.002	0.57	0.47	2.0	1	0.4	1570	0.08	<0.05	1.65	0.048
W228104		3.4	430	5.5	12.8	0.002	0.47	0.37	1.7	1	0.3	1580	0.06	<0.05	1.26	0.037
W228105		14.0	290	12.5	54.4	0.003	1.71	1.00	6.2	1	1.0	1415	0.28	<0.05	5.36	0.155
W228106		2.7	370	4.4	11.6	<0.002	0.42	0.45	1.6	1	0.3	1560	0.06	<0.05	1.18	0.035
W228107		1.3	180	1.4	1.1	<0.002	<0.01	0.07	0.1	<1	<0.2	47.2	<0.05	<0.05	0.06	<0.005
W228108		5.3	150	5.7	24.3	<0.002	0.75	0.36	2.7	1	0.4	1720	0.11	<0.05	1.97	0.067

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117344

Sample Description	Method Analyte Units LOR	ME- MS61 Tl ppm 0.02	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5
W228073		2.14	2.5	25	1.4	10.6	37	25.8
W228074		0.02	0.7	2	0.1	0.7	16	<0.5
W228075		9.87	3.4	103	9.8	24.7	78	104.5
W228076		2.67	1.9	30	2.1	18.3	26	34.7
W228077		1.04	2.3	20	0.5	12.8	23	23.2
W228078		0.48	2.2	10	0.5	10.1	7	11.6
W228079		0.35	2.0	6	0.5	8.7	5	8.1
W228080		0.73	2.1	12	0.6	10.5	7	14.3
W228081		0.64	2.3	13	0.5	11.3	19	14.7
W228082		1.41	2.8	20	1.6	13.6	15	20.7
W228083		1.28	2.6	18	1.3	13.2	12	18.6
W228084		1.26	3.1	22	1.4	15.3	13	25.0
W228085		0.73	2.2	13	0.6	10.3	6	14.1
W228086		0.59	2.4	12	0.6	11.1	7	13.7
W228087		10.50	2.2	65	5.7	15.6	48	67.5
W228088		0.46	2.2	17	0.4	10.5	12	19.0
W228089		0.43	2.3	13	1440	11.2	11	15.3
W228090		0.57	2.6	18	640	11.4	17	19.7
W228091		0.40	1.9	8	7.4	9.7	7	8.0
W228092		1.06	2.4	12	4.1	10.5	10	11.9
W228093		1.07	2.2	10	0.9	9.8	6	11.4
W228094		1.06	2.1	9	0.5	10.6	7	9.8
W228095		2.12	2.1	12	0.9	10.6	6	11.4
W228096		1.58	2.3	13	0.9	11.2	9	12.6
W228097		1.59	2.5	13	0.8	11.4	10	14.9
W228098		2.11	2.5	20	0.9	13.4	16	19.5
W228099		3.53	2.9	24	1.5	12.7	20	25.0
W228100		3.08	2.1	17	1.1	10.2	16	18.1
W228101		2.09	2.4	13	0.7	11.0	9	19.5
W228102		12.95	2.0	144	10.8	19.6	105	97.4
W228103		1.48	2.6	14	0.6	12.1	9	14.5
W228104		1.29	2.6	11	0.4	11.3	19	14.3
W228105		4.88	3.4	44	1.7	17.1	35	51.8
W228106		1.08	2.1	10	0.4	7.6	8	11.4
W228107		<0.02	0.5	2	0.1	0.7	16	<0.5
W228108		1.44	2.0	18	0.6	10.3	15	21.3

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 15- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17117344

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Ag- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- JUL- 2017
Account: RCM

CERTIFICATE WH17117351

Project: Nadaleen

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 12- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

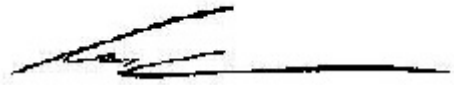
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117351

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229037		11.59	0.06	4.53	327	230	1.16	0.17	2.83	0.03	45.8	14.0	54	18.10	38.0	4.37
W229038		11.65	0.07	6.20	425	200	1.88	0.22	1.96	0.03	61.8	20.3	71	25.6	50.7	4.59
W229039		11.58	0.06	5.19	2850	330	1.13	0.18	3.35	0.08	49.1	15.5	59	13.55	49.3	4.49
W229040		11.11	0.06	6.24	408	300	1.94	0.22	2.15	0.08	59.9	19.7	72	25.1	47.7	4.45
W229041		11.75	0.05	4.98	96.4	340	1.33	0.19	2.34	0.05	52.1	15.6	60	19.60	42.7	4.39
W229042		11.59	0.06	5.18	110.5	380	1.59	0.19	1.92	0.02	54.5	16.7	62	21.3	44.1	4.06
W229043		6.28	0.07	5.75	127.0	160	1.86	0.22	1.79	0.11	59.0	18.6	66	26.9	43.9	4.93
W229044		0.30	0.66	6.46	442	230	2.45	0.24	2.19	0.33	62.9	22.8	106	38.3	65.1	6.27
W229045		10.03	0.06	5.65	269	160	1.96	0.21	2.30	0.13	56.6	19.2	64	25.5	43.3	5.10
W229046		7.98	0.06	5.37	282	180	2.23	0.16	2.56	0.16	51.5	18.5	63	28.0	40.7	3.88
W229047		5.89	0.07	7.76	647	220	2.77	0.26	1.75	0.13	73.3	21.6	85	34.8	56.9	5.78
W229048		6.99	0.02	0.08	0.9	30	0.08	0.04	20.8	0.07	1.32	0.8	1	0.27	2.8	0.47
W229049		7.87	0.07	8.47	1500	200	2.84	0.26	1.10	0.14	75.4	27.7	103	40.3	64.4	6.59
W229050		8.25	0.04	6.28	254	190	2.52	0.16	6.33	0.03	57.6	18.2	76	38.1	40.2	4.70
W229051		<0.02	0.05	6.44	254	190	2.81	0.17	6.28	0.05	60.1	18.8	78	39.7	41.4	4.79
W229052		10.89	0.05	7.07	2210	270	2.45	0.19	2.16	0.45	64.4	19.8	85	35.0	48.3	5.07
W229053		10.82	0.04	7.90	277	230	2.58	0.24	0.55	0.03	68.1	23.6	96	38.2	56.0	5.86
W229054		7.01	0.01	0.06	1.4	40	0.07	0.02	20.4	0.06	1.17	0.7	1	0.28	1.9	0.45
W229055		5.55	0.07	7.75	2320	280	2.55	0.21	4.04	0.20	65.3	22.3	95	38.9	54.2	4.93
W229056		11.34	0.05	5.90	541	180	1.71	0.16	6.41	0.07	54.5	16.1	66	25.9	37.8	4.20
W229057		11.17	0.05	4.61	196.0	170	1.14	0.16	5.90	0.14	51.3	12.1	55	17.90	32.9	3.66
W229058		11.57	0.09	5.80	492	190	1.36	0.22	2.42	0.17	57.8	14.8	62	21.7	44.1	4.74
W229059		11.47	0.17	5.13	382	170	1.25	0.20	3.05	0.25	52.5	12.7	57	18.70	38.2	4.22
W229060		9.55	0.07	6.06	283	170	1.54	0.25	2.67	0.08	60.1	14.7	62	23.8	43.4	4.31
W229061		11.27	0.05	5.72	154.0	170	1.60	0.21	3.84	<0.02	56.3	15.2	60	23.9	44.9	4.90
W229062		11.83	0.06	5.62	271	160	1.36	0.20	3.31	0.02	54.4	14.6	60	22.1	44.7	4.40
W229063		10.56	0.07	5.36	250	170	1.50	0.20	3.11	0.06	52.8	14.2	57	22.6	40.6	4.14
W229064		11.97	0.08	5.36	215	170	1.40	0.21	2.23	0.11	53.0	14.6	59	20.6	39.2	4.02
W229065		11.28	0.07	5.55	321	160	1.45	0.21	2.28	0.09	52.7	14.3	60	18.75	42.9	4.25
W229066		5.45	0.06	5.47	281	170	1.28	0.20	3.21	0.04	52.0	12.2	60	16.75	44.5	4.69
W229067		2.82	0.06	5.54	309	170	1.36	0.20	3.15	0.05	54.1	13.3	59	17.40	45.4	4.69
W229068		7.38	0.06	5.13	647	170	1.21	0.20	2.99	0.07	54.0	13.8	54	15.15	33.4	4.41
W229069		4.90	0.07	5.56	3880	180	1.25	0.20	3.08	0.08	51.3	11.8	58	15.20	42.3	4.66
W229070		7.14	0.01	0.07	8.7	20	<0.05	0.03	22.4	0.07	1.19	0.8	2	0.15	2.7	0.50
W229071		9.73	0.09	6.78	3780	200	1.67	0.25	2.61	0.11	64.8	16.2	69	26.8	49.5	5.42
W229072		0.29	0.09	3.65	2620	210	0.91	0.13	19.00	0.12	37.8	10.1	45	9.95	41.2	3.06

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117351

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229037		11.80	0.10	2.3	0.840	0.047	2.13	22.2	40.9	1.26	705	0.29	0.02	7.4	26.8	380
W229038		16.30	0.11	2.9	1.460	0.057	3.03	29.2	22.1	1.19	494	0.26	0.02	9.9	34.2	460
W229039		12.80	0.11	2.2	6.15	0.050	2.31	23.9	18.2	1.73	738	0.33	0.02	7.9	28.1	540
W229040		16.20	0.12	2.7	1.355	0.060	2.99	29.3	28.9	1.22	611	0.37	0.02	9.2	33.3	350
W229041		12.95	0.12	2.4	0.719	0.052	2.15	24.6	61.2	1.21	578	0.36	0.02	7.9	28.7	500
W229042		13.75	0.11	2.5	1.170	0.054	2.26	26.0	52.1	1.04	409	0.34	0.02	8.3	29.5	450
W229043		15.00	0.11	2.6	0.915	0.057	2.71	28.6	32.5	1.03	399	0.40	0.02	8.4	32.1	420
W229044		18.10	0.13	2.4	3.19	0.062	3.34	30.4	20.6	0.76	639	4.70	0.03	8.5	48.4	230
W229045		15.15	0.13	2.6	2.07	0.061	2.69	27.6	17.5	1.17	560	0.54	0.02	8.2	31.2	330
W229046		14.45	0.12	2.0	2.84	0.056	2.60	25.6	15.9	1.18	760	0.81	0.02	6.8	26.9	160
W229047		20.4	0.15	2.8	5.51	0.070	3.71	36.0	15.9	1.00	979	0.61	0.02	9.3	36.6	230
W229048		0.30	0.12	<0.1	0.010	<0.005	0.03	0.6	1.2	12.80	206	0.13	0.01	0.3	2.2	190
W229049		23.7	0.15	2.9	6.78	0.076	4.13	36.2	18.3	0.67	577	0.29	0.02	11.3	42.0	220
W229050		17.00	0.14	2.3	2.95	0.061	3.04	28.7	18.3	1.20	536	0.34	0.02	7.3	32.7	230
W229051		17.60	0.13	2.3	3.03	0.065	3.14	30.0	19.7	1.23	541	0.22	0.02	7.5	32.9	240
W229052		19.35	0.13	2.4	26.4	0.064	3.47	32.0	17.0	0.72	337	0.28	0.02	8.2	33.8	230
W229053		20.9	0.14	2.7	3.70	0.064	3.91	33.5	19.8	0.65	227	0.22	0.02	8.9	38.2	250
W229054		0.23	0.13	<0.1	0.016	<0.005	0.02	0.6	1.1	12.40	197	0.12	<0.01	0.1	1.9	160
W229055		22.2	0.16	2.7	12.05	0.071	3.98	31.2	15.9	0.80	880	0.26	0.03	9.3	36.5	250
W229056		15.25	0.11	2.2	2.13	0.055	2.87	26.9	15.3	1.28	877	0.55	0.02	7.2	27.2	300
W229057		12.15	0.10	2.1	1.625	0.051	2.23	24.8	17.4	1.26	779	1.28	0.02	6.8	22.5	400
W229058		14.65	0.15	2.6	1.660	0.054	2.79	28.3	18.5	1.25	620	1.43	0.03	8.1	33.0	520
W229059		12.95	0.14	2.5	1.590	0.061	2.43	26.0	19.0	1.44	824	1.01	0.03	7.8	27.1	400
W229060		15.55	0.18	2.7	1.490	0.056	2.87	29.8	27.1	1.38	613	0.43	0.03	8.4	28.6	480
W229061		15.00	0.18	2.7	0.559	0.061	2.62	28.0	32.4	1.82	699	0.31	0.03	9.0	29.9	470
W229062		14.30	0.13	2.7	0.461	0.057	2.62	26.8	21.3	1.69	665	0.33	0.03	8.8	28.5	470
W229063		13.70	0.15	2.6	0.985	0.057	2.45	26.1	20.5	1.40	605	0.35	0.03	8.1	28.2	420
W229064		13.80	0.16	2.6	1.165	0.051	2.54	26.4	20.2	1.20	472	0.39	0.03	8.0	27.1	430
W229065		14.10	0.15	2.5	1.450	0.052	2.58	26.1	17.2	1.23	577	0.45	0.03	8.5	27.9	410
W229066		14.15	0.14	2.5	1.145	0.056	2.60	25.5	16.3	1.66	647	0.34	0.03	8.3	27.3	440
W229067		14.35	0.15	2.6	1.235	0.058	2.63	26.4	16.4	1.63	647	0.37	0.03	8.5	28.8	430
W229068		12.90	0.13	2.5	1.575	0.050	2.41	26.6	15.6	1.57	590	0.72	0.02	7.9	23.5	430
W229069		14.05	0.12	2.6	1.700	0.044	2.70	25.4	11.3	1.63	892	0.30	0.02	8.7	26.8	570
W229070		0.25	0.20	<0.1	0.007	0.005	0.02	0.6	1.0	13.75	233	0.13	0.01	0.2	1.6	180
W229071		17.15	0.13	3.1	3.85	0.059	3.22	32.2	14.3	1.51	741	0.36	0.03	9.9	32.7	480
W229072		9.35	0.09	1.8	3.47	0.037	1.75	19.5	9.4	1.45	1240	1.58	0.02	5.7	22.7	380

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117351

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229037		10.6	97.4	<0.002	3.53	1.37	12.6	1	1.4	104.5	0.53	0.07	6.57	0.414	5.34	1.3
W229038		15.0	136.5	<0.002	4.20	3.06	17.0	1	1.9	98.8	0.70	0.05	8.94	0.502	7.79	1.8
W229039		10.4	96.8	<0.002	3.91	15.25	15.0	1	2.8	196.0	0.58	0.05	6.91	0.433	26.3	1.5
W229040		17.4	132.0	<0.002	3.87	2.72	17.2	1	1.8	116.5	0.66	0.06	8.72	0.463	5.83	1.7
W229041		10.4	100.5	<0.002	3.90	0.56	13.8	1	1.6	196.5	0.58	0.05	7.27	0.438	5.52	1.5
W229042		13.3	105.5	<0.002	3.66	0.54	14.4	1	1.7	127.0	0.60	<0.05	7.61	0.428	7.39	1.6
W229043		16.0	126.0	<0.002	4.63	0.50	15.7	1	1.7	87.9	0.62	0.06	8.23	0.419	4.32	1.8
W229044		47.2	159.0	0.003	4.50	5.47	19.1	1	2.7	85.6	0.60	<0.05	8.74	0.399	12.50	1.7
W229045		14.9	127.0	0.002	4.58	1.87	15.7	1	1.7	83.1	0.59	0.05	8.25	0.401	6.38	1.7
W229046		16.8	117.5	0.002	2.97	1.46	15.8	1	1.9	81.6	0.50	<0.05	6.93	0.307	6.52	1.4
W229047		16.7	171.5	0.003	5.39	7.84	21.2	1	2.1	97.6	0.69	<0.05	10.30	0.412	19.40	2.1
W229048		1.1	1.4	<0.002	<0.01	0.06	0.2	1	0.2	48.5	<0.05	<0.05	0.09	<0.005	0.05	0.5
W229049		18.1	191.5	0.002	6.49	23.1	22.5	1	2.5	77.3	0.81	0.05	10.35	0.505	29.0	1.9
W229050		11.0	141.0	0.003	3.29	1.13	19.2	1	1.8	216	0.53	<0.05	7.67	0.334	9.81	1.6
W229051		11.0	147.5	0.004	3.32	1.10	19.9	1	1.8	218	0.55	<0.05	8.09	0.347	10.45	1.7
W229052		11.5	157.0	0.002	4.60	122.0	20.2	1	2.0	97.4	0.60	0.12	8.65	0.394	141.0	1.8
W229053		12.7	172.0	0.003	5.63	4.73	23.9	1	2.2	70.6	0.68	<0.05	9.63	0.435	10.45	1.9
W229054		1.0	1.3	<0.002	<0.01	0.08	0.2	<1	<0.2	47.1	<0.05	<0.05	0.08	<0.005	0.12	0.9
W229055		12.2	167.0	0.003	4.35	47.8	26.7	1	2.3	141.0	0.67	0.08	9.24	0.444	63.9	1.8
W229056		13.0	122.0	0.002	2.89	2.51	16.3	1	1.7	165.0	0.51	<0.05	7.43	0.335	7.23	1.6
W229057		10.7	98.8	0.002	2.68	0.67	13.0	1	1.4	173.5	0.51	0.05	6.68	0.308	4.70	1.5
W229058		24.1	127.0	<0.002	4.05	3.03	14.4	1	1.8	113.5	0.59	0.05	8.22	0.418	6.88	1.8
W229059		35.8	113.0	0.002	3.23	2.11	12.5	1	1.6	106.5	0.56	<0.05	7.47	0.391	4.23	1.7
W229060		17.1	135.5	0.002	3.58	1.78	15.6	1	1.9	106.5	0.63	0.05	8.46	0.419	4.57	1.8
W229061		12.1	127.5	<0.002	3.82	0.42	15.0	1	1.8	135.0	0.64	0.05	7.94	0.449	4.71	1.7
W229062		11.4	129.0	<0.002	3.52	1.58	14.4	1	1.8	101.0	0.63	<0.05	7.68	0.449	4.21	1.6
W229063		12.7	122.5	<0.002	3.31	0.94	13.7	1	1.7	85.1	0.58	<0.05	7.48	0.406	3.32	1.6
W229064		14.1	123.5	<0.002	3.34	0.74	13.7	1	1.7	86.8	0.58	0.05	7.44	0.397	3.79	1.6
W229065		17.4	126.0	<0.002	3.64	4.31	14.1	1	1.8	88.4	0.58	0.06	7.71	0.426	5.57	1.7
W229066		10.6	126.0	<0.002	3.87	1.45	14.3	1	1.7	117.0	0.59	<0.05	7.32	0.442	4.71	1.5
W229067		11.4	129.0	<0.002	3.92	1.57	14.8	1	1.8	115.0	0.61	<0.05	7.60	0.446	5.90	1.6
W229068		13.2	114.5	<0.002	3.57	3.92	12.3	1	1.7	142.0	0.57	<0.05	7.31	0.383	6.48	1.6
W229069		11.7	129.5	<0.002	4.06	17.00	14.5	1	1.6	134.5	0.60	<0.05	7.48	0.447	8.90	1.5
W229070		2.3	1.0	<0.002	<0.01	0.10	0.2	1	<0.2	52.5	<0.05	<0.05	0.08	0.005	0.05	0.8
W229071		15.5	158.5	<0.002	5.12	21.4	16.2	1	2.1	108.5	0.70	<0.05	9.21	0.502	23.6	2.0
W229072		8.3	79.7	0.002	2.59	9.19	9.0	2	1.4	729	0.40	0.06	4.90	0.266	10.25	2.2

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17117351

Sample Description	Method / Analyte / Units / LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W229037		110	2.4	15.4	56	81.3	0.01
W229038		139	4.5	20.1	59	123.5	0.06
W229039		118	5.6	15.8	64	81.3	0.60
W229040		135	3.3	17.5	69	95.2	0.09
W229041		117	1.8	16.4	68	85.8	<0.01
W229042		117	1.9	16.4	60	88.8	<0.01
W229043		120	1.3	18.0	70	92.4	0.01
W229044		138	10.8	17.3	102	86.2	0.58
W229045		118	5.2	16.9	77	87.1	0.01
W229046		108	3.5	15.3	101	71.3	0.01
W229047		149	10.9	20.4	87	96.6	0.40
W229048		2	0.1	0.8	17	1.1	<0.01
W229049		177	12.5	21.2	70	103.0	2.16
W229050		126	4.9	18.9	76	79.5	0.03
W229051		129	5.1	19.4	82	83.1	0.03
W229052		145	6.5	17.5	85	85.7	12.65
W229053		165	7.6	20.0	70	91.4	0.12
W229054		2	0.1	0.7	16	<0.5	0.01
W229055		168	8.5	19.8	85	94.9	9.58
W229056		116	3.3	17.7	71	85.7	0.20
W229057		90	2.7	16.8	98	75.0	0.01
W229058		115	4.2	19.9	108	95.0	0.15
W229059		103	3.4	18.0	103	93.0	0.09
W229060		116	3.3	20.4	76	101.0	0.15
W229061		118	2.2	20.8	65	109.5	0.01
W229062		116	3.2	19.7	59	103.0	0.03
W229063		109	2.5	19.0	67	97.5	0.04
W229064		107	1.8	18.7	81	94.8	0.02
W229065		112	4.3	18.9	75	99.2	0.33
W229066		117	4.7	18.5	67	97.0	0.05
W229067		118	4.8	18.8	64	98.2	0.05
W229068		98	5.9	21.1	74	92.5	0.17
W229069		116	6.6	20.0	70	97.2	0.92
W229070		2	0.1	0.8	19	0.7	0.01
W229071		138	7.2	22.3	83	114.5	0.80
W229072		77	5.2	17.3	50	70.5	0.50

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 6- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17117351

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- JUL- 2017
Account: RCM

CERTIFICATE WH17118111

Project: Nadaleen

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

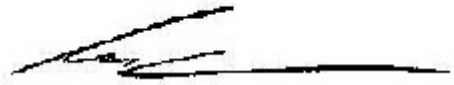
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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VANCOUVER BC V6B 1L8

Finalized Date: 11-JUL-2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17118111

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228109		7.99	0.01	0.44	14.6	120	0.20	0.02	35.5	0.03	7.10	1.9	3	1.49	4.5	0.36
W228110		7.72	0.01	1.00	31.9	160	0.42	0.05	31.4	0.04	13.90	3.8	9	4.21	9.2	0.70
W228111		7.36	0.01	1.09	55.8	1010	0.39	0.06	31.7	0.03	15.05	4.0	10	4.88	9.7	0.79
W228112		5.58	0.04	4.61	1485	200	1.01	0.22	13.45	0.11	50.6	17.1	46	17.95	43.9	2.69
W228113		5.04	0.01	0.05	2.8	30	0.05	0.02	20.4	0.06	1.09	0.7	<1	0.13	2.1	0.44
W228114		2.87	0.02	3.38	551	110	0.86	0.13	19.50	<0.02	35.6	12.3	32	13.95	24.4	2.67
W228115		7.51	0.05	3.04	415	170	0.87	0.13	7.81	0.05	37.1	9.5	32	10.55	24.9	2.81
W228116		7.35	0.05	3.59	154.5	180	1.17	0.14	2.33	0.05	38.1	11.4	43	14.85	25.2	3.06
W228117		8.25	0.06	5.16	218	170	2.04	0.22	10.00	0.02	50.4	15.5	51	19.45	43.2	3.85
W228118		8.09	0.05	4.48	91.8	220	1.58	0.19	14.35	<0.02	45.9	14.8	42	17.85	33.7	3.95
W228119		7.83	0.03	2.86	39.8	130	1.01	0.12	21.9	<0.02	30.9	9.5	29	11.30	21.6	2.26
W228120		7.48	0.04	4.11	236	170	1.27	0.19	16.65	0.02	44.0	12.5	38	13.20	32.3	2.73
W228121		8.71	0.04	3.89	176.5	140	1.24	0.21	17.60	0.03	44.8	13.9	33	15.85	29.4	3.09
W228122		8.40	0.04	4.67	233	160	1.36	0.23	16.50	0.04	47.1	12.8	40	20.4	35.6	2.94
W228123		<0.02	0.04	4.62	242	160	1.39	0.22	16.60	0.03	46.7	12.8	40	20.0	35.0	2.89
W228124		7.62	0.02	1.64	79.3	70	0.68	0.09	29.2	0.05	18.85	7.1	16	5.05	14.1	1.61
W228125		8.32	0.05	5.95	336	200	1.73	0.31	12.50	0.11	56.6	17.6	49	22.7	48.5	3.77
W228126		0.29	0.09	3.66	2650	210	1.04	0.15	19.15	0.11	37.9	11.7	41	10.60	42.8	3.05
W228127		8.89	0.04	3.39	139.0	140	1.07	0.19	22.4	0.05	34.2	13.2	29	11.95	26.1	2.58
W228128		8.20	0.03	3.84	160.0	150	1.31	0.19	18.65	0.03	42.3	9.5	34	15.95	27.6	2.34
W228129		4.47	0.03	2.53	181.5	110	1.10	0.11	25.0	<0.02	29.0	8.7	26	8.94	19.6	1.60
W228130		1.66	0.02	2.56	185.5	130	1.12	0.11	24.3	<0.02	28.1	8.2	27	9.15	21.2	1.50
W228131		6.77	0.04	3.57	239	130	1.48	0.15	20.7	<0.02	38.3	10.9	36	16.70	29.4	1.93
W228132		8.93	0.06	7.20	1260	220	2.28	0.30	3.11	0.05	70.6	19.2	67	32.8	57.3	4.84
W228133		4.97	<0.01	0.05	0.8	90	0.05	0.02	21.6	0.06	1.12	0.7	2	0.14	1.4	0.46
W228134		5.27	0.06	6.51	3640	220	1.95	0.26	3.25	0.07	63.1	18.2	62	25.4	48.2	4.62
W228135		5.86	0.08	8.07	317	250	2.76	0.35	1.76	0.11	75.6	22.7	78	39.9	57.6	5.56
W228136		7.21	0.07	8.39	217	270	2.86	0.36	1.95	0.07	79.7	23.6	73	47.0	61.3	5.71
W228137		6.00	0.08	7.70	1150	230	2.54	0.33	3.18	0.22	73.4	19.8	64	30.4	53.5	5.49
W228138		0.29	0.19	3.85	6410	210	1.02	0.15	12.20	0.14	40.8	12.5	44	11.25	36.9	2.92
W228139		6.66	0.05	8.20	440	250	2.72	0.35	2.90	0.26	77.7	17.1	71	36.5	59.8	5.33
W228140		8.22	0.10	8.85	197.5	270	3.10	0.37	2.36	0.24	83.8	24.2	76	37.3	63.2	5.91
W228141		4.27	0.06	8.98	190.0	280	3.00	0.42	1.33	0.19	81.3	17.9	77	38.4	49.9	5.42
W228142		5.49	0.06	8.70	239	270	2.92	0.40	1.70	0.09	83.9	22.5	76	34.6	57.0	5.78
W228143		6.26	0.08	8.41	213	270	2.97	0.37	2.23	0.16	80.1	19.1	72	34.0	56.7	6.11
W228144		7.18	0.08	8.81	265	270	2.95	0.40	0.88	0.13	83.5	24.3	81	35.5	58.9	6.02

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17118111

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	Hg-MS42	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228109		1.24	<0.05	0.3	0.447	0.005	0.20	4.0	2.1	0.30	182	0.16	0.01	0.7	2.3	130
W228110		2.71	0.05	0.5	0.949	0.015	0.48	7.6	4.8	0.54	173	0.29	0.01	1.6	5.5	130
W228111		2.96	<0.05	0.6	1.775	0.014	0.51	8.2	4.6	0.73	280	0.37	0.01	1.6	5.6	130
W228112		12.80	0.07	2.3	17.00	0.039	2.15	29.9	12.2	0.57	673	1.68	0.02	7.0	25.7	400
W228113		0.17	0.08	<0.1	0.012	0.005	0.02	0.5	0.9	12.50	193	0.10	<0.01	0.2	1.4	160
W228114		9.23	0.06	1.7	4.27	0.028	1.51	18.6	8.6	0.71	617	0.19	0.02	5.0	19.0	390
W228115		7.98	0.06	1.6	3.29	0.031	1.27	19.0	12.0	0.83	577	0.42	0.01	4.8	14.6	290
W228116		9.49	0.06	1.7	1.715	0.042	1.64	19.7	10.6	0.80	433	0.65	0.02	5.2	19.9	230
W228117		13.35	0.10	2.3	2.20	0.052	2.45	25.1	12.1	1.20	526	0.20	0.02	7.3	25.2	360
W228118		11.70	0.10	2.0	1.120	0.046	2.14	23.4	11.7	1.67	728	0.37	0.02	6.5	23.7	420
W228119		7.17	0.08	1.4	0.423	0.033	1.33	15.8	12.0	0.96	598	0.24	0.02	4.1	15.1	410
W228120		10.80	0.11	2.0	1.380	0.049	1.96	22.0	8.4	1.77	706	0.31	0.02	6.1	19.9	350
W228121		10.20	0.12	1.8	1.055	0.051	1.90	22.0	8.1	1.91	723	0.39	0.02	6.0	21.0	280
W228122		11.90	0.10	2.2	1.295	0.055	2.26	24.1	9.2	1.71	653	0.33	0.03	7.1	20.5	280
W228123		11.80	0.12	2.2	1.255	0.054	2.27	23.9	9.1	1.69	650	0.32	0.03	7.0	20.3	290
W228124		4.16	0.08	0.8	0.832	0.021	0.78	9.5	3.7	0.99	495	0.21	0.01	2.5	10.4	220
W228125		15.30	0.13	2.7	2.96	0.073	2.91	28.8	11.4	1.30	637	0.41	0.03	8.7	29.3	340
W228126		9.72	0.09	1.8	3.49	0.041	1.75	19.0	10.5	1.44	1210	1.68	0.02	6.2	25.4	410
W228127		8.74	0.10	1.7	1.205	0.041	1.64	17.9	7.7	1.18	520	0.34	0.02	5.2	20.8	250
W228128		9.94	0.11	1.9	0.792	0.046	1.86	21.1	8.7	1.51	523	0.30	0.02	6.1	16.5	350
W228129		6.58	0.11	1.3	0.760	0.029	1.20	14.5	5.4	0.90	597	0.23	0.02	3.8	14.3	400
W228130		6.60	0.10	1.3	0.859	0.028	1.21	14.0	5.5	0.87	629	0.23	0.02	3.9	13.6	370
W228131		9.70	0.11	1.8	0.973	0.037	1.73	19.5	8.6	0.98	534	0.33	0.02	5.4	19.0	430
W228132		19.30	0.15	3.2	3.33	0.076	3.38	33.7	20.0	1.68	572	0.35	0.03	12.4	36.8	570
W228133		0.20	0.16	<0.1	0.028	0.005	0.02	0.5	1.0	13.20	200	0.96	<0.01	0.2	1.7	210
W228134		17.10	0.15	2.9	4.28	0.063	3.15	30.6	14.4	1.61	697	0.31	0.03	10.6	33.3	570
W228135		21.5	0.15	3.5	3.25	0.090	3.87	36.8	17.7	1.21	313	0.52	0.03	12.5	43.3	540
W228136		22.5	0.16	3.6	1.600	0.090	4.08	38.2	21.1	1.32	323	0.48	0.03	13.2	45.1	560
W228137		20.5	0.15	3.1	2.88	0.077	3.64	35.9	17.4	1.95	911	0.87	0.03	11.9	39.0	560
W228138		10.40	0.10	2.0	14.60	0.036	1.86	21.1	13.2	2.62	1180	1.89	0.02	6.1	27.2	460
W228139		22.0	0.17	3.7	1.405	0.090	4.00	38.3	16.1	1.75	610	1.39	0.03	13.2	34.4	560
W228140		23.8	0.17	3.6	1.610	0.093	4.32	41.2	18.1	1.52	439	0.79	0.04	13.8	49.1	580
W228141		23.7	0.16	3.7	0.924	0.096	4.40	40.4	19.6	1.04	233	1.52	0.03	13.0	36.9	550
W228142		23.5	0.17	3.5	1.570	0.095	4.22	40.6	18.5	1.21	363	0.87	0.03	13.4	41.8	570
W228143		23.0	0.18	3.4	2.45	0.098	4.13	38.5	16.9	1.42	498	0.65	0.03	12.9	40.8	600
W228144		23.8	0.17	3.8	2.16	0.095	4.26	40.1	19.9	0.86	283	0.88	0.03	13.9	48.5	570

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17118111

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228109		1.7	8.8	<0.002	0.30	0.16	1.3	1	0.2	1880	0.05	0.06	0.70	0.025	0.38	1.6
W228110		4.0	21.4	<0.002	0.62	0.34	3.0	1	0.4	1660	0.11	<0.05	1.56	0.057	1.47	2.0
W228111		4.4	23.0	<0.002	0.69	0.33	3.2	1	0.4	1240	0.12	<0.05	1.69	0.061	3.28	2.0
W228112		15.7	96.7	0.006	2.84	5.95	10.6	<1	2.3	563	0.50	0.09	6.78	0.263	27.0	3.8
W228113		1.1	0.7	<0.002	0.01	<0.05	0.2	<1	<0.2	51.2	<0.05	<0.05	0.06	<0.005	0.03	0.6
W228114		5.7	69.2	<0.002	2.12	0.38	8.6	<1	1.2	606	0.36	<0.05	4.44	0.202	7.82	1.9
W228115		5.6	59.9	<0.002	2.05	2.66	7.3	<1	1.6	254	0.36	<0.05	4.65	0.215	8.25	1.3
W228116		12.6	74.5	<0.002	2.27	1.14	9.2	<1	1.3	69.8	0.39	<0.05	5.27	0.241	3.48	1.2
W228117		11.2	112.0	<0.002	2.60	1.25	13.2	2	1.8	318	0.51	<0.05	7.51	0.323	4.82	2.0
W228118		10.8	96.7	<0.002	2.34	0.45	10.8	2	1.4	434	0.47	0.05	6.93	0.268	2.74	2.3
W228119		5.5	58.7	<0.002	1.07	0.28	7.2	1	1.0	763	0.29	<0.05	3.95	0.175	1.15	1.8
W228120		8.7	88.0	<0.002	1.22	1.30	10.7	1	1.6	474	0.44	0.08	6.29	0.246	3.65	2.3
W228121		11.8	88.1	<0.002	1.64	0.79	10.4	2	1.3	486	0.43	0.07	6.27	0.232	2.24	1.8
W228122		12.1	106.0	<0.002	1.83	0.49	11.8	1	1.5	404	0.50	0.07	7.14	0.289	2.55	2.0
W228123		12.1	103.5	<0.002	1.77	0.47	11.7	1	1.5	405	0.50	0.08	7.18	0.287	2.54	2.0
W228124		8.1	35.8	<0.002	0.90	0.52	4.5	1	0.5	562	0.16	<0.05	2.58	0.098	1.43	1.4
W228125		15.8	136.0	<0.002	3.28	1.82	14.0	1	2.0	337	0.59	0.11	9.24	0.350	4.39	2.2
W228126		8.6	78.9	0.002	2.61	9.37	9.7	2	1.4	741	0.44	0.05	5.70	0.271	10.80	2.4
W228127		12.2	76.3	<0.002	1.81	0.68	8.3	2	1.2	583	0.37	0.05	5.46	0.203	2.21	1.9
W228128		8.5	87.7	<0.002	1.29	0.80	9.8	1	1.3	549	0.42	0.06	6.02	0.240	2.26	1.9
W228129		5.9	55.7	<0.002	0.79	1.13	7.0	1	0.9	836	0.27	<0.05	3.72	0.155	2.36	2.2
W228130		5.3	57.1	<0.002	0.71	1.26	6.8	1	0.9	747	0.27	<0.05	3.83	0.158	2.67	2.1
W228131		7.1	83.1	0.002	1.15	1.48	9.1	1	1.4	523	0.38	<0.05	5.40	0.217	3.09	2.5
W228132		16.3	179.0	<0.002	4.34	7.30	20.9	2	2.3	135.5	0.85	<0.05	11.50	0.551	9.18	2.2
W228133		1.3	0.9	<0.002	<0.01	<0.05	0.2	1	<0.2	49.4	<0.05	<0.05	0.07	<0.005	<0.02	0.5
W228134		14.4	157.5	<0.002	4.09	12.15	18.5	2	2.3	105.5	0.76	<0.05	10.05	0.508	10.40	2.1
W228135		28.4	196.0	0.002	5.54	2.53	22.7	1	2.7	93.0	0.89	<0.05	12.85	0.561	8.22	2.4
W228136		25.5	208	<0.002	5.52	0.92	23.3	2	2.8	103.5	0.91	<0.05	13.35	0.547	4.84	2.6
W228137		14.8	184.5	0.002	5.40	6.71	22.1	2	2.5	133.5	0.85	<0.05	12.15	0.500	7.46	2.3
W228138		11.4	84.6	<0.002	2.65	23.6	10.7	2	1.6	325	0.44	<0.05	6.37	0.270	46.5	7.0
W228139		11.0	204	<0.002	4.81	3.76	22.3	2	2.7	111.0	0.90	<0.05	13.10	0.528	5.53	2.6
W228140		30.7	213	0.002	5.57	1.57	24.2	1	3.0	105.5	0.92	0.05	13.65	0.536	4.13	2.7
W228141		19.1	213	<0.002	5.18	0.77	23.7	2	3.0	94.7	0.92	<0.05	13.95	0.535	3.41	2.7
W228142		21.1	206	<0.002	5.66	1.57	24.0	2	2.9	103.5	0.91	0.05	13.60	0.541	3.90	2.6
W228143		29.8	195.0	0.002	5.95	2.33	23.7	1	2.8	120.5	0.90	<0.05	13.10	0.514	4.44	2.6
W228144		20.4	206	<0.002	6.24	2.49	24.8	2	3.0	95.5	0.98	<0.05	13.95	0.568	4.80	2.7

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CERTIFICATE OF ANALYSIS WH17118111

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W228109		8	0.2	6.3	9	9.1	<0.01
W228110		17	0.4	9.8	15	18.8	0.01
W228111		18	0.7	10.3	14	20.3	<0.01
W228112		79	5.5	17.5	61	80.9	1.31
W228113		3	0.1	0.7	16	<0.5	<0.01
W228114		60	4.5	14.8	27	61.3	0.16
W228115		59	5.0	11.9	41	54.3	0.25
W228116		75	4.2	11.8	37	58.5	<0.01
W228117		93	4.0	18.4	40	78.2	0.01
W228118		75	1.1	18.3	36	70.7	<0.01
W228119		50	0.6	14.0	22	50.9	<0.01
W228120		68	1.9	18.0	33	69.4	0.11
W228121		63	1.7	17.5	34	66.7	0.03
W228122		77	1.3	17.4	58	78.1	0.01
W228123		77	1.4	17.6	57	78.9	0.02
W228124		26	1.0	10.1	39	29.2	0.03
W228125		100	4.5	17.9	128	99.3	<0.01
W228126		77	5.3	16.3	50	64.7	0.51
W228127		54	1.3	15.1	58	59.8	<0.01
W228128		65	1.1	15.7	40	70.0	<0.01
W228129		45	1.4	13.4	19	47.3	<0.01
W228130		44	1.4	13.0	19	49.3	0.01
W228131		63	2.1	15.5	27	73.8	0.01
W228132		144	6.5	22.8	64	113.5	0.52
W228133		2	0.1	0.8	16	<0.5	<0.01
W228134		130	7.2	21.5	60	103.5	0.69
W228135		162	5.4	23.8	85	120.5	0.04
W228136		159	2.3	25.4	84	127.0	<0.01
W228137		141	8.9	27.3	126	109.5	0.47
W228138		87	7.7	19.4	48	70.8	2.57
W228139		148	8.1	26.1	139	128.0	0.13
W228140		159	3.6	26.8	143	126.0	0.01
W228141		163	1.8	26.5	157	126.5	<0.01
W228142		158	4.2	26.3	97	123.5	0.01
W228143		153	2.4	26.1	113	118.5	0.01
W228144		164	5.2	28.0	120	131.0	0.04

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Finalized Date: 11- JUL- 2017
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CERTIFICATE OF ANALYSIS WH17118111

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

CRU- 31	CRU- QC	LOG- 21	LOG- 21d
LOG- 23	PUL- 31	PUL- 31d	PUL- QC
SPL- 21	SPL- 21d	WEI- 21	WSH- 21
WSH- 22			

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 7- JUL- 2017
Account: RCM

CERTIFICATE WH17118115

Project: Nadaleen

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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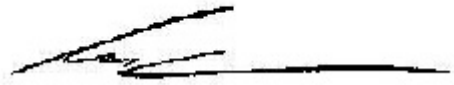
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17118115

Sample Description	Method	WEI-21	Au-AA25	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
W229073		7.65	0.01	0.06	8.39	282	210	3.40	0.28	0.97	0.07	73.5	25.9	92	53.6	64.5
W229074		8.92	<0.01	0.07	7.53	57.7	230	3.02	0.26	3.85	0.08	71.2	22.7	79	54.3	49.2
W229075		8.35	<0.01	0.02	3.05	25.1	120	1.04	0.11	21.5	0.05	32.8	8.8	31	15.05	22.2
W229076		10.84	<0.01	0.01	1.32	10.7	390	0.56	0.05	31.5	<0.02	15.50	5.0	14	5.99	11.6
W229077		10.83	0.01	0.02	5.58	129.5	190	2.00	0.24	12.60	<0.02	52.1	17.5	54	34.7	56.8
W229078		11.20	<0.01	0.02	7.54	102.0	240	2.63	0.33	5.18	0.11	78.2	19.1	61	45.4	56.4
W229079		5.52	0.01	0.01	7.94	111.5	250	2.87	0.34	5.14	0.11	84.5	20.5	63	49.4	56.3
W229080		10.71	0.24	0.03	4.14	521	350	1.09	0.21	19.25	0.07	44.8	15.1	34	13.60	31.7
W229081		11.63	0.01	0.02	4.32	977	170	1.15	0.19	19.70	0.07	54.2	16.3	32	12.20	32.7
W229082		10.79	<0.01	0.02	3.41	263	180	0.97	0.15	20.8	0.11	43.0	12.6	30	11.40	27.2
W229083		0.27	0.47	0.09	3.79	2600	210	0.92	0.14	18.75	0.12	38.4	11.4	43	10.55	44.6
W229084		11.56	0.06	0.01	0.99	121.5	140	0.35	0.06	33.7	<0.02	14.10	3.7	10	2.64	9.1
W229085		11.22	<0.01	0.02	1.40	69.2	160	0.47	0.07	34.5	0.02	19.75	4.6	13	4.51	11.7
W229086		11.28	0.11	0.01	0.95	111.5	120	0.33	0.05	33.8	0.09	13.80	3.2	10	2.92	8.5
W229087		11.17	0.07	0.01	1.08	1340	160	0.29	0.06	33.4	0.03	14.95	3.7	11	2.88	11.0
W229088		7.00	<0.01	<0.01	0.05	1.4	250	0.07	0.02	21.9	0.07	1.21	0.7	1	0.17	1.7
W229089		11.39	<0.01	0.01	0.57	53.7	130	0.27	0.03	34.3	0.02	9.78	2.1	7	1.74	5.5
W229090		10.38	<0.01	0.04	2.78	106.5	200	0.81	0.15	25.0	0.07	34.7	8.5	26	9.84	25.0
W229091		10.83	<0.01	0.02	2.13	55.5	420	0.74	0.12	29.7	0.06	29.0	6.3	20	8.18	17.8
W229092		10.72	<0.01	0.02	0.91	38.9	190	0.30	0.05	33.4	0.03	14.60	3.0	10	3.36	8.3
W229093		<0.02	0.01	0.02	0.93	39.4	190	0.32	0.05	34.5	0.04	14.95	3.1	10	3.43	8.2
W229094		11.27	<0.01	0.01	0.60	21.4	160	0.20	0.03	36.2	0.04	11.10	2.3	8	1.99	6.4
W229095		11.24	0.02	0.01	0.68	21.7	180	0.25	0.04	35.6	0.05	12.55	2.4	8	2.58	7.0
W229096		11.28	<0.01	0.02	0.71	17.5	200	0.27	0.04	36.0	0.05	12.10	2.8	6	2.68	11.2
W229097		11.09	<0.01	0.02	0.77	18.0	200	0.25	0.04	36.2	0.09	12.45	3.0	6	2.26	9.4
W229098		11.28	0.02	0.03	0.67	22.6	140	0.24	0.04	36.6	0.06	12.50	2.8	6	1.83	10.9
W229099		11.59	<0.01	0.01	0.73	23.2	130	0.25	0.04	36.0	0.05	12.65	2.7	6	2.59	6.8
W229100		11.17	<0.01	0.01	0.43	56.6	120	0.22	0.03	38.1	0.04	8.59	2.0	3	1.52	4.9
W229101		0.30	0.57	2.06	7.02	475	240	2.22	0.25	2.40	0.38	62.0	24.8	101	37.4	72.5
W229102		11.45	0.01	0.02	0.67	32.8	170	0.23	0.03	36.4	0.06	12.45	2.9	6	1.69	6.9
W229103		11.64	0.01	0.01	0.81	30.7	160	0.25	0.05	37.1	0.07	13.70	3.4	8	2.26	8.9
W229104		10.75	<0.01	0.02	1.07	36.8	170	0.31	0.05	34.3	0.16	17.35	4.0	10	2.72	10.9
W229105		11.12	<0.01	0.02	1.01	47.0	150	0.32	0.05	35.0	0.11	15.55	3.7	10	2.43	10.0
W229106		6.95	<0.01	0.02	0.06	<0.2	40	0.05	0.09	22.4	0.06	1.24	0.9	<1	0.18	4.1
W229107		11.48	<0.01	0.02	1.01	49.2	160	0.35	0.06	34.4	0.10	16.95	3.7	10	2.65	10.8
W229108		11.28	<0.01	0.02	0.95	40.6	160	0.34	0.05	35.3	0.09	14.35	3.5	10	2.87	10.1

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CERTIFICATE OF ANALYSIS WH17118115

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Hg-MS42	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W229073		5.08	24.0	0.15	3.0	1.680	0.085	3.99	35.5	30.3	0.86	344	0.29	0.03	11.7	42.6
W229074		5.29	21.6	0.13	3.1	1.255	0.074	3.42	35.0	61.5	1.03	568	0.32	0.03	11.2	38.3
W229075		2.16	8.11	0.07	1.5	0.212	0.031	1.38	16.5	18.9	0.96	557	0.59	0.02	4.7	16.5
W229076		0.99	3.76	0.07	0.6	0.168	0.013	0.59	7.8	7.9	0.59	262	0.21	0.01	2.0	9.1
W229077		3.15	16.05	0.10	2.2	0.472	0.054	2.52	27.4	43.3	1.07	724	0.32	0.03	7.9	40.5
W229078		4.15	21.0	0.14	2.7	0.631	0.069	3.47	40.2	44.9	2.70	1040	0.43	0.04	10.8	48.4
W229079		4.39	22.8	0.15	2.9	0.696	0.071	3.65	43.3	53.1	2.68	1020	0.32	0.04	11.6	53.2
W229080		2.71	11.60	0.09	2.0	3.88	0.048	1.92	24.6	12.2	1.22	1320	0.73	0.02	7.3	22.6
W229081		3.10	12.30	0.13	2.0	3.28	0.049	1.98	30.9	13.8	1.35	992	0.98	0.03	11.2	22.1
W229082		2.36	9.24	0.10	1.9	1.775	0.035	1.58	22.6	12.6	0.98	676	1.19	0.02	7.3	18.4
W229083		3.06	10.40	0.09	1.7	3.44	0.039	1.81	19.3	9.7	1.40	1180	1.70	0.02	6.7	26.9
W229084		0.75	2.73	0.06	0.5	1.525	0.014	0.45	8.5	3.0	0.55	798	0.74	0.01	1.6	5.5
W229085		1.02	3.82	0.07	0.7	1.215	0.014	0.63	10.9	5.1	0.83	373	0.53	0.01	2.1	7.8
W229086		0.70	2.65	0.05	0.5	1.605	0.018	0.42	7.4	4.1	0.82	352	0.24	0.01	1.4	4.9
W229087		0.73	2.95	0.07	0.5	1.955	0.013	0.48	8.1	4.0	0.37	587	0.30	0.01	1.7	6.1
W229088		0.47	0.20	0.07	<0.1	0.066	<0.005	0.02	0.6	1.1	13.30	204	0.09	<0.01	0.2	1.8
W229089		0.39	1.60	0.05	0.3	1.375	0.008	0.25	5.1	2.6	0.40	232	0.17	0.01	0.9	3.0
W229090		1.78	7.43	0.08	1.3	0.487	0.029	1.32	19.6	9.4	0.93	295	1.56	0.02	4.2	16.0
W229091		1.49	5.65	0.08	1.0	0.171	0.023	1.01	16.6	8.5	0.98	376	0.83	0.02	3.0	11.3
W229092		0.63	2.51	0.07	0.4	0.183	0.007	0.43	7.8	4.1	0.37	169	0.41	0.01	1.4	5.3
W229093		0.65	2.53	0.06	0.5	0.161	0.012	0.44	8.0	4.4	0.38	172	0.46	0.01	1.4	5.3
W229094		0.47	1.64	0.05	0.3	0.141	0.008	0.28	5.6	2.9	0.48	146	0.41	0.01	1.0	3.7
W229095		0.52	1.84	<0.05	0.3	0.244	0.008	0.32	6.6	3.3	0.69	179	0.35	0.01	1.0	3.5
W229096		0.54	1.85	0.07	0.4	0.306	0.009	0.35	6.3	3.6	0.55	162	1.02	0.01	1.0	7.4
W229097		0.58	2.10	0.07	0.4	0.387	0.009	0.37	6.2	3.8	0.50	186	0.50	0.01	1.1	5.0
W229098		0.49	1.85	0.06	0.3	0.717	0.009	0.30	6.0	3.2	0.55	168	0.74	0.01	0.9	7.2
W229099		0.53	2.00	0.06	0.4	1.220	0.008	0.33	6.1	3.9	0.56	191	0.29	0.01	1.1	3.5
W229100		0.36	1.17	0.06	0.2	3.16	0.005	0.17	4.2	2.1	0.29	142	0.18	0.01	0.6	2.1
W229101		6.51	18.95	0.12	2.6	3.28	0.065	3.40	30.7	18.4	0.84	665	5.26	0.03	8.7	51.6
W229102		0.54	1.82	0.06	0.4	1.130	0.009	0.31	5.9	2.7	0.35	144	0.30	0.01	0.9	3.9
W229103		0.64	2.16	0.07	0.4	1.285	0.009	0.38	6.6	3.3	0.40	191	0.38	0.01	1.2	4.6
W229104		0.75	2.84	0.06	0.5	1.550	0.014	0.51	8.5	3.5	0.45	108	0.61	0.01	1.5	6.2
W229105		0.79	2.69	0.05	0.5	2.49	0.012	0.48	7.9	3.6	0.85	320	0.54	0.01	1.4	5.6
W229106		0.48	0.24	0.15	<0.1	0.078	<0.005	0.03	0.6	1.0	13.70	206	0.39	<0.01	0.2	1.7
W229107		0.76	2.71	0.07	0.5	2.87	0.011	0.47	8.2	3.9	0.95	301	0.60	0.01	1.4	5.9
W229108		0.70	2.51	0.06	0.5	2.07	0.011	0.43	6.9	3.9	0.81	357	0.62	0.01	1.3	5.5

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W229073		260	24.7	204	0.002	4.65	1.32	26.0	1	2.5	75.0	0.81	<0.05	11.30	0.503	7.82
W229074		320	22.4	187.0	0.002	4.31	0.54	20.2	1	2.4	172.0	0.78	<0.05	11.05	0.453	9.15
W229075		380	7.4	67.4	<0.002	0.83	0.33	7.7	1	1.0	658	0.32	<0.05	4.35	0.187	1.50
W229076		360	3.8	30.8	<0.002	0.49	0.19	4.1	1	0.5	1310	0.13	<0.05	1.84	0.071	0.62
W229077		420	12.0	132.0	<0.002	2.29	0.71	15.2	1	1.9	591	0.55	<0.05	7.74	0.297	3.44
W229078		500	12.5	174.5	<0.002	2.97	0.43	18.1	1	2.4	178.5	0.79	0.06	11.90	0.365	4.99
W229079		490	15.1	188.0	<0.002	3.24	0.49	19.9	1	2.6	187.5	0.82	<0.05	13.25	0.385	5.73
W229080		350	13.9	91.6	0.004	2.17	4.44	11.0	1	1.4	669	0.49	0.09	6.54	0.247	9.96
W229081		690	16.9	95.9	0.002	1.98	3.04	12.0	2	1.4	881	0.69	0.10	6.57	0.339	8.13
W229082		360	14.3	71.2	0.002	1.78	1.29	8.7	1	1.2	989	0.48	0.06	5.49	0.254	4.56
W229083		390	8.9	83.5	<0.002	2.62	9.55	9.8	2	1.5	776	0.45	0.06	5.68	0.261	10.75
W229084		110	6.4	21.0	<0.002	0.66	1.21	2.9	1	0.4	1160	0.10	<0.05	1.64	0.055	3.77
W229085		150	5.6	28.6	<0.002	0.85	0.42	3.9	1	0.5	1760	0.14	<0.05	2.30	0.075	3.42
W229086		250	4.4	19.1	<0.002	0.60	1.09	2.7	2	0.4	1545	0.11	<0.05	1.57	0.051	2.66
W229087		220	5.3	21.4	<0.002	0.73	2.79	3.0	1	0.4	1425	0.11	<0.05	1.74	0.059	2.65
W229088		200	1.3	1.2	<0.002	<0.01	<0.05	0.2	1	<0.2	53.8	<0.05	<0.05	0.07	<0.005	0.02
W229089		360	2.6	11.3	<0.002	0.30	0.37	1.7	2	0.2	1730	0.06	<0.05	1.01	0.031	0.76
W229090		340	9.8	58.0	0.003	1.62	0.53	6.6	1	0.9	1390	0.30	0.06	4.55	0.150	2.22
W229091		370	7.2	43.4	0.002	1.23	0.40	5.4	2	0.7	1815	0.22	0.06	3.54	0.111	1.24
W229092		290	4.1	19.0	<0.002	0.52	0.25	2.4	1	0.4	2180	0.09	0.06	1.58	0.049	0.31
W229093		300	4.2	19.3	<0.002	0.53	0.25	2.4	1	0.3	2250	0.10	<0.05	1.61	0.050	0.31
W229094		430	3.1	12.6	<0.002	0.38	0.19	1.7	1	0.2	2120	0.07	<0.05	1.14	0.034	0.20
W229095		330	3.3	13.8	<0.002	0.38	0.18	1.9	2	0.2	2110	0.07	<0.05	1.27	0.037	0.19
W229096		290	7.0	15.1	0.002	0.39	0.46	1.8	1	0.3	2010	0.07	<0.05	1.36	0.040	0.21
W229097		210	4.9	16.0	<0.002	0.46	0.82	2.0	<1	0.3	1940	0.08	0.08	1.37	0.045	0.20
W229098		360	6.8	14.0	0.003	0.41	0.61	1.8	<1	0.3	1935	0.07	0.06	1.23	0.038	0.22
W229099		310	3.3	15.7	<0.002	0.34	0.27	1.9	<1	0.3	1965	0.07	<0.05	1.30	0.041	0.16
W229100		400	2.7	8.1	<0.002	0.25	0.54	1.4	1	0.2	2190	<0.05	0.05	0.83	0.025	0.15
W229101		240	82.7	177.5	0.002	4.70	6.17	19.9	<1	32.3	95.2	0.61	<0.05	9.39	0.426	13.00
W229102		480	4.7	14.0	<0.002	0.42	1.25	1.9	1	0.3	2280	0.06	0.06	1.25	0.037	0.34
W229103		270	4.8	16.8	<0.002	0.53	0.80	2.3	<1	0.3	2370	0.08	0.07	1.38	0.051	0.42
W229104		420	5.7	23.4	0.002	0.65	0.64	2.8	<1	0.4	2290	0.10	<0.05	1.90	0.060	0.75
W229105		670	5.1	22.1	0.002	0.65	1.48	2.6	1	0.4	2050	0.10	0.06	1.79	0.058	0.72
W229106		200	1.5	1.3	<0.002	<0.01	<0.05	0.2	<1	<0.2	54.9	<0.05	<0.05	0.07	<0.005	0.02
W229107		810	4.6	22.0	0.004	0.62	1.73	2.7	1	0.4	2110	0.10	0.06	1.79	0.055	0.60
W229108		510	4.7	19.7	0.003	0.57	1.98	2.4	<1	0.3	2040	0.09	0.05	1.61	0.052	0.32

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 7- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17118115

Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5
W229073		2.1	170	2.3	23.4	80	104.0
W229074		2.2	141	1.5	23.9	103	107.0
W229075		2.0	53	0.6	14.3	52	54.5
W229076		1.7	23	0.4	7.3	17	22.0
W229077		2.2	94	1.8	18.7	60	77.2
W229078		1.8	84	2.5	23.7	74	91.7
W229079		1.9	87	2.5	25.4	77	100.5
W229080		2.1	67	3.8	18.5	61	68.0
W229081		2.5	79	5.4	23.2	66	74.8
W229082		2.6	61	2.0	19.3	54	66.3
W229083		2.4	74	5.7	17.5	49	63.4
W229084		1.7	16	0.8	12.0	12	18.4
W229085		2.2	22	0.7	13.1	12	24.1
W229086		2.0	14	0.9	9.8	28	16.9
W229087		1.9	17	1.0	12.3	10	18.8
W229088		0.6	2	0.1	0.8	18	<0.5
W229089		1.9	9	0.4	8.5	5	11.6
W229090		2.9	45	1.0	14.4	33	47.3
W229091		2.5	33	0.6	18.3	32	34.6
W229092		2.3	14	0.3	12.1	10	16.0
W229093		2.4	15	0.3	12.6	10	16.8
W229094		2.7	10	0.2	11.1	8	11.6
W229095		2.3	11	0.3	12.6	10	12.2
W229096		2.1	12	0.3	12.7	14	13.5
W229097		2.0	14	0.4	11.5	18	14.2
W229098		2.2	12	0.5	13.0	11	13.3
W229099		1.9	13	0.4	12.1	11	14.2
W229100		1.9	8	0.5	11.0	4	9.6
W229101		1.7	145	13.1	20.5	119	104.0
W229102		2.2	11	0.8	12.2	8	13.7
W229103		2.4	15	0.8	13.1	12	15.4
W229104		2.7	19	0.9	15.3	23	20.5
W229105		2.3	18	1.1	11.7	26	20.2
W229106		0.4	2	0.1	0.8	18	<0.5
W229107		2.6	19	1.1	12.5	18	19.3
W229108		2.2	17	1.1	11.4	16	18.6

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 7- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17118115

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

CRU- 31	CRU- QC	LOG- 21	LOG- 21d
LOG- 23	PUL- 31	PUL- 31d	PUL- QC
SPL- 21	SPL- 21d	WEI- 21	WSH- 21
WSH- 22			

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- JUL- 2017
Account: RCM

CERTIFICATE WH17119236

Project: Nadaleen

P.O. No.: N17- 008

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 14- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

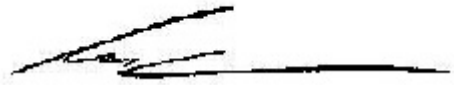
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17119236

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA25 Au ppm 0.01	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
W228145		6.53	0.11	0.03	8.07	451	260	2.13	0.37	0.82	0.09	69.4	20.6	81	28.3	56.3
W228146		4.74	0.03	0.03	8.12	481	250	2.30	0.35	0.88	0.05	70.5	15.7	79	27.7	51.0
W228147		6.07	0.36	0.05	8.28	2850	260	2.03	0.38	0.76	0.13	70.3	18.9	83	27.1	56.4
W228148		5.37	2.13	0.05	7.37	7210	280	1.73	0.32	2.38	0.29	73.0	15.9	74	23.5	53.7
W228149		0.26	0.58	0.72	6.50	465	230	2.27	0.22	2.11	0.35	57.9	21.6	108	37.9	63.6
W228150		5.98	0.12	0.08	8.05	495	270	2.24	0.34	2.06	0.14	76.2	17.6	78	29.3	51.1
W228151		8.01	0.25	0.07	7.96	410	310	2.83	0.37	1.56	0.15	76.5	20.1	81	34.0	59.9
W228152		7.52	0.60	0.07	8.38	2450	250	2.87	0.34	1.68	0.14	77.0	21.5	78	33.2	60.9
W228153		<0.02	0.62	0.09	8.40	2650	250	2.89	0.34	1.70	0.15	78.6	22.5	80	33.9	63.0
W228154		7.69	2.54	0.08	8.23	2520	270	2.58	0.34	2.02	0.18	75.9	24.5	76	29.6	61.4
W228155		7.17	0.19	0.06	7.70	540	260	2.43	0.33	2.10	0.16	74.2	19.8	72	27.2	55.1
W228156		6.99	2.64	0.07	4.18	2240	170	1.05	0.19	1.99	0.17	46.7	11.2	52	11.70	28.2
W228157		8.01	4.36	0.09	4.46	>10000	240	1.00	0.21	0.67	0.32	53.6	12.8	66	11.10	30.4
W228158		6.99	0.01	0.03	0.07	39.3	30	0.06	0.34	20.5	0.06	1.22	0.7	<1	0.15	2.8
W228159		5.38	0.13	0.06	2.91	1895	150	0.58	0.13	2.05	0.08	37.2	11.5	44	7.04	18.6
W228160		6.57	<0.01	0.08	5.85	236	240	1.61	0.26	2.59	0.13	63.5	12.1	60	18.65	32.5
W228161		7.50	<0.01	0.06	7.24	188.0	260	2.47	0.31	2.68	0.40	79.7	16.6	69	25.9	44.3
W228162		7.01	0.02	0.06	7.93	527	220	2.74	0.33	1.62	0.12	73.1	25.8	78	28.4	63.0
W228163		7.19	<0.01	0.07	7.77	138.0	220	2.60	0.30	2.64	0.02	73.6	21.4	77	27.2	61.1
W228164		7.96	<0.01	0.07	7.53	283	210	2.38	0.29	2.79	0.02	70.7	20.6	75	26.1	58.3
W228165		6.79	0.07	0.06	7.18	904	210	2.16	0.27	2.95	0.03	66.1	18.5	74	22.3	54.6
W228166		7.89	0.57	0.05	6.69	888	190	1.80	0.25	3.29	0.06	65.2	18.4	70	19.35	53.4
W228167		5.89	0.49	0.05	8.16	531	210	2.19	0.31	2.01	0.10	75.1	21.9	81	24.5	62.8
W228168		3.05	0.59	0.06	8.31	577	210	2.27	0.32	2.01	0.12	74.7	19.5	81	24.0	64.2
W228169		8.42	0.09	0.09	7.44	557	220	2.38	0.29	2.82	0.04	70.6	20.9	75	25.9	58.5
W228170		7.88	0.05	0.07	7.26	241	210	2.37	0.28	3.48	0.04	70.6	18.9	70	25.9	54.3
W228171		8.07	0.07	0.07	7.56	234	220	2.53	0.29	3.28	0.02	73.1	21.1	73	30.9	57.0
W228172		7.21	<0.01	0.07	8.83	81.6	270	2.85	0.35	1.57	0.07	80.8	22.8	85	39.7	63.7
W228173		0.26	0.50	0.09	3.65	2630	200	0.90	0.14	18.80	0.11	37.6	12.0	44	10.50	42.3
W228174		6.61	<0.01	0.07	8.84	35.9	320	2.51	0.35	1.99	0.22	83.9	22.4	83	62.0	63.4
W228175		7.28	<0.01	0.07	8.23	7.7	250	2.44	0.32	1.95	0.17	74.5	20.0	77	51.7	57.2
W228176		7.38	<0.01	0.05	8.45	17.9	680	2.39	0.34	1.97	0.13	79.0	17.0	80	50.9	59.9
W228177		5.36	<0.01	0.03	8.98	60.2	370	2.75	0.32	1.49	0.09	83.3	23.7	85	50.2	64.9
W228178		4.96	<0.01	<0.01	0.06	0.9	40	0.05	0.03	21.1	0.06	1.15	0.7	<1	0.25	1.7
W228179		3.01	<0.01	0.03	7.99	64.0	290	1.94	0.13	2.73	0.07	78.7	26.1	65	62.0	51.4
W228180		7.56	0.02	0.05	8.44	365	300	2.73	0.39	1.83	0.31	79.3	19.2	77	34.5	58.7

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17119236

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Hg-MS42	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W228145		5.32	22.9	0.13	3.7	2.70	0.081	3.95	31.6	13.6	0.76	302	0.55	0.03	12.4	40.7
W228146		4.98	23.3	0.15	3.7	2.54	0.079	3.96	33.0	13.7	0.79	218	0.49	0.03	12.1	33.6
W228147		5.69	23.4	0.10	3.6	4.59	0.068	3.98	33.0	13.5	0.63	284	0.76	0.03	12.2	40.6
W228148		5.02	20.6	0.11	3.5	5.02	0.057	3.41	36.5	13.9	1.10	1000	0.58	0.03	11.4	35.6
W228149		5.96	18.80	0.10	2.4	3.19	0.065	3.12	27.6	18.0	0.75	606	4.98	0.03	8.5	49.1
W228150		5.46	22.3	0.12	3.4	2.63	0.077	3.90	37.6	10.8	1.30	407	0.65	0.03	11.4	38.6
W228151		5.63	24.9	0.13	3.8	2.87	0.077	3.84	36.4	13.3	1.09	420	0.86	0.03	12.7	43.5
W228152		5.92	24.1	0.18	3.3	3.09	0.081	4.14	36.7	13.4	1.18	508	0.79	0.03	12.7	44.5
W228153		6.04	25.0	0.17	3.3	3.16	0.082	4.13	36.9	13.9	1.18	513	0.82	0.03	13.1	47.2
W228154		5.92	24.1	0.17	3.2	4.59	0.071	4.07	35.8	12.6	1.23	546	0.87	0.03	13.2	49.1
W228155		5.42	22.3	0.17	3.2	2.82	0.073	3.72	35.1	13.0	1.22	492	0.93	0.05	12.4	37.9
W228156		3.55	10.90	0.14	2.0	5.51	0.040	1.99	22.1	11.2	0.94	779	0.54	0.02	7.4	21.5
W228157		3.40	11.95	0.13	2.4	5.80	0.042	2.10	25.1	10.9	0.47	319	0.64	0.02	8.6	23.3
W228158		0.48	0.24	0.13	<0.1	0.025	0.007	0.02	0.6	0.9	12.90	193	0.15	0.01	0.2	1.6
W228159		3.45	7.21	0.11	1.5	1.490	0.028	1.33	17.2	15.4	0.84	549	0.47	0.02	4.9	19.1
W228160		4.01	14.80	0.14	2.9	0.916	0.057	2.78	30.1	20.1	1.28	492	0.54	0.03	10.2	24.6
W228161		4.56	20.3	0.16	3.3	0.575	0.073	3.56	37.5	26.2	1.46	593	1.21	0.04	13.1	30.8
W228162		5.86	23.5	0.16	3.3	0.893	0.087	3.79	34.5	29.2	1.09	354	0.52	0.03	13.2	48.2
W228163		5.57	21.9	0.17	3.2	0.958	0.078	3.75	35.0	24.3	1.52	540	0.31	0.03	12.6	36.8
W228164		5.60	21.3	0.17	3.2	0.946	0.074	3.58	33.4	20.5	1.60	546	0.32	0.03	12.6	38.6
W228165		5.23	19.85	0.15	3.1	2.19	0.068	3.37	31.8	13.9	1.56	536	0.23	0.03	11.9	37.6
W228166		5.13	17.90	0.14	2.8	2.57	0.067	3.17	30.3	11.4	1.65	893	0.35	0.03	12.0	37.0
W228167		5.39	23.1	0.17	3.3	2.08	0.066	3.90	35.3	13.5	1.23	834	0.58	0.03	13.1	44.8
W228168		5.04	23.2	0.17	3.5	2.11	0.068	3.90	36.0	13.4	1.24	886	0.57	0.03	13.4	40.1
W228169		5.40	22.0	0.15	3.0	1.825	0.074	3.64	33.1	16.0	1.52	795	0.58	0.03	12.4	39.4
W228170		5.01	21.1	0.16	3.0	1.035	0.079	3.43	33.5	14.7	1.85	718	0.51	0.03	12.2	36.4
W228171		5.90	21.5	0.16	3.0	0.708	0.078	3.68	35.0	18.8	1.83	605	0.46	0.04	12.4	41.8
W228172		5.80	25.1	0.16	3.5	0.296	0.091	4.21	38.3	21.8	2.00	323	0.74	0.04	13.3	46.5
W228173		3.05	9.87	0.10	1.7	3.54	0.037	1.77	18.2	9.1	1.43	1180	1.67	0.02	6.5	24.3
W228174		6.13	25.6	0.18	3.6	0.351	0.091	4.32	40.1	29.6	2.22	352	0.79	0.04	13.9	49.2
W228175		5.24	23.0	0.16	3.2	0.315	0.083	3.98	35.5	23.3	2.14	330	0.84	0.04	13.1	42.5
W228176		5.10	23.7	0.15	3.3	0.123	0.080	3.93	37.9	38.1	2.08	360	0.68	0.05	13.4	36.3
W228177		5.52	25.6	0.17	3.4	0.051	0.084	3.86	39.3	103.0	1.92	289	1.10	0.07	13.4	43.6
W228178		0.49	0.25	0.13	<0.1	0.018	0.007	0.03	0.6	1.1	13.00	206	0.20	<0.01	0.2	1.7
W228179		6.77	22.2	0.16	3.3	0.112	0.071	3.29	38.0	118.5	1.99	481	1.29	0.04	22.9	38.3
W228180		5.43	25.0	0.17	3.1	0.658	0.095	4.06	38.0	21.3	1.37	296	0.99	0.04	12.9	37.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17119236

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W228145		550	13.1	173.0	<0.002	5.48	4.42	21.5	1	2.8	80.9	0.91	<0.05	11.70	0.555	8.24
W228146		560	8.1	168.0	<0.002	5.05	3.36	20.8	1	2.8	84.7	0.90	<0.05	11.20	0.537	6.07
W228147		530	12.0	173.0	<0.002	5.98	13.40	18.6	2	2.8	72.7	0.91	<0.05	11.35	0.538	13.50
W228148		480	9.3	151.5	<0.002	4.90	28.6	21.9	1	2.5	125.0	0.84	<0.05	11.20	0.518	18.00
W228149		230	50.8	155.5	0.003	4.36	5.55	19.2	1	2.7	89.5	0.62	<0.05	8.18	0.386	13.10
W228150		620	24.2	174.5	<0.002	5.21	5.88	20.8	1	2.7	110.5	0.85	<0.05	11.15	0.483	6.02
W228151		600	30.2	183.0	0.004	5.67	5.51	23.4	2	3.0	97.1	0.91	<0.05	11.60	0.494	7.19
W228152		610	31.3	191.0	0.005	5.91	9.06	23.1	2	2.7	101.0	0.84	0.07	11.95	0.491	6.60
W228153		620	31.7	194.0	0.003	6.04	9.88	24.2	2	2.8	102.5	0.86	0.06	11.85	0.501	6.76
W228154		610	22.3	181.5	0.005	5.69	18.40	22.7	1	2.8	106.5	0.87	0.05	11.75	0.506	15.35
W228155		770	15.9	172.5	0.003	4.93	4.49	21.0	1	2.6	97.8	0.83	0.06	11.50	0.499	8.03
W228156		460	13.5	89.7	0.002	2.92	15.25	9.9	1	1.5	69.4	0.50	<0.05	7.24	0.309	24.8
W228157		440	14.8	89.6	<0.002	3.55	43.9	9.3	1	1.8	75.0	0.56	0.07	7.99	0.348	23.3
W228158		170	1.0	1.1	0.002	0.01	0.18	0.2	<1	0.2	50.9	<0.05	<0.05	0.09	<0.005	0.08
W228159		340	29.4	54.4	0.002	2.68	7.20	6.9	1	1.1	75.9	0.35	<0.05	5.38	0.235	4.94
W228160		530	17.7	126.5	<0.002	3.00	1.64	13.4	1	2.0	99.9	0.69	0.05	9.60	0.398	3.04
W228161		620	33.1	166.0	0.002	3.65	0.65	18.4	1	2.5	104.0	0.88	<0.05	12.00	0.485	2.76
W228162		580	26.0	183.0	0.002	5.59	1.29	22.4	1	2.7	89.7	0.88	0.06	11.40	0.563	3.97
W228163		610	13.4	179.0	0.002	4.95	0.77	21.9	1	2.5	97.7	0.82	0.05	10.80	0.543	2.93
W228164		580	13.6	175.0	0.002	5.06	0.92	21.2	1	2.4	94.5	0.81	<0.05	10.95	0.548	2.89
W228165		610	12.6	163.5	0.002	4.62	3.12	19.6	1	2.2	99.5	0.80	0.05	10.50	0.557	8.43
W228166		700	10.1	155.0	0.002	4.37	7.24	19.5	1	2.2	109.5	0.76	0.07	9.94	0.535	10.60
W228167		640	13.5	184.0	0.002	5.10	7.74	22.2	1	2.5	89.6	0.88	<0.05	11.45	0.590	9.44
W228168		660	12.0	198.0	0.003	4.75	7.84	23.3	1	2.6	91.7	0.90	0.05	11.95	0.589	9.52
W228169		590	19.4	165.5	0.003	4.90	4.69	21.8	1	2.5	103.0	0.78	0.05	10.65	0.520	8.60
W228170		590	19.1	176.0	0.003	4.11	1.70	20.5	1	2.3	108.5	0.76	0.05	10.40	0.487	3.91
W228171		630	19.5	177.0	0.003	4.58	1.49	20.9	1	2.4	120.0	0.80	<0.05	10.80	0.505	3.73
W228172		650	20.7	212	0.003	1.73	0.73	23.6	1	2.8	106.5	0.88	0.05	12.50	0.542	1.89
W228173		390	8.1	79.0	0.002	2.55	9.72	9.7	1	1.5	728	0.42	0.05	5.41	0.265	9.92
W228174		640	24.1	225	0.005	1.99	0.80	23.8	2	2.9	124.5	0.89	0.05	12.80	0.511	1.73
W228175		560	20.4	206	0.004	1.42	0.70	21.9	1	2.7	115.0	0.86	<0.05	11.70	0.474	1.44
W228176		640	14.4	197.0	0.004	0.59	0.38	23.1	1	2.7	140.5	0.87	0.05	11.90	0.501	1.28
W228177		570	20.4	164.0	0.004	0.12	0.20	24.1	2	2.6	105.5	0.88	<0.05	12.85	0.512	1.08
W228178		210	1.0	1.4	<0.002	<0.01	0.06	0.2	1	0.2	50.7	<0.05	<0.05	0.08	<0.005	0.03
W228179		880	15.4	141.5	0.004	0.94	0.78	21.0	1	2.2	105.5	1.31	<0.05	10.25	0.612	1.40
W228180		510	14.6	184.0	0.004	4.37	2.30	23.9	1	2.9	175.0	0.85	<0.05	12.20	0.501	4.33

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Finalized Date: 19- JUL- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17119236

Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001
W228145		2.3	154	13.5	24.8	101	120.0	
W228146		2.3	152	15.1	24.9	89	118.0	
W228147		2.3	154	15.8	25.0	103	120.5	
W228148		2.1	136	17.3	23.6	111	112.5	
W228149		1.7	139	12.6	16.8	99	82.9	
W228150		2.2	149	10.7	24.1	96	111.0	
W228151		2.5	150	9.5	25.7	87	121.0	
W228152		2.2	152	7.2	24.1	91	118.0	
W228153		2.2	153	7.5	24.3	96	120.5	
W228154		2.2	149	13.3	23.9	81	119.0	
W228155		2.1	138	10.2	24.6	104	121.5	
W228156		1.4	79	7.1	14.9	84	75.7	
W228157		1.6	88	10.7	15.9	112	91.2	1.330
W228158		0.5	2	0.1	0.8	17	0.6	
W228159		1.0	58	4.9	11.4	52	56.0	
W228160		1.9	99	4.2	19.3	95	101.5	
W228161		2.4	119	2.0	23.3	249	123.5	
W228162		2.0	151	4.9	23.9	113	122.0	
W228163		2.0	149	2.0	23.3	64	119.0	
W228164		1.9	146	3.0	23.2	65	123.0	
W228165		1.9	144	10.3	22.2	62	117.5	
W228166		1.8	137	13.7	22.6	59	111.0	
W228167		2.1	158	12.9	23.2	64	123.0	
W228168		2.2	159	12.8	24.6	60	131.0	
W228169		2.0	144	9.5	22.5	70	112.0	
W228170		2.0	137	6.4	22.4	63	113.0	
W228171		2.0	141	3.5	23.1	66	111.5	
W228172		2.3	157	1.7	28.6	79	131.0	
W228173		2.1	74	5.2	15.9	49	65.8	
W228174		2.4	153	1.6	28.4	118	147.0	
W228175		2.1	139	1.4	23.9	100	121.5	
W228176		2.2	145	1.5	25.6	94	122.0	
W228177		2.4	154	1.5	26.4	90	130.0	
W228178		0.5	2	0.1	0.8	16	0.5	
W228179		2.0	158	1.1	25.2	94	129.0	
W228180		2.1	154	7.0	23.9	273	116.5	

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 19- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17119236

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- JUL- 2017
Account: RCM

CERTIFICATE WH17121584

Project: Nadaleen

P.O. No.: N17- 010

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 16- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

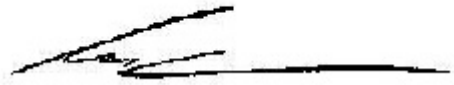
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 21-JUL-2017
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CERTIFICATE OF ANALYSIS WH17121584

Sample Description	Method	WEI-21	Au-AA25	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
W228181		7.46	<0.01	0.04	8.03	60.1	240	2.84	0.30	1.96	0.14	75.9	16.2	77	42.0	58.4
W228182		7.53	<0.01	0.06	7.99	83.4	220	2.80	0.30	2.38	0.08	76.5	17.4	72	41.9	58.5
W228183		7.35	<0.01	0.06	8.04	63.6	220	2.71	0.30	2.24	0.10	76.8	17.3	73	46.4	58.1
W228184		6.89	0.37	0.04	7.55	398	320	2.66	0.29	4.28	0.14	73.2	14.7	69	35.7	57.6
W228185		<0.02	0.35	0.04	7.46	386	320	2.78	0.27	4.25	0.14	72.9	14.6	69	35.2	55.9
W228186		7.33	0.14	0.07	7.89	262	270	3.03	0.29	2.84	0.14	76.0	19.6	73	40.1	59.8
W228187		7.59	<0.01	0.05	7.97	86.9	220	2.68	0.32	1.96	0.13	75.6	20.9	76	49.0	60.7
W228188		6.88	<0.01	0.05	6.36	49.1	290	1.98	0.22	2.63	<0.02	63.5	17.5	75	39.7	58.9
W228189		8.38	<0.01	0.06	6.21	61.1	240	1.77	0.23	2.69	<0.02	59.1	20.1	73	34.5	53.1
W228190		7.36	<0.01	0.05	6.59	31.8	230	1.88	0.23	2.71	<0.02	62.1	19.0	74	40.0	55.8
W228191		7.52	<0.01	0.05	6.33	31.4	520	1.74	0.23	3.41	<0.02	59.7	20.2	72	37.4	54.4
W228192		7.50	<0.01	0.06	6.63	25.5	250	1.73	0.22	3.56	0.02	64.1	20.8	74	35.1	56.5
W228193		7.92	<0.01	0.06	6.27	15.3	260	1.85	0.22	3.36	0.03	61.8	20.0	71	47.3	56.2
W228194		7.63	<0.01	0.05	6.57	3.7	220	1.85	0.22	3.49	<0.02	62.9	19.3	73	53.1	57.4
W228195		7.68	<0.01	0.08	6.64	52.5	220	1.93	0.23	2.74	0.03	64.5	23.1	74	51.6	56.8
W228196		7.90	<0.01	0.04	6.37	32.1	310	1.72	0.23	2.54	0.02	63.1	19.7	71	50.1	53.9
W228197		7.00	<0.01	0.05	7.62	49.6	260	2.01	0.29	1.61	0.13	75.8	19.1	78	52.9	54.2
W228198		0.29	0.49	0.09	3.42	2490	200	0.91	0.13	18.05	0.12	38.6	10.2	44	9.25	40.6
W228199		7.75	<0.01	0.04	5.03	107.5	190	1.52	0.16	13.65	0.05	47.7	14.3	57	31.1	34.7
W228200		7.71	<0.01	0.02	2.50	20.5	120	0.82	0.10	23.6	0.04	29.9	6.8	30	8.81	18.2
W228201		3.48	<0.01	0.04	2.64	25.3	130	0.81	0.11	22.4	0.05	32.5	8.7	31	9.28	20.1
W228202		8.27	0.01	0.03	2.88	655	160	0.94	0.12	21.9	<0.02	33.1	9.3	33	8.09	21.4
W228203		7.24	4.82	0.08	4.31	>10000	290	1.06	0.17	6.73	0.46	51.2	9.7	49	8.98	27.6
W228204		3.83	0.61	0.03	5.02	743	210	1.23	0.20	2.60	0.43	55.8	11.2	59	12.55	35.1
W228205		4.85	<0.01	0.01	0.04	7.9	30	0.05	0.02	20.9	0.06	1.03	0.7	2	0.13	2.5
W228206		6.18	9.40	0.02	3.81	7290	150	0.93	0.15	1.01	0.24	40.7	8.5	58	10.40	27.0
W228207		9.05	5.79	0.07	5.57	8140	190	1.33	0.22	1.13	0.25	58.2	18.2	71	18.60	40.9
W228208		5.07	5.47	0.02	5.92	2590	230	1.27	0.22	1.72	0.23	65.9	13.2	73	17.55	46.5
W228209		6.50	7.66	0.02	5.83	5930	210	1.44	0.22	2.58	0.18	61.5	16.7	71	21.6	46.8
W228210		0.29	0.55	0.62	6.76	464	240	2.29	0.23	2.26	0.33	64.3	21.5	105	38.1	65.7
W228211		4.22	0.04	0.05	4.15	244	180	1.13	0.15	3.18	0.04	46.9	12.3	53	15.95	33.2
W228212		6.23	0.16	0.07	4.76	373	150	1.27	0.19	2.74	0.03	53.8	13.7	57	15.90	37.7
W228213		8.49	0.49	0.06	5.40	766	180	1.32	0.21	2.56	0.06	59.1	13.6	64	16.10	41.4
W228214		3.24	1.16	0.05	3.86	716	140	0.87	0.14	1.85	0.04	39.4	12.6	53	8.76	32.5
W228215		7.81	5.10	0.10	5.53	9950	260	1.39	0.21	1.77	0.14	55.5	19.4	67	15.75	44.2
W228216		5.02	0.01	<0.01	0.05	24.0	30	0.08	0.03	20.5	0.06	1.11	0.7	2	0.14	1.6

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17121584

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W228181		4.98	21.9	0.20	3.6	0.390	0.088	3.85	38.2	20.0	1.77	328	0.61	0.04	11.8	32.9
W228182		5.28	22.4	0.16	3.8	0.633	0.084	3.81	38.7	21.0	1.57	340	0.41	0.04	12.2	39.9
W228183		5.43	21.9	0.17	3.3	0.443	0.080	3.84	38.7	23.1	1.64	337	0.53	0.04	11.9	39.2
W228184		4.65	20.7	0.15	3.3	0.762	0.068	3.61	36.2	14.5	2.00	669	1.38	0.04	11.3	30.4
W228185		4.62	20.6	0.18	3.2	0.760	0.068	3.57	36.6	14.7	1.99	666	1.43	0.04	11.2	30.6
W228186		5.87	22.1	0.18	3.4	0.899	0.075	3.76	38.2	15.3	1.62	637	1.30	0.04	12.0	41.5
W228187		5.18	21.4	0.17	3.6	0.372	0.075	3.76	37.6	23.9	1.56	382	0.95	0.04	11.8	40.9
W228188		4.71	17.45	0.14	3.0	0.079	0.069	2.97	31.1	40.9	1.96	518	0.38	0.04	10.5	36.4
W228189		4.80	16.55	0.14	2.9	0.110	0.062	2.84	29.2	66.7	1.92	541	0.35	0.03	9.8	36.2
W228190		5.00	17.45	0.16	3.0	0.043	0.064	2.92	31.0	72.5	2.15	556	0.39	0.05	10.5	36.8
W228191		5.04	16.50	0.13	3.0	0.035	0.058	2.88	29.5	66.8	2.35	654	0.30	0.04	10.3	36.7
W228192		5.20	17.95	0.17	3.1	0.043	0.065	2.98	31.8	65.6	2.39	666	0.32	0.04	10.8	39.6
W228193		4.77	17.45	0.14	3.1	0.028	0.062	2.82	30.9	68.7	2.24	593	0.29	0.08	10.5	36.3
W228194		4.94	17.50	0.17	3.1	0.026	0.063	2.91	31.3	73.5	2.22	590	0.38	0.15	10.7	36.3
W228195		5.12	18.00	0.14	3.0	0.057	0.068	2.92	31.8	93.2	1.95	484	0.60	0.13	10.8	40.3
W228196		5.04	17.25	0.16	3.0	0.064	0.066	2.90	31.0	91.7	1.95	454	0.40	0.06	10.3	37.1
W228197		5.11	20.1	0.15	3.2	0.185	0.075	3.70	35.7	53.2	1.73	294	0.60	0.04	11.1	36.6
W228198		2.90	9.03	0.08	1.7	4.07	0.033	1.68	18.1	9.5	1.37	1150	1.68	0.02	5.8	22.3
W228199		2.81	12.50	0.08	2.1	0.586	0.049	2.54	22.8	12.8	1.16	376	0.40	0.02	6.5	23.4
W228200		1.66	6.34	0.07	1.4	0.295	0.025	1.25	13.5	6.0	0.89	369	0.32	0.02	3.7	11.3
W228201		1.91	6.74	0.07	1.4	0.362	0.028	1.30	14.4	6.4	0.92	360	0.36	0.03	3.9	15.3
W228202		1.95	7.41	0.08	1.5	1.540	0.028	1.42	14.9	6.4	1.03	420	0.25	0.02	4.1	14.6
W228203		3.41	11.20	0.11	2.1	17.40	0.041	2.10	24.2	11.4	0.97	410	0.94	0.03	6.6	19.9
W228204		3.57	12.65	0.12	2.4	3.33	0.051	2.46	26.7	13.1	1.25	530	0.95	0.02	8.4	23.9
W228205		0.47	0.22	0.19	<0.1	0.015	<0.005	0.02	0.5	1.0	13.00	204	0.14	<0.01	0.1	1.6
W228206		3.16	9.90	0.11	1.9	12.25	0.029	1.80	20.2	18.3	0.51	203	0.77	0.02	6.2	18.7
W228207		4.07	14.90	0.12	2.6	10.55	0.043	2.72	27.1	12.8	0.72	202	0.88	0.02	8.8	33.2
W228208		4.19	15.80	0.14	3.0	13.60	0.040	2.93	28.7	12.9	0.72	225	0.74	0.02	9.9	29.1
W228209		4.65	15.70	0.14	2.8	15.55	0.050	2.86	27.7	13.2	1.29	456	0.42	0.02	9.8	32.6
W228210		6.19	18.35	0.14	2.5	3.21	0.060	3.34	30.2	18.5	0.80	642	5.21	0.03	8.7	48.5
W228211		3.99	10.70	0.10	2.0	1.420	0.044	1.96	21.7	15.2	1.42	543	0.37	0.02	6.8	23.7
W228212		4.33	12.35	0.11	2.3	2.50	0.049	2.28	24.1	11.0	1.39	503	0.38	0.02	7.7	25.9
W228213		4.44	14.70	0.13	2.6	3.74	0.053	2.63	27.0	11.4	1.39	474	0.32	0.03	9.1	27.9
W228214		3.75	9.78	0.10	1.9	4.51	0.033	1.85	18.2	10.1	0.92	370	0.33	0.02	6.2	22.9
W228215		4.28	14.40	0.11	2.6	12.40	0.048	2.73	26.2	12.4	1.01	304	0.37	0.02	9.0	35.5
W228216		0.45	0.24	0.18	<0.1	0.026	<0.005	0.03	0.5	1.0	12.55	194	0.12	<0.01	0.2	1.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17121584

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W228181		560	16.7	180.5	0.002	2.10	1.14	20.6	2	2.6	87.5	0.84	0.05	11.75	0.483	2.01
W228182		580	18.0	181.5	<0.002	3.88	1.20	21.0	2	2.6	98.1	0.87	<0.05	11.65	0.474	4.04
W228183		550	18.1	182.5	<0.002	3.23	1.08	20.4	2	2.6	97.3	0.85	<0.05	11.75	0.483	2.32
W228184		520	11.0	169.0	<0.002	2.91	2.90	19.4	2	2.7	158.5	0.83	<0.05	11.35	0.478	4.60
W228185		530	10.4	169.0	0.002	2.86	3.01	19.4	2	2.4	157.5	0.81	<0.05	10.90	0.471	4.47
W228186		520	17.8	187.0	0.002	5.40	3.32	21.3	3	2.6	100.5	0.86	0.05	11.40	0.506	5.84
W228187		580	19.3	190.5	<0.002	2.91	1.02	20.6	2	2.4	93.1	0.87	<0.05	11.85	0.544	2.70
W228188		610	11.6	161.0	<0.002	0.45	0.50	17.6	2	2.0	123.0	0.76	0.06	9.53	0.510	1.11
W228189		500	14.7	153.5	<0.002	0.70	0.65	16.7	2	1.9	102.5	0.73	<0.05	9.02	0.491	1.34
W228190		570	14.5	159.0	<0.002	0.32	0.44	17.6	1	2.0	95.9	0.77	0.05	9.51	0.527	1.02
W228191		530	13.5	157.0	<0.002	0.27	0.42	16.8	2	1.9	107.5	0.74	0.06	9.08	0.516	1.03
W228192		530	14.5	166.5	<0.002	0.33	0.49	17.9	2	2.1	136.5	0.79	0.05	9.61	0.537	1.17
W228193		540	14.8	161.5	<0.002	0.26	0.45	17.5	1	2.0	114.0	0.75	0.05	9.56	0.503	1.07
W228194		620	12.6	165.5	<0.002	0.31	0.40	17.7	1	2.0	109.5	0.78	0.06	9.59	0.531	0.98
W228195		530	18.8	161.0	<0.002	0.60	0.66	18.1	2	2.1	102.0	0.76	<0.05	9.66	0.516	1.02
W228196		640	14.6	153.0	<0.002	0.53	0.41	17.7	1	2.0	135.0	0.74	0.06	9.57	0.499	1.04
W228197		500	15.2	181.5	<0.002	1.49	0.56	19.3	1	2.4	77.4	0.84	0.05	10.80	0.494	1.56
W228198		350	7.8	72.3	<0.002	2.44	8.69	8.4	1	1.4	684	0.41	<0.05	5.04	0.252	9.89
W228199		320	14.4	108.0	0.002	1.66	0.98	12.0	1	1.5	568	0.47	<0.05	6.60	0.308	1.98
W228200		330	6.2	50.5	0.002	0.50	0.39	5.9	1	0.9	1000	0.27	<0.05	3.52	0.158	0.83
W228201		330	8.7	53.6	0.002	0.76	0.46	6.2	1	0.9	975	0.28	<0.05	3.81	0.167	1.04
W228202		390	7.8	55.6	<0.002	0.66	2.46	6.8	1	1.1	905	0.30	<0.05	4.04	0.177	2.39
W228203		510	30.4	82.5	0.002	3.33	76.9	9.2	1	1.7	201	0.49	0.06	6.58	0.277	56.8
W228204		420	16.8	96.1	<0.002	2.90	7.99	12.2	1	1.7	73.0	0.63	<0.05	7.85	0.382	9.25
W228205		150	0.9	0.8	<0.002	<0.01	0.15	0.2	<1	<0.2	45.0	<0.05	<0.05	0.06	<0.005	0.04
W228206		330	5.2	75.1	<0.002	3.32	57.1	7.8	1	2.0	40.4	0.46	0.08	5.98	0.322	50.2
W228207		460	16.6	116.0	<0.002	4.28	53.5	12.4	1	1.9	44.2	0.65	0.06	8.63	0.427	40.0
W228208		550	7.9	123.5	<0.002	4.13	47.0	12.3	1	2.1	53.9	0.73	0.05	9.05	0.483	54.4
W228209		780	6.9	124.5	<0.002	4.54	50.8	15.0	1	2.3	63.2	0.70	<0.05	8.83	0.481	63.5
W228210		220	50.0	160.0	0.003	4.41	5.41	19.2	1	2.9	85.5	0.62	<0.05	8.55	0.397	12.40
W228211		340	8.5	86.9	<0.002	3.14	0.79	10.7	1	1.4	70.6	0.50	<0.05	6.49	0.341	3.79
W228212		370	10.1	100.0	<0.002	3.88	3.14	12.2	1	1.6	57.1	0.56	<0.05	7.42	0.379	6.72
W228213		510	9.3	115.0	<0.002	4.14	7.74	14.9	1	1.8	59.4	0.64	<0.05	8.25	0.436	11.85
W228214		290	9.4	75.3	<0.002	3.43	8.51	9.8	1	1.4	46.7	0.44	<0.05	5.88	0.335	12.20
W228215		440	17.3	109.0	<0.002	4.50	47.0	12.9	1	1.9	53.0	0.65	0.07	8.37	0.436	41.3
W228216		190	0.8	1.1	<0.002	<0.01	0.19	0.2	1	<0.2	43.4	<0.05	<0.05	0.07	<0.005	0.09

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 21- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17121584

Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001
W228181		2.3	139	1.9	25.2	102	120.5	
W228182		2.3	137	3.9	25.8	83	119.5	
W228183		2.3	139	1.5	25.6	90	121.0	
W228184		2.2	133	7.9	24.5	106	121.0	
W228185		2.1	131	7.6	23.9	108	116.0	
W228186		2.2	139	6.6	25.6	94	118.0	
W228187		2.3	148	1.7	25.0	115	128.0	
W228188		1.9	130	1.4	22.6	60	107.5	
W228189		1.8	126	1.2	20.4	63	101.5	
W228190		1.9	133	1.2	21.7	67	109.5	
W228191		1.8	128	1.2	22.0	67	104.5	
W228192		2.0	135	1.2	22.6	62	111.0	
W228193		1.9	128	1.1	23.3	61	109.5	
W228194		1.9	132	1.2	23.1	66	113.5	
W228195		1.9	131	1.2	23.0	70	109.5	
W228196		1.9	126	1.3	23.6	66	109.0	
W228197		2.2	139	1.4	22.1	95	114.0	
W228198		2.1	71	5.2	14.0	49	71.0	
W228199		2.1	96	1.4	14.1	66	77.4	
W228200		1.8	45	0.6	10.9	46	47.8	
W228201		2.0	49	0.7	11.6	49	50.2	
W228202		2.1	52	4.4	12.3	35	52.8	
W228203		2.1	74	8.0	14.7	124	73.3	1.310
W228204		1.6	95	8.1	15.4	247	86.0	
W228205		0.6	2	0.1	0.6	16	<0.5	
W228206		1.3	84	6.8	11.6	60	67.1	
W228207		1.8	114	9.6	17.1	82	94.3	
W228208		1.9	127	11.7	19.1	53	103.5	
W228209		1.8	124	11.7	20.3	53	100.5	
W228210		1.8	140	12.0	18.2	103	90.6	
W228211		1.4	92	2.8	14.4	45	71.9	
W228212		1.5	102	5.2	15.5	49	84.6	
W228213		1.7	115	8.8	19.1	51	92.9	
W228214		1.2	89	7.0	11.2	42	67.8	
W228215		1.8	119	10.9	17.0	52	94.6	
W228216		0.6	2	0.1	0.7	16	0.6	

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 21- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17121584

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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VANCOUVER BC V6B 1L8

Finalized Date: 21- JUL- 2017
Account: RCM

CERTIFICATE WH17121591

Project: Nadaleen

P.O. No.: N17- 011

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 16- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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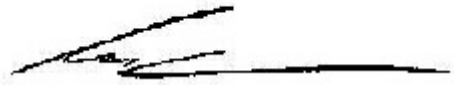
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17121591

Sample Description	Method	WEI- 21	Au- AA25	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
W228217		5.49	2.55	0.08	5.32	4300	190	1.30	0.23	1.55	0.13	50.9	17.7	62	16.85	39.2
W228218		6.75	2.15	0.06	5.71	5400	210	1.11	0.24	0.59	0.17	56.5	17.8	72	13.30	46.3
W228219		8.75	19.15	0.06	3.64	>10000	140	0.62	0.21	1.85	0.78	40.7	12.5	47	9.76	38.7
W228220		5.14	0.01	<0.01	0.06	176.0	20	0.07	0.04	21.0	0.06	1.09	0.7	<1	0.44	1.3
W228221		3.66	4.48	0.03	3.57	4220	190	0.66	0.19	23.0	0.35	44.2	11.9	36	11.25	29.3
W228222		8.69	4.64	0.04	2.99	>10000	130	0.70	0.17	22.8	0.19	37.0	10.2	32	9.52	26.2
W228223		5.06	0.22	0.02	1.37	155.5	130	0.45	0.08	30.6	0.15	21.8	4.4	14	5.54	11.4
W228224		8.28	0.02	0.03	2.28	71.5	180	0.68	0.12	27.8	0.08	30.8	7.2	23	9.19	21.7
W228225		8.00	0.02	0.02	1.63	82.1	130	0.48	0.09	27.5	0.07	25.5	4.9	17	5.55	16.7
W228226		8.37	0.06	0.02	1.75	77.1	120	0.62	0.09	27.8	0.06	30.1	5.3	17	6.84	15.4
W228227		8.48	0.10	0.01	0.65	54.2	100	0.40	0.03	33.6	<0.02	11.25	2.2	7	2.00	6.6
W228228		7.49	0.28	0.04	3.61	210	210	0.87	0.18	23.8	0.17	45.7	11.4	36	12.90	30.3
W228229		7.98	2.17	0.03	2.26	502	190	0.74	0.11	27.0	0.10	38.2	7.3	22	7.01	21.7
W228230		8.13	2.75	0.11	5.27	675	270	1.24	0.30	14.55	0.21	66.9	17.0	52	15.45	48.0
W228231		0.29	2.57	0.18	3.92	6440	210	1.01	0.13	12.75	0.14	43.4	11.7	46	10.80	35.4
W228232		7.65	1.73	0.09	4.37	499	230	0.96	0.22	16.50	0.15	58.8	12.8	42	13.35	37.7
W228233		7.39	1.63	0.05	3.02	313	210	0.90	0.15	23.7	0.09	41.0	9.7	30	9.78	27.8
W228234		7.77	0.18	0.02	1.08	58.0	180	0.44	0.05	33.3	0.10	14.90	3.2	12	3.58	10.5
W228235		7.91	0.02	0.01	0.44	17.1	120	0.23	0.02	36.0	0.02	7.34	1.5	5	1.47	5.0
W228236		3.46	0.01	0.01	0.42	14.8	110	0.26	0.02	35.4	0.03	7.10	1.4	5	1.48	5.1
W228237		8.09	0.05	0.03	1.20	39.6	130	0.51	0.06	31.4	0.05	16.45	3.4	12	5.01	10.6
W228238		7.90	<0.01	0.06	5.44	28.5	250	1.51	0.29	11.70	0.11	72.1	17.9	55	48.5	48.3
W228239		7.93	0.01	0.03	3.06	23.2	220	0.95	0.17	23.9	0.07	39.5	9.5	30	26.9	25.6
W228240		8.23	0.06	0.03	1.81	43.3	160	0.67	0.09	31.0	0.06	27.6	5.9	18	11.30	16.0
W228241		7.58	0.04	0.03	1.75	47.8	150	0.57	0.08	30.9	0.04	25.4	5.2	17	7.05	14.4
W228242		7.48	0.01	0.05	4.06	60.6	220	1.18	0.19	18.70	0.07	54.1	12.0	38	18.10	34.8
W228243		7.98	0.01	0.04	3.23	79.7	250	0.94	0.15	23.2	0.11	44.6	10.5	33	13.20	28.0
W228244		<0.02	0.01	0.03	3.18	73.5	250	0.92	0.15	23.8	0.10	38.7	9.2	32	11.85	25.7
W228245		7.83	<0.01	0.01	1.15	47.4	140	0.35	0.05	33.3	0.07	15.90	3.4	12	4.55	10.4
W228246		7.64	0.03	0.01	0.62	27.3	110	0.24	0.03	36.8	0.03	9.24	2.0	7	1.77	6.2
W228247		8.31	0.03	0.03	0.70	23.1	120	0.25	0.04	36.3	0.02	10.60	2.6	7	2.30	7.0
W228248		0.29	2.63	0.70	1.95	>10000	170	0.52	3.40	26.9	0.15	29.3	4.6	28	6.12	15.5
W228249		4.31	0.01	0.02	1.14	318	190	0.38	0.09	33.9	0.03	15.10	3.7	12	4.03	11.3
W228250		4.71	1.10	0.76	1.35	>10000	180	0.31	0.07	28.1	0.05	18.65	4.5	14	3.65	12.5
W228251		5.12	<0.01	0.26	0.07	16.4	20	<0.05	0.03	19.50	0.10	1.41	0.8	2	0.15	4.1
W228252		6.71	0.02	0.02	0.76	67.6	120	0.29	0.05	32.2	<0.02	12.45	2.9	10	2.56	7.8

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VANCOUVER BC V6B 1L8

Finalized Date: 21-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17121591

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Hg-MS42	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W228217		4.26	13.70	0.13	2.3	14.00	0.040	2.59	24.1	10.2	0.83	366	0.32	0.02	8.9	29.8
W228218		4.22	14.95	0.14	2.8	16.65	0.036	2.78	25.8	12.8	0.54	169	0.40	0.02	9.9	31.9
W228219		3.24	10.50	0.13	1.6	32.6	0.039	1.74	22.2	34.1	0.28	233	1.23	0.01	5.1	21.4
W228220		0.47	0.24	0.12	<0.1	0.043	0.007	0.03	0.5	1.1	13.10	198	0.13	<0.01	0.2	1.6
W228221		2.29	9.94	0.12	1.6	10.50	0.030	1.75	24.5	9.8	0.37	603	1.34	0.02	5.0	19.5
W228222		2.11	8.38	0.12	1.4	8.43	0.027	1.48	20.8	10.1	0.66	781	1.14	0.02	4.2	16.5
W228223		1.09	3.66	0.09	0.6	2.05	0.021	0.67	11.8	5.0	0.61	361	0.42	0.01	1.8	7.0
W228224		1.37	5.83	0.06	1.1	2.21	0.034	1.12	16.3	8.0	0.63	218	1.83	0.02	3.1	14.8
W228225		1.10	4.11	0.10	0.8	1.930	0.016	0.81	13.0	5.1	0.63	252	1.19	0.02	2.1	11.2
W228226		1.27	4.64	0.07	0.9	1.895	0.018	0.86	15.8	6.4	0.85	273	0.60	0.02	2.4	9.2
W228227		0.65	1.81	0.08	0.3	0.869	0.005	0.32	6.2	2.9	0.50	313	0.32	0.01	0.9	3.8
W228228		2.27	9.50	0.09	1.7	3.19	0.037	1.79	25.2	12.1	0.98	536	1.18	0.02	4.7	19.5
W228229		1.81	5.97	0.09	1.1	4.39	0.027	1.13	22.9	8.0	0.80	3100	0.95	0.02	3.0	12.1
W228230		3.18	13.90	0.09	2.6	5.81	0.051	2.63	38.6	17.4	1.18	3610	2.31	0.03	7.5	29.1
W228231		3.01	10.10	0.08	2.0	16.50	0.035	1.88	22.4	11.8	2.67	1200	1.92	0.02	5.7	26.0
W228232		2.94	11.15	0.09	2.0	4.80	0.047	2.12	33.7	14.2	1.29	2630	2.09	0.02	6.0	23.4
W228233		2.08	8.07	0.09	1.6	3.25	0.030	1.48	22.6	11.1	0.90	1780	1.78	0.02	4.4	17.3
W228234		0.79	2.86	0.08	0.6	0.865	<0.005	0.53	8.1	4.2	0.46	453	1.01	0.01	1.5	6.1
W228235		0.36	1.21	0.08	0.2	0.274	0.010	0.22	3.6	2.2	0.39	216	0.46	0.01	0.6	2.4
W228236		0.33	1.17	0.09	0.2	0.246	0.007	0.21	3.5	2.3	0.35	178	0.43	0.01	0.6	2.3
W228237		0.99	3.08	0.07	0.6	0.506	0.013	0.59	8.5	4.6	0.50	397	0.97	0.01	1.6	6.6
W228238		3.54	14.60	0.11	2.8	0.626	0.065	2.74	41.7	21.4	1.85	431	2.83	0.04	7.9	30.5
W228239		2.16	7.87	0.08	1.4	0.442	0.043	1.54	23.0	11.4	1.72	339	1.54	0.03	4.1	15.9
W228240		1.35	4.75	0.09	0.8	0.589	0.026	0.91	14.5	7.5	1.02	457	0.69	0.02	2.5	9.8
W228241		1.30	4.29	0.10	0.8	1.060	0.014	0.86	13.7	6.6	1.03	450	0.52	0.02	2.2	8.6
W228242		2.85	10.15	0.12	1.8	1.125	0.041	1.99	31.4	14.8	1.83	489	1.77	0.03	5.3	21.1
W228243		2.42	8.34	0.09	1.6	0.725	0.030	1.60	24.6	11.6	1.44	348	1.92	0.03	4.6	18.3
W228244		2.39	7.38	0.10	1.4	0.699	0.028	1.56	22.0	10.4	1.42	340	1.72	0.03	4.1	16.0
W228245		0.84	3.00	0.07	0.6	0.241	0.011	0.58	8.1	4.5	0.55	277	1.12	0.01	1.6	6.3
W228246		0.46	1.56	0.07	0.3	0.464	0.016	0.31	4.6	2.6	0.50	203	0.56	0.01	0.8	3.1
W228247		0.50	1.84	0.09	0.4	0.431	0.014	0.35	5.6	3.0	0.45	270	0.15	0.01	1.0	3.6
W228248		1.44	4.90	0.09	0.9	6.81	0.025	1.00	13.8	8.4	0.93	2300	1.83	0.03	2.6	12.9
W228249		0.85	2.86	0.08	0.6	0.606	0.015	0.57	8.2	4.5	0.46	257	0.20	0.02	1.6	5.7
W228250		0.93	3.58	0.16	0.7	1.455	0.042	0.66	9.6	5.5	0.48	556	0.26	0.01	1.9	7.0
W228251		0.48	0.25	0.05	<0.1	0.013	<0.005	0.02	0.7	0.9	12.10	197	0.47	0.01	0.2	2.7
W228252		0.58	2.04	<0.05	0.5	0.350	0.009	0.37	6.4	3.1	0.46	284	0.20	0.01	1.2	3.8

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 21- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17121591

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W228217		420	14.6	115.0	0.002	4.35	37.2	14.0	1	1.9	43.7	0.58	0.06	7.81	0.398	38.4
W228218		440	15.6	117.0	0.002	4.46	60.1	12.0	1	2.1	43.7	0.65	0.09	9.12	0.453	55.7
W228219		270	17.1	84.4	0.004	6.87	185.0	3.9	2	1.9	71.5	0.35	0.15	5.55	0.206	107.0
W228220		190	1.0	2.2	<0.002	0.01	0.40	0.2	<1	0.2	48.8	<0.05	<0.05	0.10	<0.005	0.19
W228221		190	11.4	82.8	0.005	2.68	32.5	11.7	1	1.1	716	0.35	0.10	6.28	0.198	30.6
W228222		260	9.3	70.5	0.004	2.99	65.9	7.4	2	1.2	829	0.31	0.08	4.94	0.167	27.3
W228223		150	4.1	30.9	0.002	0.98	3.54	3.8	1	0.6	1495	0.14	<0.05	2.13	0.073	5.22
W228224		160	9.8	48.7	0.003	1.31	1.03	4.9	2	0.8	1435	0.22	0.05	3.61	0.123	7.30
W228225		170	7.7	35.2	0.003	1.01	1.90	4.0	1	0.6	1265	0.16	<0.05	2.74	0.088	5.61
W228226		130	6.1	38.5	<0.002	1.11	0.84	5.0	2	0.7	1210	0.19	<0.05	3.01	0.096	5.68
W228227		180	2.5	14.0	<0.002	0.45	0.95	2.0	2	0.3	1650	0.07	<0.05	1.10	0.035	2.65
W228228		200	12.0	77.8	0.004	2.20	4.54	8.2	2	1.3	1035	0.35	0.05	5.95	0.198	11.60
W228229		190	8.1	50.2	0.002	1.72	12.55	7.3	2	0.9	1490	0.22	0.05	3.87	0.125	18.65
W228230		250	17.5	111.5	0.008	3.16	16.85	12.9	2	1.8	645	0.55	0.09	8.74	0.306	23.3
W228231		470	11.5	83.9	<0.002	2.65	23.5	9.9	2	1.7	327	0.42	<0.05	6.05	0.270	46.3
W228232		200	14.1	93.0	0.005	2.90	11.05	11.7	2	1.5	773	0.43	0.09	6.99	0.241	19.10
W228233		200	10.5	67.6	0.006	1.98	8.20	7.5	1	1.2	1430	0.32	0.05	5.12	0.171	13.95
W228234		410	4.0	22.3	<0.002	0.71	1.27	2.8	1	0.5	1835	0.12	<0.05	1.76	0.061	3.27
W228235		800	1.8	8.8	<0.002	0.29	0.40	1.3	1	0.2	1755	0.05	<0.05	0.74	0.025	0.91
W228236		730	1.8	8.7	<0.002	0.29	0.34	1.3	1	0.2	1740	0.05	<0.05	0.74	0.024	0.84
W228237		200	4.8	24.8	<0.002	0.83	0.66	3.1	1	0.4	1610	0.12	<0.05	1.90	0.066	1.86
W228238		260	18.3	132.0	0.005	3.29	0.62	13.2	2	2.1	725	0.58	0.06	9.32	0.307	6.70
W228239		250	9.5	70.3	0.003	1.80	0.40	6.8	2	1.2	1685	0.30	0.07	4.75	0.174	3.89
W228240		190	5.9	41.0	<0.002	1.09	0.70	4.7	2	0.7	1490	0.18	<0.05	2.97	0.100	2.18
W228241		180	5.4	36.2	<0.002	1.04	0.85	4.4	2	0.6	1445	0.17	<0.05	2.82	0.096	1.91
W228242		250	13.1	84.8	0.004	2.41	0.53	9.8	2	1.5	1090	0.40	0.05	6.27	0.229	4.71
W228243		240	11.1	68.8	0.005	2.11	0.50	8.0	2	1.2	1600	0.34	<0.05	5.27	0.183	3.82
W228244		230	10.0	62.7	0.003	2.07	0.49	7.1	1	1.1	1645	0.29	<0.05	4.66	0.180	3.45
W228245		350	4.0	22.9	0.005	0.76	0.26	2.8	1	0.5	1880	0.11	<0.05	1.85	0.065	1.44
W228246		670	2.3	12.1	<0.002	0.43	0.86	1.7	1	0.3	1625	0.06	<0.05	0.99	0.035	1.13
W228247		350	2.8	14.2	<0.002	0.47	0.67	1.9	1	0.3	1655	0.08	<0.05	1.21	0.041	1.42
W228248		340	7.8	41.2	0.002	1.44	43.4	5.5	2	0.9	1050	0.19	<0.05	3.41	0.090	23.5
W228249		200	4.0	22.9	<0.002	0.78	1.31	2.7	2	0.8	2040	0.11	<0.05	1.80	0.067	2.41
W228250		170	5.5	28.4	<0.002	5.69	386	2.8	8	0.6	1675	0.14	0.32	2.18	0.079	5.71
W228251		190	2.7	1.1	<0.002	0.02	0.43	0.2	<1	<0.2	50.3	<0.05	<0.05	0.09	0.010	<0.02
W228252		130	2.9	18.9	<0.002	0.54	0.81	2.0	1	0.4	1570	0.09	<0.05	1.47	0.046	1.35

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CERTIFICATE OF ANALYSIS WH17121591

Sample Description	Method Analyte Units LOR	ME- MS61 U ppm 0.1	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001
W228217		1.6	108	9.7	16.3	53	88.5	
W228218		1.9	121	12.7	18.3	53	103.5	
W228219		3.8	66	5.2	23.2	97	59.9	8.57
W228220		0.7	2	0.1	0.7	16	<0.5	
W228221		3.1	58	5.3	20.3	76	59.1	
W228222		2.8	49	4.1	19.2	33	52.4	1.740
W228223		1.8	22	1.5	16.2	72	23.9	
W228224		3.2	36	0.9	20.1	32	37.9	
W228225		2.2	25	0.8	13.0	26	25.6	
W228226		2.5	28	0.9	18.1	24	29.7	
W228227		1.1	11	0.6	12.4	6	13.8	
W228228		3.8	57	3.2	19.7	92	60.2	
W228229		2.1	38	2.2	23.1	24	40.8	
W228230		2.8	91	5.3	24.7	89	90.7	
W228231		6.6	87	8.2	17.9	50	73.7	
W228232		2.7	75	4.3	25.3	61	74.2	
W228233		2.6	52	2.9	17.1	34	56.6	
W228234		2.6	20	0.8	8.8	33	19.6	
W228235		2.2	9	0.2	5.8	4	9.6	
W228236		2.4	9	0.2	5.8	3	9.3	
W228237		2.0	21	0.4	9.3	19	20.6	
W228238		3.5	93	1.2	24.2	80	97.1	
W228239		2.4	51	0.6	19.3	38	53.7	
W228240		2.0	30	0.5	16.4	27	30.9	
W228241		2.1	29	0.7	15.6	21	27.6	
W228242		2.7	68	0.8	22.2	47	66.1	
W228243		2.8	55	0.9	19.9	52	59.6	
W228244		2.5	55	0.8	18.1	49	53.4	
W228245		2.5	21	0.4	10.0	16	20.8	
W228246		2.4	12	0.4	6.8	7	12.0	
W228247		1.9	11	0.4	7.6	9	12.6	
W228248		6.0	34	19.1	14.3	26	31.4	1.360
W228249		1.9	18	0.4	10.6	11	20.0	
W228250		2.0	21	1.3	10.7	12	24.1	9.39
W228251		0.6	3	0.1	0.8	19	<0.5	
W228252		1.9	12	0.3	8.3	5	16.1	

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 21- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17121591

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- JUL- 2017
Account: RCM

CERTIFICATE WH17123187

Project: Nadaleen

P.O. No.: N17- 012

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 19- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

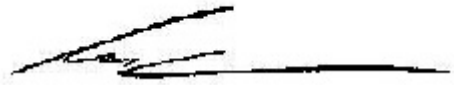
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123187

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228253		6.35	0.01	0.80	31.9	140	0.28	0.05	33.3	0.02	11.30	2.9	9	2.47	7.7	0.60
W228254		4.49	0.01	0.84	74.1	120	0.28	0.04	33.3	0.03	11.60	3.0	10	1.98	8.0	0.65
W228255		3.83	0.72	1.28	>10000	110	0.33	0.06	28.2	0.07	17.15	4.4	14	2.47	12.1	0.92
W228256		4.96	0.01	0.05	139.0	20	0.06	0.02	21.2	0.06	1.26	0.7	1	0.15	1.5	0.46
W228257		7.15	0.04	0.92	115.0	120	0.35	0.05	32.6	0.02	12.85	3.3	10	2.13	8.6	0.74
W228258		7.28	0.02	1.01	80.5	100	0.37	0.05	32.5	0.03	15.30	3.5	11	2.56	9.0	0.76
W228259		7.29	0.01	1.05	42.9	80	0.38	0.05	31.3	0.04	14.60	3.9	11	3.30	9.6	0.80
W228260		7.19	0.02	1.73	51.7	110	0.54	0.08	27.3	0.07	25.1	6.0	18	7.70	13.6	1.29
W228261		7.62	0.02	3.35	49.3	380	0.97	0.14	19.40	0.06	47.4	10.2	32	13.05	23.6	2.20
W228262		7.67	0.04	3.21	64.1	170	0.93	0.15	18.30	0.06	44.5	11.1	31	14.35	24.8	2.29
W228263		7.53	0.02	2.52	39.1	150	0.71	0.13	25.8	0.08	33.5	11.4	27	15.30	24.9	1.74
W228264		3.85	0.03	2.57	33.5	150	0.82	0.11	24.2	0.08	33.8	11.9	25	15.90	25.4	1.71
W228265		7.49	0.02	0.89	63.5	110	0.35	0.05	33.4	0.15	15.15	3.1	9	2.70	8.4	0.72
W228266		3.41	0.87	2.05	>10000	90	0.47	0.10	24.2	0.23	24.8	7.7	22	4.34	17.9	1.40
W228267		3.41	0.03	3.34	209	130	0.96	0.16	23.5	0.05	40.7	13.5	29	8.21	27.0	1.98
W228268		7.73	0.03	3.77	183.5	170	0.94	0.18	22.0	0.08	45.7	14.6	35	8.57	30.8	2.64
W228269		7.30	0.01	2.92	53.0	140	1.01	0.14	25.9	0.04	34.2	10.5	26	8.84	22.9	2.23
W228270		6.99	0.03	3.34	91.4	160	1.12	0.17	22.7	0.05	41.5	13.4	30	10.45	29.2	2.61
W228271		0.29	0.09	3.60	2600	200	0.87	0.13	19.05	0.13	39.6	11.1	45	10.30	42.5	3.02
W228272		7.91	0.03	4.13	108.5	170	1.13	0.18	17.80	0.05	48.4	14.8	38	18.50	29.7	3.22
W228273		8.22	0.02	4.42	132.5	180	1.09	0.18	20.2	0.19	51.0	10.3	44	19.95	30.3	1.90
W228274		7.81	0.04	0.53	61.4	100	0.23	0.03	33.8	0.22	10.30	2.0	7	1.63	5.7	0.41
W228275		<0.02	0.01	0.52	58.1	100	0.23	0.03	33.3	0.19	10.30	2.0	6	1.63	5.5	0.40
W228276		7.99	0.01	0.67	99.7	100	0.25	0.04	33.5	0.05	13.15	2.5	8	1.66	6.8	0.52
W228277		7.97	0.02	0.52	122.5	80	0.18	0.03	34.5	0.10	9.28	1.9	6	1.26	5.3	0.39
W228278		3.87	0.04	0.73	207	110	0.25	0.04	34.8	0.07	12.70	2.7	8	1.73	7.6	0.54
W228279		4.41	0.07	0.88	>10000	180	0.18	0.05	22.2	0.39	17.50	2.9	13	1.46	9.0	0.82
W228280		4.93	0.01	0.04	20.3	30	0.05	0.02	21.2	0.07	1.10	0.6	1	0.11	3.6	0.46
W228281		8.13	0.01	0.76	82.6	150	0.28	0.04	34.2	0.07	12.90	2.7	8	2.86	8.0	0.52
W228282		8.08	0.01	0.75	37.0	170	0.32	0.04	33.9	0.07	12.85	2.6	8	2.30	7.1	0.53
W228283		8.17	0.01	0.64	34.3	140	0.28	0.03	34.1	0.02	14.40	2.1	7	2.02	6.1	0.50
W228284		7.45	0.03	2.63	57.8	240	0.62	0.13	27.1	0.08	37.5	8.3	26	8.29	22.2	1.61
W228285		8.02	0.02	1.53	30.2	190	0.45	0.08	31.4	0.05	22.5	4.8	15	5.39	13.2	1.01
W228286		0.29	0.79	6.90	459	240	2.27	0.24	2.28	0.35	64.4	23.6	99	39.5	66.7	6.39
W228287		8.21	0.03	2.25	43.6	200	0.76	0.12	27.6	0.06	31.9	7.1	22	12.40	20.2	1.58
W228288		8.23	0.01	0.82	18.7	140	0.32	0.04	34.3	0.06	12.80	2.9	8	4.29	7.5	0.68

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123187

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228253		2.12	0.08	0.4	0.288	0.008	0.39	6.0	3.3	0.43	159	0.21	0.02	1.2	4.5	140
W228254		2.24	0.10	0.4	0.585	0.011	0.41	6.1	2.9	0.85	319	0.28	0.01	1.3	4.8	150
W228255		3.54	0.10	0.6	2.08	0.022	0.62	8.8	4.1	0.40	2630	0.41	0.01	1.9	7.3	170
W228256		0.18	0.14	<0.1	<0.005	<0.005	0.02	0.6	0.9	12.85	203	0.12	<0.01	0.1	1.8	230
W228257		2.44	0.10	0.4	1.050	0.012	0.45	6.6	3.1	0.58	713	0.33	0.01	1.4	5.3	130
W228258		2.69	0.10	0.7	1.265	0.011	0.51	8.0	3.7	0.65	716	0.32	0.01	1.5	5.5	150
W228259		2.82	0.10	0.5	0.773	0.014	0.52	7.9	3.9	1.07	338	0.79	0.01	1.5	5.9	130
W228260		4.52	0.12	1.1	0.887	0.018	0.87	14.2	5.9	1.02	296	0.84	0.02	3.0	8.8	160
W228261		8.51	0.16	2.1	0.659	0.039	1.67	25.4	9.7	0.94	441	0.74	0.02	5.8	15.2	160
W228262		8.28	0.13	1.9	0.975	0.034	1.58	23.8	9.3	1.00	379	1.12	0.02	5.5	16.6	140
W228263		6.57	0.14	1.3	0.399	0.026	1.25	18.5	7.9	0.89	511	1.12	0.02	3.9	16.8	180
W228264		6.76	0.11	1.4	0.426	0.032	1.28	18.6	8.1	0.89	522	1.18	0.02	4.0	17.5	190
W228265		2.43	0.11	0.4	0.757	0.011	0.43	8.1	2.6	0.79	185	0.51	0.01	1.3	5.1	150
W228266		5.43	0.13	1.1	3.66	0.025	0.99	13.6	5.3	0.85	665	0.59	0.01	3.2	11.2	180
W228267		8.75	0.16	1.5	1.480	0.038	1.62	23.7	6.9	1.00	655	0.59	0.02	4.8	18.3	270
W228268		10.10	0.13	1.7	2.08	0.040	1.88	24.9	6.7	1.51	794	0.72	0.02	5.5	20.7	310
W228269		7.49	0.12	1.3	0.664	0.036	1.44	19.3	5.6	1.64	720	0.75	0.02	4.1	15.7	360
W228270		9.39	0.13	1.6	1.055	0.044	1.64	23.5	6.6	1.67	698	0.98	0.02	5.1	19.6	350
W228271		9.42	0.11	1.7	3.52	0.039	1.74	20.1	8.7	1.42	1200	1.58	0.02	6.1	25.5	390
W228272		10.85	0.13	1.9	1.270	0.045	2.03	25.2	9.0	1.28	763	0.88	0.02	6.3	22.8	240
W228273		11.50	0.14	1.7	0.747	0.041	2.17	27.0	10.0	1.07	442	0.45	0.02	5.9	20.3	350
W228274		1.46	0.11	0.3	0.659	0.007	0.26	5.1	2.2	0.65	194	0.30	0.01	0.8	3.2	420
W228275		1.46	0.12	0.2	0.646	0.008	0.25	5.1	2.2	0.64	192	0.31	0.01	0.8	3.2	410
W228276		1.79	0.11	0.3	1.055	0.009	0.33	6.4	2.6	0.46	131	0.43	0.01	1.0	4.2	240
W228277		1.45	0.10	0.3	1.215	0.007	0.25	4.7	1.9	0.35	3450	0.32	0.01	0.8	3.2	350
W228278		2.01	0.09	0.4	2.21	0.010	0.36	5.8	2.4	0.40	1820	0.49	0.01	1.1	4.5	280
W228279		2.51	0.14	0.4	8.18	0.017	0.39	8.0	14.8	0.17	966	0.47	0.01	1.3	5.5	1300
W228280		0.16	0.12	<0.1	0.015	0.005	0.02	0.5	0.8	12.90	207	0.40	<0.01	0.1	3.0	210
W228281		2.07	0.12	0.4	0.839	0.010	0.37	6.2	2.9	0.37	360	0.53	0.01	1.1	4.7	250
W228282		2.02	0.10	0.4	0.616	0.006	0.36	6.4	2.9	0.49	160	0.37	0.01	1.1	4.4	280
W228283		1.77	0.10	0.3	0.428	0.007	0.31	7.2	2.8	0.45	126	0.31	0.01	0.9	3.5	270
W228284		6.81	0.15	1.3	0.691	0.029	1.27	21.1	9.2	0.64	181	1.41	0.02	3.9	15.2	130
W228285		4.05	0.12	0.7	0.631	0.015	0.74	12.4	5.7	0.58	198	0.63	0.02	2.2	8.6	300
W228286		18.45	0.16	2.5	3.39	0.067	3.37	31.9	17.5	0.80	652	4.91	0.03	8.7	49.8	240
W228287		5.91	0.11	1.0	1.095	0.024	1.09	18.0	7.9	1.00	335	0.90	0.02	3.2	12.8	220
W228288		2.16	0.10	0.4	0.422	0.009	0.40	6.4	3.4	0.40	170	0.20	0.01	1.2	4.5	180

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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123187

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228253		2.9	17.5	<0.002	0.49	0.29	2.2	1	0.3	1905	0.08	<0.05	1.24	0.047	1.10	1.7
W228254		2.9	18.8	<0.002	0.52	0.55	2.3	1	0.4	1630	0.09	<0.05	1.39	0.049	1.53	1.8
W228255		4.6	30.3	0.002	3.69	225	3.2	3	0.5	1125	0.14	0.11	2.05	0.075	7.49	2.0
W228256		1.2	1.0	<0.002	0.01	0.50	0.2	<1	<0.2	52.4	<0.05	<0.05	0.09	<0.005	0.02	0.9
W228257		3.2	21.7	<0.002	0.66	3.00	2.6	1	0.4	1535	0.10	<0.05	1.44	0.054	3.04	1.3
W228258		3.5	24.0	<0.002	0.67	3.15	2.8	1	0.4	1330	0.11	<0.05	1.60	0.061	3.16	1.6
W228259		3.7	24.4	0.002	0.66	0.50	2.8	1	0.4	897	0.11	<0.05	1.62	0.060	2.00	1.5
W228260		6.8	41.4	0.002	1.15	0.50	4.1	1	0.6	968	0.21	<0.05	3.08	0.117	2.04	2.2
W228261		11.3	79.1	<0.002	1.84	0.60	7.9	1	1.1	795	0.44	<0.05	5.80	0.237	1.29	2.4
W228262		11.2	76.9	<0.002	1.89	0.58	8.1	1	1.1	971	0.40	0.05	5.58	0.220	1.81	2.2
W228263		8.4	60.2	0.003	1.38	0.55	6.9	2	0.8	1210	0.28	0.07	3.97	0.162	3.02	2.8
W228264		8.2	61.7	0.003	1.37	0.43	6.9	1	0.9	1140	0.30	0.05	4.04	0.166	3.11	2.7
W228265		3.9	20.3	0.003	0.50	1.02	2.4	1	0.3	1690	0.09	<0.05	1.55	0.048	1.64	1.9
W228266		9.3	45.4	0.003	2.52	109.5	4.2	3	0.9	625	0.22	0.11	3.33	0.126	17.60	2.1
W228267		9.9	75.2	0.002	1.44	1.99	8.5	1	1.1	594	0.34	0.10	4.95	0.188	4.60	2.3
W228268		11.0	84.5	0.003	1.86	3.84	9.5	1	1.3	621	0.41	0.09	5.84	0.227	7.03	2.3
W228269		9.2	66.0	0.003	1.35	0.50	7.3	1	1.0	773	0.31	0.09	4.43	0.163	7.30	1.7
W228270		11.4	80.0	0.003	1.59	1.18	9.2	1	1.2	663	0.36	0.09	5.40	0.189	7.80	2.1
W228271		8.3	83.1	<0.002	2.55	8.93	9.2	2	1.4	734	0.44	0.07	5.38	0.269	10.05	2.2
W228272		17.5	92.9	0.003	2.17	1.51	10.4	1	1.3	619	0.45	0.08	6.44	0.253	7.15	2.0
W228273		7.6	97.0	0.002	1.20	0.96	10.3	2	1.3	874	0.44	<0.05	6.63	0.224	2.37	2.6
W228274		2.6	11.8	0.002	0.38	0.80	1.6	1	0.2	1360	0.06	<0.05	0.96	0.031	1.47	1.8
W228275		2.5	11.5	<0.002	0.37	0.75	1.5	1	0.2	1340	0.06	<0.05	0.94	0.030	1.41	1.8
W228276		2.8	14.7	<0.002	0.52	1.19	1.9	1	0.2	1475	0.07	<0.05	1.25	0.040	1.62	2.4
W228277		2.0	11.5	<0.002	0.40	1.51	1.7	1	0.2	1255	0.05	<0.05	0.91	0.030	2.04	1.7
W228278		3.0	16.6	0.002	0.56	3.99	2.1	1	0.2	1440	0.08	<0.05	1.26	0.042	4.65	2.4
W228279		5.1	19.0	<0.002	3.82	128.0	2.6	2	0.4	1045	0.09	0.09	1.60	0.048	18.95	3.5
W228280		2.2	0.8	<0.002	<0.01	0.13	0.1	<1	<0.2	44.7	<0.05	<0.05	0.08	<0.005	<0.02	0.5
W228281		2.9	15.8	0.002	0.52	0.58	2.1	1	0.3	1915	0.08	<0.05	1.27	0.043	2.40	2.2
W228282		2.7	15.3	0.002	0.49	0.48	2.1	1	0.3	2120	0.08	<0.05	1.29	0.043	1.42	2.0
W228283		2.3	13.3	<0.002	0.44	0.42	2.2	1	0.2	1965	0.06	<0.05	1.14	0.035	0.69	2.1
W228284		8.7	55.5	0.005	1.68	0.52	5.8	2	0.8	1595	0.28	0.06	4.26	0.148	2.34	3.2
W228285		5.0	33.1	0.002	0.97	0.26	3.5	1	0.5	1880	0.16	<0.05	2.52	0.084	1.00	2.5
W228286		49.4	168.0	0.002	4.55	5.36	21.0	1	2.8	85.5	0.65	<0.05	8.66	0.416	12.30	1.7
W228287		7.0	49.1	0.003	1.46	0.98	5.9	1	0.7	1505	0.23	<0.05	3.56	0.127	1.94	2.3
W228288		2.9	17.6	<0.002	0.63	0.42	2.4	1	0.3	1895	0.09	<0.05	1.33	0.048	0.72	1.6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123187

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228253		13	0.2	8.2	6	14.3		<0.01
W228254		14	0.6	9.1	12	17.3		0.01
W228255		20	1.6	11.2	25	24.7	5.20	1.25
W228256		2	0.1	0.8	16	<0.5		0.01
W228257		15	0.9	8.1	10	17.5		0.16
W228258		17	0.9	11.9	10	18.9		0.12
W228259		17	0.5	8.5	14	20.2		0.04
W228260		27	0.7	13.5	25	42.0		0.01
W228261		53	1.2	20.6	30	95.6		<0.01
W228262		53	0.9	18.6	42	74.8		<0.01
W228263		44	0.6	16.9	35	51.9		<0.01
W228264		47	0.5	16.5	35	53.0		<0.01
W228265		14	0.5	8.7	34	15.4		0.01
W228266		32	1.7	10.1	107	42.1	3.08	0.54
W228267		56	2.8	16.7	35	56.9		0.03
W228268		63	4.2	17.5	47	70.0		0.15
W228269		47	0.5	15.0	37	49.3		<0.01
W228270		56	2.6	17.7	50	61.3		<0.01
W228271		76	5.1	16.9	50	66.6		0.50
W228272		68	2.2	18.5	53	73.3		<0.01
W228273		58	1.3	18.2	50	64.8		0.01
W228274		10	0.5	11.3	59	10.5		0.04
W228275		10	0.5	11.0	53	10.0		0.03
W228276		11	0.8	12.2	12	12.1		0.03
W228277		9	1.2	8.4	27	9.6		0.15
W228278		13	1.2	12.6	10	13.5		0.94
W228279		15	1.6	12.5	49	17.2	6.14	4.96
W228280		2	0.1	0.8	18	<0.5		<0.01
W228281		13	0.6	10.6	25	13.3		0.05
W228282		12	0.6	11.7	26	13.4		<0.01
W228283		11	0.3	14.2	6	11.9		0.01
W228284		41	0.6	18.2	30	44.2		<0.01
W228285		24	0.4	14.8	16	27.4		<0.01
W228286		145	11.4	19.1	105	87.8		0.55
W228287		37	0.5	16.5	25	39.2		<0.01
W228288		13	0.4	9.3	27	15.4		<0.01

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 19- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17123187

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- JUL- 2017
Account: RCM

CERTIFICATE WH17123191

Project: Nadaleen

P.O. No.: N17- 013

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 19- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

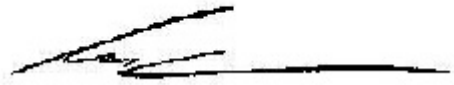
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 26-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123191

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229145		7.28	0.01	0.41	52.3	140	0.16	0.02	35.7	0.08	8.53	1.8	9	1.09	5.3	0.32
W229146		7.56	0.01	0.65	76.3	130	0.21	0.04	34.9	0.12	10.60	2.3	8	2.02	7.1	0.46
W229147		7.37	0.01	0.41	62.3	110	0.18	0.02	34.9	0.07	8.27	1.7	6	0.93	4.9	0.37
W229148		7.12	0.03	0.41	2480	110	0.15	0.02	35.4	0.08	8.19	1.7	6	1.04	4.9	0.33
W229149		0.29	0.19	3.80	6260	200	0.90	0.14	12.25	0.14	40.0	11.7	46	10.55	35.8	2.91
W229150		2.49	1.35	1.65	>10000	130	0.22	0.03	18.75	0.18	34.8	7.7	10	4.66	6.1	1.88
W229151		4.88	0.01	0.04	327	60	0.06	0.03	21.5	0.05	1.08	0.7	4	0.11	6.3	0.46
W229152		4.66	0.26	0.46	2310	130	0.15	0.03	34.4	0.09	9.12	1.9	9	1.10	6.0	0.45
W229153		7.24	0.08	1.08	3060	130	0.16	0.05	23.0	0.29	25.5	4.1	13	2.20	9.6	1.30
W229154		7.49	0.03	1.43	5870	70	0.18	0.04	26.2	0.20	31.6	6.1	10	4.18	8.3	1.59
W229155		7.36	0.02	0.40	136.0	100	0.13	0.02	35.9	0.05	7.58	1.8	6	0.96	5.4	0.34
W229156		7.32	0.09	2.14	3920	130	0.28	0.03	27.8	0.21	39.6	9.3	7	6.60	7.4	2.10
W229157		7.38	0.25	1.50	4770	160	0.23	0.04	30.0	0.20	31.4	7.4	6	4.27	10.9	1.73
W229158		7.02	0.11	0.63	762	160	0.22	0.03	34.1	0.08	10.95	2.5	8	1.85	7.6	0.53
W229159		7.10	0.71	1.14	415	230	0.22	0.06	25.3	0.60	19.55	4.1	14	2.54	13.7	0.81
W229160		7.02	0.14	0.44	198.5	100	0.15	0.02	36.7	0.08	7.19	1.8	7	1.03	5.1	0.38
W229161		6.67	0.14	0.52	372	90	0.12	0.03	35.3	0.07	9.07	2.1	8	1.12	6.4	0.41
W229162		3.35	0.14	0.65	391	100	0.15	0.03	34.4	0.08	9.28	2.2	8	1.41	7.1	0.45
W229163		7.64	0.20	0.45	1810	100	0.10	0.02	34.3	0.06	9.45	1.8	8	0.88	6.0	0.40
W229164		7.29	0.28	0.97	3650	130	0.24	0.04	32.5	0.11	13.85	3.3	12	2.48	10.7	0.68
W229165		0.28	0.69	1.85	>10000	140	0.58	2.66	26.2	0.15	28.4	5.0	29	6.09	16.1	1.38
W229166		7.32	0.53	1.49	3570	150	0.30	0.07	31.5	0.18	20.4	4.7	16	3.87	15.6	1.02
W229167		7.02	0.06	0.44	98.7	100	0.15	0.03	35.3	0.06	7.54	2.0	6	1.00	6.6	0.40
W229168		<0.02	0.06	0.42	86.3	100	0.16	0.03	36.8	0.04	7.11	1.9	6	0.96	6.0	0.37
W229169		7.78	0.01	0.22	45.2	80	0.12	0.01	36.8	0.03	4.15	1.2	4	0.42	3.2	0.22
W229170		7.19	0.04	1.08	187.0	100	0.29	0.04	33.1	0.06	18.30	4.2	10	2.63	9.7	0.85
W229171		7.00	0.04	0.19	53.8	60	0.07	0.01	36.7	0.05	4.09	1.0	4	0.41	2.7	0.18
W229172		6.67	0.06	0.24	56.1	30	0.08	0.02	36.0	0.04	3.76	1.1	2	0.64	3.0	0.19
W229173		5.20	0.53	0.27	96.4	40	0.06	0.02	35.8	0.15	6.35	1.4	2	0.62	3.3	0.23
W229174		4.63	0.86	0.21	268	30	0.07	0.03	34.8	0.24	9.47	0.9	3	0.34	4.1	0.29
W229175		3.22	4.41	2.02	1365	180	0.29	0.15	8.82	1.61	47.0	5.9	26	2.96	25.5	2.03
W229176		6.93	2.36	1.41	875	160	0.20	0.10	19.90	1.43	43.8	4.5	16	2.26	17.6	1.40
W229177		4.91	0.01	0.08	2.5	70	0.07	0.03	20.5	0.08	1.21	0.7	2	0.15	2.6	0.49
W229178		6.99	1.14	0.91	408	140	0.18	0.07	25.2	0.74	23.6	2.9	12	1.49	12.3	0.87
W229179		7.28	0.35	1.20	189.5	120	0.25	0.07	29.1	0.31	20.7	3.9	15	2.90	13.8	0.90
W229180		6.92	0.01	0.58	51.3	100	0.23	0.04	34.5	0.04	11.10	2.1	8	1.45	7.1	0.52

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 26- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123191

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229145		1.12	<0.05	0.2	0.964	0.005	0.18	4.1	1.9	0.41	400	0.28	0.01	0.6	3.2	490
W229146		1.81	0.06	0.3	1.065	0.007	0.30	5.0	2.9	0.51	255	0.27	0.01	1.0	4.1	500
W229147		1.15	0.07	0.2	0.898	0.005	0.18	3.9	1.7	0.50	165	0.25	0.01	0.6	2.6	480
W229148		1.21	0.09	0.2	1.140	0.005	0.18	4.0	1.9	0.37	277	0.30	0.01	0.6	2.7	310
W229149		9.95	0.09	1.8	14.65	0.031	1.80	21.4	11.6	2.59	1180	1.93	0.02	5.8	27.1	440
W229150		4.24	0.15	0.7	9.44	0.051	0.68	17.3	5.9	0.46	1000	0.57	0.01	3.8	3.9	1900
W229151		0.21	0.23	<0.1	0.016	<0.005	0.01	0.5	1.0	13.20	202	0.12	<0.01	0.1	1.9	200
W229152		1.38	0.08	0.2	2.06	0.010	0.21	4.3	1.8	0.40	1370	0.37	0.01	0.7	3.2	260
W229153		2.86	0.10	0.5	27.7	0.014	0.44	10.9	9.2	0.32	711	0.38	0.01	2.7	5.4	850
W229154		3.76	0.10	0.7	25.8	0.015	0.59	15.4	8.0	0.17	351	0.53	0.01	8.4	4.3	870
W229155		1.14	0.09	0.2	2.06	<0.005	0.17	3.7	1.6	0.31	437	0.26	0.01	0.7	2.8	340
W229156		5.51	0.13	1.1	8.64	0.021	0.90	19.7	8.9	0.89	681	0.75	0.01	15.0	4.7	1980
W229157		3.90	0.10	0.8	11.05	0.015	0.62	15.6	7.1	0.60	615	0.54	0.01	9.9	4.0	1300
W229158		1.71	0.10	0.3	2.40	0.007	0.27	5.3	2.9	0.40	439	0.29	0.01	1.0	4.3	390
W229159		3.34	0.12	0.5	8.61	0.014	0.49	8.8	11.2	0.33	1020	0.49	0.01	1.6	7.3	510
W229160		1.23	0.13	0.2	2.99	0.006	0.19	3.3	1.9	0.22	683	0.29	0.01	0.7	2.8	490
W229161		1.46	0.10	0.2	3.95	0.008	0.22	4.3	2.5	0.19	804	0.25	0.01	0.8	3.1	250
W229162		1.84	0.11	0.3	3.89	0.007	0.28	4.5	3.1	0.21	744	0.26	0.01	0.9	3.5	200
W229163		1.32	0.11	0.2	3.64	0.009	0.18	4.3	1.8	0.17	1440	0.27	0.01	0.7	3.0	600
W229164		2.68	0.11	0.5	4.92	0.011	0.44	6.7	4.3	0.24	586	0.46	0.01	1.5	6.1	330
W229165		5.08	0.14	0.8	6.13	0.023	0.93	14.0	9.3	0.92	2260	2.20	0.01	2.6	15.7	340
W229166		4.00	0.13	0.7	9.05	0.012	0.67	9.6	6.0	0.27	874	0.60	0.01	2.2	8.8	370
W229167		1.21	0.11	0.2	1.625	0.007	0.21	3.6	1.9	0.34	422	0.31	0.01	0.7	3.4	560
W229168		1.19	0.15	0.2	1.490	<0.005	0.20	3.4	1.8	0.34	410	0.29	0.01	0.7	3.2	510
W229169		0.64	0.12	0.1	0.553	0.007	0.09	1.9	1.1	0.24	1320	0.22	0.01	0.3	1.7	220
W229170		2.87	0.12	0.5	1.925	0.013	0.49	8.5	4.4	0.38	1220	0.41	0.01	3.2	5.8	380
W229171		0.60	0.11	0.1	1.035	0.014	0.08	1.8	1.3	0.18	2380	0.17	0.01	0.3	1.3	370
W229172		0.90	0.09	0.1	1.285	0.025	0.11	1.7	1.4	0.18	11650	0.15	0.01	0.3	1.3	110
W229173		0.93	0.10	0.2	2.56	0.027	0.12	2.8	1.8	0.15	9760	0.15	<0.01	1.0	1.4	230
W229174		0.75	0.12	0.1	8.44	0.026	0.09	3.9	3.3	0.13	7520	0.16	<0.01	0.3	1.3	180
W229175		5.77	0.10	1.0	46.7	0.018	0.90	20.1	17.8	0.16	987	1.15	0.01	2.9	12.9	1380
W229176		3.85	0.12	0.7	28.6	0.017	0.60	18.6	11.4	0.17	2390	0.71	0.01	3.2	7.6	1180
W229177		0.25	0.15	<0.1	0.083	0.006	0.03	0.6	1.2	12.55	207	0.17	0.01	0.2	1.8	180
W229178		2.59	0.10	0.5	12.85	0.011	0.40	9.1	8.9	0.18	2320	0.54	0.01	1.3	5.7	1150
W229179		3.18	0.08	0.6	4.82	0.012	0.53	8.2	7.7	0.36	1140	0.83	0.01	1.7	7.6	1050
W229180		1.52	0.08	0.3	0.615	0.007	0.26	5.0	2.8	0.49	484	0.69	0.01	0.8	4.0	970

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123191

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229145		1.7	8.5	<0.002	0.29	1.25	1.3	1	0.2	2130	<0.05	<0.05	0.72	0.024	1.88	1.7
W229146		2.6	14.4	<0.002	0.44	1.54	1.7	1	0.3	1935	0.07	<0.05	1.08	0.040	2.54	1.8
W229147		1.7	8.3	<0.002	0.31	1.14	1.4	1	0.2	1980	<0.05	<0.05	0.74	0.024	2.06	1.7
W229148		1.6	8.4	<0.002	0.41	7.59	1.3	1	0.2	1845	<0.05	<0.05	0.73	0.024	2.52	1.5
W229149		10.8	82.9	<0.002	2.59	22.1	10.0	2	1.6	318	0.41	0.05	5.74	0.268	44.5	6.2
W229150		2.7	30.2	<0.002	>10.0	348	3.8	11	0.3	1145	0.15	0.21	1.56	0.206	35.3	1.6
W229151		1.1	0.7	<0.002	0.02	0.66	0.1	1	<0.2	51.6	<0.05	<0.05	0.09	<0.005	0.03	0.9
W229152		2.7	9.6	<0.002	0.53	10.30	1.6	2	0.2	1805	0.05	<0.05	0.80	0.027	5.69	1.7
W229153		5.2	21.6	0.002	1.50	57.5	2.6	1	0.5	1005	0.16	<0.05	1.42	0.091	92.5	2.1
W229154		4.9	30.2	<0.002	1.99	19.15	3.1	2	0.5	726	0.48	<0.05	1.46	0.252	64.1	1.6
W229155		1.6	7.9	<0.002	0.33	3.17	1.4	1	0.2	1615	0.05	<0.05	0.70	0.026	4.61	1.4
W229156		2.5	39.1	<0.002	1.89	15.35	5.1	1	0.5	1370	0.85	<0.05	1.96	0.433	22.8	1.7
W229157		6.3	27.0	<0.002	1.84	27.9	3.8	2	0.4	1875	0.56	0.07	1.57	0.300	31.0	1.9
W229158		2.1	12.7	<0.002	0.55	3.83	2.1	1	0.2	2010	0.07	<0.05	1.05	0.042	4.03	1.8
W229159		4.9	23.9	<0.002	0.90	16.15	2.5	1	0.5	1830	0.11	0.06	1.73	0.062	15.35	3.0
W229160		2.0	8.8	<0.002	0.40	8.52	1.6	1	0.2	1420	<0.05	<0.05	0.72	0.029	7.86	1.7
W229161		2.8	10.2	<0.002	0.43	7.21	1.9	2	0.2	1470	0.05	<0.05	0.87	0.031	8.90	1.6
W229162		2.9	13.1	<0.002	0.47	6.78	2.1	1	0.2	1400	0.06	0.05	0.92	0.037	8.61	1.4
W229163		2.2	8.8	<0.002	0.49	10.35	2.2	1	0.2	1460	0.05	<0.05	0.82	0.029	11.25	2.1
W229164		3.4	20.7	<0.002	0.86	15.80	2.4	1	0.4	1600	0.11	0.06	1.51	0.061	16.65	2.0
W229165		7.1	41.7	0.002	1.44	43.4	5.8	2	0.7	1035	0.19	0.05	3.28	0.088	25.3	6.2
W229166		5.2	32.6	0.002	1.24	26.6	3.7	2	0.5	1740	0.16	0.08	2.15	0.090	32.2	2.8
W229167		1.9	9.5	<0.002	0.37	3.48	1.6	1	0.2	1800	0.05	<0.05	0.76	0.028	6.65	1.8
W229168		1.7	9.1	<0.002	0.35	3.19	1.6	2	0.2	1840	0.05	<0.05	0.72	0.026	5.96	1.7
W229169		1.1	4.5	<0.002	0.18	1.37	0.8	1	<0.2	1680	<0.05	<0.05	0.39	0.013	2.09	1.2
W229170		4.0	23.3	0.002	0.85	4.15	3.4	1	0.3	1435	0.19	0.05	1.59	0.107	7.79	1.9
W229171		0.7	4.2	<0.002	0.18	2.44	2.4	2	<0.2	1035	<0.05	<0.05	0.33	0.013	3.32	1.1
W229172		0.9	5.5	<0.002	0.20	2.57	4.6	1	<0.2	475	<0.05	<0.05	0.37	0.014	3.62	0.8
W229173		1.6	5.8	<0.002	0.25	4.01	4.4	1	<0.2	412	0.06	<0.05	0.43	0.037	5.91	0.9
W229174		2.9	4.2	<0.002	0.31	18.20	3.9	1	0.2	356	<0.05	<0.05	0.37	0.012	22.6	0.9
W229175		14.8	46.3	0.003	2.23	97.4	2.8	1	0.9	698	0.21	0.09	2.98	0.122	122.0	5.6
W229176		10.9	30.9	0.003	1.59	55.9	4.7	2	0.6	832	0.19	0.09	2.03	0.122	64.2	4.5
W229177		1.6	1.3	<0.002	0.01	0.30	0.2	1	<0.2	47.6	<0.05	<0.05	0.09	<0.005	0.42	0.3
W229178		6.2	18.8	0.003	0.98	24.9	4.3	1	0.4	1045	0.10	<0.05	1.47	0.057	30.2	3.6
W229179		4.8	24.3	0.007	0.88	9.32	3.4	1	0.5	1470	0.12	0.05	1.72	0.077	13.65	3.2
W229180		2.3	11.1	0.004	0.36	1.35	1.9	2	0.2	1775	0.06	<0.05	0.93	0.033	2.54	2.3

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17123191

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W229145		9	0.5	8.3	7	7.6		0.03
W229146		12	0.8	9.2	11	11.8		0.03
W229147		10	0.5	8.2	6	7.9		0.01
W229148		8	0.7	8.2	6	7.7		0.09
W229149		85	7.8	18.7	49	71.3		2.60
W229150		53	3.9	15.6	22	32.1	19.80	3.24
W229151		2	0.1	0.8	17	<0.5		0.03
W229152		10	0.9	8.4	8	8.4		0.72
W229153		22	3.1	9.9	27	17.3		1.68
W229154		39	8.3	11.5	29	32.9		0.21
W229155		9	0.9	6.6	5	7.9		0.10
W229156		67	10.0	13.6	41	49.8		0.27
W229157		43	7.0	11.6	33	39.5		1.19
W229158		13	1.1	9.3	11	11.9		0.14
W229159		21	1.6	11.4	69	18.2		1.99
W229160		9	0.8	6.5	8	8.5		0.15
W229161		10	1.0	7.8	8	8.8		0.32
W229162		11	1.1	7.5	9	10.2		0.40
W229163		10	0.9	9.2	5	9.2		0.60
W229164		17	1.5	7.8	18	16.7		0.50
W229165		33	18.8	15.6	27	30.1	1.420	2.41
W229166		26	2.1	9.7	27	23.6		0.65
W229167		10	0.6	7.0	7	9.6		0.07
W229168		9	0.6	6.5	6	9.1		0.06
W229169		5	0.3	5.0	4	4.3		0.25
W229170		22	2.4	11.6	14	20.0		0.27
W229171		6	0.4	9.3	4	4.2		0.34
W229172		7	0.5	28.1	5	3.9		0.38
W229173		9	1.0	23.5	28	6.5		0.80
W229174		7	0.5	20.9	28	3.4		2.23
W229175		37	3.8	13.1	176	32.9		13.30
W229176		30	3.0	15.0	172	23.5		9.35
W229177		2	0.1	0.8	17	0.5		0.02
W229178		17	1.9	13.4	82	16.5		4.93
W229179		22	2.0	12.9	40	20.8		1.43
W229180		13	0.6	9.0	7	11.1		0.06

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 26- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17123191

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 31- JUL- 2017
This copy reported on
1- AUG- 2017
Account: RCM

CERTIFICATE WH17154415

Project: RCM_WH17123191

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

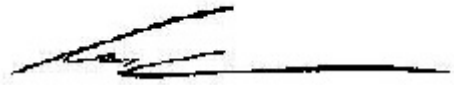
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17123191**

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- JUL- 2017
Account: RCM

Project: RCM_WH17123191

CERTIFICATE OF ANALYSIS WH17154415

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W229145		0.03
W229146		0.03
W229147		0.01
W229148		0.10
W229149		2.49
W229150		3.21
W229151		0.01
W229152		0.69
W229153		1.57
W229154		0.19
W229155		0.09
W229156		0.25
W229157		1.11
W229158		0.14
W229159		1.90
W229160		0.15
W229161		0.30
W229162		0.37
W229163		0.58
W229164		0.47
W229165		2.61
W229166		0.64
W229167		0.06
W229168		0.05
W229169		0.27
W229170		0.26
W229171		0.34
W229172		0.40
W229173		0.80
W229174		2.20
W229175		13.50
W229176		9.80
W229177		0.02
W229178		5.05
W229179		1.48
W229180		0.05

Comments: **Re- analysis results for samples originally reported on certificate WH17123191**

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Project: RCM_WH17123191

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 31- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17154415

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- JUL- 2017
Account: RCM

CERTIFICATE WH17125462

Project: Nadaleen

P.O. No.: N17- 014

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

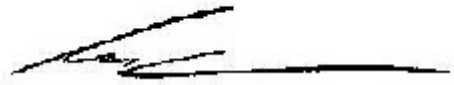
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 27-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125462

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229181		6.93	0.03	1.16	54.6	120	0.48	0.06	31.5	0.07	18.25	5.3	16	3.34	14.4	0.86
W229182		7.16	0.04	1.36	36.9	350	0.48	0.07	29.7	0.12	23.8	6.2	18	4.45	18.4	1.07
W229183		7.17	0.06	1.54	43.7	140	0.87	0.07	28.9	0.15	24.2	7.1	20	5.50	20.5	1.28
W229184		7.68	0.07	3.02	75.7	170	1.00	0.13	22.6	0.21	37.9	12.4	35	12.65	36.7	1.86
W229185		7.30	0.05	1.27	61.0	120	0.33	0.06	30.5	0.15	19.85	5.7	16	3.71	16.2	1.13
W229186		7.46	0.06	1.59	46.8	130	0.45	0.07	30.3	0.15	24.6	7.3	20	5.65	22.5	1.32
W229187		5.30	0.05	1.81	72.6	130	0.53	0.09	27.6	0.20	24.5	7.5	20	6.96	21.7	1.44
W229188		4.32	0.08	6.20	43.2	200	2.48	0.23	1.62	0.04	64.7	21.0	69	23.1	53.7	5.11
W229189		10.03	0.09	6.34	29.5	210	1.86	0.24	1.18	0.05	66.4	19.2	67	26.3	50.2	4.94
W229190		9.47	0.25	6.98	33.6	280	2.32	0.25	1.80	0.05	76.5	20.8	71	30.9	49.9	4.86
W229191		0.29	0.08	3.49	2510	190	1.15	0.13	17.95	0.12	39.9	12.0	39	9.55	39.8	2.93
W229192		8.20	0.10	6.39	42.6	260	2.30	0.24	2.03	0.16	70.3	20.0	67	29.4	47.2	4.68
W229193		7.56	0.07	5.77	42.2	330	1.80	0.20	4.99	0.10	69.2	15.9	57	27.6	38.2	4.23
W229194		10.36	0.07	5.64	37.2	200	1.67	0.19	4.96	0.07	68.0	16.6	57	27.4	36.2	4.33
W229195		5.32	0.06	5.25	35.7	190	1.54	0.19	4.58	0.07	62.9	15.7	53	25.4	33.5	4.04
W229196		11.19	0.06	5.46	38.9	190	1.55	0.19	4.66	0.10	65.2	15.7	56	30.6	36.0	4.13
W229197		11.09	0.08	5.85	42.5	320	1.90	0.21	3.13	0.05	63.9	17.2	61	36.0	40.2	4.43
W229198		10.74	0.07	4.99	25.7	220	1.45	0.17	2.03	0.03	50.5	15.4	60	39.0	41.8	4.27
W229199		6.99	0.01	0.05	0.5	30	0.06	0.02	21.4	0.07	1.04	0.9	<1	0.20	3.2	0.49
W229200		10.88	0.07	5.12	48.4	430	1.66	0.19	2.10	<0.02	59.4	16.4	57	36.0	42.7	4.26
W229201		10.81	0.06	4.63	81.6	170	1.13	0.17	2.88	0.02	50.8	14.9	55	30.8	38.7	4.06
W229202		11.13	0.06	5.24	101.5	200	1.58	0.19	1.92	0.08	56.6	15.9	59	36.8	42.4	4.16
W229203		11.07	0.08	4.75	150.0	150	1.35	0.18	1.64	0.05	53.1	15.5	58	24.5	42.3	4.11
W229204		11.09	0.09	4.55	236	160	1.31	0.17	2.16	0.08	50.3	15.5	55	17.90	38.9	4.40
W229205		<0.02	0.09	4.60	246	170	1.47	0.18	2.18	0.05	51.3	15.6	56	18.05	40.2	4.50
W229206		10.33	0.07	6.56	308	210	1.90	0.27	1.02	0.17	73.9	20.5	71	36.1	50.7	4.72
W229207		11.43	0.07	5.46	64.7	160	1.29	0.21	1.80	0.07	59.3	17.3	59	25.4	41.7	4.52
W229208		11.74	0.06	6.80	93.5	260	1.88	0.24	2.64	0.04	72.9	21.9	64	40.2	52.0	5.20
W229209		10.97	0.06	5.04	42.3	220	1.30	0.18	1.58	0.05	53.9	16.3	58	30.6	41.8	4.35
W229210		0.29	0.61	6.60	446	220	2.32	0.23	2.20	0.35	62.5	22.8	95	39.0	60.7	6.00
W229211		11.75	0.05	5.50	40.3	370	1.21	0.21	1.93	0.04	59.6	17.1	61	41.1	45.5	5.06
W229212		10.84	0.05	7.70	63.4	290	2.40	0.26	1.34	0.05	78.3	22.8	82	60.8	56.8	5.52
W229213		8.78	0.06	8.32	119.5	390	2.62	0.25	1.06	0.03	75.3	25.4	87	51.6	59.0	5.01
W229214		7.04	0.01	0.05	<0.2	30	0.07	0.02	20.3	0.05	1.07	0.6	<1	0.17	2.6	0.45
W229215		11.38	0.04	2.16	1045	140	0.35	0.06	3.71	0.07	25.0	8.4	42	5.57	17.8	3.12
W229216		9.35	0.05	3.23	69.9	240	0.61	0.10	2.62	0.08	32.5	11.2	48	9.56	28.0	3.54

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 27- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125462

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229181		3.46	<0.05	0.6	0.535	0.014	0.54	7.2	7.1	0.59	300	0.78	0.01	1.7	6.8	880
W229182		4.02	<0.05	0.7	0.336	0.017	0.62	9.2	8.6	0.83	311	0.91	0.02	2.1	9.3	1190
W229183		4.72	<0.05	0.7	0.416	0.019	0.70	9.7	8.6	0.93	567	0.88	0.02	2.3	11.3	930
W229184		8.80	0.05	1.4	0.743	0.037	1.36	17.9	17.4	0.87	271	1.37	0.02	4.4	21.2	1050
W229185		3.74	<0.05	0.6	0.679	0.015	0.58	7.4	6.4	0.77	509	0.80	0.01	1.9	8.0	960
W229186		4.67	<0.05	0.7	0.587	0.019	0.70	9.5	8.0	1.03	279	0.89	0.02	2.3	11.2	1070
W229187		5.27	0.05	0.8	0.632	0.019	0.81	10.0	7.8	0.86	456	0.88	0.02	2.6	11.7	830
W229188		18.55	0.11	2.8	0.145	0.060	2.39	31.2	70.3	0.57	585	0.78	0.03	10.0	36.7	500
W229189		18.35	0.05	2.8	0.175	0.066	2.54	32.9	73.7	0.65	537	0.67	0.03	9.8	36.0	490
W229190		20.1	0.10	3.1	0.367	0.078	2.97	37.6	85.2	1.11	683	0.52	0.03	11.2	37.5	560
W229191		10.25	0.07	1.7	3.39	0.039	1.66	20.1	10.6	1.37	1140	1.61	0.02	5.9	23.5	380
W229192		18.15	0.09	2.9	0.510	0.066	2.70	34.4	84.9	1.11	622	0.46	0.03	10.4	36.2	530
W229193		16.30	0.09	2.9	0.248	0.063	2.59	33.6	80.9	2.25	886	0.48	0.03	10.2	27.6	670
W229194		15.75	0.09	2.8	0.362	0.059	2.47	33.1	76.1	2.25	867	0.34	0.03	9.8	27.5	700
W229195		14.55	0.07	2.7	0.345	0.058	2.31	30.2	73.4	2.06	815	0.31	0.03	9.3	26.1	650
W229196		15.15	0.09	2.8	0.124	0.056	2.46	32.2	89.5	2.23	762	0.36	0.03	9.5	27.1	640
W229197		16.40	0.08	2.7	0.059	0.058	2.60	30.7	108.0	1.81	591	0.54	0.04	9.6	30.4	550
W229198		13.65	0.09	2.3	0.030	0.055	2.09	25.0	102.0	1.40	492	0.41	0.08	7.7	29.0	400
W229199		0.16	<0.05	<0.1	0.007	<0.005	0.02	0.5	1.3	13.25	206	0.13	<0.01	0.1	0.9	200
W229200		14.60	0.10	2.5	0.041	0.058	2.15	29.3	100.5	1.52	517	0.36	0.05	8.2	29.2	450
W229201		13.35	0.06	2.2	0.040	0.048	1.99	25.2	109.0	1.94	839	0.33	0.03	7.4	27.5	400
W229202		14.85	0.07	2.5	0.083	0.054	2.31	27.4	116.5	1.71	473	0.37	0.03	8.3	28.6	480
W229203		13.60	0.06	2.2	0.164	0.054	2.02	25.8	129.0	1.43	499	0.44	0.02	7.5	28.4	390
W229204		12.70	0.10	2.1	0.143	0.046	1.93	24.4	129.5	1.54	700	0.40	0.02	7.1	29.1	370
W229205		12.90	0.05	2.2	0.157	0.053	1.95	25.2	133.5	1.55	709	0.41	0.02	7.1	28.8	370
W229206		18.65	0.11	2.5	0.250	0.069	2.98	36.9	99.0	1.11	382	0.45	0.02	8.6	35.9	330
W229207		15.40	0.10	2.3	0.219	0.054	2.46	29.2	95.6	1.74	494	0.36	0.03	8.4	30.1	410
W229208		19.25	0.08	2.9	0.144	0.082	3.10	35.6	120.5	2.27	697	0.29	0.03	10.7	37.3	600
W229209		13.90	0.08	2.3	0.113	0.056	2.11	26.3	144.5	1.55	408	0.44	0.02	7.8	29.7	420
W229210		18.80	0.10	2.3	3.26	0.064	3.17	31.1	19.7	0.77	619	4.80	0.03	8.2	46.2	220
W229211		15.65	0.08	2.5	0.127	0.057	2.19	29.1	159.5	1.94	467	0.36	0.05	8.8	30.8	450
W229212		22.5	0.08	3.0	0.338	0.089	3.25	38.6	183.0	1.76	312	0.33	0.03	10.7	38.3	400
W229213		24.0	0.10	2.9	0.688	0.087	3.68	37.2	138.0	0.98	289	0.34	0.03	10.3	39.8	320
W229214		0.19	0.16	<0.1	0.009	<0.005	0.02	0.5	0.8	12.50	192	0.15	0.01	0.2	2.1	180
W229215		5.53	0.06	1.2	1.235	0.025	0.97	12.0	14.2	1.42	868	0.47	0.01	3.5	16.0	200
W229216		8.52	0.07	1.6	0.255	0.034	1.38	16.2	57.1	1.12	569	0.41	0.01	5.2	24.3	280

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CERTIFICATE OF ANALYSIS WH17125462

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229181		3.7	24.6	0.003	0.64	0.63	3.6	2	0.4	1920	0.12	0.07	1.71	0.079	2.47	2.4
W229182		4.7	29.2	0.004	0.74	0.35	4.4	3	0.5	2130	0.14	0.09	2.13	0.095	1.91	3.0
W229183		5.0	33.3	0.006	0.75	0.36	5.5	3	0.6	1655	0.17	0.08	2.32	0.106	1.61	2.6
W229184		8.4	72.0	0.006	1.46	0.51	8.9	2	1.0	1570	0.30	0.09	4.03	0.229	2.03	3.2
W229185		4.2	26.7	0.004	0.68	0.34	3.9	2	0.5	1695	0.13	0.07	1.85	0.093	0.78	2.5
W229186		4.8	34.5	0.006	0.79	0.35	5.4	3	0.6	1780	0.15	0.05	2.20	0.115	0.80	2.8
W229187		5.3	44.4	0.004	0.81	0.44	5.8	2	0.6	1370	0.18	0.07	2.57	0.121	0.97	2.2
W229188		13.5	139.0	<0.002	0.11	0.52	19.3	1	2.3	63.9	0.71	0.05	9.01	0.519	1.05	2.0
W229189		14.1	149.5	0.002	0.09	0.51	18.3	1	2.2	61.5	0.68	0.05	9.57	0.508	1.11	2.1
W229190		16.8	177.0	<0.002	0.29	0.50	19.5	1	2.4	83.4	0.76	0.06	10.70	0.519	1.35	2.2
W229191		7.7	81.9	<0.002	2.48	9.59	9.5	2	1.5	693	0.38	0.05	5.28	0.262	10.35	2.2
W229192		18.8	157.5	<0.002	0.20	0.59	17.9	1	2.2	78.6	0.69	0.07	10.15	0.491	1.31	2.1
W229193		13.7	148.5	<0.002	0.23	0.45	14.8	1	2.0	126.0	0.70	<0.05	9.71	0.434	1.11	2.2
W229194		15.8	145.0	<0.002	0.51	0.47	14.5	1	1.9	120.0	0.66	<0.05	9.53	0.435	1.28	2.1
W229195		15.2	133.0	<0.002	0.41	0.47	13.1	1	1.8	111.0	0.65	<0.05	9.03	0.409	1.25	2.0
W229196		15.1	141.0	<0.002	0.21	0.47	14.0	1	1.8	109.0	0.65	<0.05	9.14	0.412	0.85	2.0
W229197		16.5	146.0	<0.002	0.40	0.59	15.2	1	2.0	102.5	0.65	0.07	9.14	0.453	0.82	2.0
W229198		11.2	121.5	<0.002	0.21	0.37	13.5	1	1.6	70.3	0.53	0.05	7.59	0.433	0.72	1.5
W229199		1.2	0.9	<0.002	<0.01	0.09	0.2	1	<0.2	51.5	<0.05	<0.05	0.06	<0.005	0.02	0.4
W229200		12.2	128.0	<0.002	0.23	0.48	14.2	1	1.7	79.9	0.57	<0.05	8.03	0.434	0.83	1.7
W229201		11.8	118.0	<0.002	0.20	0.37	13.1	1	1.5	87.5	0.51	0.06	7.11	0.412	0.88	1.5
W229202		11.8	130.5	<0.002	0.26	0.41	14.9	1	1.7	79.1	0.57	<0.05	7.96	0.460	1.03	1.7
W229203		11.8	108.0	<0.002	0.33	0.50	13.6	1	1.7	83.8	0.50	<0.05	7.53	0.420	1.28	1.5
W229204		11.4	101.0	<0.002	0.25	0.50	13.0	1	1.6	117.5	0.48	0.05	6.87	0.398	0.92	1.5
W229205		11.7	101.5	<0.002	0.27	0.54	13.1	1	1.6	118.5	0.50	0.05	7.13	0.406	0.94	1.5
W229206		15.3	153.5	<0.002	0.59	0.58	18.2	1	2.1	99.1	0.61	0.05	10.30	0.415	1.45	1.9
W229207		15.2	129.0	<0.002	0.52	0.54	15.4	1	1.9	116.0	0.56	<0.05	8.27	0.441	1.75	1.8
W229208		15.9	159.0	<0.002	0.35	0.51	18.6	2	2.3	126.0	0.74	0.06	10.25	0.494	1.40	2.2
W229209		12.0	111.0	<0.002	0.36	0.46	13.7	1	1.7	118.5	0.54	<0.05	7.76	0.439	0.87	1.6
W229210		48.4	167.0	0.002	4.39	5.62	19.1	1	2.9	87.3	0.56	<0.05	8.66	0.395	12.45	1.7
W229211		9.9	118.5	<0.002	0.30	0.44	15.5	1	1.7	132.5	0.60	0.05	8.47	0.470	0.87	1.8
W229212		15.1	174.5	<0.002	1.34	0.53	23.0	1	2.4	123.0	0.73	0.05	11.25	0.514	2.45	2.1
W229213		17.3	182.5	<0.002	4.46	0.67	24.7	1	2.6	176.0	0.74	<0.05	10.75	0.512	4.61	1.9
W229214		1.7	0.9	<0.002	0.01	0.15	0.1	1	<0.2	45.1	<0.05	<0.05	0.08	<0.005	<0.02	0.7
W229215		4.8	42.9	<0.002	1.62	2.10	7.1	1	0.7	115.5	0.24	<0.05	3.30	0.286	3.94	0.7
W229216		8.6	62.3	<0.002	2.76	0.51	9.7	1	1.0	101.0	0.35	<0.05	4.68	0.358	1.29	0.9

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Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W229181		24	1.3	11.3	18	21.4	0.01
W229182		30	0.5	16.3	24	26.1	<0.01
W229183		36	0.4	16.1	26	28.8	<0.01
W229184		65	0.9	19.9	49	60.1	<0.01
W229185		28	0.5	13.4	23	24.4	<0.01
W229186		38	0.5	17.4	28	28.8	<0.01
W229187		40	0.6	14.2	31	31.9	<0.01
W229188		150	1.7	20.5	72	117.5	<0.01
W229189		143	1.8	21.3	70	120.5	<0.01
W229190		139	2.0	23.7	72	132.0	<0.01
W229191		72	5.5	16.2	49	74.3	0.49
W229192		127	1.9	21.2	98	122.5	<0.01
W229193		98	1.6	23.6	82	124.0	<0.01
W229194		97	1.4	22.3	81	120.5	<0.01
W229195		92	1.4	20.8	76	114.0	<0.01
W229196		96	1.2	21.2	78	119.5	<0.01
W229197		115	1.2	20.3	78	117.5	<0.01
W229198		116	1.0	15.5	60	98.3	<0.01
W229199		2	0.5	0.8	19	<0.5	<0.01
W229200		114	1.0	17.9	65	108.0	<0.01
W229201		108	0.9	16.1	54	101.0	0.03
W229202		121	1.1	18.1	75	105.0	<0.01
W229203		114	1.1	16.0	70	95.7	0.01
W229204		108	1.2	15.6	77	91.1	<0.01
W229205		110	1.2	15.9	77	93.9	<0.01
W229206		121	1.4	17.3	94	109.5	<0.01
W229207		119	1.1	17.3	77	105.0	<0.01
W229208		130	1.3	23.3	80	124.0	<0.01
W229209		118	1.0	16.3	73	100.5	<0.01
W229210		137	14.2	17.6	100	95.7	0.62
W229211		124	1.1	18.9	73	108.0	<0.01
W229212		159	1.3	23.7	84	127.0	0.01
W229213		175	2.9	22.5	74	117.5	0.01
W229214		2	0.1	0.7	16	<0.5	<0.01
W229215		83	3.2	9.6	59	44.6	0.05
W229216		101	1.4	11.6	78	68.0	<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17125462

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- JUL- 2017
This copy reported on 1- AUG- 2017
Account: RCM

CERTIFICATE WH17156486

Project: RCM_WH17125462

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 28- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

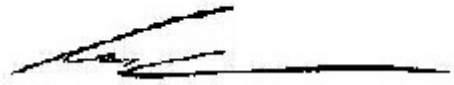
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17125462**

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- JUL- 2017
Account: RCM

Project: RCM_WH17125462

CERTIFICATE OF ANALYSIS WH17156486

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W229181		<0.01
W229182		<0.01
W229183		0.01
W229184		<0.01
W229185		<0.01
W229186		<0.01
W229187		0.01
W229188		<0.01
W229189		<0.01
W229190		<0.01
W229191		0.50
W229192		<0.01
W229193		<0.01
W229194		<0.01
W229195		0.01
W229196		<0.01
W229197		0.01
W229198		<0.01
W229199		<0.01
W229200		<0.01
W229201		<0.01
W229202		<0.01
W229203		<0.01
W229204		<0.01
W229205		<0.01
W229206		<0.01
W229207		0.01
W229208		<0.01
W229209		<0.01
W229210		0.55
W229211		<0.01
W229212		<0.01
W229213		<0.01
W229214		<0.01
W229215		0.04
W229216		<0.01

Comments: **Re- analysis results for samples originally reported on certificate WH17125462**

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: RCM_WH17125462

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 31- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17156486

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

2103 Dollarton Hwy
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www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

CERTIFICATE WH17125467

Project: Nadaleen

P.O. No.: N17- 015

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

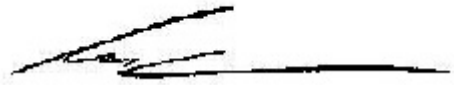
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125467

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228289		5.25	0.01	0.70	22.2	160	0.25	0.04	33.3	<0.02	10.75	2.9	7	2.16	6.7	0.49
W228290		4.28	0.01	0.93	28.6	150	0.31	0.05	32.0	0.02	13.35	3.5	12	2.16	8.3	0.74
W228291		2.78	0.12	4.32	25.7	860	0.59	0.08	10.25	0.49	25.8	21.8	76	3.58	93.2	5.80
W228292		4.85	0.45	0.69	93.1	160	0.22	0.03	32.0	0.05	9.62	3.6	11	1.62	11.8	0.95
W228293		10.72	0.03	0.38	207	110	0.17	0.05	34.9	0.06	7.40	1.6	4	1.26	4.0	0.34
W228294		6.92	0.06	0.72	464	140	0.31	0.04	33.8	0.06	11.60	2.6	8	2.64	7.0	0.69
W228295		4.96	0.11	0.91	828	180	0.35	0.05	32.1	0.07	15.35	3.1	9	3.91	7.9	0.92
W228296		<0.02	0.14	0.97	882	200	0.39	0.05	31.9	0.07	15.75	3.2	10	4.19	8.4	0.93
W228297		11.33	0.01	0.45	214	110	0.20	0.03	35.3	0.04	9.93	2.0	5	1.77	4.5	0.36
W228298		11.16	0.01	0.44	328	100	0.21	0.03	33.7	0.08	9.16	2.2	5	1.90	4.6	0.42
W228299		8.75	0.01	0.62	417	110	0.28	0.04	33.9	0.06	12.35	2.6	7	2.65	6.2	0.51
W228300		12.98	0.01	0.71	383	90	0.29	0.04	33.3	0.07	13.60	2.8	8	2.59	7.3	0.52
W228301		9.93	0.02	0.93	840	110	0.33	0.05	32.9	0.08	15.55	3.5	10	2.91	9.1	0.65
W228302		0.29	0.18	3.83	6320	200	0.85	0.12	11.95	0.14	40.2	12.1	44	11.00	35.0	2.92
W228303		9.69	0.01	0.71	648	130	0.23	0.04	33.9	0.04	12.05	2.4	8	2.26	6.1	0.51
W228304		13.33	0.01	0.47	358	100	0.19	0.03	31.7	0.03	9.77	2.0	5	1.54	4.8	0.54
W228305		8.66	0.01	0.43	525	50	0.19	0.02	27.3	0.02	10.15	1.9	5	1.60	5.7	0.96
W228306		4.06	0.04	0.44	535	50	0.23	0.04	26.5	0.05	10.55	1.9	5	1.38	15.7	1.02
W228307		10.38	0.07	0.55	1985	40	0.23	0.05	23.3	0.05	12.05	2.3	6	1.65	7.0	2.07
W228308		11.36	0.03	0.46	6760	70	0.11	0.04	32.0	0.06	11.25	2.0	6	0.87	4.3	1.11
W228309		12.13	0.03	0.84	439	90	0.39	0.06	33.1	0.18	15.20	3.1	9	2.35	8.5	0.74
W228310		11.18	0.09	1.03	3140	130	0.24	0.06	31.8	0.10	15.70	3.8	11	2.54	10.2	0.90
W228311		11.75	0.80	1.52	7300	140	0.26	0.08	28.0	0.24	23.3	5.0	17	3.71	15.4	1.13
W228312		7.00	0.01	0.04	12.3	40	0.06	0.03	20.7	0.06	0.93	0.6	1	0.11	2.9	0.45
W228313		10.81	0.83	1.30	2620	140	0.25	0.07	27.2	0.36	18.95	4.4	16	2.74	14.3	1.12
W228314		11.37	0.42	0.64	438	120	0.15	0.04	30.7	0.13	9.77	2.1	8	1.32	6.9	0.62
W228315		12.29	0.07	0.62	90.0	130	0.26	0.04	36.4	0.05	11.35	2.2	8	1.43	6.8	0.51
W228316		11.58	0.20	1.94	372	200	0.45	0.11	28.7	0.17	26.7	5.8	21	3.85	21.3	1.39
W228317		12.64	0.22	4.69	1030	300	0.77	0.22	15.40	0.43	57.4	15.5	52	11.80	51.0	3.14
W228318		6.86	0.01	0.05	0.9	30	0.06	0.04	21.6	0.05	1.01	0.7	1	0.18	4.6	0.48
W228319		11.72	0.21	1.89	568	280	0.42	0.10	28.1	0.26	31.7	6.3	22	3.29	20.7	1.49
W228320		12.14	0.24	1.46	595	180	0.31	0.08	29.6	0.25	22.2	4.4	17	2.96	14.7	1.24
W228321		11.70	0.27	3.24	650	270	0.61	0.16	20.7	0.42	47.9	10.9	35	8.88	36.5	2.11
W228322		11.35	0.14	2.01	258	170	0.45	0.10	26.9	0.31	30.5	7.0	22	5.61	22.4	1.41
W228323		0.29	0.67	1.81	>10000	140	0.53	2.42	25.3	0.14	28.4	4.7	27	5.60	15.5	1.34
W228324		11.83	0.11	1.10	196.5	150	0.25	0.07	27.5	0.21	16.30	3.7	12	2.37	12.2	0.81

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125467

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228289		1.81	0.08	0.3	0.216	0.009	0.34	5.9	2.8	0.35	153	0.14	0.01	1.0	3.7	120
W228290		2.38	0.07	0.5	0.466	0.012	0.45	7.2	2.9	0.65	219	0.23	0.01	1.4	5.0	140
W228291		10.90	0.07	1.3	0.173	0.062	0.45	11.3	50.8	3.15	1600	0.60	0.99	6.1	44.1	370
W228292		1.88	<0.05	0.3	0.201	0.012	0.18	4.7	5.4	1.09	358	0.14	0.10	0.9	5.8	600
W228293		1.06	<0.05	0.2	0.243	0.009	0.17	3.4	1.6	0.53	157	0.16	0.01	0.6	1.9	630
W228294		1.88	0.05	0.3	0.680	0.010	0.34	6.0	2.4	0.35	269	0.45	0.01	1.0	3.9	240
W228295		2.45	0.05	0.4	0.689	0.018	0.42	8.0	3.6	0.96	274	0.43	0.01	1.3	4.2	170
W228296		2.54	0.05	0.5	0.747	0.018	0.46	8.2	3.7	0.94	271	0.44	0.01	1.3	4.7	180
W228297		1.19	<0.05	0.2	0.246	0.008	0.21	5.1	2.1	0.38	180	0.21	0.01	0.7	2.6	330
W228298		1.17	0.05	0.2	0.363	0.009	0.21	4.5	2.2	0.63	188	0.21	0.01	0.7	2.6	430
W228299		1.61	0.06	0.3	0.596	0.010	0.29	6.3	3.2	0.84	198	0.29	0.01	0.9	3.4	320
W228300		1.87	0.06	0.3	1.085	0.011	0.33	7.3	3.3	0.47	268	0.39	0.01	1.0	4.1	280
W228301		2.38	0.05	0.5	2.09	0.011	0.43	8.0	3.6	0.54	319	0.40	0.02	1.3	4.5	270
W228302		9.22	0.08	1.8	15.55	0.034	1.85	20.5	10.8	2.60	1180	1.81	0.02	6.1	24.7	450
W228303		1.78	0.05	0.3	1.070	0.008	0.33	5.7	3.0	0.69	199	0.24	0.01	1.0	3.1	370
W228304		1.28	0.06	0.2	1.085	0.007	0.21	4.8	2.2	3.05	343	0.24	0.01	0.6	2.7	190
W228305		1.21	0.06	0.2	1.040	0.007	0.19	4.7	2.1	6.48	695	0.15	0.01	0.6	2.3	760
W228306		1.42	0.10	0.2	1.075	0.007	0.19	4.3	2.4	6.97	710	1.59	0.01	0.6	13.1	810
W228307		1.78	0.09	0.3	5.08	0.013	0.23	4.8	2.7	8.25	1440	0.42	0.01	0.8	5.0	330
W228308		1.50	0.10	0.2	3.92	0.011	0.21	4.7	1.7	2.42	1020	0.32	0.01	0.6	3.3	410
W228309		2.47	0.09	0.4	2.94	0.012	0.38	6.5	3.9	0.71	589	0.42	0.01	1.1	5.2	270
W228310		3.01	0.09	0.5	4.32	0.015	0.47	6.8	4.0	0.66	918	0.44	0.01	1.4	6.4	380
W228311		4.21	0.11	0.7	10.75	0.015	0.62	11.7	7.4	0.24	3140	0.80	0.01	2.0	8.9	560
W228312		0.17	0.12	<0.1	0.030	<0.005	0.02	0.5	0.9	12.70	201	0.17	0.01	0.1	1.5	180
W228313		3.67	0.10	0.6	12.95	0.011	0.54	8.1	7.9	0.21	4980	0.69	0.01	1.7	8.1	270
W228314		1.85	0.09	0.3	7.14	0.009	0.25	4.4	6.1	0.23	3000	0.30	0.01	0.8	3.6	240
W228315		1.86	0.10	0.3	2.68	0.008	0.26	4.8	2.4	0.40	587	0.36	0.01	0.9	3.8	730
W228316		5.28	0.11	0.9	11.10	0.018	0.83	13.6	5.0	0.58	1000	0.98	0.01	2.5	11.1	540
W228317		12.95	0.14	2.0	23.7	0.039	2.06	29.5	12.2	0.61	921	2.41	0.02	6.1	29.2	380
W228318		0.20	0.12	<0.1	0.033	0.005	0.02	0.5	1.0	13.15	217	0.06	<0.01	0.2	1.5	200
W228319		5.13	0.13	0.9	12.45	0.019	0.75	15.7	6.3	0.26	1840	1.55	0.01	2.5	11.5	900
W228320		4.04	0.09	0.7	12.85	0.019	0.63	11.0	5.5	0.28	2890	1.20	0.01	1.9	8.0	1160
W228321		9.34	0.14	1.5	14.50	0.026	1.45	24.2	11.3	0.34	1800	2.24	0.02	4.4	21.2	610
W228322		5.89	0.11	0.9	6.61	0.019	0.91	16.2	7.5	0.27	3010	1.47	0.01	2.8	13.2	260
W228323		5.13	0.11	0.8	6.81	0.023	0.89	14.5	9.1	0.88	2200	1.81	0.01	2.5	13.7	320
W228324		3.30	0.10	0.5	5.11	0.015	0.50	7.3	5.2	0.24	6140	0.77	0.01	1.5	6.8	520

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125467

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228289		2.2	15.3	<0.002	0.41	0.12	2.0	1	0.2	2160	0.07	<0.05	1.20	0.039	0.51	1.7
W228290		2.9	20.2	<0.002	0.62	0.31	2.5	1	0.3	1980	0.10	<0.05	1.58	0.053	0.96	1.8
W228291		5.8	24.4	<0.002	0.08	0.25	21.4	1	1.0	408	0.36	0.07	2.32	0.709	0.27	0.9
W228292		2.4	8.3	0.002	0.06	0.21	3.2	1	0.2	1490	0.06	<0.05	0.79	0.088	0.26	1.6
W228293		2.5	7.6	<0.002	0.06	0.48	1.1	1	0.2	1615	<0.05	<0.05	0.68	0.020	0.36	1.6
W228294		3.3	15.2	0.002	0.12	0.90	2.1	1	0.3	1750	0.07	<0.05	1.23	0.039	0.95	2.0
W228295		4.0	19.0	0.003	0.06	1.34	2.8	1	0.3	1390	0.09	<0.05	1.61	0.048	1.48	2.0
W228296		4.3	20.4	0.003	0.07	1.40	2.9	1	0.4	1375	0.10	<0.05	1.68	0.052	1.58	2.0
W228297		2.8	9.4	<0.002	0.14	0.52	1.4	1	0.2	1570	0.05	<0.05	0.89	0.025	0.46	1.9
W228298		2.7	9.1	<0.002	0.12	0.66	1.4	1	0.2	1425	0.05	<0.05	0.85	0.025	0.74	1.9
W228299		2.9	13.0	0.002	0.16	0.74	1.8	1	0.2	1415	0.06	<0.05	1.17	0.033	1.25	2.0
W228300		2.8	15.1	0.002	0.16	1.29	2.1	1	0.3	1330	0.07	<0.05	1.31	0.038	2.01	2.0
W228301		4.0	19.9	0.002	0.28	2.70	2.3	1	0.3	1580	0.10	<0.05	1.66	0.052	4.33	2.3
W228302		10.5	80.3	<0.002	2.62	23.5	10.3	1	1.5	323	0.42	<0.05	6.14	0.265	42.2	6.8
W228303		2.6	15.6	<0.002	0.24	1.16	1.9	1	0.2	1800	0.07	<0.05	1.23	0.038	2.26	2.0
W228304		2.5	10.2	<0.002	0.15	1.41	1.4	1	0.2	1575	0.05	<0.05	0.86	0.026	2.46	1.8
W228305		2.8	8.8	<0.002	0.16	1.46	1.4	1	0.4	720	<0.05	<0.05	0.79	0.023	3.07	2.0
W228306		10.1	8.3	0.003	0.17	1.59	1.5	1	0.3	665	<0.05	<0.05	0.71	0.023	3.08	1.8
W228307		4.6	10.1	<0.002	0.36	13.60	2.3	1	0.4	481	0.05	<0.05	0.85	0.029	15.35	1.8
W228308		2.9	8.4	<0.002	0.61	18.85	1.9	2	0.2	978	<0.05	<0.05	0.74	0.023	7.87	1.7
W228309		4.6	16.5	<0.002	0.41	4.22	2.5	1	0.3	1285	0.08	<0.05	1.32	0.045	4.82	2.1
W228310		5.0	22.7	0.002	0.82	15.95	2.9	1	0.4	1330	0.10	<0.05	1.52	0.056	12.45	2.0
W228311		5.8	31.0	0.002	1.52	43.2	6.0	2	0.5	1225	0.14	0.06	2.21	0.084	33.8	3.3
W228312		1.1	0.7	<0.002	<0.01	0.24	0.2	1	<0.2	50.3	<0.05	<0.05	0.06	<0.005	0.15	0.6
W228313		4.5	27.2	0.002	1.28	23.7	11.7	2	0.5	1015	0.12	0.05	1.87	0.081	27.9	2.9
W228314		2.7	10.8	<0.002	0.59	10.45	7.6	2	0.2	1090	0.06	<0.05	0.88	0.036	14.95	1.7
W228315		2.7	11.2	<0.002	0.44	3.00	2.7	2	0.2	1925	0.06	<0.05	0.96	0.035	6.13	2.2
W228316		7.7	38.5	0.003	1.35	13.55	5.4	2	0.7	1715	0.18	0.06	2.70	0.103	24.4	2.5
W228317		12.7	95.7	0.010	3.26	33.8	11.0	2	1.5	1300	0.45	0.09	6.39	0.280	67.1	4.0
W228318		1.1	1.1	<0.002	<0.01	0.07	0.2	1	<0.2	52.9	<0.05	<0.05	0.06	<0.005	0.27	0.4
W228319		5.8	36.5	0.005	1.52	20.9	8.2	2	0.6	2180	0.19	0.08	2.80	0.108	37.6	3.5
W228320		5.5	31.5	0.005	1.24	26.5	6.4	1	0.5	1445	0.14	0.05	2.13	0.081	43.0	2.9
W228321		9.6	72.5	0.009	2.25	28.0	7.5	2	1.1	1520	0.33	0.11	4.80	0.183	42.7	4.1
W228322		5.6	48.1	0.005	1.44	15.90	8.0	2	0.7	1720	0.20	0.08	2.94	0.112	20.0	2.8
W228323		6.1	41.7	0.002	1.37	49.5	5.9	3	0.7	1010	0.18	0.06	2.97	0.083	23.0	5.8
W228324		3.5	26.1	0.002	0.84	11.50	7.0	2	0.4	1145	0.11	<0.05	1.60	0.057	15.90	2.4

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125467

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228289		12	0.2	8.5	7	14.1		0.01
W228290		15	0.4	11.3	13	19.2		0.02
W228291		191	1.1	17.4	92	52.0		<0.01
W228292		24	2.3	9.0	12	13.8		<0.01
W228293		7	0.5	6.4	11	8.1		<0.01
W228294		13	1.1	9.0	16	15.0		<0.01
W228295		16	1.3	14.2	17	18.0		<0.01
W228296		17	1.3	14.2	18	19.0		<0.01
W228297		8	0.8	10.7	9	8.6		<0.01
W228298		8	0.4	12.0	21	8.8		<0.01
W228299		11	0.6	12.8	15	12.2		<0.01
W228300		12	0.8	12.8	14	13.9		0.01
W228301		16	1.0	13.2	14	18.3		0.03
W228302		84	7.5	18.4	48	71.7		2.65
W228303		13	0.7	11.0	7	14.1		0.01
W228304		9	0.5	10.8	5	9.0		0.06
W228305		8	0.4	12.2	5	10.8		0.05
W228306		8	0.4	12.8	14	9.8		0.06
W228307		12	0.5	13.5	11	10.6		0.72
W228308		10	0.4	10.7	10	8.4		1.02
W228309		14	0.6	14.6	32	13.9		0.15
W228310		17	0.7	13.6	13	16.5		0.98
W228311		26	1.3	17.3	28	28.1		4.11
W228312		2	0.1	0.7	17	<0.5		<0.01
W228313		25	1.2	21.4	41	20.8		6.24
W228314		13	0.5	20.0	10	10.8		4.03
W228315		12	0.5	13.4	7	12.5		0.20
W228316		35	1.4	19.3	31	35.3		1.34
W228317		90	3.5	28.8	89	78.0		3.87
W228318		2	0.1	0.7	17	<0.5		<0.01
W228319		37	1.9	19.9	36	37.8		3.83
W228320		29	1.4	20.2	30	33.3		5.07
W228321		59	3.5	22.5	59	58.6		3.54
W228322		36	2.1	18.8	43	37.6		2.24
W228323		31	16.4	16.2	23	34.1	1.370	2.10
W228324		20	1.2	18.9	22	19.5		3.35

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 28- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17125467

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
This copy reported on 8- AUG- 2017
Account: RCM

CERTIFICATE WH17158707

Project: RCM_WH17125467

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 31- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

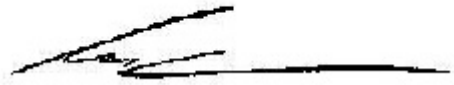
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17125467**

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

Project: RCM_WH17125467

CERTIFICATE OF ANALYSIS WH17158707

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W228289		0.01
W228290		0.02
W228291		<0.01
W228292		<0.01
W228293		<0.01
W228294		<0.01
W228295		<0.01
W228296		<0.01
W228297		<0.01
W228298		<0.01
W228299		<0.01
W228300		0.01
W228301		0.03
W228302		2.56
W228303		0.01
W228304		0.06
W228305		0.06
W228306		0.06
W228307		0.71
W228308		0.98
W228309		0.16
W228310		0.96
W228311		4.04
W228312		<0.01
W228313		6.29
W228314		4.11
W228315		0.20
W228316		1.32
W228317		3.77
W228318		<0.01
W228319		3.81
W228320		4.94
W228321		4.26
W228322		2.23
W228323		2.69
W228324		3.42

Comments: **Re- analysis results for samples originally reported on certificate WH17125467**

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: RCM_WH17125467

Finalized Date: 4- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17158707

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 29- JUL- 2017
Account: RCM

CERTIFICATE WH17125470

Project: Nadaleen

P.O. No.: N17- 016

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

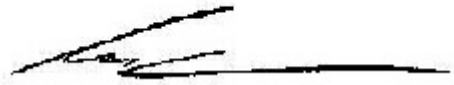
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 29-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125470

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228325		11.11	0.07	1.23	111.5	170	0.30	0.09	33.4	0.15	20.9	4.2	13	3.47	12.9	0.87
W228326		11.16	0.02	1.22	55.4	200	0.42	0.07	32.0	0.10	19.50	3.8	13	3.70	12.0	0.87
W228327		11.55	0.02	0.73	33.1	170	0.35	0.05	33.3	0.05	13.75	2.5	8	2.32	7.9	0.57
W228328		10.92	0.02	0.76	89.9	140	0.29	0.05	32.9	0.08	13.95	2.6	8	1.88	8.6	0.59
W228329		<0.02	0.02	0.73	83.7	140	0.28	0.05	33.8	0.06	14.00	2.5	8	1.79	7.6	0.57
W228330		10.99	0.02	1.03	61.4	120	0.36	0.06	32.3	0.16	15.45	3.6	11	2.66	10.6	0.70
W228331		11.98	0.02	1.06	44.5	110	0.42	0.07	32.4	0.05	18.55	3.6	12	3.60	10.3	0.74
W228332		10.83	0.02	0.80	57.1	90	0.26	0.05	33.1	0.08	16.00	2.8	9	2.60	7.9	0.58
W228333		12.15	0.02	1.56	56.8	80	0.45	0.09	32.6	0.11	23.4	5.1	15	5.98	14.2	0.93
W228334		11.59	0.01	0.34	17.8	90	0.20	0.03	35.0	0.02	6.74	1.4	4	0.94	3.9	0.35
W228335		10.98	0.01	0.18	7.0	70	0.11	0.02	35.1	0.02	3.90	0.8	3	0.46	2.4	0.19
W228336		0.29	0.10	3.59	2560	200	0.85	0.14	18.45	0.11	38.9	10.1	44	9.22	41.3	2.99
W228337		11.92	0.01	0.21	11.2	90	0.17	0.02	35.3	0.02	4.65	0.9	3	0.48	2.8	0.41
W228338		10.45	0.08	0.53	33.2	90	0.23	0.04	33.4	0.05	9.31	1.9	6	1.95	5.8	0.43
W228339		11.94	0.01	0.29	19.3	90	0.17	0.02	34.3	0.04	5.83	1.2	4	0.80	3.5	0.35
W228340		11.08	0.01	0.33	25.8	90	0.24	0.03	34.5	0.02	7.18	1.4	4	0.98	4.0	0.36
W228341		10.96	0.01	0.71	26.0	120	0.32	0.04	34.5	0.04	13.00	2.4	8	2.60	7.0	0.53
W228342		6.94	<0.01	0.06	<0.2	20	0.05	0.03	20.9	0.05	1.06	0.7	1	0.10	1.4	0.46
W228343		12.17	0.01	1.18	30.5	110	0.38	0.07	32.6	0.15	18.55	3.8	13	3.89	11.4	0.81
W228344		12.44	0.01	0.73	20.3	110	0.29	0.05	34.3	0.05	11.80	2.4	7	2.21	7.3	0.52
W228345		12.31	<0.01	0.55	26.4	130	0.20	0.05	34.0	0.02	9.42	2.1	7	1.58	5.7	0.45
W228346		5.48	0.01	0.53	22.6	140	0.19	0.05	35.6	0.04	9.73	2.2	6	1.53	5.4	0.44
W228347		10.37	0.01	0.43	10.6	130	0.23	0.05	35.9	0.03	8.57	1.8	5	1.37	4.5	0.34
W228348		12.16	0.01	0.99	30.9	150	0.34	0.08	33.4	0.09	16.45	3.6	10	3.61	9.3	0.68
W228349		11.88	0.01	0.93	59.6	150	0.29	0.08	32.9	0.07	14.30	3.3	10	2.75	8.6	0.65
W228350		10.96	0.01	0.52	28.1	140	0.21	0.06	35.7	0.06	10.45	2.1	5	1.61	5.6	0.39
W228351		0.29	0.16	3.80	6300	200	1.00	0.16	12.35	0.14	41.0	12.8	45	10.55	35.0	2.92
W228352		12.15	0.03	1.96	96.8	680	0.39	0.13	30.7	0.17	29.6	6.9	19	6.98	18.2	1.27
W228353		12.16	0.02	1.37	72.4	150	0.32	0.08	32.7	0.09	22.4	4.8	14	4.05	12.8	0.93
W228354		11.18	0.01	0.98	85.2	110	0.26	0.06	34.2	0.08	15.75	3.5	10	2.74	8.6	0.69
W228355		12.56	0.01	0.75	53.0	110	0.23	0.05	35.3	0.22	13.45	2.8	8	2.34	7.2	0.54
W228356		11.37	0.01	0.47	37.8	100	0.22	0.04	35.8	1.50	9.25	1.9	5	1.31	4.9	0.40
W228357		11.01	0.02	1.08	69.8	130	0.31	0.07	34.7	0.14	19.90	3.9	11	3.07	9.9	0.78
W228358		7.00	<0.01	0.05	<0.2	50	0.07	0.04	21.2	0.05	1.09	0.8	<1	0.17	1.8	0.46
W228359		11.40	0.04	1.50	135.5	130	0.33	0.09	32.4	0.17	22.5	5.2	15	3.79	14.2	1.03
W228360		11.67	0.02	0.58	97.8	110	0.24	0.04	36.0	0.05	10.40	2.4	6	1.44	6.2	0.47

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 29- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125470

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228325		3.40	0.08	0.6	2.74	0.013	0.55	11.0	4.6	0.40	1810	0.92	0.01	1.8	8.1	330
W228326		3.40	0.10	0.6	1.425	0.012	0.56	8.5	4.9	0.64	388	0.67	0.01	1.7	7.4	660
W228327		2.08	0.09	0.4	1.035	0.009	0.33	6.0	3.3	0.43	292	0.44	0.01	1.0	4.3	200
W228328		2.24	0.09	0.4	2.37	0.009	0.35	6.3	2.9	0.30	658	0.45	0.01	1.1	4.7	250
W228329		2.04	0.08	0.4	2.12	0.009	0.33	6.2	2.7	0.30	657	0.42	0.01	1.0	4.3	200
W228330		2.88	0.08	0.5	1.715	0.012	0.49	7.1	3.8	0.46	447	0.72	0.01	1.4	5.9	350
W228331		2.95	0.11	0.5	0.951	0.012	0.50	8.2	5.2	0.55	406	0.62	0.01	1.5	6.2	490
W228332		2.29	0.09	0.4	1.120	0.012	0.38	6.8	3.8	0.45	238	0.48	0.01	1.1	4.6	180
W228333		4.22	0.11	0.7	2.47	0.017	0.70	13.1	7.1	0.46	184	0.99	0.01	2.1	8.9	100
W228334		0.98	0.08	0.2	0.381	0.005	0.16	3.2	1.9	0.81	235	0.15	0.01	0.5	1.9	390
W228335		0.53	0.08	0.1	0.074	<0.005	0.08	1.8	1.2	0.81	214	0.10	0.01	0.3	1.1	600
W228336		9.61	0.11	1.7	3.64	0.035	1.68	19.6	9.1	1.40	1170	1.62	0.02	5.6	24.0	380
W228337		0.66	0.08	0.1	0.036	<0.005	0.09	2.2	1.2	1.15	321	0.16	0.01	0.3	1.2	750
W228338		1.51	0.09	0.3	0.486	0.006	0.24	4.6	2.5	0.56	153	0.35	0.01	0.7	3.1	260
W228339		0.88	0.08	0.2	0.339	<0.005	0.12	2.8	1.5	0.74	310	0.23	0.01	0.4	1.5	680
W228340		0.99	0.09	0.2	0.290	<0.005	0.15	3.3	1.8	0.65	196	0.21	0.01	0.5	1.8	590
W228341		1.93	0.09	0.3	0.264	0.007	0.33	5.8	3.3	0.80	197	0.28	0.01	1.0	3.7	250
W228342		0.25	0.27	<0.1	0.014	0.005	0.02	0.5	1.0	13.40	208	0.38	0.01	0.1	1.0	210
W228343		3.19	0.16	0.6	0.280	0.014	0.54	9.3	4.6	0.79	181	0.58	0.01	1.7	5.4	160
W228344		2.01	0.13	0.4	0.207	0.005	0.34	6.0	3.3	0.55	193	0.39	0.01	1.0	2.9	270
W228345		1.57	0.16	0.3	0.404	0.005	0.23	4.7	2.2	0.60	206	0.25	0.01	0.7	2.1	510
W228346		1.35	0.05	0.2	0.361	<0.005	0.23	4.9	2.0	0.59	203	0.25	0.01	0.7	2.2	520
W228347		1.10	0.06	0.2	0.146	<0.005	0.19	4.0	2.2	0.53	213	0.20	0.01	0.6	1.7	380
W228348		2.47	0.06	0.5	0.597	0.007	0.46	8.8	4.3	0.52	163	0.50	0.01	1.4	4.8	260
W228349		2.30	0.06	0.5	1.505	<0.005	0.42	7.5	3.6	0.67	357	0.42	0.01	1.3	4.4	240
W228350		1.31	0.06	0.3	0.873	<0.005	0.23	4.8	2.3	0.48	169	0.18	0.01	0.7	2.2	180
W228351		9.40	0.09	1.9	15.30	0.030	1.82	21.1	11.9	2.61	1170	1.79	0.02	5.7	25.1	440
W228352		4.91	0.08	1.0	3.40	0.010	0.89	17.9	6.4	0.82	219	1.07	0.01	2.8	10.6	150
W228353		3.40	0.06	0.7	3.23	0.007	0.63	12.1	4.5	0.81	246	0.70	0.01	1.9	6.9	310
W228354		2.45	0.06	0.5	1.950	<0.005	0.45	8.3	3.3	0.57	322	0.48	0.01	1.4	4.7	300
W228355		1.89	0.06	0.4	1.160	<0.005	0.34	7.0	2.8	0.52	198	0.37	0.01	1.0	3.4	310
W228356		1.27	0.06	0.2	0.874	<0.005	0.21	4.4	1.7	0.47	268	0.22	0.01	0.7	1.9	360
W228357		2.70	0.07	0.5	1.410	<0.005	0.50	10.7	2.8	0.60	145	0.59	0.01	1.5	5.3	160
W228358		0.20	0.16	<0.1	0.019	<0.005	0.02	0.5	0.9	13.00	199	0.09	<0.01	0.2	1.4	190
W228359		3.78	0.07	0.7	2.41	<0.005	0.68	12.0	3.6	0.67	226	0.79	0.01	2.0	7.4	180
W228360		1.46	0.06	0.3	1.395	<0.005	0.25	5.0	1.7	0.52	268	0.27	0.01	0.9	2.7	520

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Finalized Date: 29- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17125470

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228325		6.5	28.6	0.003	0.85	5.81	5.2	1	0.4	2050	0.13	0.05	2.10	0.065	10.20	2.6
W228326		3.7	28.4	0.002	0.75	1.24	3.3	2	0.4	1970	0.13	<0.05	1.89	0.066	5.55	2.4
W228327		2.6	15.3	0.002	0.46	0.62	2.4	2	0.3	2080	0.07	0.06	1.15	0.039	3.72	2.0
W228328		3.2	15.6	0.002	0.56	3.76	3.0	1	0.3	1950	0.07	<0.05	1.20	0.042	7.34	2.1
W228329		3.0	15.0	<0.002	0.53	3.59	3.0	1	0.2	2010	0.07	0.05	1.15	0.040	6.98	2.0
W228330		5.5	21.3	0.002	0.66	1.85	2.7	2	0.4	1570	0.10	<0.05	1.59	0.053	5.18	2.2
W228331		3.9	21.8	0.002	0.73	0.98	3.0	2	0.4	1375	0.11	<0.05	1.72	0.058	4.93	2.4
W228332		3.1	16.0	0.002	0.56	1.13	2.3	2	0.3	1355	0.08	<0.05	1.36	0.044	3.27	2.4
W228333		5.5	34.2	0.004	0.99	1.53	3.2	2	0.5	954	0.16	<0.05	2.21	0.084	6.77	2.4
W228334		2.3	6.5	<0.002	0.23	0.14	1.1	1	0.2	1315	<0.05	<0.05	0.58	0.020	0.96	1.5
W228335		1.7	3.4	<0.002	0.11	0.07	0.6	2	<0.2	1180	<0.05	<0.05	0.31	0.010	0.37	1.4
W228336		7.3	77.8	<0.002	2.51	9.06	9.2	1	1.4	723	0.41	0.07	4.92	0.258	9.88	2.1
W228337		1.9	3.7	<0.002	0.16	0.10	0.8	1	<0.2	1360	<0.05	<0.05	0.36	0.012	0.29	1.3
W228338		3.5	10.1	<0.002	0.37	0.20	1.6	1	0.2	1435	0.05	<0.05	0.87	0.029	0.88	1.9
W228339		2.9	5.2	<0.002	0.23	0.18	1.0	1	<0.2	1385	<0.05	<0.05	0.47	0.016	0.47	1.7
W228340		2.2	6.2	<0.002	0.24	0.21	1.2	1	<0.2	1530	<0.05	<0.05	0.59	0.018	0.54	2.1
W228341		3.2	13.5	<0.002	0.46	0.25	2.0	2	0.2	1440	0.07	<0.05	1.13	0.039	1.19	1.8
W228342		1.0	0.8	<0.002	<0.01	<0.05	0.2	<1	<0.2	48.5	<0.05	<0.05	0.06	<0.005	<0.02	0.6
W228343		5.5	22.2	0.002	0.78	0.36	2.8	1	0.4	1220	0.12	<0.05	2.02	0.064	2.60	2.9
W228344		2.8	13.6	<0.002	0.47	0.22	1.8	1	0.3	1415	0.08	<0.05	1.21	0.040	1.41	1.9
W228345		2.6	9.5	<0.002	0.39	0.21	1.5	1	0.2	1595	0.05	<0.05	0.93	0.030	0.91	1.9
W228346		2.3	10.2	<0.002	0.38	0.19	1.6	1	0.2	1670	0.05	<0.05	0.92	0.029	0.78	1.8
W228347		1.7	8.0	<0.002	0.29	0.12	1.3	1	0.2	1735	<0.05	<0.05	0.77	0.024	0.52	1.8
W228348		3.5	20.8	0.002	0.67	0.33	2.7	1	0.3	1790	0.10	<0.05	1.73	0.055	1.97	2.5
W228349		3.5	19.2	0.002	0.62	1.70	2.4	1	0.3	1505	0.10	<0.05	1.54	0.053	2.83	2.1
W228350		2.3	10.5	<0.002	0.37	0.46	1.7	1	0.2	1935	0.05	<0.05	0.92	0.029	1.38	2.1
W228351		10.6	81.4	0.002	2.62	23.9	10.4	1	1.6	322	0.41	0.05	6.60	0.271	41.1	7.2
W228352		7.2	40.1	0.004	1.32	1.76	4.5	2	0.6	1590	0.20	0.05	3.26	0.113	5.30	3.2
W228353		5.7	28.6	0.003	0.93	2.32	3.3	1	0.4	1695	0.14	<0.05	2.32	0.080	4.25	2.7
W228354		3.2	20.9	0.002	0.71	2.27	2.5	1	0.3	1325	0.10	<0.05	1.68	0.056	3.71	2.4
W228355		2.6	15.9	0.002	0.54	0.66	2.0	1	0.3	1425	0.08	<0.05	1.32	0.043	2.16	2.2
W228356		2.6	9.2	<0.002	0.37	0.69	1.5	1	0.2	1505	0.05	<0.05	0.82	0.026	1.24	1.7
W228357		6.8	21.7	0.002	0.73	0.53	3.1	1	0.4	1465	0.11	<0.05	1.88	0.060	2.23	3.0
W228358		1.1	1.0	<0.002	<0.01	<0.05	0.2	1	<0.2	50.2	<0.05	<0.05	0.15	<0.005	0.02	0.7
W228359		11.1	28.6	0.004	1.03	0.81	3.8	2	0.5	1145	0.15	<0.05	2.60	0.082	3.88	3.8
W228360		4.2	11.1	<0.002	0.44	0.63	1.7	1	0.2	1495	0.06	<0.05	1.05	0.033	2.53	2.0

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CERTIFICATE OF ANALYSIS WH17125470

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W228325		22	1.2	16.7	25	22.2	0.55
W228326		21	0.9	12.5	17	21.9	0.12
W228327		13	0.5	11.7	10	12.7	0.02
W228328		13	0.8	11.1	12	13.5	0.36
W228329		13	0.7	10.9	10	12.9	0.35
W228330		17	0.7	11.4	38	18.0	0.12
W228331		18	0.5	12.0	11	18.8	0.07
W228332		13	0.5	14.9	17	13.5	0.07
W228333		24	1.2	15.2	26	24.7	0.05
W228334		7	0.2	9.0	5	6.7	<0.01
W228335		5	0.1	5.9	5	4.5	0.01
W228336		72	4.6	16.9	50	67.1	0.49
W228337		5	0.1	6.8	4	5.2	<0.01
W228338		9	0.5	11.0	15	9.7	<0.01
W228339		6	0.2	9.6	7	6.8	<0.01
W228340		7	0.2	11.8	6	7.4	0.01
W228341		12	0.2	11.7	8	12.2	<0.01
W228342		2	0.1	0.7	16	<0.5	<0.01
W228343		19	0.4	14.8	36	19.0	<0.01
W228344		13	0.3	10.0	8	11.7	<0.01
W228345		10	0.3	9.3	4	9.7	<0.01
W228346		10	0.3	10.1	7	9.2	<0.01
W228347		8	0.1	9.2	4	7.7	<0.01
W228348		17	0.4	12.9	15	17.8	<0.01
W228349		16	0.7	11.8	10	17.5	0.08
W228350		9	0.3	11.8	8	9.1	0.03
W228351		85	7.4	18.0	50	67.9	2.27
W228352		32	1.2	15.8	31	34.3	0.01
W228353		23	1.3	14.1	15	24.9	0.04
W228354		17	1.0	11.5	14	18.4	0.08
W228355		13	0.9	12.0	42	13.9	0.01
W228356		9	0.6	9.9	137	8.7	0.03
W228357		18	1.2	15.9	31	19.0	<0.01
W228358		2	0.1	0.8	17	<0.5	<0.01
W228359		25	2.1	17.6	26	25.7	0.01
W228360		11	0.8	10.2	6	11.5	<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 29- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17125470

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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VANCOUVER BC V6B 1L8

Finalized Date: 3- AUG- 2017
This copy reported on 8- AUG- 2017
Account: RCM

CERTIFICATE WH17158712

Project: RCM_WH17125470

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 31- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

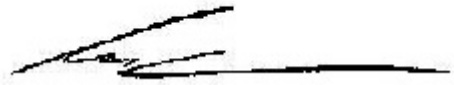
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17125470**

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 3- AUG- 2017
Account: RCM

Project: RCM_WH17125470

CERTIFICATE OF ANALYSIS WH17158712

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W228325		0.78
W228326		0.12
W228327		0.02
W228328		0.35
W228329		0.35
W228330		0.13
W228331		0.09
W228332		0.07
W228333		0.02
W228334		<0.01
W228335		<0.01
W228336		0.49
W228337		<0.01
W228338		<0.01
W228339		0.01
W228340		0.01
W228341		<0.01
W228342		<0.01
W228343		<0.01
W228344		<0.01
W228345		<0.01
W228346		<0.01
W228347		<0.01
W228348		<0.01
W228349		0.08
W228350		<0.01
W228351		2.58
W228352		0.02
W228353		0.05
W228354		0.08
W228355		0.01
W228356		0.03
W228357		<0.01
W228358		<0.01
W228359		<0.01
W228360		0.01

Comments: **Re- analysis results for samples originally reported on certificate WH17125470**

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: RCM_WH17125470

Finalized Date: 3- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17158712

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

CERTIFICATE WH17127781

Project: Nadaleen

P.O. No.: N17- 017

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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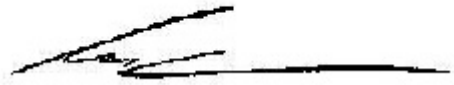
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 28-JUL-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17127781

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228361		10.62	0.06	1.87	79.6	150	0.44	0.10	27.5	0.12	27.4	6.6	20	6.16	19.6	1.20
W228362		9.00	0.02	0.86	39.9	110	0.31	0.05	32.9	0.08	16.05	3.2	10	2.49	8.8	0.61
W228363		6.81	0.02	1.72	98.6	140	0.50	0.09	28.5	0.06	23.2	6.7	18	4.49	16.7	1.15
W228364		7.12	0.02	0.52	40.4	120	0.26	0.03	34.5	0.02	10.80	2.2	7	1.61	6.0	0.53
W228365		7.74	0.01	0.69	66.4	90	0.27	0.04	33.1	0.05	12.25	2.9	9	2.98	7.5	0.49
W228366		7.67	0.01	0.54	25.4	130	0.25	0.03	33.6	0.04	9.89	2.2	7	1.86	6.0	0.40
W228367		3.65	0.01	0.48	23.7	120	0.21	0.02	33.1	0.02	9.28	2.1	6	1.66	5.7	0.37
W228368		8.05	0.01	0.59	78.2	140	0.22	0.03	33.1	0.05	9.92	2.3	8	1.98	6.3	0.43
W228369		7.71	0.01	0.87	29.5	120	0.30	0.05	33.0	0.18	14.95	3.4	10	2.85	9.8	0.59
W228370		7.69	0.01	0.45	12.8	130	0.21	0.02	34.6	0.03	8.80	2.0	6	1.33	5.5	0.34
W228371		7.46	0.02	0.48	19.9	120	0.19	0.04	33.7	0.05	10.20	1.9	6	1.24	10.1	0.38
W228372		7.28	0.01	0.86	30.2	120	0.27	0.05	32.0	0.10	16.75	3.0	10	2.85	8.8	0.58
W228373		0.29	0.62	1.88	>10000	140	0.49	2.66	25.4	0.15	29.3	4.8	28	5.45	15.2	1.37
W228374		7.54	0.01	0.59	39.2	120	0.23	0.04	33.8	0.18	12.65	2.1	8	1.77	5.8	0.44
W228375		7.63	0.01	0.81	43.4	150	0.25	0.05	32.5	0.04	15.90	2.9	10	2.48	7.9	0.56
W228376		8.13	0.01	0.35	13.7	160	0.18	0.02	34.5	0.03	8.11	1.3	5	1.21	3.6	0.30
W228377		7.78	0.02	1.37	38.0	150	0.32	0.08	30.8	0.10	18.90	4.7	15	4.78	13.0	0.92
W228378		7.43	0.01	0.41	12.0	190	0.15	0.03	34.5	0.02	8.55	1.5	5	1.00	4.2	0.34
W228379		<0.02	0.01	0.42	12.1	190	0.17	0.03	35.2	0.03	8.62	1.5	6	1.01	4.3	0.34
W228380		7.55	0.04	2.58	46.3	300	0.62	0.11	25.9	0.10	34.0	12.5	24	8.45	27.4	1.69
W228381		7.53	0.02	1.42	20.6	200	0.49	0.08	30.1	0.27	21.1	5.0	14	5.28	12.4	0.98
W228382		10.50	0.01	2.45	13.7	100	0.73	0.11	25.3	0.03	32.6	9.0	22	9.59	19.0	1.88
W228383		5.45	0.04	6.97	55.6	210	2.01	0.31	8.72	0.11	80.9	29.1	59	28.7	57.5	3.72
W228384		7.61	0.02	2.47	55.6	110	0.81	0.11	26.2	0.05	32.0	9.8	21	8.54	18.9	2.09
W228385		7.07	0.03	4.81	130.0	150	1.61	0.23	15.45	0.05	57.4	18.8	41	17.10	38.9	3.40
W228386		5.01	<0.01	0.06	0.4	40	0.06	0.03	21.2	0.06	1.18	0.7	2	0.18	3.2	0.49
W228387		8.48	0.05	5.99	176.0	570	1.98	0.25	6.82	0.12	75.3	17.8	57	23.1	43.0	3.54
W228388		7.34	0.03	3.95	115.5	300	1.40	0.19	17.10	0.06	47.4	18.1	34	14.50	28.7	3.29
W228389		7.65	0.05	5.19	509	160	1.51	0.23	11.55	0.10	61.2	15.9	44	18.35	39.3	3.82
W228390		4.92	<0.01	0.06	0.5	60	0.05	0.02	20.7	0.05	1.19	0.7	1	0.15	1.6	0.46
W228391		7.50	0.07	6.61	106.0	310	2.10	0.28	3.62	0.18	76.0	14.9	67	24.5	37.1	4.08
W228392		4.42	0.06	6.13	48.3	210	1.80	0.25	4.56	0.16	70.3	13.1	69	24.7	32.9	3.76
W228393		4.22	0.09	7.36	34.2	360	2.13	0.30	3.60	0.17	78.3	16.7	76	29.7	44.0	4.88
W228394		0.29	0.59	7.05	489	240	2.35	0.25	2.32	0.34	63.1	24.9	105	37.2	71.6	6.59
W228395		7.36	0.06	4.63	23.7	240	1.37	0.18	10.70	0.10	56.7	15.5	48	19.30	32.3	3.76
W228396		6.60	0.08	6.86	35.5	270	2.03	0.28	3.21	0.18	80.2	18.2	68	33.5	42.6	4.21

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17127781

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228361		5.61	0.09	1.0	2.05	0.021	0.86	14.9	5.3	0.78	224	1.05	0.01	2.9	10.7	230
W228362		2.51	0.06	0.4	0.892	0.009	0.40	8.8	2.9	0.46	145	0.45	0.01	1.3	4.7	130
W228363		5.12	0.08	0.9	1.325	0.021	0.78	13.3	4.3	0.80	384	0.60	0.01	2.6	8.6	210
W228364		1.67	0.05	0.3	0.664	0.007	0.22	5.6	2.1	0.56	199	0.31	0.01	0.8	2.8	170
W228365		2.17	0.05	0.3	1.210	0.008	0.29	6.5	3.0	0.48	211	0.43	0.01	1.1	3.9	270
W228366		1.66	0.05	0.3	0.869	0.005	0.23	5.0	2.2	0.47	155	0.34	0.01	0.8	2.8	310
W228367		1.50	0.05	0.3	0.762	0.006	0.20	4.8	2.2	0.48	155	0.31	0.01	0.8	2.6	360
W228368		1.75	0.05	0.3	1.170	0.007	0.26	5.1	2.1	0.45	146	0.32	0.01	0.9	3.2	230
W228369		2.58	0.06	0.4	1.170	0.009	0.40	7.9	3.8	0.56	171	0.58	0.01	1.4	4.8	340
W228370		1.39	0.05	0.2	0.462	<0.005	0.20	4.6	2.2	0.51	226	0.31	0.01	0.7	2.4	300
W228371		1.24	0.08	0.3	0.320	0.009	0.21	4.7	2.0	0.44	184	1.10	0.01	0.7	7.2	290
W228372		2.20	0.08	0.5	0.473	0.011	0.40	8.8	3.7	0.72	171	0.58	0.01	1.2	4.9	200
W228373		4.67	0.09	0.9	6.65	0.020	0.91	15.0	8.7	0.88	2220	1.93	0.01	2.5	12.9	340
W228374		1.49	0.08	0.3	0.546	0.008	0.26	6.0	2.6	0.71	190	0.27	0.01	0.9	2.9	240
W228375		2.01	0.07	0.4	1.070	0.009	0.35	8.4	3.7	0.60	184	0.46	0.01	1.2	4.1	240
W228376		0.89	0.06	0.2	0.205	<0.005	0.16	3.6	1.9	0.60	161	0.22	0.01	0.5	1.4	500
W228377		3.44	0.07	0.7	0.389	0.012	0.62	10.4	5.3	0.83	166	0.66	0.02	2.1	7.5	310
W228378		1.04	0.06	0.2	0.155	0.006	0.18	3.8	1.5	0.49	151	0.28	0.01	0.6	1.8	410
W228379		1.04	0.07	0.2	0.158	0.007	0.18	3.8	1.5	0.50	153	0.26	0.01	0.6	1.8	420
W228380		6.58	0.09	1.2	0.428	0.026	1.17	19.4	8.1	0.82	415	1.49	0.01	3.3	16.0	290
W228381		3.53	0.06	0.7	0.138	0.014	0.66	12.4	4.9	0.82	309	0.69	0.01	1.9	7.0	140
W228382		6.13	0.09	1.1	0.130	0.026	1.15	19.0	6.9	0.96	622	0.30	0.02	3.4	11.3	190
W228383		18.05	0.14	3.3	0.718	0.075	3.29	43.6	18.7	1.65	689	0.80	0.03	10.9	40.8	340
W228384		5.98	0.08	1.2	0.837	0.029	1.13	18.0	6.0	1.58	681	0.48	0.02	3.3	12.2	290
W228385		12.05	0.11	2.3	3.05	0.054	2.30	30.6	10.7	2.33	875	0.76	0.03	7.7	26.2	330
W228386		0.20	0.09	<0.1	0.013	<0.005	0.02	0.6	0.8	13.00	203	0.09	0.01	0.2	1.4	180
W228387		14.80	0.13	3.1	1.145	0.059	2.79	37.1	18.1	1.66	624	0.97	0.03	10.5	30.0	570
W228388		9.59	0.10	1.7	1.950	0.044	1.82	24.4	8.8	2.38	894	0.35	0.02	5.4	21.8	310
W228389		12.60	0.10	2.4	3.73	0.054	2.35	31.3	13.9	2.33	952	0.71	0.02	8.4	25.7	400
W228390		0.18	0.09	<0.1	0.014	<0.005	0.03	0.6	0.9	12.65	198	0.11	<0.01	0.1	1.4	180
W228391		17.35	0.13	3.2	0.844	0.064	3.04	37.5	20.1	1.43	302	0.86	0.04	11.4	30.3	710
W228392		14.75	0.13	3.0	0.828	0.059	2.81	34.7	25.5	1.24	327	0.79	0.03	10.4	27.9	580
W228393		19.80	0.12	3.3	0.956	0.072	3.45	38.2	32.9	1.24	327	1.15	0.04	12.2	36.5	610
W228394		19.55	0.12	2.6	3.29	0.067	3.38	30.0	19.7	0.81	666	5.25	0.03	9.7	54.1	240
W228395		11.25	0.10	2.4	0.319	0.045	2.09	28.0	36.4	1.71	724	0.70	0.03	8.1	26.9	530
W228396		17.85	0.13	3.5	0.297	0.067	3.11	39.4	77.4	1.46	318	1.01	0.04	12.4	33.3	740

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17127781

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228361		17.2	39.8	0.003	1.19	1.21	4.3	2	0.8	1345	0.22	0.07	3.47	0.105	3.35	3.8
W228362		4.4	18.1	0.002	0.56	0.37	2.2	2	0.4	1730	0.10	<0.05	1.63	0.048	1.94	2.4
W228363		7.2	34.7	0.002	0.83	0.64	4.8	2	0.7	1110	0.18	<0.05	2.94	0.095	2.71	2.4
W228364		4.2	10.6	<0.002	0.35	0.23	1.8	2	0.2	1570	0.06	<0.05	0.99	0.028	1.09	1.8
W228365		3.6	14.6	<0.002	0.46	0.40	1.9	2	0.3	1345	0.08	<0.05	1.30	0.039	1.33	2.2
W228366		2.7	11.5	<0.002	0.35	0.17	1.7	2	0.2	1735	0.06	<0.05	1.01	0.030	0.37	2.1
W228367		2.6	10.5	<0.002	0.32	0.16	1.5	1	0.3	1775	0.05	<0.05	0.93	0.027	0.38	2.0
W228368		2.7	12.9	0.002	0.38	0.39	1.7	1	0.3	1715	0.07	<0.05	1.11	0.033	0.65	1.9
W228369		3.8	19.0	<0.002	0.57	0.22	2.4	1	0.4	1645	0.09	<0.05	1.63	0.049	0.73	2.7
W228370		2.7	9.6	<0.002	0.30	0.14	1.3	1	0.2	1795	0.05	<0.05	0.86	0.025	0.19	1.9
W228371		6.4	9.7	0.003	0.33	0.17	1.4	1	0.3	1690	0.05	<0.05	0.89	0.028	0.23	1.8
W228372		3.7	19.3	0.002	0.54	0.17	2.3	1	0.3	1695	0.09	<0.05	1.60	0.049	0.56	2.7
W228373		7.6	41.7	0.002	1.44	46.9	5.4	1	0.7	1040	0.19	0.05	3.37	0.088	25.0	6.4
W228374		2.6	12.7	<0.002	0.38	0.21	1.6	1	0.2	1725	0.06	<0.05	1.10	0.034	0.45	2.3
W228375		3.2	16.4	<0.002	0.56	0.22	2.2	1	0.3	1740	0.09	<0.05	1.49	0.047	0.53	2.4
W228376		1.5	6.9	<0.002	0.25	0.10	1.0	1	<0.2	1760	<0.05	<0.05	0.64	0.019	0.15	1.7
W228377		5.8	29.0	0.003	0.91	0.23	2.7	1	0.5	1415	0.15	<0.05	2.38	0.083	0.42	3.2
W228378		1.9	7.5	<0.002	0.27	0.11	1.2	1	0.2	1795	<0.05	<0.05	0.75	0.023	0.24	2.0
W228379		1.9	7.6	<0.002	0.27	0.11	1.2	1	0.2	1805	<0.05	<0.05	0.76	0.024	0.24	2.0
W228380		10.6	52.7	0.004	1.39	0.57	6.0	1	0.9	1300	0.24	0.06	3.77	0.143	1.55	3.5
W228381		5.6	31.4	0.002	0.66	0.31	3.3	1	0.5	1310	0.14	<0.05	2.50	0.077	1.15	2.1
W228382		7.2	55.1	<0.002	1.14	0.27	6.2	1	0.8	749	0.24	0.06	3.83	0.139	1.56	1.9
W228383		22.5	157.5	0.003	2.81	0.73	18.8	2	2.3	271	0.70	0.13	12.05	0.405	6.88	3.4
W228384		7.3	52.4	<0.002	1.17	0.36	6.1	1	0.8	678	0.24	0.06	3.90	0.131	2.59	1.9
W228385		17.5	110.5	0.003	2.21	0.93	13.3	2	1.8	393	0.49	0.09	8.46	0.282	4.14	2.4
W228386		1.2	1.0	<0.002	<0.01	0.05	0.2	<1	<0.2	51.0	<0.05	<0.05	0.08	<0.005	0.04	0.6
W228387		14.8	136.5	<0.002	2.20	0.74	14.7	1	2.2	205	0.70	0.05	11.35	0.374	2.03	2.4
W228388		21.9	87.9	<0.002	1.69	0.60	10.6	1	1.4	553	0.37	0.08	5.61	0.217	1.89	2.2
W228389		26.0	117.0	0.002	2.73	6.43	13.2	1	2.0	278	0.54	0.08	8.81	0.310	7.78	2.3
W228390		1.3	1.2	<0.002	<0.01	<0.05	0.2	<1	<0.2	49.6	<0.05	<0.05	0.08	<0.005	0.04	0.8
W228391		25.5	154.5	0.002	3.05	0.70	15.6	1	2.2	109.0	0.76	<0.05	12.10	0.422	1.79	2.5
W228392		22.6	141.0	<0.002	2.61	0.52	14.2	1	2.1	127.0	0.70	0.05	11.10	0.387	1.74	2.3
W228393		43.5	160.0	0.002	2.78	0.78	17.3	1	2.5	149.5	0.83	0.05	12.35	0.450	1.78	2.6
W228394		51.8	169.5	0.002	4.73	5.80	21.0	1	2.9	93.5	0.63	<0.05	9.48	0.416	12.60	1.8
W228395		19.6	104.5	0.002	1.10	0.59	11.4	1	1.9	338	0.53	<0.05	8.22	0.303	1.19	2.4
W228396		25.0	160.0	<0.002	1.49	0.55	16.4	1	2.3	119.0	0.84	<0.05	12.95	0.457	1.25	2.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- JUL- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17127781

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228361		31	1.5	16.1	23	34.5		<0.01
W228362		14	0.7	12.6	13	15.9		<0.01
W228363		28	1.6	13.9	25	32.6		0.02
W228364		9	0.3	11.9	5	10.5		<0.01
W228365		12	0.4	11.7	11	13.7		0.03
W228366		10	0.3	11.4	6	11.1		<0.01
W228367		9	0.3	11.0	5	10.3		<0.01
W228368		10	0.5	10.2	12	12.0		<0.01
W228369		15	0.6	13.8	34	16.6		<0.01
W228370		9	0.3	9.8	3	9.1		<0.01
W228371		9	0.3	11.1	10	9.7		<0.01
W228372		15	0.4	15.5	23	15.9		<0.01
W228373		33	18.8	16.0	24	31.2	1.365	2.69
W228374		11	0.4	13.7	76	10.4		<0.01
W228375		14	0.5	13.6	9	14.9		<0.01
W228376		7	0.1	10.2	5	7.0		<0.01
W228377		23	0.5	13.3	31	24.5		<0.01
W228378		8	0.2	9.0	6	7.6		<0.01
W228379		8	0.2	9.1	10	7.5		<0.01
W228380		47	0.6	16.3	33	41.7		<0.01
W228381		23	0.3	11.4	49	25.0		<0.01
W228382		39	0.5	15.5	30	40.6		<0.01
W228383		119	1.3	25.2	111	113.5		<0.01
W228384		39	0.6	15.7	42	39.9		<0.01
W228385		81	1.5	20.9	53	79.4		0.01
W228386		2	0.1	0.8	16	<0.5		<0.01
W228387		93	1.8	23.5	96	101.5		<0.01
W228388		64	1.0	20.6	72	59.2		<0.01
W228389		83	4.4	21.1	68	83.4		0.08
W228390		2	0.2	0.8	16	<0.5		<0.01
W228391		110	1.7	24.1	99	108.0		<0.01
W228392		103	1.3	20.6	84	97.8		<0.01
W228393		124	1.5	22.7	107	111.0		<0.01
W228394		148	13.5	19.2	105	85.9		0.53
W228395		81	1.0	19.9	74	80.7		<0.01
W228396		112	1.5	25.0	116	119.0		<0.01

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 28- JUL- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17127781

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9- AUG- 2017
Account: RCM

CERTIFICATE WH17129275

Project: Nadaleen

P.O. No.: N17- 018

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

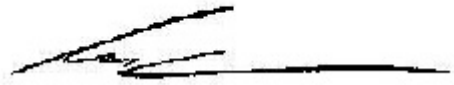
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129275

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229217		10.89	0.04	3.11	50.6	260	0.69	0.11	4.14	0.08	32.9	13.4	58	10.60	30.3	3.48
W229218		11.33	0.04	2.82	282	100	0.60	0.10	2.76	0.07	29.9	10.9	56	9.23	29.4	3.19
W229219		10.65	0.07	4.19	223	170	0.92	0.14	4.14	0.08	44.2	19.5	63	14.35	42.0	4.79
W229220		11.15	0.06	3.73	27.4	210	0.80	0.14	3.36	0.07	38.1	16.2	58	13.60	36.8	4.07
W229221		8.77	0.04	2.90	18.4	180	0.60	0.10	2.45	0.06	30.8	11.7	56	13.45	31.8	3.24
W229222		<0.02	0.04	2.98	17.5	180	0.59	0.10	2.49	0.05	30.1	11.5	55	13.10	31.3	3.30
W229223		8.52	0.02	3.45	29.5	190	0.64	0.11	1.96	0.09	33.9	13.0	60	14.00	35.0	3.22
W229224		12.01	0.03	3.32	22.4	240	0.60	0.11	2.84	0.06	34.0	14.2	60	23.2	32.1	3.37
W229225		11.64	0.04	3.42	11.4	150	0.61	0.12	2.19	0.04	36.4	15.0	66	21.9	36.2	3.21
W229226		11.38	0.02	2.75	54.1	140	0.48	0.10	2.21	0.07	29.0	11.2	53	16.95	28.1	2.99
W229227		11.45	0.04	3.40	45.3	100	0.71	0.12	2.20	0.11	34.6	14.1	61	13.05	34.2	3.22
W229228		11.44	0.02	2.15	67.9	100	0.45	0.08	2.90	0.06	23.0	8.1	45	9.34	21.2	2.79
W229229		10.83	0.29	7.96	122.0	290	2.71	0.34	1.31	0.44	78.2	35.9	87	36.3	80.7	6.23
W229230		11.02	0.03	2.23	55.5	110	0.43	0.08	3.02	0.05	24.1	7.5	45	14.10	17.3	3.69
W229231		0.29	0.08	3.60	2600	200	0.95	0.15	18.75	0.11	39.2	11.6	40	10.35	43.9	3.03
W229232		11.40	0.09	3.85	117.5	220	1.08	0.15	2.70	0.21	40.2	11.7	52	18.55	32.9	4.57
W229233		12.97	0.12	7.48	116.0	340	2.27	0.30	2.07	1.47	77.6	23.1	74	30.5	63.5	5.33
W229234		11.69	0.07	6.64	70.7	220	2.08	0.27	1.89	0.20	61.9	17.7	73	27.5	64.6	4.41
W229235		6.97	0.01	0.07	<0.2	30	0.08	0.06	22.0	0.06	1.20	0.8	1	0.28	2.3	0.48
W229236		11.57	0.07	6.88	69.9	210	2.21	0.30	2.12	0.06	64.9	19.2	74	36.5	61.2	4.88
W229237		12.03	0.07	7.14	122.0	190	2.43	0.31	2.02	0.02	67.2	25.0	77	34.8	64.3	5.44
W229238		11.86	0.06	7.54	100.5	230	2.41	0.34	2.25	<0.02	74.7	26.5	77	34.7	65.2	5.49
W229239		5.45	0.06	7.46	102.5	230	2.44	0.33	2.21	0.02	75.5	25.8	76	35.0	62.3	5.79
W229240		11.94	0.06	7.17	344	250	2.12	0.32	2.94	0.02	69.1	22.4	71	26.7	63.4	5.85
W229241		10.68	0.05	7.29	671	290	1.94	0.31	3.14	0.05	80.2	21.9	72	20.1	63.3	5.16
W229242		8.63	0.06	6.78	2020	250	1.66	0.28	2.54	0.12	64.3	20.8	74	17.35	58.9	6.04
W229243		0.30	0.18	3.94	6510	210	1.04	0.15	12.25	0.14	41.2	13.8	48	10.75	37.3	2.98
W229244		6.25	0.07	7.21	428	200	1.82	0.28	2.00	0.03	66.3	26.5	80	23.0	69.2	5.55
W229245		12.59	0.06	7.08	268	230	1.91	0.28	2.04	0.04	66.1	24.9	79	25.8	69.0	5.45
W229246		12.61	0.05	7.05	130.0	330	1.73	0.28	2.01	0.07	65.6	23.6	77	23.2	66.6	5.15
W229247		12.40	0.06	5.80	244	170	1.55	0.22	2.35	0.03	54.5	18.8	65	20.6	54.3	5.10
W229248		8.94	0.06	5.84	1190	260	1.44	0.27	1.72	0.07	55.4	19.3	66	15.90	42.5	5.13
W229249		12.67	0.05	5.74	4830	340	1.26	0.22	2.07	0.07	56.4	19.8	60	14.25	45.4	4.53
W229250		6.91	<0.01	0.07	3.2	20	0.06	0.03	22.0	0.06	1.16	0.8	2	0.17	1.7	0.48
W229251		10.41	0.06	5.64	155.5	150	1.52	0.23	2.53	0.15	55.8	18.4	65	20.5	47.9	4.76
W229252		11.31	0.07	5.93	59.3	170	1.78	0.24	2.94	0.20	61.5	21.9	64	25.9	44.6	4.68

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129275

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	Hg-MS42	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229217		8.37	0.05	1.8	0.240	0.033	1.17	15.0	71.1	1.62	789	0.32	0.01	5.5	22.2	340
W229218		7.87	0.05	1.8	0.471	0.027	1.15	14.0	28.3	1.11	536	0.30	0.01	5.1	20.8	270
W229219		11.70	0.08	2.4	0.487	0.044	1.81	20.6	38.4	1.70	1020	0.37	0.02	7.4	32.5	410
W229220		10.15	0.07	2.2	0.214	0.039	1.55	18.4	62.5	1.50	786	0.35	0.02	6.6	28.3	360
W229221		8.23	0.07	1.8	0.062	0.030	1.13	14.4	71.6	1.31	515	0.34	0.01	5.2	23.1	270
W229222		8.07	0.10	1.8	0.058	0.028	1.16	14.1	70.7	1.34	525	0.27	0.01	5.3	22.3	280
W229223		9.58	0.12	2.1	0.043	0.035	1.35	15.9	69.5	1.22	437	0.34	0.02	5.9	25.2	300
W229224		9.10	0.11	1.9	0.033	0.031	1.33	16.1	50.7	1.48	610	0.32	0.18	5.7	25.5	310
W229225		9.59	0.11	2.2	0.027	0.033	1.34	17.1	44.8	1.28	500	0.40	0.21	6.3	25.6	310
W229226		7.74	0.11	1.8	0.084	0.027	0.87	13.5	34.3	1.19	469	0.26	0.18	4.9	21.9	280
W229227		9.53	0.10	2.0	0.081	0.035	1.37	16.4	45.5	1.32	465	0.40	0.02	5.9	23.8	280
W229228		5.84	0.06	1.3	0.079	0.022	0.70	10.7	33.0	1.22	630	0.38	0.04	3.8	15.6	220
W229229		24.0	0.21	4.2	2.09	0.082	3.62	37.1	44.0	1.13	369	3.61	0.03	13.3	74.9	490
W229230		6.12	0.08	1.4	0.067	0.022	0.68	10.6	39.0	1.36	691	0.28	0.20	3.8	14.4	210
W229231		10.05	0.05	1.9	3.31	0.033	1.66	18.8	9.3	1.41	1180	1.69	0.02	6.3	25.0	380
W229232		10.65	0.08	2.1	1.115	0.038	1.55	18.7	43.6	1.29	590	1.24	0.10	6.6	25.1	300
W229233		20.5	0.19	3.5	2.13	0.080	3.41	35.3	34.8	1.38	367	3.94	0.03	12.5	41.8	1140
W229234		16.50	0.15	3.0	0.170	0.063	3.02	30.5	65.5	1.74	523	1.39	0.03	11.5	39.2	480
W229235		0.25	0.18	<0.1	0.037	<0.005	0.03	0.6	1.3	13.40	207	0.38	<0.01	0.2	2.3	210
W229236		16.80	0.14	3.1	0.135	0.075	3.13	32.1	86.4	2.10	507	0.48	0.03	11.8	37.3	560
W229237		17.95	0.16	3.1	0.142	0.076	3.25	33.3	68.3	2.23	513	0.51	0.03	12.3	40.3	560
W229238		20.0	0.17	3.3	0.275	0.076	3.35	35.5	68.6	2.06	490	0.25	0.03	13.2	44.1	830
W229239		20.2	0.17	3.4	0.268	0.078	3.32	36.3	67.4	2.08	492	0.24	0.03	13.3	43.6	830
W229240		19.30	0.17	3.3	0.400	0.073	3.31	33.9	33.8	1.65	749	0.25	0.03	12.6	40.4	650
W229241		19.75	0.16	3.4	1.780	0.065	3.45	34.5	17.4	1.91	856	0.25	0.03	12.9	38.2	720
W229242		17.90	0.16	3.1	5.84	0.061	3.15	31.3	19.2	1.53	1220	0.35	0.03	12.0	37.4	530
W229243		10.10	0.09	1.9	15.15	0.031	1.87	21.6	12.9	2.64	1200	1.91	0.02	6.1	27.4	460
W229244		19.05	0.16	3.3	0.713	0.071	3.31	32.5	31.6	1.28	516	0.31	0.03	12.5	47.6	530
W229245		18.85	0.16	3.3	0.516	0.071	3.17	32.1	48.2	1.27	616	0.39	0.03	12.7	44.7	560
W229246		19.10	0.14	3.3	0.614	0.074	3.04	35.5	39.6	1.22	596	0.44	0.03	12.4	40.9	590
W229247		14.40	0.13	2.6	0.774	0.060	2.65	26.8	27.2	1.29	862	0.29	0.02	10.0	35.6	440
W229248		14.90	0.13	2.5	3.78	0.048	2.71	27.4	15.3	1.03	765	0.24	0.02	9.7	35.1	490
W229249		14.50	0.14	2.5	8.76	0.049	2.50	27.4	17.4	1.16	771	0.31	0.02	9.6	34.1	570
W229250		0.25	0.17	<0.1	0.013	<0.005	0.02	0.6	1.2	13.40	210	0.05	0.01	0.2	1.8	190
W229251		14.05	0.12	2.6	0.767	0.057	2.61	27.2	26.4	1.35	600	0.26	0.02	9.6	31.6	470
W229252		15.10	0.13	2.7	0.498	0.062	2.71	30.2	39.9	1.72	655	0.23	0.03	9.9	34.7	650

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129275

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229217		6.7	56.3	<0.002	1.48	0.40	11.2	1	1.0	136.5	0.37	<0.05	4.68	0.379	1.36	1.0
W229218		4.9	55.5	<0.002	2.18	1.22	9.1	1	1.0	67.2	0.34	<0.05	4.32	0.385	2.44	0.9
W229219		10.9	89.7	<0.002	3.57	0.85	15.3	1	1.4	109.5	0.51	<0.05	6.11	0.477	2.23	1.3
W229220		9.7	75.0	<0.002	2.06	0.44	11.7	1	1.2	115.5	0.45	<0.05	5.48	0.430	1.43	1.1
W229221		5.4	59.5	<0.002	0.21	0.30	9.6	1	1.0	74.5	0.34	<0.05	4.43	0.390	0.48	0.9
W229222		5.2	59.1	<0.002	0.20	0.27	9.6	1	1.0	73.6	0.35	<0.05	4.36	0.400	0.47	0.9
W229223		4.9	68.9	<0.002	0.13	0.26	10.9	1	1.1	70.9	0.40	<0.05	4.88	0.428	0.47	1.0
W229224		5.4	70.5	<0.002	0.14	0.27	10.9	1	1.0	87.0	0.39	<0.05	4.78	0.408	0.50	1.0
W229225		5.7	75.4	<0.002	0.13	0.31	11.6	1	1.2	78.8	0.43	<0.05	5.26	0.442	0.57	1.1
W229226		5.6	48.8	<0.002	0.28	0.27	8.9	1	0.9	75.1	0.34	<0.05	4.28	0.357	0.77	0.9
W229227		4.0	72.0	<0.002	0.22	0.31	11.3	1	1.1	70.6	0.40	<0.05	5.00	0.409	0.61	1.0
W229228		2.6	38.6	<0.002	0.52	0.31	6.7	1	0.7	70.6	0.25	<0.05	3.27	0.292	0.71	0.7
W229229		119.0	180.0	0.003	5.43	3.35	24.1	3	2.7	86.0	0.94	0.07	13.15	0.608	7.38	2.6
W229230		4.5	36.8	<0.002	0.84	0.27	6.7	1	0.7	80.6	0.26	<0.05	3.20	0.291	0.47	0.7
W229231		7.3	79.4	0.002	2.55	9.35	9.5	2	1.4	711	0.44	0.07	5.83	0.263	10.30	2.3
W229232		37.6	82.6	<0.002	3.24	1.18	11.5	1	1.4	140.5	0.46	<0.05	6.14	0.383	3.40	1.3
W229233		51.3	181.0	0.002	5.17	1.54	22.3	2	2.4	229	0.84	0.06	11.60	0.557	7.46	2.4
W229234		11.2	170.0	<0.002	1.30	0.35	19.2	1	2.0	86.9	0.78	<0.05	10.25	0.537	1.54	1.9
W229235		1.6	2.0	<0.002	<0.01	0.07	0.2	<1	<0.2	48.3	<0.05	<0.05	0.11	<0.005	<0.02	0.5
W229236		12.8	173.0	<0.002	0.80	0.40	19.2	1	2.0	96.3	0.80	<0.05	10.50	0.556	1.15	2.0
W229237		19.5	181.0	<0.002	1.06	0.48	20.8	1	2.1	100.0	0.82	0.05	10.80	0.565	1.27	2.1
W229238		16.4	188.0	<0.002	2.30	0.61	22.3	1	2.2	139.5	0.88	0.06	11.60	0.594	2.83	2.2
W229239		15.8	187.0	<0.002	2.46	0.58	22.2	1	2.2	138.5	0.87	<0.05	11.50	0.589	3.00	2.2
W229240		18.1	174.0	<0.002	5.30	1.05	20.9	1	2.1	161.5	0.85	0.05	11.25	0.566	4.46	2.1
W229241		14.2	177.0	<0.002	4.89	8.87	21.4	1	2.1	136.0	0.87	<0.05	11.45	0.578	7.51	2.1
W229242		15.3	159.0	<0.002	5.95	27.4	22.0	1	1.9	144.5	0.79	0.07	10.05	0.578	19.65	1.9
W229243		12.0	92.3	0.002	2.65	23.9	11.5	1	1.5	330	0.42	0.05	6.09	0.273	41.6	6.8
W229244		14.1	169.5	<0.002	5.42	2.31	21.7	1	2.0	92.4	0.83	0.06	10.55	0.619	3.99	2.1
W229245		14.0	170.5	<0.002	5.29	1.32	22.0	1	2.1	132.5	0.83	0.05	10.65	0.623	5.95	2.1
W229246		14.2	156.5	<0.002	4.85	0.59	21.6	1	2.0	183.0	0.81	<0.05	10.65	0.613	5.72	2.0
W229247		10.7	139.5	<0.002	4.80	0.95	17.5	1	1.7	104.5	0.64	<0.05	8.73	0.506	4.92	1.6
W229248		16.4	134.5	<0.002	5.06	10.05	16.8	1	1.6	123.0	0.65	<0.05	9.01	0.483	10.90	1.7
W229249		15.4	126.0	<0.002	4.26	16.65	16.5	1	1.5	180.0	0.63	0.05	8.67	0.460	14.00	1.6
W229250		1.1	1.3	<0.002	<0.01	0.08	0.2	<1	<0.2	50.6	<0.05	<0.05	0.12	<0.005	0.05	0.6
W229251		20.5	132.5	<0.002	4.32	1.02	16.2	1	1.7	85.3	0.64	<0.05	8.68	0.481	3.74	1.7
W229252		26.0	141.0	<0.002	2.49	0.71	17.5	1	1.8	114.5	0.66	<0.05	9.19	0.453	2.41	1.9

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129275

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W229217		106	0.8	12.9	80	64.7	<0.01
W229218		109	2.9	10.1	62	62.5	0.01
W229219		138	4.4	16.5	79	85.0	<0.01
W229220		121	0.8	13.8	76	77.4	0.01
W229221		108	0.8	11.1	58	63.8	<0.01
W229222		111	0.8	10.8	61	62.8	<0.01
W229223		124	0.8	11.5	73	72.7	<0.01
W229224		120	0.7	12.2	66	70.4	<0.01
W229225		126	0.8	12.7	58	77.3	<0.01
W229226		100	0.6	10.2	62	71.9	<0.01
W229227		122	1.2	11.2	83	71.6	<0.01
W229228		79	0.9	8.7	48	48.4	<0.01
W229229		187	1.7	23.7	187	152.0	0.01
W229230		78	0.7	9.0	45	46.8	<0.01
W229231		73	5.4	16.6	49	67.4	0.51
W229232		106	1.0	13.3	87	77.5	<0.01
W229233		157	2.0	30.3	448	129.0	<0.01
W229234		141	1.7	22.5	112	110.5	<0.01
W229235		2	0.1	0.9	18	<0.5	<0.01
W229236		144	1.3	23.1	73	114.5	<0.01
W229237		147	1.3	24.0	73	119.0	<0.01
W229238		152	1.4	28.1	68	125.5	<0.01
W229239		151	1.4	28.0	71	126.0	<0.01
W229240		144	3.5	25.8	75	122.5	0.02
W229241		146	7.5	25.1	72	123.5	0.36
W229242		151	10.7	21.8	73	110.5	2.08
W229243		87	7.7	19.5	50	73.2	2.58
W229244		164	4.4	24.8	76	122.5	0.04
W229245		165	4.4	25.0	86	122.5	<0.01
W229246		162	3.3	24.5	91	120.0	<0.01
W229247		136	3.8	20.1	64	98.3	<0.01
W229248		133	8.1	19.0	60	95.2	0.90
W229249		126	11.2	19.2	62	93.3	1.11
W229250		2	0.1	0.8	17	<0.5	<0.01
W229251		130	3.2	19.5	79	96.0	0.01
W229252		129	1.1	22.4	81	101.0	<0.01

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Project: Nadaleen

Finalized Date: 9- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17129275

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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Finalized Date: 9- AUG- 2017
Account: RCM

CERTIFICATE WH17129274

Project: Nadaleen

P.O. No.: N17- 019

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

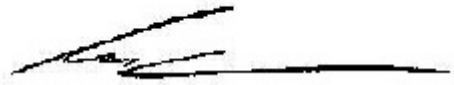
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 9-AUG-2017
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CERTIFICATE OF ANALYSIS WH17129274

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229253		12.33	0.06	4.23	50.9	180	0.97	0.24	2.27	0.10	42.4	14.1	59	20.5	38.2	3.63
W229254		12.31	0.07	5.05	61.5	190	1.51	0.28	1.60	0.16	51.2	18.6	62	22.0	40.8	3.82
W229255		11.70	0.07	5.51	49.8	160	1.62	0.28	1.73	0.09	56.3	17.5	68	25.0	50.2	4.36
W229256		11.43	0.05	5.32	405	160	1.53	0.23	2.63	0.03	55.5	15.2	58	18.55	43.5	4.51
W229257		11.54	0.07	5.19	770	470	1.70	0.20	3.26	0.05	54.3	15.1	57	18.25	45.6	4.68
W229258		12.36	0.06	6.58	396	190	2.06	0.27	2.58	0.03	67.3	18.0	66	30.2	55.7	5.59
W229259		5.61	0.06	6.72	421	190	2.10	0.28	2.61	0.05	69.0	19.2	66	31.0	55.4	6.08
W229260		12.01	0.05	4.97	301	190	1.42	0.20	2.77	0.02	53.3	15.2	57	18.30	42.7	4.01
W229261		11.27	0.09	5.72	106.0	240	2.12	0.21	1.92	0.04	54.7	19.8	67	30.3	46.5	4.43
W229262		11.79	0.06	5.36	527	280	1.61	0.21	3.29	0.10	54.6	16.6	56	23.0	42.1	4.91
W229263		0.30	0.61	6.71	459	230	2.44	0.25	2.25	0.36	63.9	22.1	100	38.6	66.0	6.26
W229264		11.47	0.07	7.32	140.0	280	2.63	0.29	1.51	0.08	74.9	18.9	75	38.3	50.5	5.22
W229265		13.08	0.07	8.04	96.5	260	3.06	0.34	1.15	0.06	79.1	23.9	75	44.2	56.7	5.86
W229266		11.45	0.07	6.77	71.5	280	2.22	0.28	2.73	0.07	67.2	20.5	70	38.7	54.8	5.01
W229267		11.85	0.05	6.16	93.0	250	1.85	0.25	3.58	<0.02	61.6	16.8	66	41.1	50.8	4.69
W229268		11.72	0.04	5.83	88.4	200	1.90	0.24	3.89	0.02	61.5	16.8	65	28.3	48.6	4.43
W229269		11.50	0.07	6.20	271	220	1.89	0.25	4.32	0.02	65.7	18.3	60	25.2	51.2	4.96
W229270		<0.02	0.13	6.35	256	230	1.71	0.28	4.39	0.02	62.5	17.4	62	23.8	51.2	5.03
W229271		11.95	0.07	6.13	108.5	250	1.90	0.26	4.18	0.09	62.0	17.0	65	44.1	49.6	4.70
W229272		10.84	0.05	6.32	132.5	210	1.89	0.25	3.80	0.14	64.9	19.0	63	31.5	49.8	5.51
W229273		10.69	0.07	8.36	302	240	3.20	0.29	0.84	0.03	72.7	25.7	97	54.3	66.8	5.74
W229274		6.68	0.04	4.68	978	140	1.51	0.15	3.23	0.13	44.6	13.5	52	21.0	36.1	3.97
W229275		8.99	0.03	7.39	3820	250	2.18	0.25	2.03	0.06	67.9	21.6	82	30.9	58.7	5.26
W229276		6.95	0.01	0.05	3.8	50	0.05	0.04	21.6	0.06	1.09	0.9	1	0.13	17.3	0.47
W229277		7.47	0.02	7.08	1055	220	2.26	0.22	1.81	0.02	66.3	19.9	81	34.0	50.5	5.11
W229278		11.76	0.05	7.45	735	250	2.41	0.22	1.70	0.08	68.2	20.5	85	35.9	52.6	5.24
W229279		6.91	<0.01	0.05	1.4	20	<0.05	0.05	21.6	0.05	1.17	0.8	1	0.16	2.3	0.47
W229280		14.01	0.05	7.87	473	270	2.19	0.24	2.18	0.09	71.4	20.3	89	30.1	66.8	5.10
W229281		10.36	0.02	5.07	93.4	150	1.66	0.16	8.50	0.06	52.2	13.3	54	22.3	37.3	4.39
W229282		11.56	0.03	6.62	82.7	210	2.30	0.22	6.43	0.02	68.5	18.3	76	32.6	49.2	4.91
W229283		11.97	0.04	5.16	143.0	430	1.82	0.16	6.34	0.04	49.7	13.4	59	34.7	36.2	4.24
W229284		0.29	0.63	1.85	>10000	140	0.56	2.80	26.2	0.14	27.8	5.2	26	6.10	17.1	1.38
W229285		12.21	0.07	5.60	427	310	1.81	0.20	7.32	0.02	53.0	15.2	65	26.1	42.5	4.63
W229286		8.45	0.06	6.82	689	370	2.42	0.23	2.37	0.03	63.4	19.9	77	37.5	50.5	5.03
W229287		9.96	0.04	7.52	242	210	3.17	0.26	1.41	<0.02	69.0	22.6	85	65.6	58.2	5.62
W229288		5.54	0.07	5.09	696	160	1.86	0.18	4.63	0.05	47.6	15.8	56	39.4	39.7	4.11

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129274

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229253		10.70	0.09	2.2	0.080	0.044	1.86	20.6	38.8	1.56	640	0.31	0.02	7.3	24.5	340
W229254		13.65	0.11	2.6	0.260	0.051	2.21	24.9	41.9	1.25	414	0.52	0.02	8.4	31.2	390
W229255		14.40	0.13	2.6	0.235	0.058	2.47	27.1	36.4	1.61	414	0.29	0.02	9.5	30.3	420
W229256		13.55	0.11	2.6	0.362	0.057	2.34	26.9	37.5	1.62	638	0.24	0.03	8.8	31.0	440
W229257		13.00	0.13	2.5	0.449	0.053	2.36	25.7	28.6	1.74	737	0.29	0.02	8.4	29.8	470
W229258		16.60	0.13	3.1	0.305	0.073	3.06	32.9	34.0	1.94	649	0.27	0.03	10.9	36.8	530
W229259		17.05	0.14	3.2	0.339	0.070	3.11	33.9	35.7	1.94	661	0.27	0.03	11.2	40.4	540
W229260		12.45	0.09	2.5	0.310	0.051	2.20	25.8	45.9	1.66	658	0.34	0.02	8.1	28.1	490
W229261		14.50	0.11	2.7	0.355	0.059	2.58	27.0	41.8	1.37	458	0.32	0.02	8.4	34.4	380
W229262		13.35	0.11	2.6	0.488	0.058	2.46	27.1	30.0	1.72	851	0.60	0.02	8.5	30.2	480
W229263		17.60	0.12	2.4	2.97	0.067	3.21	31.2	19.1	0.79	644	4.88	0.03	8.7	48.7	230
W229264		18.45	0.14	3.4	0.487	0.077	3.39	37.0	29.7	1.54	411	0.32	0.03	11.4	36.9	520
W229265		20.8	0.15	3.6	0.565	0.083	3.71	38.8	30.0	1.36	336	0.31	0.03	12.5	42.0	530
W229266		17.30	0.15	3.1	0.175	0.069	3.17	32.7	28.1	1.88	657	0.45	0.03	10.6	37.7	590
W229267		15.20	0.14	3.1	0.072	0.061	2.89	29.8	36.2	2.45	795	0.29	0.03	10.1	34.6	560
W229268		14.95	0.14	2.9	0.139	0.061	2.65	29.8	32.5	2.24	803	0.31	0.03	9.9	33.2	570
W229269		15.95	0.13	3.1	0.292	0.058	2.76	31.5	31.2	2.05	861	0.33	0.03	10.4	35.4	590
W229270		16.30	0.12	2.9	0.279	0.065	2.81	28.9	28.8	2.09	888	0.39	0.03	10.4	32.5	600
W229271		16.25	0.13	3.1	0.109	0.064	2.66	28.7	48.2	2.47	805	0.55	0.04	10.4	32.8	550
W229272		17.15	0.13	3.0	0.448	0.065	2.71	30.2	51.7	2.03	816	0.72	0.03	10.6	33.0	540
W229273		24.2	0.18	3.1	1.270	0.084	3.92	33.6	32.1	0.86	328	0.36	0.03	11.5	41.7	280
W229274		12.95	0.10	1.9	2.20	0.049	2.00	21.5	22.5	1.37	1240	0.39	0.02	5.7	22.6	280
W229275		21.0	0.15	2.7	6.09	0.065	3.09	32.5	31.3	1.09	877	0.34	0.02	9.6	35.0	330
W229276		0.27	0.23	<0.1	0.038	<0.005	0.02	0.5	1.8	13.15	201	0.09	<0.01	0.1	1.4	190
W229277		20.0	0.13	2.6	2.29	0.067	3.12	31.8	33.7	1.06	601	0.31	0.02	8.6	34.0	300
W229278		21.3	0.13	2.8	2.75	0.070	3.19	32.7	46.5	1.03	532	0.46	0.02	9.4	36.5	330
W229279		0.26	0.19	<0.1	0.039	<0.005	0.02	0.5	1.8	13.20	207	0.09	<0.01	0.1	1.5	190
W229280		22.1	0.13	2.9	2.03	0.077	3.35	34.3	55.7	1.22	509	0.39	0.03	10.1	35.7	350
W229281		14.00	0.06	2.0	0.874	0.051	2.22	24.8	41.1	1.17	813	0.36	0.02	6.4	23.7	210
W229282		19.20	0.12	2.8	0.566	0.067	2.94	32.8	48.7	1.22	485	0.38	0.02	9.1	31.5	290
W229283		14.35	0.08	2.1	0.747	0.049	2.26	24.0	53.6	0.71	401	0.35	0.02	6.6	24.3	180
W229284		5.25	<0.05	0.9	5.80	0.018	0.90	13.7	9.4	0.91	2240	1.87	0.01	2.7	13.2	340
W229285		15.95	0.08	2.1	0.909	0.055	2.49	25.7	25.8	1.23	573	0.44	0.02	7.1	27.7	180
W229286		19.25	0.15	2.6	1.135	0.068	3.04	30.4	57.3	1.11	454	0.32	0.02	9.2	32.8	240
W229287		21.5	0.15	2.9	1.425	0.078	3.40	33.0	54.2	0.98	378	0.28	0.03	9.8	36.4	260
W229288		14.05	0.13	1.9	1.390	0.052	2.27	22.9	32.5	0.99	820	0.29	0.02	6.3	26.6	210

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129274

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229253		16.9	95.2	<0.002	0.36	0.34	10.6	1	1.3	86.8	0.49	<0.05	7.14	0.392	0.81	1.4
W229254		17.0	114.0	<0.002	1.52	0.52	13.2	1	1.6	78.3	0.57	0.05	8.26	0.421	2.00	1.6
W229255		15.3	130.5	<0.002	0.97	0.49	14.3	1	1.7	80.2	0.63	<0.05	8.83	0.476	1.59	1.7
W229256		13.3	124.5	<0.002	2.77	1.27	14.2	1	1.7	92.8	0.58	0.06	7.78	0.446	3.43	1.5
W229257		11.3	127.5	<0.002	3.59	1.93	14.0	1	1.7	107.0	0.57	0.06	7.27	0.448	4.07	1.4
W229258		17.7	167.0	<0.002	3.25	1.58	17.4	1	2.1	92.9	0.72	0.08	9.48	0.532	3.22	1.9
W229259		18.6	169.5	<0.002	3.86	1.95	17.8	2	2.2	94.3	0.74	0.08	9.66	0.547	3.68	1.9
W229260		12.4	118.0	<0.002	2.09	0.59	13.2	1	1.6	106.0	0.56	0.05	7.26	0.437	3.08	1.4
W229261		17.4	141.0	<0.002	2.87	0.82	16.0	1	1.8	84.5	0.56	<0.05	7.68	0.458	2.63	1.6
W229262		12.3	128.0	<0.002	4.19	1.02	13.8	1	1.7	103.5	0.59	0.05	7.77	0.425	5.23	1.5
W229263		46.0	163.5	0.003	4.54	5.56	19.3	1	2.8	87.9	0.57	<0.05	8.63	0.397	12.65	1.6
W229264		25.9	179.0	<0.002	2.46	0.81	18.9	1	2.3	80.9	0.75	<0.05	11.00	0.533	2.87	2.1
W229265		22.1	195.5	<0.002	3.82	0.69	21.9	1	2.7	73.4	0.83	<0.05	11.70	0.563	2.96	2.2
W229266		15.5	167.0	<0.002	2.13	0.46	18.2	1	2.1	125.0	0.72	<0.05	9.88	0.507	1.64	1.9
W229267		12.2	159.0	<0.002	0.33	0.34	16.0	1	1.8	115.5	0.68	0.06	9.07	0.492	0.96	1.8
W229268		12.1	145.0	<0.002	1.07	0.36	15.9	2	1.9	118.0	0.65	0.06	8.95	0.481	2.04	1.8
W229269		17.3	142.0	<0.002	3.65	0.94	16.7	1	2.0	132.0	0.69	0.05	9.38	0.488	3.88	1.9
W229270		13.1	138.0	<0.002	3.69	0.95	16.3	2	2.0	130.5	0.73	0.08	9.74	0.498	3.72	1.9
W229271		13.8	144.5	<0.002	0.73	0.44	16.5	1	1.9	113.0	0.72	0.06	9.74	0.489	1.59	1.9
W229272		14.5	146.0	<0.002	3.32	0.55	17.6	2	2.0	132.0	0.73	<0.05	10.40	0.472	4.83	2.0
W229273		23.1	193.5	0.002	5.38	1.43	25.8	1	2.6	83.4	0.79	<0.05	11.60	0.495	8.66	2.3
W229274		9.1	100.5	<0.002	2.68	4.66	14.7	1	2.0	121.5	0.42	<0.05	6.51	0.261	5.31	1.4
W229275		11.2	152.5	<0.002	4.47	12.50	21.8	1	2.8	209	0.67	<0.05	10.75	0.429	12.20	2.1
W229276		<0.5	0.9	<0.002	<0.01	0.09	0.2	1	<0.2	50.2	<0.05	<0.05	0.07	<0.005	<0.02	0.6
W229277		11.5	159.0	0.002	4.40	4.33	20.2	1	2.3	158.0	0.62	<0.05	9.79	0.396	9.69	2.0
W229278		13.1	157.0	0.003	4.58	2.72	22.3	1	2.4	211	0.66	<0.05	10.30	0.407	10.75	2.2
W229279		<0.5	1.0	<0.002	<0.01	0.06	0.2	1	<0.2	49.8	<0.05	<0.05	0.07	<0.005	0.02	0.8
W229280		12.6	154.5	0.003	4.29	1.81	22.8	1	4.1	250	0.73	<0.05	10.95	0.448	8.65	2.1
W229281		8.2	106.0	0.002	3.35	0.40	16.8	1	1.9	224	0.46	<0.05	7.01	0.288	3.43	1.4
W229282		12.6	145.0	0.003	2.92	0.36	20.8	2	2.4	209	0.65	<0.05	10.15	0.391	4.21	2.0
W229283		9.1	111.0	0.002	3.49	0.44	15.0	1	1.8	180.5	0.48	<0.05	7.32	0.299	4.31	1.5
W229284		6.1	40.9	0.002	1.43	45.5	6.0	2	0.7	1015	0.19	0.07	3.61	0.086	23.3	6.3
W229285		9.6	121.0	0.002	3.74	1.32	18.1	1	2.0	149.5	0.52	<0.05	7.87	0.320	4.16	1.5
W229286		17.2	144.5	<0.002	4.37	2.08	19.5	1	2.2	115.5	0.64	<0.05	9.42	0.402	4.34	1.7
W229287		13.5	176.5	0.002	5.29	0.98	23.7	1	2.2	82.5	0.68	<0.05	10.70	0.445	7.07	1.9
W229288		11.4	113.0	0.002	3.42	2.77	15.5	1	1.6	93.0	0.45	<0.05	6.92	0.289	6.01	1.4

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CERTIFICATE OF ANALYSIS WH17129274

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W229253		106	0.8	14.7	76	79.5		<0.01
W229254		122	0.9	17.2	94	93.4		<0.01
W229255		127	1.1	18.6	84	98.9		<0.01
W229256		120	2.7	16.6	64	94.4		0.01
W229257		122	2.9	16.7	63	90.6		0.01
W229258		139	2.6	21.6	76	112.5		0.03
W229259		142	2.8	22.6	82	115.0		0.04
W229260		116	1.8	16.8	58	99.2		<0.01
W229261		135	1.5	15.8	62	95.6		<0.01
W229262		115	2.4	16.6	76	89.1		<0.01
W229263		141	14.3	17.3	104	89.3		0.54
W229264		143	2.0	22.9	88	119.5		<0.01
W229265		152	2.4	25.6	89	129.0		<0.01
W229266		134	1.5	22.5	93	112.5		<0.01
W229267		124	1.2	19.3	61	106.5		<0.01
W229268		122	2.0	20.7	60	105.0		<0.01
W229269		124	4.0	22.4	60	111.0		0.01
W229270		127	3.7	20.8	64	105.5		0.01
W229271		122	1.7	21.0	79	108.5		<0.01
W229272		127	3.0	21.9	101	107.0		<0.01
W229273		177	1.9	23.9	66	109.0		<0.01
W229274		94	3.4	14.9	98	63.2		0.05
W229275		149	7.1	21.3	83	95.7		0.20
W229276		2	0.1	0.8	17	<0.5		<0.01
W229277		145	6.0	20.2	79	90.9		0.05
W229278		154	6.5	19.3	99	94.3		<0.01
W229279		2	0.1	0.8	18	<0.5		<0.01
W229280		162	6.5	21.4	112	102.0		<0.01
W229281		101	1.6	18.0	100	68.9		<0.01
W229282		136	1.1	22.2	66	95.8		<0.01
W229283		106	1.2	15.3	73	72.9		<0.01
W229284		32	18.6	15.6	24	32.7	1.345	2.69
W229285		115	5.1	16.2	69	73.0		0.01
W229286		135	7.2	19.1	70	93.7		0.01
W229287		153	7.0	22.2	65	103.0		<0.01
W229288		105	6.8	15.1	57	68.7		0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 9- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17129274

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- AUG- 2017
Account: RCM

CERTIFICATE WH17128966

Project: Nadaleen

P.O. No.: N17- 020

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

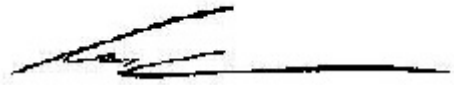
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 6-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17128966

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228397		8.42	0.09	6.78	33.5	260	1.88	0.31	4.09	0.15	79.5	16.0	64	43.2	36.8	4.26
W228398		5.62	0.07	7.60	54.7	480	2.27	0.35	2.69	0.19	88.7	17.5	68	43.4	42.5	5.18
W228399		7.88	0.08	7.74	76.4	330	2.30	0.36	2.34	0.15	90.4	18.1	73	44.0	44.6	4.46
W228400		4.25	0.09	7.19	74.9	310	2.11	0.32	2.91	0.15	89.2	15.8	66	27.7	33.0	4.62
W228401		3.98	6.18	5.79	684	530	1.47	0.26	4.02	0.09	69.0	16.1	52	23.1	45.0	4.64
W228402		6.44	0.07	7.31	89.8	380	1.92	0.33	3.34	0.11	82.0	20.1	68	24.4	50.9	3.86
W228403		6.12	0.05	7.70	45.6	260	2.38	0.34	2.52	<0.02	84.7	21.0	72	38.6	54.9	5.43
W228404		0.29	0.09	3.60	2550	200	0.88	0.15	18.60	0.11	41.5	11.3	40	10.20	41.5	2.97
W228405		7.17	0.06	7.66	47.6	250	1.95	0.33	2.40	0.02	80.4	20.2	65	30.4	53.6	5.64
W228406		8.59	0.06	7.26	52.6	240	2.06	0.32	2.73	0.08	79.6	23.0	69	32.0	52.9	4.77
W228407		7.21	0.07	6.85	29.0	230	1.88	0.29	3.32	0.09	74.4	19.8	68	31.1	49.8	4.86
W228408		7.14	0.06	6.53	38.1	220	1.77	0.29	3.56	0.06	71.8	18.7	62	33.0	48.1	4.74
W228409		<0.02	0.06	6.59	39.7	220	1.90	0.30	3.71	0.06	73.6	19.1	64	33.8	47.4	4.82
W228410		6.57	0.09	7.35	54.9	270	2.27	0.32	2.72	0.06	81.3	22.0	71	33.2	55.2	5.01
W228411		5.28	0.05	6.31	101.5	300	1.64	0.28	3.26	0.16	72.1	18.1	61	24.5	49.9	5.02
W228412		4.55	0.08	7.10	58.8	330	1.90	0.30	2.62	0.25	77.3	26.7	63	24.2	54.9	5.28
W228413		5.03	0.01	0.07	0.3	50	0.06	0.05	20.8	0.06	1.39	0.9	1	0.22	2.4	0.48
W228414		6.63	0.05	8.20	43.6	320	2.49	0.37	2.38	0.36	88.4	19.2	70	28.8	60.5	4.46
W228415		6.50	0.07	6.78	516	280	1.94	0.30	2.76	0.52	75.4	22.7	63	27.2	52.9	5.23
W228416		5.69	0.07	5.26	349	350	1.49	0.24	2.86	0.05	59.9	15.1	53	20.2	38.1	4.11
W228417		7.64	0.07	5.84	68.7	360	1.65	0.26	2.54	0.06	64.4	16.6	63	29.6	43.5	4.36
W228418		8.08	0.06	5.48	45.9	440	1.47	0.23	2.94	0.07	69.4	16.8	60	21.8	41.2	4.45
W228419		8.28	0.07	7.01	46.1	280	1.90	0.29	2.54	0.09	74.4	20.2	66	27.5	50.0	4.91
W228420		3.66	0.06	7.24	46.1	250	1.97	0.29	2.46	0.08	75.9	19.4	70	28.4	51.7	4.96
W228421		8.19	0.09	6.22	47.7	250	1.67	0.25	2.65	0.08	69.9	17.6	65	27.0	44.8	4.40
W228422		8.35	0.07	6.34	39.0	200	1.75	0.27	2.28	0.10	73.1	18.2	68	37.1	46.5	4.28
W228423		7.41	0.06	6.46	24.6	230	1.79	0.29	2.53	0.06	75.2	18.6	64	40.6	49.8	4.36
W228424		0.29	0.69	6.57	454	220	2.26	0.27	2.16	0.36	55.7	24.0	98	36.6	69.0	6.21
W228425		8.25	0.06	6.62	21.7	220	1.82	0.28	2.36	0.06	64.5	17.8	66	45.3	51.1	4.49
W228426		8.15	0.06	5.80	28.7	270	1.50	0.25	2.44	0.06	55.7	19.0	61	29.6	44.7	4.48
W228427		8.44	0.07	4.79	27.4	400	1.16	0.19	2.69	0.07	49.2	15.7	54	26.7	36.4	4.10
W228428		8.45	0.06	6.63	46.5	260	1.85	0.28	2.41	0.25	64.7	16.4	67	39.7	50.2	4.42
W228429		7.85	0.07	6.27	42.0	260	1.71	0.28	1.56	0.20	63.0	20.1	64	31.8	49.2	4.39
W228430		4.90	<0.01	0.06	<0.2	30	0.07	0.04	20.6	0.05	1.09	0.8	1	0.27	2.2	0.44
W228431		8.06	0.08	6.41	104.0	310	1.63	0.27	2.71	0.35	61.9	18.9	66	26.1	48.1	5.38
W228432		7.93	0.07	5.79	21.3	200	1.46	0.24	1.61	0.04	57.4	19.5	66	42.6	48.1	5.03

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17128966

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228397		17.10	0.14	3.2	0.306	0.072	3.23	38.1	71.3	1.37	325	0.73	0.04	10.8	32.7	970
W228398		19.95	0.16	4.0	0.507	0.079	3.66	42.9	83.5	1.41	289	1.20	0.04	12.1	37.8	690
W228399		19.80	0.18	3.7	0.420	0.081	3.65	43.4	106.0	1.44	299	0.93	0.04	12.3	38.6	860
W228400		18.80	0.18	3.5	0.439	0.077	3.42	42.6	86.6	1.57	403	0.95	0.04	11.7	32.3	720
W228401		15.15	0.13	2.8	0.483	0.059	2.62	32.6	80.0	1.71	649	0.62	0.03	9.2	30.5	500
W228402		19.10	0.17	3.4	0.306	0.075	3.26	39.0	116.0	1.85	600	0.29	0.04	11.7	36.3	610
W228403		20.6	0.16	3.6	0.309	0.082	3.38	39.6	143.5	2.12	507	0.20	0.04	12.5	39.6	570
W228404		9.31	0.07	1.9	3.28	0.039	1.72	20.3	10.0	1.38	1180	1.63	0.02	5.9	24.4	380
W228405		19.70	0.14	3.4	0.504	0.077	3.37	38.3	89.2	1.71	427	0.20	0.04	12.0	36.9	610
W228406		19.20	0.16	3.4	0.310	0.076	3.38	37.9	70.1	1.97	480	0.64	0.04	11.7	40.4	670
W228407		17.50	0.15	3.3	0.263	0.073	3.18	35.3	59.6	2.12	556	0.48	0.04	11.0	34.6	560
W228408		16.95	0.17	3.1	0.250	0.071	3.07	34.6	48.5	2.14	613	0.35	0.04	10.5	34.9	480
W228409		17.40	0.15	3.2	0.242	0.069	3.07	34.8	48.5	2.20	644	0.36	0.04	10.7	35.1	480
W228410		19.30	0.16	3.5	0.729	0.082	3.48	38.6	41.0	2.01	552	0.62	0.04	11.8	37.3	560
W228411		16.85	0.16	3.1	0.769	0.069	2.83	34.4	44.2	1.71	625	0.66	0.03	10.7	34.6	470
W228412		18.45	0.16	3.4	0.757	0.072	3.25	36.6	29.4	1.62	506	0.75	0.03	11.4	44.5	590
W228413		0.28	0.23	<0.1	0.019	0.005	0.02	0.7	1.2	12.75	203	0.11	0.01	0.2	1.8	180
W228414		21.7	0.18	3.6	0.644	0.090	3.89	41.4	24.6	1.51	451	0.86	0.04	13.2	33.4	740
W228415		17.80	0.16	3.3	1.000	0.077	3.16	36.0	19.7	1.59	590	0.75	0.03	11.2	38.9	570
W228416		13.85	0.13	2.7	0.340	0.056	2.47	28.2	56.0	1.51	529	0.38	0.03	8.3	28.3	440
W228417		14.95	0.17	2.9	0.167	0.065	2.65	30.5	123.0	1.90	508	0.35	0.03	9.3	31.5	460
W228418		14.05	0.16	2.7	0.162	0.063	2.54	28.6	82.4	1.88	623	0.36	0.03	8.7	30.5	450
W228419		17.90	0.17	3.2	0.296	0.073	3.37	35.1	39.0	1.84	516	0.40	0.04	11.0	35.6	530
W228420		18.85	0.19	3.6	0.288	0.075	3.50	36.3	39.1	1.84	499	0.40	0.04	11.5	36.9	550
W228421		16.30	0.18	3.1	0.163	0.064	2.99	32.9	47.0	1.95	531	0.38	0.03	10.2	32.6	500
W228422		16.55	0.17	3.0	0.137	0.072	2.96	34.5	77.7	1.86	471	0.46	0.03	9.7	33.9	460
W228423		17.65	0.20	3.3	0.060	0.071	3.01	35.9	82.7	2.09	491	0.45	0.04	11.0	34.3	520
W228424		19.25	0.15	2.5	3.17	0.073	3.27	25.7	15.5	0.76	628	5.35	0.03	9.0	52.1	220
W228425		17.75	0.17	3.2	0.074	0.069	3.06	30.5	62.9	2.08	496	0.44	0.05	11.1	34.5	550
W228426		15.15	0.17	2.7	0.079	0.060	2.70	26.5	60.0	1.87	482	0.54	0.03	9.4	31.8	480
W228427		12.75	0.15	2.3	0.109	0.056	2.07	23.8	69.8	1.73	630	0.29	0.05	7.8	28.1	410
W228428		17.75	0.19	3.1	0.130	0.068	3.12	30.4	74.7	2.07	500	0.83	0.04	11.1	33.7	600
W228429		16.70	0.19	3.0	0.191	0.066	2.95	29.7	68.6	1.64	375	0.69	0.03	10.1	34.1	520
W228430		0.30	0.26	<0.1	<0.005	<0.005	0.02	0.5	1.2	12.55	192	0.20	<0.01	0.2	1.6	180
W228431		17.10	0.16	2.9	0.190	0.071	3.03	29.8	45.9	2.20	569	0.34	0.04	10.6	36.8	500
W228432		15.50	0.16	2.6	0.221	0.066	2.58	27.4	76.0	1.73	497	0.24	0.07	8.8	30.9	390

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VANCOUVER BC V6B 1L8

Finalized Date: 6- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17128966

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228397		27.9	159.5	<0.002	1.52	0.62	15.4	1	2.3	169.5	0.77	<0.05	12.65	0.427	1.19	2.8
W228398		38.7	181.0	0.002	2.53	0.75	18.0	2	2.5	117.5	0.86	<0.05	14.00	0.465	1.63	2.9
W228399		30.2	178.0	<0.002	1.77	0.74	17.9	2	2.8	99.9	0.88	<0.05	14.25	0.485	2.01	3.0
W228400		28.3	162.0	<0.002	2.77	0.75	17.3	2	2.5	115.0	0.82	<0.05	13.50	0.448	2.07	2.8
W228401		23.0	123.5	<0.002	3.31	1.55	14.1	1	2.6	185.5	0.67	0.05	10.25	0.369	2.30	2.1
W228402		22.6	151.5	<0.002	1.45	0.77	18.4	2	2.4	170.5	0.84	0.06	12.70	0.481	2.24	2.5
W228403		20.0	174.0	<0.002	1.58	0.59	20.4	1	2.6	143.5	0.88	0.08	13.25	0.528	4.15	2.5
W228404		8.7	79.6	0.002	2.51	9.23	9.0	2	1.4	708	0.42	0.07	6.06	0.258	10.65	2.4
W228405		17.3	167.0	<0.002	3.72	0.63	19.6	1	2.5	155.5	0.85	0.06	12.65	0.527	4.96	2.5
W228406		17.0	170.5	<0.002	1.54	0.63	19.4	2	2.4	158.5	0.82	0.05	12.40	0.501	2.01	2.4
W228407		18.3	158.5	<0.002	1.14	0.61	17.9	1	2.4	123.0	0.79	0.06	11.70	0.486	1.59	2.3
W228408		19.4	155.0	<0.002	0.88	0.58	16.9	1	2.2	128.0	0.75	<0.05	11.10	0.452	1.25	2.2
W228409		19.6	160.0	<0.002	0.88	0.58	17.3	2	2.3	134.5	0.76	<0.05	11.45	0.451	1.27	2.3
W228410		18.7	177.0	<0.002	1.47	0.67	20.1	1	2.4	128.5	0.83	0.07	12.70	0.514	1.66	2.5
W228411		18.0	145.5	<0.002	3.35	0.48	17.4	1	2.3	158.0	0.75	<0.05	10.95	0.473	3.64	2.0
W228412		53.1	161.0	<0.002	3.64	0.70	18.8	2	2.4	158.0	0.82	0.05	12.05	0.510	3.78	2.2
W228413		1.5	1.2	<0.002	<0.01	0.05	0.2	1	<0.2	51.1	<0.05	<0.05	0.10	<0.005	<0.02	0.8
W228414		42.5	180.0	<0.002	3.55	0.45	21.9	2	2.7	175.0	0.94	<0.05	13.65	0.570	4.71	2.6
W228415		33.0	154.0	<0.002	4.87	2.27	18.6	1	2.3	147.0	0.78	0.06	11.55	0.492	3.28	2.1
W228416		14.7	111.5	<0.002	1.93	3.17	13.8	1	1.8	179.5	0.60	<0.05	9.02	0.392	1.64	1.7
W228417		13.6	122.0	<0.002	0.58	1.11	15.4	1	1.9	136.0	0.68	0.05	10.15	0.442	1.33	1.9
W228418		13.8	120.5	<0.002	1.19	0.62	14.8	1	1.8	146.5	0.62	<0.05	9.23	0.425	1.64	1.8
W228419		18.0	161.0	<0.002	2.37	0.70	18.5	2	2.2	130.5	0.77	<0.05	11.50	0.503	2.62	2.1
W228420		16.1	165.5	<0.002	2.45	0.66	18.9	2	2.4	129.5	0.81	0.05	12.05	0.517	2.68	2.3
W228421		16.7	146.0	<0.002	0.75	1.16	16.7	1	2.0	119.5	0.70	<0.05	10.70	0.456	1.40	2.0
W228422		16.8	156.5	<0.002	0.48	0.44	17.1	1	2.0	93.2	0.68	<0.05	11.15	0.443	1.10	2.1
W228423		18.1	175.0	<0.002	0.31	0.43	18.0	1	2.2	95.7	0.78	0.05	11.55	0.459	1.16	2.2
W228424		50.6	162.5	0.003	4.39	5.77	20.9	1	2.9	91.2	0.63	<0.05	8.45	0.393	13.10	1.8
W228425		15.2	177.0	<0.002	0.35	0.44	18.0	1	2.2	95.5	0.80	<0.05	10.25	0.481	1.18	2.1
W228426		19.6	148.5	<0.002	0.79	0.45	15.8	1	1.9	97.4	0.66	<0.05	8.86	0.435	1.10	1.8
W228427		15.2	115.0	<0.002	0.48	0.44	13.4	1	1.6	114.5	0.55	<0.05	7.29	0.374	0.94	1.5
W228428		15.1	165.5	<0.002	0.39	0.43	18.3	2	2.2	105.5	0.80	<0.05	10.10	0.484	1.02	2.1
W228429		20.3	147.0	<0.002	0.68	0.87	17.0	1	2.3	95.7	0.74	<0.05	9.99	0.450	1.07	2.1
W228430		1.1	1.5	<0.002	<0.01	0.05	0.2	1	<0.2	49.2	<0.05	<0.05	0.12	<0.005	<0.02	0.6
W228431		15.8	148.5	<0.002	1.10	1.30	17.4	2	2.3	181.5	0.76	0.07	9.80	0.468	1.27	2.0
W228432		17.4	142.0	0.002	0.58	0.42	16.4	1	2.1	87.4	0.62	0.05	8.79	0.413	1.35	2.0

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17128966

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W228397		109	1.4	25.8	90	109.0	<0.01
W228398		125	1.6	24.5	108	120.0	<0.01
W228399		126	1.7	26.8	101	122.5	<0.01
W228400		118	2.2	25.3	88	118.5	<0.01
W228401		96	26.0	21.1	67	93.4	<0.01
W228402		124	3.5	24.5	88	114.0	<0.01
W228403		140	2.9	25.4	66	122.0	<0.01
W228404		73	5.4	16.5	48	61.9	0.48
W228405		139	2.2	24.5	70	116.5	<0.01
W228406		132	1.4	24.8	73	116.5	<0.01
W228407		125	1.4	22.1	83	109.0	<0.01
W228408		117	1.4	22.5	74	108.5	<0.01
W228409		118	1.4	22.8	76	105.5	<0.01
W228410		136	1.8	24.4	82	117.5	<0.01
W228411		122	3.2	23.4	90	104.0	<0.01
W228412		133	3.1	23.5	147	111.5	<0.01
W228413		2	0.1	0.9	18	0.6	<0.01
W228414		152	2.1	26.9	293	123.5	<0.01
W228415		128	6.2	23.6	258	109.0	0.02
W228416		103	6.6	17.7	60	84.7	<0.01
W228417		114	2.0	19.5	68	95.4	<0.01
W228418		109	1.5	20.1	73	102.0	<0.01
W228419		131	1.5	22.3	95	109.5	<0.01
W228420		135	1.6	22.2	87	115.0	<0.01
W228421		116	3.2	20.5	82	101.5	<0.01
W228422		116	1.2	20.4	80	100.5	<0.01
W228423		119	1.7	25.9	77	109.5	<0.01
W228424		139	12.3	17.4	100	82.4	0.56
W228425		123	1.3	21.5	75	110.0	<0.01
W228426		112	1.2	18.5	75	94.4	<0.01
W228427		96	1.0	16.4	58	83.1	<0.01
W228428		125	1.3	21.4	137	110.5	<0.01
W228429		118	1.5	20.2	126	102.0	<0.01
W228430		2	0.1	0.8	17	0.5	<0.01
W228431		123	4.2	20.0	145	101.0	<0.01
W228432		117	1.1	18.3	62	89.6	0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 6- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17128966

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- AUG- 2017
Account: RCM

CERTIFICATE WH17129280

Project: Nadaleen

P.O. No.: N17- 022

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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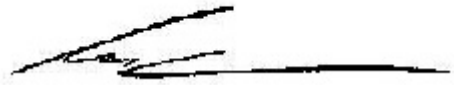
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 11- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129280

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228433		9.08	0.07	9.04	50.3	340	2.57	0.31	0.31	0.02	85.6	30.9	106	76.0	69.1	6.21
W228434		8.17	0.06	8.94	7.2	260	2.40	0.28	0.29	0.02	79.7	28.4	106	85.2	67.5	6.11
W228435		3.75	0.05	9.08	8.4	260	2.42	0.29	0.30	<0.02	81.3	30.8	110	87.0	72.3	6.30
W228436		8.55	0.07	8.84	4.9	250	2.31	0.29	0.31	<0.02	81.3	30.0	106	90.0	68.5	6.71
W228437		7.66	0.05	7.50	17.4	220	1.86	0.27	0.93	0.03	67.5	23.7	88	54.1	59.8	6.28
W228438		8.16	0.05	8.18	56.6	240	2.47	0.30	0.69	0.05	76.3	27.0	92	55.1	65.9	5.66
W228439		7.64	0.10	1.00	1910	110	0.26	0.08	30.4	0.22	14.75	4.4	10	2.59	8.7	0.67
W228440		10.89	0.06	0.71	1035	120	0.23	0.05	33.4	0.17	12.75	3.6	7	1.72	7.7	0.53
W228441		11.45	0.08	0.61	811	80	0.20	0.05	32.7	0.22	9.98	2.7	6	1.72	6.0	0.49
W228442		10.71	0.25	1.71	4770	160	0.30	0.10	17.40	0.86	23.3	5.6	19	4.28	14.8	1.20
W228443		12.53	0.16	1.21	858	140	0.25	0.08	26.5	0.23	22.4	4.2	12	2.84	10.6	0.82
W228444		<0.02	0.14	1.27	879	140	0.24	0.08	26.3	0.22	22.8	4.3	13	2.94	10.8	0.88
W228445		7.28	0.09	1.91	349	160	0.34	0.11	27.2	0.25	26.1	6.8	20	5.24	17.6	1.21
W228446		10.01	0.11	3.06	>10000	250	0.46	0.21	1.18	1.00	31.3	10.2	37	7.16	30.1	2.46
W228447		7.11	<0.01	0.05	38.1	20	<0.05	0.05	21.4	0.06	1.10	0.7	1	0.11	2.1	0.46
W228448		12.48	0.09	1.96	>10000	150	0.29	0.13	15.35	0.58	32.4	5.9	23	3.91	19.4	1.70
W228449		4.36	0.07	1.62	1630	110	0.25	0.11	23.3	0.33	32.2	5.7	17	3.50	18.2	1.34
W228450		10.60	0.09	3.22	>10000	140	0.46	0.19	7.18	0.31	48.5	10.2	34	6.36	46.1	2.48
W228451		7.16	<0.01	0.06	19.3	20	0.06	0.04	19.60	0.07	1.09	0.7	<1	0.11	3.0	0.46
W228452		0.26	0.66	4.47	8790	180	0.84	0.21	3.48	0.60	52.5	13.2	56	11.65	58.1	4.27
W228453		9.83	0.06	3.86	>10000	200	0.74	0.20	14.05	0.28	52.5	11.7	40	8.75	38.2	2.41
W228454		6.12	0.05	3.40	344	160	0.79	0.17	19.65	0.28	47.7	9.6	30	9.65	30.3	2.24
W228455		7.38	0.06	3.64	275	180	1.12	0.19	19.40	0.31	50.5	10.7	33	11.85	34.8	2.34
W228456		9.06	0.05	3.38	350	150	0.75	0.18	19.70	0.21	45.3	10.0	30	10.35	30.9	2.20
W228457		11.62	0.04	1.71	571	90	0.37	0.10	24.4	0.25	18.15	5.1	14	4.60	15.2	1.36
W228458		10.51	0.03	1.12	557	90	0.28	0.07	25.6	0.40	14.40	3.6	10	2.93	10.4	0.85
W228459		10.21	0.04	1.07	616	90	0.21	0.07	24.0	0.69	16.95	3.3	10	2.67	10.5	0.81
W228460		6.16	0.10	1.50	2900	90	0.30	0.10	9.94	1.67	20.3	4.5	19	3.32	12.5	1.34
W228461		0.26	0.25	3.87	>10000	180	0.72	0.20	10.00	0.69	46.2	11.7	44	8.51	55.2	3.03
W228462		11.13	0.02	1.35	544	110	0.34	0.07	26.7	0.63	17.45	3.8	12	3.62	10.9	0.98
W228463		11.21	0.01	0.57	156.0	90	0.20	0.04	34.1	0.11	9.18	2.1	5	1.55	5.6	0.45
W228464		13.08	0.03	0.89	168.0	90	0.30	0.05	31.9	0.15	12.40	3.1	8	2.55	8.7	0.68
W228465		10.74	0.02	1.01	278	100	0.32	0.07	29.9	0.28	15.10	3.5	10	2.71	9.5	0.72
W228466		11.06	0.04	1.88	459	120	0.41	0.11	23.1	0.49	27.7	6.0	18	4.71	17.8	1.35
W228467		10.88	0.03	1.69	587	100	0.30	0.10	22.4	0.33	27.6	5.4	16	3.85	15.7	1.28
W228468		11.60	0.02	0.83	222	90	0.23	0.06	30.4	0.16	14.05	3.1	8	1.90	8.9	0.64

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 11- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129280

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228433		25.4	0.16	3.2	0.567	0.090	4.41	41.0	51.0	1.37	238	0.29	0.04	13.0	49.8	250
W228434		24.4	0.16	3.1	0.389	0.084	4.25	38.5	62.9	1.41	262	0.23	0.04	12.3	39.7	240
W228435		25.2	0.17	3.1	0.397	0.087	4.31	39.3	64.9	1.44	269	0.24	0.04	12.7	42.6	250
W228436		24.4	0.17	3.0	0.424	0.081	4.18	40.1	70.6	1.43	329	0.23	0.04	12.4	45.0	250
W228437		20.4	0.15	2.7	0.359	0.073	3.40	34.0	78.6	1.54	461	0.35	0.03	10.2	38.0	320
W228438		23.5	0.17	2.9	0.674	0.083	3.80	38.4	62.1	1.17	319	0.32	0.03	11.3	40.3	280
W228439		2.87	0.07	0.5	14.50	0.017	0.45	7.6	6.2	0.20	1060	0.25	0.01	1.3	5.7	250
W228440		2.04	0.06	0.3	7.09	0.012	0.31	6.3	4.0	0.22	1400	0.25	0.01	1.0	4.8	600
W228441		1.82	0.05	0.3	5.31	0.012	0.28	4.8	4.6	0.20	3830	0.19	0.01	0.9	4.0	170
W228442		4.65	0.08	0.8	18.80	0.020	0.76	11.6	18.5	0.19	3380	0.36	0.01	2.3	8.6	760
W228443		3.31	0.08	0.6	8.55	0.016	0.56	10.9	8.9	0.21	2320	0.45	0.01	1.7	6.9	310
W228444		3.40	0.08	0.6	8.99	0.016	0.58	11.3	8.9	0.21	2380	0.51	0.01	1.8	7.2	330
W228445		4.94	0.07	0.9	8.81	0.016	0.89	14.1	6.8	0.27	1830	0.95	0.01	2.8	11.4	160
W228446		8.32	0.09	1.4	52.7	0.028	1.34	16.2	23.7	0.22	220	1.70	0.01	4.0	18.9	990
W228447		0.20	0.15	<0.1	0.069	<0.005	0.02	0.5	0.8	13.05	204	0.06	0.01	0.2	1.5	200
W228448		5.24	0.09	0.9	36.3	0.024	0.85	15.7	17.7	0.18	1040	1.21	0.01	2.5	11.1	400
W228449		4.14	0.09	0.8	26.7	0.021	0.50	15.5	16.4	0.14	1600	1.16	0.01	2.3	9.7	390
W228450		8.70	0.19	1.6	26.3	0.044	1.35	24.7	18.3	0.69	567	2.83	0.01	4.3	26.6	550
W228451		0.21	0.14	<0.1	0.053	0.007	0.02	0.5	1.1	12.05	203	0.06	0.01	0.1	1.4	180
W228452		12.10	0.15	2.1	24.0	0.036	2.00	27.6	17.6	0.32	562	5.42	0.02	6.6	34.0	440
W228453		9.89	0.17	1.9	9.98	0.046	1.69	27.0	12.3	1.13	494	1.81	0.02	5.3	21.9	360
W228454		8.37	0.13	1.6	5.40	0.036	1.52	24.1	8.2	1.32	468	1.34	0.02	4.6	17.5	220
W228455		9.10	0.14	1.8	4.95	0.044	1.63	26.4	9.7	1.29	500	1.57	0.02	5.1	19.7	220
W228456		8.63	0.12	1.6	7.55	0.034	1.52	24.2	9.5	0.67	729	1.74	0.02	4.7	17.9	280
W228457		4.65	0.11	0.8	11.50	0.015	0.77	10.5	9.0	0.24	2880	0.52	0.01	2.3	8.2	300
W228458		3.07	0.09	0.5	9.62	0.014	0.50	7.5	9.7	0.20	4160	0.54	0.01	1.5	5.5	410
W228459		2.98	0.10	0.5	13.30	0.021	0.47	8.2	13.0	0.17	6070	0.50	0.01	1.5	5.2	600
W228460		4.21	0.09	0.7	37.2	0.023	0.64	9.2	39.3	0.15	2770	0.82	0.01	1.9	8.4	310
W228461		10.45	0.11	1.8	26.5	0.052	1.69	25.1	15.4	0.35	764	3.45	0.02	5.6	26.6	540
W228462		3.56	0.10	0.6	11.15	0.022	0.61	9.2	8.2	0.26	1780	0.54	0.01	1.7	6.4	470
W228463		1.55	0.10	0.3	2.64	0.012	0.26	4.5	2.9	0.23	2210	0.23	0.01	0.8	2.5	440
W228464		2.46	0.10	0.5	3.58	0.016	0.41	6.4	4.5	0.35	1210	0.43	0.01	1.3	4.1	270
W228465		2.78	0.12	0.5	6.28	0.014	0.45	7.6	6.3	0.30	1700	0.63	0.01	1.5	5.0	380
W228466		5.19	0.10	0.9	13.75	0.021	0.84	12.6	12.5	0.25	2360	1.02	0.01	2.6	10.0	660
W228467		4.71	0.11	0.9	16.45	0.021	0.76	12.3	13.0	0.20	2170	0.66	0.01	2.4	8.9	540
W228468		2.32	0.10	0.4	6.04	0.012	0.37	6.9	5.1	0.20	2000	0.34	0.01	1.2	4.4	420

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129280

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228433		34.7	226	0.003	2.16	0.62	27.6	1	2.6	74.3	0.88	<0.05	13.40	0.562	1.89	2.2
W228434		21.1	228	0.002	1.29	0.40	26.3	1	2.4	68.3	0.82	<0.05	12.30	0.549	1.71	2.0
W228435		22.5	230	<0.002	1.39	0.43	27.4	1	2.8	70.8	0.85	<0.05	12.55	0.556	1.77	2.1
W228436		23.5	230	0.002	1.53	0.41	26.4	1	2.5	69.1	0.82	<0.05	12.55	0.551	1.78	2.1
W228437		16.9	197.5	0.002	0.86	0.39	22.2	1	2.2	79.1	0.68	<0.05	10.60	0.462	1.46	2.0
W228438		19.0	213	0.003	2.42	0.43	26.3	1	2.3	84.6	0.75	<0.05	11.65	0.472	4.33	2.1
W228439		5.5	25.5	<0.002	0.05	19.30	7.5	1	0.4	1260	0.09	<0.05	1.62	0.051	53.5	2.2
W228440		4.4	16.9	<0.002	0.08	13.55	4.7	1	0.3	1220	0.07	<0.05	1.24	0.037	18.15	2.1
W228441		3.1	15.3	<0.002	0.07	8.17	11.1	1	0.2	1000	0.06	<0.05	1.00	0.033	16.00	1.6
W228442		7.8	40.0	0.003	0.32	21.4	10.8	2	0.6	547	0.16	0.06	2.84	0.086	40.9	4.4
W228443		5.0	28.5	0.003	0.77	10.70	11.2	1	0.4	1150	0.12	<0.05	2.12	0.064	21.5	2.6
W228444		5.0	29.7	0.002	0.80	11.00	11.4	1	0.4	1150	0.13	<0.05	2.21	0.067	22.4	2.6
W228445		6.3	44.4	0.004	1.32	12.30	11.7	1	0.5	1510	0.21	0.06	3.19	0.108	22.7	3.7
W228446		20.1	67.6	0.006	4.08	151.5	2.7	2	1.2	389	0.30	0.13	5.21	0.162	162.0	6.6
W228447		1.1	1.0	<0.002	<0.01	0.22	0.2	<1	<0.2	46.4	<0.05	<0.05	0.07	<0.005	0.36	0.6
W228448		10.6	42.6	0.004	2.40	111.5	4.5	1	0.7	440	0.18	0.07	3.03	0.099	115.0	3.5
W228449		10.5	27.0	0.004	1.53	75.6	9.5	2	0.6	749	0.16	0.08	2.77	0.090	97.8	3.1
W228450		21.6	65.7	0.009	4.41	115.5	6.8	5	1.7	343	0.30	0.07	5.17	0.172	65.4	4.0
W228451		1.3	1.0	<0.002	<0.01	0.13	0.2	1	<0.2	46.5	<0.05	<0.05	0.10	<0.005	0.09	0.9
W228452		15.7	95.6	0.003	4.15	105.5	7.4	1	2.2	236	0.47	0.15	7.14	0.292	108.5	4.2
W228453		12.0	77.0	0.007	3.13	77.2	8.8	4	1.9	492	0.39	0.09	6.29	0.221	23.8	4.0
W228454		10.4	68.2	0.005	1.89	3.56	7.8	2	1.2	1150	0.33	0.08	5.50	0.190	12.55	3.4
W228455		11.4	76.0	0.008	1.98	1.66	9.1	2	1.2	1070	0.37	0.07	5.90	0.205	12.95	3.3
W228456		10.8	73.2	0.007	2.22	11.45	8.3	2	1.1	950	0.33	0.08	5.61	0.185	18.85	3.1
W228457		6.5	35.9	0.002	1.44	28.7	16.5	1	0.6	862	0.17	0.05	2.73	0.090	33.9	2.7
W228458		5.0	23.4	0.002	0.92	21.3	11.5	1	0.4	802	0.11	0.06	1.94	0.059	25.6	3.5
W228459		5.5	21.5	0.003	0.89	27.3	13.2	2	0.4	705	0.10	0.06	1.98	0.056	32.4	4.2
W228460		9.0	28.4	0.002	1.45	70.3	4.1	1	0.7	183.0	0.14	0.11	2.60	0.076	80.3	4.5
W228461		16.9	82.7	0.003	3.48	112.0	8.8	2	1.9	441	0.40	0.13	7.01	0.217	70.7	4.4
W228462		5.6	26.5	0.002	1.00	19.35	6.8	1	0.5	1035	0.13	<0.05	2.27	0.069	27.0	3.3
W228463		3.0	11.1	0.002	0.41	5.49	5.6	1	0.2	1315	0.05	<0.05	1.05	0.031	8.59	2.3
W228464		4.4	17.7	0.002	0.67	8.15	5.0	1	0.3	1165	0.09	<0.05	1.60	0.049	11.55	2.5
W228465		5.5	20.5	0.002	0.74	14.10	8.2	1	0.4	1220	0.10	0.05	1.84	0.056	19.25	2.9
W228466		8.7	41.9	0.003	1.48	30.3	12.3	1	0.7	628	0.18	0.07	3.30	0.102	41.3	4.7
W228467		7.1	35.1	0.003	1.43	35.7	11.5	1	0.6	536	0.17	0.08	3.00	0.094	50.2	4.0
W228468		3.5	17.2	0.002	0.65	12.95	7.7	1	0.3	1295	0.08	0.05	1.51	0.047	18.35	3.1

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129280

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228433		180	1.4	26.4	72	117.0		<0.01
W228434		176	1.3	25.2	74	111.5		<0.01
W228435		182	1.3	26.1	76	115.0		<0.01
W228436		178	1.3	26.1	77	110.5		<0.01
W228437		148	1.1	22.8	83	97.5		<0.01
W228438		164	1.2	23.4	82	105.5		<0.01
W228439		17	1.3	17.1	24	17.8		2.12
W228440		12	0.9	16.3	22	14.6		1.82
W228441		11	0.9	18.3	22	11.0		1.28
W228442		29	1.8	36.4	96	29.8		5.41
W228443		20	1.3	18.3	29	23.0		1.98
W228444		21	1.4	18.6	26	23.8		2.13
W228445		32	2.0	18.0	30	33.6		1.26
W228446		52	3.7	24.2	96	51.5	3.72	12.25
W228447		2	0.1	0.8	15	<0.5		<0.01
W228448		36	2.5	22.4	57	33.0	1.475	10.25
W228449		30	3.6	30.6	16	32.6		8.13
W228450		59	5.3	10.4	54	55.1	4.89	1.47
W228451		2	0.1	0.7	16	<0.5		<0.01
W228452		83	5.8	18.4	75	74.9		13.05
W228453		70	5.3	18.4	58	67.0	2.17	0.14
W228454		58	3.4	19.3	55	56.3		0.09
W228455		65	3.0	22.8	59	62.1		0.01
W228456		58	3.0	19.6	45	57.3		1.44
W228457		28	1.8	16.4	33	27.8		6.01
W228458		19	1.4	22.5	43	17.9		3.90
W228459		19	1.4	27.9	77	16.9		4.18
W228460		27	1.6	17.3	214	21.3		9.15
W228461		63	8.3	20.7	137	66.8	3.34	7.92
W228462		22	1.4	14.7	90	20.3		2.98
W228463		10	0.7	12.2	18	9.7		0.60
W228464		15	0.9	12.3	23	14.9		1.28
W228465		18	1.2	13.3	37	16.6		1.94
W228466		32	2.3	24.4	75	29.7		4.50
W228467		29	2.5	19.4	30	27.3		6.36
W228468		15	1.2	17.0	19	14.5		2.13

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17129280

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

CERTIFICATE WH17131108

Project: Nadaleen

P.O. No.: N17- 023

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 28- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode

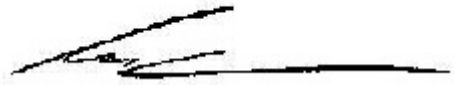
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 4- AUG- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131108

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229325		6.94	0.02	0.80	119.5	140	0.22	0.05	35.0	0.06	13.20	2.9	9	1.89	8.3	0.58
W229326		5.49	0.06	1.94	3810	260	0.31	0.10	27.5	0.89	31.0	6.2	20	3.98	17.9	1.57
W229327		4.14	0.02	1.08	119.0	140	0.30	0.06	32.8	0.19	18.20	3.6	11	2.75	11.7	0.86
W229328		7.58	0.02	0.96	67.9	110	0.30	0.06	33.2	0.14	14.95	3.3	10	2.88	9.7	0.80
W229329		3.42	0.01	0.67	51.3	100	0.21	0.05	33.6	0.09	11.90	2.5	7	1.93	7.0	0.65
W229330		7.17	0.05	3.89	65.8	220	1.00	0.18	19.60	0.24	48.8	13.8	41	18.60	42.1	2.63
W229331		7.36	0.04	3.21	45.1	290	0.90	0.17	22.6	0.22	41.8	10.8	32	15.15	30.2	2.19
W229332		7.52	0.03	2.04	50.4	200	0.61	0.11	29.0	0.19	29.9	6.3	20	9.99	19.0	1.39
W229333		7.95	0.02	1.30	36.9	160	0.43	0.07	32.1	0.15	22.3	4.3	13	4.61	13.2	0.93
W229334		7.85	0.04	3.09	72.8	340	0.69	0.14	23.5	0.19	39.4	9.6	31	12.25	28.1	1.96
W229335		9.43	0.02	1.74	36.2	180	0.40	0.09	30.1	0.13	23.1	5.7	18	5.13	17.0	1.19
W229336		0.28	0.62	1.91	>10000	140	0.48	2.57	26.3	0.14	26.6	4.7	27	5.10	15.0	1.40
W229337		7.48	0.03	2.33	51.9	200	0.62	0.12	28.8	0.17	30.1	7.5	25	8.57	22.2	1.65
W229338		8.30	0.04	3.81	95.1	220	0.84	0.16	21.4	0.20	42.9	13.7	41	11.80	37.4	2.66
W229339		8.06	0.03	2.54	84.8	200	0.59	0.12	29.5	0.19	33.9	8.7	29	5.83	25.6	1.93
W229340		<0.02	0.03	2.33	77.7	190	0.55	0.11	28.3	0.17	31.5	8.0	27	5.42	23.3	1.79
W229341		7.88	0.02	1.82	89.1	220	0.39	0.10	30.9	0.15	26.7	6.1	19	3.96	18.0	1.28
W229342		7.61	0.03	2.12	79.7	190	0.48	0.10	28.8	0.17	29.7	6.7	21	4.28	19.7	1.47
W229343		7.66	0.04	2.25	64.5	200	0.56	0.11	27.8	0.19	31.6	8.1	27	6.03	24.3	1.70
W229344		7.87	0.02	1.26	43.6	200	0.39	0.07	33.3	0.14	20.9	4.3	13	3.95	12.8	0.94
W229345		7.38	0.02	1.24	77.5	160	0.33	0.07	31.7	0.13	20.2	4.2	13	4.26	12.7	0.89
W229346		7.21	0.02	0.89	113.5	110	0.27	0.06	34.7	0.11	16.05	3.2	9	2.32	9.1	0.65
W229347		7.13	0.03	0.79	1330	120	0.23	0.05	35.8	0.12	14.65	2.9	8	1.79	8.3	0.54
W229348		4.97	<0.01	0.05	2.6	60	0.05	0.04	21.1	0.05	1.02	0.7	<1	0.12	1.5	0.47
W229349		7.84	0.02	0.99	88.9	180	0.27	0.06	32.5	0.13	17.05	3.3	11	2.63	9.9	0.67
W229350		7.41	0.02	0.84	62.0	130	0.25	0.05	34.0	0.13	14.90	3.0	9	2.39	9.3	0.62
W229351		7.71	0.01	0.56	61.2	120	0.18	0.07	34.5	0.08	10.80	2.2	6	1.53	6.2	0.45
W229352		7.32	0.09	0.31	320	90	0.12	0.08	35.5	0.06	5.52	1.3	4	0.49	7.7	0.30
W229353		7.88	0.03	0.66	42.3	150	0.23	0.06	34.8	0.09	12.20	2.3	7	2.11	8.2	0.51
W229354		8.00	0.02	0.45	46.9	130	0.19	0.04	36.5	0.09	9.60	1.7	5	1.56	5.7	0.35
W229355		0.29	0.67	7.14	471	240	2.06	0.25	2.31	0.35	64.4	23.1	105	36.3	72.8	6.53
W229356		7.39	0.01	0.35	53.4	110	0.16	0.04	37.3	0.08	7.48	1.4	4	0.91	4.6	0.30
W229357		7.47	0.02	0.45	195.5	130	0.13	0.04	37.4	0.10	9.63	1.8	5	0.82	5.8	0.34
W229358		7.22	0.02	0.61	78.6	140	0.16	0.04	35.8	0.09	9.59	2.1	7	1.65	6.3	0.45
W229359		5.12	<0.01	0.05	0.2	50	0.05	0.03	21.7	0.05	1.08	0.7	1	0.15	1.6	0.46
W229360		7.32	0.02	0.42	135.5	140	0.17	0.04	36.9	0.08	8.80	1.6	5	0.95	6.1	0.33

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131108

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229325		2.00	<0.05	0.4	2.52	0.010	0.34	6.1	3.2	0.41	208	0.37	0.01	1.1	4.4	250
W229326		4.93	0.05	0.8	5.98	0.030	0.65	16.2	8.2	1.47	1040	1.05	0.01	2.3	10.6	830
W229327		2.64	<0.05	0.5	1.235	0.012	0.46	8.8	4.1	0.93	373	0.61	0.01	1.4	6.3	580
W229328		2.28	<0.05	0.4	0.470	0.012	0.41	7.3	4.0	0.95	410	0.70	0.01	1.3	5.4	660
W229329		1.65	<0.05	0.3	0.371	0.009	0.28	5.3	2.9	0.89	390	0.49	0.01	0.9	3.9	610
W229330		9.65	0.07	1.7	0.269	0.045	1.59	25.1	18.5	1.36	549	1.68	0.03	5.3	22.8	620
W229331		7.82	0.06	1.3	0.339	0.036	1.34	21.8	13.8	1.26	557	1.15	0.02	4.2	17.9	370
W229332		5.05	0.05	0.9	0.436	0.024	0.87	15.7	8.4	0.82	436	0.74	0.02	2.7	11.4	220
W229333		3.17	0.05	0.6	0.585	0.015	0.55	11.3	5.9	0.60	307	0.45	0.01	1.7	7.3	1490
W229334		7.36	0.07	1.3	0.419	0.035	1.32	23.0	12.8	0.93	314	0.94	0.02	4.0	16.8	230
W229335		4.23	0.06	0.7	0.307	0.020	0.75	11.7	6.6	0.64	346	0.46	0.01	2.3	9.7	460
W229336		4.60	0.06	0.8	6.01	0.021	0.91	13.8	9.1	0.93	2260	1.65	0.01	2.4	12.8	350
W229337		5.60	0.05	1.0	0.247	0.025	0.99	15.1	9.1	0.75	365	0.63	0.02	3.1	13.0	710
W229338		9.14	0.06	1.6	0.942	0.042	1.67	21.9	12.4	1.47	585	1.07	0.02	4.9	22.2	270
W229339		6.15	0.06	1.1	1.425	0.028	1.10	17.4	8.1	0.92	435	0.58	0.02	3.2	15.5	770
W229340		5.63	0.06	1.0	1.425	0.025	1.02	16.0	7.6	0.86	417	0.52	0.02	2.9	14.1	700
W229341		4.52	0.06	0.8	1.770	0.022	0.80	13.6	6.2	0.81	364	0.50	0.02	2.5	10.3	360
W229342		5.15	0.05	0.9	1.560	0.024	0.92	14.9	6.6	0.73	363	0.50	0.02	2.9	11.5	630
W229343		5.58	0.06	1.0	1.350	0.027	0.98	16.6	8.3	0.95	345	0.75	0.02	3.0	14.2	290
W229344		3.15	0.05	0.6	1.035	0.015	0.54	11.4	5.5	0.94	388	0.35	0.01	1.7	7.0	270
W229345		3.08	0.06	0.5	1.255	0.013	0.54	10.3	5.6	0.88	325	0.32	0.02	1.6	6.8	360
W229346		2.25	0.05	0.4	1.530	0.011	0.38	8.1	4.0	0.70	406	0.22	0.01	1.2	4.7	510
W229347		1.99	0.05	0.3	1.570	0.010	0.35	7.2	3.3	0.55	493	0.23	0.01	1.0	4.2	510
W229348		0.17	0.09	<0.1	0.020	0.005	0.02	0.5	1.0	13.25	208	0.13	<0.01	0.1	1.4	160
W229349		2.40	0.07	0.4	1.710	0.012	0.43	8.5	4.6	0.60	287	0.23	0.01	1.3	5.4	270
W229350		2.07	<0.05	0.4	1.430	0.011	0.37	7.5	3.8	0.68	229	0.30	0.01	1.1	4.8	330
W229351		1.39	<0.05	0.3	1.680	0.008	0.24	4.8	2.6	0.53	201	0.23	0.01	0.7	3.2	550
W229352		0.79	<0.05	0.2	2.09	0.014	0.12	2.5	1.0	0.38	727	0.13	0.01	0.4	1.7	460
W229353		1.65	0.05	0.3	1.350	0.009	0.28	5.3	3.2	0.56	134	0.33	0.01	0.9	3.8	170
W229354		1.13	<0.05	0.2	1.450	0.006	0.17	4.0	2.2	0.51	142	0.16	0.01	0.6	2.4	620
W229355		19.90	0.08	2.4	3.15	0.070	3.30	31.0	18.3	0.83	662	4.84	0.03	9.6	54.6	230
W229356		0.90	<0.05	0.2	1.785	0.005	0.14	3.1	1.6	0.58	304	0.18	0.01	0.5	1.9	470
W229357		1.14	<0.05	0.2	3.22	0.006	0.17	3.9	1.7	0.36	712	0.20	0.01	0.6	2.5	380
W229358		1.47	<0.05	0.3	2.00	0.007	0.25	3.9	2.5	0.42	284	0.16	0.01	0.8	3.3	280
W229359		0.18	0.10	<0.1	0.063	<0.005	0.02	0.5	1.1	13.75	203	0.10	<0.01	0.2	1.5	190
W229360		1.02	0.06	0.2	7.13	0.007	0.15	3.6	2.0	0.37	321	0.19	0.01	0.6	2.3	490

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131108

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229325		3.0	15.9	<0.002	0.53	0.77	2.1	1	0.2	2220	0.08	<0.05	1.26	0.046	2.33	2.3
W229326		22.6	30.9	0.004	1.33	8.09	4.4	1	0.6	1450	0.17	0.05	2.86	0.097	8.16	3.7
W229327		3.7	21.0	0.003	0.64	0.43	2.8	1	0.3	1900	0.11	<0.05	1.75	0.060	2.15	2.3
W229328		3.2	19.6	0.003	0.54	0.37	2.3	1	0.3	1415	0.10	<0.05	1.52	0.055	0.50	2.3
W229329		2.5	14.0	0.002	0.41	0.29	1.8	1	0.2	1430	0.07	<0.05	1.13	0.038	0.39	2.0
W229330		10.7	80.2	0.008	2.03	0.84	9.7	2	1.2	1495	0.40	0.07	5.75	0.230	1.06	3.1
W229331		9.4	67.3	0.006	1.66	0.46	7.7	2	0.9	1470	0.32	0.07	4.93	0.181	0.49	2.6
W229332		5.9	43.8	0.003	1.10	0.33	4.7	1	0.6	2160	0.20	0.05	3.18	0.115	0.45	2.5
W229333		3.9	26.4	0.002	0.70	0.30	3.3	1	0.4	2150	0.13	0.05	2.11	0.074	0.27	2.6
W229334		8.5	62.7	0.004	1.62	0.53	6.5	2	0.9	1570	0.31	0.06	4.60	0.182	0.58	2.7
W229335		4.7	36.4	0.002	0.93	0.26	4.0	1	0.5	1695	0.18	0.05	2.54	0.106	0.34	2.1
W229336		6.5	39.7	0.002	1.45	45.1	5.1	2	0.6	1040	0.19	0.05	3.17	0.088	22.6	6.0
W229337		6.3	48.4	0.003	1.26	0.38	5.4	1	0.7	2100	0.23	0.06	3.35	0.145	0.77	2.6
W229338		9.4	79.6	0.003	1.95	0.61	9.8	1	1.0	1510	0.37	0.08	5.12	0.257	2.38	2.6
W229339		6.8	52.1	0.002	1.48	0.48	6.1	2	0.7	1990	0.25	0.06	3.69	0.163	2.53	2.8
W229340		6.1	48.3	0.003	1.37	0.44	5.7	1	0.6	1865	0.23	0.05	3.33	0.151	2.25	2.5
W229341		5.1	38.6	0.002	1.01	0.66	4.4	1	0.5	2030	0.18	0.05	2.85	0.112	2.95	2.5
W229342		5.7	42.8	0.002	1.18	0.58	4.8	1	0.6	2030	0.21	0.07	3.18	0.130	3.19	2.4
W229343		6.2	45.2	0.003	1.36	0.57	5.7	1	0.7	1915	0.22	<0.05	3.28	0.157	3.48	2.5
W229344		3.7	26.2	<0.002	0.72	0.27	3.0	1	0.4	2130	0.12	0.05	2.03	0.074	2.33	2.2
W229345		3.6	26.6	<0.002	0.73	0.48	3.0	1	0.4	1945	0.13	<0.05	2.00	0.073	3.22	2.0
W229346		2.7	19.5	<0.002	0.58	0.96	2.2	1	0.3	1725	0.09	<0.05	1.45	0.050	3.29	1.9
W229347		2.5	17.3	<0.002	0.56	2.65	2.0	1	0.2	1890	0.08	0.05	1.26	0.044	2.94	2.1
W229348		1.0	0.8	<0.002	<0.01	0.06	0.1	<1	<0.2	52.8	<0.05	<0.05	0.08	<0.005	<0.02	0.7
W229349		2.8	21.4	<0.002	0.63	0.87	2.4	1	0.3	1820	0.10	<0.05	1.58	0.062	3.38	2.2
W229350		2.7	18.1	<0.002	0.58	0.63	2.1	1	0.3	1915	0.08	0.05	1.36	0.052	3.17	2.0
W229351		1.8	11.5	<0.002	0.41	0.63	1.5	1	0.2	2010	0.05	<0.05	0.91	0.035	2.08	1.7
W229352		2.1	5.3	<0.002	0.24	1.48	1.0	1	<0.2	1600	<0.05	<0.05	0.52	0.018	2.20	1.1
W229353		2.5	13.5	0.002	0.45	0.39	1.8	1	0.2	2320	0.06	<0.05	1.07	0.037	2.04	1.7
W229354		1.7	7.8	<0.002	0.32	0.72	1.2	1	0.2	2120	<0.05	<0.05	0.78	0.026	1.68	1.7
W229355		52.3	174.5	0.002	4.70	5.42	19.9	1	2.7	94.5	0.62	<0.05	10.00	0.412	12.60	1.7
W229356		1.5	6.1	<0.002	0.26	0.84	1.0	1	<0.2	1695	<0.05	<0.05	0.63	0.020	1.49	1.6
W229357		1.9	7.8	<0.002	0.35	1.21	1.2	1	0.2	1920	<0.05	<0.05	0.78	0.026	1.87	1.9
W229358		2.0	12.2	<0.002	0.45	0.89	1.5	1	0.2	2070	0.06	<0.05	0.94	0.039	1.85	1.6
W229359		1.2	1.0	<0.002	<0.01	0.05	0.1	<1	<0.2	54.2	<0.05	<0.05	0.11	<0.005	<0.02	0.4
W229360		1.9	6.6	<0.002	0.31	1.09	1.3	1	0.2	2100	<0.05	<0.05	0.73	0.024	1.86	1.8

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Finalized Date: 4- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131108

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W229325		14	0.5	11.1	11	14.3		<0.01
W229326		35	1.4	15.0	171	32.0		0.05
W229327		21	0.6	13.2	20	20.1		<0.01
W229328		20	0.3	10.8	18	18.7		<0.01
W229329		14	0.2	9.4	11	14.4		<0.01
W229330		72	0.7	23.7	59	66.3		<0.01
W229331		54	0.6	22.2	52	54.5		0.01
W229332		34	0.4	16.4	38	35.5		<0.01
W229333		22	0.4	17.1	19	27.2		0.01
W229334		53	0.9	18.3	48	50.0		<0.01
W229335		31	0.5	15.3	27	30.7		<0.01
W229336		33	16.5	14.7	25	31.7	1.335	2.68
W229337		41	0.4	18.0	36	41.0		<0.01
W229338		72	0.6	21.2	58	60.9		<0.01
W229339		48	0.6	21.6	40	45.0		<0.01
W229340		44	0.5	19.6	37	40.9		<0.01
W229341		32	0.7	17.7	28	32.4		0.01
W229342		37	0.6	18.9	31	38.5		<0.01
W229343		44	0.6	20.7	41	40.1		<0.01
W229344		22	0.3	15.9	20	23.1		<0.01
W229345		22	0.5	14.5	19	22.7		0.02
W229346		16	0.7	13.0	16	16.0		0.07
W229347		14	0.5	12.9	13	14.3		0.15
W229348		2	0.1	0.7	17	<0.5		<0.01
W229349		18	0.8	13.8	16	17.8		0.05
W229350		15	0.6	11.9	14	15.9		0.03
W229351		11	0.5	9.7	9	11.5		0.05
W229352		7	0.4	7.3	6	6.5		0.22
W229353		13	0.5	10.6	11	10.5		0.01
W229354		9	0.4	9.0	7	9.2		0.04
W229355		145	11.3	19.5	111	92.7		0.56
W229356		8	0.3	8.0	7	6.4		0.06
W229357		9	0.4	9.4	10	7.6		0.08
W229358		12	0.5	8.0	11	11.2		0.05
W229359		2	0.1	0.7	18	<0.5		<0.01
W229360		10	0.4	8.9	8	7.5		0.03

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 4- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17131108

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

Applies to Method:				
	BAG- 06	CRU- 31	CRU- QC	LOG- 21
	LOG- 23	PUL- 31	PUL- QC	SPL- 21
	WEI- 21	WSH- 21	WSH- 22	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:				
	As- OG62	Au- AA25	Hg- MS42	ME- MS61
	ME- OG62			

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1016- 510 W HASTINGS ST
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Finalized Date: 14- AUG- 2017
Account: RCM

CERTIFICATE WH17138043

Project: Nadaleen

P.O. No.: N17- 024

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 3- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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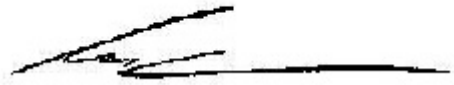
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138043

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229361		7.96	0.03	0.65	273	180	0.17	0.05	35.8	0.14	12.95	2.6	9	1.51	10.2	0.48
W229362		7.68	0.30	0.92	>10000	140	0.22	0.05	29.9	0.14	13.10	4.0	13	2.41	11.6	0.65
W229363		5.04	0.01	0.05	129.0	50	0.06	0.03	22.4	0.06	1.21	0.9	2	0.17	1.9	0.49
W229364		7.68	0.02	0.44	89.0	100	0.14	0.03	36.7	0.05	8.87	1.8	6	0.92	5.3	0.35
W229365		7.36	0.02	0.32	95.7	60	0.08	0.03	35.3	0.04	8.05	1.4	5	0.48	3.9	0.39
W229366		0.32	0.18	3.83	6410	200	0.93	0.14	12.20	0.14	42.4	12.2	47	11.00	37.2	2.94
W229367		7.58	0.02	0.25	58.3	90	0.12	0.02	36.0	0.03	5.57	1.2	4	0.53	3.4	0.29
W229368		7.22	0.03	0.58	75.7	140	0.17	0.04	36.3	0.05	10.25	2.3	7	1.61	6.7	0.42
W229369		7.76	0.03	0.64	99.5	130	0.17	0.04	35.8	0.03	9.78	2.9	9	1.79	8.8	0.45
W229370		8.06	1.50	7.63	70.6	660	2.27	0.36	4.76	0.02	83.4	16.8	60	45.6	26.2	3.85
W229371		9.30	0.07	7.47	56.7	400	2.70	0.33	4.96	0.02	68.7	12.6	60	38.9	34.1	4.36
W229372		12.44	0.05	5.40	48.2	290	1.86	0.23	13.85	0.04	53.5	11.5	39	23.3	21.9	3.15
W229373		10.30	0.08	5.82	465	270	1.98	0.24	13.70	0.04	54.9	10.4	42	22.9	24.3	2.74
W229374		13.52	0.07	4.37	152.5	230	1.50	0.18	16.95	0.04	43.4	10.1	35	17.90	24.0	2.36
W229375		11.94	0.06	3.83	172.5	200	1.23	0.16	19.35	0.04	38.2	8.3	31	13.80	15.9	2.26
W229376		9.02	0.09	4.20	1780	250	1.35	0.16	17.40	0.06	41.5	10.2	33	15.35	21.2	2.30
W229377		11.24	0.05	3.09	103.5	280	1.02	0.11	18.00	0.05	32.6	7.2	26	13.65	13.6	2.28
W229378		9.98	0.05	7.67	93.6	380	2.79	0.32	8.26	0.06	78.8	13.6	59	39.3	28.1	2.07
W229379		10.42	0.05	5.62	141.0	370	2.05	0.21	12.00	0.06	54.7	9.1	43	25.0	22.4	1.84
W229380		3.12	0.01	0.31	68.4	80	0.11	0.03	39.2	<0.02	6.11	2.4	4	0.75	5.5	0.28
W229381		6.50	0.05	2.38	84.7	1270	0.86	0.09	18.40	0.05	26.5	5.8	20	7.71	21.4	1.41
W229382		6.88	0.05	3.57	133.5	340	1.32	0.15	14.70	0.26	37.7	8.6	27	14.20	20.8	2.37
W229383		8.06	0.02	1.65	206	180	0.80	0.08	18.35	0.46	25.7	4.7	15	6.87	14.3	1.96
W229384		8.60	0.01	1.87	558	90	0.94	0.07	20.1	0.15	24.6	3.6	14	7.30	10.9	1.38
W229385		10.56	0.02	0.64	834	70	0.39	0.04	21.6	0.02	13.45	2.3	8	1.88	6.7	0.77
W229386		4.96	0.03	0.68	736	60	0.32	0.05	21.5	0.05	12.85	2.5	6	1.91	6.9	0.80
W229387		6.88	0.01	0.05	4.5	20	0.07	0.03	22.8	0.07	1.17	1.6	1	0.12	3.5	0.50
W229388		7.96	0.03	0.71	791	60	0.31	0.03	21.3	0.07	11.00	2.3	6	1.66	7.3	0.86
W229389		10.26	0.04	0.78	1880	60	0.40	0.04	20.5	0.10	14.30	2.1	7	2.22	7.2	0.91
W229390		10.80	0.03	0.74	773	90	0.27	0.04	21.1	0.03	13.70	2.0	6	1.72	6.4	0.68
W229391		<0.02	0.02	0.62	660	70	0.32	0.03	18.35	0.03	11.65	1.7	5	1.45	5.7	0.59
W229392		9.02	0.02	0.99	493	80	0.57	0.05	17.35	0.06	17.65	2.0	8	2.87	5.5	0.53
W229393		10.66	0.01	0.85	400	80	0.43	0.04	18.90	0.12	16.55	2.1	7	2.50	6.9	0.46
W229394		0.36	0.13	3.68	2500	200	1.02	0.14	19.05	0.10	39.6	12.3	44	10.15	45.0	3.06
W229395		10.98	0.01	0.54	607	60	0.28	0.03	19.50	0.04	10.70	1.7	5	1.32	5.1	0.35
W229396		10.44	0.02	1.14	530	70	0.49	0.05	17.00	0.08	17.40	2.5	10	3.09	7.0	0.72

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138043

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229361		1.89	<0.05	0.4	3.73	0.008	0.25	6.0	2.1	0.50	376	0.31	0.01	1.0	3.2	530
W229362		2.63	0.08	0.6	4.93	0.048	0.39	6.2	3.1	0.36	200	0.33	0.01	1.6	5.1	310
W229363		0.21	0.09	<0.1	0.035	<0.005	0.02	0.6	0.7	13.95	214	0.05	0.01	0.2	1.3	190
W229364		1.36	0.05	0.2	2.79	0.007	0.20	4.0	1.2	0.43	220	0.15	0.01	0.6	1.5	280
W229365		1.05	0.05	0.2	3.34	0.006	0.14	3.6	0.8	0.99	335	0.15	<0.01	0.4	1.0	260
W229366		11.15	0.08	2.1	14.40	0.038	1.86	22.4	10.7	2.61	1200	1.93	0.02	6.2	26.0	460
W229367		0.78	<0.05	0.1	4.70	<0.005	0.10	2.5	0.9	0.87	241	0.10	0.01	0.3	0.6	170
W229368		1.64	0.05	0.3	2.92	0.006	0.24	4.7	2.3	0.45	160	0.16	0.01	0.9	2.4	370
W229369		1.98	0.05	0.4	3.83	0.010	0.27	4.6	2.7	0.56	232	0.24	0.01	1.0	3.7	380
W229370		22.6	0.14	2.9	0.101	0.070	4.36	43.3	18.3	2.02	680	0.74	0.04	11.6	37.6	890
W229371		22.1	0.13	3.2	0.080	0.062	4.13	35.1	20.9	1.93	969	0.25	0.05	11.7	31.4	750
W229372		14.85	0.07	2.3	0.214	0.049	2.86	27.1	15.0	3.19	789	0.35	0.04	8.2	21.7	730
W229373		15.85	<0.05	2.4	1.085	0.050	3.08	28.4	15.1	2.73	521	0.34	0.04	8.5	21.5	600
W229374		12.10	<0.05	2.0	0.568	0.039	2.33	22.2	12.2	3.48	481	0.53	0.03	6.7	18.2	620
W229375		10.20	<0.05	1.8	0.434	0.032	2.03	20.0	11.1	3.77	504	0.61	0.03	6.1	16.1	570
W229376		11.70	<0.05	2.0	3.73	0.036	2.22	22.0	12.3	3.21	597	0.59	0.03	6.4	22.6	600
W229377		8.42	<0.05	1.7	0.260	0.025	1.64	16.9	11.7	5.49	525	0.42	0.03	5.1	14.9	540
W229378		21.9	0.11	3.6	0.602	0.072	4.19	40.5	28.5	2.23	252	0.41	0.05	12.6	29.4	980
W229379		15.40	0.06	2.5	0.307	0.050	2.95	28.2	20.1	4.65	324	0.48	0.04	8.6	19.0	670
W229380		0.94	<0.05	0.2	1.300	<0.005	0.13	2.5	1.2	1.27	209	0.12	0.01	0.5	2.3	1690
W229381		6.47	0.13	1.1	0.421	0.019	1.24	13.7	9.2	10.00	477	0.55	0.02	3.7	9.2	470
W229382		9.60	<0.05	1.8	0.707	0.029	1.88	20.0	14.0	8.98	443	0.53	0.03	5.6	15.5	630
W229383		4.71	<0.05	0.8	0.590	0.017	0.85	12.5	10.4	11.00	416	0.51	0.02	2.5	9.8	1820
W229384		5.39	<0.05	1.1	0.803	0.019	0.97	12.8	11.7	12.00	547	0.25	0.02	3.2	9.6	1520
W229385		2.14	0.13	0.5	0.746	0.006	0.33	6.5	5.0	12.95	610	0.11	0.02	1.3	3.9	3780
W229386		2.29	0.16	0.5	0.566	0.007	0.34	6.4	5.6	13.10	617	0.12	0.02	1.4	4.7	1810
W229387		0.68	0.39	<0.1	0.005	<0.005	0.02	0.5	1.2	14.10	225	0.07	<0.01	0.1	2.7	200
W229388		2.32	0.17	0.6	0.980	0.006	0.36	5.6	5.1	12.95	668	0.15	0.02	1.3	4.1	500
W229389		2.44	0.13	0.6	0.978	0.006	0.39	7.5	4.9	12.50	588	0.12	0.01	1.4	3.0	420
W229390		2.21	0.14	0.6	1.070	0.008	0.37	7.3	4.5	12.80	603	0.14	0.02	1.4	2.6	430
W229391		2.01	0.16	0.5	0.949	0.005	0.31	6.1	4.1	11.10	517	0.11	0.01	1.1	2.3	390
W229392		2.87	0.11	0.9	0.387	0.007	0.51	8.9	7.0	10.60	349	0.16	0.01	1.9	3.0	430
W229393		2.62	0.21	0.9	0.350	0.005	0.44	8.4	5.7	11.65	310	0.16	0.01	1.6	3.0	510
W229394		10.10	<0.05	1.8	3.35	0.038	1.79	18.9	10.3	1.44	1210	1.62	0.02	6.4	25.4	380
W229395		1.70	0.15	0.5	0.470	<0.005	0.27	5.7	3.5	12.10	310	0.14	0.01	1.0	2.4	490
W229396		3.24	0.17	1.1	0.656	0.010	0.58	9.4	7.0	10.45	357	0.21	0.01	2.1	4.2	570

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138043

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229361		2.9	11.1	<0.002	0.48	2.27	1.8	2	0.2	2250	0.07	0.05	1.12	0.038	2.76	2.2
W229362		4.3	18.5	<0.002	4.73	224	2.2	9	0.3	1570	0.11	0.23	1.43	0.068	7.71	2.0
W229363		1.3	1.0	<0.002	0.01	0.31	0.2	1	<0.2	55.6	<0.05	<0.05	0.07	<0.005	<0.02	0.7
W229364		3.3	8.6	<0.002	0.29	1.87	1.3	2	0.2	2040	<0.05	<0.05	0.68	0.023	1.42	1.4
W229365		3.3	6.1	<0.002	0.19	2.76	1.1	1	0.2	1565	<0.05	<0.05	0.54	0.014	2.03	1.2
W229366		10.7	83.4	0.002	2.65	25.3	10.6	2	1.7	322	0.46	0.05	5.88	0.268	45.2	6.5
W229367		1.9	4.5	<0.002	0.17	1.20	0.8	1	<0.2	1555	<0.05	<0.05	0.41	0.013	0.99	1.1
W229368		2.4	10.8	<0.002	0.39	1.17	1.7	2	0.2	1935	0.07	<0.05	0.91	0.035	1.78	1.7
W229369		2.4	12.8	<0.002	0.45	1.49	1.9	1	0.2	1715	0.07	0.05	1.01	0.039	2.37	1.7
W229370		15.1	124.0	<0.002	0.33	0.46	13.0	1	2.5	167.0	0.86	0.09	11.85	0.346	0.90	3.6
W229371		10.2	154.0	<0.002	0.34	0.46	16.4	1	2.5	173.5	0.80	0.08	12.15	0.362	1.18	4.1
W229372		9.4	120.0	<0.002	0.50	0.49	11.2	1	1.8	427	0.57	0.06	9.10	0.255	0.94	6.0
W229373		8.5	127.0	<0.002	0.18	1.69	11.8	1	1.7	429	0.61	0.06	9.74	0.268	2.70	6.6
W229374		9.1	94.1	0.003	0.14	0.48	9.0	2	1.4	463	0.48	0.06	7.56	0.207	1.35	9.8
W229375		7.7	80.8	<0.002	0.14	0.48	7.6	1	1.2	541	0.42	<0.05	6.91	0.185	1.46	8.4
W229376		9.0	88.0	<0.002	0.26	3.00	8.5	2	1.5	434	0.45	<0.05	7.23	0.199	4.77	8.3
W229377		10.2	63.0	<0.002	0.19	0.30	6.0	1	1.0	388	0.36	<0.05	5.91	0.153	0.69	6.7
W229378		16.7	174.5	<0.002	0.49	0.48	16.6	2	2.5	263	0.90	0.07	13.90	0.389	1.48	6.1
W229379		13.7	120.5	<0.002	0.47	0.44	11.1	1	1.8	248	0.59	<0.05	9.46	0.263	1.22	6.9
W229380		2.0	5.6	<0.002	0.20	1.00	0.9	1	<0.2	1465	<0.05	<0.05	0.55	0.017	1.54	1.8
W229381		7.1	44.8	<0.002	0.36	0.33	4.7	2	0.8	173.0	0.26	<0.05	4.30	0.111	0.64	6.5
W229382		19.5	68.5	<0.002	1.73	0.46	7.0	2	1.2	108.0	0.39	<0.05	6.47	0.172	2.27	12.4
W229383		13.7	31.2	<0.002	1.31	0.53	3.8	1	0.8	110.0	0.17	<0.05	3.16	0.075	1.00	3.5
W229384		6.5	34.2	<0.002	0.30	1.47	3.9	1	0.6	110.5	0.19	0.07	3.53	0.092	1.53	4.2
W229385		4.1	11.6	<0.002	0.07	1.86	1.4	1	0.3	101.5	0.08	<0.05	1.52	0.035	1.42	5.1
W229386		4.5	12.0	<0.002	0.05	1.89	1.5	2	0.3	95.1	0.09	0.06	1.62	0.038	1.33	4.4
W229387		1.3	0.8	<0.002	<0.01	<0.05	0.3	1	<0.2	51.3	<0.05	<0.05	0.08	<0.005	<0.02	0.8
W229388		4.4	12.3	<0.002	0.04	3.22	1.4	1	0.3	95.6	0.09	<0.05	1.67	0.036	1.80	5.7
W229389		5.5	12.7	<0.002	0.20	4.15	1.6	1	0.3	109.5	0.10	<0.05	1.85	0.040	2.43	6.5
W229390		3.6	11.9	<0.002	0.13	2.64	1.4	1	0.4	136.5	0.10	<0.05	1.82	0.039	1.89	6.2
W229391		3.1	10.2	<0.002	0.11	2.30	1.3	1	0.3	115.5	0.08	<0.05	1.55	0.032	1.64	5.4
W229392		4.9	17.3	<0.002	0.22	1.53	1.9	1	0.4	104.5	0.13	<0.05	2.51	0.052	1.12	7.0
W229393		5.4	14.6	<0.002	0.28	1.33	1.7	1	0.4	97.8	0.12	<0.05	2.36	0.046	0.71	6.6
W229394		9.1	77.0	<0.002	2.63	9.74	9.7	1	1.5	743	0.45	0.06	6.04	0.270	11.00	2.6
W229395		3.6	8.5	<0.002	0.20	1.40	1.1	1	0.3	96.3	0.07	<0.05	1.38	0.027	0.55	6.9
W229396		8.4	18.4	<0.002	0.41	1.29	2.0	1	0.5	98.5	0.15	<0.05	2.84	0.058	1.14	6.7

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138043

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229361		12	0.8	10.1	18	13.2		0.03
W229362		16	1.4	8.1	15	20.2	8.11	0.39
W229363		2	0.1	0.9	18	<0.5		<0.01
W229364		8	0.4	8.2	7	8.5		<0.01
W229365		6	0.4	8.1	6	6.3		0.01
W229366		85	8.3	19.6	50	76.9		2.52
W229367		6	0.3	6.6	3	5.4		0.01
W229368		11	0.5	8.1	7	11.1		<0.01
W229369		12	0.5	7.9	5	13.7		<0.01
W229370		95	2.8	26.1	61	104.5		<0.01
W229371		111	1.7	22.9	48	114.5		<0.01
W229372		77	1.2	18.7	33	86.0		<0.01
W229373		81	3.7	17.8	28	89.7		0.21
W229374		65	1.3	14.8	24	75.9		0.01
W229375		55	1.1	12.9	22	69.1		<0.01
W229376		62	1.8	13.2	46	73.4		0.19
W229377		47	0.7	11.3	43	63.8		<0.01
W229378		112	1.7	24.5	68	130.0		<0.01
W229379		79	1.2	17.0	47	91.9		<0.01
W229380		6	0.3	6.4	2	6.7		<0.01
W229381		35	1.3	9.3	23	42.9		<0.01
W229382		53	1.5	11.7	143	65.1		<0.01
W229383		24	0.9	12.2	170	32.2		<0.01
W229384		26	1.2	11.7	45	41.3		<0.01
W229385		11	0.7	9.3	12	18.5		0.02
W229386		12	0.8	7.6	12	19.2		0.01
W229387		2	0.1	0.8	17	<0.5		<0.01
W229388		12	0.8	4.6	9	20.2		0.02
W229389		16	1.0	5.1	22	22.3		0.03
W229390		15	0.8	5.3	10	21.3		0.02
W229391		13	0.7	4.6	8	18.0		0.02
W229392		26	0.8	6.4	11	31.1		0.01
W229393		17	0.8	6.8	26	32.0		<0.01
W229394		75	5.5	15.9	51	67.3		0.50
W229395		12	0.5	5.1	9	18.4		<0.01
W229396		16	1.0	7.1	13	40.0		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 14- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17138043

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

CERTIFICATE WH17131112

Project: Nadaleen

P.O. No.: N17- 025

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 28- JUN- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

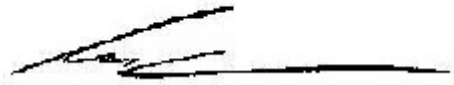
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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VANCOUVER BC V6B 1L8

Finalized Date: 4-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131112

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228469		11.46	0.03	1.39	200	130	0.32	0.08	33.8	0.23	19.85	4.4	14	2.95	13.6	1.09
W228470		11.55	0.02	1.11	111.5	100	0.30	0.07	34.1	0.17	16.60	3.7	11	2.56	10.8	0.79
W228471		11.56	0.02	1.22	242	120	0.33	0.08	33.0	0.14	19.05	3.9	12	3.01	11.5	0.86
W228472		10.85	0.03	2.22	264	170	0.49	0.12	29.5	0.22	33.1	6.4	22	6.67	20.7	1.38
W228473		6.10	0.01	0.57	63.3	100	0.26	0.04	36.1	0.05	10.40	2.0	7	1.38	6.1	0.50
W228474		2.86	0.01	0.57	59.1	100	0.29	0.05	36.3	0.05	10.30	2.0	7	1.38	6.2	0.51
W228475		12.28	0.03	1.27	94.6	190	0.39	0.07	32.9	0.12	21.3	3.9	13	3.83	12.8	0.86
W228476		11.14	0.01	0.45	45.8	90	0.22	0.04	36.5	0.04	9.36	1.7	5	1.11	5.0	0.59
W228477		10.65	0.08	4.48	245	240	1.04	0.23	19.60	0.34	57.0	15.0	46	17.75	47.4	2.61
W228478		0.29	0.19	3.98	6330	210	0.87	0.15	12.45	0.14	41.9	12.3	45	10.60	35.3	2.99
W228479		11.36	0.01	0.65	26.5	120	0.27	0.04	33.6	0.08	12.40	2.2	7	1.56	6.8	0.67
W228480		11.57	0.03	1.42	71.7	200	0.52	0.08	32.8	0.19	23.7	4.6	15	4.27	14.5	1.09
W228481		10.05	0.03	2.47	120.0	250	0.65	0.12	27.0	0.11	31.4	7.6	25	7.90	22.9	1.95
W228482		11.31	0.05	3.38	90.8	210	0.89	0.17	22.5	0.17	41.0	10.8	35	11.60	29.9	2.14
W228483		11.14	0.03	2.28	80.5	220	0.76	0.12	28.3	0.17	30.9	6.6	22	7.27	21.2	1.64
W228484		<0.02	0.03	2.31	80.2	220	0.74	0.13	28.8	0.16	31.0	6.8	23	7.36	21.3	1.67
W228485		12.89	0.05	3.14	334	220	0.72	0.16	24.7	0.23	41.4	8.8	30	10.55	27.9	2.09
W228486		11.67	0.03	1.86	387	160	0.43	0.10	30.0	0.17	26.9	5.4	18	4.46	17.5	1.21
W228487		11.37	0.03	2.02	153.5	180	0.49	0.11	29.8	0.16	28.1	6.0	20	4.30	18.9	1.41
W228488		10.87	0.01	0.91	66.9	230	0.34	0.05	33.1	0.08	14.60	3.0	10	2.09	9.1	0.75
W228489		4.09	0.23	1.32	4320	120	0.35	0.08	31.0	0.14	22.1	4.3	14	2.94	13.3	0.96
W228490		8.29	2.19	1.73	>10000	110	0.32	0.10	14.60	0.30	20.8	5.1	19	3.77	17.0	1.25
W228491		7.01	0.01	0.07	35.7	20	0.07	0.03	20.9	0.06	1.04	0.8	1	0.49	2.7	0.48
W228492		5.21	0.04	1.83	122.5	190	0.56	0.10	29.4	0.20	29.9	6.2	19	7.55	18.7	1.18
W228493		9.10	0.13	1.51	>10000	170	0.38	0.09	31.8	0.15	25.2	4.9	16	4.96	15.0	1.20
W228494		7.88	0.09	3.22	2550	180	0.70	0.15	20.9	0.26	45.1	10.6	33	10.00	32.4	2.09
W228495		5.74	0.08	3.16	4070	260	0.72	0.14	22.3	0.23	41.6	10.3	34	9.34	31.6	2.19
W228496		4.37	0.40	2.65	2990	190	0.65	0.11	23.7	0.19	30.4	10.0	36	8.23	29.1	2.05
W228497		11.63	7.46	4.58	>10000	250	0.88	0.23	0.47	1.10	55.1	17.4	65	14.65	54.6	3.33
W228498		7.07	10.30	2.95	>10000	160	0.55	0.19	0.33	1.21	42.0	9.5	39	8.19	33.0	2.74
W228499		7.18	0.01	0.05	330	50	0.06	0.04	20.4	0.06	1.08	0.6	1	0.13	1.8	0.45
W228500		10.77	12.85	5.17	>10000	250	0.87	0.26	2.92	1.40	65.1	16.0	61	14.75	51.7	3.65
W228501		0.29	1.76	1.85	>10000	100	0.23	0.48	6.86	0.78	28.7	6.1	46	3.12	26.2	2.47
W228502		6.52	0.16	0.98	354	110	0.39	0.07	32.1	0.10	16.95	3.2	10	2.83	10.0	0.92
W228503		10.60	0.04	1.75	237	150	0.56	0.10	27.7	0.14	27.8	5.8	20	4.75	17.7	1.50
W228504		10.85	0.68	2.95	443	190	0.52	0.12	22.5	0.26	36.6	10.8	38	8.04	33.0	2.36

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VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131112

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228469		3.43	<0.05	0.6	5.04	0.012	0.62	9.9	4.7	0.32	600	0.70	0.02	1.8	7.8	460
W228470		2.79	0.05	0.5	3.03	0.012	0.49	8.3	4.1	0.28	698	0.71	0.02	1.5	6.3	530
W228471		3.21	0.05	0.6	5.88	0.012	0.54	9.8	5.1	0.27	1500	0.64	0.01	1.6	6.7	520
W228472		5.39	0.05	1.0	6.57	0.021	0.99	17.2	8.1	0.40	518	1.21	0.02	2.9	12.2	180
W228473		1.46	<0.05	0.3	1.205	0.007	0.25	4.3	2.4	0.59	556	0.25	0.01	0.7	3.1	1350
W228474		1.43	<0.05	0.3	1.190	0.006	0.25	4.3	2.5	0.60	562	0.25	0.01	0.7	3.1	1340
W228475		3.11	0.05	0.6	2.24	0.013	0.56	10.7	5.5	0.65	740	0.92	0.01	1.7	7.2	840
W228476		1.17	<0.05	0.2	0.513	0.006	0.20	3.9	2.0	0.84	504	0.34	0.01	0.6	2.4	530
W228477		10.50	0.07	2.0	4.38	0.047	1.98	29.1	14.6	1.17	400	3.06	0.02	5.8	25.6	340
W228478		9.40	0.06	1.9	15.20	0.035	1.80	21.1	12.4	2.67	1180	1.80	0.02	6.2	25.7	460
W228479		1.54	<0.05	0.3	0.326	0.009	0.29	5.3	2.1	0.62	211	0.44	0.01	0.9	3.6	440
W228480		3.45	0.05	0.6	1.010	0.016	0.63	11.5	5.1	0.73	361	1.12	0.01	1.9	8.1	810
W228481		5.95	0.06	1.1	2.26	0.031	1.09	15.9	5.9	0.91	963	1.04	0.02	3.4	13.9	220
W228482		8.09	0.06	1.5	1.275	0.035	1.50	21.3	9.4	1.17	543	1.39	0.02	4.6	18.5	270
W228483		5.50	0.05	1.1	1.300	0.023	1.02	16.4	7.0	0.93	516	1.04	0.02	3.1	12.5	240
W228484		5.51	0.05	1.0	1.285	0.024	1.02	16.3	7.1	0.94	534	1.05	0.02	3.1	12.6	250
W228485		7.46	0.07	1.4	5.88	0.034	1.38	21.5	9.2	0.84	689	1.28	0.03	4.2	17.2	300
W228486		4.37	<0.05	0.8	4.46	0.017	0.81	13.9	5.3	0.45	382	0.82	0.01	2.4	10.2	250
W228487		4.76	0.05	0.9	2.69	0.023	0.89	14.4	5.2	0.78	402	1.01	0.02	2.7	11.0	560
W228488		2.22	<0.05	0.4	1.085	0.010	0.41	7.1	2.9	0.48	487	0.30	0.01	1.2	5.0	170
W228489		3.15	0.05	0.6	3.75	0.014	0.59	10.5	4.2	0.67	484	0.54	0.01	1.7	7.0	160
W228490		4.14	0.06	0.8	6.76	0.049	0.75	10.6	5.4	0.25	315	0.43	0.01	2.3	9.7	1080
W228491		0.24	0.17	<0.1	0.026	0.006	0.03	0.5	1.4	13.20	208	0.05	0.01	0.2	1.5	180
W228492		4.41	0.17	0.9	2.78	0.020	0.85	13.1	5.8	0.60	197	0.64	0.02	2.5	10.6	320
W228493		3.67	0.05	0.7	3.99	0.019	0.67	12.3	4.7	0.51	701	0.53	0.01	2.0	8.6	240
W228494		7.69	0.16	1.5	6.47	0.035	1.47	22.9	9.0	0.86	544	1.04	0.02	4.4	19.9	220
W228495		7.50	0.15	1.5	4.99	0.031	1.47	21.4	8.6	1.03	731	1.02	0.02	4.3	24.8	250
W228496		6.90	0.10	1.2	6.51	0.022	1.24	15.5	6.9	0.81	895	0.86	0.02	3.6	18.5	250
W228497		12.80	0.16	2.1	16.45	0.055	2.12	26.8	23.6	0.31	215	1.23	0.02	6.4	33.3	450
W228498		8.47	0.14	1.3	12.55	0.052	1.35	21.2	24.9	0.19	125	0.90	0.01	4.0	21.3	610
W228499		0.17	0.05	<0.1	0.016	0.005	0.02	0.5	0.9	12.60	191	0.11	0.01	0.2	1.2	190
W228500		14.20	0.15	2.5	14.70	0.046	2.42	31.8	25.7	0.38	395	1.49	0.02	7.3	31.6	420
W228501		5.17	0.09	0.8	15.45	0.027	0.82	14.6	23.9	0.16	329	5.80	0.01	2.5	18.6	500
W228502		2.57	0.07	0.5	1.695	0.014	0.46	7.7	2.8	0.47	586	0.38	0.01	1.4	5.3	210
W228503		4.51	0.08	0.9	1.710	0.024	0.83	13.9	4.9	0.99	501	0.61	0.01	2.5	10.6	220
W228504		7.73	0.11	1.4	4.23	0.029	1.37	18.1	7.9	0.73	680	0.58	0.02	4.1	20.4	420

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To: **ATAC RESOURCES LTD.**
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131112

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228469		5.1	29.8	0.003	1.16	9.24	3.3	1	0.4	1890	0.13	0.05	2.21	0.079	14.05	3.4
W228470		3.5	24.3	0.003	0.80	5.38	4.1	1	0.3	2080	0.11	<0.05	1.80	0.061	8.27	3.0
W228471		4.1	27.7	0.003	0.87	14.00	5.6	1	0.4	1645	0.12	0.05	2.04	0.068	18.50	2.6
W228472		7.0	47.5	0.005	1.47	11.15	5.6	2	0.6	1850	0.21	0.05	3.47	0.120	18.30	3.3
W228473		2.0	12.5	0.002	0.38	1.44	1.5	1	0.2	1760	0.05	<0.05	0.95	0.030	3.30	2.3
W228474		2.0	12.3	<0.002	0.37	1.60	1.5	1	0.2	1770	0.05	<0.05	0.95	0.030	3.41	2.2
W228475		5.1	28.2	0.003	0.78	2.54	4.9	1	0.4	1790	0.12	<0.05	2.03	0.068	6.41	3.1
W228476		2.0	8.6	<0.002	0.30	0.20	1.2	1	0.2	1650	<0.05	<0.05	0.74	0.024	1.98	1.3
W228477		16.3	94.1	0.011	2.54	2.41	9.6	2	1.3	1005	0.43	0.08	6.93	0.251	15.50	4.6
W228478		10.1	85.6	0.002	2.67	25.1	10.1	1	1.5	324	0.41	<0.05	5.88	0.274	46.8	6.3
W228479		2.3	13.5	0.002	0.36	0.21	2.1	1	0.2	2340	0.06	<0.05	1.08	0.037	1.57	1.9
W228480		4.6	31.1	0.004	0.83	0.73	3.8	1	0.5	2310	0.14	<0.05	2.23	0.080	3.98	3.3
W228481		7.4	50.1	0.004	1.29	1.43	5.8	2	0.8	1960	0.24	0.05	3.70	0.145	5.89	1.9
W228482		9.5	71.4	0.006	1.58	0.44	6.9	1	1.1	1350	0.32	0.06	5.17	0.193	6.44	2.7
W228483		6.6	47.9	0.003	1.23	0.42	5.2	2	0.7	1980	0.23	<0.05	3.58	0.129	4.65	2.1
W228484		6.7	48.1	0.004	1.24	0.47	5.3	1	0.7	2010	0.22	0.05	3.52	0.130	4.60	2.1
W228485		9.0	65.8	0.006	1.92	4.11	7.1	2	0.9	1585	0.31	0.05	4.76	0.180	10.05	2.6
W228486		5.7	38.1	0.003	1.11	4.80	3.9	1	0.6	1915	0.18	0.06	2.86	0.102	7.66	2.5
W228487		6.1	39.9	0.004	1.14	2.53	4.1	2	0.6	1870	0.20	0.05	3.21	0.113	4.65	2.4
W228488		2.7	19.4	0.002	0.51	0.81	2.4	1	0.3	1660	0.09	<0.05	1.43	0.056	2.54	1.6
W228489		4.2	29.0	0.003	0.94	13.95	3.2	1	0.4	1575	0.13	0.06	2.13	0.074	6.62	2.0
W228490		5.6	36.4	0.002	>10.0	728	2.5	7	0.6	723	0.16	0.31	2.57	0.113	20.3	2.4
W228491		1.3	1.9	<0.002	<0.01	0.15	0.2	1	<0.2	48.4	<0.05	<0.05	0.13	<0.005	0.04	0.8
W228492		6.2	38.1	0.003	0.99	2.45	4.5	1	0.6	2320	0.18	<0.05	2.97	0.109	6.20	3.1
W228493		4.9	32.9	0.002	1.44	33.4	3.8	2	0.5	1990	0.15	0.07	2.43	0.089	10.45	2.2
W228494		9.9	65.7	0.004	2.03	15.00	7.9	2	1.0	1310	0.32	0.07	5.04	0.201	14.00	2.8
W228495		9.1	65.5	0.003	2.06	14.65	8.4	2	1.0	1490	0.31	0.06	4.69	0.204	12.55	2.5
W228496		7.7	51.8	0.003	1.99	21.1	9.3	2	0.7	1355	0.25	0.05	3.31	0.204	18.55	2.3
W228497		16.1	91.2	0.004	>10.0	489	5.7	7	1.3	174.5	0.44	0.27	6.00	0.346	60.4	4.0
W228498		13.0	58.6	0.004	>10.0	460	3.2	9	1.0	257	0.29	0.31	4.29	0.177	47.5	4.5
W228499		1.3	0.9	<0.002	0.02	0.70	0.2	1	<0.2	50.9	<0.05	<0.05	0.08	<0.005	0.04	1.4
W228500		18.5	104.5	0.006	7.00	214	5.9	5	1.6	313	0.53	0.23	7.53	0.321	55.4	4.8
W228501		9.8	38.4	0.003	4.64	155.5	2.8	2	1.1	352	0.18	0.12	2.82	0.099	45.0	4.4
W228502		3.5	19.8	0.002	0.60	3.45	2.8	1	0.3	1980	0.10	<0.05	1.60	0.055	5.58	1.6
W228503		5.5	35.0	0.004	1.09	1.55	5.3	1	0.6	1895	0.18	0.07	2.63	0.108	5.86	2.3
W228504		8.2	57.3	0.004	2.29	7.79	7.9	2	0.8	1470	0.29	0.05	3.87	0.220	12.70	2.8

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17131112

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228469		24	1.6	14.4	40	25.4		0.96
W228470		20	1.1	16.1	23	21.3		0.42
W228471		22	1.3	16.0	15	23.8		1.93
W228472		39	2.4	19.2	41	36.6		0.95
W228473		11	0.6	10.2	6	13.6		0.20
W228474		12	0.6	10.5	6	13.3		0.18
W228475		23	1.3	17.3	18	24.5		0.30
W228476		10	0.4	8.5	5	9.1		0.01
W228477		80	4.3	20.9	70	74.6		0.09
W228478		86	7.3	18.5	51	72.8		2.59
W228479		13	0.4	12.9	11	14.4		0.02
W228480		27	0.9	16.9	25	29.7		0.03
W228481		44	2.0	18.8	24	45.4		0.11
W228482		58	1.6	17.7	47	59.0		<0.01
W228483		40	1.5	17.8	37	41.1		<0.01
W228484		40	1.5	18.0	36	40.7		0.02
W228485		53	4.0	21.2	52	54.4		0.38
W228486		32	2.2	15.6	30	32.1		0.32
W228487		36	2.5	16.1	32	36.6		0.02
W228488		17	0.9	11.0	14	17.7		<0.01
W228489		24	1.0	15.0	24	24.0		0.16
W228490		32	1.6	9.5	35	32.5	24.8	3.80
W228491		2	0.1	0.7	17	<0.5		<0.01
W228492		33	1.4	20.3	30	31.6		0.02
W228493		27	1.4	17.5	25	28.9	0.996	0.16
W228494		59	3.4	23.3	50	55.3		0.34
W228495		59	3.3	23.4	48	55.6		0.12
W228496		59	3.8	19.2	42	44.5		1.50
W228497		103	7.9	23.1	108	72.0	15.80	13.80
W228498		62	3.8	24.8	99	48.4	19.00	24.3
W228499		2	0.1	0.8	16	<0.5		<0.01
W228500		101	6.0	24.0	140	83.2	7.20	16.65
W228501		36	7.5	17.2	67	29.6	6.78	8.25
W228502		18	0.7	14.9	15	16.6		0.25
W228503		35	1.1	19.0	26	31.1		0.03
W228504		64	4.2	20.6	48	51.4		1.84

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 4- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17131112

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9- AUG- 2017
Account: RCM

CERTIFICATE WH17133871

Project: Nadaleen

P.O. No.: N17- 026

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 1- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

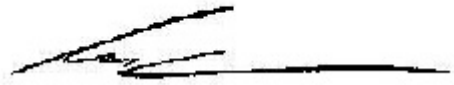
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 9-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17133871

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228505		10.51	0.28	2.74	321	160	0.65	0.11	26.2	0.20	30.9	11.4	40	8.14	36.3	2.13
W228506		10.85	0.06	2.05	158.0	160	0.54	0.11	29.4	0.18	30.6	6.8	22	4.63	20.3	1.44
W228507		10.90	0.21	1.53	203	140	0.38	0.09	30.7	0.16	22.9	4.9	16	3.25	15.6	1.12
W228508		10.73	0.02	1.20	76.9	140	0.37	0.08	32.8	0.13	20.4	3.9	13	2.89	12.5	0.91
W228509		5.57	0.04	1.21	84.1	140	0.41	0.06	31.1	0.14	19.25	4.7	13	2.90	13.3	0.95
W228510		11.66	0.03	1.56	347	130	0.49	0.08	30.7	0.15	23.7	5.5	16	3.94	15.8	1.27
W228511		10.86	0.04	3.11	105.5	180	0.89	0.15	22.6	0.24	38.5	10.6	31	11.75	29.2	1.96
W228512		11.02	0.05	3.38	107.0	220	0.92	0.14	21.2	0.19	38.4	12.8	39	13.20	34.2	2.34
W228513		11.76	0.02	0.94	123.5	150	0.39	0.06	33.4	0.13	16.05	3.8	10	2.34	10.8	0.77
W228514		11.43	0.03	1.33	77.6	150	0.49	0.08	32.0	0.14	22.5	5.3	14	4.24	14.4	0.95
W228515		11.17	0.02	0.84	57.5	150	0.31	0.06	33.9	0.13	15.85	3.4	9	2.76	9.5	0.63
W228516		11.39	0.01	0.53	36.3	140	0.24	0.05	35.0	0.09	9.79	2.3	6	2.00	6.0	0.40
W228517		10.96	0.02	0.84	103.5	150	0.31	0.06	33.9	0.12	15.10	3.5	9	2.67	9.7	0.60
W228518		9.63	0.03	0.46	107.0	110	0.22	0.05	34.7	0.08	9.47	2.1	5	1.02	5.8	0.38
W228519		7.71	0.02	0.62	3240	130	0.22	0.03	35.4	0.12	11.05	2.5	7	1.41	6.9	0.48
W228520		5.92	0.04	2.00	>10000	120	0.43	0.12	20.7	0.30	26.6	6.8	22	4.38	19.8	1.34
W228521		0.29	0.26	3.94	>10000	190	0.64	0.18	10.55	0.65	40.9	12.2	47	8.97	57.2	3.09
W228522		9.87	0.05	2.37	604	200	0.62	0.11	26.8	0.21	30.5	8.6	25	5.98	24.2	1.73
W228523		7.39	0.23	2.59	>10000	170	0.52	0.15	11.40	0.88	34.3	8.8	30	5.32	27.8	1.86
W228524		11.14	5.21	3.82	>10000	220	0.58	0.22	2.11	1.84	49.4	12.6	48	6.84	40.3	2.71
W228525		7.47	5.39	1.38	>10000	100	0.23	0.11	16.60	1.17	26.8	4.4	19	2.58	14.1	1.21
W228526		7.48	0.01	0.05	62.7	50	0.06	0.03	21.6	0.05	1.10	0.7	<1	0.11	1.9	0.47
W228527		10.15	3.62	1.18	>10000	80	0.27	0.08	21.3	0.43	21.1	3.9	15	2.32	11.6	0.96
W228528		7.12	4.34	1.22	>10000	60	0.22	0.08	22.9	0.42	21.3	4.1	15	2.33	12.0	0.97
W228529		5.68	7.72	2.11	>10000	90	0.40	0.13	19.00	0.47	30.9	6.9	24	4.34	20.4	1.62
W228530		<0.02	7.76	2.16	>10000	90	0.31	0.12	20.1	0.44	31.5	7.1	25	4.41	20.5	1.66
W228531		5.52	1.66	0.54	9460	70	0.13	0.03	32.0	0.12	11.70	2.0	6	0.90	5.8	0.45
W228532		6.33	5.78	2.13	>10000	100	0.38	0.13	15.50	0.65	35.1	7.1	25	4.79	20.8	1.53
W228533		6.22	2.87	1.18	>10000	70	0.29	0.07	27.2	0.24	17.80	4.3	14	3.44	12.1	0.87
W228534		8.08	3.94	1.30	>10000	50	0.28	0.11	10.80	1.01	16.70	4.4	17	2.94	14.1	1.07
W228535		6.70	2.27	0.95	>10000	70	0.15	0.06	22.5	0.83	13.95	3.4	13	1.75	10.2	0.81
W228536		7.40	8.41	3.55	>10000	200	0.36	0.16	7.11	1.21	56.1	12.3	41	7.14	38.5	2.48
W228537		6.95	5.36	2.61	>10000	140	0.40	0.14	2.96	1.46	39.7	8.2	33	4.73	26.8	1.94
W228538		5.67	4.83	2.71	>10000	140	0.46	0.14	1.22	1.63	36.9	8.9	38	5.22	26.1	2.10
W228539		0.29	0.70	4.65	9120	290	0.80	0.21	3.69	0.57	50.6	14.6	65	12.40	60.6	4.44
W228540		7.06	0.01	0.06	118.0	30	<0.05	0.02	21.2	0.07	1.10	0.9	1	0.15	2.5	0.51

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17133871

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228505		7.09	0.11	1.3	3.32	0.025	1.22	15.4	7.6	0.69	879	0.52	0.02	3.8	19.5	690
W228506		5.36	0.10	1.0	2.60	0.022	0.92	15.4	5.9	0.73	492	0.58	0.01	2.9	11.5	190
W228507		3.94	0.11	0.7	2.13	0.016	0.69	10.9	4.4	0.61	610	0.51	0.01	2.2	8.1	380
W228508		2.97	0.07	0.6	1.360	0.016	0.54	9.4	3.8	0.66	273	0.39	0.01	1.7	6.5	1500
W228509		3.12	0.09	0.6	1.410	0.014	0.56	9.2	4.3	0.64	280	0.43	0.01	1.7	6.6	990
W228510		4.03	0.08	0.8	2.07	0.019	0.72	11.4	5.4	0.53	523	0.45	0.01	2.4	8.5	490
W228511		8.12	0.13	1.6	1.810	0.032	1.46	19.4	10.2	0.85	362	0.72	0.02	4.6	17.9	450
W228512		8.27	0.11	1.5	2.11	0.035	1.55	19.7	10.5	0.93	368	0.70	0.02	4.6	22.2	270
W228513		2.49	0.07	0.5	1.570	0.012	0.43	7.9	3.4	0.81	339	0.36	0.01	1.3	5.1	420
W228514		3.84	<0.05	0.7	1.615	0.015	0.61	11.6	5.8	0.95	265	0.43	0.02	2.1	7.6	210
W228515		2.50	<0.05	0.5	0.990	0.010	0.39	7.4	4.8	0.62	193	0.30	0.01	1.3	4.8	480
W228516		1.56	<0.05	0.3	0.737	0.009	0.25	4.7	3.6	0.52	131	0.21	0.01	0.8	2.8	290
W228517		2.48	<0.05	0.4	1.440	0.011	0.38	7.3	4.9	0.65	149	0.34	0.01	1.3	4.8	290
W228518		1.39	<0.05	0.3	1.020	0.006	0.21	4.5	2.7	0.45	136	0.23	0.01	0.7	2.5	290
W228519		1.60	0.06	0.3	1.310	0.006	0.29	4.9	2.3	0.44	185	0.26	0.01	0.9	2.6	490
W228520		5.18	0.13	0.9	5.47	0.067	0.90	13.5	9.5	0.33	519	0.90	0.01	2.6	11.7	230
W228521		10.15	0.13	1.7	26.1	0.052	1.76	22.9	14.4	0.37	794	3.69	0.02	5.2	27.5	550
W228522		5.85	0.09	1.1	4.04	0.023	1.09	15.5	7.4	1.12	738	1.47	0.02	3.1	14.1	280
W228523		6.90	0.12	1.2	17.25	0.053	1.17	17.4	16.2	0.22	409	2.20	0.01	3.2	16.4	710
W228524		10.35	0.15	1.7	26.3	0.040	1.71	24.0	23.8	0.25	223	2.98	0.01	4.7	25.5	960
W228525		3.91	0.11	0.6	11.80	0.024	0.61	13.0	16.5	0.15	697	0.81	0.01	1.7	8.2	190
W228526		0.15	0.05	<0.1	0.049	<0.005	0.02	0.5	0.9	13.35	214	0.23	<0.01	0.1	0.7	240
W228527		3.28	0.11	0.6	6.95	0.035	0.52	9.9	14.8	0.16	798	0.67	0.01	1.5	6.4	490
W228528		3.39	0.10	0.6	6.54	0.024	0.54	12.2	13.1	0.15	1060	0.62	0.01	1.6	6.7	510
W228529		5.92	0.11	1.0	11.45	0.032	0.97	16.0	11.5	0.21	1020	1.55	0.01	2.8	12.8	290
W228530		6.09	0.10	1.0	11.50	0.033	0.99	16.3	11.5	0.22	1030	1.60	0.01	2.8	13.1	320
W228531		1.49	0.08	0.3	3.10	0.016	0.23	4.9	2.9	0.14	1090	0.39	0.01	0.7	2.3	640
W228532		5.90	0.12	1.0	10.40	0.038	0.93	18.0	16.9	0.20	424	1.55	0.01	2.6	12.6	380
W228533		3.24	0.09	0.6	3.63	0.030	0.53	8.9	8.3	0.20	1320	0.56	0.01	1.6	6.1	130
W228534		3.58	0.13	0.6	5.05	0.063	0.57	8.4	22.1	0.13	744	0.83	0.01	1.6	8.0	160
W228535		2.65	0.09	0.4	4.38	0.021	0.40	6.4	15.2	0.15	1810	0.52	0.01	1.2	5.1	560
W228536		10.15	0.16	1.7	11.65	0.032	1.52	29.1	26.6	0.26	979	1.97	0.01	4.7	22.7	410
W228537		7.82	0.15	1.1	9.51	0.060	1.18	20.1	24.6	0.19	553	1.23	0.01	3.4	16.2	450
W228538		7.93	0.13	1.2	10.05	0.055	1.22	18.4	26.6	0.21	440	1.50	0.02	3.5	16.6	230
W228539		13.05	0.14	2.1	23.9	0.028	2.13	27.0	17.1	0.33	608	5.58	0.02	6.7	35.7	470
W228540		0.20	0.06	<0.1	0.019	<0.005	0.02	0.5	0.9	13.00	215	0.41	0.01	0.1	1.2	180

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17133871

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228505		8.0	55.8	0.002	2.03	5.40	7.6	2	0.7	1405	0.25	<0.05	3.52	0.235	9.98	2.2
W228506		6.7	42.4	0.003	1.17	3.28	5.7	2	0.6	1725	0.22	0.05	3.35	0.127	6.93	2.7
W228507		5.1	32.4	<0.002	0.99	3.82	4.2	1	0.5	1790	0.16	0.06	2.53	0.091	5.68	2.4
W228508		3.9	25.0	0.003	0.70	1.25	3.4	1	0.4	2030	0.12	0.07	1.98	0.074	2.52	2.3
W228509		5.7	25.5	0.002	0.75	1.20	3.5	2	0.4	1870	0.13	<0.05	2.06	0.076	2.41	2.2
W228510		4.9	32.8	0.002	1.16	2.17	4.4	2	0.5	1695	0.18	0.06	2.82	0.103	2.69	2.2
W228511		8.8	65.3	0.003	1.74	0.99	7.3	2	0.9	1395	0.35	0.06	5.21	0.207	2.18	2.8
W228512		9.5	65.5	0.002	2.17	1.07	8.7	2	0.9	1385	0.34	0.08	5.02	0.254	2.02	2.6
W228513		3.1	18.6	<0.002	0.60	1.48	2.7	2	0.3	2210	0.10	<0.05	1.74	0.055	0.78	2.2
W228514		4.5	28.6	0.003	0.82	1.08	4.1	2	0.5	2010	0.15	0.06	2.32	0.084	0.79	2.3
W228515		3.0	19.2	<0.002	0.56	0.61	2.8	2	0.3	2270	0.09	0.05	1.56	0.049	0.76	2.3
W228516		2.0	11.7	<0.002	0.33	0.78	1.7	2	0.2	2350	0.06	<0.05	0.99	0.032	0.84	1.7
W228517		3.4	18.4	0.002	0.55	2.39	2.6	2	0.3	2150	0.09	0.07	1.48	0.051	2.08	2.3
W228518		3.5	10.1	<0.002	0.32	1.89	1.7	1	0.2	2170	0.05	<0.05	0.87	0.024	1.83	1.5
W228519		1.6	12.0	<0.002	0.62	10.15	1.8	2	0.2	2110	0.06	0.07	1.11	0.037	2.47	1.9
W228520		5.7	42.7	0.002	6.28	223	5.4	3	0.6	906	0.20	0.08	3.35	0.115	15.85	2.5
W228521		16.6	79.4	0.002	3.65	105.5	8.2	2	1.7	453	0.40	0.11	6.87	0.230	65.2	4.2
W228522		6.9	47.9	0.006	1.50	7.94	6.3	2	0.7	1730	0.23	0.06	3.84	0.138	9.92	3.1
W228523		8.9	54.9	0.007	6.32	273	8.4	5	0.7	384	0.25	0.17	4.42	0.143	47.4	4.4
W228524		12.9	78.5	0.010	5.26	231	4.4	4	1.1	286	0.37	0.23	6.27	0.208	65.5	6.7
W228525		6.3	30.3	0.004	2.85	121.0	7.2	4	0.4	567	0.13	0.08	2.40	0.074	27.5	3.2
W228526		0.7	0.8	<0.002	<0.01	0.31	0.1	1	<0.2	51.9	<0.05	<0.05	0.06	<0.005	0.14	0.6
W228527		4.6	24.9	0.002	3.14	137.0	5.6	4	0.3	654	0.12	0.12	2.13	0.064	20.0	2.9
W228528		5.3	26.5	0.004	2.02	80.1	6.9	3	0.3	600	0.11	0.08	2.21	0.066	19.05	3.1
W228529		9.0	46.3	0.004	2.69	93.0	8.6	3	0.5	455	0.21	0.12	3.69	0.118	37.7	3.5
W228530		9.0	47.2	0.006	2.76	98.1	8.7	3	0.5	484	0.22	0.11	3.76	0.119	37.7	3.6
W228531		2.0	10.1	<0.002	0.93	33.7	5.7	2	0.2	1325	0.05	0.07	1.02	0.029	9.27	2.9
W228532		9.4	45.2	0.005	4.26	160.5	3.6	3	0.6	841	0.21	0.14	3.62	0.114	32.7	4.0
W228533		4.7	26.0	<0.002	2.97	104.5	4.7	4	0.3	1265	0.12	0.09	2.06	0.069	11.45	2.8
W228534		4.5	28.0	0.002	9.42	494	3.6	8	0.4	382	0.12	0.25	2.20	0.070	13.10	2.7
W228535		2.6	18.2	0.002	2.37	94.4	6.9	3	0.3	897	0.09	0.09	1.55	0.053	9.60	2.8
W228536		13.2	72.3	0.006	4.29	120.0	5.7	3	1.1	371	0.35	0.23	5.49	0.203	30.4	5.8
W228537		10.0	54.8	0.004	8.05	350	3.0	9	0.8	145.0	0.25	0.25	3.87	0.144	21.3	4.5
W228538		9.4	57.2	0.004	6.89	278	2.4	7	1.0	80.3	0.26	0.24	3.72	0.148	21.8	3.7
W228539		16.3	96.7	0.004	4.40	103.5	7.6	1	2.3	248	0.50	0.13	6.66	0.311	94.6	3.9
W228540		1.5	0.8	<0.002	0.01	0.41	0.2	1	<0.2	50.9	<0.05	<0.05	0.08	<0.005	0.28	0.5

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17133871

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W228505		62	5.9	19.2	46	50.1		0.98
W228506		37	2.5	20.6	31	36.8		0.14
W228507		27	1.8	15.8	24	28.5		0.43
W228508		22	1.2	15.8	19	26.1		0.13
W228509		23	1.2	14.7	19	23.1		0.01
W228510		28	2.0	18.9	26	32.0		0.01
W228511		55	1.4	23.1	49	56.8		0.01
W228512		69	1.9	21.2	54	53.9		<0.01
W228513		18	1.2	13.6	17	16.7		<0.01
W228514		25	1.7	17.6	23	26.5		<0.01
W228515		16	1.0	14.4	13	17.4		<0.01
W228516		10	0.7	9.2	10	11.9		0.01
W228517		16	1.3	13.1	14	16.4		0.01
W228518		9	0.9	8.2	10	11.2		0.01
W228519		12	0.8	8.3	10	10.9		0.17
W228520		37	2.7	17.0	38	34.1	10.60	2.20
W228521		65	7.7	21.5	140	61.4	3.33	7.95
W228522		45	3.1	19.4	37	38.9		0.27
W228523		50	3.7	39.7	73	42.5	9.75	6.91
W228524		75	4.8	27.2	163	60.7	5.73	10.80
W228525		27	1.8	19.5	88	21.4	3.51	5.77
W228526		2	0.1	0.7	17	<0.5		0.01
W228527		23	1.6	20.4	30	19.4	4.65	3.18
W228528		23	1.9	22.7	31	20.9	2.10	3.19
W228529		41	3.0	20.1	36	36.4	2.04	4.82
W228530		41	3.1	20.0	34	36.7	2.09	4.74
W228531		11	0.9	19.7	10	11.3		1.08
W228532		38	2.8	17.4	47	33.1	5.80	4.21
W228533		21	1.4	12.6	17	19.3	4.24	2.60
W228534		23	1.5	17.1	61	19.0	18.20	2.84
W228535		17	1.3	15.2	56	16.0	3.31	2.35
W228536		63	4.4	17.4	106	57.5	3.53	4.37
W228537		47	2.8	19.6	125	37.1	14.45	6.77
W228538		48	2.7	13.8	149	41.0	11.30	6.14
W228539		87	5.4	18.0	79	75.0		12.45
W228540		2	<0.1	0.8	26	<0.5		0.01

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 9- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17133871

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 13- AUG- 2017
Account: RCM

CERTIFICATE WH17138045

Project: Nadaleen

P.O. No.: N17- 027

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 3- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

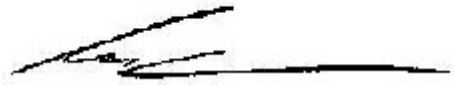
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 13- AUG- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138045

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228541		11.20	1.22	1.14	2300	80	0.24	0.06	26.0	0.30	14.75	3.8	12	2.24	9.0	0.71
W228542		11.96	1.39	1.00	895	70	0.20	0.05	27.4	0.24	15.45	4.2	10	1.86	10.5	0.66
W228543		5.52	1.36	0.89	621	70	0.18	0.05	27.4	0.20	14.10	3.9	8	1.65	10.0	0.61
W228544		11.32	0.67	0.86	261	100	0.26	0.05	32.5	0.08	13.70	4.0	10	1.84	9.0	0.59
W228545		0.30	0.79	6.81	437	220	2.36	0.24	2.21	0.34	63.4	23.2	102	36.3	67.9	6.32
W228546		11.40	1.05	1.99	554	150	0.44	0.10	30.1	0.24	28.8	7.9	21	4.60	20.6	1.27
W228547		10.94	0.10	0.79	141.5	110	0.24	0.05	32.9	0.11	14.95	3.9	9	2.15	9.3	0.59
W228548		11.18	0.15	0.58	110.5	60	0.20	0.03	29.4	0.04	10.70	3.2	6	1.42	7.0	0.80
W228549		10.94	0.04	0.43	85.1	80	0.19	0.03	35.2	0.03	8.84	2.8	5	0.86	6.0	0.40
W228550		11.44	0.05	0.90	96.0	90	0.21	0.05	33.8	0.08	16.30	4.2	10	2.00	10.4	0.67
W228551		11.38	0.03	0.50	54.8	80	0.22	0.04	35.2	0.09	8.46	2.5	16	1.01	6.4	0.38
W228552		11.40	0.02	0.94	70.3	100	0.34	0.06	33.2	0.09	13.85	3.7	9	2.46	9.6	0.65
W228553		10.26	0.09	0.52	66.5	90	0.19	0.04	34.8	0.04	9.21	2.4	6	1.05	6.1	0.41
W228554		7.70	0.81	1.25	282	160	0.32	0.07	27.2	0.26	15.40	4.9	13	2.22	12.0	0.86
W228555		<0.02	0.88	1.30	295	170	0.36	0.08	28.0	0.27	16.50	5.3	14	2.42	13.3	0.90
W228556		11.60	0.02	0.60	52.1	110	0.27	0.04	35.5	0.07	10.40	2.4	6	1.30	6.4	0.43
W228557		11.28	0.02	0.90	48.0	80	0.31	0.06	33.6	0.05	14.30	3.7	9	2.74	9.8	0.63
W228558		10.84	0.07	0.42	419	80	0.18	0.03	35.8	0.04	7.58	1.9	5	0.90	4.9	0.32
W228559		11.20	0.05	0.51	127.0	90	0.20	0.04	36.1	0.04	8.74	2.2	6	0.97	5.9	0.37
W228560		11.00	0.04	1.26	107.5	120	0.46	0.08	32.3	0.09	18.55	4.5	13	3.12	12.0	0.80
W228561		11.34	0.03	0.91	67.6	90	0.32	0.06	32.2	0.06	14.65	3.6	9	2.08	10.0	0.66
W228562		11.82	0.04	2.26	158.0	120	0.80	0.10	22.4	0.09	26.6	9.0	24	8.87	24.4	1.86
W228563		11.32	0.03	2.50	72.2	170	0.84	0.12	26.5	0.09	34.5	9.4	27	9.79	25.8	1.71
W228564		11.88	0.03	2.37	58.2	160	0.93	0.10	26.3	0.08	27.6	9.7	26	8.60	26.6	1.68
W228565		12.66	0.05	2.66	71.3	210	0.79	0.13	27.9	0.19	38.6	9.3	25	7.86	25.8	1.70
W228566		6.72	0.07	2.31	136.0	200	0.81	0.12	28.3	0.22	29.6	8.2	22	6.82	25.3	1.47
W228567		8.66	0.28	3.86	>10000	230	1.03	0.19	18.40	0.33	44.2	13.2	40	10.05	39.1	2.58
W228568		5.00	0.01	0.04	18.0	10	0.06	0.03	20.5	0.05	1.19	0.9	1	0.18	2.3	0.44
W228569		7.60	0.04	1.78	103.0	150	0.63	0.10	28.7	0.20	24.9	6.3	19	4.92	18.7	1.29
W228570		7.64	0.08	1.49	161.5	120	0.48	0.09	31.8	0.14	21.8	4.9	16	3.34	14.8	0.98
W228571		7.74	0.08	0.99	3250	110	0.48	0.07	32.8	0.10	18.20	3.6	10	5.24	11.4	0.88
W228572		7.22	0.04	1.52	3460	100	0.47	0.08	29.7	0.08	20.8	5.1	15	4.71	14.1	1.09
W228573		7.06	0.07	4.45	207	180	1.17	0.23	17.10	0.18	56.7	13.7	42	12.00	43.2	2.73
W228574		5.12	0.02	0.07	2.9	30	0.08	0.03	21.3	0.05	1.31	0.9	1	0.18	2.5	0.48
W228575		7.76	0.02	0.93	57.4	100	0.35	0.06	33.1	0.05	14.05	3.3	10	2.45	9.6	0.78
W228576		0.36	0.10	3.80	2540	200	1.19	0.15	19.15	0.12	38.7	11.9	43	10.65	43.8	3.11

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 13- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138045

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228541		3.36	<0.05	0.6	2.74	0.014	0.55	7.1	9.0	0.25	10500	0.37	0.01	1.7	4.9	170
W228542		3.15	<0.05	0.5	3.00	0.018	0.47	7.3	8.1	0.18	19050	0.44	0.01	1.5	4.9	520
W228543		2.90	<0.05	0.5	2.79	0.023	0.41	6.7	7.4	0.16	19550	0.39	0.01	1.3	4.6	430
W228544		2.48	<0.05	0.5	2.03	0.009	0.41	6.5	4.1	0.28	4390	0.32	0.01	1.4	4.4	620
W228545		19.10	0.09	2.6	3.10	0.065	3.30	30.0	19.3	0.79	654	5.02	0.03	9.2	50.6	220
W228546		5.57	<0.05	1.0	3.95	0.019	0.93	14.4	6.1	0.39	2270	1.10	0.01	2.9	11.5	220
W228547		2.31	<0.05	0.4	1.690	0.005	0.37	7.2	3.3	0.60	926	0.29	0.01	1.2	4.2	220
W228548		1.65	<0.05	0.3	1.235	0.007	0.28	5.1	2.3	4.17	1020	0.30	0.01	0.9	3.5	170
W228549		1.33	<0.05	0.2	1.020	0.006	0.20	4.2	1.7	1.15	797	0.29	0.01	0.6	2.4	390
W228550		2.67	<0.05	0.5	1.800	0.009	0.43	8.2	2.9	0.56	486	0.59	0.01	1.3	4.9	200
W228551		1.44	0.06	0.3	0.951	0.007	0.24	4.3	1.7	0.41	377	0.33	0.01	0.7	8.4	420
W228552		2.73	0.07	0.5	1.100	0.010	0.45	7.6	3.5	0.60	241	0.55	0.01	1.3	4.8	260
W228553		1.48	0.05	0.3	1.110	0.006	0.24	4.8	2.1	0.46	829	0.27	0.01	0.8	2.4	190
W228554		3.55	0.06	0.6	4.86	0.008	0.57	8.4	9.3	0.28	1010	0.56	0.01	1.6	7.1	450
W228555		3.90	0.08	0.7	4.68	0.010	0.58	9.1	10.2	0.29	1030	0.63	0.01	1.8	7.8	460
W228556		1.68	0.05	0.3	0.713	0.006	0.28	5.1	2.4	0.35	194	0.25	0.01	0.8	2.6	740
W228557		2.66	0.06	0.5	1.110	0.008	0.43	7.3	3.2	0.46	209	0.47	0.01	1.4	5.1	520
W228558		1.23	0.06	0.2	0.540	0.005	0.20	3.8	1.9	0.53	329	0.21	0.01	0.6	1.7	210
W228559		1.47	0.05	0.2	0.659	0.007	0.24	4.5	1.9	0.33	380	0.25	0.01	0.7	2.4	160
W228560		3.54	0.06	0.7	1.585	0.014	0.60	9.3	4.9	0.56	258	0.52	0.01	1.9	6.6	330
W228561		2.69	0.06	0.5	1.100	0.009	0.44	7.6	2.9	1.20	237	0.45	0.01	1.3	5.1	380
W228562		6.48	0.07	1.1	2.07	0.024	1.08	13.7	8.4	4.34	522	0.77	0.02	3.2	15.1	470
W228563		6.95	0.09	1.3	0.697	0.027	1.21	18.1	9.6	0.92	432	0.87	0.02	3.8	16.1	1140
W228564		6.36	0.06	1.1	1.015	0.024	1.15	14.6	8.8	0.83	492	0.56	0.02	3.2	16.2	260
W228565		7.44	0.08	1.3	1.265	0.025	1.30	21.4	9.9	0.93	243	1.04	0.02	3.8	15.6	190
W228566		6.45	0.07	1.2	1.455	0.023	1.11	16.3	8.2	0.77	341	1.15	0.02	3.4	13.3	230
W228567		10.55	0.10	1.8	3.39	0.042	1.87	24.1	11.7	1.34	932	2.28	0.02	5.5	23.1	420
W228568		0.22	0.07	<0.1	0.011	0.005	0.02	0.6	1.0	12.70	203	0.13	<0.01	0.1	1.6	200
W228569		4.83	0.06	0.9	1.300	0.020	0.85	13.3	6.4	1.03	319	1.27	0.02	2.5	10.7	330
W228570		4.06	0.06	0.7	2.01	0.014	0.70	11.3	4.8	0.71	645	1.04	0.01	2.1	8.3	710
W228571		2.83	0.06	0.5	1.805	0.015	0.36	9.0	6.4	0.96	954	0.52	0.01	1.4	5.6	480
W228572		4.09	0.05	0.7	1.235	0.019	0.68	10.9	4.9	1.22	736	0.62	0.01	2.0	7.8	460
W228573		11.60	0.11	2.0	2.70	0.048	2.14	31.3	12.6	1.81	519	2.02	0.03	6.2	26.4	300
W228574		0.26	0.08	<0.1	0.008	<0.005	0.03	0.7	1.1	13.10	208	0.18	0.01	0.2	1.8	180
W228575		2.51	<0.05	0.4	0.504	0.010	0.45	7.2	3.2	1.28	489	0.53	0.01	1.3	5.1	710
W228576		10.30	0.07	1.9	3.46	0.034	1.83	20.6	9.8	1.45	1220	1.69	0.02	6.4	25.7	390

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 13- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138045

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228541		4.3	25.1	<0.002	0.85	13.65	8.4	1	0.3	729	0.12	<0.05	1.84	0.061	8.94	2.1
W228542		3.9	21.0	0.003	0.78	10.75	10.7	2	0.3	458	0.10	<0.05	1.75	0.053	10.75	2.9
W228543		3.7	19.0	<0.002	0.70	9.80	11.3	2	0.3	412	0.09	<0.05	1.62	0.047	10.30	2.6
W228544		3.5	17.9	<0.002	0.62	6.37	5.9	2	0.3	1245	0.10	<0.05	1.62	0.049	7.40	2.4
W228545		52.1	164.5	<0.002	4.54	5.75	20.6	1	2.9	91.9	0.64	<0.05	9.55	0.402	13.20	1.9
W228546		7.6	40.8	0.004	1.40	9.49	5.9	2	0.6	1260	0.21	0.08	3.52	0.112	16.00	3.6
W228547		5.3	16.7	0.002	0.52	2.54	2.5	1	0.3	1565	0.08	<0.05	1.49	0.045	6.07	2.6
W228548		3.8	11.8	0.002	0.45	2.85	2.0	2	0.2	1065	0.06	<0.05	1.09	0.032	5.38	1.8
W228549		2.1	8.9	<0.002	0.32	1.79	1.5	1	0.2	1390	<0.05	0.06	0.85	0.023	4.30	2.0
W228550		3.8	18.6	0.002	0.65	2.18	2.5	2	0.3	1420	0.09	0.05	1.67	0.050	7.25	2.8
W228551		2.3	11.0	<0.002	0.36	0.62	1.7	2	0.2	1475	0.05	<0.05	0.77	0.027	3.04	1.6
W228552		3.2	21.7	0.003	0.65	0.53	3.0	2	0.3	1540	0.09	<0.05	1.43	0.051	4.49	2.2
W228553		2.1	11.0	0.002	0.41	2.84	2.1	2	0.2	1450	0.05	0.05	0.85	0.030	4.20	1.8
W228554		4.8	26.6	0.002	0.93	16.65	2.0	2	0.4	1530	0.12	0.08	1.81	0.064	18.35	2.9
W228555		5.3	29.1	0.002	0.97	18.15	2.1	2	0.5	1570	0.13	0.09	1.95	0.065	20.3	3.2
W228556		2.2	12.3	<0.002	0.39	0.74	2.0	2	0.2	2110	0.06	<0.05	0.92	0.032	2.45	2.2
W228557		3.6	20.1	0.002	0.60	0.78	2.8	2	0.3	1655	0.10	<0.05	1.45	0.050	3.97	2.4
W228558		1.6	9.0	<0.002	0.30	1.34	1.4	1	0.2	1615	<0.05	<0.05	0.67	0.023	1.89	1.7
W228559		2.2	10.2	<0.002	0.35	0.82	1.7	1	0.2	1770	0.05	<0.05	0.80	0.028	2.07	1.9
W228560		4.7	27.5	0.002	0.82	0.97	3.4	2	0.4	1450	0.14	<0.05	1.98	0.070	4.69	2.5
W228561		4.1	19.6	<0.002	0.62	0.88	2.8	2	0.3	1435	0.10	<0.05	1.51	0.049	3.19	2.3
W228562		7.9	49.2	0.002	1.51	1.13	6.6	2	0.7	907	0.24	0.05	3.14	0.153	7.71	2.3
W228563		7.7	55.2	0.004	1.63	0.59	8.2	2	0.8	1445	0.27	0.06	3.86	0.166	5.44	2.8
W228564		6.5	49.8	0.002	1.59	1.31	7.0	2	0.7	1420	0.24	<0.05	3.10	0.175	4.22	2.0
W228565		8.5	57.4	0.003	1.55	0.67	7.6	2	0.8	1680	0.29	0.06	4.11	0.153	4.88	2.9
W228566		7.5	50.3	0.004	1.35	0.82	6.4	2	1.1	1970	0.25	0.06	3.50	0.135	4.83	2.6
W228567		12.3	81.2	0.008	2.92	31.0	9.0	3	1.4	1155	0.40	0.10	5.68	0.224	12.05	3.7
W228568		1.3	1.2	<0.002	<0.01	0.15	0.2	1	<0.2	49.1	<0.05	<0.05	0.08	<0.005	0.05	0.5
W228569		6.1	38.0	0.004	1.07	0.40	5.4	2	0.6	1750	0.18	0.05	2.74	0.099	4.45	2.6
W228570		4.9	31.5	0.004	0.93	1.16	3.9	2	0.5	1535	0.15	0.07	2.31	0.080	5.33	2.9
W228571		3.9	19.4	0.004	0.85	6.66	3.3	2	0.3	1550	0.10	0.06	1.63	0.054	6.90	2.3
W228572		6.4	29.6	<0.002	1.05	7.43	3.9	2	0.5	1825	0.16	0.07	2.31	0.084	4.26	2.5
W228573		14.1	89.1	0.009	2.54	1.88	11.4	2	1.4	1215	0.46	0.08	6.78	0.252	8.90	4.4
W228574		1.4	1.3	<0.002	<0.01	0.25	0.2	1	<0.2	48.9	<0.05	<0.05	0.13	<0.005	0.03	0.6
W228575		3.5	19.0	0.002	0.57	0.75	2.7	2	0.3	1690	0.09	<0.05	1.46	0.052	1.81	1.8
W228576		8.9	83.9	0.002	2.66	10.10	9.9	2	1.6	768	0.47	0.07	5.56	0.272	10.70	2.3

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Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228541		20	1.6	15.0	34	20.8		3.04
W228542		18	1.6	20.1	26	18.6		3.31
W228543		15	1.5	20.7	26	16.7		3.10
W228544		14	1.2	13.4	11	17.9		1.25
W228545		140	16.4	18.8	104	91.3		0.56
W228546		33	2.8	14.3	34	33.2		1.40
W228547		14	0.9	12.1	18	14.5		0.29
W228548		10	0.5	9.8	6	10.4		0.70
W228549		8	0.5	10.3	7	9.1		0.25
W228550		16	0.9	12.4	11	16.6		0.18
W228551		9	0.6	10.3	16	9.7		0.18
W228552		16	0.9	13.1	15	16.7		0.07
W228553		9	0.6	12.5	5	9.6		0.09
W228554		20	2.0	11.0	27	23.8		2.03
W228555		21	2.2	11.7	28	24.7		2.04
W228556		10	0.7	12.5	8	11.9		0.04
W228557		15	1.0	13.2	7	17.7		0.04
W228558		7	0.6	9.5	4	7.9		0.12
W228559		9	0.7	10.2	6	8.8		0.11
W228560		21	1.5	13.3	14	22.9		0.13
W228561		15	1.0	12.5	6	16.8		0.06
W228562		44	1.6	17.3	15	40.6		0.11
W228563		49	1.0	21.6	18	52.8		0.04
W228564		49	2.1	17.1	14	41.9		<0.01
W228565		45	2.6	23.9	38	46.0		0.01
W228566		40	2.3	18.6	35	41.5		0.18
W228567		70	4.7	21.0	64	65.9	1.375	0.86
W228568		2	0.1	0.8	15	0.5		<0.01
W228569		33	1.3	17.0	36	31.8		0.01
W228570		26	1.6	13.9	20	28.3		0.20
W228571		17	1.5	15.3	15	18.3		0.43
W228572		25	1.5	15.1	11	26.0		0.25
W228573		78	4.8	26.4	29	73.6		0.04
W228574		3	0.1	0.9	17	0.5		<0.01
W228575		17	1.0	10.9	7	17.7		0.05
W228576		76	5.5	17.3	50	68.6		0.51

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 13- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17138045

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- AUG- 2017
Account: RCM

CERTIFICATE WH17138073

Project: Nadaleen

P.O. No.: N17- 028

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 3- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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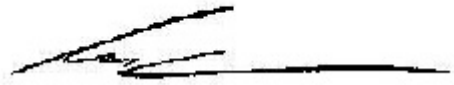
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138073

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228577		7.92	0.01	0.47	33.1	80	0.24	0.05	31.4	0.04	9.03	1.9	6	1.14	5.6	0.57
W228578		8.04	0.01	0.51	27.6	90	0.20	0.04	34.6	0.04	8.40	1.9	6	1.16	5.1	0.42
W228579		7.94	0.02	1.11	39.4	130	0.39	0.06	33.0	0.09	17.50	3.7	12	3.44	10.7	0.77
W228580		7.58	0.03	1.69	52.7	140	0.50	0.10	30.7	0.14	24.8	5.5	17	5.91	15.6	1.04
W228581		<0.02	0.03	1.72	56.2	150	0.51	0.10	30.9	0.10	26.1	5.7	17	6.33	16.3	1.06
W228582		8.02	0.02	1.19	48.5	130	0.33	0.07	32.5	0.07	18.20	4.0	12	3.24	11.5	0.82
W228583		7.92	0.02	1.21	63.7	110	0.38	0.07	32.3	0.08	18.70	4.0	12	3.89	10.9	0.80
W228584		8.22	0.02	0.69	885	90	0.22	0.05	33.7	0.04	12.20	2.5	7	1.87	6.4	0.49
W228585		5.00	0.01	0.04	0.9	20	0.06	0.03	20.6	0.07	1.00	0.8	1	0.11	2.1	0.46
W228586		7.78	0.03	2.72	88.7	170	0.72	0.14	25.4	0.06	35.1	8.0	25	7.90	21.0	1.82
W228587		7.94	0.02	1.41	66.4	110	0.51	0.08	31.5	0.07	21.2	5.0	36	4.21	13.2	1.10
W228588		7.92	0.07	2.87	786	160	0.87	0.16	24.1	0.12	37.3	9.6	27	7.14	26.4	2.10
W228589		0.36	0.11	3.62	2470	190	1.09	0.14	18.60	0.12	38.3	11.4	43	10.60	40.7	3.01
W228590		7.58	0.01	0.42	52.0	80	0.17	0.04	35.4	0.03	8.20	1.9	5	0.77	4.8	0.36
W228591		7.66	0.01	0.31	17.2	80	0.16	0.03	35.8	0.02	6.02	1.6	4	0.69	3.7	0.29
W228592		3.66	<0.01	0.32	17.9	80	0.18	0.02	36.0	0.02	6.06	1.5	11	0.71	3.6	0.29
W228593		7.74	0.01	0.73	31.9	90	0.23	0.05	34.9	0.12	12.75	2.9	13	2.39	7.1	0.55
W228594		6.28	0.01	0.75	72.2	100	0.17	0.05	34.7	0.09	12.30	2.9	8	2.10	7.2	0.56
W228595		4.38	1.05	1.99	>10000	150	0.32	0.11	20.5	0.31	25.7	7.6	20	4.80	19.1	1.44
W228596		4.96	0.01	0.04	26.7	20	0.05	0.03	21.3	0.05	0.94	0.8	1	0.12	2.1	0.48
W228597		4.86	0.27	2.24	4320	140	0.52	0.11	28.3	0.08	26.7	9.2	21	5.26	17.4	1.53
W228598		7.40	0.04	4.72	91.0	170	1.26	0.22	16.10	0.04	52.2	16.9	39	14.15	33.1	3.17
W228599		8.00	0.06	6.45	236	220	1.71	0.27	4.86	0.10	67.2	20.1	63	20.4	47.8	4.53
W228600		7.52	0.06	7.28	99.0	240	2.00	0.30	2.01	0.06	70.3	19.9	93	25.2	54.4	5.24
W228601		8.40	0.07	6.34	66.1	230	1.69	0.23	1.70	0.05	59.7	19.1	69	32.8	46.9	4.63
W228602		8.44	0.04	6.17	43.0	290	1.57	0.23	1.24	0.04	60.6	16.8	73	32.3	51.2	4.72
W228603		8.22	0.07	7.26	32.2	230	1.82	0.29	1.54	0.10	70.1	23.3	83	48.8	60.6	5.50
W228604		8.08	0.07	6.55	28.5	220	1.65	0.25	2.03	0.11	64.1	20.5	74	36.1	57.1	5.10
W228605		7.36	0.07	6.82	32.6	240	1.73	0.27	1.68	0.02	67.0	20.2	73	40.8	57.2	5.09
W228606		7.40	0.11	4.82	32.7	210	1.23	0.20	2.84	0.05	48.6	18.6	60	20.8	41.1	5.07
W228607		7.50	0.08	6.26	26.0	340	1.85	0.22	2.33	0.11	64.8	16.7	70	29.2	51.1	4.72
W228608		0.38	0.65	6.89	458	240	2.49	0.24	2.23	0.30	61.9	20.8	101	38.3	64.1	6.33
W228609		7.48	0.09	5.78	24.5	280	1.59	0.21	2.00	0.02	57.8	17.0	68	27.1	46.9	4.47
W228610		7.24	0.07	5.71	17.0	270	1.57	0.19	2.05	0.02	57.7	16.5	70	27.5	49.1	4.64
W228611		7.14	0.08	6.36	4.1	260	1.75	0.25	1.79	<0.02	63.6	17.2	74	29.5	53.2	4.95
W228612		7.24	0.10	5.45	5.5	250	1.46	0.19	2.05	0.02	55.4	17.4	69	23.5	47.4	4.67

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138073

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228577		1.35	<0.05	0.2	0.156	0.005	0.22	4.4	2.0	3.72	477	0.24	0.01	0.7	2.7	1570
W228578		1.39	<0.05	0.2	0.260	0.005	0.25	4.1	1.9	0.53	371	0.27	0.01	0.7	2.4	1010
W228579		2.99	0.05	0.6	0.260	0.015	0.54	8.7	4.1	1.06	293	0.67	0.01	1.6	6.1	1060
W228580		4.44	0.06	0.9	0.433	0.019	0.83	12.8	5.5	0.79	189	1.16	0.01	2.4	9.4	560
W228581		4.64	0.07	0.9	0.440	0.020	0.84	13.8	5.9	0.79	188	1.27	0.01	2.5	9.7	550
W228582		3.24	0.06	0.6	0.457	0.014	0.58	9.3	3.8	0.86	277	0.81	0.01	1.6	6.4	350
W228583		3.17	<0.05	0.6	0.832	0.011	0.58	9.9	4.1	0.66	222	0.69	0.01	1.7	6.4	200
W228584		1.91	<0.05	0.4	0.621	0.008	0.34	6.7	2.5	0.44	343	0.36	0.01	1.0	3.4	190
W228585		0.18	0.06	<0.1	0.006	<0.005	0.01	0.5	0.8	12.75	206	0.08	<0.01	0.1	1.5	170
W228586		7.00	0.09	1.3	1.680	0.028	1.33	21.1	7.1	1.50	363	1.33	0.02	3.7	13.7	490
W228587		4.01	0.05	0.7	1.150	0.013	0.69	10.5	4.0	0.58	275	1.18	0.01	2.2	19.8	300
W228588		8.21	0.05	1.5	4.14	0.032	1.39	20.5	8.3	0.95	392	2.10	0.02	4.5	17.2	230
W228589		10.15	0.06	1.9	3.47	0.040	1.76	19.1	9.3	1.40	1180	1.66	0.02	6.4	25.2	370
W228590		1.22	<0.05	0.2	0.553	<0.005	0.20	4.3	1.5	0.52	162	0.25	0.01	0.7	2.6	220
W228591		0.92	<0.05	0.2	0.383	<0.005	0.15	3.0	1.2	0.64	149	0.20	0.01	0.5	1.7	400
W228592		0.93	<0.05	0.2	0.384	<0.005	0.16	3.0	1.1	0.64	154	0.21	0.01	0.5	4.9	420
W228593		2.05	<0.05	0.4	0.900	0.009	0.35	6.7	3.3	0.61	169	0.48	0.01	1.2	6.4	490
W228594		2.08	0.07	0.4	0.841	0.007	0.36	6.5	2.3	0.62	497	0.36	0.01	1.2	4.1	510
W228595		5.69	0.05	1.1	4.30	0.042	0.88	13.9	11.9	0.34	2600	0.80	0.01	3.1	11.6	240
W228596		0.15	0.07	<0.1	0.011	<0.005	0.02	<0.5	0.9	13.20	202	0.13	<0.01	0.1	1.8	170
W228597		6.04	0.06	1.1	1.880	0.023	1.09	14.3	5.1	0.74	905	0.43	0.02	3.2	12.8	180
W228598		13.10	0.08	2.2	0.777	0.056	2.38	28.6	7.5	2.03	952	0.31	0.03	7.1	24.3	320
W228599		18.55	0.10	2.9	0.410	0.070	3.10	33.5	19.1	1.64	676	0.74	0.03	10.7	35.1	420
W228600		19.35	0.13	3.1	0.278	0.076	3.41	34.3	30.3	1.49	486	0.68	0.03	12.0	52.5	900
W228601		16.90	0.09	2.8	0.207	0.063	3.04	29.2	37.3	1.71	491	0.59	0.03	9.7	33.8	370
W228602		16.90	0.09	2.8	0.160	0.059	2.88	29.4	63.8	1.61	367	0.58	0.05	10.0	31.0	380
W228603		20.0	0.11	3.5	0.044	0.077	3.35	34.3	109.5	2.07	447	0.53	0.11	12.6	45.5	540
W228604		17.80	0.10	3.1	0.023	0.067	3.07	31.4	87.3	2.11	626	0.56	0.11	11.4	39.2	510
W228605		18.55	0.11	3.3	0.017	0.071	3.04	32.8	84.9	2.01	496	0.53	0.15	11.9	39.4	490
W228606		13.45	0.08	2.5	0.033	0.052	2.09	23.7	54.6	2.20	568	0.75	0.11	8.4	31.0	380
W228607		15.25	0.18	2.7	0.028	0.067	2.58	30.7	83.4	2.16	546	0.52	0.19	9.6	33.9	510
W228608		17.30	0.19	2.4	3.12	0.068	3.26	30.6	19.8	0.81	687	4.98	0.03	8.3	51.6	240
W228609		14.00	0.17	2.5	0.038	0.061	2.29	28.3	56.1	1.92	488	0.58	0.31	9.1	33.8	480
W228610		14.00	0.18	2.6	0.025	0.061	2.17	28.1	60.6	1.99	536	0.60	0.36	9.1	33.3	480
W228611		15.25	0.16	2.8	0.023	0.062	2.42	30.8	64.4	2.04	440	0.63	0.38	9.8	36.1	610
W228612		13.00	0.17	2.4	0.030	0.058	2.02	27.0	60.8	1.95	553	0.58	0.34	8.7	33.2	500

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Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138073

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228577		2.7	9.6	<0.002	0.26	0.33	1.6	2	0.2	1235	0.05	<0.05	0.83	0.025	0.62	2.1
W228578		2.1	10.0	<0.002	0.31	0.36	1.5	2	0.2	1760	0.05	<0.05	0.82	0.027	0.69	1.8
W228579		4.3	22.3	<0.002	0.64	0.34	3.0	2	0.4	1790	0.11	0.06	1.81	0.060	1.39	2.8
W228580		6.3	35.3	0.005	0.96	0.56	4.1	2	0.6	1865	0.17	0.06	2.79	0.093	1.77	3.0
W228581		6.7	37.2	0.004	0.98	0.56	4.4	2	0.6	1885	0.18	0.08	2.92	0.093	1.85	3.2
W228582		4.6	24.7	0.003	0.70	0.44	3.2	2	0.4	1590	0.12	0.05	1.92	0.062	1.00	2.2
W228583		4.3	24.4	0.002	0.76	0.91	3.0	2	0.4	1635	0.12	0.05	1.96	0.065	1.85	2.3
W228584		2.6	14.2	<0.002	0.51	2.94	1.9	2	0.3	1615	0.07	<0.05	1.23	0.036	1.49	2.0
W228585		1.3	0.8	<0.002	<0.01	<0.05	0.1	1	<0.2	46.0	<0.05	<0.05	0.06	<0.005	<0.02	0.8
W228586		8.3	56.4	0.004	1.71	1.24	6.0	2	0.9	1100	0.29	0.06	4.22	0.148	3.78	2.6
W228587		5.4	29.9	0.003	1.03	1.99	3.9	1	0.5	1520	0.15	<0.05	2.25	0.080	2.62	3.0
W228588		15.4	63.4	0.003	2.06	14.90	7.7	2	1.0	1160	0.30	0.08	4.52	0.159	14.25	3.3
W228589		8.5	82.0	0.002	2.58	9.80	9.4	2	1.4	730	0.42	0.09	5.21	0.265	10.75	2.3
W228590		2.1	8.8	<0.002	0.30	0.79	1.5	2	0.2	1590	<0.05	<0.05	0.75	0.023	1.32	1.6
W228591		1.5	6.3	<0.002	0.21	0.24	1.0	2	<0.2	1640	<0.05	0.05	0.56	0.018	0.83	1.4
W228592		1.4	6.3	<0.002	0.21	0.26	1.0	1	<0.2	1635	<0.05	<0.05	0.56	0.018	0.84	1.5
W228593		2.9	15.4	<0.002	0.49	0.42	2.1	1	0.3	1575	0.08	0.05	1.29	0.042	2.48	2.3
W228594		2.9	15.9	<0.002	0.53	1.11	2.2	1	0.3	1455	0.08	0.06	1.27	0.042	3.21	2.1
W228595		8.3	41.3	0.002	3.63	149.0	5.6	4	0.8	781	0.20	0.08	3.34	0.113	30.0	3.1
W228596		1.3	1.0	<0.002	<0.01	0.13	0.2	1	<0.2	46.9	<0.05	<0.05	0.07	<0.005	0.02	0.5
W228597		6.9	47.8	<0.002	1.50	21.2	5.6	1	0.7	1220	0.21	0.10	3.29	0.123	12.15	2.4
W228598		13.7	103.5	<0.002	2.12	0.74	12.0	1	1.7	546	0.49	0.09	7.08	0.270	2.12	1.9
W228599		17.0	142.5	<0.002	3.29	0.80	17.1	1	2.2	188.5	0.73	0.08	9.73	0.438	2.59	2.4
W228600		19.3	161.0	<0.002	3.56	0.65	18.4	1	2.4	164.0	0.82	0.08	10.15	0.522	3.34	2.3
W228601		19.8	147.5	0.002	0.68	0.64	17.0	1	2.0	141.0	0.67	<0.05	8.72	0.457	1.10	1.9
W228602		13.4	148.5	<0.002	0.40	0.48	17.3	1	1.9	99.3	0.66	<0.05	8.45	0.483	1.08	1.8
W228603		16.7	188.0	<0.002	0.26	0.51	20.2	1	2.3	94.1	0.86	<0.05	10.25	0.595	1.13	2.2
W228604		16.8	177.5	<0.002	0.13	0.39	18.5	1	2.1	109.5	0.79	0.07	9.37	0.555	1.15	2.0
W228605		17.4	181.0	<0.002	0.25	0.51	18.6	1	2.2	116.0	0.83	0.07	9.72	0.557	1.17	2.1
W228606		19.5	117.0	<0.002	0.41	0.68	13.5	1	1.6	228	0.57	0.05	7.02	0.413	0.88	1.6
W228607		13.9	144.0	<0.002	0.31	0.44	16.2	1	1.7	179.0	0.68	<0.05	8.73	0.522	0.87	1.8
W228608		47.3	174.0	0.002	4.55	5.05	19.6	1	2.6	91.3	0.58	<0.05	8.49	0.408	11.35	1.7
W228609		16.1	121.0	<0.002	0.29	0.55	14.7	1	1.6	137.5	0.66	<0.05	8.11	0.494	0.67	1.7
W228610		16.3	116.0	<0.002	0.24	0.42	15.0	1	1.6	108.5	0.63	<0.05	7.98	0.507	0.58	1.6
W228611		14.3	127.5	<0.002	0.27	0.45	16.2	1	1.8	119.0	0.70	<0.05	8.81	0.533	0.64	1.8
W228612		15.1	104.5	<0.002	0.25	0.48	14.1	1	1.5	111.0	0.60	<0.05	7.52	0.481	0.53	1.6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138073

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W228577		9	0.4	9.2	5	12.0		0.04
W228578		10	0.5	7.9	6	10.5		0.01
W228579		19	0.8	12.7	12	22.2		<0.01
W228580		30	1.1	13.5	23	29.7		<0.01
W228581		30	1.2	14.3	16	31.6		<0.01
W228582		21	1.3	11.7	12	20.7		<0.01
W228583		20	1.4	11.6	14	19.6		0.03
W228584		11	0.9	10.8	7	12.2		0.04
W228585		2	0.1	0.7	16	<0.5		<0.01
W228586		43	3.6	16.9	36	46.7		0.02
W228587		25	2.0	11.7	30	26.9		<0.01
W228588		49	4.5	16.9	39	55.4		0.09
W228589		74	5.6	16.4	48	68.5		0.49
W228590		8	0.7	9.9	6	8.6		<0.01
W228591		6	0.5	6.9	4	7.3		<0.01
W228592		6	0.4	7.3	4	6.9		<0.01
W228593		13	1.2	11.5	26	14.4		<0.01
W228594		13	1.0	10.4	28	14.7		0.08
W228595		33	2.7	23.6	49	39.3	5.05	5.23
W228596		2	0.1	0.7	15	<0.5		<0.01
W228597		36	1.9	14.3	30	38.6		1.11
W228598		75	1.5	17.8	59	79.3		<0.01
W228599		120	4.5	20.3	83	107.0		0.01
W228600		136	3.5	24.1	89	112.5		<0.01
W228601		131	1.2	17.3	65	100.5		<0.01
W228602		137	1.2	18.0	67	100.5		<0.01
W228603		156	1.5	23.2	95	123.0		<0.01
W228604		146	1.4	21.0	101	113.0		<0.01
W228605		144	1.4	21.8	78	119.0		<0.01
W228606		111	1.3	16.6	57	92.3		<0.01
W228607		137	1.0	21.5	80	106.0		<0.01
W228608		144	11.4	20.0	102	95.6		0.57
W228609		130	1.0	19.8	68	102.0		<0.01
W228610		133	0.9	20.1	68	103.0		<0.01
W228611		142	1.0	22.3	74	110.0		<0.01
W228612		127	0.9	19.5	61	100.5		<0.01

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Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138073

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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Account: RCM

CERTIFICATE WH17138076

Project: Nadaleen

P.O. No.: N17- 029

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 3- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

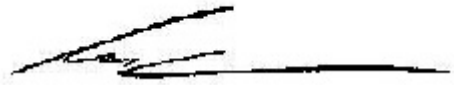
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 13- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138076

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229397		6.56	0.03	0.76	184.5	70	0.32	0.03	19.00	0.13	11.00	1.3	8	2.46	8.2	0.47
W229398		5.78	0.03	0.23	1370	30	0.17	0.01	20.5	0.03	5.18	0.9	4	0.55	5.6	0.21
W229399		4.86	0.49	0.86	3440	160	0.39	0.03	19.95	1.09	14.95	3.3	14	2.67	12.8	0.54
W229400		0.34	1.82	1.85	>10000	100	0.24	0.48	7.04	0.80	29.8	6.5	47	3.20	28.1	2.51
W229401		11.22	0.24	1.78	234	100	0.64	0.05	16.35	0.08	23.9	3.1	17	5.98	13.2	0.80
W229402		11.78	0.34	0.95	565	60	0.40	0.03	17.95	0.20	14.70	2.5	12	3.13	10.6	0.97
W229403		11.74	0.09	1.23	215	70	0.47	0.04	18.55	0.03	16.10	1.8	11	3.96	8.5	0.58
W229404		10.90	0.09	0.55	365	60	0.22	0.02	19.70	0.04	7.54	1.8	6	1.51	11.6	0.39
W229405		5.32	0.08	0.53	494	50	0.27	0.02	20.3	0.02	7.58	1.5	6	1.45	7.9	0.41
W229406		11.38	0.05	0.53	648	50	0.26	0.02	20.7	0.03	7.41	1.4	5	1.34	7.2	0.85
W229407		10.80	0.07	0.47	1145	40	0.20	0.01	20.1	0.02	6.77	1.3	5	1.21	6.3	0.81
W229408		13.42	0.08	1.78	304	100	0.55	0.05	16.45	0.02	21.1	2.6	16	5.10	10.5	0.76
W229409		12.12	0.15	1.22	3030	60	0.45	0.03	18.00	0.08	14.65	3.0	12	3.07	10.6	0.84
W229410		5.54	0.08	0.56	117.0	30	0.24	0.01	19.45	<0.02	7.16	1.2	5	1.31	4.2	0.59
W229411		3.90	0.07	0.46	6790	30	0.22	0.02	19.00	<0.02	7.25	1.7	5	0.93	4.7	0.60
W229412		4.90	0.15	0.79	8330	50	0.39	0.03	19.70	0.18	11.10	2.3	8	2.14	7.2	0.79
W229413		<0.02	0.16	0.81	9140	50	0.43	0.03	18.90	0.26	11.00	2.2	8	2.24	7.4	0.78
W229414		10.84	0.09	0.54	5560	50	0.31	0.02	19.70	0.05	12.20	2.0	7	1.19	6.4	0.51
W229415		11.28	0.07	0.28	7840	30	0.24	0.02	20.2	0.10	9.48	1.6	3	0.52	5.5	0.46
W229416		10.98	0.13	0.30	1370	30	0.25	0.02	21.2	0.02	6.67	1.6	4	0.47	4.8	0.41
W229417		11.26	0.06	0.35	417	100	0.23	0.02	20.7	0.02	5.79	1.7	4	0.80	5.1	0.35
W229418		11.14	0.14	0.63	917	50	0.36	0.03	20.4	0.05	7.25	2.3	8	2.08	7.7	0.37
W229419		10.70	0.06	0.83	525	60	0.42	0.02	19.30	0.02	11.10	2.1	8	2.32	6.8	0.39
W229420		11.96	0.06	0.95	320	170	0.49	0.04	18.75	0.03	12.90	2.4	9	2.71	9.5	0.39
W229421		12.12	0.08	0.54	1150	40	0.29	0.02	20.1	0.02	9.22	1.7	7	1.35	6.0	0.25
W229422		8.74	0.06	0.42	166.0	20	0.28	0.02	19.90	0.07	6.04	1.8	5	1.19	5.0	0.31
W229423		8.18	0.10	0.58	223	30	0.26	0.02	19.60	0.07	7.52	2.0	7	1.74	6.5	0.61
W229424		6.24	0.09	0.57	1570	40	0.30	0.02	20.5	0.06	7.83	2.2	7	1.61	8.2	0.33
W229425		7.12	0.08	0.24	807	20	0.13	0.02	20.9	0.03	5.33	1.7	3	0.43	5.3	0.89
W229426		9.50	0.14	1.65	4110	110	0.55	0.05	17.60	0.03	18.75	3.6	16	5.15	10.5	0.62
W229427		7.12	<0.01	0.05	7.1	20	0.07	0.02	22.2	0.08	1.02	1.5	1	0.11	2.7	0.49
W229428		0.36	0.11	3.63	2590	200	0.84	0.15	18.80	0.24	36.8	12.1	42	10.10	42.4	3.02
W229429		10.32	0.06	1.01	724	50	0.36	0.04	19.15	0.06	13.50	2.8	8	3.17	9.5	0.53
W229430		12.22	0.04	0.98	330	90	0.29	0.03	19.20	0.07	10.70	2.6	11	2.30	6.5	1.11
W229431		12.60	0.06	0.73	1000	40	0.31	0.02	19.25	0.08	10.65	2.4	9	1.86	7.4	1.43
W229432		7.20	<0.01	0.06	2.3	40	0.06	0.02	21.5	0.05	1.06	1.5	1	0.14	3.5	0.48

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Finalized Date: 13- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138076

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229397		1.97	0.10	0.6	0.853	0.008	0.39	7.0	4.3	11.70	250	0.12	0.01	1.3	2.7	340
W229398		0.64	0.16	0.1	1.560	0.005	0.11	3.5	1.5	12.85	222	0.11	0.01	0.4	1.4	350
W229399		2.45	0.18	0.5	9.22	0.012	0.41	8.4	5.5	12.10	297	2.62	0.01	1.7	9.1	740
W229400		5.15	0.10	0.8	15.40	0.023	0.83	15.8	26.9	0.18	348	6.34	0.01	2.6	21.2	510
W229401		4.58	0.13	1.2	1.335	0.012	0.91	13.1	10.2	9.98	253	2.69	0.02	3.1	8.8	710
W229402		2.40	0.13	0.6	1.535	0.009	0.48	7.5	6.1	11.15	391	1.20	0.01	1.7	7.9	410
W229403		3.26	0.16	0.9	1.300	0.009	0.62	8.9	7.5	11.50	252	1.08	0.02	2.1	4.6	210
W229404		1.44	0.18	0.3	1.640	<0.005	0.26	4.6	3.8	12.15	254	0.80	0.01	1.0	3.5	140
W229405		1.40	0.18	0.3	1.200	0.007	0.25	4.6	4.0	12.65	266	0.71	0.01	0.9	3.4	130
W229406		1.35	0.14	0.3	1.055	0.006	0.25	4.7	3.9	12.45	650	0.60	0.02	0.9	3.6	190
W229407		1.19	0.14	0.2	1.045	0.005	0.22	4.4	3.3	12.15	637	0.51	0.02	0.8	3.2	160
W229408		4.37	0.16	1.2	1.315	0.014	0.90	10.8	10.9	10.10	402	0.64	0.02	3.0	6.5	350
W229409		3.03	0.16	0.7	2.09	0.010	0.62	7.8	6.6	10.75	552	0.99	0.02	2.0	7.1	360
W229410		1.43	0.16	0.4	1.045	0.005	0.27	4.2	3.9	11.90	502	0.74	0.02	1.0	3.0	120
W229411		1.35	<0.05	0.4	1.115	0.008	0.22	4.0	3.7	11.65	621	0.70	0.02	0.7	2.3	120
W229412		2.28	0.07	0.6	2.39	0.012	0.38	5.9	5.0	11.10	689	0.67	0.02	1.4	3.9	160
W229413		2.24	0.06	0.6	2.78	0.014	0.38	5.9	4.7	10.50	690	0.70	0.02	1.4	4.0	160
W229414		1.63	0.10	0.5	1.620	0.007	0.26	6.6	3.4	11.25	532	0.33	0.01	1.0	3.2	430
W229415		1.05	0.18	0.2	1.460	0.013	0.13	5.0	2.0	11.30	512	0.29	0.01	0.5	2.5	110
W229416		1.09	0.13	0.2	1.615	0.006	0.14	3.9	2.2	11.20	1080	0.29	0.01	0.6	2.4	100
W229417		1.29	0.20	0.2	0.726	<0.005	0.17	3.4	2.7	11.75	349	0.33	0.01	0.6	2.4	90
W229418		2.10	0.20	0.4	1.235	0.007	0.31	4.3	4.7	11.80	366	0.79	0.01	1.1	4.5	210
W229419		2.54	0.20	0.8	1.245	0.006	0.41	6.2	5.2	11.20	296	1.05	0.01	1.5	3.3	160
W229420		2.83	0.20	0.7	1.855	0.006	0.47	7.3	6.4	10.65	265	0.49	0.01	1.7	4.1	220
W229421		1.82	0.17	0.4	0.597	0.005	0.26	5.4	3.9	11.20	351	0.52	0.01	0.9	2.5	160
W229422		1.46	0.23	0.2	0.449	<0.005	0.20	3.4	3.3	11.95	232	0.47	0.01	0.8	2.9	120
W229423		1.74	0.12	0.3	0.637	<0.005	0.28	4.1	4.5	11.80	305	0.42	0.01	1.0	3.7	160
W229424		1.67	0.14	0.3	0.516	<0.005	0.27	4.8	3.7	12.45	330	0.41	0.01	0.9	3.9	320
W229425		0.78	0.09	0.1	0.625	<0.005	0.11	3.5	1.3	12.65	457	0.38	0.01	0.4	3.3	200
W229426		4.68	0.11	1.1	0.845	0.018	0.83	10.3	9.8	10.95	348	0.88	0.02	2.7	7.0	360
W229427		0.50	0.29	<0.1	0.018	<0.005	0.02	0.5	0.9	13.60	217	0.09	<0.01	0.1	2.1	190
W229428		9.51	<0.05	1.8	3.53	0.038	1.70	18.3	9.0	1.43	1200	1.69	0.02	6.0	24.6	380
W229429		2.82	0.09	0.7	0.497	0.007	0.51	7.9	5.4	11.80	342	0.46	0.01	1.7	4.4	240
W229430		2.58	<0.05	0.8	0.935	0.006	0.49	6.6	4.3	11.55	482	0.17	0.01	1.7	4.9	290
W229431		1.90	<0.05	0.6	0.821	0.008	0.37	6.1	3.9	11.15	548	0.79	0.02	1.2	5.4	220
W229432		0.41	0.17	<0.1	0.016	0.005	0.03	0.5	1.0	13.25	214	0.08	0.01	0.2	1.9	180

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 13- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138076

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229397		4.4	12.7	<0.002	0.32	0.71	1.2	1	0.4	71.0	0.10	<0.05	1.72	0.037	0.88	6.0
W229398		3.1	3.3	<0.002	0.18	1.48	0.4	1	0.2	77.9	<0.05	<0.05	0.56	0.012	0.85	8.5
W229399		14.1	13.8	0.009	0.53	4.22	1.4	3	0.4	159.0	0.12	<0.05	2.30	0.046	5.20	25.7
W229400		10.7	42.4	0.003	4.73	157.0	3.0	3	1.1	352	0.19	0.12	3.24	0.102	43.8	4.8
W229401		11.1	31.2	0.006	0.50	1.31	2.9	2	0.7	100.0	0.22	<0.05	3.84	0.089	2.32	13.7
W229402		17.2	16.3	0.002	0.78	2.04	1.5	2	0.5	90.2	0.12	<0.05	2.13	0.048	2.53	15.6
W229403		7.1	22.1	0.003	0.36	0.94	2.0	1	0.6	96.8	0.15	<0.05	2.50	0.059	1.66	11.9
W229404		7.4	8.5	<0.002	0.34	1.37	0.9	1	1.0	93.7	0.07	<0.05	1.08	0.027	1.55	11.4
W229405		7.6	8.2	<0.002	0.35	1.48	0.9	1	0.6	94.0	0.07	<0.05	1.00	0.025	1.41	11.2
W229406		7.8	7.8	<0.002	0.31	1.72	0.9	1	0.4	86.7	0.07	<0.05	1.04	0.026	1.67	13.0
W229407		6.8	7.2	<0.002	0.32	1.81	0.8	1	0.2	77.7	0.06	<0.05	0.93	0.022	1.90	12.2
W229408		9.4	31.6	<0.002	0.44	1.34	2.8	1	0.6	99.0	0.22	<0.05	3.62	0.085	2.14	16.2
W229409		9.4	21.2	0.002	0.50	4.81	1.8	1	0.4	89.8	0.15	<0.05	2.55	0.058	3.02	13.8
W229410		7.3	8.9	<0.002	0.21	1.33	0.9	1	0.3	74.8	0.07	<0.05	1.20	0.027	1.91	12.8
W229411		7.6	7.1	<0.002	0.54	8.48	0.9	2	0.2	77.6	0.06	<0.05	1.08	0.021	2.01	11.2
W229412		11.7	13.8	<0.002	0.67	13.05	1.5	1	0.3	122.0	0.10	<0.05	1.76	0.038	4.47	14.0
W229413		10.6	13.7	<0.002	0.75	14.35	1.5	2	0.3	120.5	0.10	<0.05	1.86	0.039	4.94	14.6
W229414		7.2	9.4	<0.002	0.63	7.20	1.0	1	0.2	141.5	0.07	<0.05	1.33	0.027	3.31	9.3
W229415		7.6	4.8	<0.002	0.73	10.00	0.6	1	<0.2	126.5	<0.05	<0.05	0.65	0.013	3.06	8.5
W229416		7.0	5.2	<0.002	0.37	3.60	0.6	1	<0.2	138.0	<0.05	<0.05	0.70	0.015	3.77	10.3
W229417		5.3	5.9	<0.002	0.26	0.75	0.7	1	<0.2	139.5	0.05	<0.05	0.77	0.016	1.28	12.5
W229418		10.9	11.3	<0.002	0.30	2.33	1.0	2	0.3	122.5	0.08	<0.05	1.37	0.030	2.24	23.4
W229419		5.9	14.1	0.002	0.30	1.32	1.4	1	0.3	119.5	0.11	<0.05	1.88	0.040	1.72	15.0
W229420		6.2	16.1	<0.002	0.29	0.94	1.7	1	0.3	117.0	0.12	<0.05	2.08	0.045	1.75	16.7
W229421		4.4	9.3	<0.002	0.19	2.02	1.1	1	0.2	125.5	0.07	<0.05	1.15	0.025	1.10	18.8
W229422		6.6	7.0	<0.002	0.26	0.73	0.8	1	<0.2	80.2	0.06	<0.05	0.91	0.020	1.01	15.5
W229423		8.9	9.9	<0.002	0.62	1.50	1.0	1	0.2	72.3	0.07	<0.05	1.23	0.027	1.76	14.5
W229424		8.1	9.2	<0.002	0.35	3.25	1.0	2	0.2	77.2	0.08	<0.05	1.21	0.027	1.46	15.4
W229425		10.8	3.5	<0.002	0.82	2.52	0.5	1	<0.2	72.3	<0.05	<0.05	0.50	0.011	1.99	9.7
W229426		9.0	28.4	<0.002	0.70	5.88	2.6	2	0.6	87.0	0.20	<0.05	3.36	0.077	2.06	17.9
W229427		1.7	0.9	<0.002	<0.01	0.05	0.2	1	<0.2	48.1	<0.05	<0.05	4.93	<0.005	<0.02	21.2
W229428		9.9	76.2	<0.002	2.54	9.31	8.9	2	1.4	716	0.46	<0.05	5.54	0.264	10.70	2.5
W229429		7.4	16.5	<0.002	0.40	1.96	1.8	1	0.4	83.3	0.12	<0.05	2.04	0.046	1.29	10.8
W229430		8.7	14.8	<0.002	0.89	2.00	1.4	1	0.4	75.4	0.12	<0.05	2.01	0.048	3.66	8.9
W229431		10.0	11.9	<0.002	1.03	2.35	1.3	2	0.3	106.0	0.09	<0.05	1.60	0.035	3.66	7.9
W229432		1.3	1.1	<0.002	<0.01	<0.05	0.2	1	<0.2	45.7	<0.05	<0.05	0.14	<0.005	<0.02	0.9

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 13- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138076

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W229397		12	0.7	5.1	28	22.0		0.01
W229398		8	0.4	2.6	8	4.3		<0.01
W229399		42	1.5	5.3	490	17.3		0.01
W229400		36	6.9	17.0	69	32.1	7.13	8.22
W229401		37	1.4	8.6	14	44.8		0.01
W229402		26	1.1	5.3	52	23.6		0.01
W229403		23	1.1	5.5	7	36.4		0.01
W229404		15	0.8	2.6	4	9.5		0.01
W229405		15	0.7	2.7	3	8.9		0.01
W229406		11	0.9	2.8	6	9.4		0.03
W229407		12	0.9	2.6	5	7.2		0.03
W229408		30	2.1	6.7	7	46.0		0.02
W229409		34	1.6	4.8	21	27.8		0.06
W229410		17	1.0	2.7	3	14.6		0.04
W229411		15	0.7	2.7	2	13.2		0.10
W229412		17	1.8	4.6	36	23.9		0.20
W229413		17	1.7	4.6	50	24.4		0.25
W229414		13	1.0	4.5	11	16.0		0.14
W229415		6	0.7	3.5	20	6.2		0.09
W229416		6	0.8	2.7	4	6.7		0.33
W229417		8	0.7	2.3	4	7.9		0.01
W229418		16	1.4	2.8	10	13.3		0.03
W229419		18	1.3	4.1	3	29.1		0.04
W229420		17	1.4	4.7	4	28.2		0.02
W229421		13	1.0	3.4	3	12.6		0.02
W229422		11	0.8	2.3	14	8.9		0.01
W229423		10	1.0	2.9	13	11.8		0.03
W229424		9	0.9	3.8	10	10.9		0.07
W229425		7	0.5	2.7	2	5.1		0.11
W229426		35	1.7	6.6	5	39.9		0.23
W229427		2	0.1	0.8	18	<0.5		<0.01
W229428		75	5.5	16.2	54	64.7		0.51
W229429		19	1.0	4.7	9	24.5		0.05
W229430		20	1.1	4.5	10	27.6		0.07
W229431		19	0.9	4.2	12	22.7		0.06
W229432		2	0.1	0.8	16	<0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 13- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17138076

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- AUG- 2017
Account: RCM

CERTIFICATE WH17139657

Project: Nadaleen

P.O. No.: N17- 030

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 7- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

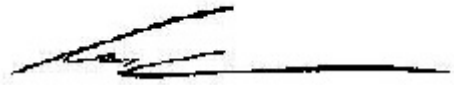
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 12-AUG-2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139657

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228613		7.21	0.06	5.41	5.1	220	1.43	0.20	1.71	0.03	53.8	14.3	61	24.2	48.5	4.40
W228614		8.06	0.14	5.72	12.1	240	1.53	0.22	2.08	0.03	59.3	25.5	62	28.5	47.8	4.89
W228615		8.08	0.05	6.30	4.7	250	1.62	0.24	2.09	0.02	63.2	17.8	66	32.3	51.9	5.01
W228616		3.48	0.07	6.55	5.4	260	1.73	0.26	2.18	0.02	65.0	18.9	67	33.0	54.7	5.11
W228617		8.22	0.07	5.55	5.3	270	1.41	0.21	1.85	0.02	55.2	16.4	61	26.0	50.7	4.63
W228618		8.25	0.07	5.59	4.6	240	1.47	0.22	1.75	0.02	54.6	17.5	62	26.5	48.9	4.63
W228619		0.26	0.69	6.86	466	240	2.27	0.24	2.25	0.39	61.4	22.8	96	41.3	66.7	6.44
W228620		8.39	0.05	5.75	3.6	240	1.34	0.21	2.08	<0.02	56.2	16.4	65	26.5	50.0	4.80
W228621		8.56	0.04	6.15	3.9	250	1.53	0.23	2.09	<0.02	61.0	18.2	67	29.8	55.0	5.08
W228622		7.66	0.05	6.17	49.9	260	1.56	0.24	2.25	<0.02	61.8	18.4	66	31.2	50.9	5.11
W228623		7.52	0.04	5.40	8.0	230	1.33	0.20	1.94	<0.02	53.4	15.7	61	25.1	49.0	4.70
W228624		7.62	0.13	6.11	7.1	240	1.44	0.23	2.15	<0.02	59.3	24.6	67	31.4	52.9	5.14
W228625		5.04	<0.01	0.05	<0.2	30	0.06	0.02	21.0	0.07	1.04	0.6	<1	0.17	1.9	0.48
W228626		7.85	0.05	6.27	3.8	250	1.56	0.24	2.28	0.02	61.7	18.3	66	33.1	53.3	5.14
W228627		6.58	0.04	5.72	6.7	240	1.27	0.21	1.99	<0.02	54.9	16.5	65	27.0	47.4	4.66
W228628		8.17	0.04	5.88	29.2	350	1.40	0.24	2.18	0.02	57.9	16.1	62	26.2	46.9	4.60
W228629		<0.02	0.04	5.81	34.2	370	1.43	0.21	2.10	<0.02	59.0	15.8	61	26.1	46.6	4.48
W228630		7.42	0.05	5.39	39.2	370	1.43	0.21	1.80	0.03	54.5	14.7	60	24.6	47.9	4.33
W228631		7.76	0.05	5.23	4.9	230	1.30	0.20	1.67	0.02	52.7	14.7	58	25.3	42.7	4.22
W228632		7.42	0.05	5.42	6.3	230	1.44	0.21	1.76	0.02	55.4	13.6	61	27.4	45.8	4.47
W228633		4.96	<0.01	0.05	0.2	20	0.06	0.03	20.4	0.07	1.13	0.6	3	0.17	1.5	0.47
W228634		7.96	0.05	5.64	7.8	330	1.48	0.22	1.86	0.07	57.6	14.7	62	29.7	43.6	4.59
W228635		8.47	0.07	5.35	24.1	250	1.38	0.22	2.45	0.51	53.8	13.4	59	28.7	37.8	4.08
W228636		7.14	0.04	4.78	33.9	410	1.06	0.18	3.67	0.08	48.1	12.6	53	22.0	37.7	4.10
W228637		8.16	0.04	5.44	13.3	300	1.48	0.21	4.88	0.03	53.5	14.0	54	28.9	45.7	4.42
W228638		7.78	0.05	5.92	5.4	290	1.47	0.23	3.92	0.03	59.1	16.2	60	30.3	49.1	4.25
W228639		7.75	0.04	5.25	7.0	300	1.33	0.20	4.39	0.13	52.7	15.0	55	28.4	42.0	4.24
W228640		7.75	0.05	6.32	14.0	330	1.41	0.25	3.15	0.14	62.7	16.5	64	31.4	50.7	4.75
W228641		7.78	0.06	6.59	25.4	960	1.80	0.27	1.87	0.03	67.3	16.8	68	31.4	54.6	4.79
W228642		8.20	0.30	5.11	109.5	230	1.11	0.23	7.11	0.30	54.2	9.4	69	17.40	37.1	3.21
W228643		10.40	0.17	6.00	197.5	250	2.10	0.28	1.36	0.40	67.3	14.0	60	22.7	42.4	4.75
W228644		6.28	0.56	5.62	944	220	1.54	0.26	2.03	0.40	57.9	16.1	64	17.75	51.4	5.28
W228645		0.26	0.10	3.52	2550	200	0.89	0.15	17.70	0.11	38.3	10.1	40	10.15	39.3	2.92
W228646		12.61	0.54	6.65	252	260	2.09	0.31	1.83	0.23	71.0	18.1	72	23.1	51.4	5.03
W228647		8.19	1.58	6.20	270	210	1.65	0.24	3.31	0.16	61.2	16.9	65	19.00	53.8	4.88
W228648		9.64	0.08	5.76	352	210	1.53	0.24	4.27	0.16	58.8	18.2	59	19.50	49.6	5.16

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139657

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228613		13.70	0.13	2.5	0.024	0.058	2.09	25.9	65.4	1.89	396	0.19	0.30	8.7	29.4	430
W228614		14.65	0.14	2.6	0.047	0.061	2.15	28.4	56.2	2.06	512	0.37	0.39	9.0	35.8	480
W228615		16.10	0.14	2.9	0.021	0.069	2.38	30.2	59.7	2.23	505	0.23	0.42	10.1	33.6	500
W228616		16.50	0.14	3.0	0.025	0.071	2.48	31.8	59.1	2.31	519	0.27	0.43	10.3	34.9	520
W228617		14.00	0.13	2.6	0.028	0.059	2.06	26.7	55.5	1.97	424	0.25	0.39	8.8	30.8	430
W228618		14.15	0.11	2.5	0.027	0.059	2.07	26.9	56.1	1.93	435	0.21	0.39	8.7	32.2	440
W228619		18.50	0.12	2.5	3.14	0.072	3.32	29.1	19.4	0.80	651	4.81	0.03	8.7	49.0	230
W228620		14.20	0.11	2.6	0.025	0.062	2.11	26.9	55.2	2.13	495	0.18	0.40	9.0	32.0	470
W228621		15.25	0.11	2.8	0.024	0.067	2.23	29.0	60.3	2.26	493	0.20	0.44	9.7	33.8	530
W228622		15.65	0.12	2.8	0.028	0.068	2.25	30.0	61.6	2.31	517	0.17	0.42	10.1	34.3	480
W228623		13.55	0.13	2.5	0.019	0.054	1.92	25.6	54.9	2.02	484	0.21	0.41	8.6	30.2	450
W228624		15.25	0.11	2.8	0.044	0.070	2.22	29.5	58.8	2.26	511	0.21	0.46	9.5	36.9	470
W228625		0.16	0.08	<0.1	0.009	0.005	0.02	0.5	1.0	13.10	200	0.05	0.01	0.1	1.3	170
W228626		15.75	0.13	2.9	0.018	0.071	2.31	30.1	56.1	2.36	554	0.19	0.44	10.0	33.6	510
W228627		14.25	0.13	2.5	0.016	0.057	2.16	27.2	50.0	2.09	496	0.22	0.40	8.9	32.4	470
W228628		14.10	0.10	2.9	0.014	0.060	2.32	27.8	57.3	2.10	597	0.25	0.34	9.4	31.1	500
W228629		14.25	0.11	2.8	0.013	0.063	2.31	28.1	58.5	2.06	578	0.22	0.33	9.3	30.3	470
W228630		13.30	0.09	2.6	0.018	0.057	2.14	26.8	112.5	1.91	490	0.32	0.25	8.7	30.2	440
W228631		12.95	0.09	2.7	0.019	0.058	1.99	25.3	49.3	1.77	408	0.36	0.34	8.4	28.4	430
W228632		13.50	0.08	2.7	0.026	0.060	2.05	26.9	62.4	1.98	395	0.25	0.36	9.0	27.1	420
W228633		0.18	0.10	<0.1	0.009	<0.005	0.02	0.5	1.1	12.80	204	0.08	<0.01	0.1	1.4	180
W228634		13.95	0.10	2.8	0.033	0.058	2.17	27.9	58.5	1.98	449	0.31	0.37	9.0	29.5	440
W228635		13.05	0.09	2.6	0.045	0.060	2.21	26.4	50.0	2.00	621	0.68	0.34	8.5	25.5	410
W228636		11.45	0.06	2.4	0.010	0.047	1.94	23.0	56.5	2.40	861	0.27	0.33	7.5	25.0	480
W228637		13.50	0.07	2.8	0.010	0.054	2.34	25.8	64.9	3.03	1060	0.23	0.36	8.9	27.9	470
W228638		14.60	0.08	3.0	0.012	0.054	2.63	28.7	108.0	2.85	807	0.27	0.31	9.9	31.5	560
W228639		13.10	0.07	2.6	0.022	0.049	2.26	25.7	78.3	2.79	988	0.31	0.34	8.6	28.9	460
W228640		15.65	0.08	3.1	0.025	0.066	2.80	30.7	85.8	2.58	736	0.30	0.19	10.1	33.0	560
W228641		16.80	0.09	3.3	0.035	0.071	3.03	32.1	104.5	2.27	439	0.29	0.06	10.9	34.3	500
W228642		13.05	0.08	2.8	2.68	0.064	2.32	26.2	19.4	0.73	257	2.25	0.08	8.1	21.7	350
W228643		15.30	0.11	3.3	4.44	0.063	2.87	32.5	14.0	0.95	336	2.14	0.03	10.3	38.5	270
W228644		14.20	0.08	2.8	10.55	0.056	2.69	28.4	12.8	1.14	507	2.40	0.02	8.9	46.2	370
W228645		9.07	0.05	1.8	3.45	0.037	1.67	19.4	8.7	1.36	1140	1.52	0.02	5.8	22.6	360
W228646		16.80	0.08	3.3	4.37	0.072	3.15	33.9	14.6	1.13	455	1.52	0.03	10.7	43.3	480
W228647		15.30	0.09	3.0	2.42	0.060	2.91	29.4	16.1	1.74	790	0.38	0.02	10.2	33.0	520
W228648		14.10	0.08	2.8	1.060	0.060	2.70	28.0	21.4	2.02	937	0.35	0.02	9.5	35.9	880

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Finalized Date: 12- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139657

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228613		14.7	114.0	<0.002	0.17	0.42	14.1	1	1.6	117.5	0.59	<0.05	8.01	0.487	0.67	1.6
W228614		25.1	113.5	<0.002	0.45	0.88	16.2	2	1.7	110.0	0.62	0.06	8.86	0.484	0.71	1.8
W228615		18.7	123.5	<0.002	0.22	0.43	17.6	1	1.9	114.5	0.69	0.06	9.72	0.516	0.70	1.9
W228616		15.4	129.0	<0.002	0.30	0.51	18.0	1	1.9	121.5	0.73	0.07	10.05	0.532	0.69	2.0
W228617		14.2	105.0	<0.002	0.28	0.46	14.8	1	1.8	103.5	0.62	<0.05	8.15	0.488	0.62	1.7
W228618		15.4	109.0	<0.002	0.24	0.45	14.5	1	1.6	97.3	0.61	0.06	8.35	0.486	0.71	1.7
W228619		51.8	167.0	0.002	4.62	5.49	20.6	1	2.8	92.6	0.62	<0.05	8.92	0.405	13.30	1.7
W228620		13.7	108.5	<0.002	0.15	0.38	15.1	1	1.6	120.5	0.64	<0.05	8.46	0.497	0.64	1.7
W228621		19.5	116.0	<0.002	0.15	0.37	17.2	1	1.8	101.5	0.69	0.06	9.18	0.531	0.66	1.9
W228622		14.0	119.0	<0.002	0.16	0.45	17.3	1	1.8	131.0	0.70	0.08	9.20	0.520	0.77	1.9
W228623		15.2	100.5	<0.002	0.10	0.33	14.5	1	1.5	104.5	0.59	<0.05	7.89	0.478	0.54	1.6
W228624		18.6	113.0	<0.002	0.21	0.62	15.8	1	1.8	113.0	0.69	0.07	9.06	0.521	0.65	1.8
W228625		1.0	1.0	<0.002	<0.01	0.07	0.1	1	<0.2	49.2	<0.05	<0.05	0.09	<0.005	<0.02	0.6
W228626		15.7	122.5	<0.002	0.18	0.41	17.3	1	1.8	116.0	0.72	0.05	9.53	0.526	0.65	1.9
W228627		12.6	111.0	<0.002	0.13	0.35	16.0	1	1.6	119.0	0.61	0.05	8.41	0.503	0.58	1.7
W228628		15.7	110.0	0.003	0.18	0.46	14.2	1	1.7	115.5	0.72	<0.05	8.65	0.499	0.63	1.8
W228629		13.7	111.0	0.002	0.16	0.40	14.2	1	1.7	112.5	0.70	<0.05	8.55	0.496	0.61	1.8
W228630		13.9	103.5	0.002	0.18	0.48	13.3	1	1.6	122.5	0.67	0.08	8.02	0.473	0.63	1.6
W228631		14.6	97.6	0.003	0.20	0.42	12.7	1	1.6	108.5	0.63	0.05	7.85	0.456	0.56	1.6
W228632		11.5	103.5	<0.002	0.20	0.44	13.3	1	1.6	107.5	0.64	<0.05	8.06	0.478	0.56	1.7
W228633		1.3	1.0	<0.002	<0.01	0.07	0.2	1	<0.2	49.2	<0.05	<0.05	0.08	<0.005	<0.02	0.7
W228634		12.8	109.5	0.003	0.32	0.57	13.6	1	1.7	110.0	0.66	0.05	8.54	0.470	0.63	1.8
W228635		16.3	110.0	0.002	0.44	0.67	12.9	1	1.6	122.5	0.64	0.05	8.05	0.441	0.64	1.7
W228636		8.8	91.6	<0.002	0.08	0.28	10.9	1	1.4	168.5	0.58	0.05	7.13	0.411	0.51	1.4
W228637		11.7	118.5	<0.002	0.06	0.27	12.6	1	1.6	196.0	0.66	<0.05	8.25	0.451	0.59	1.6
W228638		13.2	135.5	<0.002	0.08	0.32	13.8	1	2.3	201	0.70	0.05	8.87	0.483	0.78	1.8
W228639		12.7	115.0	<0.002	0.07	0.27	12.8	1	1.6	180.0	0.62	0.05	7.82	0.446	0.69	1.6
W228640		14.6	141.5	<0.002	0.14	0.41	15.1	1	1.9	146.0	0.74	0.05	9.61	0.517	0.79	1.9
W228641		16.3	156.5	<0.002	0.28	0.48	16.6	1	2.0	136.0	0.83	0.06	10.20	0.532	0.93	2.1
W228642		15.6	97.9	0.014	0.55	1.76	19.0	4	1.6	191.5	0.60	0.08	8.30	0.424	5.71	2.6
W228643		23.9	128.5	0.007	4.54	2.77	14.0	3	2.0	94.0	0.80	<0.05	10.50	0.427	18.15	2.7
W228644		21.1	114.0	0.008	5.00	31.8	13.8	2	1.9	113.5	0.65	0.08	8.86	0.429	33.4	3.0
W228645		8.6	74.2	0.002	2.50	9.08	8.1	1	1.4	696	0.44	0.06	5.51	0.261	10.50	2.3
W228646		22.2	137.0	0.005	4.76	5.69	17.3	2	2.1	120.0	0.77	0.07	10.45	0.502	12.80	2.7
W228647		18.1	129.5	0.002	4.19	3.78	15.6	1	2.0	155.0	0.77	0.05	9.30	0.543	4.48	1.9
W228648		21.7	120.0	<0.002	4.01	1.94	15.1	1	1.8	205	0.71	0.07	8.36	0.513	2.59	1.7

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CERTIFICATE OF ANALYSIS WH17139657

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W228613		125	1.0	18.7	62	90.8	<0.01
W228614		131	1.0	20.1	69	95.9	<0.01
W228615		136	1.1	21.8	66	106.0	<0.01
W228616		141	1.1	22.3	64	108.0	<0.01
W228617		126	1.0	19.0	60	92.6	<0.01
W228618		128	1.0	19.7	59	93.3	<0.01
W228619		143	11.9	19.3	106	86.4	0.57
W228620		130	1.0	19.5	63	94.6	0.01
W228621		136	1.1	21.9	74	101.5	<0.01
W228622		134	1.1	21.8	65	107.0	<0.01
W228623		124	1.0	21.9	66	91.3	<0.01
W228624		137	1.1	20.7	68	99.9	<0.01
W228625		2	0.1	0.7	16	<0.5	<0.01
W228626		135	1.1	21.6	75	104.0	<0.01
W228627		131	1.0	19.5	60	95.3	<0.01
W228628		132	1.1	19.4	63	119.0	<0.01
W228629		129	1.0	19.5	62	98.1	<0.01
W228630		126	1.3	17.9	65	91.9	<0.01
W228631		122	1.0	17.1	59	91.7	0.01
W228632		126	1.0	20.2	59	94.2	<0.01
W228633		2	0.1	0.7	17	<0.5	<0.01
W228634		124	1.0	19.0	69	93.1	<0.01
W228635		116	1.0	18.2	117	89.6	<0.01
W228636		109	0.9	16.9	63	82.5	<0.01
W228637		111	1.0	18.8	58	95.1	<0.01
W228638		119	1.0	19.8	67	104.5	<0.01
W228639		113	0.9	18.1	75	94.6	<0.01
W228640		133	1.2	21.7	96	106.5	<0.01
W228641		136	1.2	22.4	71	113.5	<0.01
W228642		134	4.7	14.5	177	95.3	0.03
W228643		117	5.2	19.6	109	110.0	0.04
W228644		126	9.2	20.6	106	96.4	4.96
W228645		72	5.3	16.0	48	64.4	0.48
W228646		149	7.1	22.2	130	116.5	0.14
W228647		142	10.9	20.3	98	103.0	0.11
W228648		134	5.2	21.0	95	96.2	0.04

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CERTIFICATE OF ANALYSIS WH17139657

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- AUG- 2017
Account: RCM

CERTIFICATE WH17138079

Project: Nadaleen

P.O. No.: N17- 031

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 5- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

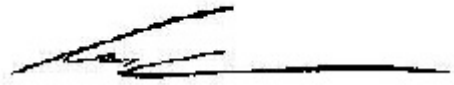
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17138079

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229433		11.32	0.07	1.74	899	230	0.52	0.06	16.80	0.04	24.2	2.5	19	5.63	9.7	0.87
W229434		5.30	0.07	1.29	135.5	110	0.46	0.04	17.10	0.03	22.2	2.0	15	3.56	11.1	0.79
W229435		11.86	0.28	2.14	260	120	0.76	0.09	19.50	0.06	27.7	3.4	21	5.15	11.2	1.01
W229436		9.34	1.21	3.15	7240	360	1.06	0.13	19.55	0.07	36.6	5.8	33	11.85	30.4	1.41
W229437		12.78	0.12	2.62	775	220	1.02	0.07	21.6	0.04	30.6	4.2	27	8.72	13.4	1.13
W229438		7.76	0.18	3.21	134.5	690	1.08	0.08	18.00	0.07	39.3	5.1	37	11.10	21.8	1.39
W229439		5.94	0.14	4.51	345	270	1.24	0.10	11.45	0.06	52.5	6.5	49	10.60	23.8	1.72
W229440		8.10	0.12	2.39	149.5	200	0.79	0.06	23.5	0.09	32.2	4.5	26	7.32	12.0	1.04
W229441		11.26	0.13	5.06	158.5	280	1.60	0.12	9.54	0.03	55.7	7.9	52	20.0	26.6	2.16
W229442		10.04	0.16	3.85	105.5	490	1.36	0.09	14.70	0.08	49.4	6.2	45	16.10	23.1	1.70
W229443		11.50	0.12	3.61	109.5	190	1.29	0.10	13.45	0.06	44.0	5.6	40	14.80	15.3	1.68
W229444		9.66	0.24	4.82	399	430	1.70	0.11	10.25	0.07	54.8	8.0	54	24.9	22.4	2.12
W229445		7.32	0.86	1.55	>10000	80	0.53	0.06	26.3	0.16	22.8	2.5	18	3.58	6.8	0.84
W229446		6.42	0.14	2.59	1005	110	0.89	0.07	22.0	0.08	30.7	3.8	28	7.50	10.2	1.37
W229447		0.34	0.65	1.89	>10000	140	0.53	2.61	26.3	0.16	27.5	4.4	26	6.12	15.4	1.38
W229448		5.82	0.60	2.55	>10000	110	0.73	0.09	16.00	0.25	31.9	4.1	30	7.28	14.0	1.32
W229449		7.02	<0.01	0.06	89.4	20	0.08	0.02	20.7	0.08	1.04	0.5	1	0.13	1.2	0.45
W229450		10.86	0.52	4.68	4420	160	1.43	0.11	10.40	0.07	53.4	7.4	50	20.2	26.3	2.19
W229451		12.48	0.83	4.56	8980	260	1.30	0.11	8.79	0.12	55.4	7.7	50	17.00	26.2	2.15
W229452		<0.02	0.79	4.50	9690	250	1.15	0.11	8.38	0.12	53.7	7.7	50	17.05	26.1	2.14
W229453		12.02	0.76	3.78	>10000	210	0.98	0.10	11.10	0.10	45.8	6.4	43	11.55	17.3	1.81
W229454		6.84	0.01	0.06	42.6	20	0.07	0.03	21.0	0.06	1.13	0.6	1	0.15	2.3	0.48
W229455		11.62	0.66	3.92	>10000	240	1.13	0.11	11.65	0.11	48.0	6.5	42	13.05	18.8	1.87
W229456		11.04	0.05	1.83	150.0	190	0.79	0.06	26.4	0.04	23.1	2.8	19	6.01	9.9	0.91
W229457		12.36	0.03	1.82	106.0	160	0.63	0.05	28.2	0.05	21.9	3.1	18	5.85	14.7	0.85
W229458		11.18	0.04	1.34	124.5	170	0.44	0.04	29.7	0.08	16.70	2.2	15	4.37	7.5	0.69
W229459		11.54	0.03	0.90	62.4	240	0.37	0.04	31.7	0.02	12.50	1.8	6	2.60	4.8	0.48
W229460		11.46	0.08	3.10	86.4	250	0.89	0.09	19.25	0.05	37.1	5.1	30	12.00	17.8	1.23
W229461		0.36	0.63	1.87	>10000	140	0.47	2.65	25.9	0.15	27.4	4.7	24	5.72	16.0	1.38
W229462		5.98	0.09	3.31	91.8	250	1.18	0.10	11.65	0.04	40.2	6.0	37	16.50	14.8	1.50
W229463		5.78	0.10	1.30	33.4	260	0.54	0.06	30.4	0.05	18.60	3.4	11	5.10	10.0	0.66
W229464		8.02	0.04	1.00	23.2	70	0.42	0.04	31.8	0.03	13.90	2.0	8	4.07	7.0	0.36
W229465		7.86	0.05	0.93	68.0	50	0.44	0.05	27.6	0.08	13.85	1.8	8	2.25	5.9	0.63
W229466		7.78	0.13	0.97	518	100	0.36	0.04	19.60	0.03	13.45	2.3	8	2.56	7.3	1.55
W229467		4.10	0.32	1.83	6100	180	0.46	0.06	14.30	0.05	22.4	5.3	19	4.65	14.0	3.35
W229468		2.00	0.29	1.91	3940	210	0.47	0.06	13.80	0.05	21.6	5.7	19	4.85	14.3	3.53

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138079

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229433		4.36	0.11	1.5	0.872	0.016	0.90	11.7	8.6	8.55	352	1.53	0.01	2.9	6.5	330
W229434		3.09	0.11	1.6	2.40	0.011	0.65	12.1	6.7	7.42	396	0.43	0.01	2.3	5.0	420
W229435		5.16	0.12	1.9	0.670	0.018	1.13	15.4	8.1	4.24	385	1.31	0.02	3.5	8.8	340
W229436		7.95	0.15	1.6	1.380	0.029	1.67	21.3	11.5	2.29	286	3.14	0.02	5.1	20.2	400
W229437		6.58	0.15	1.5	0.461	0.023	1.44	17.3	11.6	2.61	206	0.58	0.02	4.1	10.8	330
W229438		7.79	0.15	1.6	1.090	0.021	1.76	22.9	12.9	2.36	284	0.61	0.02	4.8	15.0	800
W229439		11.55	0.17	3.0	0.990	0.035	2.41	28.7	16.9	2.49	340	0.83	0.02	7.4	17.3	670
W229440		6.12	0.15	1.3	0.584	0.021	1.31	18.9	9.6	1.52	311	0.40	0.01	3.8	10.1	370
W229441		13.00	0.14	3.1	1.025	0.038	2.92	30.2	23.9	2.90	538	1.04	0.03	8.2	21.9	640
W229442		9.87	0.15	2.4	0.717	0.030	2.26	27.0	19.5	2.12	243	1.11	0.02	6.5	17.3	720
W229443		9.06	0.15	2.3	0.423	0.028	2.16	24.3	18.9	3.54	273	0.83	0.03	6.2	14.4	460
W229444		12.40	0.15	2.6	1.075	0.039	2.80	30.5	27.0	3.65	427	0.86	0.03	8.1	21.3	670
W229445		3.99	0.11	1.0	2.90	0.015	0.80	12.8	6.0	1.93	1130	0.52	0.01	2.7	6.6	210
W229446		6.48	0.12	1.7	1.915	0.021	1.35	17.0	11.9	3.14	548	0.57	0.02	4.4	10.1	350
W229447		4.82	0.11	0.9	6.52	0.024	0.94	14.7	8.8	0.93	2310	1.74	0.01	2.6	12.6	340
W229448		6.66	0.12	1.4	4.54	0.032	1.32	18.5	13.0	2.23	822	1.01	0.01	4.2	10.8	360
W229449		0.20	0.15	<0.1	0.065	<0.005	0.02	0.5	0.9	12.85	205	0.13	0.01	0.1	1.4	180
W229450		11.70	0.15	2.6	2.85	0.033	2.46	29.5	30.3	3.22	705	1.26	0.02	7.3	21.9	660
W229451		11.85	0.13	2.7	4.98	0.031	2.40	30.1	27.1	4.75	1060	0.97	0.02	7.5	20.5	590
W229452		11.65	0.12	2.6	5.09	0.034	2.38	28.4	25.5	4.52	999	1.02	0.02	7.3	20.7	580
W229453		9.81	0.12	2.5	4.39	0.029	1.95	24.1	18.5	5.64	1040	1.07	0.02	6.5	16.2	460
W229454		0.20	0.12	<0.1	0.039	0.005	0.03	0.6	0.9	13.10	218	0.06	<0.01	0.2	1.4	210
W229455		10.20	0.13	2.5	4.02	0.030	2.07	26.2	19.5	5.25	1120	0.94	0.02	6.9	16.4	510
W229456		4.56	0.11	0.9	0.515	0.016	0.98	12.5	9.6	2.16	239	0.59	0.01	2.9	7.7	210
W229457		4.63	0.11	0.9	0.527	0.015	0.98	12.1	8.7	1.74	146	0.28	0.01	2.9	7.8	220
W229458		3.36	0.10	0.6	0.389	0.011	0.72	9.5	6.6	1.34	146	0.52	0.01	2.1	5.8	260
W229459		2.26	0.09	0.5	0.227	0.006	0.48	6.5	4.9	0.95	129	0.27	0.01	1.2	4.5	130
W229460		7.66	0.14	1.9	0.497	0.024	1.84	19.1	18.0	2.76	170	0.65	0.02	5.0	13.9	440
W229461		4.80	0.11	0.8	6.09	0.020	0.92	13.9	8.4	0.91	2230	1.70	0.01	2.5	13.5	340
W229462		8.51	0.23	2.4	0.392	0.025	2.04	20.9	24.9	5.34	212	1.34	0.03	5.8	15.3	420
W229463		3.41	0.10	0.7	0.278	0.012	0.74	9.9	8.8	1.44	123	0.83	0.01	2.1	9.3	180
W229464		2.65	0.11	0.6	0.165	0.009	0.58	7.6	7.0	1.41	99	0.44	0.01	1.7	4.8	170
W229465		2.37	0.13	0.6	0.363	0.008	0.50	7.0	5.6	3.85	238	0.47	0.01	1.5	4.6	170
W229466		2.36	0.13	0.6	0.856	0.007	0.54	6.8	6.0	9.85	654	0.76	0.02	1.5	6.1	170
W229467		4.22	0.10	1.2	2.75	0.014	0.99	10.3	10.3	7.93	920	2.00	0.02	3.1	13.6	350
W229468		4.32	0.07	1.3	2.69	0.014	1.03	9.6	9.9	7.57	861	2.18	0.02	3.1	14.1	320

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CERTIFICATE OF ANALYSIS WH17138079

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229433		9.1	30.9	<0.002	0.51	1.96	2.7	1	0.5	130.0	0.22	<0.05	3.96	0.084	1.92	9.8
W229434		4.8	22.1	<0.002	0.29	1.40	2.0	1	0.4	154.5	0.16	<0.05	3.23	0.063	2.59	7.6
W229435		9.4	37.4	<0.002	0.54	1.61	3.1	2	0.7	293	0.25	<0.05	4.76	0.104	2.75	8.4
W229436		15.8	59.2	0.004	1.31	11.95	4.9	3	1.1	392	0.38	<0.05	6.52	0.148	4.95	11.7
W229437		6.6	49.2	<0.002	0.37	2.10	4.0	2	0.8	485	0.30	<0.05	5.49	0.121	1.41	10.1
W229438		7.1	59.3	0.002	0.44	1.59	4.7	2	0.9	360	0.36	<0.05	6.53	0.145	2.55	7.4
W229439		9.0	86.3	<0.002	0.82	1.77	6.8	2	1.5	208	0.54	<0.05	9.82	0.214	2.53	7.3
W229440		5.2	46.7	0.002	0.31	1.14	3.8	2	0.8	352	0.27	<0.05	5.15	0.112	1.62	9.1
W229441		9.2	108.5	<0.002	0.49	1.02	7.6	2	1.6	166.5	0.62	<0.05	11.10	0.241	2.54	4.5
W229442		8.6	87.5	0.002	0.46	0.66	5.8	2	1.3	275	0.48	<0.05	8.43	0.185	1.31	7.4
W229443		8.7	83.7	<0.002	0.36	1.07	5.3	2	1.2	249	0.44	<0.05	8.06	0.183	1.28	5.7
W229444		10.4	118.5	<0.002	0.84	3.64	7.4	3	1.6	188.5	0.60	<0.05	10.40	0.235	4.61	5.2
W229445		6.9	36.6	<0.002	1.26	60.6	2.4	3	0.5	651	0.19	<0.05	3.67	0.077	16.85	15.1
W229446		7.6	62.6	<0.002	0.69	7.31	3.9	2	0.8	446	0.32	<0.05	5.79	0.128	9.06	7.7
W229447		7.4	40.4	<0.002	1.43	46.3	5.3	2	0.7	1045	0.18	0.08	3.29	0.088	24.7	6.2
W229448		7.8	60.9	<0.002	4.53	221	3.8	6	0.8	302	0.31	0.11	5.61	0.122	25.1	13.3
W229449		1.3	1.0	<0.002	<0.01	0.28	0.1	1	<0.2	47.4	<0.05	<0.05	0.08	<0.005	0.02	0.6
W229450		10.8	115.0	<0.002	1.62	14.10	6.8	3	1.5	151.5	0.53	<0.05	10.05	0.217	10.20	7.1
W229451		10.4	113.5	<0.002	1.87	26.2	6.8	3	1.4	214	0.56	<0.05	10.25	0.219	16.20	5.9
W229452		10.1	112.5	<0.002	1.90	27.5	6.7	3	1.5	204	0.53	<0.05	9.82	0.216	15.60	5.8
W229453		9.1	88.5	<0.002	2.20	56.3	5.6	3	1.1	256	0.47	<0.05	8.56	0.186	18.05	5.6
W229454		1.3	1.2	<0.002	0.01	0.13	0.1	1	<0.2	47.3	<0.05	<0.05	0.09	<0.005	0.03	0.6
W229455		9.1	97.1	<0.002	1.84	39.2	6.1	3	1.2	307	0.50	<0.05	9.14	0.192	18.95	7.9
W229456		5.5	42.6	<0.002	0.29	0.63	2.8	2	0.6	657	0.20	<0.05	3.72	0.084	1.25	12.8
W229457		5.3	42.1	<0.002	0.26	0.32	2.8	1	0.6	587	0.20	<0.05	3.70	0.083	0.60	12.1
W229458		5.3	29.9	<0.002	0.28	0.69	2.1	2	0.4	780	0.15	<0.05	2.80	0.060	1.11	14.7
W229459		4.1	17.9	<0.002	0.14	0.36	1.4	<1	0.3	926	0.10	<0.05	1.67	0.038	0.79	14.5
W229460		7.5	71.2	<0.002	0.41	0.35	4.9	1	0.9	462	0.38	<0.05	6.82	0.150	0.89	9.2
W229461		8.0	40.7	0.002	1.45	43.7	5.6	1	0.6	1025	0.18	0.05	3.29	0.087	24.1	6.2
W229462		9.6	80.7	<0.002	0.50	0.42	5.3	1	1.1	204	0.44	<0.05	7.60	0.169	0.72	5.6
W229463		7.8	30.4	0.002	0.29	0.22	2.3	<1	0.4	1205	0.17	<0.05	2.81	0.061	0.63	15.6
W229464		7.0	22.6	<0.002	0.16	0.19	1.7	1	0.3	2050	0.12	<0.05	2.29	0.048	0.59	16.4
W229465		7.5	17.4	<0.002	0.30	1.37	1.6	<1	0.3	1145	0.12	<0.05	2.16	0.045	1.34	14.3
W229466		8.9	19.0	<0.002	1.00	3.19	1.5	1	0.3	165.5	0.12	<0.05	2.05	0.046	4.24	11.3
W229467		19.2	36.1	<0.002	3.29	18.45	2.9	2	0.6	167.0	0.22	<0.05	3.99	0.087	15.30	6.7
W229468		19.5	37.3	<0.002	3.43	14.25	3.0	2	0.6	162.5	0.22	<0.05	4.01	0.090	14.30	6.7

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 14- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17138079

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229433		32	1.4	7.9	7	60.2		0.03
W229434		26	1.2	7.8	5	65.4		0.04
W229435		40	1.8	9.1	12	76.3		0.30
W229436		80	1.5	12.5	19	63.5		0.57
W229437		42	0.9	9.2	21	58.6		0.09
W229438		60	1.3	13.7	26	63.3		0.06
W229439		74	3.0	16.5	18	112.0		0.10
W229440		49	1.5	11.3	12	52.9		0.09
W229441		81	2.3	17.0	27	113.5		0.01
W229442		66	1.5	15.5	48	91.8		0.01
W229443		62	1.5	13.8	33	89.5		0.08
W229444		79	3.5	17.4	47	103.0		0.37
W229445		31	2.1	8.2	48	40.4	1.870	5.54
W229446		43	2.9	9.8	38	66.8		1.16
W229447		33	18.2	15.5	24	33.1	1.410	2.63
W229448		43	3.2	9.6	65	53.8	8.47	7.60
W229449		2	0.1	0.7	16	<0.5		<0.01
W229450		79	4.7	17.4	49	101.5		1.06
W229451		79	4.9	16.2	51	103.5		2.37
W229452		79	4.6	15.8	48	100.5		2.32
W229453		61	4.3	13.3	33	92.8	2.68	2.48
W229454		2	0.1	0.8	17	0.5		<0.01
W229455		64	4.3	14.0	42	96.3	1.795	2.50
W229456		31	1.0	7.0	53	37.1		<0.01
W229457		28	0.5	6.5	34	34.9		<0.01
W229458		25	0.4	5.5	46	25.7		<0.01
W229459		16	0.2	3.6	13	16.1		<0.01
W229460		50	0.7	11.6	20	74.2		<0.01
W229461		33	18.7	15.5	25	30.5	1.440	2.54
W229462		56	0.8	13.2	22	93.5		<0.01
W229463		25	0.4	5.0	21	23.0		<0.01
W229464		18	0.3	4.3	11	21.2		<0.01
W229465		16	0.7	4.1	13	19.7		0.09
W229466		16	0.8	4.2	5	20.8		0.21
W229467		29	1.5	6.6	8	41.8		0.51
W229468		30	1.5	6.5	10	45.2		0.52

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 14- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17138079

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
Hg- MS42	LOG- 21	LOG- 21d	LOG- 23
ME- MS61	ME- OG62	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

CERTIFICATE WH17139653

Project: Nadaleen

P.O. No.: N17- 032

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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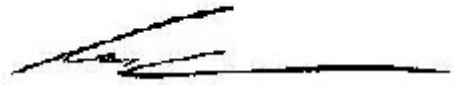
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139653

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229469		3.85	0.11	2.67	119.0	120	0.79	0.07	16.00	0.06	24.8	4.7	32	7.66	16.2	1.72
W229470		7.44	0.07	1.81	104.5	70	0.73	0.06	28.4	0.06	20.9	3.1	21	4.76	12.7	0.72
W229471		7.72	0.05	2.24	103.5	120	0.91	0.06	23.7	0.04	25.9	3.8	26	6.79	13.0	0.99
W229472		<0.02	0.06	2.26	104.0	120	0.83	0.07	24.8	0.04	26.5	3.9	25	6.90	14.0	1.02
W229473		4.31	0.08	3.61	161.0	130	1.33	0.09	15.20	0.06	42.2	5.3	38	12.90	20.1	1.27
W229474		4.32	0.27	2.63	7610	220	0.86	0.08	22.6	0.10	32.6	4.6	31	7.27	15.3	0.93
W229475		6.67	0.87	2.93	>10000	120	1.01	0.09	16.80	0.08	31.6	5.6	34	6.89	18.0	1.18
W229476		8.08	0.04	2.63	207	130	1.17	0.09	18.15	0.06	33.9	4.3	27	9.19	16.0	1.11
W229477		7.30	0.03	3.67	51.7	200	1.31	0.11	12.75	0.08	44.9	6.3	38	17.40	19.7	1.66
W229478		7.47	0.04	3.69	11.2	180	1.45	0.10	17.35	0.07	43.9	6.8	39	19.75	20.9	1.73
W229479		7.97	0.04	2.67	14.5	260	1.15	0.08	21.7	0.07	33.3	5.2	29	9.44	15.3	1.37
W229480		4.91	<0.01	0.07	<0.2	30	<0.05	<0.01	21.0	<0.02	<0.01	<0.1	2	<0.05	<0.2	0.47
W229481		8.22	0.04	4.08	14.1	220	1.42	0.11	14.25	0.09	47.1	7.6	44	19.40	23.7	2.02
W229482		8.23	0.06	4.02	24.6	190	1.44	0.12	13.20	0.07	45.9	7.4	41	18.10	25.8	2.05
W229483		0.24	0.09	3.71	2690	200	0.99	0.14	19.50	0.13	38.9	11.0	41	10.15	42.5	3.14
W229484		7.78	0.03	3.55	27.9	190	1.31	0.11	18.35	0.07	40.3	6.4	35	12.10	22.7	1.68
W229485		8.10	0.04	1.73	72.5	120	0.65	0.06	28.4	0.09	19.90	3.5	18	3.16	11.3	0.88
W229486		7.54	0.05	1.44	63.0	150	0.57	0.05	28.4	0.08	18.10	2.9	16	2.25	10.5	0.76
W229487		7.83	0.05	1.60	24.7	110	0.68	0.06	28.8	0.12	21.0	3.2	18	4.04	10.1	0.78
W229488		7.39	0.04	3.25	55.1	280	1.15	0.10	20.1	0.07	33.9	5.5	32	11.65	18.9	1.34
W229489		3.40	0.06	3.00	54.7	280	1.06	0.09	20.9	0.08	33.1	5.0	30	10.85	17.4	1.30
W229490		8.38	0.05	1.55	21.6	120	0.64	0.06	28.2	0.07	19.05	3.1	18	4.74	9.8	0.77
W229491		7.70	0.06	1.41	9.4	160	0.49	0.05	30.7	0.10	17.05	2.7	16	4.92	8.8	0.74
W229492		7.68	0.08	2.96	11.3	210	0.99	0.09	20.0	0.06	34.3	5.6	33	16.60	17.8	1.48
W229493		7.87	0.06	3.13	12.0	180	1.06	0.09	20.6	0.10	38.1	5.7	36	17.10	16.9	1.54
W229494		4.95	0.01	0.07	0.7	20	0.07	0.04	21.7	0.05	1.21	0.8	1	0.19	5.2	0.46
W229495		7.66	0.04	2.95	9.7	220	0.91	0.10	22.8	0.05	31.9	5.3	31	18.20	21.7	1.38
W229496		8.27	0.06	1.77	24.3	140	0.79	0.06	26.2	0.07	23.8	3.3	20	5.78	9.4	0.90
W229497		0.24	0.09	3.54	2550	190	0.88	0.14	18.25	0.10	37.9	10.6	39	9.94	40.3	2.96
W229498		7.88	0.07	3.68	135.0	230	1.14	0.11	13.10	0.11	46.4	6.5	44	9.27	24.6	1.83
W229499		8.89	0.22	2.68	1180	190	0.85	0.09	22.3	0.18	33.3	5.1	33	5.33	21.0	1.38
W229500		8.30	0.07	3.51	141.5	200	1.07	0.11	14.95	0.14	43.4	6.1	41	7.89	26.1	1.72
W229501		7.79	0.05	1.99	19.1	210	0.68	0.07	27.8	0.12	24.9	3.7	23	7.84	14.1	0.96
W229502		7.91	0.04	1.46	15.5	970	0.66	0.06	28.7	0.10	20.5	2.9	17	3.67	12.5	0.77
W229503		7.55	0.07	2.28	63.0	120	0.89	0.08	25.0	0.07	28.8	4.3	26	5.68	13.8	1.07
W229504		8.06	0.06	3.21	31.1	230	1.09	0.11	21.5	0.07	37.6	5.8	35	8.09	27.7	1.53

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VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139653

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229469		6.81	0.06	1.4	0.722	0.019	1.52	12.3	14.2	8.01	543	3.27	0.02	4.0	10.9	340
W229470		4.52	0.06	0.8	0.535	0.016	1.01	11.0	10.9	2.30	240	0.46	0.01	2.8	6.8	250
W229471		5.43	0.08	1.1	0.689	0.015	1.25	13.6	15.2	3.03	236	0.52	0.02	3.4	8.2	290
W229472		5.50	0.09	1.1	0.664	0.020	1.29	13.9	15.8	3.08	242	0.53	0.02	3.6	8.2	300
W229473		9.11	0.08	1.8	0.895	0.030	1.98	21.6	29.2	3.64	320	0.70	0.03	5.7	13.6	480
W229474		6.86	0.08	1.3	1.455	0.019	1.43	17.0	16.2	1.54	525	0.28	0.02	4.3	11.2	380
W229475		7.98	0.08	1.6	2.85	0.025	1.62	17.1	15.7	3.48	853	0.76	0.02	4.9	12.3	350
W229476		7.32	0.09	1.6	0.341	0.021	1.45	18.0	16.1	4.30	285	0.62	0.02	4.5	10.2	320
W229477		10.10	0.09	2.0	0.082	0.029	2.09	24.1	23.4	4.46	263	0.30	0.03	6.2	17.9	430
W229478		9.89	0.08	1.8	0.061	0.028	2.09	23.7	26.4	3.65	246	0.32	0.04	6.0	17.7	410
W229479		7.00	0.08	1.2	0.054	0.023	1.46	17.5	16.9	2.52	222	0.27	0.03	4.3	13.0	290
W229480		<0.05	<0.05	<0.1	0.011	<0.005	0.03	<0.5	<0.2	12.90	207	<0.05	0.01	<0.1	<0.2	210
W229481		10.55	0.09	1.8	0.060	0.035	2.25	25.2	32.8	3.76	243	0.30	0.04	6.4	19.8	470
W229482		10.30	0.08	1.7	0.064	0.031	2.17	24.5	33.2	5.01	262	0.78	0.04	6.3	19.9	420
W229483		9.50	0.06	1.7	3.65	0.040	1.75	19.8	10.1	1.47	1240	1.52	0.02	5.7	24.9	390
W229484		9.10	0.07	1.5	0.123	0.025	1.85	21.4	27.5	3.18	238	0.22	0.03	5.5	17.0	420
W229485		4.67	0.07	0.8	0.151	0.015	0.85	10.6	9.7	1.87	198	0.48	0.02	2.7	8.8	190
W229486		3.75	0.06	0.6	0.136	0.014	0.70	9.4	6.9	1.94	187	0.50	0.02	2.2	7.0	180
W229487		4.11	0.07	0.8	0.121	0.012	0.80	10.6	11.2	2.10	217	0.45	0.02	2.5	7.3	220
W229488		8.39	0.08	1.4	0.118	0.025	1.66	18.6	23.8	2.86	253	0.23	0.03	5.1	14.6	380
W229489		7.88	0.09	1.3	0.111	0.024	1.53	17.8	21.5	2.93	265	0.28	0.03	4.7	13.0	360
W229490		4.00	0.06	0.8	0.066	0.013	0.73	9.8	14.0	1.96	196	0.45	0.03	2.4	7.5	200
W229491		3.48	0.06	0.6	0.070	0.013	0.58	9.0	23.9	1.44	223	0.46	0.10	2.1	6.4	210
W229492		7.53	0.07	1.3	0.068	0.026	1.26	18.4	71.4	2.83	254	0.51	0.17	4.6	14.0	410
W229493		7.85	0.08	1.4	0.070	0.027	1.36	20.4	62.0	2.58	304	0.47	0.20	4.9	14.8	520
W229494		0.26	0.09	<0.1	0.007	<0.005	0.03	0.6	1.4	13.15	209	0.24	0.01	0.3	1.5	190
W229495		7.44	0.08	1.2	0.063	0.024	1.26	17.7	56.1	2.19	359	0.20	0.18	4.5	13.6	380
W229496		4.51	0.08	1.0	0.165	0.014	0.83	11.8	16.5	2.60	400	0.44	0.03	2.9	7.8	230
W229497		9.13	0.07	1.6	3.57	0.038	1.67	19.2	9.7	1.38	1160	1.49	0.02	5.6	23.6	360
W229498		9.43	0.08	1.9	0.630	0.028	1.74	24.4	30.0	4.57	549	0.72	0.04	6.1	18.0	720
W229499		6.91	0.08	1.2	1.550	0.021	1.26	17.8	14.2	2.74	733	0.51	0.03	4.4	13.5	490
W229500		9.12	0.09	1.8	1.005	0.028	1.63	23.4	28.8	4.27	649	0.60	0.04	5.8	17.3	680
W229501		5.06	0.07	0.9	0.124	0.019	0.90	12.7	20.1	1.43	579	0.34	0.03	3.3	9.5	310
W229502		3.79	0.07	0.7	0.115	0.012	0.66	10.3	10.1	1.33	686	0.31	0.02	2.5	7.1	230
W229503		5.77	0.05	1.0	0.323	0.019	1.04	15.8	18.6	2.04	966	0.40	0.03	3.7	10.7	310
W229504		8.19	0.06	1.2	0.118	0.028	1.41	20.6	33.9	2.05	1400	0.32	0.04	5.1	15.6	390

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139653

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229469		11.3	53.0	<0.002	0.72	1.94	4.1	2	1.0	156.0	0.29	<0.05	5.46	0.130	3.44	5.4
W229470		8.6	36.7	<0.002	0.34	1.30	3.0	2	0.7	563	0.20	<0.05	3.72	0.087	1.79	13.2
W229471		6.5	46.9	<0.002	0.23	1.06	3.5	2	0.7	494	0.25	<0.05	4.73	0.109	2.41	9.9
W229472		6.8	47.3	<0.002	0.23	1.10	3.6	2	0.7	520	0.25	<0.05	4.83	0.112	2.42	10.4
W229473		9.7	79.5	<0.002	0.32	2.18	5.8	3	1.1	283	0.42	<0.05	7.92	0.178	3.36	6.8
W229474		7.7	59.0	<0.002	0.92	23.4	4.3	2	0.8	465	0.31	<0.05	5.64	0.132	7.68	9.6
W229475		8.8	66.5	0.002	1.37	55.8	5.2	3	1.0	286	0.35	<0.05	6.37	0.145	14.35	9.4
W229476		7.0	61.9	<0.002	0.17	1.13	4.7	2	0.9	327	0.33	<0.05	6.23	0.131	1.12	8.8
W229477		7.3	90.6	<0.002	0.20	0.36	6.3	2	1.3	214	0.46	<0.05	8.51	0.185	0.54	4.8
W229478		7.4	95.4	<0.002	0.17	0.28	6.4	3	1.2	331	0.45	<0.05	8.17	0.181	0.52	6.8
W229479		6.0	68.7	<0.002	0.12	0.25	4.5	2	0.9	457	0.32	<0.05	5.66	0.131	0.43	8.2
W229480		<0.5	<0.1	<0.002	<0.01	<0.05	<0.1	<1	<0.2	<0.2	<0.05	<0.05	<0.01	<0.005	<0.02	0.1
W229481		7.9	109.0	<0.002	0.08	0.28	6.8	2	1.4	259	0.47	<0.05	8.46	0.200	0.62	5.2
W229482		7.9	106.5	<0.002	0.27	0.32	6.6	2	1.4	253	0.46	<0.05	8.34	0.195	0.67	6.1
W229483		8.0	77.9	<0.002	2.62	8.54	9.3	2	1.3	733	0.41	0.07	5.61	0.276	9.72	2.3
W229484		7.0	91.7	<0.002	0.24	0.25	5.8	2	1.1	362	0.41	<0.05	7.26	0.170	0.56	5.7
W229485		6.8	46.1	<0.002	0.28	0.61	3.1	2	0.6	644	0.20	<0.05	3.54	0.082	0.44	14.4
W229486		6.1	37.6	<0.002	0.23	0.49	2.5	2	0.6	717	0.16	<0.05	2.98	0.068	0.40	13.0
W229487		6.9	40.5	<0.002	0.21	0.25	2.7	2	0.5	693	0.18	<0.05	3.50	0.078	0.30	13.7
W229488		7.5	78.0	<0.002	0.36	0.36	5.3	2	1.0	438	0.37	<0.05	6.74	0.157	0.52	8.8
W229489		11.4	72.5	<0.002	0.31	0.51	4.9	2	1.1	430	0.34	<0.05	6.23	0.144	0.51	8.6
W229490		6.8	39.1	<0.002	0.16	0.29	2.6	2	0.5	735	0.18	<0.05	3.25	0.074	0.30	13.6
W229491		6.1	31.7	<0.002	0.16	0.19	2.3	2	0.5	994	0.16	<0.05	2.89	0.066	0.28	14.1
W229492		8.4	72.0	<0.002	0.20	0.29	4.8	3	1.1	551	0.34	<0.05	6.24	0.144	0.44	8.9
W229493		8.1	81.9	<0.002	0.17	0.24	5.0	2	1.0	425	0.36	<0.05	6.62	0.156	0.49	9.3
W229494		1.3	1.3	<0.002	<0.01	0.08	0.2	1	<0.2	45.6	<0.05	<0.05	0.11	<0.005	<0.02	1.1
W229495		5.2	77.4	<0.002	0.15	0.19	4.7	1	0.9	411	0.34	<0.05	5.76	0.139	0.49	7.9
W229496		6.9	45.8	<0.002	0.22	0.25	2.9	2	0.6	1100	0.21	<0.05	4.16	0.090	0.45	12.7
W229497		7.9	75.6	0.002	2.49	8.19	8.8	1	1.3	702	0.39	0.06	5.58	0.259	9.62	2.3
W229498		11.1	88.7	<0.002	0.50	0.76	5.9	3	1.2	295	0.45	<0.05	8.58	0.189	1.37	6.9
W229499		8.1	65.6	<0.002	0.51	6.42	4.4	2	0.9	571	0.32	<0.05	6.02	0.133	5.10	12.9
W229500		9.8	84.6	<0.002	0.50	1.51	5.8	3	1.2	371	0.43	<0.05	8.08	0.176	1.99	7.5
W229501		6.9	50.6	<0.002	0.23	0.21	3.4	2	0.7	791	0.24	<0.05	4.39	0.098	0.50	13.3
W229502		6.7	36.2	<0.002	0.22	0.17	2.4	1	0.5	1115	0.18	<0.05	3.35	0.074	0.45	13.8
W229503		8.4	49.4	<0.002	0.33	0.65	3.6	2	0.7	728	0.27	<0.05	5.15	0.113	1.00	12.8
W229504		8.6	73.4	<0.002	0.21	0.25	5.3	2	1.1	573	0.38	<0.05	6.78	0.152	0.94	9.0

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VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139653

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W229469		42	2.0	9.0	14	51.3		0.06
W229470		31	1.3	6.6	17	30.6		0.03
W229471		36	1.0	7.8	14	41.2		0.02
W229472		36	1.1	8.1	19	42.9		0.02
W229473		52	2.0	13.1	20	69.2		0.03
W229474		44	1.7	11.1	13	59.2		0.26
W229475		50	2.1	9.6	13	60.2	1.865	1.02
W229476		40	1.4	10.7	17	61.1		0.02
W229477		51	0.7	13.8	31	79.5		<0.01
W229478		52	0.7	13.3	37	66.7		<0.01
W229479		39	0.5	10.0	36	45.6		<0.01
W229480		2	<0.1	<0.1	17	<0.5		<0.01
W229481		64	0.7	14.3	56	66.4		<0.01
W229482		61	0.7	13.9	59	66.1		<0.01
W229483		75	4.9	16.8	52	67.0		0.50
W229484		47	0.6	12.3	53	56.4		<0.01
W229485		27	0.5	6.3	33	29.7		<0.01
W229486		23	0.4	5.4	32	22.8		<0.01
W229487		25	0.3	6.4	34	28.9		<0.01
W229488		45	0.6	10.2	37	52.0		0.01
W229489		42	0.6	10.3	40	51.1		<0.01
W229490		25	0.3	5.8	29	24.7		<0.01
W229491		24	0.2	5.2	37	21.9		<0.01
W229492		46	0.5	10.2	45	48.4		<0.01
W229493		49	0.5	12.2	49	52.0		<0.01
W229494		3	0.3	0.8	15	<0.5		<0.01
W229495		47	0.4	9.7	43	42.8		0.01
W229496		25	0.4	7.2	34	37.5		<0.01
W229497		71	4.7	16.1	47	61.8		0.50
W229498		57	0.9	15.0	62	72.3		<0.01
W229499		42	0.9	10.8	63	47.1		0.66
W229500		56	1.2	13.9	68	64.9		0.03
W229501		31	0.3	7.6	38	31.8		<0.01
W229502		23	0.3	6.2	33	24.9		<0.01
W229503		35	0.5	8.2	39	39.1		0.05
W229504		50	0.5	10.6	51	46.4		0.01

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17139653

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 18- AUG- 2017
Account: RCM

CERTIFICATE WH17144032

Project: Nadaleen

P.O. No.: N17- 033

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

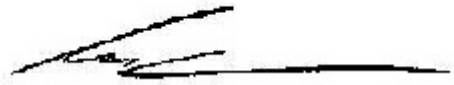
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17144032

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229505		7.58	0.16	4.30	37.3	170	1.13	0.22	17.80	0.09	48.2	8.3	48	12.55	41.2	1.96
W229506		7.96	0.09	4.52	72.8	450	1.25	0.18	14.85	0.08	52.6	9.8	49	15.60	34.9	1.94
W229507		7.60	0.05	2.04	25.6	120	0.53	0.10	28.3	0.11	26.7	3.8	21	5.27	15.8	0.83
W229508		7.74	0.09	1.53	24.5	60	0.44	0.06	28.3	0.18	21.2	4.6	16	2.94	10.9	0.70
W229509		7.52	0.13	6.18	41.7	230	1.44	0.24	12.15	0.06	66.5	13.9	40	21.3	201	2.98
W229510		7.06	0.05	8.09	96.1	300	2.10	0.33	0.94	<0.02	69.0	16.0	66	28.8	44.6	5.01
W229511		5.32	0.17	0.78	707	70	0.32	0.03	20.0	0.21	8.59	1.9	8	1.94	6.0	0.42
W229512		7.02	0.05	0.37	2360	50	0.20	0.03	20.6	0.06	5.88	1.4	4	0.90	6.5	0.30
W229513		4.96	0.14	0.37	4170	70	0.14	0.03	20.3	0.08	7.94	1.2	6	0.75	4.0	0.44
W229514		6.98	0.01	0.05	6.8	20	0.06	0.03	21.6	0.05	1.20	0.8	1	0.12	2.0	0.48
W229515		7.34	0.11	2.13	1515	200	0.64	0.06	15.60	0.03	24.7	3.4	21	6.15	6.0	1.01
W229516		9.70	0.05	0.40	8840	50	0.14	0.03	19.70	0.02	7.94	1.4	6	0.85	4.7	0.42
W229517		6.72	0.08	0.35	272	50	0.17	0.03	21.1	0.06	7.83	1.3	6	0.75	4.3	0.47
W229518		8.18	0.07	0.43	1385	40	0.20	0.03	21.1	0.12	9.66	1.8	6	1.06	7.1	0.47
W229519		<0.02	0.07	0.42	1375	40	0.24	0.03	20.6	0.11	9.56	1.8	6	1.04	6.7	0.47
W229520		8.86	0.12	0.81	189.0	70	0.31	0.04	19.80	0.03	13.35	1.7	9	2.17	7.4	0.44
W229521		11.18	0.60	1.03	123.0	70	0.42	0.05	18.80	0.81	14.70	2.4	12	4.02	11.3	0.49
W229522		0.34	0.69	6.73	471	230	2.20	0.27	2.27	0.35	60.3	23.2	105	36.6	66.9	6.27
W229523		12.18	0.07	1.36	125.0	110	0.44	0.05	17.30	0.12	18.40	2.2	13	4.33	10.1	0.62
W229524		11.76	0.26	0.81	1530	70	0.28	0.04	20.1	0.17	14.05	2.3	10	2.24	11.8	0.52
W229525		11.50	0.12	1.87	335	110	0.63	0.06	16.55	0.08	24.8	3.3	16	5.60	13.3	1.00
W229526		11.14	0.34	1.12	130.0	100	0.45	0.04	19.00	0.18	16.20	2.9	12	4.08	10.6	0.63
W229527		11.20	0.10	0.93	89.6	70	0.39	0.04	21.4	0.07	14.25	1.9	10	3.12	7.8	0.40
W229528		10.60	0.01	0.39	77.7	30	0.19	0.02	21.1	0.02	8.88	1.0	5	0.83	6.3	0.27
W229529		11.54	0.01	1.01	286	80	0.47	0.04	18.50	0.06	16.25	1.6	9	2.85	6.2	0.52
W229530		9.36	0.04	0.98	260	90	0.39	0.05	18.80	0.09	15.75	2.2	8	3.12	8.5	1.34
W229531		10.52	0.09	7.79	374	370	3.02	0.34	2.86	0.12	82.8	15.1	61	37.1	34.6	2.62
W229532		5.32	0.07	7.93	368	380	3.15	0.34	2.77	0.11	85.4	14.6	65	37.4	33.5	2.29
W229533		7.52	0.03	2.26	265	850	0.97	0.10	16.40	0.03	24.2	4.4	19	10.35	15.0	1.36
W229534		12.20	0.06	3.77	87.8	250	1.25	0.15	15.70	0.05	39.3	7.0	29	20.6	15.1	1.70
W229535		11.68	0.05	2.57	22.8	170	0.80	0.11	19.30	0.05	29.8	5.0	21	13.35	11.7	1.46
W229536		7.00	<0.01	0.06	<0.2	20	0.05	0.03	21.9	0.05	1.15	0.8	1	0.12	1.7	0.48
W229537		11.42	0.05	2.83	17.6	170	0.90	0.12	19.55	0.06	32.0	6.7	23	14.90	13.5	1.51
W229538		0.34	0.09	3.66	2630	200	0.86	0.15	18.60	0.12	38.7	11.7	43	10.10	42.6	3.06
W229539		10.66	0.07	3.03	42.5	240	0.92	0.13	22.0	0.03	33.2	7.2	25	16.85	12.2	1.55
W229540		11.98	0.05	3.09	22.8	260	0.94	0.13	21.2	0.05	33.9	5.6	24	17.40	11.9	1.33

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 18- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17144032

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229505		11.45	0.11	1.6	0.099	0.040	1.84	27.8	49.8	2.52	1280	0.49	0.05	7.4	22.4	510
W229506		12.10	0.12	1.9	0.112	0.038	1.99	29.5	55.1	3.18	1510	0.49	0.05	7.7	22.5	500
W229507		5.56	0.09	0.8	0.073	0.018	0.86	15.5	15.1	1.28	2430	0.21	0.05	3.6	9.5	210
W229508		4.09	0.07	0.7	0.079	0.011	0.65	12.1	7.7	1.67	3430	0.52	0.02	2.7	7.5	220
W229509		15.90	0.13	2.2	0.072	0.049	2.65	38.5	59.0	1.58	1640	0.88	0.04	8.7	26.3	390
W229510		22.7	0.15	3.1	0.054	0.075	3.64	36.5	94.1	1.48	352	0.17	0.06	12.1	36.9	510
W229511		2.15	0.10	0.5	1.545	0.005	0.36	5.3	4.4	12.10	1600	0.63	0.01	1.2	4.2	170
W229512		1.08	0.15	0.2	0.819	0.006	0.17	3.7	2.9	11.50	883	0.26	0.01	0.6	2.3	100
W229513		1.08	0.13	0.2	0.939	<0.005	0.17	4.6	2.4	11.85	914	0.52	0.01	0.6	2.7	140
W229514		0.23	0.16	<0.1	0.051	<0.005	0.02	0.6	1.0	13.35	224	0.05	0.01	0.2	1.5	200
W229515		5.85	0.14	1.1	2.43	0.016	1.07	14.1	8.3	9.40	569	0.58	0.01	2.9	7.6	330
W229516		1.17	0.13	0.2	0.948	0.006	0.19	4.8	2.1	12.05	585	0.34	0.01	0.6	2.9	110
W229517		1.03	0.16	0.2	0.771	0.005	0.17	4.5	1.9	13.00	503	0.70	0.01	0.6	2.9	110
W229518		1.29	0.14	0.2	1.230	0.005	0.21	5.9	2.9	12.90	475	0.39	0.01	0.6	4.1	150
W229519		1.29	0.15	0.2	1.080	<0.005	0.21	5.8	2.9	12.75	469	0.39	0.01	0.6	4.1	130
W229520		2.20	0.14	0.5	0.765	0.005	0.39	7.8	4.4	12.15	331	0.48	0.01	1.2	4.1	250
W229521		2.91	0.14	0.6	0.867	0.006	0.52	8.7	6.0	11.70	342	0.78	0.01	1.8	5.3	340
W229522		19.00	0.16	2.6	3.47	0.063	3.25	31.7	17.2	0.80	661	4.97	0.03	8.8	50.1	230
W229523		3.57	0.11	1.3	0.693	0.008	0.67	9.8	6.5	10.70	342	0.67	0.01	2.4	4.5	400
W229524		2.25	0.12	0.6	1.405	0.006	0.39	8.5	4.1	12.05	405	1.67	0.01	1.5	6.1	440
W229525		4.99	0.13	1.5	1.085	0.014	0.93	13.9	9.6	9.36	342	2.18	0.02	3.2	8.2	1000
W229526		3.03	0.13	0.8	0.844	0.008	0.55	9.6	6.1	11.00	330	2.37	0.01	1.9	7.5	540
W229527		2.56	0.15	0.6	0.614	0.007	0.44	8.9	4.9	11.60	344	1.51	0.01	1.5	4.1	600
W229528		1.20	0.17	0.3	0.265	<0.005	0.20	5.9	2.6	11.70	1040	0.20	0.01	0.7	1.1	510
W229529		2.96	0.15	0.9	0.584	0.008	0.51	10.1	5.8	10.30	1310	0.24	0.01	1.8	2.7	640
W229530		2.72	0.12	0.8	1.175	0.007	0.49	9.5	4.9	10.50	501	0.32	0.01	1.7	4.8	510
W229531		20.9	0.21	3.4	2.14	0.064	4.03	47.2	24.5	2.06	108	1.06	0.05	11.5	32.7	720
W229532		21.6	0.23	3.5	1.980	0.068	4.11	47.8	24.7	2.03	105	0.60	0.05	12.0	29.4	980
W229533		6.13	0.11	1.0	0.835	0.019	1.13	13.4	10.2	9.00	532	0.35	0.02	3.4	7.4	460
W229534		10.15	0.15	1.8	0.285	0.033	1.95	23.3	13.4	5.63	337	0.55	0.03	5.7	15.4	590
W229535		6.92	0.13	1.3	0.080	0.021	1.34	17.0	8.4	5.43	360	0.36	0.02	3.9	10.8	670
W229536		0.24	0.14	<0.1	0.035	<0.005	0.02	0.6	1.0	13.80	216	0.10	0.01	0.2	1.7	190
W229537		7.48	0.14	1.4	0.095	0.027	1.48	18.1	9.0	5.47	373	0.33	0.03	4.3	16.3	540
W229538		9.70	0.11	1.8	3.62	0.035	1.72	20.7	8.2	1.43	1240	1.60	0.02	6.1	25.0	390
W229539		8.11	0.11	1.5	0.110	0.027	1.58	19.2	8.9	3.08	303	0.55	0.02	4.7	19.7	560
W229540		8.14	0.14	1.4	0.124	0.024	1.60	19.1	8.6	3.08	314	0.37	0.02	4.6	11.1	600

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 18- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17144032

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229505		12.7	99.6	<0.002	0.19	0.36	7.1	1	1.7	389	0.56	0.05	9.12	0.206	0.89	10.0
W229506		11.4	102.5	<0.002	0.24	0.47	7.4	2	1.8	359	0.58	<0.05	9.99	0.221	1.16	8.1
W229507		9.1	43.1	<0.002	0.11	0.20	3.4	1	0.8	695	0.27	<0.05	4.61	0.099	0.39	12.2
W229508		23.2	29.0	<0.002	0.11	0.29	2.6	2	0.6	841	0.20	<0.05	3.46	0.075	0.36	13.4
W229509		36.5	123.0	<0.002	0.08	0.35	10.5	1	2.1	443	0.67	0.06	11.15	0.293	1.06	9.1
W229510		14.2	130.0	<0.002	0.44	0.57	14.9	1	2.8	131.0	0.92	0.07	12.25	0.413	1.55	2.6
W229511		7.9	12.9	<0.002	0.20	3.19	1.3	1	0.3	112.5	0.09	<0.05	1.63	0.035	2.85	12.8
W229512		4.6	6.0	<0.002	0.25	4.11	0.8	1	0.6	104.5	<0.05	<0.05	0.76	0.017	1.47	17.6
W229513		4.7	5.6	0.002	0.42	7.41	0.8	1	0.2	118.5	<0.05	<0.05	0.80	0.017	2.07	9.6
W229514		1.4	0.9	<0.002	<0.01	0.06	0.2	<1	<0.2	47.9	<0.05	<0.05	0.09	<0.005	0.03	0.8
W229515		6.4	37.8	<0.002	0.68	4.58	3.7	1	0.7	98.5	0.22	<0.05	4.21	0.087	8.76	8.5
W229516		5.5	6.6	<0.002	0.76	10.95	0.9	1	0.3	98.7	0.05	<0.05	0.89	0.018	2.71	9.0
W229517		5.6	5.7	0.002	0.32	1.21	0.8	<1	0.2	123.0	<0.05	<0.05	0.78	0.017	1.33	9.8
W229518		10.0	7.3	<0.002	0.40	2.09	1.0	1	0.3	134.0	0.05	<0.05	0.89	0.018	1.67	15.1
W229519		9.3	7.0	<0.002	0.39	2.22	1.0	1	0.4	130.5	<0.05	<0.05	0.87	0.018	1.62	15.3
W229520		6.5	12.7	0.002	0.28	0.76	1.4	1	0.4	158.5	0.10	<0.05	1.68	0.035	1.07	12.1
W229521		55.0	18.1	0.009	0.25	2.19	1.8	2	0.4	108.0	0.13	<0.05	2.29	0.049	1.04	10.0
W229522		53.1	161.5	0.002	4.63	5.86	19.7	1	3.0	89.4	0.64	<0.05	9.27	0.402	13.50	1.9
W229523		8.3	22.1	<0.002	0.34	1.21	2.2	1	0.7	113.0	0.17	<0.05	3.12	0.065	1.44	11.1
W229524		10.2	14.0	0.002	0.44	3.46	1.4	1	0.5	111.0	0.11	<0.05	2.07	0.041	2.67	15.1
W229525		11.1	32.3	0.002	0.61	1.70	3.0	2	0.7	148.5	0.24	<0.05	4.46	0.091	2.28	13.4
W229526		10.1	19.1	0.003	0.47	1.20	2.0	2	0.4	128.0	0.15	<0.05	2.65	0.053	1.61	19.0
W229527		5.4	15.0	0.002	0.21	0.82	1.7	1	0.5	149.0	0.11	<0.05	2.06	0.043	1.16	18.6
W229528		2.5	6.8	<0.002	0.08	0.63	0.7	1	0.4	118.5	0.05	<0.05	0.92	0.019	0.52	8.7
W229529		3.5	18.0	<0.002	0.23	1.07	1.9	1	0.5	114.0	0.13	<0.05	2.38	0.048	1.47	8.1
W229530		8.7	17.2	<0.002	1.14	1.54	1.8	<1	0.4	151.0	0.12	<0.05	2.24	0.049	3.23	8.0
W229531		27.1	162.0	<0.002	2.30	1.43	14.5	1	2.5	64.6	0.87	0.10	14.15	0.377	4.41	4.8
W229532		24.2	166.5	<0.002	1.87	1.22	14.7	1	2.6	62.1	0.87	0.09	14.60	0.399	4.20	4.9
W229533		5.5	46.2	<0.002	0.57	0.77	4.4	1	0.7	108.5	0.25	<0.05	4.03	0.105	1.77	4.1
W229534		12.2	78.2	0.004	0.68	0.43	7.0	1	1.3	284	0.42	<0.05	6.92	0.179	1.09	14.7
W229535		7.9	52.7	<0.002	0.32	0.25	4.7	1	0.9	392	0.29	<0.05	4.94	0.122	0.44	8.7
W229536		1.3	0.9	<0.002	<0.01	0.05	0.2	<1	<0.2	48.8	<0.05	<0.05	0.08	<0.005	0.02	0.7
W229537		9.2	59.1	<0.002	0.32	0.27	5.4	1	0.9	387	0.31	<0.05	5.22	0.132	0.50	7.7
W229538		9.1	79.7	<0.002	2.62	9.54	9.2	2	1.4	723	0.45	0.06	5.80	0.270	11.05	2.5
W229539		11.5	63.5	<0.002	0.53	0.40	5.6	1	1.0	645	0.34	<0.05	5.67	0.142	0.58	11.1
W229540		7.6	64.6	<0.002	0.17	0.27	5.6	1	1.0	511	0.33	<0.05	5.47	0.144	0.58	9.3

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Finalized Date: 18- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17144032

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W229505		67	0.8	14.8	64	64.2	0.01
W229506		66	1.0	16.3	60	74.6	<0.01
W229507		28	0.5	8.4	40	33.5	<0.01
W229508		22	0.4	7.4	51	27.9	<0.01
W229509		75	1.2	17.3	85	80.4	<0.01
W229510		79	2.0	18.5	93	112.0	<0.01
W229511		16	1.5	3.7	21	16.5	0.41
W229512		10	0.7	4.2	8	13.1	0.24
W229513		21	0.7	3.8	13	9.8	0.27
W229514		2	0.1	0.9	16	<0.5	<0.01
W229515		35	2.3	7.3	7	41.7	0.38
W229516		12	0.8	3.1	4	6.9	0.08
W229517		17	0.6	3.1	11	6.2	0.07
W229518		12	0.8	3.9	40	7.3	0.05
W229519		12	0.8	3.8	33	7.2	0.05
W229520		15	1.1	5.4	3	19.2	<0.01
W229521		105	1.1	5.5	77	23.9	<0.01
W229522		141	12.4	19.3	106	92.1	0.54
W229523		22	1.3	7.3	14	46.3	<0.01
W229524		21	1.3	5.6	15	20.5	0.21
W229525		27	1.9	10.8	13	56.1	0.12
W229526		29	1.0	7.4	19	32.5	0.01
W229527		96	1.0	7.2	9	22.7	<0.01
W229528		14	0.5	5.8	3	12.8	0.08
W229529		19	1.0	8.4	6	35.8	0.14
W229530		16	1.2	7.7	14	31.4	0.13
W229531		104	6.9	22.2	55	127.0	0.02
W229532		108	6.8	25.1	53	133.5	0.02
W229533		32	2.6	10.0	13	42.2	0.10
W229534		56	1.5	13.5	27	71.3	<0.01
W229535		38	0.6	10.9	28	53.8	<0.01
W229536		3	0.1	0.8	17	0.5	<0.01
W229537		40	0.6	11.2	21	53.6	<0.01
W229538		73	5.7	16.7	50	68.2	0.50
W229539		45	0.7	12.2	14	57.8	<0.01
W229540		45	0.7	12.1	46	55.9	<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 18- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17144032

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	BAG- 06	CRU- 31	CRU- QC
Hg- MS42	LOG- 21	LOG- 21d	LOG- 23
ME- MS61	PUL- 31	PUL- 31d	PUL- QC
SPL- 21	SPL- 21d	WEI- 21	WSH- 21
WSH- 22			

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 22- AUG- 2017
Account: RCM

CERTIFICATE WH17141976

Project: Nadaleen

P.O. No.: N17- 037

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 10- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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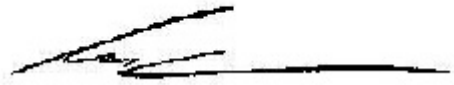
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 22- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17141976

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228721		7.20	0.06	6.45	1015	300	1.64	0.27	3.14	0.49	63.7	20.4	68	20.1	62.2	5.15
W228722		6.62	0.36	5.86	298	310	1.63	0.25	3.22	0.12	60.1	19.6	66	24.8	56.6	5.06
W228723		8.26	0.06	5.92	51.9	330	1.35	0.25	2.57	0.21	59.1	22.8	77	38.8	61.0	5.25
W228724		8.06	0.06	6.19	103.5	550	1.76	0.26	2.93	0.09	62.2	22.5	76	37.8	61.2	5.21
W228725		7.60	0.07	5.85	114.5	830	1.51	0.24	3.13	0.11	59.0	21.6	76	35.4	61.1	5.10
W228726		3.88	0.04	5.61	99.4	550	1.51	0.24	3.23	0.10	57.4	19.9	74	33.3	57.2	4.93
W228727		7.96	0.07	6.17	90.9	240	1.70	0.26	2.40	0.08	60.8	23.8	78	26.4	61.0	5.07
W228728		7.62	0.07	6.03	121.0	380	1.61	0.25	2.32	0.08	61.2	20.8	78	23.9	60.5	5.02
W228729		0.34	0.19	3.65	5960	190	0.90	0.15	11.75	0.14	40.8	12.6	43	10.75	40.3	2.84
W228730		7.66	0.06	5.71	138.0	240	1.57	0.25	2.53	0.07	56.8	20.7	74	20.8	57.3	4.75
W228731		7.84	0.06	5.44	381	310	1.41	0.22	3.24	0.02	53.0	20.0	67	19.50	53.8	4.88
W228732		7.54	0.06	5.78	107.5	300	1.54	0.25	2.85	0.03	57.5	22.2	74	28.4	61.0	5.09
W228733		7.50	0.05	4.86	87.4	240	1.44	0.20	5.18	0.03	48.3	16.7	58	19.85	45.1	4.94
W228734		7.86	0.07	5.75	118.0	370	1.46	0.23	2.93	0.32	57.1	21.1	67	21.2	55.0	4.89
W228735		7.56	0.05	5.41	428	370	1.21	0.21	3.79	0.30	54.9	16.6	62	15.30	50.0	4.51
W228736		7.78	0.08	6.45	586	230	1.59	0.28	3.00	0.19	63.7	17.6	66	17.65	60.0	4.29
W228737		5.82	0.12	6.37	>10000	250	1.38	0.27	0.80	0.73	64.5	19.3	76	13.70	56.9	4.47
W228738		6.00	0.25	6.52	>10000	210	1.23	0.27	0.37	0.43	66.8	19.8	79	17.25	54.6	5.13
W228739		4.92	0.01	0.05	17.5	20	0.07	0.03	21.5	0.08	1.20	0.9	1	0.12	2.7	0.47
W228740		6.46	0.09	8.15	5170	270	1.93	0.36	1.14	0.26	84.7	20.2	82	20.6	61.2	5.22
W228741		4.82	0.09	8.48	601	260	2.10	0.36	1.57	0.18	81.5	23.6	81	22.9	64.8	5.65
W228742		7.90	0.10	8.06	308	250	2.17	0.32	2.08	0.15	79.4	21.3	78	27.2	62.5	5.48
W228743		7.94	0.10	7.88	218	290	2.53	0.35	2.59	0.22	78.1	21.7	77	31.1	67.2	5.04
W228744		7.90	0.07	6.55	112.0	460	2.10	0.26	2.89	0.03	67.6	19.4	72	30.5	58.0	4.44
W228745		7.48	0.07	6.03	61.7	240	1.67	0.26	3.15	0.02	64.4	17.6	71	30.0	49.6	4.76
W228746		7.80	0.07	6.29	108.5	290	1.73	0.26	2.40	<0.02	67.3	19.9	71	27.2	53.4	4.40
W228747		8.70	0.07	5.98	178.0	400	2.27	0.24	1.66	0.10	66.1	16.7	70	30.4	46.2	4.06
W228748		0.30	0.10	3.63	2590	200	0.94	0.15	18.60	0.11	40.7	11.7	42	10.30	44.6	3.05
W228749		7.22	0.05	3.54	343	720	1.17	0.14	3.50	0.04	37.3	13.0	57	13.85	33.0	3.11
W228750		<0.02	0.05	3.34	334	710	1.17	0.13	3.50	0.04	34.5	12.1	54	13.05	30.2	2.98
W228751		6.56	0.06	6.49	159.0	330	2.05	0.27	2.81	0.04	67.6	20.0	69	28.6	50.6	4.81
W228752		9.74	0.08	6.26	267	380	1.72	0.27	2.37	0.03	66.7	21.5	67	29.5	50.5	4.70
W228753		5.00	<0.01	0.05	0.5	50	0.07	0.03	21.5	0.06	1.29	0.9	1	0.14	2.5	0.49
W228754		8.32	0.07	6.42	107.5	470	1.72	0.28	2.75	<0.02	68.6	20.1	71	35.0	53.4	4.73
W228755		7.88	0.06	6.23	32.8	940	1.49	0.27	4.28	0.05	68.3	16.6	72	32.9	51.3	5.25
W228756		8.46	0.06	7.33	142.0	930	2.42	0.27	3.33	0.02	72.9	24.5	83	50.9	55.2	4.71

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Finalized Date: 22- AUG- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17141976

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228721		17.80	0.10	3.4	1.050	0.068	3.11	31.1	23.3	1.55	685	1.22	0.03	11.7	39.1	470
W228722		16.20	0.10	3.1	0.259	0.064	2.68	28.7	75.3	1.81	830	0.61	0.03	10.7	37.3	470
W228723		16.35	0.10	3.1	0.135	0.062	2.64	28.6	159.0	2.11	614	0.73	0.06	10.7	41.7	430
W228724		17.05	0.09	3.3	0.121	0.063	2.73	30.1	146.0	2.21	699	0.57	0.05	11.2	41.4	440
W228725		16.50	0.09	3.2	0.106	0.060	2.54	28.6	148.5	2.17	760	0.55	0.06	10.8	39.7	460
W228726		15.45	0.09	3.1	0.100	0.055	2.45	27.3	146.0	2.13	782	0.68	0.04	10.2	37.8	470
W228727		16.65	0.09	3.1	0.142	0.067	2.80	29.3	122.5	2.07	617	0.55	0.03	11.0	41.7	460
W228728		16.40	0.09	3.1	0.134	0.063	2.78	29.6	109.0	2.01	615	0.48	0.03	10.8	39.0	460
W228729		10.65	0.07	2.1	14.80	0.039	1.71	21.4	13.4	2.47	1160	1.90	0.02	6.3	27.3	420
W228730		15.65	0.07	3.0	0.182	0.063	2.66	27.5	70.5	1.94	656	0.42	0.03	10.3	40.3	430
W228731		14.60	0.08	2.8	0.200	0.060	2.53	25.7	55.2	1.96	758	0.40	0.03	9.5	35.1	400
W228732		16.30	0.09	3.0	0.132	0.065	2.62	27.9	103.5	2.16	737	0.43	0.03	10.5	40.5	430
W228733		12.70	0.09	2.3	0.095	0.052	2.31	22.8	41.1	2.65	1220	0.46	0.03	8.0	28.9	630
W228734		15.65	0.09	2.8	0.312	0.062	2.70	27.5	60.1	1.90	716	0.69	0.03	9.7	38.3	500
W228735		15.00	0.10	2.7	0.474	0.061	2.56	26.0	29.8	1.77	872	0.91	0.02	9.3	33.7	430
W228736		18.10	0.12	3.5	1.345	0.067	3.13	31.2	16.0	1.61	817	0.70	0.03	11.1	34.9	500
W228737		17.05	0.11	3.0	20.8	0.062	3.05	31.0	13.1	0.67	303	1.45	0.02	9.5	39.9	500
W228738		17.65	0.12	2.9	20.0	0.053	3.10	32.4	13.7	0.51	122	1.15	0.02	9.7	39.3	450
W228739		0.12	<0.05	<0.1	0.026	0.007	0.02	0.6	1.1	12.95	214	0.18	<0.01	0.1	0.7	180
W228740		22.5	0.12	3.7	21.5	0.063	3.97	41.0	13.1	0.94	316	1.21	0.03	12.0	43.3	600
W228741		22.2	0.12	3.7	3.74	0.084	4.24	38.5	11.9	1.16	452	0.89	0.03	12.1	47.1	740
W228742		20.9	0.13	3.6	2.19	0.078	3.85	38.8	15.6	1.36	471	1.01	0.03	11.4	44.2	600
W228743		22.3	0.14	3.6	2.31	0.087	3.86	36.5	26.9	1.51	529	1.13	0.03	12.3	46.2	520
W228744		17.15	0.10	3.0	0.826	0.066	2.96	33.0	41.5	1.66	559	0.94	0.03	9.5	34.9	400
W228745		15.45	0.11	3.0	0.249	0.062	2.88	30.6	30.9	2.12	629	0.66	0.03	9.3	32.8	440
W228746		16.30	0.12	3.1	0.242	0.062	2.94	32.2	36.8	1.73	432	0.62	0.03	9.9	37.3	710
W228747		15.70	0.10	2.9	0.556	0.063	2.75	32.8	23.6	1.03	314	0.90	0.02	8.9	30.5	360
W228748		9.55	0.05	1.9	3.50	0.042	1.70	19.9	9.9	1.42	1220	1.66	0.02	6.0	24.5	380
W228749		9.09	0.06	1.7	0.407	0.041	1.56	17.8	13.7	1.63	633	1.39	0.01	5.0	19.9	480
W228750		8.79	0.05	1.6	0.384	0.033	1.49	16.8	13.2	1.62	635	1.39	0.01	4.6	18.7	440
W228751		17.20	0.09	2.9	0.529	0.070	2.84	32.2	31.4	1.49	550	0.66	0.02	9.6	37.0	440
W228752		16.75	0.09	3.0	0.606	0.064	2.76	32.1	35.4	1.29	535	0.76	0.02	9.5	38.7	330
W228753		0.14	<0.05	<0.1	<0.005	<0.005	0.02	0.6	1.1	13.20	214	0.13	<0.01	0.1	0.8	180
W228754		16.65	0.08	3.1	0.328	0.075	2.98	32.8	38.7	1.67	550	0.71	0.03	10.0	36.8	680
W228755		16.35	0.10	3.0	0.250	0.058	2.93	32.7	46.2	2.22	810	0.82	0.03	9.6	31.7	590
W228756		20.4	0.11	3.0	0.466	0.076	3.59	35.5	43.7	1.69	613	0.35	0.03	9.8	36.6	250

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228721		19.8	137.5	<0.002	4.32	2.27	19.7	2	2.2	156.5	0.85	0.05	10.15	0.557	3.62	2.2
W228722		12.5	131.5	<0.002	2.29	0.83	18.2	1	1.9	135.0	0.77	0.08	8.79	0.526	3.64	1.9
W228723		11.1	139.5	<0.002	0.12	0.39	19.2	1	1.9	107.0	0.77	0.08	8.64	0.570	0.89	1.8
W228724		13.8	142.0	<0.002	0.14	0.38	19.8	1	1.9	115.5	0.83	0.08	9.41	0.580	0.95	2.0
W228725		13.1	133.5	<0.002	0.15	0.34	18.8	1	1.8	141.5	0.78	0.10	9.06	0.568	0.91	1.9
W228726		12.7	128.5	<0.002	0.12	0.32	18.6	1	1.8	140.5	0.73	0.06	8.41	0.560	0.85	1.9
W228727		19.8	136.5	<0.002	0.22	0.56	18.8	1	2.1	111.5	0.80	0.05	9.11	0.586	1.04	1.9
W228728		14.7	132.5	<0.002	0.25	0.45	18.5	1	1.9	109.5	0.78	0.06	9.00	0.583	0.93	1.9
W228729		11.2	86.2	<0.002	2.48	22.7	10.7	2	1.6	300	0.45	0.05	6.18	0.262	44.8	6.6
W228730		15.1	124.0	<0.002	0.70	0.59	17.4	1	1.8	116.0	0.75	0.06	8.67	0.551	1.03	1.8
W228731		10.6	117.0	<0.002	1.79	1.07	16.6	1	1.7	130.5	0.70	0.06	8.08	0.528	1.28	1.8
W228732		13.8	133.5	<0.002	0.46	0.51	18.5	1	1.9	114.0	0.74	0.08	8.90	0.562	1.13	1.8
W228733		13.2	107.5	<0.002	0.64	0.66	15.2	1	1.5	194.0	0.58	<0.05	6.86	0.429	0.88	1.5
W228734		20.5	128.0	<0.002	1.85	0.50	17.4	1	1.8	155.5	0.70	<0.05	8.57	0.490	2.06	1.8
W228735		16.0	118.0	<0.002	3.27	0.95	16.8	1	1.7	178.0	0.67	0.05	7.80	0.479	3.68	1.6
W228736		16.4	142.5	<0.002	3.50	5.36	19.3	1	2.1	131.5	0.83	0.07	9.69	0.531	6.19	2.0
W228737		15.6	134.5	<0.002	5.18	185.0	13.3	1	2.3	76.2	0.69	0.27	9.70	0.496	105.5	2.0
W228738		18.4	145.5	0.002	5.77	113.0	12.9	2	2.3	68.3	0.67	0.16	9.97	0.491	96.2	2.1
W228739		1.3	0.9	<0.002	<0.01	0.24	0.1	1	<0.2	48.9	<0.05	<0.05	0.08	<0.005	0.09	0.6
W228740		20.0	187.0	0.002	5.25	52.0	20.6	2	2.9	88.5	0.83	0.05	12.95	0.523	81.8	2.7
W228741		18.2	189.5	0.003	5.51	7.26	23.6	2	2.9	92.1	0.86	0.06	12.20	0.543	13.00	2.4
W228742		21.8	184.0	0.002	5.19	2.09	21.9	2	2.9	103.0	0.79	<0.05	11.95	0.519	5.94	2.4
W228743		24.1	168.5	0.003	4.47	1.76	22.7	2	3.7	136.0	0.84	0.05	11.65	0.504	7.87	2.5
W228744		16.6	144.5	0.002	2.24	0.77	18.5	2	2.7	217	0.67	<0.05	9.77	0.451	4.57	2.0
W228745		12.3	143.0	<0.002	0.66	0.48	17.0	1	1.9	136.5	0.66	0.05	9.45	0.457	1.44	1.9
W228746		14.6	147.0	<0.002	1.73	0.55	18.0	1	2.0	122.5	0.70	0.05	9.85	0.487	1.94	2.0
W228747		17.8	139.5	<0.002	3.61	0.73	17.0	1	2.2	126.0	0.62	<0.05	9.65	0.390	3.80	2.0
W228748		8.7	82.1	<0.002	2.57	9.48	9.6	2	1.4	720	0.41	0.06	5.74	0.268	10.95	2.4
W228749		11.6	76.4	<0.002	1.95	0.85	9.9	1	1.7	204	0.33	<0.05	5.01	0.229	2.86	1.2
W228750		10.9	72.4	<0.002	1.82	0.79	9.5	<1	1.5	195.0	0.31	<0.05	4.64	0.218	2.74	1.0
W228751		17.9	143.0	<0.002	4.01	0.74	19.4	1	2.4	209	0.65	0.05	9.79	0.425	4.58	1.9
W228752		20.3	141.0	0.002	4.17	1.09	18.2	1	1.9	150.5	0.65	<0.05	9.48	0.447	5.11	2.0
W228753		1.2	0.9	<0.002	0.01	0.05	0.2	1	<0.2	47.8	<0.05	<0.05	0.08	<0.005	0.02	0.8
W228754		14.5	147.5	<0.002	2.61	0.47	17.8	1	2.2	156.5	0.70	<0.05	9.89	0.483	2.65	2.0
W228755		13.0	140.0	<0.002	1.61	1.10	17.5	2	1.9	213	0.68	<0.05	9.86	0.452	1.84	2.1
W228756		17.4	169.0	0.002	2.42	0.61	21.9	1	2.4	161.5	0.70	<0.05	10.40	0.456	3.16	2.0

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 22- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17141976

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W228721		145	10.3	23.0	292	124.5		0.03
W228722		136	4.2	24.3	116	115.0		0.01
W228723		151	1.3	22.3	109	120.5		<0.01
W228724		154	1.5	32.5	93	124.0		<0.01
W228725		150	1.5	23.7	85	119.0		<0.01
W228726		144	1.4	22.3	84	114.0		<0.01
W228727		153	1.9	21.9	90	118.5		<0.01
W228728		153	1.6	21.3	82	118.5		0.01
W228729		79	8.2	19.4	47	85.3		2.58
W228730		143	2.7	20.8	77	111.5		0.01
W228731		139	4.0	19.8	56	103.0		<0.01
W228732		149	2.0	21.4	60	115.0		<0.01
W228733		113	2.0	20.5	52	91.6		<0.01
W228734		129	1.4	20.6	161	105.5		<0.01
W228735		128	3.0	20.0	133	102.0		<0.01
W228736		138	6.8	22.6	109	122.0		1.09
W228737		137	12.8	20.9	190	102.5	2.59	14.60
W228738		138	12.0	22.0	77	99.2	1.245	8.84
W228739		2	0.1	0.8	16	<0.5		<0.01
W228740		152	11.4	27.4	79	123.5		4.82
W228741		156	8.2	25.5	109	118.5		0.39
W228742		147	5.9	25.0	94	122.5		0.04
W228743		150	8.1	24.1	124	118.5		0.14
W228744		128	4.1	21.1	68	102.0		<0.01
W228745		120	1.7	20.8	52	102.5		<0.01
W228746		127	3.0	21.2	57	102.5		<0.01
W228747		112	5.7	18.5	76	95.2		<0.01
W228748		73	5.5	17.2	50	64.9		0.52
W228749		70	4.1	11.0	39	57.3		0.07
W228750		66	3.8	10.7	39	57.4		0.08
W228751		127	4.3	19.9	55	97.8		0.01
W228752		123	3.8	19.9	58	100.0		0.03
W228753		2	0.1	0.8	15	<0.5		<0.01
W228754		129	2.4	21.9	60	104.5		<0.01
W228755		119	1.3	23.0	64	101.0		<0.01
W228756		144	2.9	20.3	59	101.0		<0.01

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 22- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17141976

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 25- AUG- 2017
Account: RCM

CERTIFICATE VA17145123

Project: Nadaleen

P.O. No.: N17- 038

This report is for 36 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 14- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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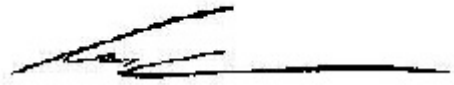
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 25- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS VA17145123

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229577		11.66	0.32	2.43	52.6	370	0.92	0.41	21.7	0.51	29.6	3.5	24	10.80	20.9	1.14
W229578		11.38	0.10	1.66	16.3	330	0.64	0.09	27.3	0.24	21.8	2.9	18	7.67	14.5	0.74
W229579		11.76	0.12	2.46	38.0	160	0.88	0.10	23.5	0.10	29.8	4.2	25	9.85	17.9	0.97
W229580		12.10	0.36	2.07	37.2	260	0.73	0.11	19.65	0.16	26.6	3.1	21	7.00	14.6	0.82
W229581		10.72	0.10	1.34	415	270	0.54	0.07	29.0	0.11	17.40	2.6	15	4.03	10.0	0.58
W229582		12.06	0.09	0.98	84.8	100	0.45	0.06	25.6	0.08	14.45	1.7	10	2.85	7.4	0.67
W229583		11.02	0.05	0.65	39.0	60	0.37	0.06	33.6	0.20	8.94	1.3	7	1.99	4.3	0.26
W229584		11.16	0.06	1.09	71.3	100	0.53	0.04	27.1	0.15	13.40	1.9	12	4.71	7.4	0.51
W229585		12.82	0.30	0.66	630	40	0.21	0.10	18.75	0.38	10.05	2.8	8	2.05	14.8	2.94
W229586		5.00	0.17	0.55	328	40	0.23	0.06	20.0	0.12	8.05	2.0	6	1.30	11.7	2.19
W229587		7.04	0.02	0.05	1.4	20	0.08	0.05	21.8	0.08	1.16	0.7	<1	0.13	3.7	0.48
W229588		5.60	0.06	0.32	586	30	0.18	0.03	20.4	0.05	6.02	1.2	4	0.65	5.6	1.47
W229589		5.82	0.14	0.36	2950	30	0.18	0.03	20.1	0.05	7.80	1.7	4	0.75	7.6	2.28
W229590		10.44	0.16	0.62	1455	50	0.31	0.03	19.20	0.11	9.62	2.3	8	1.65	11.6	3.24
W229591		0.34	0.18	3.81	6190	200	0.97	0.14	12.40	0.14	39.8	12.1	47	10.65	37.1	2.93
W229592		6.98	0.08	0.48	1195	30	0.21	0.02	20.1	0.06	8.16	2.2	5	1.04	7.5	2.15
W229593		10.84	0.08	0.60	6790	40	0.27	0.02	18.80	0.14	10.80	1.8	7	1.52	6.5	3.77
W229594		11.80	0.11	0.64	2990	50	0.24	0.02	19.00	0.07	9.93	3.6	8	1.71	10.0	4.59
W229595		15.76	0.11	0.49	1610	30	0.18	0.02	19.50	0.07	7.72	2.1	6	1.15	6.3	2.99
W229596		<0.02	0.10	0.48	1555	30	0.18	0.02	19.60	0.10	7.75	2.2	6	1.16	6.3	2.98
W229597		13.06	0.20	0.66	3630	50	0.26	0.03	19.25	0.05	7.83	1.5	8	1.64	5.9	1.32
W229598		14.78	0.08	0.34	4050	30	0.14	0.02	19.85	0.02	5.10	0.9	5	0.78	4.3	0.62
W229599		7.70	0.09	0.83	1040	90	0.22	0.02	19.75	0.02	6.76	1.7	9	0.83	5.8	0.49
W229600		9.18	0.09	0.43	478	60	0.24	0.02	21.0	<0.02	6.53	1.2	7	1.03	5.2	0.48
W229601		0.34	0.61	1.88	>10000	140	0.60	3.10	26.2	0.14	28.5	5.1	28	6.35	16.7	1.41
W229602		7.12	0.06	0.39	544	40	0.26	0.02	22.0	0.03	6.12	1.0	7	0.85	7.9	0.35
W229603		9.28	0.10	0.99	4710	70	0.31	0.01	19.80	0.30	8.54	3.3	9	0.70	9.5	3.13
W229604		5.06	0.25	0.44	>10000	60	0.26	0.03	16.15	0.17	5.48	4.0	7	0.67	17.0	6.32
W229605		5.42	0.16	0.55	>10000	60	0.29	0.04	15.25	0.09	6.12	2.7	7	1.01	10.1	3.56
W229606		4.90	0.02	0.04	230	20	<0.05	0.01	21.5	0.06	0.95	0.7	1	0.11	2.4	0.49
W229607		9.78	0.04	0.85	3890	60	0.34	0.03	18.40	0.03	14.90	1.1	9	2.22	5.2	0.89
W229608		7.58	0.03	0.38	2050	20	0.19	0.02	19.95	<0.02	8.46	0.8	3	0.67	3.5	0.88
W229609		3.90	0.03	0.39	2430	20	0.19	0.02	19.55	0.03	8.12	0.8	4	0.69	3.5	0.85
W229610		7.94	0.03	0.52	3210	40	0.26	0.02	19.90	<0.02	10.10	0.8	4	1.26	3.8	0.89
W229611		7.76	0.05	0.61	2060	30	0.27	0.02	18.95	0.02	9.62	1.4	5	1.33	10.9	0.93
W229612		7.76	0.05	0.68	4450	40	0.25	0.03	19.20	0.05	12.20	1.7	6	1.45	6.8	1.15

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Finalized Date: 25- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS VA17145123

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229577		6.25	0.05	1.5	0.126	0.038	1.30	15.9	13.3	2.98	202	0.57	0.02	3.9	8.3	340
W229578		4.29	0.05	1.0	0.150	0.019	0.89	11.5	8.6	1.82	161	0.84	0.01	2.7	6.3	310
W229579		6.45	0.06	1.5	0.238	0.023	1.31	16.2	12.2	2.32	145	0.80	0.02	4.2	10.9	310
W229580		5.18	0.05	2.1	0.162	0.017	1.10	14.1	10.2	3.73	165	1.00	0.02	3.6	6.8	380
W229581		3.42	0.07	0.9	0.425	0.014	0.70	9.3	7.1	2.47	194	1.19	0.01	2.2	5.6	290
W229582		2.52	0.05	0.9	0.254	0.009	0.51	8.0	5.6	4.85	249	0.78	0.01	1.6	3.6	200
W229583		1.70	0.05	0.4	0.071	0.007	0.34	5.2	4.6	1.22	101	0.10	0.01	1.1	2.2	160
W229584		2.84	0.07	0.8	0.233	0.011	0.55	7.3	8.2	3.89	212	0.38	0.01	1.8	3.9	320
W229585		1.56	0.05	0.3	1.645	0.012	0.32	6.0	4.1	10.20	762	0.66	0.01	1.1	10.4	290
W229586		1.24	0.05	0.3	1.850	0.007	0.25	4.6	3.6	11.15	862	0.60	0.02	0.9	5.2	140
W229587		0.19	0.07	<0.1	0.009	0.006	0.02	0.6	1.2	13.70	216	0.09	<0.01	0.2	1.2	200
W229588		0.80	0.05	0.2	1.050	0.005	0.14	3.4	2.6	11.85	741	0.38	0.01	0.5	2.9	100
W229589		0.90	<0.05	0.2	1.440	0.006	0.17	5.0	2.5	11.75	855	0.44	0.01	0.5	5.1	100
W229590		1.58	<0.05	0.3	2.53	0.007	0.30	6.4	5.0	11.05	841	0.65	0.01	1.0	12.8	190
W229591		9.94	0.09	2.0	14.80	0.037	1.82	21.7	12.4	2.61	1180	1.83	0.02	5.8	27.4	450
W229592		1.21	<0.05	0.2	1.740	0.007	0.24	5.5	3.1	11.60	766	0.30	0.01	0.7	11.7	150
W229593		1.56	0.05	0.3	2.41	0.009	0.29	7.1	3.7	11.25	758	0.31	0.01	0.9	10.7	130
W229594		1.54	<0.05	0.4	3.01	0.008	0.31	6.6	3.7	11.40	743	0.35	0.01	1.0	18.3	100
W229595		1.20	<0.05	0.3	2.14	0.008	0.23	5.0	2.7	11.65	750	0.39	0.01	0.8	10.7	90
W229596		1.20	<0.05	0.3	2.12	0.005	0.23	5.4	2.8	11.70	753	0.38	0.01	0.8	10.7	90
W229597		1.65	<0.05	0.5	1.820	0.006	0.30	4.7	3.6	11.70	594	0.70	0.01	1.2	5.6	150
W229598		0.90	<0.05	0.2	0.761	0.006	0.15	3.2	2.2	12.35	305	0.43	0.01	0.5	2.5	110
W229599		1.84	0.06	0.3	0.611	0.006	0.25	4.0	2.8	11.85	283	0.46	0.15	0.9	3.8	160
W229600		1.21	0.06	0.2	1.230	<0.005	0.21	4.0	2.6	12.40	307	0.52	0.01	0.7	3.2	120
W229601		5.02	0.08	0.9	6.11	0.023	0.95	15.1	9.5	0.94	2270	1.87	0.01	2.7	14.3	340
W229602		1.08	0.05	0.3	0.913	<0.005	0.18	3.8	2.2	11.70	374	0.68	0.01	0.6	2.5	110
W229603		2.16	<0.05	0.4	2.28	0.010	0.21	5.4	3.1	10.30	919	0.50	0.25	0.8	9.7	120
W229604		1.14	0.07	0.3	9.93	0.029	0.20	3.6	2.0	8.33	1010	0.49	0.01	0.6	11.5	130
W229605		1.43	0.07	0.5	6.94	0.043	0.24	3.8	2.5	6.88	714	0.60	0.01	0.9	8.0	130
W229606		0.13	<0.05	<0.1	0.017	<0.005	0.02	0.5	0.8	13.65	212	0.11	<0.01	0.1	1.7	180
W229607		2.19	0.05	0.7	1.985	0.010	0.41	8.0	4.1	10.95	606	0.36	0.01	1.5	2.5	590
W229608		1.06	0.06	0.3	0.414	0.006	0.19	5.2	2.3	12.10	740	0.13	0.02	0.7	1.5	280
W229609		1.03	0.05	0.4	0.421	0.006	0.19	5.0	2.3	11.85	726	0.12	0.02	0.7	1.4	220
W229610		1.38	0.05	0.4	0.669	0.006	0.26	6.0	2.9	12.10	783	0.13	0.02	0.9	1.6	260
W229611		1.64	0.05	0.7	0.878	0.006	0.30	5.7	3.7	11.60	698	0.19	0.02	1.1	3.5	380
W229612		1.75	0.05	0.6	1.200	0.007	0.34	6.3	3.5	11.55	742	0.22	0.02	1.1	4.3	410

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CERTIFICATE OF ANALYSIS VA17145123

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229577		10.0	45.7	<0.002	0.46	1.56	4.1	2	0.8	751	0.29	<0.05	4.93	0.111	0.39	6.9
W229578		5.4	30.5	<0.002	0.29	0.42	2.9	2	0.6	920	0.20	<0.05	3.41	0.076	0.37	7.4
W229579		7.5	45.5	<0.002	0.47	0.41	4.2	1	0.9	495	0.31	<0.05	5.12	0.116	0.54	11.4
W229580		8.4	36.5	0.002	0.30	0.77	3.4	2	0.7	397	0.28	<0.05	4.83	0.103	0.57	8.4
W229581		7.0	22.4	<0.002	0.37	1.26	2.3	1	0.5	610	0.16	<0.05	2.83	0.063	1.33	13.2
W229582		6.3	16.1	<0.002	0.28	0.40	1.7	1	0.3	470	0.12	<0.05	2.22	0.047	1.09	12.7
W229583		4.6	11.2	<0.002	0.14	0.32	1.1	1	0.2	1155	0.08	<0.05	1.39	0.030	0.33	14.8
W229584		5.4	18.3	<0.002	0.21	0.38	1.9	1	0.4	720	0.13	<0.05	2.32	0.051	0.60	11.0
W229585		32.5	10.3	<0.002	2.57	2.33	1.2	1	0.5	93.5	0.08	<0.05	1.36	0.030	4.84	20.0
W229586		16.9	7.7	<0.002	1.56	2.54	1.0	1	0.4	105.5	0.06	<0.05	1.15	0.024	4.87	16.9
W229587		1.7	0.9	<0.002	<0.01	0.18	0.2	<1	<0.2	48.2	<0.05	<0.05	0.11	<0.005	0.02	0.9
W229588		8.9	4.7	<0.002	0.88	1.79	0.6	1	0.2	80.9	<0.05	<0.05	0.72	0.015	2.60	12.5
W229589		13.9	5.4	<0.002	1.72	5.72	0.7	1	0.4	86.5	<0.05	<0.05	0.72	0.016	4.85	13.3
W229590		28.3	11.4	<0.002	2.72	5.84	1.1	1	0.3	101.0	0.14	<0.05	1.18	0.028	8.88	20.6
W229591		11.5	85.2	<0.002	2.54	22.5	10.5	2	1.6	316	0.43	0.05	5.90	0.264	40.3	6.4
W229592		22.1	8.0	<0.002	1.51	5.47	0.9	1	0.2	102.0	0.06	<0.05	0.88	0.022	5.99	12.9
W229593		35.5	10.4	<0.002	3.79	14.30	1.1	2	0.3	95.6	0.07	<0.05	1.04	0.026	9.42	13.1
W229594		43.9	10.6	<0.002	4.72	11.40	1.1	1	0.3	95.0	0.08	<0.05	1.21	0.030	11.90	12.7
W229595		27.6	7.5	<0.002	2.66	5.79	0.9	1	0.2	95.5	0.06	<0.05	1.02	0.022	7.66	12.4
W229596		27.4	7.5	<0.002	2.66	5.76	0.9	1	0.2	96.2	0.06	<0.05	0.99	0.022	7.61	12.5
W229597		15.7	10.1	<0.002	1.08	5.54	1.2	1	0.2	97.2	0.09	<0.05	1.46	0.032	3.47	19.6
W229598		7.9	5.1	<0.002	0.68	4.98	0.7	1	<0.2	83.0	<0.05	<0.05	0.68	0.015	1.63	11.7
W229599		6.1	7.8	<0.002	0.23	2.09	1.7	1	0.2	115.0	0.06	<0.05	0.97	0.034	0.76	13.1
W229600		8.0	7.0	<0.002	0.30	1.71	0.9	1	0.2	119.5	0.05	<0.05	0.74	0.019	1.37	15.4
W229601		7.5	42.9	0.002	1.41	48.4	6.0	2	0.7	1035	0.19	0.06	3.36	0.087	22.6	6.2
W229602		6.2	6.1	<0.002	0.22	1.77	0.7	1	<0.2	111.0	<0.05	<0.05	0.65	0.017	0.86	12.0
W229603		23.0	6.5	<0.002	2.86	10.90	1.8	1	0.3	121.0	0.06	<0.05	0.77	0.043	7.84	13.0
W229604		55.7	7.0	<0.002	>10.0	115.5	0.7	5	0.5	80.4	0.05	0.09	0.81	0.018	30.6	16.9
W229605		42.7	8.9	<0.002	>10.0	200	0.9	10	0.4	80.5	0.07	0.12	1.10	0.024	16.95	17.3
W229606		1.5	0.8	<0.002	0.02	0.26	0.1	1	<0.2	51.3	<0.05	<0.05	0.07	<0.005	0.05	0.6
W229607		4.8	14.0	<0.002	0.43	4.22	1.7	1	0.3	110.5	0.11	<0.05	2.01	0.040	2.95	11.1
W229608		2.5	6.5	<0.002	0.18	1.93	0.7	1	<0.2	73.4	0.05	<0.05	0.93	0.018	0.70	5.7
W229609		2.3	6.5	<0.002	0.19	2.04	0.7	1	0.2	71.9	0.05	<0.05	0.93	0.019	0.69	5.3
W229610		2.7	9.2	<0.002	0.25	3.28	1.1	1	0.2	79.8	0.07	<0.05	1.20	0.024	1.41	6.1
W229611		5.4	10.4	<0.002	0.33	2.87	1.1	1	1.0	77.5	0.08	<0.05	1.43	0.029	1.93	7.3
W229612		7.6	11.1	<0.002	0.68	6.20	1.2	1	0.4	88.8	0.08	<0.05	1.53	0.032	3.27	8.6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 25- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS VA17145123

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229577		39	0.5	9.4	48	55.2		<0.01
W229578		30	0.3	7.5	23	38.0		<0.01
W229579		41	0.5	9.6	20	54.2		<0.01
W229580		36	0.4	9.5	17	77.4		<0.01
W229581		26	0.7	6.2	15	32.9		0.01
W229582		23	0.7	5.4	8	35.9		0.01
W229583		16	0.3	3.4	11	17.6		<0.01
W229584		23	0.6	5.5	7	29.9		<0.01
W229585		17	1.1	3.9	25	11.8		0.01
W229586		11	1.0	3.0	13	11.1		0.02
W229587		2	0.1	0.8	18	<0.5		<0.01
W229588		9	0.6	2.3	5	6.0		0.01
W229589		10	0.8	2.6	8	5.6		0.03
W229590		20	1.3	3.3	24	8.4		0.06
W229591		84	7.6	19.3	47	76.7		2.63
W229592		8	0.8	3.1	10	8.0		0.06
W229593		10	1.0	3.4	48	10.1		0.13
W229594		11	1.2	3.4	11	13.5		0.10
W229595		12	1.0	2.9	15	10.0		0.07
W229596		11	1.0	2.9	21	10.1		0.05
W229597		19	1.4	3.1	11	14.8		0.07
W229598		12	0.6	2.2	3	5.6		0.01
W229599		20	0.6	3.6	6	11.1		0.01
W229600		14	0.6	3.1	2	10.8		0.01
W229601		33	18.3	16.3	23	29.5	1.365	2.75
W229602		11	0.6	3.2	5	21.4		0.01
W229603		17	0.9	4.2	83	22.0		0.10
W229604		9	2.2	3.4	23	22.3	9.16	1.18
W229605		11	1.9	3.6	10	27.5	16.85	1.00
W229606		1	0.1	0.8	15	<0.5		<0.01
W229607		25	1.2	6.3	10	22.4		0.03
W229608		6	0.4	4.6	5	10.8		0.01
W229609		6	0.4	4.3	11	11.4		0.01
W229610		10	0.5	4.8	4	12.7		0.04
W229611		11	0.6	5.4	6	20.7		0.02
W229612		13	0.8	5.5	21	18.2		0.06

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 25- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS VA17145123

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
Hg- MS42	LOG- 21	LOG- 21d	LOG- 23
ME- MS61	ME- OG62	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

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Finalized Date: 19- AUG- 2017
Account: RCM

CERTIFICATE WH17147658

Project: Nadaleen

P.O. No.: N17- 039

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 18- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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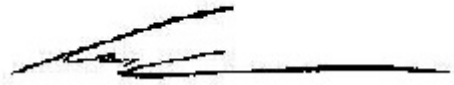
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147658

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228757		7.08	0.04	5.75	53.8	470	1.92	0.16	3.32	0.02	56.0	17.2	71	39.0	32.0	3.53
W228758		7.74	0.02	1.77	110.5	120	0.57	0.08	27.3	0.08	25.1	5.9	19	6.01	15.2	1.88
W228759		6.22	0.03	1.63	270	140	0.47	0.08	30.0	0.09	25.2	5.2	17	5.51	13.9	1.36
W228760		8.34	0.02	1.01	238	110	0.31	0.05	32.8	0.08	17.50	3.6	11	3.71	9.8	0.80
W228761		9.38	0.06	3.10	405	280	0.84	0.11	18.70	0.08	32.7	10.5	35	11.25	33.0	2.18
W228762		2.22	0.09	6.04	141.5	440	1.50	0.20	2.83	0.08	53.1	20.1	72	21.8	48.2	4.23
W228763		8.82	0.11	1.67	33.8	480	0.77	0.07	16.95	0.38	22.6	4.4	15	5.38	13.2	2.28
W228764		8.18	0.17	1.09	22.3	100	0.51	0.06	18.55	0.79	14.35	3.1	9	3.41	9.4	1.47
W228765		0.34	0.10	3.44	2520	190	0.90	0.13	18.15	0.11	35.4	10.5	41	9.96	39.1	2.86
W228766		6.08	0.07	5.94	57.2	330	1.64	0.32	6.08	0.09	54.5	20.0	53	24.7	58.4	4.24
W228767		13.20	0.07	4.66	48.3	370	1.27	0.21	5.96	0.07	43.3	16.5	52	19.95	48.1	4.50
W228768		8.62	0.07	3.68	45.8	270	0.87	0.17	5.83	0.09	34.3	11.7	48	13.65	44.3	3.65
W228769		9.32	0.10	8.72	32.2	440	3.31	0.31	1.77	0.25	102.0	19.5	67	39.2	42.0	4.41
W228770		10.04	0.09	9.28	29.5	550	3.45	0.25	1.75	0.46	111.0	16.9	68	35.2	35.3	4.35
W228771		9.74	0.12	8.12	108.5	550	3.02	0.26	2.52	0.39	89.8	16.4	64	26.3	43.2	4.12
W228772		<0.02	0.13	8.12	106.5	510	3.30	0.27	2.50	0.30	97.8	17.2	61	28.0	37.1	4.07
W228773		7.56	0.07	6.59	169.5	270	2.25	0.35	3.71	0.18	60.4	19.6	63	23.8	59.6	4.45
W228774		5.78	0.16	6.80	333	300	2.17	0.31	2.57	0.73	68.3	16.2	73	23.6	52.0	4.87
W228775		5.90	0.17	6.83	375	350	2.26	0.31	3.05	0.81	68.3	16.2	76	24.5	55.0	4.85
W228776		7.08	0.01	0.05	<0.2	20	0.06	0.02	21.4	0.06	0.98	0.9	1	0.15	2.1	0.47
W228777		9.34	0.19	6.04	221	280	1.82	0.27	2.76	0.35	62.3	14.2	79	20.1	53.5	4.97
W228778		7.42	0.13	6.70	211	280	1.99	0.28	1.48	0.23	62.5	19.3	83	21.4	58.9	5.34
W228779		9.28	0.11	5.73	247	250	1.73	0.24	1.75	0.20	52.8	17.5	78	18.60	52.1	5.01
W228780		9.74	0.14	6.16	339	290	1.79	0.24	3.46	0.25	59.6	18.8	70	17.60	55.5	5.12
W228781		6.02	0.57	5.34	311	250	1.44	0.24	3.97	0.37	52.2	11.6	68	13.90	43.5	4.21
W228782		0.34	0.19	3.82	6520	200	0.94	0.14	12.25	0.13	39.8	11.5	46	11.00	34.9	2.90
W228783		6.58	0.14	6.03	344	280	1.72	0.26	2.23	0.22	63.8	13.6	67	18.25	39.5	4.67
W228784		7.38	0.20	5.41	356	290	1.50	0.22	4.79	0.30	52.0	13.3	67	15.75	44.1	4.79
W228785		6.90	0.18	7.50	913	340	1.95	0.29	2.77	0.21	62.8	21.7	83	26.9	81.6	5.51
W228786		9.94	0.07	5.97	129.0	290	1.71	0.23	4.90	0.13	56.7	17.7	61	21.4	47.3	5.00
W228787		12.04	0.06	6.68	91.5	270	2.02	0.25	2.38	0.15	64.9	17.6	69	25.6	52.3	4.56
W228788		4.98	0.07	6.48	85.3	270	1.98	0.25	2.27	0.14	63.6	20.0	66	25.9	51.6	4.62
W228789		10.64	0.08	6.45	144.0	240	1.92	0.25	2.83	0.13	62.6	20.3	69	21.5	53.3	4.67
W228790		11.68	0.06	6.45	297	200	2.01	0.25	3.35	0.14	62.8	20.0	68	21.8	54.5	4.80
W228791		7.06	0.01	0.05	0.3	90	0.06	0.02	21.5	0.05	0.96	0.8	1	0.10	2.1	0.47
W228792		0.34	0.64	1.88	>10000	140	0.51	2.70	26.2	0.13	26.6	4.7	27	5.48	15.0	1.36

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147658

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228757		15.40	0.08	2.3	0.354	0.056	2.82	27.6	25.4	1.48	599	0.62	0.03	7.8	25.7	160
W228758		4.41	<0.05	0.8	0.750	0.018	0.80	14.0	5.7	1.55	666	0.88	0.02	2.3	10.1	290
W228759		4.20	<0.05	0.8	0.665	0.020	0.75	14.3	4.7	0.87	438	0.72	0.01	2.3	8.6	290
W228760		2.58	<0.05	0.5	0.259	0.011	0.46	9.0	3.1	0.58	188	0.58	0.01	1.4	5.5	240
W228761		7.99	0.07	1.5	0.471	0.032	1.35	16.1	23.0	0.77	315	0.65	0.02	4.2	15.9	310
W228762		15.80	0.10	2.6	0.560	0.061	2.86	25.5	32.1	1.30	460	0.64	0.03	8.0	29.8	300
W228763		4.45	0.06	0.7	0.047	0.018	0.78	11.2	4.8	9.10	3340	7.92	0.02	2.7	10.6	210
W228764		2.82	0.05	0.5	0.078	0.013	0.52	6.3	3.6	10.75	2220	7.60	0.01	1.9	8.7	220
W228765		9.32	0.07	1.8	3.56	0.035	1.67	17.5	8.1	1.37	1140	1.66	0.02	5.6	21.7	380
W228766		15.95	0.09	2.7	0.210	0.071	2.97	26.5	10.8	3.47	839	1.57	0.04	10.2	52.8	520
W228767		12.50	0.09	2.1	0.226	0.053	2.31	21.0	10.8	3.06	757	1.17	0.03	6.7	31.0	490
W228768		9.44	0.07	1.7	0.147	0.043	1.76	16.9	9.8	2.92	684	1.25	0.02	5.1	25.2	360
W228769		23.7	0.15	3.4	0.283	0.080	4.16	49.3	24.0	1.69	372	3.09	0.05	13.2	37.0	720
W228770		27.8	0.16	3.1	0.241	0.071	4.45	52.7	25.1	1.64	395	3.80	0.05	13.4	35.1	770
W228771		21.6	0.13	2.8	0.550	0.067	3.99	42.0	15.8	1.55	446	3.05	0.04	12.1	31.0	840
W228772		22.6	0.15	2.9	0.524	0.070	3.94	46.7	16.4	1.55	444	3.05	0.04	12.4	32.6	820
W228773		17.30	0.10	3.0	1.540	0.077	3.28	29.1	12.9	2.10	760	1.30	0.04	11.0	35.8	460
W228774		17.85	0.12	3.4	5.08	0.077	3.36	33.1	13.9	1.53	329	3.64	0.04	11.6	39.6	290
W228775		17.85	0.13	3.3	4.90	0.075	3.33	32.9	14.7	1.79	307	4.31	0.03	11.6	41.4	310
W228776		0.20	0.06	<0.1	0.011	0.005	0.03	0.5	0.8	13.25	203	0.07	<0.01	0.1	1.3	180
W228777		15.80	0.11	3.0	4.92	0.072	3.01	30.8	13.0	1.52	336	3.93	0.03	10.1	40.4	310
W228778		17.45	0.12	3.2	5.00	0.075	3.31	29.3	13.9	1.10	266	1.80	0.03	11.1	42.3	410
W228779		14.50	0.10	2.7	5.52	0.065	2.83	25.3	16.2	1.10	327	1.65	0.03	9.4	36.4	350
W228780		16.00	0.11	3.0	4.66	0.067	3.04	28.6	11.4	1.80	470	1.83	0.03	10.5	38.4	480
W228781		12.70	0.12	2.4	3.38	0.062	2.67	26.0	9.8	2.02	496	2.39	0.03	8.1	34.5	300
W228782		9.56	0.09	1.8	14.70	0.039	1.85	20.9	10.5	2.59	1160	1.75	0.02	5.7	26.4	450
W228783		14.85	0.13	3.0	3.72	0.066	3.05	30.6	10.4	1.40	259	2.55	0.03	10.9	36.6	220
W228784		13.30	0.13	2.5	3.72	0.064	2.65	25.6	14.6	2.55	496	2.92	0.03	8.6	38.1	360
W228785		17.35	0.14	3.0	3.35	0.077	3.65	30.5	14.1	1.76	558	1.67	0.03	11.5	46.8	460
W228786		14.30	0.14	2.7	1.905	0.063	2.93	27.3	34.5	2.88	712	0.57	0.04	10.7	33.0	520
W228787		16.10	0.14	3.0	1.180	0.076	3.24	31.4	41.9	1.58	450	0.39	0.03	12.0	31.8	460
W228788		15.45	0.13	2.9	1.135	0.070	3.13	30.1	48.9	1.57	431	0.41	0.03	11.6	35.0	440
W228789		15.50	0.14	2.8	1.350	0.068	3.15	30.1	23.3	1.58	521	0.48	0.03	11.6	37.0	450
W228790		15.40	0.13	2.9	1.465	0.070	3.08	30.1	20.7	1.74	690	0.40	0.03	11.7	35.6	520
W228791		0.17	0.08	<0.1	0.009	0.005	0.02	0.5	0.7	12.95	210	0.06	0.01	0.1	1.3	180
W228792		4.69	0.08	0.8	6.71	0.026	0.95	13.3	7.7	0.92	2260	1.65	0.01	2.5	12.8	330

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147658

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228757		10.7	134.0	<0.002	1.61	0.37	15.0	1	1.8	115.5	0.52	<0.05	8.55	0.318	2.05	1.5
W228758		8.0	34.9	0.002	1.13	0.32	4.2	2	0.6	921	0.17	<0.05	2.99	0.092	2.30	2.3
W228759		7.0	33.9	0.002	1.10	0.30	3.7	2	0.6	1060	0.16	0.05	2.78	0.084	2.39	2.5
W228760		4.1	20.8	0.002	0.76	0.23	2.3	2	0.4	1255	0.10	<0.05	1.82	0.055	1.77	2.3
W228761		8.3	64.3	0.002	1.87	0.43	8.2	1	2.3	742	0.33	<0.05	4.17	0.203	3.05	2.0
W228762		18.6	133.5	0.002	3.29	0.57	18.6	1	2.3	186.5	0.62	<0.05	8.69	0.413	2.38	1.7
W228763		8.5	32.1	0.014	0.24	0.22	3.4	2	0.7	274	0.20	<0.05	3.03	0.076	0.37	6.7
W228764		17.2	22.0	0.027	0.60	0.29	2.4	2	0.5	192.5	0.15	<0.05	1.90	0.057	0.39	5.3
W228765		7.7	79.7	<0.002	2.45	8.27	9.0	2	1.4	689	0.43	0.06	4.96	0.257	8.81	2.1
W228766		20.8	135.0	0.003	3.04	0.51	17.5	2	2.0	157.5	0.70	0.10	8.95	0.440	1.56	1.8
W228767		18.3	101.0	<0.002	3.02	0.39	12.4	1	1.8	175.5	0.51	0.07	6.06	0.345	1.00	1.3
W228768		17.6	72.6	<0.002	2.35	0.30	9.7	1	1.5	139.0	0.41	0.08	4.76	0.296	0.78	1.0
W228769		24.6	184.0	0.012	2.37	0.74	18.5	2	3.1	211	0.97	0.06	17.80	0.405	1.23	3.6
W228770		19.7	171.5	0.010	2.08	0.72	17.1	2	3.1	195.5	1.02	<0.05	19.45	0.361	1.35	4.3
W228771		20.2	141.5	0.010	3.61	0.93	15.4	2	3.7	245	0.89	0.05	15.70	0.351	2.50	3.3
W228772		20.9	155.5	0.011	3.56	0.95	16.2	2	3.0	243	0.91	<0.05	16.90	0.347	2.59	3.5
W228773		22.1	144.5	0.003	3.83	1.46	19.3	1	2.2	123.5	0.76	0.11	9.74	0.480	2.61	1.9
W228774		31.6	154.0	0.008	4.41	1.08	18.7	3	2.6	88.1	0.83	0.06	11.65	0.481	9.24	3.1
W228775		27.7	152.5	0.011	4.37	2.79	19.2	3	3.0	157.5	0.81	0.06	11.40	0.482	7.63	3.5
W228776		1.3	1.2	<0.002	0.01	<0.05	0.2	1	<0.2	45.8	<0.05	<0.05	0.07	<0.005	0.04	0.6
W228777		19.3	134.5	0.011	4.28	0.75	18.0	3	2.5	129.0	0.71	0.05	10.10	0.464	8.92	3.2
W228778		20.8	148.5	0.004	5.32	0.53	19.9	2	2.2	115.0	0.77	0.05	10.50	0.535	13.80	2.4
W228779		17.8	122.0	0.004	4.84	0.92	16.8	2	2.2	103.5	0.66	0.07	8.84	0.488	10.60	2.0
W228780		18.3	130.0	0.005	4.29	4.92	18.2	2	2.7	169.5	0.72	0.06	9.58	0.483	9.02	2.5
W228781		18.1	111.5	0.008	3.22	5.70	14.1	2	2.1	194.5	0.56	<0.05	8.16	0.393	5.19	2.5
W228782		9.6	88.8	0.002	2.62	20.9	10.3	2	1.7	321	0.39	<0.05	5.45	0.268	42.3	6.2
W228783		22.8	136.5	0.006	4.45	5.75	16.6	2	2.1	130.5	0.68	<0.05	10.35	0.436	7.22	2.6
W228784		15.7	115.0	0.009	4.11	1.48	16.8	2	1.8	251	0.56	0.06	7.80	0.406	7.31	2.8
W228785		20.7	154.5	0.004	5.34	3.20	22.2	2	2.7	211	0.70	0.08	9.72	0.576	6.72	2.4
W228786		17.5	133.5	<0.002	3.58	0.80	17.2	1	1.9	201	0.65	<0.05	8.84	0.492	4.37	1.8
W228787		16.2	153.0	<0.002	3.49	0.62	19.7	1	2.2	128.0	0.74	<0.05	10.20	0.563	3.07	2.0
W228788		17.3	149.5	<0.002	3.40	0.53	19.4	1	2.1	126.5	0.72	<0.05	9.90	0.545	2.90	1.9
W228789		20.4	148.0	<0.002	3.99	1.29	19.4	1	2.0	173.0	0.71	0.05	9.61	0.545	3.23	1.8
W228790		15.1	148.5	<0.002	4.04	1.24	19.7	1	2.0	192.5	0.72	<0.05	9.80	0.554	3.43	1.8
W228791		1.0	0.8	<0.002	0.01	<0.05	0.2	1	<0.2	49.0	<0.05	<0.05	0.07	<0.005	0.02	0.7
W228792		6.3	42.7	0.002	1.43	43.7	5.7	2	0.7	1030	0.17	0.05	3.00	0.089	20.5	5.9

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147658

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W228757		107	1.2	16.9	47	80.2		<0.01
W228758		29	1.0	16.6	50	30.1		<0.01
W228759		27	0.7	15.5	45	28.2		<0.01
W228760		17	0.4	12.4	18	17.3		<0.01
W228761		60	1.9	15.8	41	53.6		<0.01
W228762		128	3.3	18.9	68	95.0		<0.01
W228763		59	0.6	10.0	85	27.7		<0.01
W228764		47	0.3	5.6	166	21.6		<0.01
W228765		72	4.6	16.9	46	68.9		0.50
W228766		123	1.1	23.3	34	104.0		<0.01
W228767		98	0.8	17.4	47	80.3		<0.01
W228768		84	0.6	13.7	38	70.2		<0.01
W228769		160	1.5	28.0	108	124.0		<0.01
W228770		178	1.4	26.5	164	112.5		<0.01
W228771		166	2.2	23.2	162	103.5		0.01
W228772		163	2.2	25.6	118	109.0		0.01
W228773		131	2.9	21.4	109	111.5		0.05
W228774		141	2.5	21.4	327	123.0		<0.01
W228775		144	6.1	21.9	385	122.5		0.01
W228776		2	0.1	0.8	15	<0.5		<0.01
W228777		144	2.4	22.4	107	113.0		<0.01
W228778		162	1.8	21.8	108	121.5		<0.01
W228779		144	2.2	18.6	93	100.5		0.01
W228780		138	4.1	22.2	112	111.5		<0.01
W228781		113	7.4	17.7	164	99.9		0.04
W228782		85	7.0	19.8	48	77.7		2.61
W228783		121	6.6	18.5	79	119.5		<0.01
W228784		128	5.9	18.8	137	101.5		<0.01
W228785		169	10.3	22.1	97	121.5		0.06
W228786		128	3.6	20.6	86	107.5		<0.01
W228787		144	3.1	23.3	122	120.0		0.01
W228788		141	2.4	22.3	112	116.0		<0.01
W228789		142	3.8	21.8	100	117.0		0.02
W228790		144	4.8	23.0	97	118.0		0.04
W228791		2	0.1	0.7	14	<0.5		<0.01
W228792		33	15.9	16.5	24	33.3	1.360	2.41

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 19- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17147658

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 25- AUG- 2017
This copy reported on 28- AUG- 2017
Account: RCM

CERTIFICATE WH17176933

Project: RCM_WH17147658

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 22- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

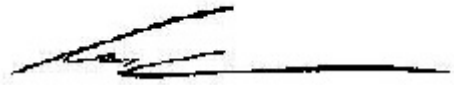
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17147658**

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 25- AUG- 2017
Account: RCM

Project: RCM_WH17147658

CERTIFICATE OF ANALYSIS WH17176933

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W228757		0.01
W228758		<0.01
W228759		<0.01
W228760		<0.01
W228761		<0.01
W228762		<0.01
W228763		0.06
W228764		<0.01
W228765		0.51
W228766		<0.01
W228767		<0.01
W228768		<0.01
W228769		<0.01
W228770		<0.01
W228771		0.01
W228772		<0.01
W228773		0.04
W228774		<0.01
W228775		<0.01
W228776		<0.01
W228777		<0.01
W228778		<0.01
W228779		0.01
W228780		<0.01
W228781		0.03
W228782		2.58
W228783		0.01
W228784		<0.01
W228785		0.06
W228786		<0.01
W228787		<0.01
W228788		0.04
W228789		0.01
W228790		0.05
W228791		<0.01
W228792		2.74

Comments: **Re- analysis results for samples originally reported on certificate WH17147658**

***** See Appendix Page for comments regarding this certificate *****

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Project: RCM_WH17147658

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 25- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17176933

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 25- AUG- 2017
Account: RCM

CERTIFICATE VA17145124

Project: Nadaleen

P.O. No.: N17- 040

This report is for 36 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 14- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
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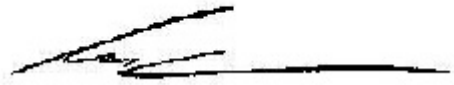
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS VA17145124

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229613		8.38	0.07	0.52	4820	50	0.22	0.05	19.20	0.02	11.10	1.2	5	1.06	6.5	1.06
W229614		9.56	0.03	0.70	4850	50	0.26	0.05	18.95	0.03	12.85	1.4	5	1.49	4.2	0.88
W229615		7.58	0.29	0.85	9500	80	0.29	0.05	18.65	0.22	13.15	3.1	11	1.61	16.0	2.10
W229616		7.02	0.04	1.22	380	80	0.45	0.05	17.65	0.14	16.90	1.3	11	2.64	5.0	0.72
W229617		7.74	0.02	0.88	336	50	0.35	0.04	18.70	0.05	12.85	1.2	7	2.07	4.5	0.79
W229618		7.32	0.04	0.78	124.5	40	0.35	0.05	18.25	0.02	11.55	1.0	6	1.96	3.5	1.14
W229619		3.52	0.04	0.81	137.5	40	0.33	0.05	18.60	0.02	11.70	1.1	6	1.98	3.7	1.17
W229620		7.78	0.03	0.51	767	40	0.22	0.03	19.45	0.05	10.25	1.2	4	1.05	4.2	1.41
W229621		0.34	0.28	3.94	>10000	180	0.63	0.18	10.55	0.64	45.8	11.3	47	9.05	54.5	3.10
W229622		8.14	0.04	0.40	183.5	40	0.20	0.03	20.1	0.06	8.51	1.0	4	0.67	4.1	1.85
W229623		8.42	0.02	0.60	92.1	40	0.31	0.03	19.30	<0.02	10.85	1.3	4	1.43	3.3	0.86
W229624		8.06	0.02	0.71	61.1	130	0.39	0.05	19.75	0.02	12.55	1.2	5	1.79	3.7	0.76
W229625		5.84	0.04	0.61	824	90	0.32	0.04	20.3	0.02	9.98	1.4	5	1.27	5.1	1.02
W229626		5.14	0.07	0.51	280	220	0.27	0.04	19.30	0.49	10.50	1.6	5	1.17	7.9	1.27
W229627		5.92	0.05	2.80	6860	240	0.98	0.16	15.50	0.15	34.3	4.5	23	7.71	17.0	1.79
W229628		4.78	0.01	0.08	7.9	80	0.07	0.03	22.0	0.06	1.48	0.6	<1	0.19	1.4	0.49
W229629		7.50	0.01	0.38	70.8	30	0.22	0.04	24.6	0.02	5.15	1.1	4	0.96	4.8	0.77
W229630		7.76	0.01	1.40	66.4	70	0.62	0.07	18.20	0.21	16.55	2.2	11	5.93	12.2	0.96
W229631		7.72	0.01	0.12	32.5	10	0.11	0.02	21.3	<0.02	2.62	0.8	1	0.14	2.4	0.77
W229632		7.78	0.01	0.09	103.0	10	0.12	0.02	21.2	<0.02	2.42	0.5	1	0.10	3.1	0.66
W229633		4.52	0.01	0.08	250	10	0.14	0.02	21.3	<0.02	2.47	0.6	2	0.09	2.7	0.65
W229634		4.98	0.06	0.41	1610	30	0.27	0.04	20.3	0.04	5.52	1.8	5	0.66	7.4	0.81
W229635		<0.02	0.07	0.40	1385	30	0.21	0.03	20.3	0.04	5.73	1.9	5	0.67	7.6	0.80
W229636		4.80	0.04	0.50	7530	50	0.26	0.04	20.2	0.34	7.34	1.3	6	0.73	3.9	0.74
W229637		7.74	0.11	2.75	2220	170	0.90	0.10	17.00	0.11	31.6	5.5	23	5.96	13.8	1.51
W229638		0.34	0.66	1.89	>10000	140	0.51	2.68	26.1	0.14	28.4	4.5	26	6.04	15.4	1.39
W229639		7.74	0.09	0.78	64.7	150	0.36	0.04	27.4	0.02	11.15	3.3	8	1.38	4.2	1.93
W229640		8.26	0.07	2.83	37.6	200	0.86	0.11	20.0	0.13	32.1	5.1	25	10.85	16.2	1.61
W229641		8.08	0.06	4.05	62.5	190	1.14	0.15	18.65	0.06	43.7	7.5	32	15.75	16.9	2.01
W229642		5.08	0.01	0.05	1.0	30	0.08	0.03	21.6	0.06	1.11	0.6	<1	0.13	5.1	0.48
W229643		3.06	0.31	1.80	312	130	0.58	0.06	16.35	0.38	21.4	2.6	19	5.33	6.6	0.85
W229644		6.88	0.05	2.60	73.3	170	0.85	0.08	13.70	0.02	32.4	2.9	26	12.50	13.9	1.15
W229645		11.52	0.06	4.01	41.7	180	1.39	0.10	11.75	0.05	45.4	4.9	39	21.3	22.5	1.43
W229646		11.54	0.06	2.89	44.6	150	0.95	0.09	12.10	0.05	38.7	4.4	30	11.75	7.6	1.23
W229647		10.14	0.08	3.23	52.9	180	1.02	0.09	11.20	0.08	42.3	5.3	39	13.20	13.3	1.20
W229648		9.04	0.08	3.98	68.2	240	1.31	0.11	14.05	0.02	44.1	5.7	44	17.15	18.9	1.13

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229613		1.35	0.06	0.5	1.355	0.006	0.26	5.9	3.0	11.35	684	0.18	0.02	0.9	3.5	470
W229614		1.84	0.07	0.6	0.971	0.007	0.34	6.7	3.7	11.35	616	0.15	0.02	1.2	3.6	370
W229615		2.18	<0.05	0.6	3.98	0.014	0.42	6.9	3.6	10.90	655	0.79	0.01	1.3	12.6	540
W229616		3.05	<0.05	0.9	0.515	0.012	0.63	8.7	6.8	9.93	367	0.56	0.02	2.0	2.9	560
W229617		2.24	0.06	0.8	0.283	0.008	0.45	7.1	5.1	11.25	567	0.22	0.02	1.5	2.2	450
W229618		1.98	0.05	0.6	0.422	0.007	0.39	6.1	4.5	11.05	675	0.44	0.02	1.3	2.6	430
W229619		2.00	0.05	0.7	0.452	0.006	0.41	6.1	4.7	11.20	663	0.46	0.02	1.4	3.1	440
W229620		1.27	<0.05	0.4	0.464	0.006	0.25	5.5	2.9	11.70	724	0.15	0.02	0.9	4.0	420
W229621		10.05	0.07	1.8	28.2	0.041	1.77	25.0	13.2	0.38	799	3.53	0.02	5.5	25.7	540
W229622		0.94	<0.05	0.4	0.513	0.005	0.20	4.8	2.3	12.10	666	0.11	0.01	0.7	3.3	500
W229623		1.47	0.05	0.4	0.305	0.007	0.30	5.9	3.7	11.95	566	0.11	0.02	0.9	3.4	450
W229624		1.80	0.06	0.6	0.202	0.008	0.35	6.7	4.4	12.15	513	0.13	0.01	1.2	2.6	360
W229625		1.57	0.06	0.5	0.473	0.006	0.30	5.6	3.7	12.55	579	0.15	0.01	1.0	3.3	410
W229626		1.32	0.05	0.3	1.520	0.006	0.25	5.2	2.8	11.80	547	0.15	0.01	0.9	5.6	840
W229627		6.59	0.06	1.3	2.49	0.027	1.38	18.6	10.7	8.96	871	0.19	0.02	3.9	11.6	570
W229628		0.25	0.08	<0.1	0.017	0.005	0.04	0.7	1.3	13.80	219	0.20	<0.01	0.2	1.3	220
W229629		0.91	0.06	0.2	0.539	0.005	0.19	2.6	2.1	8.94	373	0.07	0.01	0.6	1.8	580
W229630		3.34	0.07	0.7	0.760	0.021	0.71	8.4	7.8	10.85	388	0.10	0.02	2.0	4.2	480
W229631		0.31	0.07	0.1	0.114	<0.005	0.05	1.3	1.3	12.95	354	<0.05	0.02	0.2	1.2	330
W229632		0.23	0.08	0.1	0.639	<0.005	0.03	1.2	1.1	12.80	383	<0.05	0.02	0.1	0.9	360
W229633		0.20	0.10	0.1	0.921	<0.005	0.03	1.2	1.0	12.95	398	<0.05	0.02	0.1	1.4	370
W229634		1.06	0.08	0.2	4.67	<0.005	0.20	2.9	3.3	11.80	465	0.12	0.02	0.7	7.4	260
W229635		1.10	0.06	0.3	3.62	0.005	0.20	3.0	3.3	11.80	455	0.12	0.02	0.7	7.4	270
W229636		1.28	0.07	0.3	1.045	0.006	0.25	3.7	3.0	11.55	563	0.12	0.02	0.7	2.6	410
W229637		6.38	0.07	1.7	1.050	0.023	1.37	16.9	9.9	7.13	598	0.64	0.03	4.0	12.1	730
W229638		4.68	0.05	0.8	1.560	0.020	0.93	14.5	9.2	0.93	2300	1.75	0.01	2.5	12.6	330
W229639		1.88	<0.05	0.5	0.260	0.007	0.39	6.0	3.3	5.54	441	0.86	0.01	1.2	7.6	260
W229640		6.57	0.06	1.5	0.091	0.023	1.44	18.3	9.9	5.92	350	0.86	0.03	4.1	12.2	570
W229641		9.43	0.08	1.8	0.307	0.032	2.09	23.8	11.8	3.48	373	0.38	0.03	5.6	16.6	850
W229642		0.17	0.07	<0.1	0.007	<0.005	0.02	0.5	0.9	13.60	211	<0.05	<0.01	0.2	1.3	190
W229643		4.25	0.08	1.1	1.295	0.014	0.84	10.9	9.4	9.59	550	0.58	0.01	2.6	5.9	260
W229644		6.16	0.09	1.6	0.351	0.018	1.41	17.0	12.8	8.03	276	0.45	0.02	4.1	7.5	340
W229645		9.35	0.09	2.6	0.287	0.031	2.23	23.8	21.6	6.52	246	0.92	0.03	6.4	11.4	480
W229646		6.83	0.09	2.4	0.364	0.022	1.59	19.7	13.9	6.71	258	0.91	0.02	4.8	9.8	340
W229647		7.34	0.07	2.2	1.790	0.026	1.75	21.0	13.1	4.96	210	1.07	0.02	5.2	12.8	540
W229648		9.31	0.08	2.3	1.510	0.031	2.09	23.5	18.6	5.42	210	0.79	0.02	6.3	13.3	540

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	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229613		6.5	8.6	<0.002	0.66	6.49	0.9	1	0.2	79.5	0.07	<0.05	1.29	0.027	3.19	7.0
W229614		5.1	12.2	<0.002	0.56	6.33	1.3	1	0.2	87.0	0.09	<0.05	1.68	0.036	2.56	7.3
W229615		23.7	13.6	0.002	2.34	19.05	1.4	2	0.6	126.5	0.10	<0.05	1.91	0.039	10.90	11.3
W229616		4.0	20.6	<0.002	0.20	1.33	2.0	1	0.4	172.5	0.15	<0.05	2.52	0.058	0.93	10.3
W229617		3.2	14.3	<0.002	0.19	0.93	1.4	1	0.3	80.5	0.11	<0.05	1.94	0.043	0.58	6.9
W229618		5.5	12.3	<0.002	0.42	0.69	1.2	1	0.3	68.0	0.10	<0.05	1.75	0.039	1.54	9.1
W229619		5.8	12.9	<0.002	0.46	0.74	1.3	1	0.3	71.2	0.10	<0.05	1.83	0.039	1.82	9.4
W229620		7.4	7.8	<0.002	0.76	1.32	0.9	<1	0.2	77.8	0.06	<0.05	1.20	0.026	2.12	6.9
W229621		16.8	81.0	0.003	3.61	107.5	8.3	2	1.9	449	0.41	0.15	6.62	0.226	66.7	4.2
W229622		5.6	5.8	<0.002	1.48	0.94	0.7	1	0.2	71.6	0.06	<0.05	0.88	0.020	3.80	6.1
W229623		4.9	9.2	<0.002	0.44	0.87	1.0	1	0.3	68.2	0.07	<0.05	1.30	0.029	1.20	7.3
W229624		3.3	11.5	<0.002	0.31	0.48	1.2	1	0.3	74.4	0.09	<0.05	1.61	0.036	0.64	6.2
W229625		4.3	9.7	<0.002	0.60	1.46	1.0	1	0.2	84.6	0.08	<0.05	1.34	0.032	1.81	4.7
W229626		11.1	7.9	<0.002	1.04	1.69	0.9	1	0.2	108.0	0.06	0.11	1.02	0.026	3.40	4.5
W229627		11.4	51.2	<0.002	1.54	10.40	4.9	1	0.9	137.5	0.29	0.05	4.58	0.132	5.65	4.4
W229628		1.2	1.5	<0.002	<0.01	0.10	0.2	<1	<0.2	47.4	<0.05	<0.05	0.12	<0.005	0.02	0.9
W229629		1.2	6.2	<0.002	0.09	0.24	0.7	<1	0.2	165.5	<0.05	<0.05	0.67	0.018	0.41	1.9
W229630		3.3	26.6	<0.002	0.32	0.38	2.4	1	0.5	67.6	0.15	<0.05	2.38	0.066	0.55	4.0
W229631		0.6	1.6	<0.002	0.02	0.18	0.2	<1	<0.2	55.1	<0.05	<0.05	0.24	0.006	0.13	1.3
W229632		0.8	1.1	<0.002	0.02	0.32	0.2	<1	<0.2	60.4	<0.05	<0.05	0.17	<0.005	0.39	1.4
W229633		1.6	0.9	<0.002	0.05	0.62	0.2	<1	<0.2	70.3	<0.05	<0.05	0.16	<0.005	0.56	2.1
W229634		12.3	6.1	<0.002	0.27	4.02	0.7	<1	0.2	95.1	0.05	<0.05	0.88	0.020	3.49	2.9
W229635		11.4	6.3	<0.002	0.25	3.77	0.7	1	0.2	96.2	0.05	<0.05	0.87	0.019	4.07	2.9
W229636		8.7	8.0	<0.002	0.50	11.35	1.0	1	0.3	138.5	0.06	<0.05	1.01	0.023	2.66	3.6
W229637		12.1	46.9	<0.002	0.67	3.39	4.6	1	0.9	275	0.29	<0.05	5.02	0.131	2.62	9.0
W229638		7.4	39.4	0.002	1.44	45.5	5.5	2	0.7	1035	0.19	0.05	3.30	0.088	23.1	6.1
W229639		7.2	11.6	0.002	0.33	0.33	1.2	1	0.3	751	0.09	<0.05	1.61	0.036	0.99	13.9
W229640		9.9	52.6	0.002	0.41	0.39	4.7	1	0.9	502	0.30	<0.05	5.00	0.133	0.90	18.6
W229641		9.3	76.8	<0.002	0.60	0.41	6.5	1	1.3	491	0.40	<0.05	6.49	0.192	0.87	7.7
W229642		1.8	0.9	<0.002	<0.01	0.17	0.1	<1	<0.2	44.6	<0.05	<0.05	0.08	<0.005	<0.02	0.7
W229643		5.1	27.1	<0.002	0.30	1.11	2.7	1	0.6	126.0	0.20	<0.05	3.55	0.078	2.65	6.6
W229644		5.6	45.7	<0.002	0.25	0.43	4.0	1	0.8	110.0	0.29	<0.05	5.41	0.121	0.92	7.4
W229645		7.5	72.7	<0.002	0.29	0.30	5.9	1	1.2	134.5	0.47	<0.05	8.35	0.190	0.49	6.2
W229646		8.4	51.9	0.002	0.33	0.43	4.2	2	0.9	141.0	0.34	<0.05	6.44	0.141	0.53	4.7
W229647		7.3	55.1	<0.002	0.28	0.45	4.6	2	1.0	146.5	0.40	<0.05	6.85	0.156	1.37	6.5
W229648		7.3	67.9	0.002	0.24	0.62	5.9	2	1.4	190.0	0.46	<0.05	8.09	0.190	1.34	8.5

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 25- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS VA17145124

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229613		10	0.6	5.1	4	18.1		0.04
W229614		17	0.9	5.0	5	22.9		0.04
W229615		32	1.4	5.7	47	21.5		0.15
W229616		27	1.4	6.3	16	33.0		0.02
W229617		14	0.8	5.9	8	29.1		0.01
W229618		15	0.7	5.1	4	23.5		0.01
W229619		16	0.7	5.3	4	25.1		0.01
W229620		9	0.5	4.8	9	15.7		0.01
W229621		64	8.1	21.9	134	66.1	3.27	8.00
W229622		8	0.5	3.9	12	12.4		<0.01
W229623		13	0.5	4.5	3	15.5		0.01
W229624		15	0.6	4.7	4	20.4		<0.01
W229625		11	0.6	3.9	5	16.6		0.01
W229626		8	0.5	4.4	185	11.1		0.01
W229627		38	1.9	11.0	48	47.1		0.59
W229628		2	0.1	0.9	18	<0.5		<0.01
W229629		6	0.2	3.1	18	8.1		<0.01
W229630		21	0.9	5.5	102	23.6		<0.01
W229631		2	0.1	1.2	6	3.9		<0.01
W229632		2	0.1	1.2	5	3.4		<0.01
W229633		2	0.1	1.4	4	3.4		<0.01
W229634		5	0.4	2.2	7	10.2		0.01
W229635		5	0.9	2.3	7	10.6		0.01
W229636		8	1.0	3.3	60	10.9		0.54
W229637		40	1.7	10.6	50	62.6		0.05
W229638		33	16.8	14.8	24	32.2	1.365	2.83
W229639		14	0.3	4.4	27	18.4		<0.01
W229640		43	0.6	9.7	52	55.6		<0.01
W229641		59	0.7	12.9	55	64.9		<0.01
W229642		2	0.1	0.8	15	<0.5		<0.01
W229643		43	2.2	6.2	58	39.4		0.09
W229644		42	0.9	9.1	9	59.2		0.01
W229645		64	0.8	13.3	16	96.8		<0.01
W229646		42	0.9	11.2	12	92.3		0.01
W229647		61	1.1	12.5	25	82.0		<0.01
W229648		64	1.1	12.0	10	85.5		<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 25- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS VA17145124

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE VA17180763

Project: Nadaleen

P.O. No.: N17- 040

This report is for 36 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 26- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

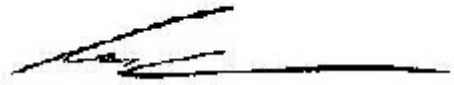
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS VA17180763

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W229613		0.04
W229614		0.04
W229615		0.15
W229616		0.02
W229617		<0.01
W229618		<0.01
W229619		<0.01
W229620		0.01
W229621		7.85
W229622		0.01
W229623		0.01
W229624		<0.01
W229625		0.01
W229626		0.01
W229627		0.57
W229628		<0.01
W229629		<0.01
W229630		<0.01
W229631		<0.01
W229632		<0.01
W229633		<0.01
W229634		0.01
W229635		0.01
W229636		0.53
W229637		0.04
W229638		2.69
W229639		<0.01
W229640		<0.01
W229641		<0.01
W229642		<0.01
W229643		0.10
W229644		0.02
W229645		<0.01
W229646		0.01
W229647		0.01
W229648		0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS VA17180763

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

2103 Dollarton Hwy
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- AUG- 2017
Account: RCM

CERTIFICATE WH17148639

Project: Nadaleen

P.O. No.: N17- 041

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 17- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

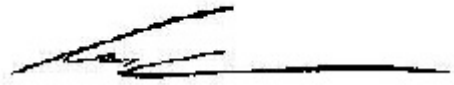
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 27- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17148639

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229649		11.34	0.06	1.86	25.0	140	0.67	0.17	25.7	0.04	26.2	3.4	18	8.08	6.8	0.71
W229650		11.12	0.07	3.15	50.8	170	1.07	0.16	18.85	0.03	35.2	4.5	31	11.80	13.7	1.18
W229651		11.34	0.06	1.93	49.6	210	0.59	0.12	23.0	0.03	27.4	3.7	20	5.48	10.1	1.63
W229652		11.10	0.07	2.74	49.1	530	0.96	0.14	20.4	0.07	33.5	4.7	28	8.28	10.9	1.12
W229653		11.48	0.10	0.63	27.1	80	0.33	0.08	35.9	0.08	10.70	1.5	7	1.93	4.6	0.26
W229654		10.68	0.09	1.30	107.5	120	0.51	0.10	31.3	0.08	17.95	2.4	15	4.51	8.5	0.72
W229655		5.66	0.15	4.53	180.0	200	1.40	0.28	17.20	0.06	51.1	7.8	46	17.40	28.2	1.38
W229656		8.28	0.10	3.76	1935	150	1.09	0.14	10.10	0.04	44.0	6.7	42	17.10	15.7	1.57
W229657		5.26	0.40	3.85	505	320	1.16	0.12	14.45	0.07	43.1	5.8	44	15.45	20.0	1.44
W229658		7.12	0.01	0.05	1.3	20	0.05	0.03	21.7	0.06	1.11	0.7	1	0.14	3.6	0.49
W229659		8.74	0.06	1.95	52.8	320	0.73	0.06	20.3	0.06	27.6	3.5	24	7.67	14.6	1.59
W229660		0.34	0.19	3.88	6500	210	1.06	0.14	12.45	0.13	41.6	11.5	46	10.70	34.6	2.92
W229661		10.84	0.04	0.92	25.2	1030	0.39	0.04	27.7	0.03	16.60	1.9	12	3.61	9.1	1.34
W229662		12.24	0.06	1.42	26.1	170	0.56	0.05	30.5	0.05	18.85	2.9	17	5.98	8.2	0.59
W229663		<0.02	0.05	1.30	24.6	220	0.53	0.05	31.9	0.07	18.20	2.6	16	5.42	7.9	0.54
W229664		11.30	0.04	1.64	48.5	200	0.58	0.05	29.9	0.03	20.3	2.6	20	6.34	7.6	0.52
W229665		10.06	0.05	1.83	105.5	260	0.68	0.06	26.6	0.06	24.6	2.9	22	5.66	10.4	0.70
W229666		10.50	0.04	3.07	126.5	230	1.04	0.09	20.6	0.06	38.0	3.6	32	10.70	17.7	0.83
W229667		11.18	0.06	1.93	55.9	320	0.69	0.07	27.6	0.07	25.6	3.3	21	5.91	15.4	0.60
W229668		10.16	0.08	3.50	98.6	260	1.13	0.10	17.50	0.06	41.8	5.5	40	10.30	23.1	1.20
W229669		12.04	0.05	1.41	58.6	230	0.57	0.05	30.3	0.07	18.50	2.3	17	4.26	7.5	0.57
W229670		10.58	0.04	1.43	69.3	190	0.60	0.05	31.8	0.05	19.05	2.5	17	4.15	10.9	0.55
W229671		5.08	0.04	1.28	71.4	190	0.55	0.06	32.3	0.06	17.85	2.3	15	3.79	8.7	0.49
W229672		11.02	0.04	1.49	30.9	360	0.58	0.05	28.7	0.04	21.4	2.4	18	4.34	8.1	0.62
W229673		11.26	0.05	1.56	66.0	200	0.66	0.05	29.9	0.06	20.6	2.9	18	5.13	10.6	0.70
W229674		11.08	0.03	1.04	23.3	250	0.52	0.04	31.4	0.05	16.55	2.2	13	3.55	6.5	0.57
W229675		11.62	0.02	0.56	29.5	360	0.22	0.03	31.7	0.09	10.20	1.3	8	1.44	3.8	0.33
W229676		0.34	0.65	1.89	>10000	140	0.57	2.84	26.4	0.14	27.6	4.7	27	6.01	15.8	1.38
W229677		11.72	0.04	1.44	44.7	310	0.53	0.06	27.4	0.04	21.1	2.2	17	4.81	7.1	0.61
W229678		12.02	0.02	1.26	42.1	400	0.49	0.05	31.1	0.05	20.0	1.8	14	4.41	6.5	0.39
W229679		11.96	0.05	2.29	61.3	190	0.97	0.07	28.5	0.05	28.1	4.5	24	7.87	13.7	0.76
W229680		11.90	0.06	1.61	68.3	110	0.66	0.06	26.7	0.02	20.0	2.9	18	5.64	7.6	0.83
W229681		6.88	0.01	0.05	0.3	140	<0.05	0.03	22.0	0.06	1.09	0.6	1	0.11	2.9	0.47
W229682		11.22	0.04	1.50	61.4	170	0.63	0.05	27.2	0.06	22.1	2.7	17	4.89	8.8	0.64
W229683		11.32	0.06	1.85	40.6	100	0.65	0.06	26.4	0.08	23.1	3.4	21	5.72	10.6	0.74
W229684		11.14	0.07	2.04	41.9	100	0.74	0.07	25.1	0.04	24.1	4.4	22	6.48	11.4	0.78

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17148639

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229649		4.57	0.06	1.2	0.111	0.014	1.02	14.4	9.7	2.55	146	0.55	0.01	3.1	7.4	240
W229650		7.58	0.08	2.0	0.365	0.024	1.76	19.5	14.3	4.09	189	0.77	0.02	5.0	10.2	390
W229651		4.80	0.06	1.0	0.443	0.017	1.03	14.0	7.3	4.88	295	0.52	0.01	3.0	10.1	300
W229652		6.67	0.08	1.8	0.305	0.021	1.48	17.9	12.2	2.99	188	0.61	0.01	4.3	11.4	350
W229653		1.56	0.05	0.3	0.210	0.006	0.34	6.5	2.7	0.54	160	0.51	0.01	0.9	3.2	150
W229654		3.14	0.06	0.6	0.554	0.010	0.68	10.0	5.3	1.48	206	0.56	0.01	2.0	5.9	230
W229655		10.80	0.09	2.2	1.430	0.033	2.44	28.4	17.5	2.50	177	1.08	0.02	7.4	18.8	820
W229656		9.11	0.09	2.8	7.21	0.027	1.92	23.1	21.2	3.87	373	1.27	0.02	6.0	16.4	570
W229657		9.10	0.07	2.2	3.19	0.025	1.91	23.6	18.9	5.12	274	1.78	0.02	6.0	16.9	530
W229658		0.18	0.08	<0.1	0.010	<0.005	0.03	0.5	1.1	13.60	211	0.28	<0.01	0.1	2.6	180
W229659		4.71	0.08	1.2	1.215	0.017	1.06	14.1	9.9	5.00	256	0.64	0.01	3.1	10.1	330
W229660		9.33	0.06	1.9	15.45	0.033	1.81	21.9	11.7	2.61	1200	1.87	0.02	5.6	25.5	450
W229661		2.26	0.05	0.4	0.258	0.008	0.49	8.2	4.6	4.80	245	0.47	0.01	1.4	5.0	130
W229662		3.45	0.06	0.6	0.215	0.011	0.74	10.3	7.5	1.02	103	0.44	0.01	2.2	7.1	240
W229663		3.10	0.06	0.6	0.209	0.010	0.69	9.9	6.8	0.99	105	0.40	0.01	2.0	6.4	220
W229664		4.04	0.07	0.9	0.195	0.012	0.87	11.0	6.7	1.27	134	0.42	0.01	2.6	6.1	280
W229665		4.30	0.07	1.0	0.323	0.016	0.95	13.1	7.8	2.59	166	0.61	0.01	2.9	6.9	310
W229666		7.11	0.09	1.5	0.625	0.021	1.59	20.2	13.0	3.24	198	0.47	0.01	4.7	8.6	470
W229667		4.62	0.07	1.0	0.343	0.015	1.03	14.2	7.9	1.62	136	0.57	0.01	3.1	7.7	290
W229668		8.46	0.09	2.0	0.316	0.027	1.90	22.2	15.3	3.78	167	0.68	0.02	5.4	13.8	540
W229669		3.45	0.07	0.8	0.098	0.011	0.75	9.8	6.4	1.78	122	0.55	0.01	2.3	5.4	200
W229670		3.52	0.06	0.7	0.073	0.014	0.78	10.4	7.0	1.17	115	0.35	0.01	2.2	5.5	240
W229671		3.13	0.07	0.6	0.077	0.011	0.69	9.7	6.5	1.07	114	0.35	0.01	2.0	5.1	200
W229672		3.62	0.06	0.7	0.071	0.012	0.82	11.2	6.2	1.33	117	0.43	0.01	2.2	5.7	250
W229673		3.87	0.07	0.8	0.103	0.012	0.85	11.0	9.2	1.57	115	0.47	0.01	2.5	6.5	190
W229674		2.57	0.06	0.5	0.125	0.008	0.57	8.7	6.5	1.87	126	0.39	0.01	1.7	5.4	160
W229675		1.34	0.06	0.4	0.161	0.006	0.32	5.6	3.5	2.25	123	0.37	0.01	0.9	2.6	140
W229676		4.70	0.08	0.8	6.54	0.023	0.92	14.4	9.4	0.92	2320	1.82	0.01	2.6	13.2	330
W229677		3.48	0.06	0.8	0.183	0.012	0.79	10.6	8.6	3.42	154	0.43	0.01	2.3	5.7	200
W229678		3.07	0.06	0.6	0.128	0.010	0.70	10.4	6.1	0.92	208	0.17	0.01	1.9	3.8	250
W229679		5.66	0.07	1.2	0.097	0.017	1.30	15.5	12.2	1.50	196	0.36	0.01	3.6	10.2	320
W229680		3.90	0.07	0.9	0.206	0.014	0.90	10.6	8.0	4.08	305	0.65	0.01	2.5	6.7	190
W229681		0.15	0.06	<0.1	0.016	<0.005	0.02	0.5	1.0	13.75	213	0.09	0.01	0.1	1.5	180
W229682		3.65	0.08	0.9	0.254	0.013	0.85	10.0	10.7	2.68	151	0.57	0.02	2.4	6.8	230
W229683		4.53	0.08	1.0	0.277	0.013	1.05	11.9	13.6	2.86	126	0.79	0.02	3.0	8.2	290
W229684		5.05	0.08	1.2	0.260	0.016	1.17	14.4	11.6	3.48	145	0.70	0.02	3.3	9.9	300

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 27- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17148639

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229649		5.8	35.6	<0.002	0.14	0.22	3.0	2	0.6	630	0.23	<0.05	3.99	0.092	0.39	12.3
W229650		7.1	59.1	0.002	0.22	0.29	4.9	2	1.0	330	0.37	<0.05	6.64	0.153	0.72	8.9
W229651		6.5	35.6	<0.002	0.43	0.60	3.3	2	0.6	278	0.23	<0.05	3.90	0.089	1.14	9.4
W229652		7.5	52.3	<0.002	0.36	0.40	4.4	2	0.9	346	0.32	<0.05	5.88	0.130	0.75	9.4
W229653		4.0	10.8	<0.002	0.12	0.16	1.1	1	0.2	921	0.07	<0.05	1.20	0.028	0.38	13.4
W229654		5.4	23.6	<0.002	0.30	0.30	2.2	1	0.4	717	0.15	<0.05	2.60	0.061	1.17	16.1
W229655		10.0	84.6	<0.002	0.62	0.40	7.1	3	1.4	312	0.55	<0.05	9.37	0.220	1.38	12.4
W229656		10.5	70.6	<0.002	0.75	2.11	6.3	2	1.2	138.0	0.45	<0.05	8.18	0.183	11.85	7.3
W229657		11.5	66.4	0.003	0.59	1.34	5.9	2	1.2	233	0.46	<0.05	7.99	0.185	5.07	9.7
W229658		2.1	1.1	<0.002	<0.01	0.11	0.1	<1	<0.2	44.8	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W229659		7.8	35.3	<0.002	0.76	0.30	3.1	1	0.7	374	0.24	<0.05	4.22	0.095	0.97	8.6
W229660		10.9	79.9	0.002	2.64	22.3	9.8	1	1.5	319	0.42	<0.05	5.87	0.270	42.1	6.4
W229661		4.9	15.3	<0.002	0.31	0.21	1.5	1	0.3	565	0.11	<0.05	1.97	0.044	0.42	13.1
W229662		6.1	26.6	<0.002	0.32	0.21	2.4	1	0.5	818	0.17	<0.05	2.97	0.066	0.42	17.0
W229663		5.7	24.0	<0.002	0.28	0.20	2.1	1	0.5	874	0.15	<0.05	2.70	0.061	0.38	15.1
W229664		5.0	29.0	<0.002	0.18	0.33	2.7	1	0.6	698	0.19	<0.05	3.39	0.078	0.45	14.9
W229665		5.4	31.3	<0.002	0.20	0.39	3.0	1	0.6	617	0.22	<0.05	3.93	0.085	0.69	12.8
W229666		5.8	51.8	<0.002	0.17	0.44	4.8	1	1.0	393	0.35	<0.05	6.19	0.141	1.25	10.7
W229667		5.8	33.6	<0.002	0.23	0.36	3.1	1	0.6	668	0.23	<0.05	4.14	0.093	0.55	11.1
W229668		7.9	62.3	<0.002	0.42	0.45	5.3	2	1.1	407	0.41	<0.05	7.23	0.167	0.66	8.1
W229669		5.8	24.6	<0.002	0.15	0.25	2.3	2	0.5	813	0.17	<0.05	3.09	0.067	0.42	15.3
W229670		4.9	26.0	<0.002	0.11	0.33	2.4	1	0.5	858	0.17	<0.05	2.95	0.067	0.35	13.2
W229671		4.9	22.9	<0.002	0.09	0.30	2.2	2	0.4	841	0.15	<0.05	2.73	0.059	0.35	13.2
W229672		4.9	26.7	<0.002	0.16	0.19	2.4	1	0.5	793	0.17	<0.05	3.06	0.068	0.33	11.7
W229673		6.5	29.0	<0.002	0.40	0.23	2.6	1	0.6	817	0.19	<0.05	3.25	0.072	0.45	14.8
W229674		6.3	18.4	<0.002	0.33	0.23	1.7	1	0.4	944	0.13	<0.05	2.20	0.050	0.44	12.3
W229675		4.8	9.6	<0.002	0.12	0.27	0.9	1	0.2	967	0.07	<0.05	1.27	0.028	0.28	10.5
W229676		8.0	39.7	0.002	1.45	45.3	5.5	2	0.7	1025	0.19	<0.05	3.28	0.089	23.1	6.1
W229677		6.9	26.7	<0.002	0.28	0.28	2.4	1	0.5	834	0.18	<0.05	3.04	0.068	0.47	13.1
W229678		3.6	23.0	<0.002	0.16	0.16	2.1	1	0.4	571	0.15	<0.05	2.44	0.056	0.37	9.8
W229679		6.8	44.2	<0.002	0.46	0.29	3.7	2	0.8	494	0.26	<0.05	4.67	0.106	0.64	11.2
W229680		5.8	29.6	<0.002	0.35	0.35	2.6	1	0.5	514	0.19	<0.05	3.29	0.074	0.90	13.1
W229681		1.3	0.9	<0.002	<0.01	0.05	0.1	<1	<0.2	50.1	<0.05	<0.05	0.08	<0.005	<0.02	0.9
W229682		10.5	29.5	<0.002	0.36	0.33	2.4	2	0.5	1335	0.19	<0.05	3.33	0.073	0.84	11.3
W229683		9.4	36.9	<0.002	0.34	0.24	3.0	2	0.6	1425	0.22	<0.05	4.10	0.091	0.60	14.0
W229684		10.6	39.5	<0.002	0.36	0.30	3.2	2	0.7	1155	0.25	<0.05	4.45	0.100	0.79	13.9

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VANCOUVER BC V6B 1L8

Finalized Date: 27- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17148639

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229649		33	0.4	7.8	11	47.5		<0.01
W229650		53	0.7	10.6	10	72.2		0.01
W229651		31	1.0	8.5	12	36.9		0.13
W229652		41	0.9	9.8	35	66.9		<0.01
W229653		18	0.3	3.6	19	9.7		<0.01
W229654		26	0.9	5.8	19	21.3		0.02
W229655		69	2.1	15.3	21	83.3		0.01
W229656		60	3.3	13.8	13	103.5		0.12
W229657		67	3.2	12.5	27	85.6		0.05
W229658		2	0.1	0.8	17	<0.5		<0.01
W229659		32	0.7	8.8	25	45.1		<0.01
W229660		86	7.3	18.1	50	70.0		2.59
W229661		21	0.2	4.8	10	15.9		<0.01
W229662		27	0.3	5.5	17	24.4		<0.01
W229663		26	0.3	5.3	18	22.0		<0.01
W229664		29	0.5	5.8	10	30.3		<0.01
W229665		32	1.1	7.8	22	37.0		<0.01
W229666		53	1.5	10.6	30	55.8		<0.01
W229667		33	0.7	7.9	28	36.6		0.01
W229668		55	1.2	12.5	37	73.0		0.01
W229669		25	0.5	5.7	24	30.2		<0.01
W229670		27	0.5	6.0	21	27.8		<0.01
W229671		25	0.4	5.7	19	23.0		<0.01
W229672		27	0.3	6.3	21	29.4		<0.01
W229673		28	0.3	5.9	15	30.9		<0.01
W229674		18	0.3	4.8	11	19.9		<0.01
W229675		10	0.2	3.7	14	16.5		<0.01
W229676		34	17.2	15.2	25	34.5	1.325	2.69
W229677		25	0.4	5.9	11	28.5		<0.01
W229678		21	0.4	6.1	6	21.2		<0.01
W229679		35	0.6	8.1	9	64.3		<0.01
W229680		27	0.6	6.1	6	33.1		<0.01
W229681		2	0.1	0.8	16	<0.5		<0.01
W229682		25	0.6	6.1	16	35.4		<0.01
W229683		32	0.4	6.7	20	39.8		<0.01
W229684		34	0.6	7.0	13	45.2		<0.01

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17148639

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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Finalized Date: 27- AUG- 2017
Account: RCM

CERTIFICATE WH17148649

Project: Nadaleen

P.O. No.: N17- 042

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 19- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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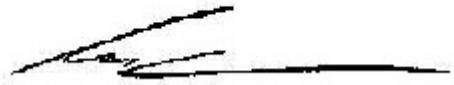
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17148649

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228793		12.32	0.06	6.36	333	210	1.70	0.25	3.26	0.16	61.8	16.6	74	21.2	57.4	5.27
W228794		10.72	0.07	6.13	49.4	200	1.78	0.24	3.17	0.12	59.4	16.7	78	26.1	54.1	4.90
W228795		11.06	0.07	5.86	84.5	190	1.83	0.26	2.50	0.12	58.8	18.8	81	21.6	56.6	4.83
W228796		11.64	0.08	6.87	224	200	2.25	0.29	2.31	0.10	68.0	22.4	81	24.4	63.5	5.24
W228797		11.02	0.06	6.26	96.7	190	1.99	0.26	2.43	0.10	60.7	22.1	75	21.0	60.2	5.07
W228798		10.46	0.05	3.89	774	180	0.86	0.14	2.94	0.07	39.3	17.1	82	11.15	38.7	4.01
W228799		9.42	0.05	3.59	145.5	110	0.84	0.13	2.32	0.06	37.4	13.8	90	11.50	36.7	3.56
W228800		7.82	0.09	6.40	5300	190	1.69	0.28	2.68	0.36	62.3	23.2	73	15.55	56.0	5.50
W228801		6.76	<0.01	0.05	6.8	20	0.05	0.04	21.3	0.05	1.07	0.7	1	0.11	1.6	0.48
W228802		11.14	0.06	4.85	2300	140	1.15	0.18	1.53	0.11	48.8	21.9	81	14.10	50.4	4.38
W228803		<0.02	0.06	5.25	2140	140	1.08	0.19	1.79	0.12	49.7	22.2	82	14.10	53.1	4.90
W228804		7.46	0.09	6.11	4520	260	1.51	0.26	1.51	0.12	58.9	19.8	78	17.30	49.1	4.53
W228805		0.34	1.68	1.86	>10000	100	0.28	0.49	7.20	0.83	30.3	6.7	47	3.39	29.1	2.65
W228806		8.36	0.10	6.94	405	200	2.08	0.29	2.60	0.27	66.4	23.2	80	27.4	68.9	5.55
W228807		12.08	0.06	5.98	166.0	170	1.59	0.25	2.36	0.15	56.4	22.6	80	22.8	60.1	5.13
W228808		13.98	0.08	6.64	3410	190	1.84	0.28	1.71	0.08	65.2	24.3	76	19.05	59.1	5.09
W228809		7.10	<0.01	0.05	5.3	30	0.05	0.04	21.4	0.05	1.13	0.6	1	0.13	2.0	0.48
W228810		10.34	0.09	6.55	1380	190	1.75	0.27	1.42	0.04	65.6	20.7	74	20.3	59.9	4.98
W228811		12.02	0.09	6.27	2640	180	1.71	0.27	1.03	0.10	62.7	19.4	79	20.0	55.0	4.52
W228812		12.06	0.05	3.05	507	190	0.85	0.14	2.50	<0.02	34.1	9.0	63	10.20	30.3	3.04
W228813		12.18	0.06	7.25	281	230	2.41	0.32	2.24	0.06	71.3	21.4	72	24.5	64.7	5.40
W228814		11.10	0.06	6.99	5780	200	1.88	0.29	1.23	0.19	69.4	25.7	77	20.9	60.7	5.28
W228815		12.24	0.07	5.73	4940	150	1.55	0.23	1.95	0.36	61.4	18.0	74	17.45	49.0	4.51
W228816		10.80	0.07	5.23	4960	120	1.22	0.20	1.06	0.08	53.8	19.8	79	15.10	49.0	4.65
W228817		11.94	0.05	5.87	4530	170	1.26	0.22	0.68	0.90	56.3	18.9	84	14.55	50.7	4.69
W228818		11.46	0.12	5.56	2890	150	1.48	0.22	0.92	0.14	53.9	16.2	81	16.00	49.4	4.68
W228819		11.32	0.11	8.09	1535	250	2.31	0.34	1.04	0.13	79.6	23.3	87	27.1	67.2	5.55
W228820		10.98	0.05	7.87	648	260	2.31	0.40	1.50	0.21	73.9	22.8	75	27.2	57.0	5.50
W228821		11.66	0.04	7.40	1905	260	2.19	0.35	2.88	0.23	68.1	19.2	70	23.9	55.8	4.42
W228822		0.34	0.63	1.87	>10000	140	0.59	3.30	26.3	0.15	28.5	4.8	28	6.65	15.5	1.40
W228823		12.36	0.08	7.12	746	220	2.12	0.30	4.45	0.13	66.8	17.4	72	22.6	57.3	3.61
W228824		11.38	0.05	5.50	891	160	1.36	0.23	4.05	0.09	54.7	17.8	60	15.80	45.5	4.49
W228825		11.04	0.07	5.87	4840	250	1.42	0.22	4.04	0.11	57.9	17.2	69	16.15	46.8	4.71
W228826		11.40	0.05	4.24	334	210	1.05	0.18	3.55	0.12	44.1	11.9	76	12.65	37.6	3.70
W228827		5.40	0.05	4.47	350	260	1.09	0.18	3.33	0.14	45.1	13.3	65	12.75	39.2	3.84
W228828		11.70	0.05	4.78	280	200	1.08	0.18	3.50	0.12	46.1	16.3	77	13.50	40.4	4.19

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 27- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17148649

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228793		15.35	0.08	3.0	1.200	0.063	2.96	30.3	24.0	1.72	705	0.72	0.03	10.3	34.6	510
W228794		14.85	0.09	3.0	0.447	0.064	2.83	29.8	79.1	2.12	653	0.76	0.03	9.8	33.4	480
W228795		16.20	0.11	3.0	0.226	0.060	2.65	28.4	114.5	1.98	545	1.43	0.03	10.4	35.6	440
W228796		18.90	0.11	3.1	0.314	0.069	3.23	32.5	96.4	2.20	582	0.70	0.03	11.9	38.3	550
W228797		16.95	0.11	2.8	0.251	0.060	2.88	29.3	72.7	2.16	580	0.67	0.03	11.2	38.8	510
W228798		10.30	0.08	2.1	0.620	0.038	1.74	17.9	45.2	1.30	623	1.79	0.03	7.0	29.2	350
W228799		10.15	0.08	2.2	0.589	0.034	1.56	17.9	44.0	1.02	592	1.99	0.04	6.8	26.7	270
W228800		17.80	0.13	3.0	4.99	0.057	3.03	29.6	13.9	1.48	1120	1.27	0.02	11.4	40.2	770
W228801		0.17	0.08	<0.1	0.009	<0.005	0.02	0.5	0.8	13.25	216	0.12	<0.01	0.1	1.6	170
W228802		13.20	0.09	2.5	4.23	0.042	2.22	23.4	14.0	0.83	479	1.35	0.02	8.4	33.7	390
W228803		13.95	0.11	2.7	3.67	0.046	2.42	23.7	16.2	0.94	545	0.97	0.02	9.2	36.4	420
W228804		16.55	0.10	2.9	5.53	0.044	2.92	28.9	11.9	0.96	716	1.29	0.02	10.7	31.7	490
W228805		5.58	0.08	0.9	15.30	0.024	0.83	15.2	26.2	0.17	349	6.28	0.01	2.6	20.1	500
W228806		19.25	0.11	3.4	1.130	0.067	3.33	32.2	20.1	1.46	744	0.63	0.03	12.5	42.1	540
W228807		16.40	0.10	2.8	0.411	0.058	2.76	27.0	29.9	1.88	679	0.74	0.03	10.6	38.8	490
W228808		18.35	0.11	3.2	7.46	0.055	3.19	31.6	12.8	1.08	489	0.65	0.02	11.5	39.4	570
W228809		0.17	0.10	<0.1	0.010	<0.005	0.02	0.5	0.8	13.40	209	0.10	<0.01	0.1	1.5	180
W228810		17.35	0.09	3.0	5.27	0.055	3.14	31.3	11.5	0.95	408	0.62	0.02	11.1	35.8	560
W228811		17.20	0.10	3.0	3.81	0.048	3.03	30.4	10.7	0.79	294	0.88	0.02	10.9	33.4	460
W228812		7.85	0.06	1.7	2.17	0.026	1.45	16.7	9.7	1.11	756	1.99	0.01	4.9	16.6	310
W228813		19.90	0.11	3.5	2.18	0.068	3.54	34.7	12.3	1.40	700	0.43	0.03	12.3	38.5	550
W228814		19.55	0.12	3.4	10.05	0.059	3.37	33.4	12.7	0.93	468	0.75	0.02	13.5	41.8	570
W228815		16.40	0.10	3.0	8.00	0.047	2.66	28.7	11.2	0.95	646	1.03	0.02	10.5	33.0	450
W228816		15.15	0.10	2.8	8.40	0.042	2.44	26.2	10.6	0.51	302	0.90	0.01	9.6	36.8	450
W228817		16.00	0.10	2.8	9.10	0.044	2.76	27.0	11.1	0.45	187	0.99	0.02	10.2	36.2	510
W228818		15.30	0.09	2.8	9.29	0.045	2.61	26.2	11.6	0.60	294	1.15	0.02	9.8	33.4	460
W228819		23.2	0.13	3.8	10.45	0.070	3.89	38.4	16.9	0.88	377	1.01	0.03	13.3	43.2	660
W228820		23.5	0.11	3.2	4.26	0.074	3.90	35.6	15.2	1.07	560	0.80	0.03	12.1	41.6	540
W228821		23.2	0.12	3.3	1.990	0.076	3.73	32.3	15.0	1.60	455	0.58	0.03	12.5	37.9	530
W228822		5.13	0.07	0.9	6.44	0.022	0.94	14.5	8.8	0.90	2250	1.82	0.01	2.7	13.0	320
W228823		18.35	0.11	3.2	0.611	0.073	3.39	32.4	19.7	2.33	698	0.61	0.03	10.9	36.3	560
W228824		14.30	0.08	2.7	1.250	0.053	2.57	25.7	22.7	1.96	750	0.37	0.02	9.5	31.3	490
W228825		15.35	0.09	2.9	1.935	0.059	2.77	27.8	26.6	1.92	907	1.15	0.02	9.7	31.5	450
W228826		10.85	0.07	2.1	0.793	0.039	1.94	21.3	19.1	1.59	815	2.28	0.02	6.8	22.7	420
W228827		11.55	0.07	2.1	0.847	0.043	2.02	21.9	20.3	1.54	726	1.49	0.02	7.5	24.4	450
W228828		12.50	0.07	2.4	0.572	0.044	2.24	22.1	20.3	1.60	917	1.73	0.02	8.2	28.0	390

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 27- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17148649

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228793		17.6	134.0	<0.002	4.73	1.63	16.6	1	1.9	177.5	0.74	0.05	8.98	0.563	3.74	1.8
W228794		20.1	130.0	<0.002	1.31	0.49	16.0	1	1.9	224	0.71	0.06	8.71	0.537	1.55	1.8
W228795		14.5	124.0	<0.002	0.62	0.42	17.8	1	1.8	169.5	0.71	0.05	9.15	0.543	1.12	1.8
W228796		19.2	155.0	<0.002	1.03	0.72	20.3	1	2.1	146.5	0.82	0.05	10.50	0.569	1.47	2.0
W228797		20.7	141.0	<0.002	0.83	0.55	19.0	1	2.2	167.0	0.76	0.06	9.50	0.535	1.17	1.9
W228798		9.5	80.8	<0.002	3.11	0.96	11.9	1	1.1	152.5	0.46	<0.05	5.60	0.462	1.73	1.1
W228799		7.9	71.6	<0.002	2.48	0.95	10.6	1	1.2	87.9	0.46	<0.05	5.40	0.481	2.87	1.1
W228800		25.3	146.5	<0.002	5.26	14.30	21.4	1	2.3	115.0	0.75	<0.05	9.75	0.513	16.55	1.9
W228801		1.1	0.9	<0.002	0.01	0.19	0.2	1	<0.2	43.3	<0.05	<0.05	0.08	<0.005	0.04	0.6
W228802		11.6	106.0	<0.002	4.17	5.67	13.1	1	1.8	81.9	0.59	<0.05	7.44	0.512	15.05	1.4
W228803		10.7	111.5	<0.002	4.86	5.84	14.0	1	1.9	88.5	0.63	<0.05	7.73	0.556	15.20	1.5
W228804		18.4	139.5	<0.002	4.40	14.30	17.8	1	1.9	95.1	0.72	0.06	9.50	0.517	15.30	1.9
W228805		10.7	42.6	0.002	4.80	164.0	3.1	2	1.2	351	0.19	0.12	3.31	0.103	43.2	4.8
W228806		22.6	169.5	<0.002	5.32	2.07	21.6	1	2.2	168.5	0.84	0.05	10.80	0.619	5.09	2.1
W228807		17.8	139.5	<0.002	1.95	0.75	19.3	1	1.9	163.0	0.71	0.06	8.91	0.559	2.86	1.8
W228808		17.8	152.0	<0.002	4.98	12.30	18.2	1	2.1	98.6	0.79	0.05	10.50	0.561	22.2	2.1
W228809		1.2	1.0	<0.002	<0.01	0.07	0.1	1	<0.2	45.9	<0.05	<0.05	0.09	<0.005	0.05	0.6
W228810		16.7	150.5	<0.002	5.03	7.54	16.9	1	2.6	83.4	0.77	0.07	10.10	0.552	17.55	2.0
W228811		16.1	152.0	<0.002	4.65	15.40	15.2	1	2.5	70.8	0.75	0.05	10.25	0.524	14.20	2.0
W228812		8.8	72.5	<0.002	2.32	3.22	7.5	1	1.8	100.5	0.37	<0.05	5.50	0.278	7.20	1.1
W228813		17.6	185.5	<0.002	5.20	3.08	20.9	1	2.6	115.5	0.88	0.05	11.55	0.541	6.26	2.3
W228814		27.4	171.0	<0.002	5.61	20.8	19.0	1	2.4	72.1	0.83	0.07	10.95	0.583	26.0	2.2
W228815		18.9	139.0	<0.002	4.77	21.9	16.8	1	1.9	68.9	0.72	0.05	9.68	0.532	24.1	1.9
W228816		14.8	130.0	<0.002	5.15	20.5	12.4	1	1.6	53.4	0.64	<0.05	8.81	0.514	26.9	1.6
W228817		14.4	132.5	<0.002	5.21	12.35	12.5	1	1.7	49.8	0.68	<0.05	9.09	0.537	20.7	1.7
W228818		13.1	128.0	<0.002	4.98	12.15	14.6	1	1.9	54.9	0.67	<0.05	9.07	0.511	23.9	1.7
W228819		23.3	188.5	<0.002	5.71	11.05	23.8	1	2.7	76.9	0.92	<0.05	13.30	0.580	32.5	2.6
W228820		23.7	188.0	0.002	5.44	8.07	21.4	1	2.5	124.5	0.84	0.06	11.95	0.497	13.50	2.4
W228821		13.0	148.5	0.002	3.65	6.85	20.9	1	2.6	186.5	0.88	0.05	10.85	0.504	4.86	2.2
W228822		7.1	42.1	0.002	1.44	46.9	5.6	2	0.7	1020	0.20	0.05	3.55	0.089	25.4	6.9
W228823		9.3	145.5	<0.002	2.30	3.96	18.5	1	2.3	178.0	0.78	0.09	9.89	0.519	1.57	2.0
W228824		14.1	115.0	<0.002	3.61	4.83	14.3	1	1.7	177.5	0.65	0.05	8.69	0.474	3.54	1.7
W228825		24.1	119.0	<0.002	3.50	14.80	15.9	1	1.8	184.0	0.69	0.05	9.18	0.474	4.56	1.8
W228826		9.8	83.4	<0.002	2.56	3.30	10.4	1	1.9	147.5	0.49	<0.05	6.67	0.372	1.96	1.4
W228827		12.4	85.0	<0.002	2.85	3.86	11.3	1	1.7	156.0	0.51	<0.05	6.82	0.383	2.02	1.4
W228828		12.5	96.7	<0.002	3.15	2.51	13.0	1	1.4	159.0	0.55	<0.05	7.24	0.441	2.48	1.4

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W228793		149	6.3	20.3	99	107.0		0.02
W228794		141	1.9	20.0	86	105.0		<0.01
W228795		146	2.0	20.2	97	108.0		<0.01
W228796		149	3.6	23.5	90	114.5		<0.01
W228797		137	3.1	21.2	104	103.0		<0.01
W228798		130	3.9	13.5	70	80.6		0.01
W228799		137	3.1	12.1	58	77.8		0.01
W228800		140	11.5	24.9	210	109.5		1.08
W228801		2	0.1	0.7	15	<0.5		<0.01
W228802		143	8.4	16.7	88	91.6		0.76
W228803		154	8.8	17.5	98	98.4		0.50
W228804		139	8.1	19.9	81	103.5		1.37
W228805		37	6.9	16.6	70	32.4	7.02	8.38
W228806		162	5.7	24.5	191	124.5		0.07
W228807		150	4.2	20.6	87	103.5		0.01
W228808		147	11.6	25.5	63	116.0		3.30
W228809		2	0.1	0.7	15	<0.5		<0.01
W228810		142	10.8	22.5	72	110.0		1.57
W228811		139	10.6	20.8	62	113.0		1.25
W228812		74	4.2	12.0	29	58.6		0.41
W228813		146	12.6	24.7	78	124.5		0.14
W228814		151	14.3	24.1	108	122.0		3.23
W228815		139	11.2	20.4	191	112.0		2.71
W228816		139	11.2	19.5	45	100.5		1.91
W228817		143	10.4	20.0	215	104.0		1.23
W228818		136	10.6	18.4	68	102.0		2.24
W228819		158	13.2	26.4	90	137.5		5.42
W228820		143	7.8	24.6	150	116.0		1.76
W228821		138	12.8	22.4	111	115.0		0.03
W228822		32	20.2	16.2	25	33.1	1.380	2.75
W228823		142	14.0	23.0	74	120.5		<0.01
W228824		120	9.5	19.2	77	97.6		0.06
W228825		127	8.1	19.0	69	100.0		0.32
W228826		100	5.5	14.9	90	75.3		0.03
W228827		104	5.9	16.3	94	76.8		0.04
W228828		121	5.1	16.0	76	84.5		0.22

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17148649

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	BAG- 06	CRU- 31
CRU- QC	Hg- MS42	LOG- 21	LOG- 21d
LOG- 23	ME- MS61	ME- OG62	PUL- 31
PUL- 31d	PUL- QC	SPL- 21	SPL- 21d
WEI- 21	WSH- 21	WSH- 22	

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- SEP- 2017
Account: RCM

CERTIFICATE WH17152311

Project: Nadaleen

P.O. No.: N17- 043

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

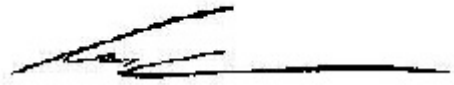
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152311

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228829		12.14	0.06	6.50	92.8	250	1.80	0.27	2.21	0.09	62.0	20.9	78	27.7	61.1	5.40
W228830		13.22	0.05	7.25	50.4	340	2.00	0.31	1.88	0.07	67.8	19.0	79	31.5	63.1	5.12
W228831		11.22	0.06	6.07	63.8	200	1.57	0.24	2.25	0.22	59.1	19.0	71	27.5	54.5	4.99
W228832		10.29	0.06	5.86	87.0	170	1.40	0.24	2.15	0.04	56.1	17.8	68	28.5	51.3	4.65
W228833		9.70	0.08	6.67	96.7	220	1.71	0.28	2.19	0.03	65.8	19.1	72	31.8	56.7	5.31
W228834		11.88	0.07	7.72	76.1	230	2.16	0.34	1.83	0.02	75.3	19.8	75	39.5	61.8	5.44
W228835		11.72	0.06	7.31	78.7	300	1.95	0.33	2.08	0.02	71.8	20.3	76	37.2	59.3	5.40
W228836		13.80	0.09	7.50	58.3	220	2.03	0.32	1.91	0.05	73.5	21.3	76	36.5	62.7	5.33
W228837		11.35	0.10	7.47	43.5	230	2.31	0.34	1.98	0.04	75.9	21.6	77	36.4	64.8	5.39
W228838		10.17	0.08	7.98	52.2	290	2.47	0.35	1.79	0.04	78.0	21.1	78	44.1	64.7	5.35
W228839		5.36	0.07	7.82	52.1	270	2.45	0.35	1.77	0.04	75.5	21.3	76	41.9	65.0	5.32
W228840		11.50	0.06	8.09	67.0	250	2.55	0.36	1.52	0.02	80.7	23.3	79	39.4	65.7	5.35
W228841		0.26	1.58	1.79	>10000	90	0.25	0.51	6.83	0.81	27.5	6.2	45	3.25	28.0	2.44
W228842		12.13	0.06	7.50	60.0	290	2.54	0.31	2.01	0.04	67.8	24.2	77	35.1	70.4	5.40
W228843		12.20	0.04	7.23	90.1	290	2.46	0.31	2.11	0.05	67.6	26.1	76	30.4	69.2	5.37
W228844		12.04	0.05	7.60	121.0	240	2.63	0.32	2.61	<0.02	65.2	26.0	74	25.6	73.7	5.20
W228845		12.65	0.04	5.89	480	200	1.63	0.25	2.92	0.04	51.9	20.1	61	16.30	56.3	4.66
W228846		<0.02	0.05	6.07	532	200	1.77	0.25	3.08	0.03	53.7	20.7	61	16.65	59.7	4.84
W228847		9.93	0.03	6.27	144.5	410	2.06	0.23	1.70	0.13	52.6	23.6	71	24.8	59.3	5.00
W228848		8.41	0.02	7.26	72.5	320	2.55	0.22	3.16	0.04	57.2	23.6	88	28.9	59.1	5.47
W228849		7.29	0.01	3.51	82.3	180	1.18	0.13	19.10	0.03	30.9	14.4	34	11.20	32.6	2.59
W228850		7.45	<0.01	3.26	168.0	160	1.09	0.15	24.8	0.04	33.2	13.9	27	10.35	29.7	2.25
W228851		7.19	0.03	4.99	4950	490	1.50	0.25	15.45	0.08	50.5	21.9	41	14.70	44.1	3.15
W228852		7.37	0.72	2.73	>10000	150	0.62	0.15	19.25	0.17	27.2	12.8	26	7.75	34.5	2.00
W228853		6.93	0.02	0.11	24.7	30	0.10	0.06	20.9	0.07	1.39	1.1	<1	0.33	7.1	0.51
W228854		9.56	<0.01	1.79	128.0	150	0.58	0.09	27.2	0.02	23.2	6.4	16	6.40	13.2	1.40
W228855		0.26	0.15	3.95	6810	220	1.04	0.15	12.90	0.13	37.6	13.6	46	11.00	41.4	3.08
W228856		12.10	<0.01	0.77	32.5	130	0.27	0.04	36.4	0.02	10.45	3.5	7	2.58	8.3	0.55
W228857		11.82	<0.01	0.46	16.6	180	0.19	0.02	38.8	0.02	6.80	2.3	5	1.93	5.6	0.40
W228858		11.11	<0.01	0.68	18.2	130	0.31	0.03	36.2	0.02	9.37	2.8	6	1.90	7.3	0.49
W228859		12.08	<0.01	0.44	11.9	120	0.22	0.02	38.7	<0.02	7.82	2.2	4	1.16	5.1	0.40
W228860		11.49	<0.01	0.59	21.4	110	0.26	0.03	37.1	0.03	9.10	2.6	6	1.66	6.4	0.47
W228861		11.15	<0.01	0.68	31.6	130	0.29	0.03	37.8	0.06	11.45	2.7	6	2.46	7.0	0.63
W228862		11.27	<0.01	0.59	23.2	130	0.22	0.03	38.5	0.02	10.10	2.7	6	2.10	6.6	0.46
W228863		6.97	<0.01	0.05	0.5	20	0.06	0.01	22.6	0.05	1.12	1.0	<1	0.13	2.0	0.49
W228864		6.27	<0.01	0.47	14.4	110	0.20	0.02	37.9	0.09	9.40	2.2	5	1.62	5.8	0.37

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152311

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228829		17.15	0.10	2.9	0.174	0.073	2.88	30.5	44.5	2.09	606	0.51	0.03	11.5	41.8	560
W228830		18.90	0.12	3.2	0.211	0.077	3.26	33.8	53.6	2.01	558	0.41	0.03	13.0	39.1	570
W228831		15.70	0.09	2.7	0.165	0.066	2.71	28.7	67.0	2.23	640	0.63	0.03	10.7	36.3	490
W228832		14.95	0.11	2.6	0.096	0.063	2.61	27.3	71.2	2.07	591	0.35	0.03	9.8	35.7	510
W228833		17.10	0.11	2.9	0.088	0.076	2.90	31.8	91.9	2.29	578	0.33	0.03	11.1	38.7	770
W228834		20.4	0.12	3.2	0.075	0.092	3.43	37.5	81.2	2.32	593	0.39	0.04	13.5	41.5	590
W228835		19.50	0.11	3.1	0.091	0.082	3.35	35.7	76.8	2.24	657	0.44	0.04	13.0	39.5	600
W228836		19.85	0.11	3.2	0.185	0.081	3.38	36.4	69.6	2.22	532	0.52	0.03	13.2	40.5	600
W228837		19.90	0.12	3.3	0.165	0.086	3.33	37.2	66.2	2.23	530	0.30	0.03	13.4	40.8	630
W228838		21.5	0.13	3.4	0.132	0.089	3.62	39.0	63.2	2.21	559	0.48	0.04	14.0	42.8	620
W228839		20.9	0.12	3.3	0.138	0.088	3.54	38.0	62.1	2.19	538	0.47	0.03	13.6	42.5	620
W228840		21.6	0.12	3.4	0.109	0.092	3.64	39.3	71.1	2.09	406	0.48	0.04	14.1	44.6	630
W228841		5.22	0.07	0.8	15.60	0.023	0.78	14.2	26.2	0.16	316	5.81	0.01	2.6	20.1	490
W228842		22.3	0.14	3.4	0.142	0.078	3.28	35.4	159.0	2.20	567	0.67	0.04	13.5	47.8	630
W228843		22.0	0.18	3.5	0.105	0.081	3.35	35.0	132.0	2.26	507	0.33	0.04	13.5	51.1	630
W228844		22.2	0.18	3.5	0.260	0.072	3.63	34.2	48.2	1.85	622	0.46	0.03	13.6	49.5	660
W228845		17.60	0.13	2.9	0.752	0.061	2.74	27.1	20.2	1.51	730	0.24	0.02	10.7	39.4	480
W228846		18.10	0.15	3.0	0.755	0.062	2.86	28.0	19.6	1.60	767	0.26	0.03	11.0	40.5	470
W228847		19.05	0.18	2.9	0.377	0.062	2.99	27.7	37.8	1.12	533	0.40	0.02	9.8	43.0	420
W228848		21.6	0.17	2.7	0.210	0.067	3.55	30.8	47.3	1.79	771	0.22	0.03	9.9	37.6	230
W228849		10.15	<0.05	1.6	0.389	0.033	1.69	17.8	11.7	1.55	670	0.50	0.02	5.1	23.1	350
W228850		9.57	0.06	1.6	0.933	0.037	1.64	19.8	7.1	1.24	757	0.64	0.02	5.1	19.6	300
W228851		14.75	0.05	2.5	2.19	0.055	2.51	30.5	10.2	1.49	1160	0.92	0.03	8.0	30.3	290
W228852		8.34	0.05	1.5	4.31	0.038	1.30	17.0	8.5	1.19	1600	1.20	0.02	4.2	19.5	280
W228853		0.39	0.21	<0.1	0.012	0.006	0.04	0.7	1.4	12.60	209	0.65	0.01	0.2	6.0	190
W228854		5.10	<0.05	1.3	0.259	0.018	0.89	13.4	5.8	0.76	454	0.37	0.02	3.5	7.7	120
W228855		11.20	0.05	2.1	15.25	0.039	1.88	21.0	12.9	2.72	1260	1.96	0.02	6.6	30.5	480
W228856		2.30	<0.05	0.4	0.131	0.008	0.38	5.8	3.4	0.48	155	0.13	0.01	1.2	4.4	210
W228857		1.41	<0.05	0.3	0.093	0.005	0.23	3.6	2.3	0.47	154	0.28	0.01	0.8	2.5	900
W228858		1.89	<0.05	0.4	0.310	0.006	0.34	5.1	2.3	0.40	158	0.34	0.01	1.1	3.9	410
W228859		1.32	<0.05	0.3	0.142	0.006	0.21	4.3	1.6	0.37	192	0.20	0.01	0.7	2.2	440
W228860		1.65	<0.05	0.3	0.261	0.007	0.29	4.9	2.1	0.35	231	0.31	0.01	0.9	3.1	260
W228861		1.98	0.05	0.4	0.362	0.008	0.34	6.6	2.7	0.45	283	0.43	0.01	1.0	3.6	520
W228862		1.72	0.08	0.3	0.316	0.007	0.29	5.7	2.9	0.40	276	0.35	0.01	0.9	3.3	420
W228863		0.35	0.25	<0.1	0.011	<0.005	0.02	0.6	1.1	13.65	208	0.07	<0.01	0.2	1.5	220
W228864		1.41	0.08	0.2	0.158	0.005	0.23	5.2	2.3	0.44	126	0.25	0.01	0.7	2.6	180

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Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152311

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228829		16.9	149.5	<0.002	1.04	0.50	19.0	1	2.1	158.5	0.79	0.05	8.80	0.553	1.25	1.9
W228830		14.2	170.0	<0.002	1.13	0.41	20.2	1	2.3	145.0	0.87	<0.05	9.90	0.577	1.44	2.2
W228831		16.9	142.0	<0.002	0.25	0.42	17.5	1	1.9	126.0	0.74	<0.05	8.11	0.514	0.90	1.8
W228832		14.8	145.5	<0.002	0.26	0.46	15.9	1	1.8	106.0	0.69	<0.05	7.98	0.505	0.87	1.8
W228833		15.8	165.5	<0.002	0.39	0.58	17.8	1	2.1	117.0	0.78	<0.05	9.09	0.533	0.98	2.0
W228834		17.2	207	<0.002	0.25	0.51	20.9	1	2.5	99.3	0.93	0.05	11.50	0.548	1.16	2.4
W228835		18.4	195.0	<0.002	0.48	0.61	19.7	1	2.4	150.5	0.89	0.05	10.30	0.536	1.10	2.3
W228836		18.9	193.0	<0.002	0.51	0.70	20.2	2	2.4	121.5	0.89	0.06	10.70	0.550	1.38	2.3
W228837		18.0	188.5	<0.002	0.51	0.67	20.2	1	2.6	145.5	0.91	0.07	10.65	0.561	1.38	2.4
W228838		18.1	204	<0.002	0.50	0.69	21.7	1	2.7	110.0	0.97	0.06	11.55	0.550	1.20	2.5
W228839		17.1	197.0	<0.002	0.52	0.65	21.2	1	2.7	104.0	0.95	0.06	11.05	0.550	1.27	2.5
W228840		18.5	197.5	<0.002	0.83	0.63	21.7	2	2.7	122.5	0.98	0.06	12.45	0.562	1.25	2.5
W228841		10.1	42.4	0.003	4.46	154.0	3.0	2	1.2	328	0.18	0.11	2.88	0.094	43.1	4.5
W228842		20.5	168.5	0.003	0.59	0.77	22.9	1	2.4	169.5	0.93	<0.05	11.70	0.569	1.08	2.4
W228843		17.7	171.5	0.003	0.43	0.64	23.2	1	2.3	160.0	0.95	0.06	11.45	0.578	1.13	2.3
W228844		17.8	176.5	0.004	2.93	0.68	23.1	1	2.3	146.5	0.94	0.08	11.50	0.599	2.32	2.3
W228845		14.4	134.5	0.002	3.98	1.64	18.8	1	1.9	182.0	0.75	<0.05	9.24	0.497	3.82	1.9
W228846		14.9	138.0	0.002	4.21	1.84	19.5	2	1.8	183.0	0.77	0.05	9.50	0.501	4.12	1.9
W228847		15.1	149.0	0.003	3.28	0.61	20.6	1	1.9	132.5	0.67	0.05	9.33	0.464	3.69	1.8
W228848		12.7	169.5	0.002	0.73	0.35	23.8	1	1.9	156.5	0.70	<0.05	9.62	0.442	1.31	1.8
W228849		7.6	74.6	0.004	0.91	0.40	10.2	1	1.3	502	0.34	<0.05	4.90	0.203	1.13	1.9
W228850		10.1	73.3	0.004	1.57	0.70	9.0	1	1.1	697	0.36	0.06	5.38	0.187	2.81	2.0
W228851		15.7	114.5	0.004	2.72	11.45	14.4	1	1.6	519	0.56	0.09	8.48	0.299	7.18	2.8
W228852		9.7	63.3	0.005	4.79	146.5	6.6	4	1.0	628	0.30	0.08	4.52	0.162	24.0	3.3
W228853		4.4	2.4	<0.002	0.04	0.17	0.2	1	<0.2	48.9	<0.05	<0.05	0.12	0.005	0.02	0.7
W228854		6.6	41.6	<0.002	1.07	0.44	4.9	1	0.6	980	0.24	<0.05	3.53	0.132	1.49	1.6
W228855		11.9	89.0	0.005	2.77	23.7	11.4	1	1.6	339	0.46	<0.05	6.59	0.278	46.1	7.1
W228856		2.9	17.7	0.003	0.51	0.17	2.2	1	0.3	1590	0.09	<0.05	1.39	0.044	1.20	2.0
W228857		1.8	10.4	0.003	0.34	0.15	1.4	1	0.2	1590	0.05	<0.05	0.85	0.027	0.48	1.9
W228858		2.6	14.5	0.002	0.48	0.30	1.8	1	0.2	1490	0.07	<0.05	1.23	0.040	0.50	2.3
W228859		1.8	9.4	0.002	0.30	0.24	1.4	1	0.2	1740	<0.05	<0.05	0.96	0.025	0.28	2.2
W228860		2.3	12.3	0.003	0.41	0.32	1.6	1	0.2	1560	0.06	<0.05	1.11	0.033	0.49	2.2
W228861		2.6	14.9	0.002	0.56	0.51	2.1	1	0.3	1770	0.07	<0.05	1.27	0.038	0.90	2.3
W228862		2.4	13.3	0.002	0.43	0.45	1.7	1	0.2	1770	0.06	<0.05	1.13	0.034	0.77	2.5
W228863		1.2	1.1	<0.002	<0.01	0.07	0.2	1	<0.2	51.7	<0.05	<0.05	0.08	<0.005	<0.02	0.8
W228864		2.0	10.3	0.002	0.32	0.17	1.4	1	0.2	1740	0.05	<0.05	0.93	0.027	0.57	2.2

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152311

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W228829		154	1.4	21.7	79	111.5		<0.01
W228830		158	1.5	23.3	74	119.0		<0.01
W228831		140	1.7	20.5	117	102.0		<0.01
W228832		133	1.3	19.9	59	98.8		<0.01
W228833		139	1.4	23.0	66	109.5		<0.01
W228834		147	1.9	25.5	79	122.0		<0.01
W228835		141	1.4	24.4	81	118.0		<0.01
W228836		147	1.6	24.3	93	120.0		<0.01
W228837		146	1.7	25.6	86	124.0		<0.01
W228838		149	1.6	27.0	84	125.5		<0.01
W228839		147	1.6	25.7	84	123.0		<0.01
W228840		151	1.9	26.7	83	129.0		<0.01
W228841		35	6.9	16.0	62	30.4	7.27	8.05
W228842		150	1.8	25.1	100	121.0		<0.01
W228843		149	1.8	25.5	90	122.0		<0.01
W228844		156	2.2	25.0	94	122.0		<0.01
W228845		129	7.6	19.7	86	98.7		0.06
W228846		133	8.0	20.4	75	102.5		0.07
W228847		139	3.5	19.8	88	94.4		<0.01
W228848		151	3.7	20.6	89	92.5		<0.01
W228849		63	1.9	15.0	45	56.2		<0.01
W228850		54	1.1	15.4	51	56.8		0.01
W228851		85	3.2	19.2	68	86.9		0.29
W228852		50	2.7	12.8	43	50.9	7.11	3.11
W228853		4	0.2	0.9	21	0.7		<0.01
W228854		29	0.6	14.4	22	46.2		<0.01
W228855		88	8.3	19.8	53	74.9		2.51
W228856		12	0.2	8.3	7	15.1		<0.01
W228857		8	0.1	5.9	4	10.9		<0.01
W228858		12	0.3	7.3	9	13.9		<0.01
W228859		8	0.3	7.3	4	10.0		0.02
W228860		10	0.5	7.3	10	11.7		0.01
W228861		12	0.5	11.6	30	14.0		0.03
W228862		11	0.4	10.4	5	12.7		0.01
W228863		2	0.1	0.9	15	<0.5		<0.01
W228864		9	0.2	11.1	26	9.4		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 1- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17152311

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 28- AUG- 2017
Account: RCM

CERTIFICATE WH17147665

Project: Nadaleen

P.O. No.: N17- 044

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 18- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
As- CON01	As in Concentrates	WST- SEQ

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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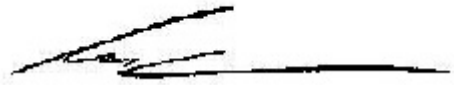
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 28- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147665

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229685		9.04	0.04	1.15	403	140	0.33	0.05	28.5	0.35	14.60	2.7	14	5.16	7.0	0.53
W229686		8.78	0.18	2.87	1270	160	0.89	0.09	17.65	0.14	32.6	5.5	32	7.69	17.0	1.21
W229687		5.74	0.14	2.70	77.7	260	0.96	0.07	18.45	0.16	30.8	5.3	31	8.54	15.4	1.11
W229688		11.86	0.03	1.53	46.5	100	0.51	0.04	25.1	0.14	20.0	3.0	16	3.15	7.9	0.57
W229689		11.06	0.06	1.36	181.5	90	0.33	0.04	21.2	0.12	15.65	2.4	14	2.26	6.3	0.62
W229690		11.98	0.04	1.37	184.0	120	0.46	0.04	26.1	0.16	16.35	2.9	15	2.37	9.6	0.59
W229691		10.96	0.03	0.81	42.2	60	0.32	0.02	30.1	0.08	11.10	1.9	9	1.31	4.6	0.41
W229692		5.76	0.03	0.82	35.5	60	0.39	0.03	29.7	0.06	11.00	2.0	9	1.42	4.6	0.46
W229693		8.36	0.13	0.80	6420	40	0.26	0.02	28.7	0.07	11.45	1.9	9	1.23	4.5	0.50
W229694		6.96	<0.01	0.05	22.2	30	0.06	0.02	21.8	0.05	1.10	1.1	<1	0.13	1.7	0.48
W229695		10.18	3.08	0.82	>10000	30	0.16	0.04	7.78	0.40	14.05	1.5	11	1.48	6.0	0.44
W229696		5.52	0.28	1.53	>10000	70	0.51	0.04	28.5	0.05	13.05	3.2	20	2.44	7.4	0.58
W229697		10.56	0.05	1.07	458	60	0.42	0.03	31.2	0.02	14.10	2.7	13	1.92	6.3	0.38
W229698		5.60	0.06	1.54	212	70	0.57	0.04	29.3	0.05	16.10	3.4	18	2.77	8.2	0.50
W229699		12.12	0.03	1.18	825	70	0.52	0.04	31.4	0.05	15.30	2.7	13	2.33	6.4	0.39
W229700		6.18	0.02	1.19	54.9	70	0.58	0.04	32.6	0.06	12.90	2.6	14	2.61	9.0	0.49
W229701		10.00	0.02	1.01	337	50	0.43	0.03	30.7	0.03	12.35	2.3	12	2.70	6.9	0.48
W229702		9.82	0.51	0.83	>10000	30	0.32	0.03	19.55	0.04	12.20	2.5	11	1.74	7.6	1.40
W229703		5.86	0.07	1.14	>10000	50	0.40	0.04	17.85	0.08	18.80	3.9	16	2.38	10.5	1.47
W229704		0.32	1.72	1.91	>10000	100	0.28	0.45	7.46	0.89	27.4	7.3	47	3.21	30.3	2.69
W229705		7.02	0.87	1.58	>10000	60	0.44	0.06	9.44	0.20	22.6	4.1	20	3.04	16.4	1.62
W229706		7.06	0.01	0.06	902	20	0.10	0.01	21.3	0.05	1.28	1.3	<1	0.14	2.5	0.49
W229707		9.96	0.67	3.95	>10000	140	1.37	0.09	7.56	0.07	50.0	8.0	49	8.88	27.8	1.71
W229708		7.48	0.04	1.46	1720	110	0.74	0.03	22.9	0.05	24.4	3.4	18	3.89	9.2	0.82
W229709		11.46	0.08	3.75	135.0	150	1.67	0.08	11.35	0.03	41.1	6.4	44	12.40	22.4	1.56
W229710		6.36	0.04	3.26	99.1	170	1.40	0.06	11.30	0.07	39.8	6.0	37	10.85	19.7	1.53
W229711		<0.02	0.05	3.23	184.5	180	1.23	0.08	11.15	0.03	39.7	5.9	37	10.95	20.0	1.52
W229712		11.76	0.05	1.60	61.3	170	0.72	0.04	25.8	0.06	19.85	3.6	17	4.13	9.9	0.91
W229713		5.46	0.12	1.87	5350	100	0.68	0.05	23.9	0.02	21.4	4.7	19	4.44	11.6	1.15
W229714		12.00	0.06	1.69	145.0	110	0.87	0.05	27.1	0.06	21.3	4.3	18	4.00	11.3	0.90
W229715		11.74	0.07	1.80	94.4	100	0.88	0.04	28.2	0.06	19.25	5.1	20	4.13	12.5	0.87
W229716		11.58	0.03	2.03	138.5	90	1.05	0.05	24.0	0.05	24.9	4.0	21	4.74	12.7	0.93
W229717		0.34	0.18	4.00	6590	210	1.24	0.13	12.85	0.17	41.6	13.7	46	10.95	38.4	3.13
W229718		11.64	0.03	2.27	71.3	130	1.07	0.06	24.5	0.10	27.3	4.7	23	6.62	17.1	0.85
W229719		11.08	0.05	3.44	171.5	160	1.16	0.06	19.60	0.03	37.3	6.3	35	9.56	17.8	1.34
W229720		5.94	0.06	3.85	120.0	190	1.49	0.10	16.85	0.06	43.0	8.4	39	11.90	20.5	1.69

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Finalized Date: 28- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147665

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229685		3.22	0.13	0.8	0.162	0.010	0.71	7.9	6.9	2.18	139	0.46	0.01	2.1	4.7	250
W229686		7.84	0.14	2.0	0.785	0.020	1.64	16.3	18.4	3.24	407	1.11	0.02	5.2	12.7	600
W229687		7.27	0.13	1.9	0.575	0.018	1.61	15.7	19.8	3.09	159	1.07	0.02	5.1	12.0	520
W229688		4.04	0.11	1.1	0.394	0.008	0.85	10.1	7.9	2.92	145	0.58	0.02	2.7	5.4	260
W229689		3.57	0.11	1.3	1.045	0.010	0.76	8.1	6.3	3.27	278	0.71	0.01	2.2	4.5	220
W229690		3.64	0.09	1.0	0.332	0.009	0.78	8.6	7.2	2.57	117	0.98	0.01	2.4	7.6	230
W229691		2.16	0.06	0.6	0.262	0.005	0.45	6.0	4.1	1.98	101	0.40	0.01	1.4	2.7	130
W229692		2.25	0.09	0.6	0.253	0.007	0.45	6.0	4.0	2.07	103	0.38	0.01	1.5	3.3	140
W229693		2.10	0.08	0.6	0.630	0.006	0.44	6.1	3.6	2.01	344	0.37	0.01	1.3	3.0	160
W229694		0.36	0.24	<0.1	0.011	<0.005	0.02	0.5	1.0	13.60	217	0.07	<0.01	0.1	1.6	180
W229695		2.35	0.13	0.6	2.45	0.117	0.41	7.1	7.7	1.02	553	0.59	<0.01	1.4	3.3	130
W229696		4.36	0.08	1.1	0.864	0.014	0.87	7.3	8.0	2.04	555	0.77	0.01	2.8	6.1	240
W229697		2.91	0.11	0.7	0.428	0.009	0.60	7.8	5.8	1.43	163	0.45	0.01	2.0	4.1	170
W229698		4.36	0.16	1.1	0.516	0.014	0.87	8.7	8.6	1.84	180	0.63	0.01	2.9	6.2	240
W229699		3.09	0.12	0.9	0.365	0.009	0.65	8.3	6.4	1.79	141	0.45	0.01	2.0	4.6	190
W229700		3.43	0.14	0.7	0.342	0.006	0.66	7.5	5.8	1.31	158	0.54	0.01	2.2	5.9	180
W229701		2.70	0.12	0.6	0.333	0.009	0.55	7.2	6.0	2.53	179	0.50	0.01	1.7	4.3	140
W229702		2.33	0.17	0.7	2.33	0.009	0.44	6.3	5.3	11.10	1080	0.75	0.02	1.4	5.4	140
W229703		3.10	0.14	0.8	4.32	0.024	0.60	9.5	7.1	10.00	1500	0.77	0.01	2.0	7.7	190
W229704		5.61	0.07	0.8	15.00	0.030	0.87	13.5	31.2	0.18	358	6.43	0.01	2.4	22.2	530
W229705		4.26	0.09	1.1	4.43	0.058	0.84	11.5	14.6	5.11	984	0.92	0.01	2.5	9.5	300
W229706		0.62	0.49	<0.1	0.017	<0.005	0.03	0.6	1.4	13.35	215	0.44	0.01	0.2	2.6	190
W229707		11.00	0.19	2.0	2.02	0.038	2.15	24.3	27.8	4.30	867	1.07	0.02	6.4	19.8	480
W229708		4.13	0.12	1.0	0.415	0.017	0.82	12.8	9.4	2.83	302	0.49	0.01	2.5	6.8	240
W229709		10.35	0.14	2.2	0.655	0.024	2.19	20.9	30.0	5.63	267	1.03	0.03	6.3	15.9	450
W229710		8.74	0.17	2.2	0.491	0.026	1.95	20.0	25.4	5.58	241	0.90	0.03	5.6	14.7	410
W229711		8.68	0.16	2.3	0.505	0.021	1.92	19.8	24.8	5.51	241	0.94	0.03	5.6	14.9	410
W229712		4.44	0.11	0.9	0.260	0.012	0.90	10.7	9.7	2.41	179	0.56	0.02	2.7	7.3	200
W229713		5.07	0.10	1.2	0.971	0.015	1.02	11.4	10.0	2.52	313	0.57	0.02	3.2	10.2	230
W229714		4.65	0.12	0.9	0.439	0.011	0.94	11.2	11.1	1.97	190	0.58	0.01	2.9	9.5	220
W229715		4.90	0.11	0.8	0.452	0.014	1.00	10.7	11.3	1.80	191	0.84	0.01	3.0	10.7	220
W229716		5.57	0.14	1.2	0.563	0.015	1.12	12.8	13.6	2.25	234	0.55	0.02	3.5	9.0	250
W229717		10.60	0.11	2.1	14.75	0.035	1.93	21.1	14.4	2.72	1220	2.02	0.02	6.2	28.7	450
W229718		6.21	0.13	1.2	0.330	0.017	1.27	14.3	18.1	2.36	164	0.49	0.02	3.8	10.1	250
W229719		9.11	0.12	1.8	0.610	0.020	1.88	19.4	23.0	3.00	282	0.39	0.02	5.9	15.6	400
W229720		10.40	0.12	2.2	0.689	0.024	2.15	22.4	25.9	2.91	220	0.48	0.03	6.8	20.1	410

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147665

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229685		6.2	24.9	<0.002	0.29	0.62	1.9	2	0.4	913	0.15	<0.05	2.39	0.057	0.43	8.1
W229686		10.2	61.8	<0.002	0.76	3.55	4.8	4	0.9	470	0.36	<0.05	6.01	0.139	1.83	9.2
W229687		9.6	60.6	0.002	0.51	0.84	4.6	2	0.9	468	0.36	<0.05	5.76	0.135	0.99	8.6
W229688		7.0	32.0	<0.002	0.21	0.85	2.4	2	0.5	916	0.19	<0.05	3.18	0.072	1.08	9.8
W229689		6.7	28.0	<0.002	0.24	2.66	2.0	2	0.4	569	0.17	<0.05	2.72	0.063	3.98	10.3
W229690		8.3	29.0	<0.002	0.22	1.03	2.1	2	0.4	1185	0.17	<0.05	2.82	0.066	0.95	9.9
W229691		5.0	16.4	<0.002	0.13	0.88	1.1	1	0.3	1500	0.09	<0.05	1.58	0.037	0.71	8.4
W229692		5.3	16.1	<0.002	0.15	0.38	1.1	2	0.3	1580	0.10	<0.05	1.66	0.038	0.70	8.6
W229693		4.9	16.0	<0.002	0.55	15.25	1.2	2	0.3	1400	0.10	<0.05	1.58	0.037	2.55	8.2
W229694		1.1	0.9	<0.002	0.01	0.09	<0.1	1	<0.2	49.2	<0.05	<0.05	0.06	<0.005	<0.02	0.5
W229695		5.2	17.6	<0.002	>10.0	668	1.3	16	0.3	221	0.10	0.16	1.82	0.039	7.14	7.9
W229696		7.3	32.5	<0.002	0.94	25.7	2.6	1	0.5	1060	0.20	<0.05	3.61	0.079	3.34	15.1
W229697		5.3	21.9	<0.002	0.18	1.53	1.9	1	0.4	1290	0.14	<0.05	2.35	0.053	1.20	14.2
W229698		7.2	32.8	<0.002	0.24	1.66	2.6	2	0.5	1180	0.21	<0.05	3.61	0.078	1.50	16.0
W229699		5.7	23.4	<0.002	0.24	2.28	2.2	1	0.4	1060	0.14	<0.05	2.58	0.056	1.01	14.5
W229700		6.7	23.6	<0.002	0.29	1.16	2.0	2	0.4	954	0.14	<0.05	2.51	0.058	1.00	13.9
W229701		5.2	19.3	<0.002	0.27	1.25	1.7	1	0.4	860	0.12	<0.05	2.12	0.048	0.97	13.8
W229702		7.2	15.6	<0.002	1.35	21.8	1.5	2	0.3	116.0	0.11	<0.05	1.87	0.041	9.78	11.7
W229703		9.6	22.0	<0.002	2.38	60.5	2.3	3	0.4	135.0	0.14	<0.05	2.51	0.057	17.50	12.6
W229704		10.8	39.2	0.002	4.86	162.5	3.5	2	1.1	357	0.18	0.16	3.03	0.101	40.5	4.4
W229705		14.5	28.5	<0.002	7.51	251	2.7	10	0.7	102.5	0.18	0.11	3.29	0.069	17.35	7.3
W229706		1.5	1.1	<0.002	0.06	1.56	0.4	1	<0.2	45.1	<0.05	<0.05	0.09	<0.005	0.12	0.6
W229707		11.6	75.0	<0.002	3.57	120.0	6.8	6	2.1	131.0	0.50	0.11	8.77	0.190	8.49	5.2
W229708		4.1	28.4	<0.002	0.41	4.24	2.7	2	0.6	907	0.19	<0.05	3.37	0.072	1.28	5.4
W229709		7.4	77.8	<0.002	0.49	0.90	6.2	3	1.3	178.0	0.48	<0.05	8.16	0.184	1.33	4.2
W229710		7.0	68.3	<0.002	0.43	0.69	5.3	3	1.2	189.0	0.43	<0.05	7.39	0.164	0.92	4.2
W229711		7.1	67.6	<0.002	0.43	0.85	5.4	3	1.2	187.5	0.43	<0.05	7.62	0.162	0.98	4.3
W229712		5.5	31.9	<0.002	0.26	0.36	2.9	2	0.5	564	0.20	<0.05	3.36	0.075	0.62	10.9
W229713		8.0	37.3	<0.002	0.89	9.08	3.2	3	0.7	383	0.24	<0.05	4.15	0.089	2.35	11.5
W229714		7.1	33.6	<0.002	0.53	0.79	3.1	2	0.6	564	0.21	<0.05	3.63	0.079	1.29	11.4
W229715		7.5	35.6	<0.002	0.51	0.82	3.1	2	0.7	576	0.21	<0.05	3.64	0.083	1.20	13.6
W229716		6.5	41.0	<0.002	0.44	1.04	3.6	2	0.9	456	0.26	<0.05	4.39	0.096	1.62	11.1
W229717		11.2	84.0	<0.002	2.69	23.9	10.9	2	1.6	329	0.44	<0.05	6.10	0.274	44.8	6.6
W229718		6.3	46.7	<0.002	0.31	0.30	4.0	3	1.0	499	0.29	<0.05	4.86	0.106	0.79	10.7
W229719		9.2	66.7	<0.002	0.69	0.78	5.7	2	1.2	306	0.44	<0.05	7.22	0.164	2.36	9.0
W229720		13.3	78.4	<0.002	1.20	1.17	6.4	2	1.4	280	0.52	<0.05	8.28	0.189	1.94	9.4

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VANCOUVER BC V6B 1L8

Finalized Date: 28- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17147665

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	As- CON01	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01	0.01
W229685		20	0.3	5.5	155	32.3			<0.01
W229686		46	2.1	11.5	24	72.9			0.43
W229687		44	1.7	11.1	22	72.6			0.01
W229688		22	0.7	7.1	35	43.5			<0.01
W229689		19	0.8	6.3	24	46.6			0.01
W229690		22	0.7	5.9	33	36.9			0.01
W229691		12	0.4	4.0	17	23.4			<0.01
W229692		12	0.4	4.0	14	24.5			<0.01
W229693		12	0.6	4.3	10	23.2			0.60
W229694		2	0.1	0.8	16	<0.5			<0.01
W229695		13	1.1	5.0	27	21.9	>30.0	33.3	3.49
W229696		26	1.7	6.6	11	42.9	1.315		1.13
W229697		19	0.9	4.8	7	27.1			0.10
W229698		26	1.4	5.7	8	40.6			0.10
W229699		19	1.0	5.3	8	31.6			0.01
W229700		20	1.0	4.4	10	26.2			0.01
W229701		18	0.9	4.2	14	22.1			0.01
W229702		15	1.8	4.1	6	22.3	1.190		2.27
W229703		21	1.5	5.4	7	31.0	3.32		4.47
W229704		38	8.1	15.8	72	31.0	6.88		8.30
W229705		26	1.5	5.3	28	35.9	14.65		4.41
W229706		2	0.1	0.8	15	0.6			<0.01
W229707		61	3.6	11.0	24	76.3	5.37		3.00
W229708		23	1.0	8.2	19	38.0			0.08
W229709		57	1.9	13.0	25	81.3			0.02
W229710		48	1.3	13.4	30	84.4			0.01
W229711		49	1.3	13.5	30	84.2			0.01
W229712		24	0.8	6.4	25	32.7			0.03
W229713		29	1.8	7.5	15	40.8			0.20
W229714		27	1.1	7.0	33	35.0			<0.01
W229715		30	1.1	6.2	26	31.0			0.03
W229716		32	1.2	8.3	25	42.1			0.02
W229717		86	8.2	18.7	51	74.2			2.53
W229718		35	0.8	9.0	37	44.4			<0.01
W229719		51	2.0	11.2	14	66.8			0.01
W229720		53	2.5	13.2	29	78.9			0.02

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 28- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17147665

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- CON01	As- OG62	Au- AA25	BAG- 06
CRU- 31	CRU- QC	Hg- MS42	LOG- 21
LOG- 21d	LOG- 23	ME- MS61	ME- OG62
PUL- 31	PUL- 31d	PUL- QC	SPL- 21
SPL- 21d	WEI- 21	WSH- 21	WSH- 22

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE WH17152303

Project: Nadaleen

P.O. No.: N17- 045

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

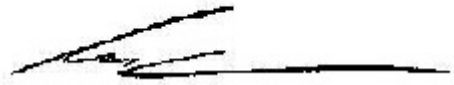
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17152303

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229721		10.72	0.05	4.20	235	210	1.57	0.07	12.60	0.05	51.6	7.1	46	16.35	23.2	1.39
W229722		11.52	0.05	3.87	69.9	230	1.45	0.08	16.55	0.06	47.1	7.3	46	20.1	22.2	1.54
W229723		11.39	0.04	1.23	19.8	120	0.57	0.05	29.6	0.04	17.50	2.1	16	3.96	8.2	0.47
W229724		10.99	0.04	2.12	84.1	90	0.86	0.06	24.9	0.07	25.8	3.8	25	6.43	11.4	0.85
W229725		10.98	0.06	1.23	51.8	170	0.61	0.05	28.9	0.06	17.45	2.6	15	3.22	7.1	0.59
W229726		5.34	0.03	3.42	54.7	250	1.30	0.09	18.15	0.07	39.1	3.4	38	15.55	9.5	0.92
W229727		4.55	0.22	1.44	532	300	0.57	0.06	21.3	0.13	22.9	2.5	15	3.81	8.9	0.81
W229728		5.55	0.10	1.95	920	130	0.67	0.06	17.95	0.23	24.3	3.0	20	4.68	10.0	0.91
W229729		0.26	0.19	3.72	6100	200	0.99	0.14	12.15	0.19	41.7	11.9	44	10.80	37.1	2.93
W229730		6.93	0.09	1.19	4820	440	0.45	0.05	18.55	0.17	20.6	2.0	14	2.83	8.4	0.77
W229731		7.24	0.08	1.74	696	170	0.61	0.06	19.60	0.14	23.2	2.7	19	4.61	9.5	0.87
W229732		7.76	0.13	2.62	1840	190	0.97	0.09	17.65	0.32	34.1	4.2	28	8.26	15.2	1.16
W229733		7.45	0.07	2.13	360	150	0.80	0.08	22.4	0.12	29.6	3.3	24	5.52	16.0	1.02
W229734		5.46	0.04	2.09	283	110	0.78	0.06	21.9	0.09	26.7	3.1	24	4.41	13.1	1.01
W229735		6.03	0.52	5.46	784	370	1.77	0.20	13.10	0.09	62.8	9.7	48	15.15	33.4	2.50
W229736		7.86	0.45	4.59	687	300	1.57	0.17	14.45	0.10	55.1	7.2	44	12.65	26.8	1.88
W229737		7.98	0.01	0.05	3.0	40	0.07	0.03	20.6	0.05	1.07	0.7	1	0.12	1.9	0.47
W229738		6.65	0.17	3.04	470	190	1.09	0.10	17.55	0.10	38.2	4.7	33	7.60	18.8	1.27
W229739		5.34	0.10	1.29	232	120	0.57	0.05	22.0	0.08	24.5	2.0	14	4.01	8.7	0.86
W229740		7.60	0.19	2.73	474	170	1.04	0.08	18.70	0.08	39.3	4.3	31	7.72	17.1	1.32
W229741		6.17	0.06	2.33	83.3	180	0.88	0.08	22.6	0.05	30.5	4.1	28	8.64	13.8	1.13
W229742		10.89	0.10	1.51	65.3	120	0.61	0.06	25.7	0.05	24.8	2.8	19	4.62	7.5	0.83
W229743		<0.02	0.10	1.61	63.8	130	0.62	0.05	25.1	0.05	24.9	2.9	20	4.83	7.4	0.89
W229744		7.44	0.06	3.07	101.0	160	1.06	0.11	21.7	0.05	36.6	5.6	37	8.33	21.9	1.30
W229745		3.31	0.07	2.79	78.6	180	0.91	0.09	22.4	0.06	34.4	5.3	34	7.41	16.0	1.25
W229746		7.49	0.07	1.99	96.2	130	0.81	0.07	25.3	0.26	26.1	3.7	25	5.05	17.1	1.25
W229747		6.80	0.06	1.71	341	250	0.54	0.06	27.2	0.05	19.70	2.3	21	2.96	8.7	0.79
W229748		7.36	0.10	2.32	64.9	180	0.82	0.08	23.5	0.05	28.1	3.8	27	10.20	16.3	0.99
W229749		7.85	0.05	1.74	76.0	310	0.60	0.06	24.3	0.03	23.4	3.2	20	6.95	11.4	1.22
W229750		7.93	0.05	1.59	20.0	130	0.56	0.06	27.6	0.05	20.4	3.1	19	5.74	9.7	0.76
W229751		7.69	0.03	2.73	28.1	300	0.94	0.08	21.6	0.06	30.9	4.2	30	11.75	15.8	0.99
W229752		8.04	0.03	3.51	98.5	200	1.25	0.10	15.20	0.03	41.0	3.7	38	14.30	26.8	1.33
W229753		3.59	0.02	4.08	415	170	1.23	0.10	13.65	0.05	40.7	3.2	47	7.64	16.7	1.43
W229754		3.11	0.02	3.34	8020	160	0.99	0.09	13.75	0.06	37.4	3.4	39	5.48	14.7	1.60
W229755		6.51	0.01	0.05	9.6	30	<0.05	0.04	21.1	0.06	1.12	0.7	1	0.12	1.9	0.48
W229756		0.26	0.30	3.77	>10000	180	0.72	0.19	10.15	0.67	46.5	12.1	45	9.47	58.2	3.03

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152303

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229721		10.20	0.07	2.2	0.682	0.034	2.26	25.7	28.1	3.48	218	0.30	0.03	7.3	15.5	550
W229722		9.48	0.07	1.9	0.447	0.029	2.17	24.1	26.9	2.34	170	0.28	0.03	6.7	17.5	530
W229723		3.32	0.10	0.6	0.175	0.011	0.64	10.0	6.5	0.97	122	0.49	0.01	2.0	5.3	170
W229724		5.46	0.14	1.0	0.533	0.019	1.11	14.1	10.4	1.70	204	0.23	0.01	3.4	9.1	300
W229725		3.22	0.13	0.6	0.355	0.011	0.64	9.8	5.9	1.29	176	0.59	0.01	2.0	5.7	180
W229726		9.00	0.16	1.7	0.192	0.028	1.78	20.7	22.7	2.14	169	0.21	0.02	5.8	8.5	470
W229727		3.70	0.15	1.0	1.270	0.012	0.77	12.1	7.9	4.60	391	0.49	0.01	2.3	6.1	320
W229728		4.53	0.14	1.1	1.880	0.014	1.02	12.8	9.9	6.39	580	0.41	0.01	2.8	6.8	390
W229729		9.98	0.11	1.9	15.40	0.034	1.73	21.7	12.6	2.52	1160	1.91	0.02	5.7	25.9	440
W229730		3.18	0.12	0.9	2.47	0.014	0.63	10.8	8.2	5.82	539	0.35	0.01	1.9	4.8	330
W229731		4.18	0.14	0.9	1.270	0.014	0.91	12.2	9.1	5.17	486	0.38	0.02	2.5	6.6	350
W229732		6.86	0.18	1.4	3.51	0.021	1.36	18.3	14.7	4.34	672	0.39	0.02	4.2	10.9	420
W229733		5.55	0.14	1.0	1.050	0.017	1.10	15.7	9.2	2.80	495	0.32	0.02	3.4	8.7	290
W229734		4.97	0.15	1.0	1.100	0.016	1.07	13.8	8.2	2.86	533	0.32	0.02	3.0	8.0	290
W229735		13.90	0.17	2.2	0.947	0.046	2.63	33.6	21.8	2.42	830	0.48	0.04	8.6	22.0	430
W229736		12.25	0.17	2.0	0.852	0.037	2.25	29.5	20.1	3.32	680	0.49	0.03	7.6	17.5	440
W229737		0.22	0.18	<0.1	0.013	<0.005	0.02	0.5	0.9	13.10	194	0.09	<0.01	0.1	1.5	190
W229738		7.96	0.18	1.5	0.772	0.025	1.54	20.3	13.4	3.69	506	0.42	0.02	4.8	11.5	390
W229739		3.49	0.15	0.9	0.522	0.012	0.71	12.5	7.4	4.58	335	0.28	0.01	2.0	4.8	230
W229740		7.21	0.16	1.6	1.185	0.023	1.40	19.9	13.2	3.60	474	0.47	0.03	4.6	11.5	360
W229741		5.99	0.13	1.2	0.083	0.017	1.20	16.1	11.4	3.06	515	0.42	0.03	3.9	10.8	310
W229742		4.00	0.14	0.9	0.083	0.013	0.79	13.0	7.7	2.32	505	0.37	0.02	2.6	6.6	240
W229743		4.11	0.13	1.0	0.079	0.010	0.84	13.0	8.0	2.47	510	0.39	0.02	2.7	6.8	260
W229744		8.28	0.15	1.4	0.101	0.026	1.59	20.1	12.1	2.00	455	0.38	0.02	5.2	15.2	440
W229745		7.42	0.15	1.3	0.107	0.022	1.44	18.8	10.9	1.99	453	0.41	0.02	4.6	14.6	430
W229746		5.30	0.14	0.9	0.243	0.015	1.05	13.8	8.5	2.34	364	0.60	0.01	3.2	10.3	270
W229747		3.88	0.11	0.6	0.347	0.011	0.88	10.9	5.3	1.39	340	0.44	0.01	2.4	5.8	260
W229748		5.55	0.14	1.0	0.114	0.018	1.28	15.1	13.2	2.28	291	0.30	0.02	3.4	9.9	400
W229749		4.43	0.11	1.0	0.079	0.013	0.96	12.5	10.4	3.34	315	0.45	0.02	2.7	7.8	250
W229750		4.23	0.14	0.8	0.059	0.013	0.87	11.3	8.8	2.02	235	0.55	0.01	2.6	7.5	200
W229751		6.58	0.16	1.2	0.063	0.019	1.52	15.9	14.6	2.40	231	0.32	0.02	4.1	9.1	340
W229752		9.18	0.16	1.7	0.080	0.026	1.91	21.3	18.7	4.89	340	0.45	0.02	5.8	7.7	400
W229753		9.39	0.15	1.8	0.314	0.028	2.20	22.0	15.3	5.33	329	0.26	0.02	5.7	7.1	460
W229754		7.75	0.14	1.9	0.421	0.023	1.78	19.6	11.4	5.13	346	0.21	0.02	4.8	9.6	380
W229755		0.21	0.17	<0.1	0.011	<0.005	0.02	0.5	0.9	13.15	197	0.29	<0.01	0.1	1.5	170
W229756		10.70	0.11	1.8	27.4	0.037	1.72	25.8	15.2	0.37	760	3.69	0.02	5.5	26.4	530

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Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152303

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229721		8.7	96.3	<0.002	0.53	1.38	7.1	3	1.4	226	0.51	<0.05	10.10	0.208	1.54	8.3
W229722		9.9	91.9	<0.002	0.80	0.31	6.6	3	1.3	323	0.47	<0.05	9.12	0.191	1.12	8.7
W229723		4.8	27.5	<0.002	0.17	0.21	2.1	1	0.4	655	0.15	<0.05	2.61	0.060	0.28	14.4
W229724		6.3	46.3	<0.002	0.54	1.08	3.5	1	0.7	401	0.26	<0.05	4.37	0.105	1.25	9.1
W229725		5.3	27.1	<0.002	0.33	0.76	2.1	1	0.4	544	0.15	<0.05	2.69	0.061	0.74	13.9
W229726		6.5	78.6	<0.002	0.21	0.34	5.7	2	1.1	302	0.45	<0.05	7.56	0.173	0.50	7.4
W229727		6.5	28.7	<0.002	0.06	1.90	2.5	1	0.4	402	0.17	<0.05	3.31	0.068	2.34	6.9
W229728		6.1	34.0	<0.002	0.07	2.38	3.0	1	0.5	242	0.21	<0.05	3.85	0.092	3.35	6.1
W229729		12.6	86.6	0.002	2.53	24.1	11.0	1	1.5	306	0.43	<0.05	6.19	0.264	42.8	6.7
W229730		5.6	23.8	<0.002	0.33	11.45	2.2	1	0.4	276	0.15	<0.05	2.74	0.057	5.04	6.1
W229731		6.3	31.9	<0.002	0.07	2.15	2.8	1	0.5	348	0.19	<0.05	3.47	0.084	3.07	6.6
W229732		7.9	52.7	<0.002	0.12	5.87	4.4	1	0.8	294	0.32	<0.05	5.74	0.125	6.59	8.1
W229733		5.7	42.8	<0.002	0.11	1.26	3.6	1	0.7	435	0.26	<0.05	4.54	0.101	1.64	7.6
W229734		6.0	37.7	<0.002	0.17	0.77	3.2	1	0.6	521	0.23	<0.05	4.20	0.101	1.60	7.8
W229735		13.6	118.0	<0.002	0.44	1.74	10.2	1	1.7	345	0.65	0.05	11.40	0.270	3.31	7.5
W229736		10.2	100.5	<0.002	0.33	1.72	8.4	1	1.5	317	0.58	<0.05	9.61	0.224	2.76	7.1
W229737		1.2	0.9	<0.002	0.01	0.05	0.2	<1	<0.2	48.3	<0.05	<0.05	0.07	<0.005	0.02	0.5
W229738		7.3	61.3	<0.002	0.21	1.22	5.2	1	1.0	367	0.38	<0.05	6.54	0.147	1.89	7.5
W229739		4.4	27.3	<0.002	0.09	0.74	2.3	1	0.4	395	0.16	<0.05	2.95	0.061	1.00	6.5
W229740		6.7	57.9	<0.002	0.16	0.87	4.7	2	0.9	520	0.36	<0.05	6.55	0.136	1.36	7.0
W229741		6.6	48.4	<0.002	0.18	0.30	3.9	1	0.8	1005	0.31	<0.05	5.50	0.118	0.39	11.3
W229742		5.6	32.4	<0.002	0.11	0.24	2.6	1	0.5	1005	0.21	<0.05	3.70	0.077	0.31	11.2
W229743		5.7	33.0	<0.002	0.11	0.23	2.6	1	0.5	975	0.21	<0.05	3.86	0.084	0.31	11.0
W229744		6.9	65.0	<0.002	0.18	0.34	5.2	1	1.2	501	0.40	<0.05	6.59	0.150	0.41	11.0
W229745		6.7	58.1	<0.002	0.19	0.29	4.7	1	1.0	546	0.36	<0.05	6.03	0.137	0.39	11.5
W229746		6.2	42.3	<0.002	0.58	0.46	3.3	2	0.9	519	0.25	<0.05	4.26	0.095	0.47	10.8
W229747		5.4	29.9	<0.002	0.25	0.65	2.5	1	0.5	622	0.19	<0.05	3.23	0.082	0.59	12.0
W229748		5.2	47.6	<0.002	0.13	0.22	3.6	1	0.7	458	0.27	<0.05	4.65	0.114	0.32	7.7
W229749		4.8	37.0	<0.002	0.16	0.23	2.8	1	0.6	498	0.22	<0.05	3.88	0.086	0.23	10.8
W229750		4.9	34.1	<0.002	0.22	0.18	2.6	1	0.6	660	0.20	<0.05	3.50	0.078	0.20	14.0
W229751		5.0	55.8	<0.002	0.35	0.21	4.1	1	0.9	462	0.31	<0.05	5.34	0.132	0.32	8.4
W229752		6.1	74.6	<0.002	0.32	0.27	5.7	2	1.2	222	0.45	<0.05	7.83	0.169	0.43	6.5
W229753		5.4	71.8	<0.002	0.35	0.73	5.8	2	1.2	222	0.46	<0.05	8.01	0.199	0.67	5.7
W229754		5.9	58.0	<0.002	0.70	10.60	4.8	2	1.1	261	0.38	<0.05	6.84	0.167	0.61	6.0
W229755		1.2	1.0	<0.002	0.01	0.07	0.1	<1	<0.2	50.7	<0.05	<0.05	0.07	<0.005	<0.02	0.7
W229756		17.3	88.4	0.002	3.46	106.0	9.3	2	1.9	430	0.42	0.16	7.09	0.220	63.8	4.3

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CERTIFICATE OF ANALYSIS WH17152303

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229721		61	2.8	14.5	32	80.5		0.07
W229722		59	0.8	13.6	40	69.8		0.01
W229723		21	0.4	5.4	18	22.7		<0.01
W229724		34	1.6	8.5	40	38.4		0.05
W229725		26	0.9	5.7	24	24.9		<0.01
W229726		52	1.2	12.2	20	63.3		<0.01
W229727		27	2.7	7.8	23	40.2		0.29
W229728		36	1.2	8.4	39	45.4		0.55
W229729		83	7.3	19.1	51	70.0		2.52
W229730		24	1.0	7.1	28	35.0		1.18
W229731		31	0.9	8.2	33	37.2		0.53
W229732		45	1.4	10.9	111	56.3		1.40
W229733		34	0.9	9.5	43	40.7		0.44
W229734		33	0.8	8.8	48	37.5		0.28
W229735		73	7.2	16.1	70	81.4		0.15
W229736		59	5.9	14.7	53	73.8		0.36
W229737		2	0.1	0.7	15	<0.5		<0.01
W229738		47	2.2	11.7	39	54.8		0.28
W229739		21	1.2	8.4	20	32.5		0.10
W229740		40	2.2	11.5	30	59.5		0.06
W229741		33	0.5	9.2	31	49.6		<0.01
W229742		22	0.7	7.5	22	36.5		<0.01
W229743		23	0.6	7.9	23	37.8		<0.01
W229744		49	0.6	11.7	40	53.8		0.01
W229745		46	0.5	11.6	37	51.2		0.01
W229746		33	0.7	8.3	26	33.9		<0.01
W229747		30	0.7	5.8	19	26.5		0.02
W229748		37	0.8	9.6	21	42.8		<0.01
W229749		27	0.3	7.7	14	36.7		0.01
W229750		26	0.3	6.1	16	31.4		<0.01
W229751		41	0.5	9.3	17	44.0		0.01
W229752		53	0.9	12.8	13	64.9		0.01
W229753		59	1.5	12.5	17	69.8		0.02
W229754		47	1.8	11.6	23	70.1		0.03
W229755		2	0.1	0.8	15	<0.5		<0.01
W229756		62	8.0	23.3	137	65.1	3.49	7.86

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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 30- AUG- 2017
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CERTIFICATE OF ANALYSIS WH17152303

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE WH17152309

Project: Nadaleen

P.O. No.: N17- 046

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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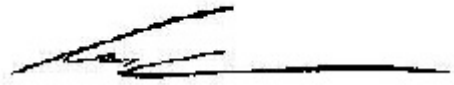
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17152309

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228865		11.26	0.02	0.94	29.1	120	0.32	0.07	32.6	0.09	14.80	3.3	10	4.06	10.1	0.66
W228866		5.03	0.01	0.43	5810	80	0.18	0.04	35.1	0.03	7.71	1.8	6	1.09	5.3	0.35
W228867		6.97	0.01	0.05	8.9	310	<0.05	0.05	20.5	0.06	1.30	0.6	<1	0.12	1.5	0.45
W228868		11.82	0.01	0.54	49.2	100	0.13	0.05	33.4	0.05	10.90	1.8	6	1.72	5.6	0.43
W228869		11.90	0.01	0.44	173.0	100	0.12	0.04	35.4	0.07	8.85	1.5	5	1.07	4.3	0.35
W228870		0.26	0.09	3.52	2490	200	0.70	0.15	18.40	0.11	38.3	10.0	44	10.30	40.7	3.01
W228871		11.12	0.02	0.71	71.5	120	0.18	0.05	33.9	0.07	12.90	2.4	7	1.86	6.7	0.53
W228872		11.30	0.01	0.78	1735	120	0.20	0.05	33.8	0.07	13.85	2.5	8	2.24	7.6	0.53
W228873		11.11	0.01	0.48	237	100	0.19	0.04	35.3	0.04	9.18	1.7	6	1.20	5.0	0.38
W228874		10.96	0.01	0.47	49.8	90	0.18	0.04	35.4	0.04	8.97	1.6	5	1.17	4.7	0.35
W228875		11.17	0.01	0.58	26.6	130	0.23	0.04	34.8	0.04	10.10	2.0	6	2.06	5.8	0.50
W228876		10.37	0.01	0.74	29.9	120	0.27	0.05	34.1	0.06	13.25	2.4	8	3.77	7.3	0.57
W228877		7.54	0.02	0.72	384	120	0.33	0.06	34.0	0.05	13.15	2.3	8	2.57	7.5	0.60
W228878		5.46	0.29	5.41	>10000	490	1.05	0.25	2.91	0.30	55.9	14.2	64	22.3	49.0	3.81
W228879		7.04	<0.01	0.05	15.2	20	0.05	0.03	20.8	0.06	1.10	0.6	1	0.14	1.2	0.49
W228880		9.78	0.87	4.68	>10000	220	0.84	0.22	1.50	1.01	55.1	11.9	57	10.20	38.8	3.63
W228881		3.98	0.13	6.07	8110	620	1.15	0.26	1.04	0.52	66.2	15.7	69	17.00	48.2	4.06
W228882		1.55	0.19	6.14	>10000	400	1.22	0.26	0.98	0.41	62.0	16.4	71	18.00	49.4	3.88
W228883		10.89	0.05	5.59	842	200	1.08	0.23	3.15	0.02	57.6	13.5	60	16.50	40.8	4.27
W228884		11.09	0.05	5.47	621	170	1.31	0.20	2.58	0.05	54.2	14.2	61	17.45	37.2	4.35
W228885		11.28	0.05	7.57	195.5	280	2.00	0.25	2.43	0.03	69.4	21.6	91	33.2	50.4	4.48
W228886		7.44	0.04	7.13	212	250	1.78	0.24	2.97	0.05	68.0	18.9	80	32.2	43.0	4.18
W228887		11.31	0.01	0.89	43.9	830	0.22	0.06	30.8	0.06	14.25	3.8	9	2.24	8.9	1.01
W228888		<0.02	0.01	0.88	42.0	840	0.24	0.05	31.3	0.07	14.40	3.9	11	2.22	9.1	1.02
W228889		11.00	0.02	2.54	56.2	150	0.70	0.10	25.1	0.03	29.7	7.1	28	11.50	18.4	1.75
W228890		10.95	0.02	1.85	42.3	110	0.52	0.10	26.9	0.04	26.1	7.0	17	6.25	14.4	1.48
W228891		10.57	0.03	1.72	26.3	110	0.47	0.11	26.2	0.08	25.5	5.2	16	5.78	11.3	1.28
W228892		10.32	0.01	0.62	13.1	130	0.23	0.04	33.4	0.04	9.13	2.1	7	1.91	5.3	0.57
W228893		9.21	0.01	0.69	17.1	110	0.24	0.06	34.0	0.02	11.30	2.3	7	2.54	6.0	0.57
W228894		10.82	0.01	0.53	79.2	110	0.18	0.04	34.6	<0.02	8.80	1.8	6	1.41	4.7	0.44
W228895		11.46	0.01	1.30	85.4	130	0.36	0.08	29.7	0.04	20.3	4.1	14	3.76	12.2	1.06
W228896		11.19	0.01	1.31	87.1	130	0.43	0.08	30.8	0.04	19.35	4.3	14	4.11	11.8	0.91
W228897		10.89	0.01	0.61	77.8	130	0.23	0.05	34.3	0.03	11.35	2.2	7	1.55	6.1	0.47
W228898		6.31	0.27	1.00	>10000	170	0.33	0.08	28.2	0.49	17.15	3.4	11	2.60	11.1	0.75
W228899		0.26	1.67	1.79	>10000	90	0.27	0.47	7.04	0.80	28.7	6.2	46	3.21	27.1	2.51
W228900		11.33	0.07	0.56	>10000	130	0.18	0.04	32.8	0.03	10.50	1.8	6	1.43	5.7	0.51

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CERTIFICATE OF ANALYSIS WH17152309

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228865		2.62	0.15	0.5	0.330	0.010	0.45	7.8	4.2	0.65	206	0.63	0.01	1.4	5.0	650
W228866		1.21	0.14	0.2	0.250	0.007	0.21	4.1	2.0	0.47	311	0.26	0.01	0.6	2.2	130
W228867		0.17	0.09	<0.1	0.015	0.006	0.02	0.6	0.6	12.65	191	0.10	0.01	0.1	1.6	480
W228868		1.44	0.05	0.3	0.413	0.009	0.26	5.5	1.5	0.52	224	0.29	0.01	0.8	2.9	220
W228869		1.13	<0.05	0.2	0.451	0.007	0.21	4.2	1.2	0.35	302	0.22	0.01	0.6	2.3	220
W228870		8.95	<0.05	1.7	3.91	0.040	1.65	19.1	6.7	1.37	1170	1.53	0.02	6.0	24.2	380
W228871		1.82	<0.05	0.4	0.761	0.014	0.34	6.4	1.8	0.34	298	0.39	0.01	1.0	3.9	350
W228872		2.01	<0.05	0.4	0.825	0.018	0.37	6.8	2.1	0.40	363	0.32	0.01	1.1	4.1	440
W228873		1.26	<0.05	0.3	0.542	0.016	0.23	4.4	1.7	0.29	299	0.22	0.01	0.7	2.6	170
W228874		1.19	<0.05	0.2	0.540	0.016	0.22	4.3	1.6	0.31	571	0.20	0.01	0.7	2.5	240
W228875		1.44	<0.05	0.3	0.431	0.015	0.27	5.0	2.5	0.39	219	0.28	0.01	0.8	3.3	260
W228876		1.90	<0.05	0.4	0.616	0.017	0.34	6.6	3.2	0.40	144	0.45	0.01	1.1	4.2	240
W228877		1.93	<0.05	0.4	0.969	0.019	0.32	6.5	3.2	0.60	664	0.43	0.01	1.0	4.3	530
W228878		13.75	0.08	2.2	11.80	0.061	2.33	27.6	17.5	0.42	892	1.81	0.02	7.2	35.1	230
W228879		0.15	0.08	<0.1	0.031	0.007	0.02	0.5	0.8	12.85	199	0.07	<0.01	0.1	1.5	180
W228880		12.20	0.08	2.0	22.7	0.052	2.10	26.2	14.5	0.30	510	1.00	0.02	6.6	27.6	250
W228881		15.40	0.08	2.5	28.2	0.055	2.76	31.2	13.0	0.62	464	0.65	0.02	8.6	33.0	350
W228882		15.75	0.08	2.4	18.15	0.055	2.75	30.1	14.2	0.58	416	0.70	0.02	8.4	34.1	380
W228883		13.30	0.05	2.5	1.635	0.053	2.62	27.6	8.7	1.46	761	0.29	0.03	8.6	28.9	400
W228884		13.45	0.05	2.3	0.901	0.052	2.57	26.3	9.8	1.30	671	0.36	0.02	7.9	27.4	300
W228885		20.0	0.06	2.9	0.440	0.081	3.69	32.9	22.5	1.22	617	0.20	0.03	10.3	33.8	190
W228886		18.60	0.07	2.7	0.457	0.076	3.44	33.2	22.1	1.39	735	0.21	0.03	9.2	30.6	180
W228887		2.19	<0.05	0.5	0.170	0.012	0.42	7.7	1.8	0.93	466	0.38	0.01	1.3	5.4	120
W228888		2.28	<0.05	0.4	0.177	0.012	0.42	7.8	1.9	0.95	477	0.39	0.01	1.3	5.5	130
W228889		6.36	<0.05	1.1	0.262	0.026	1.22	15.5	7.1	1.34	518	0.76	0.02	3.4	11.3	210
W228890		4.66	<0.05	1.0	0.320	0.022	0.90	13.8	3.7	0.87	598	0.33	0.02	3.0	9.7	150
W228891		4.12	<0.05	1.1	0.310	0.020	0.82	14.3	4.0	0.67	489	0.61	0.02	2.9	7.4	90
W228892		1.56	<0.05	0.3	0.229	0.008	0.29	5.0	2.1	0.94	350	0.37	0.01	0.9	2.9	120
W228893		1.72	<0.05	0.4	0.193	0.009	0.32	6.0	2.7	0.58	215	0.18	0.01	1.0	3.4	110
W228894		1.33	<0.05	0.3	0.212	0.008	0.25	4.6	1.9	0.39	182	0.11	0.01	0.8	2.6	120
W228895		3.36	<0.05	0.7	0.718	0.016	0.63	11.1	4.4	0.90	262	0.64	0.01	2.0	7.3	480
W228896		3.54	<0.05	0.6	0.581	0.016	0.63	11.1	4.6	0.72	278	0.71	0.01	1.9	7.1	460
W228897		1.65	<0.05	0.3	0.365	0.009	0.29	6.0	2.2	0.52	269	0.30	0.01	0.9	3.4	410
W228898		2.75	<0.05	0.5	2.09	0.026	0.44	8.9	5.0	0.46	5510	0.53	0.01	1.5	5.8	350
W228899		5.05	<0.05	0.9	15.20	0.025	0.79	14.0	24.7	0.16	338	5.73	0.01	2.5	19.6	480
W228900		1.49	<0.05	0.3	0.469	0.012	0.25	5.1	2.2	1.08	3260	0.34	0.01	0.8	3.1	370

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228865		3.9	21.1	0.002	0.63	0.21	2.4	2	0.4	1455	0.10	<0.05	1.70	0.054	1.18	3.1
W228866		2.1	9.4	<0.002	0.55	9.96	1.3	2	0.2	1500	<0.05	<0.05	0.80	0.023	0.53	1.4
W228867		1.9	0.9	<0.002	0.01	0.12	0.1	<1	<0.2	50.2	<0.05	<0.05	0.12	<0.005	<0.02	0.6
W228868		2.2	11.6	<0.002	0.36	0.49	1.4	1	0.2	1535	0.06	<0.05	1.00	0.030	0.98	1.9
W228869		1.7	9.1	<0.002	0.29	1.08	1.1	1	0.2	1935	<0.05	<0.05	0.79	0.025	0.99	2.1
W228870		8.2	74.9	<0.002	2.46	9.14	7.9	1	1.3	692	0.44	0.06	5.50	0.259	9.38	2.3
W228871		2.5	14.7	<0.002	0.47	1.06	1.7	1	0.2	1805	0.08	<0.05	1.27	0.040	1.73	2.3
W228872		2.8	16.2	<0.002	0.56	5.69	1.9	1	0.3	1730	0.08	<0.05	1.38	0.041	1.92	2.4
W228873		1.8	9.9	<0.002	0.32	1.02	1.2	1	0.2	1765	0.05	<0.05	0.89	0.027	1.23	1.8
W228874		1.8	9.5	<0.002	0.29	0.84	1.2	1	0.2	1605	0.05	<0.05	0.88	0.026	1.09	1.9
W228875		2.1	11.7	<0.002	0.42	0.36	1.5	1	0.2	1900	0.06	<0.05	0.97	0.034	1.05	1.8
W228876		2.6	15.3	<0.002	0.48	0.43	2.0	1	0.3	2060	0.08	<0.05	1.30	0.040	1.98	2.1
W228877		3.0	14.4	<0.002	0.46	2.03	2.4	1	0.3	1635	0.08	<0.05	1.27	0.038	3.06	2.1
W228878		28.0	106.0	0.002	4.55	66.0	10.2	2	1.5	187.0	0.56	0.10	8.18	0.304	39.2	2.1
W228879		1.2	0.9	<0.002	<0.01	0.11	0.1	<1	<0.2	46.3	<0.05	<0.05	0.06	<0.005	0.10	0.6
W228880		21.1	94.4	0.002	5.69	198.0	6.8	2	1.7	84.0	0.50	0.21	7.48	0.291	81.5	2.1
W228881		20.8	119.0	<0.002	3.83	143.0	12.9	1	2.1	94.2	0.65	0.13	9.64	0.401	140.0	2.0
W228882		22.6	122.0	<0.002	4.31	130.0	13.1	2	1.9	101.5	0.62	0.12	8.93	0.383	89.5	2.1
W228883		13.9	113.0	<0.002	3.22	3.36	12.5	1	1.6	113.0	0.63	0.05	8.43	0.408	5.71	1.8
W228884		11.4	113.0	<0.002	3.38	1.77	12.9	1	1.6	93.4	0.57	<0.05	7.84	0.374	4.32	1.6
W228885		14.2	152.0	<0.002	2.81	0.73	19.7	1	2.4	124.5	0.77	<0.05	10.15	0.454	3.76	2.0
W228886		13.8	149.5	<0.002	2.41	0.75	19.4	1	2.1	131.5	0.70	<0.05	9.68	0.414	2.95	1.9
W228887		3.2	17.7	<0.002	0.51	0.20	2.4	1	0.3	1575	0.09	<0.05	1.46	0.050	0.65	2.4
W228888		3.2	17.5	<0.002	0.51	0.19	2.5	1	0.3	1560	0.09	<0.05	1.43	0.049	0.62	2.4
W228889		5.5	55.5	0.003	0.95	0.37	6.4	1	0.8	1165	0.25	<0.05	3.70	0.144	1.25	2.4
W228890		6.5	39.6	<0.002	1.11	0.48	4.3	1	0.6	987	0.21	<0.05	3.26	0.114	0.81	1.9
W228891		7.9	36.8	<0.002	0.99	0.37	3.8	1	0.5	1000	0.22	<0.05	3.18	0.111	1.05	1.9
W228892		2.3	12.8	<0.002	0.39	0.21	1.6	1	0.2	1150	0.07	<0.05	1.05	0.034	0.52	1.6
W228893		2.6	14.4	<0.002	0.47	0.14	1.8	1	0.2	1530	0.08	<0.05	1.17	0.038	0.53	1.8
W228894		2.2	10.6	<0.002	0.37	0.20	1.4	1	0.2	1610	0.06	<0.05	0.91	0.030	0.38	1.5
W228895		4.4	27.8	<0.002	0.87	0.29	3.7	1	0.5	1245	0.14	<0.05	2.24	0.073	1.12	2.0
W228896		4.4	28.5	0.002	0.75	0.26	3.1	1	0.5	1460	0.14	<0.05	2.25	0.073	1.47	1.7
W228897		3.0	12.5	<0.002	0.40	0.40	1.6	1	0.2	1450	0.06	<0.05	1.14	0.035	0.72	2.4
W228898		5.6	20.5	<0.002	2.89	128.0	2.7	3	0.4	1315	0.11	0.08	1.86	0.055	4.04	2.9
W228899		9.9	39.8	0.002	4.58	154.0	2.9	2	1.1	339	0.18	0.11	3.15	0.098	38.8	4.6
W228900		2.9	11.2	<0.002	0.91	37.3	1.8	2	0.2	1455	0.06	<0.05	0.96	0.029	1.23	1.8

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152309

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W228865		17	0.3	14.2	15	17.6		0.01
W228866		8	0.2	8.8	4	7.9		0.01
W228867		1	0.1	0.8	15	0.6		<0.01
W228868		10	0.3	10.9	7	10.4		0.02
W228869		8	0.3	9.5	8	8.8		0.10
W228870		73	5.0	15.6	48	61.6		0.51
W228871		12	0.6	11.4	10	13.1		0.05
W228872		14	0.8	11.6	9	14.6		0.09
W228873		9	0.5	9.0	5	9.3		0.05
W228874		8	0.6	9.4	5	9.3		0.10
W228875		11	0.7	9.2	6	10.7		0.01
W228876		14	0.9	10.7	10	13.8		<0.01
W228877		14	1.0	12.0	10	14.5		0.06
W228878		96	8.9	14.7	59	78.5	2.08	5.78
W228879		2	0.1	0.8	15	<0.5		<0.01
W228880		87	8.1	17.5	189	71.5	5.84	16.60
W228881		121	12.4	17.3	59	88.7		22.4
W228882		123	11.2	18.3	65	87.9	2.02	12.40
W228883		108	7.0	17.1	51	84.4		0.20
W228884		110	5.9	16.1	55	78.6		0.14
W228885		153	3.4	19.4	75	99.6		0.04
W228886		138	2.9	19.1	74	94.0		0.10
W228887		16	0.5	11.2	28	16.5		0.01
W228888		16	0.5	11.4	30	16.2		<0.01
W228889		47	0.8	13.0	32	39.5		<0.01
W228890		30	0.9	15.2	18	38.4		0.02
W228891		27	0.6	14.6	20	39.2		<0.01
W228892		11	0.3	8.0	18	11.7		0.01
W228893		11	0.2	9.3	10	13.3		<0.01
W228894		9	0.4	7.2	7	10.6		<0.01
W228895		22	1.2	11.1	17	25.1		<0.01
W228896		22	0.9	11.3	15	25.0		<0.01
W228897		11	0.5	10.3	6	11.8		<0.01
W228898		17	1.3	14.9	54	17.6	4.89	0.82
W228899		36	6.1	15.2	66	29.8	6.94	8.19
W228900		10	0.5	9.9	4	11.0	1.175	0.07

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17152309

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- AUG- 2017
Account: RCM

CERTIFICATE WH17154489

Project: Nadaleen

P.O. No.: N17- 047

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

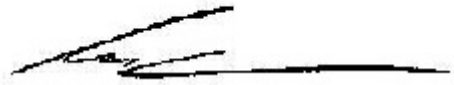
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 31- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17154489

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228901		12.02	0.02	1.07	11.1	170	0.33	0.06	31.7	0.11	16.20	3.5	11	5.71	10.5	0.84
W228902		11.64	0.14	1.62	18.6	210	0.53	0.09	28.8	0.13	23.9	5.3	17	9.12	17.0	1.13
W228903		12.25	0.02	0.73	6.3	140	0.26	0.04	33.5	0.08	12.25	2.6	8	3.02	8.0	0.63
W228904		11.51	0.09	3.66	68.5	310	1.08	0.18	19.15	0.28	50.3	12.0	38	16.65	36.8	2.42
W228905		11.42	0.04	1.66	16.7	210	0.61	0.09	30.2	0.14	26.2	5.3	17	7.58	16.9	1.21
W228906		11.93	0.02	0.98	6.6	150	0.37	0.06	31.9	0.09	17.65	3.4	11	4.32	10.2	0.78
W228907		10.51	0.02	1.38	24.2	150	0.50	0.07	30.7	0.13	21.6	4.5	15	5.32	14.1	0.97
W228908		10.87	0.02	1.27	22.9	150	0.46	0.06	30.4	0.07	20.9	4.7	16	4.50	13.8	1.15
W228909		5.16	0.04	2.27	32.0	240	0.77	0.12	25.4	0.21	34.4	7.8	26	10.75	23.5	1.66
W228910		16.47	0.08	8.18	107.5	460	3.90	0.36	3.18	0.39	99.2	16.7	70	41.8	52.2	3.93
W228911		4.10	0.07	8.34	61.0	820	2.86	0.37	2.19	0.17	84.4	20.7	64	34.1	51.4	4.04
W228912		0.26	0.64	6.63	447	230	2.33	0.24	2.17	0.36	63.0	21.2	101	39.5	63.3	6.20
W228913		7.78	0.10	1.46	25.5	860	0.58	0.07	15.80	0.41	18.65	4.0	13	6.37	12.9	2.82
W228914		7.52	0.19	5.58	39.0	340	1.53	0.31	7.09	0.27	52.4	15.4	44	23.4	54.2	4.00
W228915		4.96	0.05	6.67	33.2	360	1.78	0.38	3.83	0.09	67.9	17.8	57	27.5	60.4	4.56
W228916		9.13	0.05	3.56	51.2	400	0.91	0.18	7.32	0.05	36.0	12.0	36	12.30	37.6	4.12
W228917		6.90	<0.01	0.06	<0.2	30	0.05	0.02	21.1	0.06	1.13	0.7	1	0.20	1.9	0.48
W228918		5.86	0.06	1.38	13.3	150	0.34	0.08	3.46	0.13	18.75	6.4	34	4.63	14.1	2.34
W228919		7.62	0.04	3.81	14.1	270	0.88	0.21	5.71	0.07	40.4	11.4	42	13.40	31.5	4.22
W228920		6.63	0.07	7.18	23.3	340	2.00	0.30	2.97	0.33	68.8	18.4	67	30.3	60.4	4.70
W228921		<0.02	0.08	7.16	24.4	350	2.07	0.29	3.02	0.36	68.6	18.8	66	30.5	59.5	4.65
W228922		6.55	0.01	7.88	10.9	300	1.29	0.06	4.01	0.10	85.4	25.8	29	47.9	35.1	6.98
W228923		5.75	0.03	1.74	16.3	290	0.50	0.07	31.4	0.17	23.1	5.3	17	7.58	16.4	1.22
W228924		7.96	0.07	7.95	96.5	530	2.54	0.28	3.87	0.09	87.3	17.1	60	26.5	41.1	4.44
W228925		9.86	0.03	5.86	28.6	350	1.52	0.28	6.14	0.06	50.4	16.7	53	18.30	55.0	4.53
W228926		10.81	0.04	6.45	46.1	300	1.73	0.31	5.42	0.05	57.7	18.7	57	22.7	66.2	4.81
W228927		11.48	0.05	5.13	30.7	200	1.22	0.24	5.96	0.05	44.6	16.2	51	19.90	56.8	4.51
W228928		10.25	0.09	5.69	60.3	250	1.52	0.30	4.92	0.08	51.3	16.6	57	19.00	58.6	4.37
W228929		4.34	0.12	6.21	240	250	1.75	0.27	3.13	0.85	54.6	14.5	66	22.6	48.9	4.58
W228930		4.35	0.07	5.85	1690	300	1.77	0.28	6.53	0.20	59.9	10.7	50	19.25	36.1	4.50
W228931		1.98	0.06	6.15	3130	330	1.79	0.32	5.65	0.24	62.9	11.6	51	21.3	40.5	4.35
W228932		6.44	<0.01	0.10	14.1	20	0.08	0.02	20.8	0.06	1.49	0.8	1	0.54	1.7	0.51
W228933		6.60	0.09	4.88	233	220	1.30	0.24	6.72	0.18	46.7	11.7	57	13.85	40.5	4.39
W228934		6.88	0.11	6.09	147.0	230	1.57	0.22	3.45	0.22	55.1	16.1	69	17.20	48.8	4.90
W228935		0.26	0.18	3.92	6450	210	0.94	0.13	12.40	0.13	41.3	12.1	44	10.10	37.0	2.98
W228936		9.41	0.11	6.22	99.4	420	1.49	0.24	2.15	0.23	58.1	15.9	69	15.95	56.2	4.68

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 31- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17154489

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228901		2.76	0.09	0.5	0.156	0.014	0.50	8.2	4.6	0.68	214	0.68	0.02	1.5	6.0	160
W228902		4.21	0.11	0.8	0.151	0.017	0.74	12.3	7.3	0.80	156	1.03	0.02	2.3	9.8	210
W228903		1.92	0.11	0.4	0.084	0.010	0.33	5.7	3.2	0.59	124	0.52	0.01	1.1	4.2	180
W228904		9.63	0.14	1.8	0.430	0.043	1.71	26.2	12.8	1.22	432	2.01	0.04	5.4	22.6	370
W228905		4.40	0.12	0.8	0.166	0.019	0.76	13.9	6.7	0.82	391	0.83	0.02	2.4	9.6	770
W228906		2.53	0.11	0.5	0.083	0.011	0.45	8.4	5.2	0.49	281	0.36	0.01	1.5	5.7	290
W228907		3.65	0.12	0.7	0.352	0.017	0.64	9.9	6.4	0.59	268	0.45	0.01	2.0	7.9	380
W228908		3.36	0.11	0.7	0.370	0.016	0.58	10.5	5.5	0.69	417	0.40	0.01	1.8	8.3	370
W228909		6.01	0.14	1.2	0.732	0.028	1.05	17.4	9.9	0.84	283	0.73	0.02	3.3	14.4	440
W228910		23.6	0.20	3.2	0.156	0.084	3.97	46.9	23.3	1.26	947	1.48	0.05	12.6	47.0	530
W228911		23.7	0.18	3.1	0.056	0.080	4.22	39.1	18.8	1.49	606	3.70	0.04	12.9	40.0	520
W228912		18.00	0.15	2.4	3.07	0.066	3.13	30.5	18.9	0.79	617	4.75	0.03	8.6	47.8	230
W228913		3.85	0.11	0.6	0.070	0.020	0.67	9.1	4.8	8.51	2200	3.37	0.01	2.6	14.4	220
W228914		14.80	0.16	2.6	0.421	0.060	2.70	25.9	9.7	4.12	781	2.47	0.03	8.1	89.2	430
W228915		18.60	0.18	2.9	0.199	0.080	3.31	32.3	12.4	2.46	800	1.20	0.04	10.7	56.0	570
W228916		9.58	0.13	1.5	0.133	0.040	1.69	16.8	10.0	3.70	942	0.73	0.02	5.0	29.8	440
W228917		0.23	0.20	<0.1	0.006	<0.005	0.03	0.5	0.9	13.10	206	0.06	<0.01	0.2	1.4	180
W228918		3.60	0.11	0.7	0.174	0.018	0.63	7.9	7.6	1.58	452	0.35	0.01	1.9	14.4	170
W228919		10.35	0.13	1.6	0.235	0.048	1.82	19.3	10.9	2.88	960	0.47	0.02	5.6	26.2	400
W228920		20.3	0.17	2.8	0.255	0.079	3.43	33.3	23.1	2.14	596	1.63	0.04	10.5	41.7	500
W228921		20.3	0.17	2.9	0.260	0.076	3.44	33.8	23.1	2.18	596	1.64	0.04	10.6	42.1	500
W228922		19.50	0.18	2.4	0.152	0.067	2.77	41.6	270	2.45	1250	1.69	1.10	47.2	26.1	1660
W228923		4.65	0.13	0.8	0.330	0.018	0.82	10.0	7.7	0.67	362	0.50	0.02	2.4	9.3	720
W228924		22.6	0.20	2.7	0.357	0.074	3.84	43.8	15.4	2.32	787	2.37	0.04	10.5	42.1	650
W228925		15.65	0.15	2.4	0.669	0.062	2.85	24.4	10.7	3.41	907	0.74	0.03	8.3	46.9	520
W228926		18.35	0.16	2.5	1.245	0.073	3.21	27.6	14.2	3.17	704	0.84	0.03	9.4	43.4	520
W228927		13.80	0.14	1.9	0.917	0.063	2.51	21.5	14.9	3.06	751	0.53	0.03	7.1	34.4	460
W228928		15.45	0.15	2.3	1.590	0.065	2.79	25.0	12.2	2.60	687	0.93	0.03	8.3	37.1	460
W228929		16.50	0.17	2.9	3.68	0.067	3.03	27.3	15.4	1.78	465	3.58	0.03	8.7	42.4	270
W228930		15.50	0.16	2.7	2.10	0.056	2.66	29.0	19.6	3.24	1400	0.68	0.03	8.8	26.5	420
W228931		16.55	0.16	2.7	1.935	0.062	2.76	30.5	25.0	2.88	1320	0.56	0.03	9.4	28.0	450
W228932		0.40	0.24	<0.1	0.015	0.005	0.04	0.7	1.4	12.85	219	0.08	0.01	0.2	1.7	160
W228933		12.90	0.15	2.2	1.970	0.056	2.34	22.5	12.1	3.26	951	1.81	0.03	7.1	29.9	390
W228934		16.00	0.16	2.7	1.985	0.061	2.83	26.3	38.3	1.89	370	1.88	0.03	8.8	40.2	390
W228935		11.10	0.13	1.9	14.80	0.034	1.85	21.0	12.2	2.60	1200	1.87	0.02	5.7	27.7	440
W228936		16.65	0.18	2.6	1.550	0.064	2.90	27.6	34.3	1.40	353	1.44	0.03	8.9	39.0	410

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17154489

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228901		4.2	23.8	<0.002	0.63	0.20	2.8	1	0.4	2100	0.11	<0.05	1.75	0.057	1.17	1.9
W228902		5.6	37.1	0.003	0.86	0.27	4.2	1	0.5	1910	0.17	<0.05	2.79	0.087	1.07	2.7
W228903		2.6	15.5	<0.002	0.39	0.15	2.1	1	0.3	2330	0.08	<0.05	1.27	0.040	0.25	1.9
W228904		11.9	80.5	0.007	1.81	0.59	9.4	2	1.4	1320	0.40	0.07	6.16	0.213	0.66	3.5
W228905		5.7	35.7	0.003	0.82	0.27	4.6	2	0.6	1950	0.18	0.05	2.99	0.091	0.33	2.5
W228906		3.4	20.9	<0.002	0.53	0.20	3.0	1	0.4	1970	0.10	<0.05	1.77	0.059	0.19	1.9
W228907		4.7	29.4	<0.002	0.69	0.35	4.1	1	0.5	1940	0.15	<0.05	2.30	0.084	0.40	2.7
W228908		4.0	26.4	<0.002	0.76	0.28	4.5	1	0.4	1800	0.13	<0.05	2.08	0.082	0.35	1.7
W228909		7.5	47.5	0.003	1.35	0.48	5.7	2	0.8	1430	0.24	0.06	3.98	0.143	0.77	3.1
W228910		27.4	139.5	0.003	1.07	0.92	16.4	1	2.7	158.5	0.94	0.09	16.65	0.395	1.40	3.1
W228911		22.4	109.0	0.003	2.38	0.83	15.7	2	2.8	183.5	0.96	0.05	14.30	0.371	1.20	3.3
W228912		49.1	163.5	0.002	4.29	5.62	18.8	1	2.9	87.9	0.63	<0.05	9.11	0.389	12.00	1.8
W228913		10.5	27.3	0.012	0.74	0.30	3.2	1	0.5	284	0.18	<0.05	2.67	0.070	0.44	2.2
W228914		23.6	110.0	0.021	3.16	0.72	13.4	3	1.8	163.5	0.61	0.14	8.32	0.369	2.02	2.4
W228915		21.9	134.5	0.003	3.72	0.59	16.4	1	2.2	177.5	0.78	0.15	10.40	0.475	1.81	1.9
W228916		15.1	67.1	0.002	2.54	0.48	9.2	1	1.1	195.0	0.37	0.06	4.91	0.258	0.89	1.0
W228917		1.1	1.1	<0.002	0.01	0.05	0.3	1	<0.2	48.5	<0.05	<0.05	0.10	<0.005	<0.02	0.7
W228918		14.6	23.2	<0.002	1.44	0.22	3.5	1	0.5	119.0	0.14	<0.05	2.30	0.111	0.55	0.5
W228919		13.3	72.8	<0.002	2.30	0.38	9.7	1	1.3	190.0	0.41	0.05	5.73	0.254	0.79	1.1
W228920		17.3	140.5	0.006	2.96	0.52	19.7	1	2.2	179.5	0.75	0.10	10.45	0.488	1.13	2.3
W228921		17.9	143.5	0.004	2.98	0.54	20.1	1	2.3	182.0	0.77	0.08	10.60	0.482	1.18	2.3
W228922		7.5	123.0	0.002	0.80	0.31	17.9	1	1.6	247	2.38	<0.05	7.07	0.889	1.12	1.5
W228923		5.1	34.3	0.003	1.06	0.29	4.5	2	0.5	1790	0.16	<0.05	2.60	0.108	0.49	2.1
W228924		19.3	146.5	0.009	3.04	2.75	16.1	1	2.7	234	0.84	0.06	13.95	0.381	2.18	3.1
W228925		16.2	107.0	<0.002	3.53	1.11	15.8	1	1.7	209	0.60	0.09	7.43	0.449	1.62	1.4
W228926		20.0	129.0	<0.002	4.16	0.51	18.8	1	2.1	161.0	0.65	0.08	8.28	0.476	2.19	1.5
W228927		17.1	96.2	<0.002	3.46	0.39	14.6	1	1.8	165.0	0.50	0.08	6.42	0.397	1.85	1.2
W228928		17.5	109.0	0.002	3.34	0.50	16.0	1	1.8	145.0	0.60	0.10	7.30	0.439	2.49	1.4
W228929		33.6	125.0	0.011	3.92	1.06	16.7	2	2.7	98.0	0.66	<0.05	8.97	0.459	7.76	2.8
W228930		19.3	111.5	<0.002	3.31	3.44	13.9	1	1.9	192.5	0.65	0.09	8.65	0.394	4.26	1.7
W228931		20.1	113.5	0.002	3.35	4.74	14.7	2	2.1	201	0.69	0.09	9.33	0.417	4.19	1.7
W228932		1.2	2.5	<0.002	0.01	0.06	0.4	1	<0.2	51.5	<0.05	<0.05	0.14	0.005	0.05	0.6
W228933		16.8	89.4	0.005	3.02	0.98	12.8	1	1.5	193.0	0.51	0.07	6.84	0.376	3.65	1.6
W228934		17.1	112.0	0.005	4.27	0.59	17.2	1	1.8	206	0.65	<0.05	8.30	0.489	5.36	2.1
W228935		10.7	81.4	0.002	2.64	25.2	11.1	1	1.7	322	0.42	<0.05	5.79	0.268	44.3	6.0
W228936		19.7	115.0	0.005	3.36	0.59	16.5	2	2.6	185.5	0.66	<0.05	8.82	0.472	6.38	2.1

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17154489

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W228901		19	0.2	11.2	14	18.2	<0.01
W228902		30	0.4	16.0	19	29.8	<0.01
W228903		14	0.2	9.0	8	13.7	<0.01
W228904		67	1.5	23.1	56	64.3	<0.01
W228905		30	0.4	17.6	25	33.2	<0.01
W228906		18	0.2	13.5	14	18.9	<0.01
W228907		26	0.7	17.0	19	25.1	<0.01
W228908		26	1.1	17.2	13	26.7	<0.01
W228909		44	0.9	21.4	32	43.4	<0.01
W228910		124	2.1	23.5	138	111.5	<0.01
W228911		99	2.3	19.2	66	114.0	<0.01
W228912		138	14.4	18.4	97	85.6	0.51
W228913		34	0.5	9.3	49	25.2	<0.01
W228914		109	1.4	19.4	35	95.1	<0.01
W228915		121	1.5	21.7	36	108.0	<0.01
W228916		74	0.8	13.9	25	59.0	<0.01
W228917		2	0.1	0.8	15	0.6	<0.01
W228918		33	0.3	6.2	60	29.1	<0.01
W228919		76	0.7	14.8	53	64.4	<0.01
W228920		148	1.5	22.4	148	107.0	<0.01
W228921		146	1.5	23.4	153	111.0	<0.01
W228922		194	1.0	25.4	94	105.5	<0.01
W228923		33	0.4	14.8	25	31.9	<0.01
W228924		141	4.6	23.4	60	97.9	0.01
W228925		127	1.6	19.0	34	88.3	<0.01
W228926		136	1.3	22.1	40	108.5	0.01
W228927		112	1.0	16.8	37	73.5	<0.01
W228928		123	1.8	18.3	54	86.9	<0.01
W228929		140	2.6	19.2	325	102.0	<0.01
W228930		99	5.1	19.4	138	97.6	0.21
W228931		104	5.8	19.3	120	100.5	0.22
W228932		2	0.1	0.9	17	1.1	<0.01
W228933		108	2.8	17.0	52	79.3	0.06
W228934		142	3.0	19.0	93	96.1	<0.01
W228935		85	7.8	19.1	48	70.5	2.88
W228936		136	1.5	18.6	98	99.4	<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 31- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17154489

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

REE's may not be totally soluble in this method.

Applies to Method: ME- MS61

LABORATORY ADDRESSES

Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

Applies to Method:

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 8- SEP- 2017
This copy reported on 19- SEP- 2017
Account: RCM

CERTIFICATE WH17190219

Project: RCM_WH17154489

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 6- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

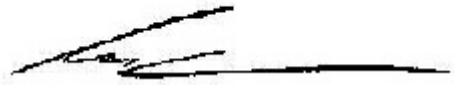
To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17154489**

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 8- SEP- 2017
Account: RCM

Project: RCM_WH17154489

CERTIFICATE OF ANALYSIS WH17190219

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W228901		<0.01
W228902		<0.01
W228903		0.01
W228904		<0.01
W228905		<0.01
W228906		0.14
W228907		<0.01
W228908		<0.01
W228909		0.01
W228910		<0.01
W228911		<0.01
W228912		0.57
W228913		<0.01
W228914		<0.01
W228915		<0.01
W228916		<0.01
W228917		<0.01
W228918		<0.01
W228919		<0.01
W228920		<0.01
W228921		<0.01
W228922		<0.01
W228923		<0.01
W228924		0.01
W228925		<0.01
W228926		<0.01
W228927		<0.01
W228928		<0.01
W228929		<0.01
W228930		0.22
W228931		0.22
W228932		<0.01
W228933		0.06
W228934		<0.01
W228935		2.57
W228936		<0.01

Comments: **Re- analysis results for samples originally reported on certificate WH17154489**

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Project: RCM_WH17154489

Finalized Date: 8- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17190219

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE WH17152400

Project: Nadaleen

P.O. No.: N17- 048

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

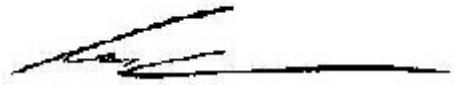
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152400

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229757		4.49	0.07	2.57	137.5	150	0.87	0.07	18.45	0.08	34.4	4.6	29	5.04	12.8	1.25
W229758		4.09	0.04	2.78	85.0	180	1.12	0.07	21.4	0.11	34.5	4.8	31	9.43	17.0	1.07
W229759		8.92	0.13	2.69	117.5	140	0.82	0.13	19.15	0.16	29.7	3.5	29	6.67	19.0	0.87
W229760		7.41	0.07	2.06	120.0	140	0.49	0.07	20.9	0.06	22.8	3.0	24	4.59	14.6	0.99
W229761		7.83	0.05	3.50	58.1	240	1.07	0.09	15.55	0.05	38.5	5.4	42	10.85	23.3	1.12
W229762		8.10	0.04	1.91	44.7	210	0.57	0.06	24.6	0.05	21.3	4.2	22	5.94	21.6	0.88
W229763		7.03	0.07	3.34	95.2	180	1.08	0.08	11.80	0.06	37.6	4.9	40	11.35	19.4	1.33
W229764		3.25	0.05	3.54	6050	190	1.07	0.09	11.65	0.05	38.2	4.9	42	11.30	20.7	1.39
W229765		4.85	<0.01	0.04	9.3	20	0.05	0.02	20.7	0.06	1.01	0.6	1	0.11	1.3	0.45
W229766		5.99	0.05	2.09	220	190	0.70	0.06	22.3	0.04	25.5	3.5	23	5.87	10.2	0.87
W229767		7.80	0.04	1.27	36.6	90	0.52	0.04	28.7	0.17	17.60	2.2	15	4.24	9.1	0.63
W229768		7.98	0.07	1.49	33.6	120	0.48	0.05	28.4	0.04	19.30	3.0	17	3.71	10.4	0.49
W229769		<0.02	0.07	1.46	30.6	110	0.60	0.05	27.7	0.04	19.60	3.0	17	3.74	9.0	0.48
W229770		4.63	0.04	0.91	35.9	50	0.53	0.03	30.6	0.09	14.50	1.8	12	2.37	5.3	0.36
W229771		5.27	0.72	1.62	>10000	60	0.52	0.05	18.05	0.09	20.8	2.8	19	2.86	10.5	0.74
W229772		4.10	0.62	1.10	>10000	50	0.34	0.04	24.4	0.24	14.50	1.9	15	2.25	6.9	0.49
W229773		5.58	0.40	1.18	6760	190	0.63	0.04	29.7	0.14	14.80	2.4	15	2.94	6.8	0.51
W229774		0.26	0.18	3.78	6320	200	1.07	0.13	12.35	0.14	38.7	12.1	45	11.15	36.4	2.89
W229775		3.04	4.74	1.68	>10000	50	0.43	0.07	11.30	0.78	17.20	3.0	23	3.52	19.6	0.84
W229776		5.00	0.01	0.09	296	40	0.12	0.03	20.7	0.07	1.17	0.7	1	1.76	1.5	0.48
W229777		5.29	0.27	1.10	1195	60	0.43	0.04	30.0	0.06	15.15	2.1	12	2.64	6.0	0.54
W229778		4.28	0.05	1.94	90.1	160	0.83	0.06	24.1	0.06	23.5	3.7	21	6.19	11.3	0.99
W229779		8.23	0.05	3.02	114.5	190	1.13	0.08	20.9	0.06	33.3	5.8	34	10.20	14.8	1.26
W229780		3.60	0.05	2.40	94.4	150	0.92	0.07	24.6	0.07	26.6	4.4	26	7.49	12.6	0.96
W229781		7.60	0.03	1.02	48.0	540	0.47	0.03	31.2	0.08	13.35	2.1	11	3.17	7.0	0.53
W229782		7.35	0.05	2.00	79.1	150	0.97	0.06	25.3	0.04	24.3	3.6	21	5.61	9.8	0.96
W229783		7.89	0.09	3.50	89.7	270	1.53	0.08	17.20	0.06	40.2	6.3	38	17.65	16.4	1.60
W229784		7.79	0.15	3.90	162.0	320	1.47	0.10	14.85	0.09	46.4	6.9	43	16.95	20.8	1.83
W229785		0.26	0.67	1.85	>10000	140	0.55	2.60	25.8	0.20	25.8	4.9	28	5.99	20.8	1.39
W229786		8.05	0.08	3.77	105.5	490	1.43	0.10	15.75	0.05	43.6	6.6	41	20.9	23.0	1.66
W229787		7.56	0.04	1.47	46.0	690	0.60	0.05	28.1	0.09	18.45	2.9	16	5.07	7.3	0.97
W229788		7.48	0.07	1.00	37.0	170	0.47	0.04	31.7	0.12	12.90	2.1	13	2.96	5.2	0.72
W229789		7.86	0.06	3.74	79.9	540	1.49	0.09	13.70	0.05	41.7	6.2	39	14.65	16.7	1.61
W229790		7.96	0.04	3.21	37.5	240	1.13	0.08	22.1	0.03	34.1	5.4	29	23.4	15.0	1.31
W229791		8.22	0.04	3.10	39.7	200	1.10	0.08	20.2	0.07	33.6	5.5	29	23.8	14.4	1.33
W229792		7.89	0.08	1.91	42.0	230	0.74	0.06	25.5	0.12	22.9	3.7	21	9.75	14.9	0.73

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152400

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229757		6.89	0.07	1.7	0.336	0.020	1.37	17.1	10.3	5.24	305	0.96	0.02	4.6	10.8	340
W229758		7.81	0.07	1.7	0.237	0.024	1.49	18.0	14.0	2.55	208	0.55	0.02	5.1	11.6	360
W229759		6.98	0.08	1.4	0.256	0.027	1.45	16.0	10.7	4.73	232	0.39	0.02	4.6	8.6	320
W229760		5.16	0.09	1.3	0.341	0.018	1.11	11.7	6.2	4.76	312	0.44	0.01	3.5	7.5	310
W229761		8.86	0.12	1.8	0.241	0.028	1.95	20.3	16.4	3.38	196	0.63	0.03	5.8	14.2	550
W229762		4.79	0.06	0.9	0.284	0.016	1.07	11.5	8.8	2.49	228	0.49	0.02	3.1	8.3	250
W229763		8.46	0.09	2.0	0.659	0.027	1.90	18.9	15.1	5.70	281	0.96	0.03	5.5	13.1	450
W229764		9.09	0.08	2.2	0.765	0.027	1.99	19.7	16.0	5.65	326	0.71	0.03	5.9	12.3	430
W229765		0.17	0.15	<0.1	0.019	0.005	0.02	0.5	0.5	12.70	189	0.10	<0.01	0.1	1.7	180
W229766		5.28	0.10	1.2	0.374	0.017	1.16	13.4	9.7	3.27	198	0.56	0.02	3.5	7.6	260
W229767		3.21	0.05	0.8	0.349	0.010	0.73	9.6	7.2	2.21	223	0.36	0.01	2.1	4.6	290
W229768		3.61	0.05	1.0	0.239	0.012	0.86	10.8	6.5	1.39	141	0.86	0.01	2.8	6.6	260
W229769		3.52	0.06	1.0	0.224	0.012	0.85	10.9	7.1	1.47	136	0.88	0.01	2.7	6.4	260
W229770		2.29	0.05	0.6	0.230	0.010	0.50	8.2	5.5	1.36	212	0.49	0.01	1.6	4.0	240
W229771		3.97	0.07	1.1	2.03	0.016	0.82	11.5	12.3	2.48	3270	0.63	0.01	2.5	6.7	270
W229772		2.69	0.06	0.8	1.390	0.016	0.56	7.8	7.2	1.73	514	0.58	0.01	1.8	4.7	180
W229773		3.03	0.05	0.7	0.650	0.013	0.64	8.3	8.4	1.54	243	0.41	0.01	1.9	5.7	230
W229774		9.52	0.07	1.9	15.25	0.037	1.78	19.9	13.4	2.55	1170	1.84	0.02	5.7	27.2	430
W229775		4.26	0.07	1.0	4.01	0.036	0.87	10.7	13.1	2.17	1140	0.55	0.01	2.7	7.9	290
W229776		0.32	0.13	<0.1	0.021	0.005	0.07	0.6	1.5	12.65	209	0.05	<0.01	0.4	1.7	160
W229777		2.80	0.06	0.7	0.570	0.011	0.60	8.3	6.4	1.62	333	0.42	0.01	1.8	5.1	160
W229778		4.89	0.06	1.2	0.264	0.018	1.10	13.1	12.5	2.76	151	0.64	0.02	3.2	9.4	240
W229779		7.44	0.08	1.7	0.210	0.024	1.69	17.9	21.0	2.91	166	0.66	0.02	4.7	14.2	380
W229780		5.94	0.07	1.3	0.199	0.019	1.33	14.4	15.3	2.14	142	0.58	0.02	3.7	11.3	320
W229781		2.57	0.05	0.5	0.132	0.008	0.56	7.8	5.6	1.20	116	0.31	0.01	1.6	5.3	170
W229782		4.93	0.06	1.2	0.201	0.016	1.10	13.1	11.2	2.50	228	0.49	0.01	3.3	9.1	260
W229783		8.84	0.08	2.1	0.257	0.028	2.03	21.3	20.3	3.11	255	0.74	0.02	5.9	16.3	460
W229784		9.47	0.09	2.3	0.464	0.029	2.30	24.2	22.1	2.86	238	1.18	0.03	6.3	18.4	610
W229785		4.74	0.07	0.8	6.45	0.024	0.93	13.4	9.2	0.89	2200	2.23	0.01	2.5	15.3	330
W229786		9.38	0.08	2.0	0.334	0.028	2.24	22.6	25.5	2.49	219	0.74	0.03	5.8	18.0	680
W229787		3.66	0.06	0.9	0.182	0.012	0.84	10.1	8.0	1.96	170	0.41	0.01	2.4	7.4	190
W229788		2.59	0.06	0.6	0.186	0.009	0.56	7.4	4.9	1.50	199	0.54	0.01	1.7	5.8	160
W229789		9.18	0.08	2.5	0.190	0.029	2.17	21.9	18.7	3.41	239	0.57	0.03	6.0	16.1	470
W229790		7.71	0.07	1.3	0.083	0.020	1.83	18.2	21.3	1.92	198	0.47	0.02	4.2	14.3	420
W229791		7.60	0.07	1.3	0.077	0.021	1.78	18.0	20.5	2.34	178	0.57	0.02	4.3	15.8	400
W229792		4.76	0.06	1.1	0.088	0.015	1.10	13.0	9.6	1.61	127	0.80	0.01	3.2	9.5	300

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152400

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229757		6.3	47.8	0.002	0.27	0.82	4.3	2	0.9	407	0.35	<0.05	6.23	0.125	0.71	10.0
W229758		7.8	56.1	0.003	0.38	0.38	4.9	2	1.1	457	0.39	<0.05	6.60	0.133	0.64	10.3
W229759		7.3	49.5	<0.002	0.31	0.81	4.7	2	0.9	390	0.34	0.05	5.30	0.131	0.73	9.0
W229760		6.7	36.9	<0.002	0.36	0.84	3.6	1	0.8	578	0.25	<0.05	4.09	0.101	0.65	6.5
W229761		7.3	68.3	<0.002	0.35	0.94	5.8	3	1.1	303	0.43	<0.05	6.88	0.171	0.63	7.6
W229762		4.4	37.1	<0.002	0.19	0.22	3.3	2	0.6	482	0.24	<0.05	3.62	0.091	0.43	10.8
W229763		6.8	68.3	<0.002	0.38	0.78	5.6	3	1.1	198.5	0.42	<0.05	6.94	0.164	1.01	4.0
W229764		6.3	72.9	<0.002	0.64	10.10	6.0	3	1.3	190.5	0.45	<0.05	7.18	0.176	1.92	4.1
W229765		1.1	0.7	<0.002	<0.01	0.06	0.1	<1	<0.2	45.5	<0.05	<0.05	0.07	<0.005	0.05	0.9
W229766		4.3	42.6	<0.002	0.26	1.65	3.5	2	0.7	465	0.27	<0.05	4.09	0.102	0.85	11.2
W229767		3.4	27.2	<0.002	0.15	0.28	2.2	1	0.4	636	0.16	<0.05	2.55	0.061	0.40	6.1
W229768		7.2	29.8	<0.002	0.20	0.29	2.4	2	0.5	793	0.20	<0.05	3.24	0.075	0.67	13.7
W229769		7.1	29.7	<0.002	0.20	0.29	2.4	2	0.6	808	0.20	<0.05	3.17	0.075	0.69	13.2
W229770		4.3	17.6	<0.002	0.14	0.54	1.6	1	0.3	900	0.11	<0.05	1.94	0.044	0.63	10.6
W229771		8.0	33.7	<0.002	1.64	48.0	2.6	3	0.5	482	0.19	<0.05	3.36	0.075	7.78	16.6
W229772		6.6	23.1	<0.002	1.99	71.9	1.8	3	0.4	884	0.14	<0.05	2.37	0.053	3.33	14.7
W229773		5.5	25.4	<0.002	0.57	19.40	2.0	1	0.4	1095	0.14	<0.05	2.46	0.056	2.76	15.1
W229774		10.6	80.7	<0.002	2.59	22.3	10.3	1	1.5	313	0.42	<0.05	5.56	0.267	44.5	6.6
W229775		12.4	36.0	<0.002	8.18	371	2.2	6	0.6	263	0.20	0.16	3.33	0.081	12.65	28.1
W229776		1.2	6.1	<0.002	0.02	0.46	0.1	<1	0.3	48.9	0.05	<0.05	0.07	<0.005	0.07	0.6
W229777		5.9	23.4	<0.002	0.27	4.75	1.9	1	0.4	1425	0.14	<0.05	2.38	0.053	2.07	15.8
W229778		6.6	41.1	<0.002	0.25	0.45	3.3	1	0.7	1160	0.24	<0.05	4.09	0.094	0.64	13.4
W229779		6.5	63.0	<0.002	0.29	0.43	5.0	2	1.0	499	0.36	<0.05	5.89	0.140	0.55	11.0
W229780		6.0	49.8	<0.002	0.22	0.40	3.9	1	0.8	629	0.28	<0.05	4.64	0.110	0.43	13.5
W229781		3.6	20.8	<0.002	0.10	0.24	1.8	1	0.3	887	0.12	<0.05	1.99	0.046	0.20	14.8
W229782		4.8	39.5	<0.002	0.15	0.24	3.4	1	0.6	603	0.23	<0.05	4.03	0.093	0.37	12.9
W229783		7.5	77.3	<0.002	0.27	0.30	6.0	2	1.2	392	0.44	<0.05	7.12	0.168	0.57	8.0
W229784		8.6	88.3	0.002	0.38	0.58	6.5	2	1.2	286	0.47	<0.05	7.90	0.188	0.80	7.4
W229785		17.5	40.3	<0.002	1.42	45.3	5.8	2	0.7	1010	0.19	0.06	3.06	0.087	22.8	6.2
W229786		7.4	83.4	<0.002	0.31	0.30	6.2	1	1.2	304	0.43	<0.05	7.22	0.172	0.64	6.9
W229787		6.7	30.1	<0.002	0.35	0.20	2.4	1	0.5	919	0.17	<0.05	2.88	0.070	0.42	12.8
W229788		6.1	20.1	<0.002	0.22	0.20	1.8	1	0.4	954	0.13	<0.05	1.99	0.049	0.38	16.6
W229789		7.0	75.7	<0.002	0.29	0.35	6.1	2	1.2	285	0.45	<0.05	7.47	0.177	0.60	7.1
W229790		5.3	67.8	<0.002	0.17	0.14	5.1	1	0.8	629	0.32	<0.05	5.48	0.128	0.43	9.9
W229791		5.3	65.5	<0.002	0.20	0.17	5.0	1	0.8	781	0.32	<0.05	5.38	0.126	0.40	7.9
W229792		5.4	39.0	<0.002	0.19	0.19	3.2	2	0.7	602	0.23	<0.05	3.74	0.090	0.33	12.2

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CERTIFICATE OF ANALYSIS WH17152400

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229757		43	1.9	10.5	16	60.5		0.02
W229758		46	1.0	11.0	21	59.9		<0.01
W229759		40	1.6	10.6	68	53.6		0.01
W229760		35	1.1	8.8	11	47.4		0.06
W229761		54	0.6	13.4	17	68.1		<0.01
W229762		31	0.4	7.2	10	35.6		<0.01
W229763		54	1.5	12.8	13	72.7		0.04
W229764		56	2.4	13.1	14	80.4		0.18
W229765		2	0.1	0.8	14	<0.5		<0.01
W229766		38	0.9	8.7	11	45.4		0.02
W229767		21	0.5	6.2	9	28.8		0.08
W229768		27	0.5	6.1	7	38.8		0.01
W229769		25	0.5	6.2	9	39.8		<0.01
W229770		16	0.6	5.1	6	23.6		0.02
W229771		26	2.6	8.2	13	42.6	2.53	4.41
W229772		18	1.3	5.3	25	31.6	3.74	1.96
W229773		20	1.1	5.1	14	27.1		0.47
W229774		83	7.4	17.8	48	67.8		2.51
W229775		30	2.5	4.0	67	34.0	17.90	7.34
W229776		2	0.1	0.7	18	<0.5		<0.01
W229777		18	1.1	5.0	15	28.2		0.61
W229778		31	1.1	7.8	19	44.2		0.01
W229779		48	0.8	10.6	18	62.8		<0.01
W229780		40	0.6	8.5	17	49.3		<0.01
W229781		18	0.4	4.5	23	20.2		<0.01
W229782		33	1.2	8.1	25	43.9		<0.01
W229783		57	1.3	13.4	31	77.6		<0.01
W229784		66	1.2	15.0	47	84.8		0.01
W229785		32	17.8	15.5	37	31.5	1.400	2.69
W229786		65	0.8	14.2	23	76.7		0.01
W229787		23	0.4	6.0	47	35.6		<0.01
W229788		21	0.6	4.7	51	22.4		0.01
W229789		52	1.4	13.7	16	94.5		0.01
W229790		46	0.6	9.5	14	47.1		0.01
W229791		44	0.5	9.8	13	50.1		<0.01
W229792		34	0.4	7.1	28	41.2		0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17152400

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- SEP- 2017
Account: RCM

CERTIFICATE WH17152302

Project: Nadaleen

P.O. No.: N17- 049

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

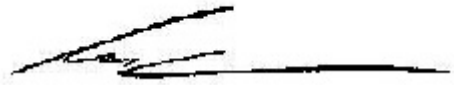
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
Ag- OG62	Ore Grade Ag - Four Acid	ICP- AES
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 1- SEP- 2017
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CERTIFICATE OF ANALYSIS WH17152302

Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg 0.02	Ag- OG62 Ag ppm 1	ME- MS61 Ag ppm 0.01	ME- MS61 Al % 0.01	ME- MS61 As ppm 0.2	ME- MS61 Ba ppm 10	ME- MS61 Be ppm 0.05	ME- MS61 Bi ppm 0.01	ME- MS61 Ca % 0.01	ME- MS61 Cd ppm 0.02	ME- MS61 Ce ppm 0.01	ME- MS61 Co ppm 0.1	ME- MS61 Cr ppm 1	ME- MS61 Cs ppm 0.05	ME- MS61 Cu ppm 0.2
W229793		7.44		0.07	1.17	34.6	180	0.63	0.07	31.6	0.06	15.30	2.3	15	3.35	7.8
W229794		7.53		0.10	1.65	4260	90	0.52	0.07	14.10	0.07	21.1	2.6	17	4.68	8.8
W229795		7.43		0.11	1.52	81.9	80	0.51	0.06	15.85	0.04	17.80	2.7	15	4.39	9.6
W229796		7.88		0.05	0.77	742	40	0.27	0.04	18.45	<0.02	10.95	1.2	7	1.95	4.5
W229797		8.19		0.15	1.17	1945	60	0.38	0.06	17.05	0.02	15.15	1.4	11	3.11	8.2
W229798		8.62		0.15	0.97	>10000	50	0.34	0.05	17.35	0.04	13.85	1.9	11	2.27	8.9
W229799		4.88		0.01	0.05	42.7	100	<0.05	0.05	21.1	0.06	1.04	0.7	<1	0.37	2.5
W229800		8.37		0.14	0.99	5710	60	0.37	0.06	18.20	0.29	12.45	3.1	11	2.00	13.1
W229801		8.33		0.14	0.85	>10000	40	0.32	0.05	18.55	0.63	11.00	2.8	10	1.82	10.1
W229802		8.52		0.13	0.86	>10000	40	0.36	0.05	17.10	0.08	12.55	2.2	11	1.77	9.4
W229803		6.41		0.11	0.65	>10000	40	0.23	0.04	16.60	0.38	10.45	2.5	9	1.08	8.2
W229804		3.69		0.20	0.47	>10000	30	0.15	0.04	15.70	0.06	8.93	2.3	7	0.71	8.6
W229805		5.52		0.01	0.04	101.0	30	0.07	0.04	21.0	0.06	1.11	0.7	<1	0.15	7.1
W229806		3.87	836	>100	0.44	9630	30	0.30	0.04	20.0	<0.02	6.75	15.9	5	0.75	3110
W229807		7.54		0.12	0.92	285	40	0.37	0.05	19.45	<0.02	11.75	1.7	7	2.89	7.3
W229808		<0.02		0.84	0.92	293	40	0.49	0.05	19.50	0.02	11.65	1.7	8	2.84	10.8
W229809		8.52		0.14	0.58	750	30	0.22	0.04	16.80	0.02	7.98	3.2	6	1.52	9.9
W229810		9.04		0.27	0.47	827	30	0.20	0.04	16.90	0.34	8.00	5.4	5	0.99	14.6
W229811		0.26		0.18	3.88	6440	200	1.01	0.15	12.20	0.15	41.8	12.2	44	10.95	36.9
W229812		8.14		0.36	0.54	6340	40	0.22	0.04	17.95	0.13	7.61	4.8	6	1.03	13.2
W229813		8.37		0.56	0.55	4930	30	0.18	0.04	16.05	0.07	6.45	5.3	5	1.12	19.9
W229814		3.86		0.46	0.55	4790	30	0.24	0.04	16.55	0.07	6.44	4.8	5	1.13	19.1
W229815		7.72		0.47	0.62	671	30	0.29	0.04	19.45	0.03	9.17	2.4	6	1.79	9.8
W229816		2.38		0.33	0.90	128.0	40	0.39	0.05	19.95	0.03	16.15	1.1	8	2.67	4.5
W229817		4.27		0.03	0.36	5860	20	0.19	0.03	21.3	0.02	7.77	0.8	4	0.82	4.6
W229818		7.71		0.02	0.34	213	20	0.19	0.03	19.80	<0.02	7.36	0.7	2	0.72	3.9
W229819		7.77		0.03	0.71	65.6	30	0.36	0.05	19.75	<0.02	14.05	1.0	4	2.09	4.4
W229820		7.10		0.03	0.98	1655	50	0.44	0.05	18.55	0.04	15.55	1.4	6	2.54	6.1
W229821		8.12		0.06	0.66	2070	40	0.33	0.04	19.65	<0.02	12.50	1.6	5	1.74	7.0
W229822		7.47		0.02	0.65	2340	40	0.31	0.04	19.75	<0.02	10.05	1.5	4	1.48	6.6
W229823		0.27		1.72	1.80	>10000	90	0.29	0.46	6.89	0.83	29.1	6.5	45	3.20	27.9
W229824		7.50		0.03	0.37	4800	20	0.22	0.03	19.75	<0.02	6.93	1.0	3	0.69	5.0
W229825		7.18		0.03	0.47	8200	40	0.26	0.04	20.1	0.08	9.72	1.3	5	1.27	6.0
W229826		5.99		0.03	0.52	5670	50	0.25	0.04	20.3	0.10	11.10	1.1	5	1.05	5.8
W229827		8.50		0.03	0.48	3080	160	0.27	0.04	20.6	0.05	11.65	1.2	5	1.23	5.7
W229828		8.61		0.04	0.35	475	1260	0.23	0.03	20.3	0.04	7.97	1.6	4	0.74	6.3

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152302

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
W229793		0.52	3.36	0.15	0.7	0.122	0.008	0.63	8.7	5.5	1.51	116	0.50	0.01	1.9	5.6
W229794		0.84	4.15	0.13	1.9	0.934	0.013	0.85	10.8	7.2	6.91	202	1.06	0.01	2.9	6.5
W229795		0.95	4.01	0.14	1.3	0.849	0.011	0.77	9.1	7.6	9.54	268	1.58	0.01	2.6	7.4
W229796		0.46	2.02	0.14	0.5	0.517	0.007	0.39	5.8	4.0	11.40	350	0.18	0.01	1.3	3.1
W229797		0.68	3.06	0.15	0.8	1.360	0.008	0.57	7.7	5.9	10.55	442	0.31	0.01	2.0	4.0
W229798		1.37	2.57	0.12	0.7	1.770	0.018	0.47	7.7	5.0	10.40	561	0.55	0.01	1.6	5.8
W229799		0.47	0.23	0.18	<0.1	0.016	0.005	0.03	0.5	1.1	12.95	217	0.08	<0.01	0.2	1.8
W229800		2.42	2.53	0.09	0.6	3.43	0.012	0.49	6.9	4.8	10.60	829	0.63	0.01	1.6	10.6
W229801		2.76	2.23	0.07	0.5	6.42	0.014	0.41	6.7	5.2	10.65	830	0.67	0.01	1.4	11.9
W229802		4.65	2.16	<0.05	0.6	6.63	0.013	0.42	7.4	4.8	10.15	736	0.58	0.01	1.4	11.9
W229803		4.68	1.61	<0.05	0.5	7.57	0.015	0.30	6.4	3.4	9.92	698	0.45	0.01	1.1	17.2
W229804		3.87	1.13	0.05	0.4	8.06	0.032	0.20	5.6	2.5	9.38	816	0.47	0.01	0.8	13.1
W229805		0.48	0.21	0.16	<0.1	0.038	<0.005	0.02	0.5	0.9	12.80	202	0.18	<0.01	0.2	1.9
W229806		0.57	1.20	0.12	0.3	1.195	0.008	0.22	3.7	3.0	10.65	335	0.46	0.01	0.1	102.5
W229807		0.87	2.52	0.11	0.6	1.175	0.008	0.46	6.4	6.4	10.65	512	0.48	0.01	1.6	4.9
W229808		0.91	2.47	0.09	0.6	1.450	0.009	0.47	6.3	6.5	10.65	504	0.50	0.01	1.6	5.1
W229809		6.64	1.50	0.05	0.3	2.23	0.007	0.29	4.5	3.9	9.74	690	0.70	0.01	1.0	11.1
W229810		9.05	1.22	<0.05	0.2	4.77	0.006	0.23	5.1	2.7	9.17	728	0.62	0.01	0.7	21.9
W229811		2.95	10.10	0.05	1.9	14.95	0.034	1.80	22.0	12.1	2.62	1180	1.96	0.02	6.1	26.8
W229812		5.72	1.44	<0.05	0.2	4.72	0.007	0.27	4.5	2.6	10.00	788	0.70	0.01	0.8	19.1
W229813		8.97	1.41	<0.05	0.3	5.21	0.007	0.27	3.7	2.8	9.14	760	0.42	0.01	0.8	21.2
W229814		8.12	1.45	<0.05	0.3	4.17	0.007	0.27	3.9	2.8	9.48	801	0.41	0.01	0.8	18.2
W229815		2.53	1.73	<0.05	0.4	1.625	0.008	0.31	5.2	4.1	10.95	684	0.20	0.02	1.1	8.3
W229816		1.00	2.46	0.06	0.7	0.578	0.008	0.45	8.8	6.4	10.45	660	0.31	0.02	1.7	2.9
W229817		1.11	1.01	0.09	0.3	0.602	0.006	0.17	4.7	2.8	11.40	804	0.08	0.02	0.6	1.8
W229818		0.86	0.95	0.11	0.3	0.278	<0.005	0.16	4.5	2.4	11.75	631	0.10	0.02	0.6	1.7
W229819		0.94	2.06	0.10	0.5	0.339	0.006	0.35	7.3	4.3	11.35	682	0.17	0.02	1.3	2.6
W229820		0.98	2.76	0.10	0.8	0.344	0.009	0.49	7.8	5.9	11.00	596	0.11	0.02	1.8	3.5
W229821		1.28	1.87	0.08	0.5	0.646	0.007	0.33	6.2	3.9	11.50	608	0.12	0.02	1.2	4.3
W229822		0.72	1.85	0.10	0.5	0.376	0.007	0.33	5.3	3.9	11.65	540	0.11	0.02	1.2	3.3
W229823		2.47	5.14	0.07	0.9	14.90	0.030	0.78	14.8	26.5	0.18	332	5.98	0.01	2.6	19.4
W229824		0.69	1.07	0.11	0.3	0.264	0.006	0.18	3.7	2.7	11.55	566	0.08	0.02	0.7	2.1
W229825		0.79	1.35	0.10	0.4	0.503	0.009	0.23	5.1	3.3	11.75	679	0.07	0.01	0.8	3.0
W229826		0.84	1.51	0.11	0.3	1.105	0.006	0.26	5.7	2.3	12.05	746	0.05	0.01	1.0	3.8
W229827		0.81	1.33	0.11	0.2	0.854	0.007	0.22	6.4	2.5	11.90	742	0.06	0.01	0.8	3.9
W229828		0.86	1.07	0.12	0.3	0.301	0.007	0.17	4.1	2.8	11.60	630	0.13	0.01	0.7	4.1

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Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152302

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
W229793		200	4.8	20.9	0.002	0.18	0.11	1.9	1	0.4	845	0.15	<0.05	2.48	0.056	0.30
W229794		340	6.5	29.6	<0.002	0.63	3.67	2.7	2	0.6	147.5	0.22	<0.05	3.86	0.079	1.06
W229795		310	9.4	26.6	0.002	0.55	0.97	2.6	2	0.5	94.3	0.19	<0.05	3.27	0.073	1.06
W229796		170	3.6	12.7	<0.002	0.24	1.11	1.3	1	0.3	77.9	0.09	<0.05	1.50	0.035	0.72
W229797		340	5.7	19.8	<0.002	0.54	3.13	1.9	1	0.4	84.3	0.14	<0.05	2.31	0.054	2.47
W229798		240	15.0	16.5	<0.002	2.75	33.8	1.7	3	0.4	89.1	0.12	<0.05	2.01	0.045	3.99
W229799		160	1.6	1.8	<0.002	0.01	0.09	0.1	1	<0.2	48.4	<0.05	<0.05	0.31	<0.005	0.02
W229800		340	21.9	16.9	<0.002	2.30	8.97	1.7	1	0.4	101.5	0.12	<0.05	2.07	0.045	9.56
W229801		220	29.8	14.4	<0.002	2.93	17.00	1.5	2	0.4	88.6	0.10	<0.05	1.72	0.040	14.60
W229802		210	33.0	14.3	<0.002	5.39	17.10	1.5	2	0.4	80.7	0.10	<0.05	1.83	0.042	17.15
W229803		130	46.8	10.7	<0.002	6.31	41.1	1.2	2	0.3	84.7	0.08	<0.05	1.43	0.031	19.80
W229804		90	27.4	7.6	<0.002	7.86	101.0	0.9	5	0.3	77.8	0.06	0.05	1.08	0.023	19.40
W229805		180	1.5	1.0	<0.002	0.01	0.17	0.1	1	<0.2	47.3	<0.05	<0.05	0.07	<0.005	0.03
W229806		100	5.3	6.9	0.007	0.65	10.20	0.8	2	0.2	123.5	<0.05	<0.05	0.84	0.016	1.34
W229807		250	9.0	15.9	<0.002	0.42	1.00	1.6	1	0.3	108.5	0.11	<0.05	1.86	0.042	1.74
W229808		230	9.4	15.8	<0.002	0.45	1.01	1.6	1	0.3	109.5	0.11	<0.05	1.87	0.042	1.83
W229809		160	37.7	9.5	<0.002	7.38	1.92	1.0	1	0.3	67.5	0.07	<0.05	1.14	0.026	16.60
W229810		140	59.2	7.6	<0.002	9.98	4.31	0.8	2	0.3	71.0	0.06	<0.05	0.92	0.021	30.6
W229811		450	11.3	85.9	0.002	2.64	22.9	10.6	2	1.6	313	0.43	0.06	6.07	0.261	45.4
W229812		280	53.5	9.1	0.003	6.57	15.45	0.9	2	0.3	87.7	0.06	<0.05	1.02	0.023	20.5
W229813		160	65.2	9.0	0.006	>10.0	11.00	0.9	2	0.3	74.6	0.06	<0.05	0.98	0.023	23.2
W229814		160	63.6	9.1	0.004	9.11	9.91	0.9	2	0.3	76.8	0.06	<0.05	0.99	0.023	19.50
W229815		160	17.1	10.9	<0.002	2.14	2.49	1.1	1	0.2	99.9	0.08	<0.05	1.29	0.028	7.52
W229816		620	5.0	15.8	<0.002	0.34	0.97	1.6	1	0.3	130.0	0.11	<0.05	2.13	0.043	1.57
W229817		500	3.5	5.8	<0.002	0.61	6.91	0.7	1	0.2	82.7	<0.05	<0.05	0.82	0.016	1.42
W229818		400	2.3	5.6	<0.002	0.24	0.65	0.6	1	0.2	64.3	0.05	<0.05	0.84	0.017	0.83
W229819		370	3.6	12.8	<0.002	0.25	0.56	1.3	1	0.3	77.2	0.09	<0.05	1.65	0.034	1.04
W229820		350	4.4	18.2	<0.002	0.43	2.33	1.8	1	0.3	70.2	0.13	<0.05	2.34	0.049	1.11
W229821		550	5.9	12.0	<0.002	0.81	3.21	1.2	1	0.3	79.9	0.09	<0.05	1.55	0.033	2.38
W229822		400	3.8	11.6	<0.002	0.42	2.97	1.2	1	0.3	75.2	0.09	<0.05	1.54	0.033	1.08
W229823		500	10.3	40.8	0.003	4.64	159.5	3.1	2	1.2	329	0.18	0.12	3.03	0.096	42.0
W229824		340	2.7	6.4	<0.002	0.41	5.99	0.7	1	<0.2	63.0	0.05	<0.05	0.84	0.019	0.72
W229825		770	3.6	8.5	<0.002	0.58	10.05	1.0	2	0.2	89.2	0.06	<0.05	1.05	0.024	1.09
W229826		680	6.9	9.2	<0.002	0.45	7.90	0.9	1	0.2	97.5	0.06	<0.05	0.97	0.025	1.28
W229827		340	8.9	8.3	<0.002	0.37	4.67	0.9	1	0.2	103.0	0.05	<0.05	0.81	0.022	1.69
W229828		540	11.1	6.3	<0.002	0.28	1.25	0.8	1	<0.2	105.0	<0.05	<0.05	0.78	0.018	0.82

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152302

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	U	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.1	1	0.1	0.1	2	0.5	0.001	0.01
W229793		16.1	22	0.5	4.9	17	23.8		<0.01
W229794		8.5	32	1.0	7.9	19	71.4		0.02
W229795		9.6	35	1.1	6.8	12	45.5		0.02
W229796		8.0	21	0.6	4.2	2	16.6		0.01
W229797		11.4	29	1.1	5.4	3	28.3		0.08
W229798		11.0	20	1.4	4.9	5	24.3	3.59	0.17
W229799		1.1	2	<0.1	0.7	18	<0.5		<0.01
W229800		20.1	18	1.7	4.7	105	22.3		0.30
W229801		21.7	17	1.8	3.8	205	16.4	1.300	0.42
W229802		17.8	16	1.8	4.2	11	21.7	1.080	0.34
W229803		14.8	13	1.6	3.8	122	17.8	3.00	0.41
W229804		12.5	11	2.0	3.2	6	13.7	8.82	0.74
W229805		0.6	2	<0.1	0.8	15	<0.5		<0.01
W229806		11.6	9	2460	2.8	2	12.2		0.06
W229807		14.4	22	2.4	4.4	3	23.1		<0.01
W229808		14.5	22	7.3	4.4	3	22.9		0.01
W229809		14.9	12	1.5	2.9	3	12.1		0.01
W229810		18.4	12	2.0	2.8	99	9.1		0.06
W229811		6.5	84	7.8	18.9	49	72.3		2.52
W229812		23.1	22	1.6	3.0	18	8.5		0.27
W229813		17.8	13	2.4	2.5	6	8.8		0.11
W229814		17.4	13	2.3	2.6	4	8.8		0.10
W229815		12.2	16	2.1	3.4	9	15.0		0.03
W229816		13.7	25	3.7	6.0	8	24.3		0.08
W229817		8.7	14	1.0	4.0	4	13.3		0.06
W229818		7.2	9	0.5	4.6	3	12.4		<0.01
W229819		9.3	17	0.8	5.2	4	19.5		0.06
W229820		6.2	24	0.9	6.4	12	32.0		0.03
W229821		8.1	13	0.8	5.3	4	18.7		0.03
W229822		6.8	12	0.7	4.5	4	21.7		0.05
W229823		4.4	35	6.2	16.5	66	32.1	6.95	8.35
W229824		4.3	7	0.5	3.3	3	12.4		0.04
W229825		4.0	9	0.8	4.8	15	14.2		0.07
W229826		2.8	8	0.6	5.4	21	9.9		0.04
W229827		1.7	7	0.6	4.9	9	8.8		0.03
W229828		2.9	7	0.4	5.3	9	10.3		<0.01

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17152302

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Ag- OG62	As- OG62	Au- AA25	Hg- MS42
ME- MS61	ME- OG62		

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE WH17156945

Project: Nadaleen

P.O. No.: N17- 050

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 28- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

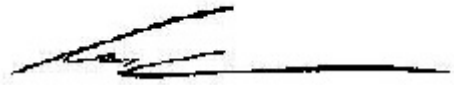
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17156945

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228937		9.52	0.10	5.63	74.5	510	1.57	0.24	3.08	0.24	61.2	15.0	72	18.30	53.4	5.01
W228938		11.19	0.15	7.18	112.5	370	2.25	0.34	1.26	0.28	77.8	17.3	80	26.5	64.1	4.97
W228939		11.58	0.12	6.63	78.7	290	1.71	0.30	1.51	0.27	69.3	15.9	78	22.1	60.4	4.91
W228940		9.49	0.11	5.38	256	270	1.46	0.25	2.55	0.23	54.4	13.9	69	16.60	52.1	4.71
W228941		9.40	0.09	6.82	181.0	280	2.13	0.31	2.24	0.26	74.0	17.1	74	22.8	52.0	4.63
W228942		6.15	0.15	6.57	421	250	1.83	0.31	2.28	0.32	67.9	15.0	78	19.70	59.4	5.32
W228943		8.73	0.26	5.70	1400	420	1.60	0.25	3.83	0.66	57.6	14.2	75	17.95	64.6	4.69
W228944		7.03	0.03	0.05	1.9	40	0.06	0.09	20.9	0.06	1.12	0.7	1	0.15	3.1	0.50
W228945		11.64	0.07	6.20	251	240	1.76	0.25	3.30	0.18	64.7	16.7	68	22.4	55.0	4.98
W228946		<0.02	0.08	6.35	265	240	1.86	0.25	3.02	0.17	66.0	17.3	69	22.9	56.7	4.99
W228947		11.06	0.08	6.77	353	230	1.80	0.27	2.22	0.15	68.1	18.6	72	23.9	58.7	4.97
W228948		11.73	0.06	5.95	189.0	270	1.77	0.23	3.03	0.18	60.7	17.8	72	23.3	54.9	5.00
W228949		9.76	0.06	5.30	73.4	220	1.41	0.19	2.85	0.16	51.3	16.4	73	20.8	50.5	4.87
W228950		12.30	0.06	5.80	331	440	1.54	0.21	3.32	0.12	56.7	16.9	71	19.05	52.1	5.04
W228951		10.89	0.10	4.92	148.5	170	1.28	0.18	1.89	0.12	46.5	17.4	78	16.10	49.3	4.00
W228952		10.42	0.07	4.03	647	140	0.99	0.17	3.11	0.11	40.0	11.6	53	9.93	37.5	3.91
W228953		7.74	0.06	5.34	1280	230	1.28	0.21	3.88	0.11	53.2	16.5	67	12.10	52.1	4.99
W228954		0.26	0.10	3.60	2550	200	0.97	0.14	18.60	0.13	39.1	10.9	43	10.30	43.2	3.07
W228955		10.02	0.05	5.37	586	180	1.37	0.21	2.87	0.21	56.2	15.1	66	15.50	50.2	4.86
W228956		11.63	0.07	6.48	456	250	1.81	0.27	2.81	0.24	66.6	21.4	71	22.1	61.8	5.74
W228957		9.25	0.07	6.44	112.0	250	1.87	0.25	2.94	0.14	63.2	20.2	71	24.2	58.3	5.27
W228958		11.77	0.06	5.31	636	140	1.36	0.20	4.58	0.09	57.2	16.6	64	18.70	48.4	4.95
W228959		11.28	0.06	5.42	729	190	1.30	0.20	3.31	0.12	52.2	17.6	67	16.45	50.9	4.95
W228960		14.96	0.08	4.76	426	140	1.12	0.17	3.00	0.09	46.3	17.4	70	17.30	47.1	4.56
W228961		11.51	0.09	5.14	384	140	1.19	0.17	2.41	0.23	48.6	18.5	77	13.15	49.4	4.95
W228962		10.90	0.11	7.40	350	220	2.12	0.29	2.39	0.38	72.8	22.7	78	22.5	64.0	5.39
W228963		0.26	0.69	6.75	462	230	2.47	0.24	2.21	0.35	59.3	22.2	105	37.8	69.0	6.39
W228964		12.21	0.06	6.84	5360	190	1.76	0.29	1.93	0.14	67.0	23.0	79	20.5	67.4	6.29
W228965		5.76	0.07	6.78	6420	190	1.78	0.27	1.73	0.19	67.2	23.6	78	20.6	67.1	5.97
W228966		12.26	0.07	6.77	770	170	1.77	0.27	1.91	0.17	67.8	22.7	77	22.5	64.5	5.87
W228967		12.77	0.07	6.41	205	180	1.87	0.25	2.39	0.25	62.6	21.3	73	22.4	60.2	5.56
W228968		13.14	0.06	6.94	245	200	2.01	0.28	2.03	<0.02	68.7	21.3	73	22.4	61.2	5.30
W228969		7.03	<0.01	0.06	1.8	20	<0.05	0.03	20.6	0.05	1.15	0.8	1	0.15	2.7	0.47
W228970		11.98	0.05	6.12	459	180	1.83	0.24	2.58	0.12	61.4	19.8	76	25.3	60.7	5.49
W228971		11.33	0.05	5.85	126.5	170	1.58	0.21	2.49	0.07	56.0	19.9	79	21.8	55.7	5.20
W228972		12.44	0.06	6.48	74.5	200	1.93	0.25	1.95	0.04	64.0	20.9	80	24.3	63.0	5.56

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17156945

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228937		14.30	0.12	2.7	1.030	0.064	2.59	29.7	41.4	1.76	475	1.82	0.03	9.1	38.0	430
W228938		19.30	0.15	3.4	2.18	0.078	3.38	37.5	42.0	1.15	242	2.20	0.04	11.7	50.2	350
W228939		16.60	0.15	3.1	2.71	0.074	3.07	33.8	33.7	1.04	286	2.24	0.03	9.9	42.2	360
W228940		13.10	0.14	2.8	2.30	0.061	2.45	26.9	27.6	1.38	391	1.38	0.03	7.9	36.8	310
W228941		17.70	0.18	3.3	3.30	0.075	3.26	35.6	27.4	1.34	408	0.96	0.04	11.1	41.0	520
W228942		16.55	0.14	3.1	5.85	0.077	3.17	32.9	17.2	1.34	368	2.97	0.03	9.7	47.4	340
W228943		14.65	0.16	2.8	4.26	0.067	2.68	29.0	13.4	2.12	612	4.96	0.03	8.5	49.2	360
W228944		0.19	0.15	<0.1	0.017	0.005	0.02	0.5	0.9	12.95	209	0.07	<0.01	0.1	1.9	170
W228945		15.35	0.13	3.0	2.73	0.068	2.96	31.6	30.3	1.91	616	0.66	0.03	10.0	36.4	500
W228946		16.15	0.13	3.1	2.68	0.065	3.03	32.1	31.5	1.79	573	0.65	0.03	10.7	37.7	490
W228947		17.30	0.17	3.4	1.370	0.071	3.22	33.1	32.6	1.36	471	0.36	0.03	11.4	39.0	450
W228948		14.80	0.16	3.0	0.922	0.065	2.65	29.7	86.3	1.88	636	0.33	0.03	9.9	34.3	410
W228949		12.95	0.14	2.5	0.629	0.054	2.28	24.9	137.0	2.01	645	0.33	0.02	8.3	34.2	380
W228950		14.40	0.15	2.8	1.115	0.060	2.65	27.7	44.1	1.73	642	0.35	0.02	9.1	34.3	440
W228951		12.50	0.14	2.5	0.887	0.048	2.18	23.0	74.4	1.08	354	0.53	0.02	7.6	43.2	300
W228952		10.10	0.13	2.0	1.465	0.038	1.90	19.6	14.5	1.43	562	0.74	0.02	6.2	25.4	320
W228953		13.50	0.13	2.7	2.11	0.047	2.52	26.3	12.6	1.83	987	0.43	0.02	8.9	34.4	390
W228954		9.30	0.07	1.8	3.82	0.036	1.69	19.8	9.0	1.40	1190	1.62	0.02	5.9	25.6	370
W228955		13.60	0.14	2.7	1.555	0.050	2.53	27.8	13.9	1.43	808	0.55	0.02	8.8	32.4	570
W228956		16.90	0.15	3.2	1.750	0.066	3.06	32.3	21.8	1.53	918	0.39	0.03	10.6	41.5	530
W228957		16.35	0.14	3.1	0.563	0.064	2.94	31.2	36.0	1.78	744	0.33	0.03	10.6	38.7	500
W228958		13.35	0.14	2.7	0.779	0.053	2.41	27.5	21.6	2.18	1070	0.42	0.02	8.7	33.4	540
W228959		13.90	0.14	2.7	2.05	0.052	2.46	25.5	15.4	1.66	1090	0.43	0.02	8.7	36.1	440
W228960		12.10	0.12	2.5	0.810	0.047	2.16	22.9	19.4	1.44	855	0.41	0.02	7.8	33.5	380
W228961		13.20	0.13	2.6	1.695	0.056	2.38	24.1	14.1	1.20	622	0.43	0.02	8.1	39.9	390
W228962		19.10	0.15	3.5	2.83	0.085	3.56	36.4	16.7	1.48	613	0.61	0.03	11.9	45.9	550
W228963		18.05	0.14	2.5	3.40	0.064	3.21	29.3	18.3	0.79	644	4.93	0.03	8.6	51.7	210
W228964		17.80	0.14	3.2	3.79	0.064	3.23	32.8	21.5	1.16	438	0.54	0.03	11.2	43.8	540
W228965		17.90	0.17	3.3	4.34	0.067	3.22	32.7	22.0	1.05	383	0.55	0.03	11.2	45.1	540
W228966		17.70	0.17	3.3	2.53	0.070	3.18	32.9	18.6	1.13	571	0.53	0.03	11.3	43.9	510
W228967		16.50	0.16	3.1	0.709	0.063	3.05	30.6	23.2	1.35	681	0.49	0.03	10.5	42.9	520
W228968		18.15	0.17	3.3	0.398	0.074	3.34	34.1	17.2	1.28	591	0.31	0.03	11.7	40.6	530
W228969		0.22	0.18	<0.1	0.024	<0.005	0.02	0.6	1.1	12.90	192	<0.05	<0.01	0.1	1.5	170
W228970		15.95	0.14	3.0	0.383	0.070	2.82	29.9	49.7	1.87	865	0.39	0.03	10.3	40.9	490
W228971		14.45	0.14	2.8	0.120	0.059	2.69	27.6	40.4	2.22	786	0.34	0.03	9.6	39.7	480
W228972		16.65	0.16	3.1	0.115	0.066	3.05	31.1	37.2	2.34	633	0.32	0.03	10.9	42.4	500

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17156945

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228937		19.9	119.5	0.004	3.00	0.62	15.6	2	1.9	217	0.65	0.06	9.38	0.461	5.33	2.5
W228938		24.4	159.5	0.004	3.67	0.61	19.9	2	2.6	155.0	0.85	0.07	12.75	0.521	8.58	3.3
W228939		22.0	128.5	0.003	4.05	0.56	16.5	2	3.1	152.5	0.73	0.07	10.45	0.493	9.08	2.7
W228940		17.2	101.5	0.004	4.02	0.56	13.5	2	2.5	174.0	0.59	0.07	8.24	0.428	7.03	2.1
W228941		21.4	138.5	0.002	3.93	0.57	17.8	1	2.5	187.0	0.82	0.07	10.95	0.511	7.14	2.7
W228942		22.3	129.5	0.005	4.73	1.51	16.4	3	2.4	148.5	0.74	0.08	10.55	0.460	11.10	3.3
W228943		16.4	113.0	0.017	3.76	3.92	15.2	3	3.4	252	0.62	0.06	8.77	0.420	6.45	3.8
W228944		1.8	1.0	<0.002	<0.01	0.06	0.2	1	<0.2	47.8	<0.05	<0.05	0.07	<0.005	0.03	0.6
W228945		19.0	128.5	<0.002	4.43	1.16	16.7	2	2.1	183.0	0.76	0.05	9.38	0.508	5.17	2.0
W228946		19.4	133.0	<0.002	4.46	1.14	16.9	2	2.1	170.5	0.76	0.06	9.58	0.514	5.44	2.1
W228947		21.2	146.0	<0.002	4.40	0.79	18.0	1	2.2	128.5	0.82	<0.05	10.25	0.548	4.79	2.1
W228948		16.7	124.0	<0.002	2.59	0.50	16.7	1	2.1	149.5	0.72	<0.05	8.93	0.537	2.92	1.8
W228949		17.8	103.0	<0.002	0.82	0.53	15.2	1	1.6	175.5	0.61	<0.05	7.46	0.483	1.66	1.5
W228950		20.7	119.5	<0.002	3.68	0.70	16.3	1	1.8	246	0.66	<0.05	8.08	0.507	4.06	1.7
W228951		24.3	95.8	<0.002	2.71	0.86	14.3	1	1.5	111.5	0.55	0.06	6.80	0.505	2.16	1.5
W228952		25.7	79.6	<0.002	2.59	2.16	11.0	1	1.3	148.5	0.46	<0.05	5.79	0.361	4.47	1.3
W228953		13.2	106.0	<0.002	3.76	6.08	16.0	1	1.7	202	0.62	<0.05	7.62	0.500	7.30	1.6
W228954		8.4	75.6	0.002	2.52	9.01	9.0	1	1.4	712	0.42	0.06	5.51	0.265	10.25	2.3
W228955		10.7	113.5	<0.002	4.07	3.69	15.3	1	1.7	115.0	0.64	0.06	8.10	0.504	5.61	1.6
W228956		61.6	144.5	<0.002	5.16	5.37	18.4	1	2.1	118.0	0.79	0.07	9.66	0.529	4.46	2.0
W228957		21.6	138.5	<0.002	3.25	0.67	17.3	1	2.1	207	0.75	0.07	9.33	0.528	3.00	1.9
W228958		12.0	116.5	<0.002	3.70	1.64	16.5	1	1.7	182.5	0.63	<0.05	7.61	0.503	3.26	1.6
W228959		13.1	117.5	<0.002	4.17	4.11	15.9	1	1.8	142.0	0.62	<0.05	7.66	0.510	7.28	1.5
W228960		15.1	104.5	<0.002	3.75	2.06	14.1	1	1.5	107.0	0.57	<0.05	6.75	0.501	3.58	1.4
W228961		18.9	104.0	<0.002	4.30	2.48	15.4	1	1.7	98.1	0.57	<0.05	6.91	0.525	5.55	1.5
W228962		31.4	152.0	<0.002	4.95	3.49	20.4	1	2.4	125.5	0.89	0.06	10.85	0.574	6.37	2.2
W228963		48.8	154.0	0.002	4.49	5.34	19.6	1	2.8	87.4	0.63	<0.05	8.57	0.404	12.55	1.7
W228964		20.5	139.5	<0.002	5.90	15.80	17.5	1	2.2	96.4	0.80	0.05	9.90	0.584	10.85	2.0
W228965		21.1	139.0	<0.002	5.61	16.95	17.2	1	2.3	95.8	0.82	0.05	9.94	0.584	11.70	2.0
W228966		22.1	145.5	<0.002	5.67	2.17	20.1	1	2.2	97.8	0.81	0.08	9.99	0.572	7.94	2.0
W228967		19.9	141.0	<0.002	5.14	0.68	18.6	1	2.0	104.0	0.76	0.07	9.40	0.564	3.41	1.9
W228968		15.3	158.0	<0.002	4.95	1.23	19.1	1	2.3	100.5	0.85	0.06	10.45	0.553	2.32	2.1
W228969		1.2	1.0	<0.002	0.01	0.05	0.2	1	<0.2	46.7	<0.05	<0.05	0.08	<0.005	0.02	0.5
W228970		16.2	140.0	<0.002	2.72	1.52	18.3	1	2.0	130.5	0.75	0.05	8.94	0.564	2.27	1.9
W228971		14.2	127.5	<0.002	0.20	0.97	17.3	1	1.7	124.0	0.70	<0.05	8.17	0.564	1.12	1.7
W228972		14.1	152.0	<0.002	0.13	0.69	18.7	1	2.0	110.0	0.79	0.05	9.24	0.580	1.04	1.9

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Finalized Date: 30- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17156945

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W228937		138	1.3	20.0	121	98.5	<0.01
W228938		157	1.5	22.8	128	126.5	<0.01
W228939		149	1.4	19.5	134	112.5	<0.01
W228940		124	1.9	15.4	97	88.9	<0.01
W228941		145	4.6	23.3	114	119.0	<0.01
W228942		139	5.0	19.4	130	111.0	0.01
W228943		149	7.0	17.4	187	104.0	0.11
W228944		2	0.1	0.7	18	0.5	<0.01
W228945		135	5.8	21.6	112	107.0	0.01
W228946		138	5.9	23.7	99	114.0	0.01
W228947		144	4.4	25.2	109	115.5	<0.01
W228948		138	3.7	20.3	132	105.0	<0.01
W228949		134	3.2	17.0	134	97.0	<0.01
W228950		140	5.0	18.5	100	104.5	<0.01
W228951		150	3.2	14.5	111	90.8	<0.01
W228952		99	6.1	13.3	80	70.9	0.01
W228953		136	7.8	18.2	80	95.3	0.20
W228954		74	5.1	16.1	49	63.8	0.51
W228955		135	6.9	19.5	170	107.0	0.16
W228956		142	6.3	22.8	147	109.5	0.20
W228957		143	2.2	21.6	100	109.0	<0.01
W228958		135	5.2	20.6	74	100.5	0.13
W228959		139	6.6	18.5	80	97.9	0.28
W228960		142	4.5	16.7	81	89.8	0.12
W228961		154	5.5	16.2	145	97.8	0.06
W228962		157	7.6	24.0	269	126.0	0.01
W228963		139	11.6	18.2	104	86.2	0.53
W228964		157	12.9	24.7	94	119.5	0.36
W228965		156	13.6	24.7	116	117.5	0.32
W228966		156	12.7	23.8	126	116.5	0.06
W228967		153	4.4	22.5	127	110.0	<0.01
W228968		145	5.4	23.4	72	119.5	<0.01
W228969		2	0.1	0.8	15	0.6	<0.01
W228970		156	5.4	21.5	93	109.5	0.04
W228971		155	4.6	20.3	78	103.5	<0.01
W228972		156	4.5	22.2	77	118.0	<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 30- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17156945

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

CERTIFICATE WH17161494

Project: Nadaleen

P.O. No.: N17- 051

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 2- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

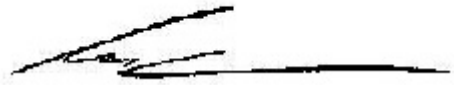
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 15- SEP- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161494

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W228973		12.22	0.07	6.58	149.0	200	2.05	0.27	1.68	0.04	67.4	23.5	78	30.3	63.9	5.26
W228974		8.78	0.06	6.70	44.1	210	2.12	0.27	1.76	0.08	67.7	23.0	77	25.6	64.0	5.21
W228975		6.45	0.07	6.79	170.5	250	2.00	0.27	1.77	0.06	68.8	24.1	77	24.0	67.3	5.21
W228976		11.97	0.05	4.71	31.8	170	1.35	0.17	2.45	0.10	48.8	15.2	63	21.0	41.7	4.16
W228977		12.25	0.06	7.04	238	240	2.12	0.29	2.27	0.52	71.6	17.4	77	27.6	63.7	5.52
W228978		12.36	0.18	7.50	247	340	2.36	0.30	2.52	0.07	74.8	18.9	70	27.9	52.7	5.03
W228979		11.75	0.08	8.02	29.6	290	2.59	0.34	1.41	0.18	81.7	19.5	81	38.1	61.5	5.05
W228980		11.62	0.10	7.10	36.9	330	2.24	0.31	2.20	0.07	73.4	20.9	67	31.1	53.9	6.81
W228981		12.02	0.05	7.37	105.0	470	2.14	0.32	2.97	0.09	74.8	17.2	71	28.5	55.5	5.18
W228982		13.15	0.05	6.99	112.5	340	2.46	0.29	2.58	0.18	71.8	19.0	69	39.2	57.1	4.56
W228983		11.27	0.06	7.16	16.3	330	2.40	0.32	1.98	0.14	70.9	19.7	71	42.7	50.7	4.61
W228984		0.26	0.71	7.06	436	240	2.62	0.27	2.23	0.35	67.1	25.0	100	40.7	71.3	6.39
W228985		11.19	0.13	7.04	21.2	420	2.47	0.30	3.32	0.30	69.5	27.7	68	40.0	42.1	4.91
W228986		11.48	0.09	7.63	25.7	350	2.71	0.32	3.16	0.28	78.9	21.9	76	42.1	43.8	4.55
W228987		7.12	0.01	0.06	1.4	120	0.05	0.02	20.5	0.06	1.24	0.7	1	0.27	1.8	0.50
W228988		10.88	0.05	6.38	169.0	250	1.53	0.26	2.02	0.11	64.1	17.1	68	29.6	48.7	4.95
W228989		10.14	0.08	7.11	1035	320	2.03	0.26	2.57	0.07	66.0	21.0	73	22.7	54.3	5.19
W228990		8.68	0.08	5.01	695	170	1.24	0.19	3.13	0.15	54.0	19.8	65	14.05	47.8	4.59
W228991		6.65	0.07	5.01	1655	200	1.25	0.21	3.28	0.18	52.9	14.2	57	12.70	47.3	4.69
W228992		5.04	0.06	4.83	352	460	1.26	0.18	4.31	0.18	48.4	13.5	60	11.95	39.9	4.25
W228993		6.80	<0.01	0.08	1.9	40	0.07	0.03	20.2	0.06	1.35	0.8	1	0.65	2.2	0.50
W228994		6.61	0.08	6.50	1130	380	1.86	0.26	3.54	0.20	64.2	15.2	70	17.80	52.2	4.46
W228995		6.28	0.06	6.84	214	220	1.66	0.26	1.99	0.07	65.4	19.8	67	18.80	64.8	5.50
W228996		6.10	0.07	7.17	1315	170	1.73	0.26	2.71	0.41	67.5	18.8	60	15.40	55.6	4.66
W228997		<0.02	0.07	7.07	1225	200	1.82	0.26	3.01	0.51	66.4	17.6	61	15.10	51.3	4.82
W228998		11.13	0.10	7.57	385	260	2.34	0.28	2.24	0.11	71.8	30.8	67	21.7	67.8	5.07
W228999		11.12	0.07	7.78	208	250	2.61	0.28	2.10	0.06	72.8	20.2	71	31.5	62.6	4.87
W229000		0.26	0.19	3.91	6200	210	0.96	0.13	12.05	0.12	42.3	12.6	44	11.30	37.4	2.91
W230001		10.46	0.06	5.10	237	310	1.23	0.18	2.77	0.10	46.7	13.9	55	20.3	38.9	4.31
W230002		11.17	0.09	7.12	251	230	2.33	0.26	2.93	0.18	71.1	23.5	62	31.1	54.2	5.07
W230003		12.15	0.07	6.50	223	230	1.99	0.24	3.54	0.16	68.7	19.4	60	29.3	55.3	4.76
W230004		5.33	0.05	7.76	196.0	250	2.35	0.29	2.63	0.51	73.7	16.5	67	28.8	56.3	4.90
W230005		8.32	0.19	0.35	96.1	50	0.31	0.02	15.70	0.33	4.42	1.3	18	0.97	5.0	0.78
W230006		9.66	0.09	2.49	244	100	0.73	0.10	13.50	0.60	23.0	7.7	26	7.12	25.6	2.39
W230007		5.26	0.05	3.61	551	130	0.79	0.11	3.10	0.20	35.7	13.2	55	11.95	54.7	4.05
W230008		10.09	0.08	5.91	338	240	1.58	0.23	4.43	0.19	59.7	17.1	55	22.9	59.5	5.50

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161494

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W228973		17.30	0.11	2.9	0.109	0.078	3.10	30.5	83.7	2.18	554	0.32	0.03	11.9	40.4	540
W228974		17.60	0.10	3.0	0.145	0.084	3.07	30.5	132.0	2.17	555	0.36	0.03	11.5	39.7	480
W228975		17.55	0.12	3.0	0.185	0.086	3.11	30.8	129.5	2.14	544	0.34	0.03	11.5	40.3	500
W228976		11.85	0.10	2.1	0.071	0.056	2.10	22.2	114.0	1.78	649	0.77	0.02	7.5	28.2	410
W228977		18.30	0.11	3.0	0.672	0.083	3.33	32.8	33.0	1.46	458	1.01	0.03	11.9	36.0	570
W228978		19.60	0.13	2.9	1.535	0.081	3.55	34.5	25.6	1.72	603	1.26	0.03	11.1	38.4	720
W228979		21.2	0.13	3.2	0.445	0.092	3.91	37.1	41.0	2.00	322	0.82	0.04	12.2	37.2	690
W228980		18.80	0.11	2.9	0.776	0.082	3.29	33.6	51.8	2.11	395	0.59	0.03	11.2	40.3	550
W228981		18.85	0.13	3.0	0.211	0.086	3.37	34.3	49.8	2.40	595	0.57	0.03	12.2	36.1	650
W228982		18.55	0.13	2.9	0.130	0.083	3.26	32.7	69.9	2.40	512	0.69	0.04	11.2	33.2	720
W228983		18.90	0.12	3.1	0.045	0.084	3.10	33.8	111.0	1.95	464	0.44	0.17	11.0	35.6	480
W228984		19.25	0.12	2.5	3.18	0.080	3.32	31.7	22.3	0.81	653	5.01	0.03	9.5	51.1	240
W228985		17.85	0.13	2.8	0.155	0.075	3.27	33.1	90.6	2.24	605	0.99	0.04	10.1	36.4	570
W228986		19.75	0.14	3.0	0.084	0.079	3.63	36.3	116.5	2.02	571	1.02	0.04	11.4	33.8	720
W228987		0.21	0.09	<0.1	0.009	0.012	0.03	0.6	1.2	13.05	209	<0.05	<0.01	0.1	1.7	170
W228988		15.75	0.10	2.7	0.514	0.073	2.91	29.1	99.3	1.70	574	1.09	0.03	9.9	29.9	440
W228989		18.50	0.11	2.7	1.245	0.085	3.27	29.7	27.7	1.60	856	0.44	0.02	10.0	30.8	320
W228990		13.00	0.09	2.2	1.340	0.065	2.34	24.7	27.6	1.53	756	0.57	0.02	8.3	35.2	410
W228991		13.05	0.09	2.2	3.11	0.054	2.31	24.3	14.0	1.67	831	0.40	0.02	8.2	27.7	360
W228992		11.90	0.08	2.1	0.999	0.057	2.21	22.7	17.5	2.03	1050	0.48	0.02	7.6	25.1	630
W228993		0.29	0.09	<0.1	0.010	0.012	0.04	0.6	1.3	12.95	213	0.06	<0.01	0.3	1.4	180
W228994		16.35	0.09	2.8	2.11	0.077	3.10	30.2	15.4	2.01	685	0.65	0.03	10.6	29.6	460
W228995		17.40	0.19	2.9	0.471	0.076	3.20	31.1	23.9	1.25	558	0.70	0.03	11.9	37.1	660
W228996		19.05	0.17	2.8	1.480	0.076	3.39	32.1	11.2	1.63	1060	0.97	0.03	12.3	34.1	670
W228997		18.60	0.18	2.8	1.640	0.074	3.35	31.6	12.0	1.75	1120	0.87	0.03	11.8	33.4	700
W228998		19.50	0.18	3.2	0.591	0.077	3.56	34.3	17.7	1.40	585	0.80	0.03	12.7	43.7	670
W228999		20.0	0.17	3.2	1.485	0.082	3.68	35.1	22.4	1.42	439	1.00	0.03	12.6	37.8	590
W229000		10.15	0.13	2.0	15.35	0.034	1.81	21.4	11.7	2.59	1180	1.88	0.02	6.1	26.9	450
W230001		12.45	0.17	2.2	0.782	0.050	2.33	22.6	22.7	1.39	595	0.85	0.02	7.8	28.2	410
W230002		18.90	0.16	3.1	0.722	0.079	3.38	34.1	16.8	1.82	513	0.80	0.03	11.3	42.0	580
W230003		17.65	0.16	3.0	0.429	0.078	3.08	32.6	19.6	2.01	568	0.53	0.03	11.4	38.6	550
W230004		19.75	0.19	3.2	0.625	0.083	3.68	34.9	18.1	1.65	434	1.26	0.03	12.2	32.4	590
W230005		0.94	0.13	0.2	0.250	<0.005	0.16	2.3	1.8	9.59	1160	5.95	0.01	0.6	5.5	200
W230006		6.37	0.14	1.3	1.305	0.029	1.18	10.8	6.8	7.43	812	1.12	0.02	4.0	18.7	210
W230007		9.05	0.14	1.8	1.650	0.037	1.58	16.9	26.5	1.37	828	0.40	0.02	5.6	23.5	260
W230008		15.30	0.16	2.8	1.835	0.066	2.65	28.2	19.8	2.18	1200	0.47	0.02	10.7	31.6	450

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Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161494

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W228973		17.2	168.5	0.002	0.20	0.74	20.3	1	2.0	116.5	0.82	0.06	9.84	0.579	1.19	2.0
W228974		19.8	165.5	0.002	0.46	0.57	20.8	1	2.1	129.0	0.80	0.07	10.05	0.587	1.39	2.1
W228975		16.3	161.0	0.002	0.74	0.86	20.8	1	2.3	155.5	0.83	0.07	9.85	0.589	2.71	2.1
W228976		10.4	95.3	0.002	0.12	0.26	13.6	1	1.4	113.0	0.53	<0.05	7.21	0.431	0.71	1.3
W228977		12.3	145.0	0.003	4.52	1.87	20.0	1	2.3	142.0	0.77	<0.05	10.75	0.561	2.94	2.1
W228978		20.8	164.0	0.003	3.71	2.98	20.3	2	2.3	167.5	0.78	<0.05	11.25	0.480	4.79	2.3
W228979		12.6	197.0	0.003	1.12	0.50	22.2	1	2.5	106.5	0.84	<0.05	12.25	0.521	1.71	2.5
W228980		30.2	185.5	0.003	4.25	0.73	20.5	1	2.3	113.5	0.76	<0.05	10.95	0.485	2.61	2.2
W228981		15.4	185.0	0.003	2.01	0.89	19.8	1	2.4	218	0.84	0.06	11.50	0.517	2.59	2.3
W228982		14.5	185.5	0.002	0.64	0.56	20.3	1	2.2	108.5	0.80	<0.05	10.65	0.483	1.73	2.1
W228983		17.8	169.0	0.003	0.32	0.52	19.6	1	2.3	144.0	0.80	0.07	11.65	0.469	1.05	2.4
W228984		53.9	169.5	0.004	4.69	5.66	22.2	1	2.8	95.6	0.66	<0.05	9.71	0.411	13.30	1.9
W228985		29.6	174.5	0.003	1.20	0.87	18.0	1	2.1	215	0.71	0.05	10.85	0.414	1.23	2.6
W228986		24.6	182.0	0.003	0.89	0.65	19.7	2	2.5	167.0	0.79	0.06	12.00	0.453	1.22	2.7
W228987		1.3	1.3	<0.002	<0.01	0.06	0.2	<1	<0.2	49.3	<0.05	<0.05	0.11	<0.005	0.02	1.1
W228988		13.7	133.0	0.002	1.86	0.63	16.3	1	1.9	144.5	0.68	0.05	9.55	0.477	2.12	2.0
W228989		15.1	144.0	0.003	4.69	2.99	20.2	1	2.1	205	0.68	<0.05	9.42	0.464	4.77	1.8
W228990		20.2	98.9	0.002	3.80	2.83	15.3	1	1.6	120.5	0.55	0.05	7.41	0.452	4.22	1.5
W228991		16.5	99.4	0.002	3.91	13.50	14.8	1	1.8	144.0	0.58	<0.05	7.66	0.420	13.20	1.5
W228992		13.3	87.3	0.002	2.81	3.26	14.1	1	1.5	265	0.55	<0.05	7.02	0.437	2.97	1.4
W228993		1.2	3.3	<0.002	0.01	0.08	0.2	<1	<0.2	50.9	<0.05	<0.05	0.10	<0.005	0.06	0.5
W228994		20.0	127.0	0.002	3.58	7.02	16.8	1	2.0	182.0	0.74	<0.05	9.82	0.490	8.45	2.0
W228995		15.9	140.5	0.002	5.37	1.89	20.0	1	2.2	136.0	0.81	0.05	10.30	0.567	2.36	2.0
W228996		15.3	161.0	0.002	4.21	4.48	20.1	1	2.3	242	0.82	0.05	10.20	0.519	5.71	2.0
W228997		14.6	157.5	0.002	4.29	4.63	19.2	1	2.3	269	0.81	0.05	10.05	0.510	6.07	1.9
W228998		36.2	166.5	0.002	4.72	1.52	20.4	1	2.8	137.5	0.90	0.06	11.40	0.549	2.79	2.3
W228999		17.3	173.5	0.002	4.58	1.26	21.4	1	2.5	103.5	0.85	<0.05	11.50	0.541	3.47	2.3
W229000		10.9	82.5	0.002	2.63	23.2	10.6	1	1.6	322	0.44	<0.05	6.25	0.271	42.9	7.0
W230001		11.1	110.5	0.002	3.51	0.78	12.8	1	1.5	113.5	0.56	<0.05	7.80	0.419	3.00	1.5
W230002		33.2	167.0	0.004	4.06	1.04	19.6	1	2.5	117.5	0.80	0.07	11.20	0.480	2.28	2.2
W230003		20.1	151.5	0.002	3.68	0.79	18.7	1	2.3	150.5	0.76	0.05	10.40	0.491	2.45	2.1
W230004		21.3	174.5	0.003	4.37	0.74	20.4	1	2.4	105.5	0.84	<0.05	11.65	0.510	2.16	2.4
W230005		7.5	6.0	0.010	0.12	0.60	0.8	1	0.3	150.5	0.05	<0.05	0.62	0.019	0.60	6.9
W230006		16.0	48.1	0.004	1.62	1.77	7.0	1	1.0	186.0	0.28	<0.05	3.33	0.207	2.94	1.2
W230007		13.9	72.0	0.002	2.92	1.97	11.5	<1	3.7	132.5	0.41	<0.05	4.82	0.387	6.44	1.1
W230008		19.6	129.0	0.002	4.18	1.91	17.8	1	2.6	191.0	0.72	0.05	9.11	0.474	4.22	1.8

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Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161494

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W228973		152	3.1	22.5	68	107.0	<0.01
W228974		151	3.9	22.2	82	111.0	<0.01
W228975		153	4.3	22.2	76	110.0	<0.01
W228976		114	1.0	16.4	77	78.0	<0.01
W228977		150	10.4	21.8	226	113.0	<0.01
W228978		140	8.9	23.1	67	104.5	0.17
W228979		146	2.3	25.3	106	120.5	<0.01
W228980		132	1.5	21.2	71	103.5	<0.01
W228981		134	2.4	22.3	91	109.5	<0.01
W228982		125	1.3	23.9	125	105.0	<0.01
W228983		127	1.3	22.7	101	108.0	<0.01
W228984		141	12.1	19.2	102	87.6	0.58
W228985		117	1.2	22.3	137	97.1	<0.01
W228986		125	1.4	23.9	123	112.0	<0.01
W228987		2	0.1	0.8	16	0.6	<0.01
W228988		128	2.9	19.2	92	95.4	<0.01
W228989		143	6.7	18.3	82	96.8	0.01
W228990		128	4.5	17.5	88	81.4	0.02
W228991		113	14.0	16.2	73	81.3	1.76
W228992		115	6.0	16.2	107	74.9	0.01
W228993		2	0.3	0.8	18	0.5	<0.01
W228994		134	7.3	17.7	121	100.5	<0.01
W228995		148	7.4	22.4	82	102.5	0.01
W228996		136	9.9	20.9	198	99.9	0.64
W228997		134	9.6	20.6	262	96.9	0.66
W228998		144	5.6	23.5	92	110.5	0.11
W228999		149	2.9	22.2	75	111.0	0.02
W229000		85	7.8	18.2	48	69.3	2.50
W230001		113	1.6	15.3	60	78.1	0.01
W230002		132	3.2	21.6	143	110.5	0.04
W230003		127	3.3	22.0	111	107.0	0.02
W230004		143	2.0	22.0	366	109.5	<0.01
W230005		69	0.6	2.3	27	5.8	0.02
W230006		55	3.9	9.5	172	43.2	0.06
W230007		111	3.0	12.2	118	62.0	0.17
W230008		125	5.0	21.0	108	96.6	0.07

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Project: Nadaleen

Finalized Date: 15- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17161494

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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Finalized Date: 29- AUG- 2017
Account: RCM

CERTIFICATE WH17158517

Project: Nadaleen

P.O. No.: N17- 052

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 31- JUL- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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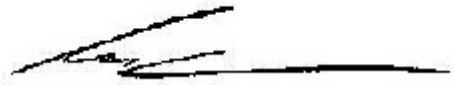
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 29- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17158517

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229829		7.60	0.06	0.27	1120	430	0.21	0.02	20.8	0.72	8.52	1.6	4	0.46	7.4	1.05
W229830		8.52	0.03	0.68	4220	920	0.36	0.02	19.55	0.11	10.20	2.1	6	1.50	7.8	0.86
W229831		4.66	0.04	2.52	2760	400	0.96	0.09	16.10	3.15	27.0	4.1	19	5.77	14.0	1.65
W229832		4.98	0.02	0.89	4830	80	0.40	0.03	19.40	0.07	12.25	2.4	8	2.15	8.0	1.31
W229833		2.38	0.02	1.01	1175	100	0.49	0.04	19.05	0.09	13.55	2.5	9	2.50	9.9	1.34
W229834		6.14	0.03	4.35	113.5	220	1.44	0.14	15.50	0.14	46.4	4.8	32	12.65	15.5	1.69
W229835		7.61	0.13	1.26	56.5	90	0.58	0.03	26.1	0.05	17.90	3.5	13	2.89	7.9	0.87
W229836		7.92	0.06	0.77	126.0	120	0.52	0.02	29.5	0.05	10.65	1.9	8	1.84	5.0	0.81
W229837		8.54	0.04	2.39	101.0	510	0.99	0.08	20.0	0.05	27.7	5.3	19	6.43	8.1	2.57
W229838		7.85	0.06	5.81	226	370	1.89	0.23	11.35	0.04	60.1	8.3	42	18.35	41.2	3.14
W229839		0.26	0.19	4.02	6540	210	1.06	0.13	13.05	0.17	45.0	12.4	44	11.45	37.6	3.06
W229840		7.40	0.01	8.67	145.0	310	2.57	0.32	0.65	<0.02	89.8	18.4	70	30.4	11.8	4.95
W229841		7.39	0.04	8.86	897	370	2.89	0.32	0.89	<0.02	99.3	18.0	68	25.6	15.4	5.22
W229842		7.04	2.05	6.40	>10000	500	1.85	0.27	4.74	0.15	67.0	10.1	54	13.10	61.2	3.86
W229843		7.40	1.52	1.70	>10000	70	0.53	0.05	21.0	0.17	16.95	3.4	25	2.55	11.5	0.71
W229844		7.06	3.77	3.78	>10000	120	1.01	0.12	11.15	0.28	42.3	7.1	43	7.31	33.6	2.16
W229845		7.28	1.13	2.82	5440	130	0.92	0.07	16.65	0.09	34.5	4.9	33	6.18	20.7	1.46
W229846		4.84	0.01	0.05	27.1	70	0.07	0.01	20.5	0.05	1.04	0.9	1	0.10	4.2	0.49
W229847		7.70	0.06	3.81	69.6	170	1.54	0.09	13.95	0.05	43.5	6.7	44	12.30	23.6	1.78
W229848		7.53	0.08	3.49	120.0	240	1.41	0.07	15.10	0.06	41.4	7.0	40	8.76	25.8	1.66
W229849		7.42	0.13	3.68	634	150	1.39	0.10	13.65	0.08	42.0	5.6	41	11.40	22.0	1.45
W229850		7.41	0.12	2.38	183.0	120	0.89	0.06	17.90	0.06	28.0	4.9	26	7.09	16.6	1.36
W229851		8.31	0.03	2.65	19.6	130	0.91	0.06	21.7	0.07	29.6	4.7	29	11.65	16.8	1.12
W229852		7.76	0.04	1.52	19.3	110	0.68	0.04	27.1	0.05	18.20	2.6	18	5.02	10.2	0.70
W229853		7.85	0.66	2.14	8060	130	0.89	0.05	22.5	0.22	25.1	3.9	25	7.08	15.5	0.98
W229854		6.86	0.88	2.72	>10000	110	0.83	0.06	16.05	0.12	30.7	5.1	34	6.45	17.4	1.27
W229855		7.22	0.14	3.94	3230	170	1.42	0.09	10.20	0.04	45.2	6.1	50	12.85	26.1	1.44
W229856		8.14	0.06	2.51	70.3	110	0.74	0.06	19.25	0.04	28.9	4.8	31	7.88	15.4	1.19
W229857		7.35	0.06	1.28	61.9	70	0.73	0.03	28.0	0.09	16.40	3.0	17	3.48	9.3	0.70
W229858		7.33	0.13	1.63	53.7	80	0.74	0.04	25.6	0.12	21.5	3.2	18	3.51	10.2	0.63
W229859		0.26	0.18	3.89	6330	200	1.03	0.13	12.60	0.16	38.9	11.8	45	10.10	37.5	2.95
W229860		7.53	0.10	1.16	53.1	60	0.49	0.05	29.2	0.11	18.80	2.5	15	2.67	10.7	0.48
W229861		<0.02	0.10	1.16	46.7	60	0.42	0.03	28.5	0.09	19.35	2.4	15	2.59	8.9	0.46
W229862		7.57	0.10	0.87	1830	40	0.48	0.02	25.1	0.07	12.30	2.1	10	1.71	7.7	0.64
W229863		8.26	0.21	0.79	1735	40	0.44	0.03	27.0	0.04	10.60	2.0	10	1.68	6.8	0.56
W229864		4.93	0.01	0.05	12.5	20	0.07	0.02	21.1	0.06	1.02	0.9	1	0.14	3.4	0.48

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 29- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17158517

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229829		0.86	0.09	0.2	0.631	0.006	0.13	4.1	2.2	12.35	839	0.11	0.01	0.5	4.4	420
W229830		2.01	0.14	0.4	0.518	0.009	0.34	5.1	4.6	11.65	518	0.13	0.02	1.1	5.6	1000
W229831		7.15	0.10	1.2	1.430	0.023	1.28	12.6	11.5	8.91	413	0.36	0.03	3.8	10.3	670
W229832		2.49	0.08	0.4	0.515	0.014	0.45	6.2	5.0	10.15	519	0.57	0.02	1.3	4.9	1070
W229833		2.73	0.09	0.5	0.696	0.010	0.51	6.6	5.4	9.94	510	0.64	0.02	1.5	5.4	840
W229834		11.10	0.10	2.0	0.586	0.035	2.27	23.4	18.6	4.80	346	0.31	0.03	6.1	11.3	800
W229835		3.24	0.10	0.9	0.336	0.011	0.64	9.2	5.8	4.54	277	1.97	0.01	2.1	7.4	620
W229836		2.11	0.08	0.4	0.381	0.009	0.39	5.5	3.3	4.28	268	1.55	0.01	1.2	4.8	460
W229837		6.23	0.09	1.1	0.445	0.022	1.22	13.9	6.2	5.00	731	0.43	0.02	3.5	11.3	430
W229838		14.95	0.11	2.4	1.125	0.044	3.02	30.7	12.7	3.32	579	0.39	0.04	8.3	19.0	570
W229839		10.80	0.09	2.1	14.80	0.037	1.90	22.3	12.7	2.73	1240	2.01	0.02	6.3	27.2	470
W229840		24.4	0.17	3.4	0.520	0.072	4.39	43.7	17.8	0.85	202	0.20	0.05	12.7	38.0	530
W229841		25.4	0.16	3.4	0.420	0.082	4.56	49.3	15.8	0.88	352	0.22	0.05	13.2	40.6	450
W229842		16.75	0.16	2.6	5.83	0.050	3.11	35.7	13.6	2.61	2110	0.45	0.04	9.5	26.9	420
W229843		4.66	0.07	0.8	1.240	0.032	0.86	9.3	8.4	1.80	1680	0.58	0.01	2.7	7.3	230
W229844		10.30	0.07	1.9	4.54	0.028	1.90	22.5	16.9	3.91	1700	0.33	0.02	6.2	18.5	470
W229845		7.80	0.08	1.4	1.865	0.024	1.49	17.4	12.0	3.44	981	0.44	0.02	4.9	11.5	300
W229846		0.24	0.19	<0.1	0.033	<0.005	0.02	0.5	0.9	13.00	203	0.12	<0.01	0.1	1.9	190
W229847		10.30	0.12	2.1	0.266	0.033	2.06	22.4	16.8	4.63	319	0.56	0.03	6.5	18.3	450
W229848		9.36	0.10	1.8	0.459	0.025	1.86	21.2	16.9	3.93	314	0.42	0.02	5.9	16.8	420
W229849		9.81	0.09	2.2	0.481	0.026	2.01	21.7	16.3	4.52	312	0.49	0.03	6.3	15.9	420
W229850		6.48	0.11	1.5	0.303	0.016	1.30	14.1	10.2	5.07	307	0.80	0.02	4.1	12.6	310
W229851		7.20	0.08	1.4	0.129	0.018	1.46	15.3	16.3	2.65	192	0.37	0.02	4.5	13.7	320
W229852		4.11	0.09	0.8	0.135	0.010	0.84	9.9	8.6	2.05	182	0.44	0.01	2.6	6.4	200
W229853		5.86	0.10	1.1	1.505	0.021	1.16	13.1	12.4	2.71	397	0.56	0.02	3.7	9.2	300
W229854		7.42	0.09	1.5	1.915	0.028	1.45	15.5	15.4	4.08	739	1.02	0.02	4.6	11.9	350
W229855		10.70	0.14	2.2	0.793	0.028	2.19	22.9	23.0	5.31	334	1.02	0.03	6.7	16.0	500
W229856		6.65	0.08	1.4	0.310	0.018	1.37	14.4	13.0	3.87	246	0.85	0.02	4.2	12.2	320
W229857		3.47	0.09	0.7	0.233	0.010	0.69	9.0	7.1	1.90	221	0.59	0.01	2.2	7.5	220
W229858		4.43	0.08	1.2	0.372	0.012	0.89	10.9	8.1	1.86	149	0.94	0.01	3.0	7.7	260
W229859		10.20	0.08	1.9	13.95	0.036	1.83	19.8	12.2	2.62	1200	1.85	0.02	5.9	27.2	440
W229860		2.98	0.09	0.8	0.346	0.010	0.62	10.5	5.3	0.98	140	2.92	0.01	2.4	5.7	290
W229861		3.11	0.07	0.9	0.340	0.007	0.62	10.5	5.3	1.00	135	2.93	0.01	2.4	5.9	280
W229862		2.36	0.11	0.6	0.551	0.009	0.46	6.6	4.7	6.20	393	0.44	0.01	1.5	5.2	150
W229863		2.21	0.08	0.5	0.789	0.009	0.42	6.0	4.7	5.15	998	0.37	0.01	1.4	4.5	130
W229864		0.25	0.19	<0.1	0.029	<0.005	0.02	0.5	1.1	13.40	220	0.05	0.01	0.1	2.8	170

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CERTIFICATE OF ANALYSIS WH17158517

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229829		13.9	3.9	<0.002	0.36	2.73	0.8	1	<0.2	101.5	<0.05	<0.05	0.57	0.013	1.27	1.7
W229830		10.6	10.5	<0.002	0.68	6.52	1.6	2	0.2	130.0	0.08	0.05	1.30	0.033	1.40	2.2
W229831		11.2	41.4	<0.002	1.44	4.46	4.6	1	0.8	152.5	0.27	<0.05	4.04	0.124	1.74	3.0
W229832		4.8	14.7	<0.002	0.86	6.33	1.8	2	0.3	194.0	0.10	<0.05	1.63	0.043	1.25	3.7
W229833		7.4	16.6	<0.002	0.76	2.44	2.2	2	0.4	195.5	0.11	<0.05	1.94	0.048	1.59	3.8
W229834		10.2	76.9	<0.002	1.05	0.69	7.7	1	1.4	241	0.45	0.06	6.99	0.204	1.53	6.1
W229835		9.4	18.7	0.002	0.32	0.42	2.2	3	0.4	630	0.16	<0.05	2.78	0.062	1.08	12.3
W229836		6.7	11.6	0.002	0.20	0.81	1.5	2	0.3	747	0.08	<0.05	1.47	0.034	1.51	14.9
W229837		6.1	42.2	<0.002	0.15	0.51	4.5	2	0.8	415	0.26	<0.05	4.06	0.110	0.88	10.1
W229838		8.5	107.5	<0.002	0.77	0.83	10.9	1	1.8	298	0.60	0.05	9.43	0.274	1.78	6.4
W229839		11.4	77.5	<0.002	2.71	25.1	10.8	2	1.7	328	0.46	<0.05	6.20	0.282	45.1	6.7
W229840		19.0	178.5	<0.002	4.29	0.83	18.0	1	2.8	489	0.94	0.10	14.45	0.466	3.10	2.5
W229841		19.4	177.5	<0.002	4.59	3.87	18.3	1	3.1	176.0	0.97	0.10	16.95	0.454	3.05	2.6
W229842		20.3	134.5	<0.002	3.48	69.7	12.1	2	2.1	114.0	0.72	0.07	10.65	0.323	31.0	5.0
W229843		6.9	33.4	<0.002	2.52	130.0	2.6	4	0.6	408	0.20	0.09	3.22	0.078	7.01	16.4
W229844		13.2	77.2	<0.002	1.94	93.4	6.1	4	1.5	127.5	0.48	0.13	7.44	0.184	29.1	6.7
W229845		5.8	60.0	<0.002	0.69	25.2	4.8	2	1.1	261	0.36	<0.05	5.49	0.137	9.36	7.3
W229846		1.3	0.8	<0.002	0.02	0.14	0.1	1	<0.2	46.2	<0.05	<0.05	0.08	<0.005	0.03	0.7
W229847		9.0	79.3	<0.002	0.45	0.65	6.3	3	1.4	240	0.49	<0.05	7.93	0.189	0.75	6.2
W229848		6.5	71.2	<0.002	0.29	1.03	5.8	2	1.4	283	0.46	<0.05	7.06	0.171	0.98	6.3
W229849		8.8	77.5	<0.002	0.24	2.06	5.9	2	1.3	234	0.47	<0.05	7.54	0.184	1.65	6.4
W229850		6.0	48.5	<0.002	0.31	1.03	3.9	2	0.8	311	0.30	<0.05	4.95	0.119	0.94	8.2
W229851		5.8	56.6	<0.002	0.34	0.21	4.4	3	0.9	392	0.34	<0.05	5.18	0.128	0.40	8.2
W229852		5.0	29.6	<0.002	0.16	0.20	2.7	2	0.6	626	0.19	<0.05	2.98	0.075	0.44	13.2
W229853		7.0	43.3	<0.002	0.82	22.6	3.6	3	0.8	434	0.27	<0.05	4.24	0.104	4.13	10.9
W229854		9.2	54.3	<0.002	1.67	48.7	4.4	3	1.0	288	0.35	<0.05	5.49	0.133	7.87	8.9
W229855		8.4	82.3	<0.002	0.67	8.88	6.5	3	1.4	177.0	0.51	<0.05	8.20	0.198	2.88	3.5
W229856		9.4	48.7	<0.002	0.70	0.50	4.0	2	0.9	632	0.32	<0.05	5.04	0.124	1.17	7.8
W229857		7.8	24.2	<0.002	0.52	0.67	2.2	2	0.5	689	0.16	<0.05	2.61	0.063	0.90	10.7
W229858		12.0	31.0	<0.002	0.49	1.36	2.8	3	0.6	806	0.22	<0.05	3.66	0.084	1.38	11.8
W229859		11.2	81.7	<0.002	2.62	23.5	9.9	2	1.6	317	0.43	0.06	5.49	0.273	42.6	6.3
W229860		11.1	21.5	<0.002	0.38	1.51	2.0	2	0.5	732	0.17	<0.05	2.55	0.060	1.29	14.7
W229861		10.7	21.1	<0.002	0.37	1.47	2.0	2	0.4	714	0.17	<0.05	2.54	0.059	1.20	15.3
W229862		11.3	15.1	<0.002	0.42	5.95	1.5	2	0.3	369	0.11	<0.05	1.84	0.042	1.83	12.1
W229863		6.4	14.9	<0.002	0.33	4.82	1.4	2	0.3	411	0.10	<0.05	1.63	0.038	2.58	13.8
W229864		1.5	1.0	<0.002	<0.01	0.07	0.2	1	<0.2	52.0	<0.05	<0.05	0.07	<0.005	0.02	0.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 29- AUG- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17158517

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229829		5	0.4	5.4	148	6.8		0.01
W229830		11	0.7	6.6	20	16.4		0.01
W229831		34	2.6	9.3	833	45.4		0.04
W229832		14	0.8	5.3	18	18.0		0.04
W229833		16	0.9	5.6	20	19.7		0.05
W229834		58	3.0	14.5	42	77.7		0.02
W229835		21	0.9	7.5	15	35.6		0.03
W229836		14	0.6	5.3	19	18.3		0.07
W229837		35	1.2	10.3	23	43.6		<0.01
W229838		80	3.3	18.4	30	91.7		0.01
W229839		85	8.4	19.6	51	77.5		2.63
W229840		103	4.1	22.0	83	121.5		<0.01
W229841		97	8.3	22.5	80	118.0		0.03
W229842		78	7.1	15.9	61	94.5	1.120	12.80
W229843		27	2.4	6.1	26	29.1	4.70	4.22
W229844		55	4.3	10.7	36	70.0	1.685	16.50
W229845		44	2.8	10.4	13	51.7		4.85
W229846		2	0.1	0.7	13	<0.5		<0.01
W229847		54	0.9	13.0	19	77.8		0.02
W229848		51	1.9	12.3	26	65.8		0.07
W229849		53	1.9	12.6	30	82.5		0.32
W229850		39	1.4	9.0	19	56.3		0.19
W229851		44	0.5	9.2	21	49.0		<0.01
W229852		25	0.4	5.9	10	30.9		<0.01
W229853		32	1.4	8.0	36	41.0		3.27
W229854		44	2.6	9.2	19	55.5	2.25	4.33
W229855		64	2.2	13.1	15	79.9		0.32
W229856		42	0.9	8.9	11	51.7		0.01
W229857		23	0.9	5.5	8	26.8		0.02
W229858		28	1.3	6.7	21	44.0		0.01
W229859		85	7.8	17.0	49	70.2		2.61
W229860		21	1.1	5.4	18	31.5		0.01
W229861		21	1.0	5.4	16	33.0		0.01
W229862		16	0.9	4.2	11	23.3		0.08
W229863		15	1.0	4.5	12	17.8		0.80
W229864		2	0.1	0.7	18	<0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 29- AUG- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17158517

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

CERTIFICATE WH17161500

Project: Nadaleen

P.O. No.: N17- 053

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 2- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

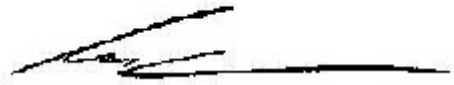
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161500

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230009		9.00	0.08	6.29	259	240	1.93	0.25	2.71	0.19	63.8	18.3	66	21.4	63.1	5.39
W230010		9.95	0.08	6.19	210	360	1.87	0.22	2.55	0.12	57.4	21.7	70	22.2	67.0	5.05
W230011		9.38	0.07	4.94	64.1	190	1.55	0.16	2.39	0.08	44.6	17.7	70	22.5	47.3	4.40
W230012		9.23	0.08	4.86	68.2	220	1.48	0.18	1.87	0.16	46.9	12.9	58	19.75	42.0	3.99
W230013		10.82	0.10	6.86	1285	250	2.12	0.26	2.66	0.14	64.4	21.8	72	24.3	63.8	6.01
W230014		9.86	0.09	5.09	3990	280	1.15	0.17	0.68	0.13	47.1	20.2	72	12.55	58.7	4.22
W230015		0.26	0.09	3.50	2430	190	0.90	0.13	17.95	0.10	36.1	10.5	41	10.10	38.9	2.97
W230016		10.52	0.07	3.44	5730	170	0.61	0.10	0.09	0.10	32.3	15.5	69	8.14	32.6	3.20
W230017		10.13	0.09	4.84	2840	230	1.17	0.16	1.36	0.11	46.1	17.5	67	14.90	44.3	4.33
W230018		11.25	0.09	4.87	115.5	190	1.35	0.17	2.75	0.10	48.4	17.1	65	19.15	57.3	4.82
W230019		10.58	0.10	4.97	447	190	1.48	0.20	2.55	0.11	52.2	16.5	65	18.15	50.4	4.33
W230020		8.60	0.10	6.46	81.3	230	1.95	0.24	2.00	0.06	60.3	18.6	72	23.6	64.0	4.78
W230021		8.30	0.07	6.67	84.7	210	1.92	0.25	2.73	0.12	64.9	21.5	74	28.8	61.8	5.36
W230022		10.11	0.07	3.60	139.5	180	0.98	0.13	3.56	0.07	37.1	11.9	60	15.70	29.7	4.10
W230023		6.93	<0.01	0.08	2.8	30	0.05	0.06	20.6	0.07	1.18	0.7	1	0.24	2.3	0.50
W230024		9.78	0.07	5.99	708	160	1.52	0.23	1.91	0.19	58.4	16.8	79	28.7	51.7	5.33
W230025		10.14	0.06	4.47	800	150	0.92	0.14	3.03	0.12	43.4	15.5	63	15.25	43.5	4.09
W230026		10.97	0.07	4.29	258	110	1.05	0.15	2.46	0.10	41.1	15.5	61	16.50	41.2	4.28
W230027		11.83	0.09	6.46	172.0	190	1.96	0.26	2.16	0.18	66.0	19.8	76	26.5	52.7	5.01
W230028		10.99	0.11	6.10	92.5	240	1.68	0.22	2.34	0.12	58.0	23.9	75	31.6	143.5	4.66
W230029		7.29	0.01	0.09	1.8	30	0.05	0.02	20.8	0.06	1.29	0.8	1	0.37	1.5	0.50
W230030		8.73	0.06	5.84	71.9	300	1.59	0.21	1.39	<0.02	59.7	18.1	71	29.5	61.4	4.57
W230031		10.56	0.04	6.13	103.5	330	1.46	0.22	3.00	0.10	59.1	18.2	70	22.7	54.5	4.54
W230032		<0.02	0.05	6.00	100.5	320	1.45	0.22	2.86	0.09	59.5	17.9	67	22.7	54.6	4.45
W230033		11.24	0.07	7.71	1735	310	1.96	0.28	2.60	0.17	72.9	22.0	73	25.9	55.4	4.80
W230034		10.16	0.06	7.78	266	250	2.14	0.28	2.53	0.16	72.0	20.3	75	25.4	62.7	5.18
W230035		0.26	0.11	3.53	2490	200	0.83	0.13	18.10	0.13	36.8	10.6	42	10.15	37.9	2.99
W230036		12.72	0.05	7.55	91.9	220	2.05	0.29	2.02	0.08	73.7	20.5	70	33.7	58.8	5.44
W230037		12.04	0.11	7.65	145.5	210	2.09	0.29	1.63	0.03	70.4	20.8	76	34.0	55.8	5.23
W230038		11.97	0.09	6.38	67.5	240	1.72	0.22	2.67	0.09	62.8	21.9	68	27.1	52.5	4.94
W230039		4.55	0.10	6.61	67.3	220	1.77	0.24	2.41	0.06	63.9	23.1	71	28.8	54.2	5.11
W230040		11.41	0.06	5.93	297	200	1.70	0.21	4.56	0.08	58.6	20.3	60	24.1	49.3	4.66
W230041		12.79	0.08	8.34	52.0	290	2.47	0.32	0.98	0.17	76.6	21.8	80	36.2	54.2	5.78
W230042		11.47	0.06	6.59	156.5	190	2.02	0.25	2.95	0.03	61.7	20.3	68	27.1	54.8	5.03
W230043		11.65	0.05	5.50	747	220	1.53	0.20	2.19	0.03	53.3	17.0	61	17.70	46.4	4.31
W230044		11.43	0.07	5.71	2910	240	1.21	0.22	1.17	0.07	59.2	14.1	65	21.0	45.6	4.66

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Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161500

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230009		16.95	0.15	3.1	1.355	0.083	2.94	28.1	20.1	1.53	706	0.46	0.03	11.8	36.4	540
W230010		16.20	0.13	2.9	0.941	0.076	2.76	25.5	51.0	1.46	597	0.44	0.03	10.8	36.5	540
W230011		12.80	0.14	2.5	0.248	0.056	2.23	20.5	83.9	1.76	554	0.45	0.02	8.1	32.3	380
W230012		12.60	0.12	2.3	0.299	0.053	2.18	20.9	88.7	1.52	519	0.48	0.03	7.8	24.3	360
W230013		17.85	0.14	3.2	1.700	0.082	3.23	29.2	48.2	1.70	668	0.68	0.03	12.0	41.0	590
W230014		13.20	0.12	2.5	4.21	0.052	2.32	21.3	21.3	0.53	270	0.60	0.02	8.6	37.5	460
W230015		9.20	0.09	1.6	3.52	0.040	1.65	16.8	8.7	1.38	1160	1.60	0.02	5.9	22.9	370
W230016		9.43	0.09	1.8	3.56	0.036	1.55	15.0	16.7	0.18	45	0.38	0.01	5.9	29.3	270
W230017		12.75	0.12	2.3	4.24	0.055	2.26	21.0	14.6	0.87	461	0.53	0.02	7.8	33.0	380
W230018		12.85	0.13	2.3	2.82	0.063	2.28	21.4	21.4	1.43	496	0.73	0.02	7.8	32.4	420
W230019		13.50	0.11	2.4	3.32	0.063	2.25	23.3	27.3	1.39	506	0.74	0.02	8.3	32.5	410
W230020		16.90	0.13	2.9	1.820	0.074	3.00	27.6	29.4	1.54	436	0.55	0.03	10.8	34.5	510
W230021		17.60	0.13	3.0	0.189	0.080	3.19	29.4	36.2	2.36	679	0.47	0.03	11.8	36.0	790
W230022		9.50	0.11	1.7	1.100	0.043	1.59	17.1	28.2	1.66	771	0.39	0.02	5.8	22.7	340
W230023		0.26	0.10	<0.1	0.015	0.011	0.03	0.5	0.9	13.00	215	<0.05	0.01	0.2	1.4	190
W230024		15.60	0.11	2.7	3.72	0.063	2.73	26.3	27.1	1.14	615	0.62	0.02	9.6	35.0	560
W230025		11.60	0.08	2.1	2.93	0.053	2.03	19.4	14.6	1.47	1260	0.80	0.02	7.2	29.8	470
W230026		11.20	0.10	2.0	2.43	0.054	1.93	18.6	14.2	1.19	741	0.82	0.02	6.7	31.3	400
W230027		17.60	0.11	3.0	2.73	0.077	2.85	29.4	21.7	1.38	494	0.72	0.03	10.8	34.6	610
W230028		15.95	0.13	2.8	0.973	0.071	2.80	26.1	29.9	1.93	606	0.74	0.03	10.6	36.9	630
W230029		0.27	0.09	<0.1	0.019	0.011	0.04	0.6	0.8	13.05	216	<0.05	0.01	0.2	1.5	220
W230030		15.35	0.11	2.8	0.362	0.070	2.71	26.9	32.5	1.71	398	0.28	0.03	10.2	31.7	520
W230031		15.85	0.10	2.9	0.419	0.071	2.89	27.0	15.6	1.70	668	0.50	0.02	11.0	32.6	520
W230032		15.85	0.11	3.0	0.427	0.074	2.81	26.9	16.7	1.63	650	0.53	0.02	11.0	32.1	510
W230033		21.3	0.13	3.4	1.790	0.080	3.64	34.2	13.9	1.72	743	0.71	0.03	12.7	38.0	520
W230034		20.7	0.14	3.3	1.245	0.077	3.79	32.8	13.4	1.63	632	1.08	0.03	12.9	37.7	610
W230035		9.18	0.08	1.7	3.69	0.043	1.66	17.3	7.3	1.40	1180	1.59	0.02	6.0	22.5	380
W230036		19.95	0.11	3.3	0.452	0.087	3.64	32.9	16.7	1.79	530	0.76	0.03	12.5	37.7	580
W230037		20.0	0.13	3.2	0.232	0.087	3.70	33.5	15.4	2.05	436	0.36	0.03	12.3	37.0	570
W230038		17.20	0.12	2.9	0.326	0.079	3.06	27.8	18.4	2.05	566	0.36	0.03	11.5	37.8	540
W230039		17.70	0.12	2.9	0.296	0.076	3.17	28.6	18.6	2.04	517	0.38	0.03	11.3	40.5	510
W230040		16.00	0.13	2.8	0.577	0.068	2.84	26.3	13.8	2.46	927	0.34	0.02	10.6	34.0	570
W230041		22.3	0.15	3.4	1.195	0.094	4.04	35.0	30.1	1.72	248	0.95	0.04	12.2	41.3	530
W230042		17.40	0.13	2.9	0.520	0.076	3.16	27.7	16.1	1.69	601	0.29	0.03	11.2	34.2	580
W230043		14.65	0.11	2.5	1.830	0.062	2.63	23.9	11.9	1.29	591	0.35	0.02	9.5	30.1	470
W230044		13.55	0.07	2.2	2.88	0.055	2.69	27.2	8.8	0.85	364	0.31	0.02	7.1	25.9	370

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161500

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230009		19.2	140.0	<0.002	4.84	1.50	19.4	1	2.4	148.0	0.80	0.06	9.76	0.532	4.35	1.9
W230010		17.2	127.0	0.002	4.06	1.09	18.2	1	3.0	216	0.72	0.05	8.99	0.553	3.68	1.7
W230011		10.2	101.0	<0.002	0.63	0.46	15.7	1	1.5	129.5	0.58	<0.05	6.71	0.492	1.04	1.4
W230012		10.3	95.6	<0.002	0.57	0.40	12.7	1	1.6	110.0	0.57	0.05	7.52	0.415	0.97	1.5
W230013		24.1	137.5	0.002	4.90	3.91	19.4	1	2.2	148.5	0.81	<0.05	10.45	0.558	4.61	2.0
W230014		14.2	95.2	0.002	4.15	5.75	13.5	1	2.6	116.0	0.59	<0.05	7.52	0.493	10.00	1.5
W230015		8.3	70.8	0.003	2.49	9.28	8.6	1	1.4	692	0.41	0.05	5.13	0.258	9.80	2.2
W230016		8.1	63.8	<0.002	3.07	6.45	7.0	1	1.1	72.0	0.40	<0.05	4.45	0.415	7.24	1.0
W230017		14.7	94.7	0.002	4.12	3.80	11.7	1	1.8	121.0	0.56	<0.05	6.88	0.448	10.20	1.4
W230018		15.4	96.8	0.003	4.16	0.71	14.5	1	2.8	161.0	0.55	<0.05	7.24	0.439	5.99	1.5
W230019		16.8	100.5	0.004	3.65	2.34	15.0	1	2.3	156.0	0.59	0.07	7.77	0.434	6.79	1.6
W230020		18.7	131.0	0.002	2.99	0.87	17.8	1	3.4	131.0	0.76	0.05	9.83	0.523	5.19	1.9
W230021		14.3	142.5	<0.002	0.75	0.58	18.9	1	2.2	142.0	0.81	0.06	10.00	0.550	1.22	1.8
W230022		14.4	72.6	0.003	2.13	0.99	10.0	1	1.3	145.0	0.42	<0.05	5.06	0.325	3.67	1.1
W230023		1.3	1.4	<0.002	0.01	0.07	0.2	<1	0.2	50.2	<0.05	<0.05	0.09	<0.005	0.04	0.7
W230024		19.4	129.0	0.003	5.22	8.53	17.5	1	2.0	82.6	0.67	<0.05	8.88	0.523	12.75	1.7
W230025		10.4	92.9	0.002	3.25	5.89	13.0	1	1.5	102.0	0.51	<0.05	5.98	0.431	9.53	1.2
W230026		16.3	92.6	0.004	3.69	3.07	11.8	1	1.3	83.3	0.48	<0.05	5.63	0.408	7.41	1.2
W230027		18.9	141.5	0.003	4.35	2.70	18.1	1	2.7	135.5	0.76	0.06	10.20	0.506	8.35	2.1
W230028		18.6	134.5	0.003	1.35	0.77	16.8	1	13.2	132.0	0.72	0.05	9.38	0.507	3.19	1.9
W230029		1.2	2.0	<0.002	0.01	0.06	0.2	<1	<0.2	49.8	<0.05	<0.05	0.12	0.005	0.05	0.7
W230030		14.5	133.5	<0.002	0.53	0.59	14.4	1	4.0	89.0	0.71	<0.05	9.10	0.498	1.78	1.8
W230031		13.0	135.0	<0.002	3.53	0.78	15.7	1	2.6	153.5	0.75	<0.05	9.73	0.542	2.65	1.9
W230032		12.5	138.0	0.002	3.46	0.80	16.2	1	2.6	149.0	0.73	<0.05	9.27	0.524	2.60	1.8
W230033		18.2	177.0	<0.002	4.39	4.27	20.6	1	3.1	134.5	0.88	<0.05	11.55	0.538	6.63	2.2
W230034		19.5	178.0	0.002	4.71	2.73	20.8	1	2.8	113.5	0.86	<0.05	11.60	0.549	4.24	2.2
W230035		8.7	73.7	0.002	2.50	9.52	8.1	1	1.4	699	0.43	0.05	5.19	0.262	10.00	2.2
W230036		18.5	179.5	<0.002	2.89	0.76	18.9	1	2.7	124.0	0.88	0.06	11.40	0.539	2.46	2.1
W230037		16.7	191.0	0.002	1.56	0.68	19.9	1	2.4	93.5	0.86	<0.05	11.50	0.534	1.88	2.2
W230038		18.1	159.5	<0.002	2.33	0.66	17.8	1	2.0	153.0	0.72	<0.05	9.67	0.506	1.80	1.8
W230039		20.0	170.0	<0.002	2.33	0.71	17.9	1	2.1	134.0	0.76	<0.05	10.00	0.518	1.73	1.9
W230040		15.3	147.0	0.002	3.61	1.37	16.2	1	1.9	161.5	0.68	0.05	9.42	0.486	2.57	1.7
W230041		23.1	219	0.003	2.75	0.68	21.6	1	2.8	116.5	0.86	0.05	12.40	0.516	3.61	2.4
W230042		14.9	158.5	0.002	4.41	0.65	17.9	1	2.1	133.0	0.77	0.05	10.10	0.524	2.81	1.9
W230043		13.1	125.5	0.002	3.86	2.08	14.8	1	2.0	94.2	0.65	<0.05	8.82	0.448	6.51	1.6
W230044		17.1	123.0	0.002	4.38	2.45	11.3	1	2.5	101.0	0.54	<0.05	7.82	0.383	10.20	1.6

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161500

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W230009		134	5.6	23.2	110	115.0	0.02
W230010		145	2.9	20.6	92	108.0	0.04
W230011		132	1.2	16.3	77	91.1	<0.01
W230012		111	1.7	15.7	267	87.4	<0.01
W230013		145	6.5	22.5	113	115.5	0.04
W230014		138	8.9	16.6	95	91.6	0.21
W230015		72	5.1	15.7	47	63.6	0.51
W230016		119	6.9	11.9	62	66.9	0.14
W230017		129	5.9	15.2	74	83.4	0.15
W230018		127	1.1	15.8	73	83.5	<0.01
W230019		130	4.2	16.2	61	89.5	0.03
W230020		147	1.8	19.1	62	106.5	<0.01
W230021		141	1.5	23.0	157	112.5	<0.01
W230022		90	1.9	13.4	60	63.2	<0.01
W230023		2	0.1	0.8	18	0.6	<0.01
W230024		149	6.9	20.1	96	101.0	0.54
W230025		125	5.3	14.9	61	78.9	0.56
W230026		118	4.5	14.8	60	74.2	0.18
W230027		148	6.7	21.9	96	111.5	0.08
W230028		139	2.4	20.9	95	107.5	<0.01
W230029		2	0.1	0.9	17	0.8	<0.01
W230030		133	2.6	20.0	50	104.5	<0.01
W230031		141	2.7	20.3	81	109.5	<0.01
W230032		139	2.7	20.7	75	109.0	<0.01
W230033		150	11.1	23.3	103	124.0	0.34
W230034		152	9.5	24.4	101	125.5	0.07
W230035		72	5.4	16.6	48	64.8	0.50
W230036		145	2.3	24.1	86	118.0	<0.01
W230037		145	1.7	24.8	72	120.5	<0.01
W230038		133	1.2	21.2	80	108.5	<0.01
W230039		139	1.2	21.4	74	111.5	<0.01
W230040		123	4.6	20.8	80	105.5	0.02
W230041		151	1.7	24.9	106	123.5	<0.01
W230042		136	2.2	23.0	72	107.0	<0.01
W230043		118	7.7	18.6	62	92.9	0.16
W230044		119	8.3	15.1	62	74.7	0.49

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 15- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17161500

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
This copy reported on 28- SEP- 2017
Account: RCM

CERTIFICATE WH17204263

Project: RCM_WH17161549

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 22- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

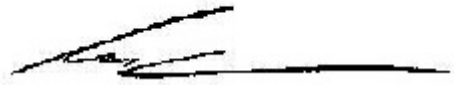
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA24	Au 50g FA AA finish	AAS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17161549**

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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Finalized Date: 26- SEP- 2017
Account: RCM

Project: RCM_WH17161549

CERTIFICATE OF ANALYSIS WH17204263

Sample Description	Method Analyte Units LOR	Au- AA24 Au ppm 0.005
W230045		<0.005
W230046		<0.005
W230047		0.006
W230048		<0.005
W230049		<0.005
W230050		<0.005
W230051		<0.005
W230052		1.115
W230053		0.052
W230054		2.50
W230055		0.406
W230056		0.336
W230057		<0.005
W230058		<0.005
W230059		0.066
W230060		0.011
W230061		<0.005
W230062		<0.005
W230063		<0.005
W230064		<0.005
W230065		<0.005
W230066		<0.005
W230067		<0.005
W230068		<0.005
W230069		<0.005
W230070		<0.005
W230071		<0.005
W230072		<0.005
W230073		<0.005
W230074		<0.005
W230075		<0.005
W230076		<0.005
W230077		<0.005
W230078		<0.005
W230079		<0.005
W230080		2.49

Comments: **Re- analysis results for samples originally reported on certificate WH17161549**

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Project: RCM_WH17161549

Finalized Date: 26- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17204263

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA24 FND- 02

ALS Canada Ltd.

2103 Dollarton Hwy
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To: **ATAC RESOURCES LTD.**
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Finalized Date: 4- OCT- 2017
This copy reported on
16- OCT- 2017
Account: RCM

CERTIFICATE WH17212384

Project: RCM_WH17161549

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 2- OCT- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS

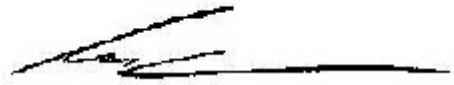
To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Comments: **Re- analysis results for samples originally reported on certificate WH17161549**

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
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Finalized Date: 4- OCT- 2017
Account: RCM

Project: RCM_WH17161549

CERTIFICATE OF ANALYSIS WH17212384

Sample Description	Method Analyte Units LOR	Au- AA25 Au ppm 0.01
W230045		0.01
W230046		<0.01
W230047		0.01
W230048		<0.01
W230049		<0.01
W230050		<0.01
W230051		<0.01
W230052		1.15
W230053		0.06
W230054		2.60
W230055		0.43
W230056		0.35
W230057		<0.01
W230058		<0.01
W230059		0.06
W230060		0.01
W230061		<0.01
W230062		<0.01
W230063		<0.01
W230064		<0.01
W230065		<0.01
W230066		<0.01
W230067		<0.01
W230068		<0.01
W230069		<0.01
W230070		<0.01
W230071		<0.01
W230072		<0.01
W230073		<0.01
W230074		<0.01
W230075		<0.01
W230076		<0.01
W230077		<0.01
W230078		<0.01
W230079		<0.01
W230080		2.67

Comments: **Re- analysis results for samples originally reported on certificate WH17161549**

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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Project: RCM_WH17161549

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 4- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17212384

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25 FND- 02

ALS Canada Ltd.

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1016- 510 W HASTINGS ST
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Finalized Date: 15- SEP- 2017
Account: RCM

CERTIFICATE WH17161549

Project: Nadaleen

P.O. No.: N17- 054

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 3- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

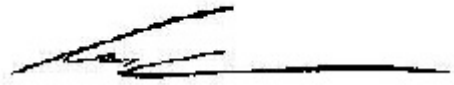
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161549

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230045		12.55	0.06	6.67	117.0	220	2.36	0.20	1.42	0.02	61.5	21.4	76	35.3	54.1	4.58
W230046		10.57	0.08	4.80	64.8	200	1.41	0.17	2.61	0.02	55.1	14.2	55	25.2	33.0	4.11
W230047		12.35	0.06	5.81	64.3	210	1.77	0.23	2.40	0.21	65.2	15.2	65	32.3	65.4	3.85
W230048		9.56	0.05	5.16	29.5	190	1.42	0.20	2.68	0.53	62.2	11.7	57	26.9	33.2	3.66
W230049		11.68	0.09	7.28	128.0	240	2.38	0.25	1.12	0.06	70.6	28.1	89	50.5	76.3	4.37
W230050		11.61	0.05	6.15	68.4	280	1.51	0.20	2.75	<0.02	60.1	21.5	78	36.4	69.2	5.20
W230051		11.41	0.05	6.46	56.0	250	1.74	0.23	2.56	<0.02	63.9	21.9	76	40.2	67.0	4.84
W230052		11.78	0.05	6.64	1770	210	1.80	0.23	6.41	0.05	69.2	21.4	67	36.0	73.6	4.30
W230053		11.41	0.02	1.46	54.3	120	0.56	0.06	30.2	0.04	21.6	6.9	15	6.73	23.4	1.22
W230054		0.28	0.19	3.82	5470	200	0.76	0.12	11.90	0.14	40.7	10.9	45	10.70	35.0	2.84
W230055		11.82	0.02	2.18	1705	120	0.57	0.08	24.0	0.06	32.4	6.9	22	10.25	14.7	1.52
W230056		4.95	0.04	2.92	646	150	0.63	0.12	21.8	0.08	37.8	10.0	28	15.85	22.0	1.92
W230057		11.49	0.01	0.79	21.8	110	0.28	0.03	31.9	0.04	12.95	2.8	9	2.83	6.7	0.76
W230058		11.66	0.01	0.94	17.0	120	0.29	0.04	31.0	0.03	14.60	3.2	10	3.75	7.6	0.73
W230059		11.88	0.01	0.67	25.3	120	0.25	0.02	32.5	0.02	11.30	2.1	7	3.24	5.6	0.55
W230060		11.79	0.02	1.34	26.8	290	0.37	0.05	31.5	0.02	18.70	4.3	14	6.41	11.7	0.86
W230061		11.26	0.01	0.71	17.2	130	0.24	0.03	32.7	0.02	12.65	2.4	8	3.06	6.4	0.56
W230062		6.97	<0.01	0.13	0.3	20	0.08	0.01	19.70	0.05	1.13	0.7	1	1.48	1.2	0.47
W230063		11.87	0.02	0.66	28.7	850	0.22	0.02	33.5	0.05	11.00	2.4	7	2.61	6.7	0.47
W230064		11.08	0.01	0.55	12.8	170	0.17	0.01	34.1	0.02	9.33	1.8	6	2.26	5.1	0.39
W230065		12.71	0.04	3.14	39.7	200	0.92	0.15	21.7	0.08	45.5	9.8	30	17.40	28.0	2.18
W230066		11.73	0.03	3.01	24.8	220	0.93	0.14	21.9	0.16	44.0	9.2	29	15.70	25.6	2.18
W230067		11.50	0.01	0.88	16.3	130	0.35	0.03	31.1	0.07	14.90	2.7	11	3.21	7.5	0.69
W230068		<0.02	0.01	0.94	20.3	140	0.33	0.03	32.1	0.11	16.85	3.0	10	3.50	8.1	0.77
W230069		10.90	0.01	0.46	10.8	130	0.21	0.01	33.3	0.02	8.46	1.6	5	1.95	4.2	0.35
W230070		11.35	0.01	0.43	15.1	140	0.20	0.01	34.1	0.06	8.32	1.7	5	1.90	4.7	0.35
W230071		11.19	0.01	0.49	10.7	140	0.21	0.02	33.2	0.05	10.30	1.8	6	2.12	5.0	0.39
W230072		11.25	0.01	0.67	23.3	160	0.23	0.02	32.6	0.06	13.10	2.4	7	2.89	7.3	0.49
W230073		10.97	0.01	0.68	14.8	160	0.25	0.02	33.8	0.07	12.80	2.4	8	4.21	7.6	0.50
W230074		11.27	0.01	0.56	18.2	130	0.21	0.02	33.3	0.07	12.00	2.2	7	1.92	8.5	0.44
W230075		11.50	0.01	0.48	8.7	160	0.24	0.01	33.0	0.03	9.82	1.9	6	2.01	5.1	0.46
W230076		11.77	0.02	0.58	8.4	130	0.29	0.04	34.3	0.05	11.10	2.2	11	2.27	5.8	0.47
W230077		12.11	0.02	1.10	14.6	200	0.51	0.07	31.7	0.09	17.95	3.6	12	5.05	10.4	0.77
W230078		7.08	<0.01	0.05	0.4	30	0.06	0.04	20.9	0.07	1.02	0.6	1	0.16	1.5	0.47
W230079		11.99	0.01	0.54	6.6	170	0.30	0.04	33.2	0.05	10.30	1.9	7	1.77	5.6	0.46
W230080		0.26	0.71	1.87	>10000	140	0.70	3.05	25.4	0.18	28.8	4.8	28	6.12	15.3	1.36

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Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161549

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230045		17.60	0.11	2.4	1.100	0.069	3.19	30.6	16.6	0.98	469	0.28	0.03	8.4	34.3	280
W230046		12.30	0.12	2.1	0.822	0.047	2.29	26.8	18.0	1.31	579	0.37	0.03	7.4	28.5	450
W230047		14.85	0.13	2.8	0.411	0.061	2.84	31.5	21.4	1.44	555	1.36	0.03	9.9	30.4	440
W230048		13.10	0.13	2.5	0.150	0.052	2.56	30.1	20.8	1.55	585	1.37	0.03	9.0	24.5	460
W230049		19.50	0.14	2.9	0.383	0.074	3.63	34.2	22.1	1.37	321	0.38	0.03	9.9	40.6	350
W230050		16.20	0.10	2.8	0.087	0.060	2.91	29.0	50.3	2.15	654	0.31	0.03	10.8	38.6	510
W230051		17.35	0.11	2.9	0.081	0.068	3.06	30.5	62.2	2.11	588	0.31	0.03	11.4	39.8	530
W230052		17.80	0.14	2.5	3.84	0.066	3.02	34.7	48.8	1.60	799	0.44	0.03	9.7	40.6	380
W230053		3.77	0.08	0.7	0.897	0.016	0.70	12.0	3.4	0.67	657	0.49	0.01	2.1	8.5	190
W230054		9.68	0.07	1.9	15.75	0.031	1.79	21.0	8.7	2.57	1190	1.82	0.02	5.7	25.3	440
W230055		5.59	0.12	1.3	1.470	0.021	1.05	18.1	4.5	0.55	657	0.48	0.02	3.6	9.3	130
W230056		7.18	0.09	1.7	2.21	0.029	1.42	20.7	5.6	0.68	698	0.90	0.02	4.5	13.9	150
W230057		1.98	0.08	0.4	0.217	0.011	0.37	7.6	2.1	0.52	199	0.60	0.01	1.1	3.3	100
W230058		2.44	0.10	0.5	0.190	0.012	0.44	8.1	2.5	0.86	289	0.57	0.01	1.3	4.0	130
W230059		1.72	0.08	0.3	0.911	0.009	0.31	6.0	2.1	0.53	278	0.18	0.01	0.9	2.6	130
W230060		3.43	0.10	0.7	0.615	0.016	0.64	10.0	4.0	0.47	198	0.27	0.01	1.9	6.3	170
W230061		1.81	0.10	0.4	0.182	0.009	0.33	6.6	2.5	0.35	172	0.11	0.01	1.0	2.9	180
W230062		0.38	0.14	<0.1	0.005	<0.005	0.07	0.5	1.5	12.30	216	0.05	0.01	0.2	1.4	170
W230063		1.76	0.09	0.3	0.199	0.008	0.31	5.5	2.5	0.40	155	0.12	0.01	1.0	2.8	310
W230064		1.44	0.09	0.3	0.278	0.009	0.26	4.3	2.1	0.40	150	0.42	0.01	0.8	2.3	210
W230065		8.11	0.09	1.5	0.611	0.037	1.48	26.1	11.0	1.21	385	1.80	0.02	4.5	17.8	240
W230066		7.78	0.11	1.5	0.310	0.038	1.42	25.7	9.5	1.42	402	1.40	0.02	4.3	16.2	200
W230067		2.27	0.09	0.4	0.285	0.013	0.42	7.9	3.1	0.57	319	0.33	0.01	1.2	4.5	330
W230068		2.54	0.09	0.5	0.300	0.015	0.44	8.6	3.4	0.60	317	0.37	0.01	1.3	4.4	340
W230069		1.27	0.07	0.2	0.071	0.005	0.22	4.5	2.2	0.38	235	0.21	0.01	0.7	1.7	410
W230070		1.15	0.08	0.2	0.068	0.009	0.20	4.3	2.1	0.45	165	0.24	0.01	0.6	1.7	190
W230071		1.33	0.08	0.3	0.088	0.009	0.23	5.2	2.6	0.49	195	0.31	0.01	0.7	2.1	230
W230072		1.81	0.09	0.3	0.119	0.009	0.31	6.4	3.8	0.57	142	0.31	0.01	1.0	3.2	280
W230073		1.76	0.08	0.3	0.109	0.009	0.32	6.0	3.8	0.47	133	0.29	0.01	1.0	3.0	540
W230074		1.55	0.10	0.3	0.100	0.009	0.27	5.6	3.0	0.41	109	0.25	0.01	0.9	2.6	140
W230075		1.24	0.09	0.2	0.064	0.005	0.23	4.7	2.8	0.37	78	0.23	0.01	0.7	2.1	150
W230076		1.45	<0.05	0.3	0.092	<0.005	0.27	5.1	4.3	0.41	175	0.26	0.02	0.8	4.9	510
W230077		2.76	<0.05	0.5	0.125	0.005	0.52	9.1	7.7	0.76	233	0.65	0.02	1.5	6.2	200
W230078		0.17	0.14	<0.1	0.005	<0.005	0.02	0.5	1.2	12.80	220	0.10	<0.01	0.2	1.5	210
W230079		1.38	0.05	0.3	0.075	<0.005	0.28	4.7	4.5	0.70	312	0.27	0.01	0.8	3.0	680
W230080		4.65	0.05	0.9	6.24	0.014	0.93	14.5	11.9	0.91	2300	1.77	0.01	2.6	13.0	340

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230045		16.0	163.5	0.003	3.94	0.66	18.9	1	2.3	92.5	0.59	<0.05	8.85	0.385	3.78	1.7
W230046		24.3	117.5	0.003	2.75	0.59	11.7	1	1.5	91.5	0.54	<0.05	8.10	0.322	2.55	1.7
W230047		17.0	145.5	0.002	1.72	0.60	14.1	1	4.9	87.4	0.70	0.06	10.35	0.393	1.99	2.1
W230048		20.5	134.0	0.002	0.54	0.41	11.4	1	1.7	82.1	0.64	<0.05	9.34	0.357	0.90	1.9
W230049		28.8	197.5	0.003	1.12	0.81	21.6	1	3.8	78.1	0.70	0.05	10.75	0.446	1.20	2.0
W230050		12.9	162.0	0.002	0.17	0.34	17.9	1	2.9	124.5	0.75	0.05	9.45	0.541	1.00	1.8
W230051		13.6	167.0	0.002	0.18	0.36	18.3	1	3.0	122.5	0.77	0.05	10.05	0.541	1.27	1.9
W230052		13.9	154.5	0.003	1.97	9.50	17.5	1	5.1	237	0.69	0.06	10.55	0.415	10.55	2.1
W230053		4.4	32.8	0.004	0.88	0.82	3.9	1	1.5	1320	0.15	<0.05	2.30	0.085	2.97	2.2
W230054		10.5	81.8	0.003	2.62	23.6	9.0	1	1.5	316	0.42	<0.05	5.76	0.264	44.1	6.5
W230055		6.4	51.1	0.002	1.38	6.86	5.1	1	0.7	931	0.26	<0.05	3.75	0.144	4.35	1.9
W230056		9.6	63.9	0.002	1.75	4.63	6.5	1	0.9	838	0.34	<0.05	4.90	0.190	6.00	2.3
W230057		2.7	16.4	0.002	0.48	0.15	2.0	1	0.3	1600	0.08	<0.05	1.31	0.045	1.84	1.6
W230058		3.0	20.9	0.004	0.57	0.14	2.6	<1	0.4	1365	0.10	<0.05	1.51	0.051	2.07	1.7
W230059		2.3	14.4	0.002	0.46	0.91	1.9	<1	0.2	1785	0.07	<0.05	1.09	0.038	1.56	1.6
W230060		4.7	30.5	0.002	0.84	0.34	2.9	1	0.5	1635	0.14	<0.05	2.17	0.076	2.34	2.3
W230061		2.5	15.1	<0.002	0.48	0.17	2.0	1	0.3	1780	0.07	<0.05	1.17	0.041	1.07	1.6
W230062		1.1	6.1	<0.002	<0.01	0.05	0.2	<1	<0.2	47.5	<0.05	<0.05	0.09	<0.005	0.07	0.6
W230063		8.6	13.8	<0.002	0.45	0.22	1.6	<1	0.4	1630	0.07	<0.05	1.09	0.038	0.75	2.1
W230064		2.5	11.4	0.002	0.35	0.28	1.4	<1	0.2	1580	0.05	<0.05	0.88	0.029	0.66	2.2
W230065		10.1	69.7	0.005	1.94	0.43	8.1	1	1.0	1445	0.32	0.05	5.03	0.176	3.64	2.8
W230066		9.4	67.1	0.005	1.85	0.36	7.8	1	1.0	1495	0.32	0.05	4.88	0.167	1.23	2.4
W230067		2.8	18.3	0.002	0.56	0.18	2.4	1	0.3	1560	0.09	<0.05	1.48	0.048	0.31	1.6
W230068		3.2	20.5	0.002	0.60	0.19	2.6	1	0.3	1620	0.10	<0.05	1.58	0.051	0.35	1.7
W230069		1.7	9.8	<0.002	0.29	0.18	1.3	<1	0.2	1810	0.05	<0.05	0.84	0.026	0.13	1.6
W230070		1.6	9.2	0.002	0.29	0.18	1.2	1	0.2	1795	0.05	<0.05	0.80	0.024	0.13	1.6
W230071		1.8	10.8	0.002	0.34	0.13	1.4	1	0.2	1690	0.05	<0.05	0.90	0.028	0.13	2.0
W230072		2.4	14.8	0.002	0.44	0.16	1.9	1	0.3	1805	0.07	<0.05	1.23	0.038	0.17	2.1
W230073		2.4	15.7	0.002	0.43	0.14	1.7	1	0.4	1830	0.07	<0.05	1.19	0.038	0.16	2.3
W230074		2.1	13.4	0.003	0.36	0.12	1.7	1	0.5	2070	0.06	<0.05	1.04	0.032	0.12	2.1
W230075		1.6	11.5	0.002	0.40	0.10	1.6	1	0.2	2210	0.05	<0.05	0.81	0.031	0.08	1.8
W230076		3.0	13.4	<0.002	0.34	0.15	1.8	1	0.3	2250	0.06	<0.05	0.99	0.033	0.10	2.2
W230077		4.1	24.1	0.003	0.64	0.20	3.0	1	0.4	2240	0.11	0.05	1.89	0.061	0.19	2.6
W230078		1.4	0.9	<0.002	<0.01	0.12	0.1	<1	<0.2	52.5	<0.05	<0.05	0.07	<0.005	<0.02	0.6
W230079		2.6	14.0	<0.002	0.34	0.16	1.6	1	0.2	1730	0.05	<0.05	0.94	0.029	0.10	2.1
W230080		8.1	37.9	0.002	1.45	47.7	5.6	2	0.7	1035	0.19	0.07	3.57	0.088	26.4	8.0

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 15- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161549

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230045		135	3.6	17.9	53	85.2		<0.01
W230046		86	1.9	16.7	44	76.7		<0.01
W230047		103	2.4	19.1	149	97.4		0.01
W230048		86	1.6	19.0	266	90.6		<0.01
W230049		144	1.2	21.8	63	103.0		<0.01
W230050		139	1.3	20.7	70	102.5		<0.01
W230051		141	2.0	21.5	71	107.0		<0.01
W230052		114	4.0	21.2	71	93.2		1.12
W230053		26	0.9	13.4	19	26.4		0.05
W230054		85	7.6	17.9	49	66.0		2.52
W230055		36	2.3	16.0	29	49.5		0.42
W230056		48	3.0	16.8	40	59.1		0.35
W230057		13	0.3	9.7	15	15.1		<0.01
W230058		16	0.2	10.4	14	16.6		<0.01
W230059		12	0.6	9.8	10	12.2		0.06
W230060		21	0.7	10.3	17	24.3		0.01
W230061		12	0.3	11.2	14	13.2		<0.01
W230062		3	0.1	0.8	17	<0.5		<0.01
W230063		11	0.2	8.1	25	12.2		<0.01
W230064		10	0.3	6.8	10	9.8		<0.01
W230065		53	0.9	19.8	45	55.0		<0.01
W230066		52	0.6	22.9	110	51.3		<0.01
W230067		15	0.2	13.9	34	15.7		<0.01
W230068		16	0.2	15.1	47	17.3		<0.01
W230069		9	0.1	8.7	4	9.4		<0.01
W230070		8	0.1	8.9	18	8.0		<0.01
W230071		10	0.1	11.2	9	9.2		<0.01
W230072		12	0.2	12.8	10	12.4		<0.01
W230073		12	0.1	12.0	10	12.6		<0.01
W230074		10	0.1	12.1	10	10.5		<0.01
W230075		9	0.1	11.0	4	9.1		<0.01
W230076		11	0.2	12.3	7	11.4		<0.01
W230077		20	0.2	14.6	16	19.4		<0.01
W230078		2	0.1	0.8	19	<0.5		<0.01
W230079		11	0.1	9.3	5	10.4		<0.01
W230080		33	18.4	16.1	26	32.2	1.410	2.84

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 15- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17161549

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 17- SEP- 2017
Account: RCM

CERTIFICATE WH17161492

Project: Nadaleen

P.O. No.: N17- 055

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 2- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

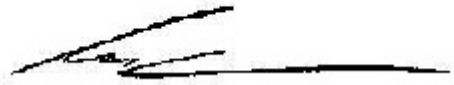
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17161492

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229865		7.86	0.38	1.17	>10000	60	0.40	0.05	18.65	0.25	17.65	2.8	16	2.31	8.7	0.74
W229866		7.60	0.27	1.28	>10000	50	0.34	0.05	18.60	0.07	18.35	2.8	13	3.20	9.0	0.63
W229867		7.91	0.32	0.91	>10000	40	0.29	0.04	18.65	0.05	16.70	2.4	11	2.42	8.1	1.07
W229868		4.83	0.01	0.06	76.1	30	0.07	0.03	19.60	0.06	1.01	0.7	1	0.56	2.0	0.47
W229869		8.14	0.26	1.41	8580	60	0.37	0.06	18.60	0.05	18.90	3.1	17	4.40	10.9	0.77
W229870		4.09	0.78	3.31	>10000	120	0.72	0.12	12.80	0.30	43.6	6.7	41	8.94	23.0	1.75
W229871		0.26	0.18	3.77	6230	200	0.77	0.13	12.35	0.16	41.9	11.5	45	10.30	35.9	2.97
W229872		3.87	0.11	2.47	494	110	0.69	0.08	22.3	0.06	28.2	4.4	26	9.07	12.9	1.02
W229873		8.30	0.08	2.11	248	150	0.45	0.07	21.0	0.11	26.4	4.3	22	8.35	15.2	1.97
W229874		7.74	0.12	4.00	74.0	230	1.16	0.11	12.85	0.06	49.1	6.5	46	28.0	23.1	1.93
W229875		6.55	0.08	4.39	68.0	240	1.28	0.11	13.10	0.07	52.0	7.6	47	37.7	23.2	1.90
W229876		7.27	0.10	2.25	1045	120	0.72	0.07	25.5	0.05	25.0	3.9	25	14.65	13.3	0.90
W229877		<0.02	0.10	2.34	789	120	0.72	0.07	25.7	0.06	26.0	4.0	26	16.55	13.4	0.91
W229878		7.24	0.04	1.20	135.0	90	0.40	0.04	27.3	0.06	17.05	2.4	13	7.36	6.0	1.07
W229879		7.17	1.02	3.41	247	160	0.80	0.09	19.65	0.09	40.8	5.7	36	22.7	16.8	1.49
W229880		3.69	0.44	3.16	483	260	0.78	0.08	11.95	0.04	41.1	4.8	33	18.75	12.7	1.44
W229881		7.21	2.81	3.17	>10000	160	0.76	0.09	11.75	0.16	42.9	5.4	37	9.54	15.2	1.47
W229882		7.88	1.25	3.26	>10000	230	0.73	0.10	12.25	0.15	40.8	5.6	35	10.75	17.7	1.40
W229883		6.98	0.41	2.84	>10000	100	0.51	0.11	6.64	0.28	29.4	4.5	40	6.60	18.4	1.43
W229884		4.94	<0.01	0.07	80.4	70	0.06	0.04	20.3	0.07	1.10	0.7	1	0.68	1.5	0.51
W229885		7.68	0.12	1.99	>10000	550	0.44	0.06	12.00	0.13	26.0	2.9	26	4.86	10.4	0.87
W229886		0.26	1.68	1.76	>10000	90	0.16	0.48	6.95	0.86	29.8	6.3	44	3.11	26.7	2.49
W229887		6.18	0.06	1.41	7490	90	0.32	0.04	15.20	0.03	18.60	2.0	17	4.19	5.8	0.65
W229888		7.05	0.17	1.67	139.0	200	0.57	0.06	20.6	0.07	22.3	2.9	17	6.29	13.8	0.76
W229889		7.19	0.11	1.13	2460	70	0.36	0.05	18.20	0.32	16.80	2.1	14	3.70	8.6	0.67
W229890		7.61	0.09	1.19	478	50	0.38	0.04	17.70	0.04	18.50	2.2	14	3.74	6.1	0.59
W229891		7.90	0.08	2.47	347	90	0.84	0.09	14.40	0.03	26.7	4.2	25	10.05	15.0	0.96
W229892		5.68	0.09	2.60	169.5	100	0.99	0.08	14.10	0.04	27.8	3.9	24	11.80	16.3	0.91
W229893		2.56	0.07	2.54	150.0	100	1.04	0.08	13.75	0.04	27.6	4.0	24	11.50	16.0	0.87
W229894		4.62	0.03	0.22	>10000	10	0.13	0.03	19.60	0.16	5.56	0.8	4	0.46	3.2	0.99
W229895		5.45	0.07	0.48	>10000	30	0.23	0.04	20.5	0.02	7.20	1.3	5	1.08	6.4	1.38
W229896		7.06	0.07	0.47	5360	30	0.21	0.04	19.80	0.03	7.96	1.5	5	0.95	5.3	2.05
W229897		8.36	0.07	0.61	482	30	0.25	0.05	19.90	0.03	8.79	1.4	6	1.51	4.7	1.44
W229898		5.38	0.10	0.54	2120	40	0.19	0.05	20.2	0.07	7.18	1.4	6	0.92	5.8	1.74
W229899		8.65	0.06	0.36	3550	40	0.20	0.04	21.4	0.31	5.96	0.9	4	0.54	4.4	1.10
W229900		7.84	0.03	0.46	942	30	0.20	0.04	20.6	0.03	7.42	1.3	4	0.97	5.8	0.85

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Finalized Date: 17- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161492

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229865		3.34	0.08	0.7	2.08	0.019	0.62	9.1	14.9	7.86	817	0.56	0.02	2.0	7.3	190
W229866		3.54	0.08	0.8	1.015	0.013	0.68	9.5	12.2	10.00	2090	0.42	0.01	2.2	7.4	170
W229867		2.54	0.07	0.5	1.480	0.016	0.47	8.1	9.5	9.41	1740	0.35	0.01	1.5	6.1	130
W229868		0.23	0.13	<0.1	0.016	<0.005	0.03	0.5	3.8	12.65	211	0.05	0.01	0.2	1.6	160
W229869		3.89	0.09	0.8	2.82	0.012	0.76	9.5	10.2	8.60	621	0.65	0.01	2.5	8.2	220
W229870		8.60	0.10	1.6	12.95	0.023	1.82	23.6	17.0	2.84	818	1.20	0.02	5.1	18.6	550
W229871		9.97	0.07	1.9	15.15	0.034	1.85	21.6	13.1	2.63	1200	1.85	0.02	5.8	26.3	440
W229872		6.35	0.08	1.2	2.40	0.019	1.38	15.5	13.9	1.52	434	0.59	0.01	3.9	12.3	330
W229873		5.37	0.07	1.0	0.995	0.016	1.23	14.0	12.1	4.23	332	0.84	0.01	3.3	11.1	260
W229874		10.30	0.10	2.1	0.476	0.033	2.51	25.0	29.8	3.75	234	1.12	0.03	6.5	17.4	560
W229875		11.20	0.11	2.1	0.336	0.033	2.70	26.9	32.9	3.14	215	0.87	0.03	6.8	19.5	600
W229876		5.80	0.09	0.8	0.552	0.015	1.29	13.0	12.7	1.29	192	0.77	0.01	3.2	10.1	370
W229877		5.98	0.10	0.9	0.564	0.014	1.32	14.4	13.0	1.33	191	0.68	0.01	3.3	10.5	380
W229878		3.03	0.07	0.7	0.481	0.009	0.69	8.8	6.7	2.37	266	0.40	0.01	1.8	6.4	200
W229879		8.75	0.10	2.0	3.53	0.021	1.88	21.4	13.3	1.82	431	0.56	0.02	5.7	14.9	410
W229880		7.91	0.10	2.7	2.53	0.021	1.72	21.9	12.0	2.57	552	0.57	0.02	5.4	11.9	390
W229881		8.28	0.10	2.5	4.85	0.020	1.68	22.2	13.8	3.61	1520	0.97	0.02	5.4	14.9	410
W229882		8.49	0.09	1.8	9.71	0.023	1.70	21.7	12.9	2.29	907	1.29	0.01	5.0	15.2	510
W229883		7.57	0.07	1.9	17.15	0.021	1.48	14.7	12.1	3.55	754	2.13	0.01	4.8	12.8	640
W229884		0.27	0.13	<0.1	0.025	<0.005	0.04	0.6	1.2	13.00	218	0.06	0.01	0.2	1.6	160
W229885		5.28	0.10	1.5	8.84	0.016	1.02	13.7	8.7	6.52	1290	0.81	0.01	3.5	7.4	400
W229886		5.10	0.07	0.8	15.40	0.027	0.81	14.9	19.8	0.17	338	5.94	0.01	2.5	18.8	480
W229887		3.55	0.08	1.5	1.720	0.014	0.73	9.0	5.9	7.73	565	0.59	0.01	2.5	4.9	330
W229888		4.31	0.11	1.1	4.14	0.014	0.90	11.3	6.9	6.53	361	1.72	0.01	2.8	7.8	280
W229889		2.85	0.11	0.8	1.740	0.008	0.57	8.8	5.3	10.75	355	0.94	0.01	1.8	5.3	200
W229890		3.10	0.14	0.8	0.901	0.008	0.63	9.0	5.4	11.25	348	0.50	0.01	1.9	5.5	270
W229891		6.28	0.10	1.4	0.663	0.021	1.30	12.9	14.9	8.74	245	0.57	0.02	3.7	8.9	360
W229892		6.66	0.10	1.5	0.672	0.016	1.37	14.7	18.6	8.42	233	0.68	0.02	4.0	8.9	380
W229893		6.49	0.10	1.5	0.740	0.017	1.34	14.8	17.9	8.31	224	0.76	0.02	4.0	9.1	380
W229894		0.62	0.07	0.1	0.426	<0.005	0.11	3.6	1.6	11.95	648	0.59	0.02	0.4	2.1	200
W229895		1.17	0.07	0.2	1.105	0.007	0.24	4.4	3.0	12.25	784	0.40	0.02	0.7	3.7	210
W229896		1.16	0.05	0.2	1.645	0.005	0.23	4.9	3.0	11.90	771	0.31	0.01	0.7	4.6	130
W229897		1.54	0.05	0.3	1.315	<0.005	0.30	4.9	4.4	12.05	734	0.43	0.02	1.0	4.0	120
W229898		1.31	0.05	0.3	1.535	0.005	0.25	4.2	3.4	12.20	815	0.58	0.02	0.9	4.3	150
W229899		0.90	0.07	0.2	1.515	<0.005	0.16	3.4	1.9	11.75	778	0.27	0.01	0.6	2.7	240
W229900		1.28	0.09	0.3	1.350	0.005	0.23	3.7	2.6	12.55	677	0.07	0.02	0.7	4.3	680

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161492

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229865		8.7	23.0	<0.002	1.70	54.2	2.0	2	0.5	219	0.14	0.05	2.51	0.059	5.44	13.0
W229866		8.7	26.0	<0.002	0.89	28.5	2.5	2	0.5	127.5	0.16	<0.05	2.76	0.065	3.02	14.0
W229867		7.8	16.8	<0.002	1.45	67.5	2.0	2	0.4	119.5	0.11	0.05	1.94	0.044	4.82	9.4
W229868		1.7	2.2	<0.002	0.01	0.46	0.2	1	0.2	45.7	<0.05	<0.05	0.07	<0.005	0.04	0.7
W229869		10.9	30.1	<0.002	0.88	26.2	2.3	2	0.6	152.0	0.18	<0.05	2.99	0.070	10.50	17.3
W229870		18.3	68.4	0.002	1.84	58.9	3.8	3	1.3	235	0.38	<0.05	6.53	0.153	49.9	40.1
W229871		10.8	82.0	<0.002	2.65	23.1	9.6	2	1.7	310	0.42	0.06	5.52	0.276	43.7	6.1
W229872		8.0	55.1	<0.002	0.65	4.50	4.0	1	0.8	438	0.28	<0.05	4.77	0.117	8.20	12.7
W229873		7.4	43.2	<0.002	0.59	0.98	3.4	2	0.8	352	0.23	<0.05	3.95	0.100	1.90	10.5
W229874		8.0	93.1	<0.002	0.40	0.40	6.2	2	1.4	264	0.46	<0.05	7.92	0.195	0.98	5.8
W229875		7.8	105.0	<0.002	0.39	0.37	6.8	2	1.5	236	0.50	<0.05	8.26	0.204	0.75	5.7
W229876		6.8	49.4	<0.002	0.48	2.37	3.6	1	0.8	635	0.24	<0.05	3.87	0.096	1.54	13.4
W229877		7.1	50.9	<0.002	0.47	2.00	3.7	1	0.7	657	0.24	<0.05	4.01	0.098	1.63	13.7
W229878		4.6	25.2	<0.002	0.33	0.54	1.9	1	0.4	671	0.13	<0.05	2.18	0.054	1.37	11.0
W229879		9.6	76.4	<0.002	1.09	10.65	5.2	2	1.1	378	0.42	<0.05	6.89	0.172	12.80	9.2
W229880		10.4	68.0	<0.002	0.82	8.31	4.6	2	1.1	200	0.40	<0.05	6.73	0.159	10.00	5.9
W229881		11.3	68.0	<0.002	1.96	70.4	5.0	3	1.2	189.5	0.40	<0.05	7.01	0.161	17.65	9.8
W229882		10.6	71.2	<0.002	2.04	62.1	4.7	2	1.1	172.0	0.36	0.05	6.29	0.151	22.4	11.2
W229883		13.4	59.3	0.002	2.21	42.0	2.9	2	1.1	100.5	0.35	<0.05	5.39	0.142	34.2	31.9
W229884		1.4	2.9	<0.002	0.01	0.23	0.1	1	<0.2	48.7	<0.05	<0.05	0.09	<0.005	0.16	0.7
W229885		6.2	40.8	<0.002	1.84	37.8	2.6	2	0.8	90.3	0.25	<0.05	4.03	0.101	15.50	17.4
W229886		9.8	40.4	0.002	4.67	160.5	2.9	2	1.2	331	0.18	0.15	2.88	0.100	42.2	4.2
W229887		3.0	24.5	<0.002	0.56	11.80	2.1	1	0.5	70.2	0.19	<0.05	3.36	0.076	2.71	9.2
W229888		6.8	31.7	<0.002	0.41	0.52	2.6	2	0.7	221	0.20	<0.05	3.47	0.082	1.57	11.4
W229889		6.0	17.8	<0.002	0.46	4.86	1.8	1	0.6	83.4	0.13	<0.05	2.29	0.055	3.00	11.8
W229890		5.5	19.4	0.002	0.31	1.29	1.9	1	0.4	81.0	0.14	<0.05	2.33	0.058	1.47	10.9
W229891		8.2	42.3	<0.002	0.57	0.38	3.6	1	0.9	76.9	0.26	<0.05	4.72	0.114	1.13	9.2
W229892		8.4	46.8	<0.002	0.51	0.50	3.8	2	0.9	89.6	0.29	<0.05	4.98	0.124	1.45	9.9
W229893		8.0	45.7	<0.002	0.52	0.47	3.6	1	0.8	84.4	0.28	<0.05	4.88	0.122	1.51	9.8
W229894		3.3	3.3	<0.002	0.71	9.33	0.4	1	0.2	64.1	<0.05	<0.05	0.49	0.011	0.74	7.1
W229895		8.4	7.3	<0.002	1.11	10.25	0.7	1	0.2	90.7	0.05	<0.05	0.94	0.022	2.77	12.6
W229896		13.2	6.7	<0.002	1.80	5.68	0.7	1	0.2	93.2	0.05	<0.05	0.91	0.022	4.08	12.5
W229897		10.0	8.7	<0.002	0.75	1.05	1.0	1	0.2	93.1	0.07	<0.05	1.26	0.030	2.27	13.6
W229898		10.4	7.4	<0.002	1.14	2.92	0.9	1	0.3	92.9	0.06	<0.05	1.08	0.027	3.21	14.0
W229899		5.6	4.8	<0.002	0.61	3.31	0.6	1	0.2	98.0	<0.05	<0.05	0.71	0.017	2.13	10.7
W229900		9.3	7.4	<0.002	0.27	2.60	0.9	1	0.2	84.2	0.05	<0.05	0.86	0.023	1.61	3.2

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 17- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17161492

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229865		21	1.7	5.0	23	25.9	2.65	2.38
W229866		22	1.6	5.5	7	28.9	1.085	0.86
W229867		17	1.1	5.4	9	18.4	2.28	1.44
W229868		2	0.1	0.7	16	<0.5		<0.01
W229869		26	1.7	4.9	14	29.3		0.94
W229870		62	3.5	7.1	137	59.7	1.265	3.53
W229871		83	7.9	17.9	49	70.5		2.46
W229872		37	2.4	7.9	30	46.4		0.16
W229873		36	0.9	7.5	72	38.4		0.03
W229874		68	0.8	13.1	37	81.2		0.01
W229875		76	0.9	13.6	40	82.8		<0.01
W229876		44	1.2	6.4	38	30.2		0.04
W229877		45	1.3	6.5	39	32.8		0.03
W229878		23	0.7	5.1	22	23.0		0.02
W229879		52	3.7	10.9	29	75.2		1.09
W229880		41	3.0	11.6	21	97.9		0.78
W229881		50	3.9	11.0	28	94.7	2.20	4.52
W229882		53	4.6	9.4	25	64.5	2.57	2.87
W229883		59	5.4	7.0	37	70.6	2.70	0.65
W229884		2	0.1	0.7	19	0.6		<0.01
W229885		40	3.3	6.0	19	57.6	3.02	0.36
W229886		35	8.1	15.5	65	31.2	7.08	8.50
W229887		27	1.7	6.8	3	57.1		0.07
W229888		34	2.2	7.0	10	43.7		0.01
W229889		25	1.7	5.1	25	27.8		0.09
W229890		27	1.2	5.8	5	27.6		0.02
W229891		44	1.3	8.4	6	54.4		0.01
W229892		45	1.5	8.8	8	60.7		0.01
W229893		44	1.4	8.7	9	59.3		0.03
W229894		7	0.3	2.3	26	5.0	1.155	0.01
W229895		8	0.7	3.0	4	7.7	1.010	0.10
W229896		8	0.8	2.8	7	8.0		0.02
W229897		11	1.0	3.0	4	12.1		0.01
W229898		17	0.9	2.7	15	10.5		0.06
W229899		8	0.7	3.6	46	12.2		0.04
W229900		8	0.4	5.1	5	9.7		0.01

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 17- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17161492

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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CERTIFICATE WH17171146

Project: Nadaleen

P.O. No.: N17- 056

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 9- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
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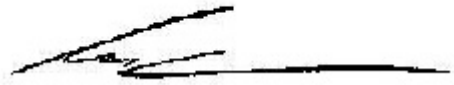
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17171146

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230081		12.29	0.04	0.89	12.9	220	0.31	0.07	34.5	0.09	14.25	2.7	10	3.88	8.3	0.76
W230082		12.01	0.03	1.26	15.1	230	0.39	0.09	33.4	0.12	22.0	3.9	14	6.78	11.6	0.96
W230083		11.31	0.01	0.49	9.3	130	0.23	0.04	35.6	0.05	8.53	1.6	5	1.74	4.7	0.42
W230084		9.82	0.02	1.00	25.6	140	0.41	0.07	32.8	0.08	18.20	3.1	11	3.61	8.8	0.77
W230085		7.40	0.06	4.75	67.6	320	1.22	0.24	20.1	0.32	65.7	14.0	50	27.1	40.8	2.82
W230086		10.18	0.04	3.21	35.0	290	0.80	0.16	23.9	0.21	44.0	10.3	36	14.30	29.7	2.18
W230087		11.13	0.02	1.40	20.4	180	0.42	0.09	32.4	0.13	23.6	4.5	15	4.99	12.8	1.19
W230088		11.28	0.03	2.27	61.2	290	0.67	0.13	27.8	0.22	35.5	7.1	23	7.82	19.5	1.57
W230089		11.30	0.08	2.17	>10000	180	0.55	0.13	24.9	0.16	36.3	7.0	25	7.87	19.0	1.61
W230090		<0.02	0.08	2.17	>10000	180	0.59	0.12	24.6	0.16	36.7	7.0	25	8.00	19.1	1.62
W230091		11.30	0.17	0.92	>10000	140	0.21	0.06	33.7	0.14	17.40	2.9	10	2.33	8.1	0.72
W230092		9.38	0.58	1.69	>10000	210	0.30	0.10	28.7	0.22	27.5	5.8	18	2.99	18.7	1.17
W230093		4.68	0.59	2.67	>10000	270	0.44	0.14	25.8	0.28	38.3	8.5	28	5.01	27.3	1.58
W230094		7.18	3.49	2.92	>10000	120	0.46	0.18	3.51	0.64	35.1	9.6	35	4.51	33.1	2.09
W230095		7.07	0.08	0.05	53.3	70	0.06	0.07	20.6	0.06	1.01	0.7	<1	0.10	4.5	0.46
W230096		12.40	0.78	1.71	515	200	0.35	0.10	29.6	0.20	26.6	6.1	18	3.96	18.6	1.19
W230097		10.78	1.11	1.99	471	200	0.41	0.11	26.9	0.25	28.2	6.6	21	4.39	20.8	1.35
W230098		8.32	0.43	1.32	252	180	0.36	0.09	29.4	0.16	25.7	4.7	13	3.07	14.6	0.92
W230099		8.60	0.43	2.06	225	190	0.49	0.13	27.5	0.23	31.1	7.9	20	5.68	23.5	1.26
W230100		0.28	0.65	4.58	9110	260	0.89	0.24	3.69	0.52	48.5	14.6	61	13.05	61.7	4.37
W230101		11.56	0.51	2.57	394	210	0.56	0.14	27.0	0.22	37.2	8.8	25	7.77	26.9	1.66
W230102		11.31	0.25	2.65	323	200	0.61	0.16	28.4	0.23	40.8	8.9	25	8.05	27.7	1.75
W230103		11.48	0.03	1.27	95.1	150	0.38	0.08	31.1	0.13	20.1	4.4	13	3.72	13.5	0.95
W230104		11.35	0.03	1.46	2220	160	0.42	0.09	31.4	0.17	23.1	4.6	14	3.95	14.0	0.95
W230105		12.57	0.03	1.56	95.8	170	0.43	0.10	32.5	0.29	22.5	5.5	16	4.85	17.7	1.01
W230106		11.97	0.02	1.07	70.2	140	0.45	0.07	32.9	0.15	17.50	3.6	11	3.17	10.9	0.78
W230107		11.57	0.01	0.28	15.8	130	0.24	0.04	36.3	0.06	6.84	1.3	4	0.64	3.8	0.43
W230108		11.03	0.01	0.47	20.5	120	0.25	0.04	35.5	0.08	8.48	1.8	5	1.20	5.7	0.45
W230109		5.01	0.01	0.45	23.0	160	0.26	0.04	36.3	0.08	8.17	1.8	5	1.06	5.6	0.45
W230110		12.07	0.03	1.74	50.0	260	0.52	0.11	29.6	0.24	27.0	5.8	18	6.62	18.1	1.15
W230111		5.66	0.03	1.70	67.2	310	0.47	0.10	30.9	0.17	30.0	5.9	17	5.64	17.5	1.17
W230112		6.62	0.21	1.63	253	200	0.42	0.09	31.1	0.18	26.1	5.2	16	5.22	14.8	1.03
W230113		7.96	4.41	3.22	>10000	110	0.54	0.18	4.60	1.82	41.2	9.9	38	7.05	32.3	2.23
W230114		7.08	0.04	0.04	48.0	20	<0.05	0.05	20.5	0.07	1.03	0.7	1	0.10	2.8	0.46
W230115		10.41	0.10	1.42	341	170	0.42	0.09	31.2	0.18	23.7	4.4	13	4.66	13.9	0.86
W230116		0.26	1.61	3.20	>10000	120	0.62	0.29	8.30	0.79	43.2	11.3	46	9.11	34.3	3.19

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 17- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17171146

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230081		2.01	<0.05	0.5	0.092	0.010	0.49	7.1	5.7	0.68	234	0.64	0.02	1.2	5.3	450
W230082		2.89	0.05	0.6	0.123	0.013	0.63	10.2	7.9	0.81	329	0.90	0.02	1.7	7.4	670
W230083		1.18	<0.05	0.2	0.064	0.006	0.23	4.1	3.6	0.58	296	0.26	0.01	0.7	2.9	460
W230084		2.32	<0.05	0.5	0.302	0.012	0.48	8.7	4.6	0.92	370	0.76	0.01	1.4	6.0	640
W230085		11.35	0.08	2.4	0.692	0.052	2.27	34.7	17.2	1.47	566	2.18	0.03	6.7	27.4	300
W230086		7.69	0.06	1.7	0.366	0.036	1.52	22.2	12.7	1.12	427	0.94	0.02	4.5	19.6	360
W230087		3.30	<0.05	0.7	0.135	0.015	0.67	11.1	5.6	0.64	393	0.41	0.01	1.9	8.2	740
W230088		5.35	0.05	1.2	1.030	0.024	1.07	17.9	8.9	0.84	340	0.67	0.02	3.4	13.2	510
W230089		5.22	0.07	1.1	4.96	0.042	1.01	19.0	8.5	0.70	313	0.56	0.02	3.2	12.9	710
W230090		5.21	0.08	1.2	4.88	0.041	1.02	18.8	8.7	0.70	313	0.54	0.02	3.2	12.9	760
W230091		2.15	0.05	0.5	3.14	0.014	0.43	8.4	3.5	0.73	435	0.26	0.01	1.3	5.1	670
W230092		4.27	0.05	0.9	7.33	0.023	0.78	14.6	4.6	0.82	477	0.76	0.01	2.4	11.6	320
W230093		6.74	0.06	1.3	7.45	0.024	1.24	20.4	7.5	0.98	462	0.85	0.02	3.8	14.6	280
W230094		7.46	0.09	1.4	16.70	0.031	1.28	18.3	21.4	0.57	257	1.10	0.01	3.8	17.5	3170
W230095		0.16	0.09	<0.1	0.036	0.008	0.02	0.5	0.9	12.85	195	0.19	<0.01	0.1	1.3	180
W230096		4.35	0.06	0.9	7.07	0.018	0.78	14.0	6.6	0.77	522	0.67	0.01	2.4	10.8	630
W230097		5.01	0.06	1.0	8.35	0.016	0.87	14.7	7.7	0.73	502	0.62	0.01	2.8	11.5	420
W230098		3.55	0.07	0.7	4.28	0.013	0.61	13.7	5.2	0.54	333	0.52	0.01	2.0	8.7	260
W230099		5.67	0.07	1.0	4.19	0.019	0.93	17.0	7.8	0.80	299	0.97	0.01	3.0	12.9	170
W230100		12.25	0.08	2.2	24.3	0.027	2.09	26.2	18.4	0.32	569	5.62	0.02	6.9	35.7	460
W230101		6.86	0.06	1.3	6.63	0.027	1.14	19.8	8.3	0.64	530	0.88	0.02	3.8	15.5	230
W230102		7.19	0.05	1.3	5.58	0.028	1.19	21.4	7.8	0.74	582	0.85	0.02	4.0	15.7	240
W230103		3.37	0.05	0.6	1.795	0.014	0.58	10.0	5.2	0.79	295	0.34	0.01	1.9	7.6	360
W230104		3.67	0.05	0.7	1.370	0.015	0.67	11.0	5.6	0.68	290	0.40	0.01	2.0	7.6	180
W230105		4.24	0.05	0.8	1.735	0.013	0.73	10.9	6.8	0.77	199	0.67	0.01	2.4	10.1	210
W230106		2.83	0.05	0.6	0.967	0.013	0.48	8.0	4.7	0.59	338	0.29	0.01	1.6	5.9	880
W230107		0.75	0.05	0.2	0.051	<0.005	0.13	3.1	1.9	0.55	372	0.14	0.01	0.5	2.2	880
W230108		1.28	<0.05	0.3	0.179	0.006	0.22	4.0	2.6	0.54	456	0.19	0.01	0.7	2.8	1170
W230109		1.21	<0.05	0.2	0.179	<0.005	0.20	3.8	2.5	0.56	444	0.17	0.01	0.7	2.7	1230
W230110		4.51	0.07	0.8	0.459	0.019	0.80	13.3	7.3	0.82	151	0.53	0.02	2.6	10.1	470
W230111		4.25	0.06	0.8	1.085	0.019	0.76	14.7	7.3	0.87	178	0.53	0.02	2.4	10.1	280
W230112		4.29	0.06	0.9	1.885	0.016	0.75	13.0	8.0	0.56	232	0.45	0.02	2.6	9.0	320
W230113		8.78	0.11	1.5	10.85	0.036	1.43	21.1	30.4	0.31	270	0.83	0.01	4.6	18.6	460
W230114		0.17	0.11	<0.1	0.028	0.005	0.02	0.5	0.9	13.05	201	0.07	<0.01	0.1	1.5	180
W230115		3.83	0.07	0.7	2.03	0.016	0.62	12.0	6.5	0.45	213	0.35	0.01	2.2	7.5	220
W230116		8.48	0.08	1.7	21.9	0.036	1.49	23.2	18.2	2.04	1120	4.39	0.02	4.8	24.4	340

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 17- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17171146

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230081		3.7	21.5	0.002	0.55	0.21	2.4	1	0.4	2240	0.09	0.05	1.49	0.052	0.17	2.0
W230082		4.8	29.1	0.002	0.78	0.25	2.8	1	0.5	2040	0.13	<0.05	2.09	0.072	0.25	3.1
W230083		1.9	9.7	<0.002	0.30	0.14	1.1	1	0.2	1650	0.05	<0.05	0.80	0.027	0.10	1.8
W230084		4.4	19.1	0.003	0.62	0.44	2.6	1	0.4	1680	0.11	<0.05	1.66	0.056	0.45	2.5
W230085		16.8	96.9	0.009	2.54	1.07	10.3	2	1.7	1290	0.51	0.09	7.32	0.285	1.70	3.9
W230086		9.6	67.2	0.002	1.80	0.55	7.6	1	1.1	1600	0.34	0.06	4.64	0.223	1.30	2.9
W230087		4.6	29.8	0.002	0.82	0.22	3.6	1	0.5	1990	0.15	0.06	2.13	0.088	1.09	2.1
W230088		7.6	47.7	0.002	1.41	0.55	4.9	1	0.8	1460	0.26	0.06	3.59	0.151	2.98	2.8
W230089		7.2	45.5	0.003	4.75	128.0	5.6	6	0.8	1540	0.25	0.15	3.39	0.145	15.65	2.4
W230090		7.3	45.7	0.003	4.70	126.5	5.5	5	0.8	1510	0.25	0.13	3.51	0.146	16.15	2.5
W230091		3.2	18.0	<0.002	1.33	37.6	2.2	2	0.4	1910	0.10	0.07	1.44	0.060	9.10	2.0
W230092		6.7	34.7	0.002	1.88	43.6	4.6	3	0.5	1600	0.18	0.05	2.60	0.110	20.9	3.0
W230093		8.7	53.7	0.004	1.99	31.0	5.9	2	1.0	1570	0.28	0.08	4.02	0.163	19.70	3.6
W230094		11.6	60.1	0.003	6.59	265	2.1	6	1.2	828	0.27	0.21	4.38	0.167	57.4	6.2
W230095		1.7	0.8	<0.002	<0.01	0.22	0.1	1	<0.2	46.8	<0.05	<0.05	0.10	<0.005	0.05	0.5
W230096		6.2	36.3	0.002	1.13	17.20	4.1	2	0.6	1600	0.18	0.09	2.75	0.105	22.1	3.0
W230097		6.8	39.0	0.003	1.35	23.7	4.4	1	0.7	1440	0.20	0.08	3.12	0.121	32.1	3.1
W230098		5.1	28.6	0.002	0.87	11.45	3.7	1	0.5	1960	0.15	0.07	2.32	0.084	17.20	3.0
W230099		7.2	44.3	0.003	1.20	8.23	4.5	1	0.7	1990	0.21	0.10	3.32	0.116	15.15	3.1
W230100		16.7	96.7	0.003	4.27	100.5	7.9	1	2.3	238	0.51	0.14	6.69	0.302	96.0	4.2
W230101		8.8	54.1	0.003	1.59	12.95	6.8	1	0.9	1630	0.26	0.08	4.11	0.148	23.9	3.1
W230102		9.6	55.9	0.004	1.63	9.19	7.8	2	0.9	1930	0.29	0.08	4.35	0.153	20.0	3.3
W230103		4.4	27.8	<0.002	0.82	0.97	3.6	1	0.4	1540	0.14	<0.05	2.05	0.079	4.92	2.1
W230104		4.8	31.1	<0.002	1.00	3.53	4.2	1	0.5	1810	0.15	<0.05	2.27	0.085	4.35	2.7
W230105		5.7	35.5	0.002	1.00	1.66	3.4	1	0.5	2170	0.18	<0.05	2.44	0.096	4.59	2.9
W230106		3.8	23.5	<0.002	0.69	1.09	3.0	1	0.4	1890	0.11	<0.05	1.74	0.065	2.25	2.2
W230107		1.3	6.2	<0.002	0.24	0.18	1.2	1	<0.2	1970	<0.05	<0.05	0.56	0.017	0.23	1.5
W230108		1.9	10.4	<0.002	0.32	0.25	1.5	1	0.2	1700	0.05	<0.05	0.81	0.029	0.24	1.5
W230109		1.8	9.6	<0.002	0.32	0.24	1.5	1	0.2	1760	0.05	<0.05	0.79	0.027	0.21	1.4
W230110		6.3	38.6	0.003	1.03	0.58	4.4	1	0.6	2280	0.19	0.05	2.87	0.103	2.42	3.5
W230111		6.1	35.8	0.002	1.06	0.66	4.5	1	0.6	2010	0.17	<0.05	2.86	0.098	4.40	3.5
W230112		5.5	36.6	0.002	1.00	2.62	4.4	1	0.5	2220	0.17	0.05	2.69	0.103	4.97	3.0
W230113		12.3	70.2	0.003	7.48	368	3.7	11	0.9	620	0.32	0.36	4.79	0.198	26.0	4.6
W230114		1.4	0.8	<0.002	<0.01	0.20	0.1	1	<0.2	47.6	<0.05	<0.05	0.05	<0.005	0.03	0.5
W230115		4.8	30.8	<0.002	0.81	4.05	3.9	1	0.5	1930	0.16	<0.05	2.33	0.088	5.97	2.7
W230116		20.9	70.9	0.003	5.42	211	6.2	4	1.4	195.5	0.35	0.15	5.14	0.192	75.1	6.7

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 17- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17171146

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W230081		17	0.2	11.0	11	16.7		<0.01
W230082		23	0.3	13.3	17	22.4		<0.01
W230083		10	0.1	6.9	5	8.8		<0.01
W230084		19	0.4	11.9	9	18.5		<0.01
W230085		85	1.5	23.8	74	81.4		<0.01
W230086		64	0.8	21.0	49	54.7		<0.01
W230087		26	0.3	16.0	21	25.6		<0.01
W230088		41	1.5	19.1	38	42.3		<0.01
W230089		42	1.2	22.1	35	39.6	7.28	<0.01
W230090		42	1.2	21.7	34	39.7	7.32	<0.01
W230091		17	0.6	13.6	17	18.6	1.575	<0.01
W230092		30	1.1	21.1	34	30.8	1.680	0.25
W230093		46	1.5	21.7	44	44.2	1.025	0.39
W230094		53	1.9	21.9	72	54.6	10.65	11.95
W230095		2	0.1	0.7	18	<0.5		0.01
W230096		31	1.2	19.8	28	32.3		0.70
W230097		35	1.5	17.4	33	36.2		0.87
W230098		23	1.1	19.3	23	27.1		0.06
W230099		36	1.4	16.2	33	34.3		0.04
W230100		85	5.8	19.8	73	77.1		12.45
W230101		45	1.8	22.2	41	44.7		0.06
W230102		48	2.3	24.1	41	46.4		0.03
W230103		23	0.6	15.5	21	23.6		<0.01
W230104		25	0.7	17.7	22	24.1		0.01
W230105		28	0.9	13.4	26	27.5		<0.01
W230106		19	0.6	15.0	19	20.1		0.01
W230107		7	0.1	9.4	4	8.7		<0.01
W230108		9	0.1	8.0	8	12.5		<0.01
W230109		9	0.1	7.8	7	11.8		<0.01
W230110		30	0.6	20.8	28	31.4		<0.01
W230111		30	0.4	20.0	25	27.9		<0.01
W230112		28	0.8	19.7	25	30.5		0.16
W230113		58	2.8	18.6	153	51.8	12.60	6.07
W230114		2	0.1	0.7	17	<0.5		<0.01
W230115		24	1.2	17.5	22	27.1		0.04
W230116		56	6.1	20.3	119	59.1	7.80	12.65

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 17- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17171146

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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VANCOUVER BC V6B 1L8

Finalized Date: 16- SEP- 2017
Account: RCM

CERTIFICATE WH17162590

Project: Nadaleen

P.O. No.: N17- 057

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 4- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

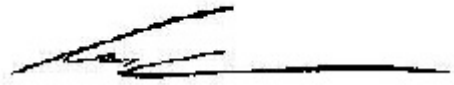
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 16- SEP- 2017
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CERTIFICATE OF ANALYSIS WH17162590

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229901		7.71	0.04	0.48	714	40	0.13	0.04	19.45	0.03	8.15	1.7	5	1.12	6.0	1.08
W229902		8.03	0.03	1.40	246	120	0.45	0.07	18.15	0.08	18.65	3.4	12	5.18	7.6	1.31
W229903		8.05	0.03	2.54	121.0	140	0.64	0.11	15.90	0.27	28.0	3.8	20	9.58	9.6	1.95
W229904		7.86	0.08	4.52	68.2	420	1.15	0.17	14.05	0.03	47.3	8.4	35	20.9	17.8	2.45
W229905		9.19	0.04	8.92	15.8	320	1.79	0.37	0.67	0.05	104.5	15.6	71	14.55	37.6	4.53
W229906		8.67	0.06	9.27	31.9	360	1.87	0.40	0.31	0.03	108.0	20.7	76	13.90	38.8	5.11
W229907		9.48	0.06	9.11	3.2	320	1.90	0.35	0.33	<0.02	104.5	15.5	74	15.30	38.3	4.49
W229908		10.90	0.05	9.26	5.9	320	1.99	0.37	0.36	<0.02	102.5	16.4	77	19.10	36.0	4.89
W229909		8.89	0.08	7.20	16.8	290	1.53	0.28	6.98	0.09	83.5	15.2	57	11.55	28.5	4.07
W229910		10.66	0.09	6.87	21.0	300	1.57	0.29	5.94	0.04	82.1	11.3	63	13.10	23.9	3.66
W229911		9.81	0.06	4.25	17.1	260	0.78	0.16	15.80	0.05	55.3	7.2	35	6.15	13.9	2.22
W229912		10.70	0.05	3.82	16.0	270	0.74	0.14	18.50	0.06	50.1	5.5	34	7.35	12.3	2.01
W229913		8.67	0.03	3.10	7.5	190	0.59	0.12	21.5	0.05	38.8	4.9	23	5.77	10.0	1.61
W229914		9.63	0.04	3.08	10.2	180	0.75	0.13	23.5	0.05	39.4	4.7	26	6.84	10.7	1.77
W229915		8.08	0.04	3.20	18.0	210	0.69	0.12	24.7	0.03	41.5	4.9	24	7.88	10.2	1.56
W229916		0.26	0.18	3.95	6540	210	0.77	0.15	12.60	0.16	43.8	11.1	45	11.50	35.3	3.06
W229917		11.35	0.04	4.28	19.1	200	0.88	0.16	19.05	0.03	52.3	6.5	35	10.95	14.5	2.05
W229918		10.94	0.04	5.15	20.3	320	1.08	0.18	18.10	0.03	56.9	8.2	41	14.10	16.6	2.02
W229919		12.38	0.07	3.92	28.2	410	0.81	0.16	19.30	0.06	48.9	6.2	32	9.31	13.3	2.45
W229920		<0.02	0.05	3.83	25.8	320	0.83	0.15	18.45	0.11	47.6	6.0	30	9.07	13.2	2.29
W229921		9.97	0.07	8.08	29.8	410	1.62	0.32	3.33	0.05	93.4	14.9	67	22.9	31.8	4.63
W229922		8.73	0.04	9.01	8.8	480	2.04	0.41	0.65	0.02	96.0	15.8	71	31.0	36.0	4.68
W229923		12.28	0.03	8.86	8.4	350	2.23	0.29	0.48	<0.02	98.0	16.8	71	29.5	28.6	5.14
W229924		6.35	0.03	7.98	182.0	330	2.16	0.28	2.88	0.05	87.7	14.1	60	24.7	30.3	4.24
W229925		6.96	<0.01	0.12	0.7	40	0.07	0.06	20.9	0.07	1.46	0.9	2	0.47	3.3	0.50
W229926		6.52	0.07	1.73	28.7	360	0.52	0.06	25.4	0.31	25.5	3.2	20	4.27	9.6	1.00
W229927		0.26	0.66	1.89	>10000	140	0.46	2.71	26.3	0.18	29.1	4.4	28	6.31	15.2	1.42
W229928		12.07	0.07	1.14	18.2	150	0.36	0.05	29.0	0.28	18.35	2.0	14	3.18	6.3	0.57
W229929		11.90	0.06	1.32	13.2	230	0.42	0.05	26.5	0.30	20.6	2.4	17	3.39	7.1	0.73
W229930		9.90	0.05	1.17	9.3	250	0.36	0.05	28.9	0.32	17.45	2.0	15	3.01	6.5	0.49
W229931		5.50	0.06	1.18	9.7	200	0.40	0.05	28.9	0.30	18.30	2.0	14	3.14	6.4	0.47
W229932		10.48	0.05	0.99	18.4	200	0.28	0.04	30.1	0.35	14.45	1.8	12	2.58	5.7	0.35
W229933		10.61	0.06	1.03	18.8	220	0.35	0.05	31.6	0.32	15.65	1.9	14	2.67	7.9	0.33
W229934		10.93	0.03	1.05	35.3	890	0.35	0.05	32.3	0.24	15.95	2.0	13	2.73	6.6	0.54
W229935		7.11	<0.01	0.05	0.8	60	<0.05	0.04	20.8	0.07	1.13	0.6	<1	0.16	2.2	0.47
W229936		12.11	0.14	2.67	45.3	500	0.99	0.10	17.10	0.11	35.3	4.8	34	9.16	21.9	1.29

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Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17162590

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229901		1.23	<0.05	0.3	1.615	0.007	0.23	4.1	2.0	11.75	559	0.13	0.02	0.8	7.0	780
W229902		3.41	0.06	0.7	0.624	0.012	0.72	9.1	4.2	10.30	437	0.29	0.02	2.1	8.1	830
W229903		5.93	0.05	1.1	0.355	0.026	1.29	14.2	7.2	8.49	324	0.31	0.02	3.5	9.5	660
W229904		10.80	0.07	2.1	0.081	0.036	2.31	25.2	10.9	4.51	563	1.06	0.03	6.3	18.3	640
W229905		21.6	0.10	2.9	0.032	0.078	2.92	54.2	91.2	1.15	732	0.28	0.20	10.8	33.6	720
W229906		22.2	0.10	3.0	0.035	0.079	2.92	57.0	97.8	1.20	464	0.48	0.20	11.3	39.5	700
W229907		22.3	0.11	3.0	0.011	0.079	3.02	54.7	108.0	1.21	336	0.14	0.20	11.2	34.6	620
W229908		23.0	0.11	3.1	0.018	0.075	3.12	53.9	129.5	1.30	389	0.18	0.21	11.4	37.2	670
W229909		17.65	0.09	2.5	0.035	0.057	2.27	43.4	93.1	1.11	568	0.61	0.18	9.1	28.3	490
W229910		17.10	0.09	2.5	0.167	0.059	2.46	42.3	85.3	1.24	493	0.43	0.15	8.9	24.5	790
W229911		9.95	0.06	1.7	0.108	0.031	1.42	28.0	36.9	1.41	431	0.27	0.11	5.4	14.6	830
W229912		8.93	0.07	1.6	0.106	0.032	1.35	25.4	44.1	0.86	217	0.47	0.11	5.0	13.1	900
W229913		7.17	0.06	1.0	0.054	0.027	1.09	19.7	39.2	0.79	177	0.27	0.09	3.5	10.3	600
W229914		7.22	0.05	1.1	0.073	0.025	1.09	20.1	33.9	0.69	230	0.40	0.13	3.8	11.1	870
W229915		7.27	0.06	1.0	0.109	0.026	1.09	21.3	32.1	0.66	202	0.27	0.14	3.7	11.1	490
W229916		9.89	0.06	2.0	15.10	0.033	1.87	22.4	9.9	2.70	1220	1.86	0.02	5.8	25.2	480
W229917		9.77	0.07	1.6	0.108	0.034	1.44	26.8	36.5	0.81	253	0.39	0.32	5.3	14.9	600
W229918		11.80	0.08	1.7	0.142	0.038	2.17	30.3	31.2	0.71	295	0.32	0.08	6.1	16.8	460
W229919		9.10	0.06	1.5	0.137	0.036	1.59	24.8	48.3	0.90	535	0.27	0.05	4.9	13.7	500
W229920		8.83	0.05	1.5	0.132	0.031	1.55	24.5	44.7	0.88	506	0.25	0.05	4.7	13.1	510
W229921		20.1	0.10	2.7	0.041	0.063	3.06	48.6	142.5	1.19	640	0.59	0.08	10.5	30.5	580
W229922		22.1	0.11	2.9	0.030	0.069	3.57	50.8	125.0	1.42	316	0.44	0.07	11.4	34.2	650
W229923		22.6	0.11	3.3	0.025	0.076	3.56	51.3	100.5	1.46	177	0.25	0.06	12.0	35.0	500
W229924		21.2	0.10	2.8	0.342	0.072	3.41	47.4	84.4	1.57	553	0.34	0.05	11.4	40.3	500
W229925		0.30	0.09	<0.1	0.009	<0.005	0.05	0.7	1.6	13.10	217	0.08	0.01	0.2	2.3	190
W229926		4.21	0.06	1.0	0.099	0.015	0.80	12.6	10.1	2.62	354	0.99	0.02	2.9	7.3	310
W229927		4.77	0.05	0.9	6.51	0.024	0.93	14.1	7.4	0.94	2300	1.72	0.01	2.5	12.7	360
W229928		2.95	0.05	0.7	0.103	0.013	0.57	9.4	4.6	1.59	124	0.75	0.01	2.1	4.9	220
W229929		3.23	<0.05	0.9	0.117	0.013	0.67	10.2	5.2	2.29	148	0.80	0.01	2.3	6.1	270
W229930		2.88	0.06	0.7	0.090	0.009	0.58	9.0	4.5	1.70	123	0.58	0.01	2.1	5.0	240
W229931		2.99	0.06	0.7	0.078	0.010	0.59	9.3	4.9	1.62	121	0.59	0.01	2.2	5.0	240
W229932		2.46	0.06	0.7	0.070	0.008	0.49	7.9	4.7	0.90	100	0.67	0.01	1.8	4.3	220
W229933		2.64	0.08	0.6	0.079	0.009	0.54	8.9	4.5	0.77	102	0.67	0.01	1.9	4.6	250
W229934		2.73	0.06	0.6	0.071	0.011	0.56	8.8	5.8	0.97	112	0.31	0.01	1.8	4.9	200
W229935		0.18	0.13	<0.1	0.011	<0.005	0.02	0.5	1.1	13.05	216	<0.05	<0.01	0.1	1.6	180
W229936		7.67	0.09	1.9	0.124	0.024	1.42	17.7	18.6	2.28	166	1.33	0.02	5.2	16.6	470

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17162590

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229901		15.6	7.8	<0.002	0.63	2.72	0.7	1	0.2	73.0	0.05	<0.05	0.86	0.023	2.39	2.9
W229902		10.1	25.9	<0.002	0.86	0.98	2.2	1	0.5	97.6	0.15	<0.05	2.47	0.068	1.61	4.3
W229903		10.1	46.8	<0.002	1.35	0.67	3.7	<1	0.9	119.5	0.26	<0.05	4.25	0.120	1.08	4.7
W229904		10.0	85.2	0.002	0.32	0.55	6.3	1	1.5	256	0.47	<0.05	7.74	0.210	0.93	8.6
W229905		22.9	136.5	<0.002	0.20	0.77	13.4	1	2.7	147.0	0.83	0.09	14.80	0.417	0.75	2.8
W229906		31.2	138.5	<0.002	0.23	1.32	14.2	1	2.8	141.0	0.87	0.06	15.65	0.431	0.92	3.1
W229907		11.0	145.0	<0.002	0.02	0.25	14.5	1	2.8	124.5	0.86	0.06	15.25	0.431	0.70	2.6
W229908		25.3	147.5	<0.002	0.09	0.40	14.8	1	2.8	115.0	0.88	0.06	15.55	0.431	0.76	3.1
W229909		42.5	108.0	<0.002	0.58	1.13	11.0	1	2.1	298	0.69	0.06	12.10	0.344	0.63	2.5
W229910		20.0	117.0	<0.002	1.88	0.58	10.8	1	2.2	267	0.67	0.05	12.05	0.330	1.03	2.8
W229911		10.4	65.9	<0.002	1.21	0.32	6.2	1	1.3	749	0.41	<0.05	7.21	0.197	0.63	2.3
W229912		10.3	62.8	<0.002	1.39	0.26	5.5	2	1.2	859	0.38	<0.05	6.71	0.185	0.63	2.4
W229913		7.2	51.1	<0.002	0.96	0.20	4.2	1	0.9	745	0.27	<0.05	4.91	0.122	0.33	1.8
W229914		7.8	53.5	<0.002	1.28	0.20	4.4	1	0.9	1010	0.28	<0.05	5.03	0.136	0.35	2.0
W229915		7.8	54.3	<0.002	1.11	0.21	4.4	1	0.9	1150	0.29	<0.05	5.19	0.131	0.49	2.1
W229916		11.0	83.2	<0.002	2.71	23.9	9.2	1	1.7	327	0.43	<0.05	5.99	0.278	45.9	6.6
W229917		10.7	73.3	<0.002	1.45	0.27	6.0	1	1.3	907	0.40	<0.05	7.23	0.193	0.50	2.5
W229918		11.5	97.4	<0.002	1.32	0.29	6.9	1	1.5	752	0.46	<0.05	8.27	0.218	0.80	2.7
W229919		15.3	69.3	<0.002	1.38	0.69	5.6	1	1.3	733	0.36	<0.05	6.69	0.176	0.85	2.3
W229920		11.9	68.1	<0.002	1.23	0.56	5.3	1	1.2	730	0.37	<0.05	6.55	0.171	0.88	2.3
W229921		37.2	127.5	<0.002	0.50	0.70	12.6	1	2.5	217	0.78	0.06	13.90	0.394	0.71	2.7
W229922		19.3	167.5	<0.002	0.10	0.27	14.4	1	2.5	114.0	0.85	0.08	14.50	0.424	0.82	2.8
W229923		14.2	177.5	<0.002	0.10	0.26	15.6	1	2.7	116.0	0.92	0.08	15.20	0.440	0.86	2.6
W229924		17.3	159.5	<0.002	3.21	1.00	13.8	1	2.5	183.5	0.86	0.05	14.25	0.389	1.96	2.7
W229925		1.3	2.7	<0.002	<0.01	<0.05	0.2	1	<0.2	49.7	<0.05	<0.05	0.12	0.005	0.02	0.6
W229926		11.9	32.4	<0.002	0.22	0.56	2.5	2	0.6	905	0.22	<0.05	3.90	0.086	0.24	10.9
W229927		7.7	40.9	0.002	1.47	44.7	5.1	2	0.7	1040	0.19	0.07	3.32	0.090	24.8	6.2
W229928		7.4	20.8	<0.002	0.18	0.28	1.7	2	0.5	1240	0.15	<0.05	2.72	0.059	0.23	11.5
W229929		8.9	24.4	<0.002	0.21	0.31	1.9	2	0.5	1140	0.17	<0.05	3.13	0.069	0.24	11.1
W229930		8.5	20.8	<0.002	0.15	0.24	1.7	2	0.5	1335	0.15	<0.05	2.69	0.060	0.21	12.8
W229931		8.0	21.3	<0.002	0.14	0.24	1.8	2	0.4	1255	0.16	<0.05	2.79	0.060	0.20	13.5
W229932		7.6	17.3	<0.002	0.13	0.19	1.5	1	0.4	1195	0.14	<0.05	2.25	0.052	0.18	13.4
W229933		7.9	18.6	<0.002	0.10	0.16	1.7	1	0.4	1055	0.14	<0.05	2.43	0.053	0.20	11.3
W229934		6.3	19.4	<0.002	0.07	0.16	1.7	1	0.4	1130	0.13	<0.05	2.38	0.053	0.15	10.3
W229935		1.3	1.0	<0.002	<0.01	<0.05	0.1	1	<0.2	53.5	<0.05	<0.05	0.09	<0.005	<0.02	0.7
W229936		10.3	57.7	0.002	0.11	0.31	4.7	2	1.0	538	0.39	<0.05	6.03	0.138	0.35	8.2

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229901		7	0.5	4.8	4	9.4		<0.01
W229902		22	1.0	7.5	17	24.7		<0.01
W229903		36	1.0	8.1	120	44.9		<0.01
W229904		63	1.1	13.5	49	77.9		<0.01
W229905		99	1.5	22.1	136	98.7		<0.01
W229906		100	1.6	22.9	106	102.5		<0.01
W229907		102	1.7	22.0	81	101.5		<0.01
W229908		101	1.6	22.3	85	104.0		<0.01
W229909		72	1.3	17.7	116	89.7		<0.01
W229910		73	1.4	19.3	81	89.4		<0.01
W229911		41	1.0	14.4	45	60.0		<0.01
W229912		40	0.8	12.3	48	56.7		0.01
W229913		26	0.6	9.0	52	35.3		0.01
W229914		30	0.6	9.4	42	39.4		<0.01
W229915		28	0.6	8.8	35	37.6		<0.01
W229916		86	7.9	18.8	50	69.3		2.56
W229917		39	0.8	12.1	56	55.8		<0.01
W229918		44	0.8	11.0	58	59.0		<0.01
W229919		36	0.7	11.4	48	52.1		<0.01
W229920		35	0.7	11.0	48	50.2		<0.01
W229921		86	1.4	19.8	101	96.4		<0.01
W229922		90	1.4	20.9	104	100.5		<0.01
W229923		98	1.7	21.8	108	112.5		<0.01
W229924		86	4.9	20.1	101	99.6		<0.01
W229925		2	0.1	0.8	18	0.8		<0.01
W229926		31	0.6	7.3	57	36.1		<0.01
W229927		33	17.8	15.5	26	31.9	1.350	2.68
W229928		24	0.3	5.5	44	25.3		0.05
W229929		26	0.3	6.0	42	29.2		<0.01
W229930		23	0.3	5.2	35	25.7		<0.01
W229931		22	0.3	5.5	36	27.1		<0.01
W229932		18	0.2	4.7	37	24.4		<0.01
W229933		24	0.2	4.8	41	20.6		<0.01
W229934		18	0.2	5.0	30	20.5		<0.01
W229935		2	0.1	0.8	17	<0.5		<0.01
W229936		52	0.6	10.6	32	66.3		<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 16- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17162590

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 16- SEP- 2017
Account: RCM

CERTIFICATE WH17168425

Project: Nadaleen

P.O. No.: N17- 058

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 11- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

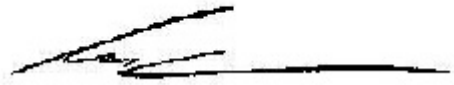
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17168425

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229937		12.47	0.15	5.00	77.9	290	1.84	0.15	11.00	0.07	51.6	8.8	50	17.60	32.1	2.07
W229938		0.26	0.19	3.77	6240	200	1.01	0.15	12.05	0.14	37.9	11.5	42	10.55	36.2	2.89
W229939		11.15	0.05	1.12	17.9	490	0.45	0.06	29.6	0.08	20.2	1.9	13	3.21	6.5	0.57
W229940		11.73	0.05	1.55	23.6	560	0.54	0.07	27.3	0.04	21.5	2.9	17	4.15	8.9	0.93
W229941		10.97	0.05	2.05	70.9	360	0.62	0.08	25.2	0.05	24.7	3.8	23	5.41	10.5	1.17
W229942		11.65	0.15	4.66	242	350	1.61	0.12	10.75	0.06	51.7	8.3	51	16.40	22.9	2.21
W229943		11.66	0.16	4.61	397	3360	1.52	0.13	10.70	0.07	50.8	8.4	51	17.05	29.1	2.31
W229944		10.69	0.06	1.42	270	2410	0.41	0.06	27.4	0.10	19.20	2.9	15	3.58	8.1	0.77
W229945		12.60	0.07	1.12	118.5	140	0.33	0.06	31.8	0.16	17.75	2.5	17	2.87	9.0	0.56
W229946		11.50	0.05	0.80	72.0	420	0.28	0.05	32.9	0.12	14.45	1.7	10	1.99	5.8	0.32
W229947		10.37	0.04	1.06	112.0	580	0.36	0.05	30.8	0.14	15.90	2.0	16	2.35	6.3	0.40
W229948		<0.02	0.08	1.43	164.5	230	0.48	0.06	29.4	0.17	18.00	2.6	16	3.27	8.8	0.50
W229949		10.79	0.05	1.07	188.5	90	0.36	0.05	30.2	0.18	15.95	1.8	12	2.67	5.2	0.45
W229950		11.98	0.04	1.06	169.5	60	0.33	0.04	27.7	0.25	16.30	1.9	12	2.34	5.3	0.49
W229951		11.19	0.05	1.14	309	80	0.42	0.05	29.9	0.18	18.90	2.2	14	2.64	6.5	0.60
W229952		12.35	0.08	0.83	269	2330	0.36	0.05	31.2	0.20	14.15	1.8	11	1.63	4.9	0.46
W229953		8.60	0.02	0.44	61.3	2660	0.20	0.06	31.1	0.28	8.76	0.9	6	0.84	2.4	0.29
W229954		11.31	0.40	3.18	785	220	0.87	0.09	19.60	0.23	36.7	5.7	36	7.59	26.0	1.51
W229955		6.89	0.01	0.06	3.6	100	0.06	0.04	21.4	0.06	1.06	0.7	1	0.23	1.3	0.47
W229956		9.14	0.06	1.69	203	250	0.63	0.07	28.4	0.07	21.6	3.2	17	3.42	9.6	0.86
W229957		10.83	0.12	3.02	268	330	1.02	0.11	20.1	0.17	34.7	5.0	31	7.06	15.2	1.37
W229958		0.26	0.30	4.01	>10000	190	0.66	0.20	10.65	0.69	44.2	11.9	47	9.57	55.3	3.14
W229959		11.78	0.12	3.51	297	240	1.19	0.11	18.05	0.10	41.1	6.5	37	12.85	19.4	1.60
W229960		11.16	0.07	1.82	158.5	140	0.67	0.07	25.1	0.11	26.9	3.8	20	4.86	11.2	0.97
W229961		11.42	0.07	1.63	177.5	340	0.57	0.06	24.9	0.16	27.8	2.7	18	3.56	9.5	0.79
W229962		10.57	0.05	0.84	84.6	90	0.29	0.04	29.6	0.28	14.90	1.3	9	1.29	3.9	0.32
W229963		11.23	0.05	1.09	118.0	70	0.39	0.04	29.4	0.16	16.65	1.9	13	2.05	5.7	0.51
W229964		10.57	0.08	1.25	166.5	360	0.46	0.05	25.2	0.25	17.95	2.2	15	1.77	6.3	0.63
W229965		6.89	0.01	0.05	0.7	70	0.06	0.04	20.8	0.06	1.02	0.8	1	0.27	1.7	0.49
W229966		9.58	0.03	3.45	7.6	130	1.15	0.11	10.65	0.10	41.5	6.4	36	5.30	43.9	1.64
W229967		4.96	0.04	3.71	9.0	190	1.24	0.12	10.85	0.08	41.5	6.9	38	5.68	58.3	1.77
W229968		9.85	0.04	3.15	11.0	110	1.00	0.11	17.75	0.09	38.4	5.3	33	3.55	20.9	1.56
W229969		10.63	0.02	3.39	3.4	150	1.08	0.11	18.50	0.12	38.7	4.9	34	3.88	18.7	1.50
W229970		10.68	0.07	3.29	4.7	120	1.08	0.11	19.80	0.11	35.3	5.1	35	2.94	22.1	1.50
W229971		9.88	0.05	1.98	6.0	80	0.67	0.08	27.6	0.16	24.6	4.4	22	1.48	13.7	0.87
W229972		10.00	0.07	2.81	9.9	130	1.11	0.10	21.1	0.18	34.2	6.3	28	2.39	93.5	1.16

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17168425

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229937		13.75	0.17	2.2	0.154	0.042	2.74	28.2	44.4	3.23	199	0.97	0.03	8.3	21.7	640
W229938		10.40	0.09	2.0	15.10	0.041	1.79	20.2	12.6	2.55	1160	1.83	0.02	6.1	25.6	440
W229939		3.04	0.10	0.6	0.078	0.013	0.60	10.8	6.5	0.94	136	0.37	0.01	1.9	3.7	190
W229940		4.31	0.10	0.7	0.072	0.017	0.84	12.4	7.9	1.48	146	0.52	0.01	2.6	7.0	200
W229941		5.49	0.11	0.9	0.082	0.018	1.10	14.0	13.0	1.92	154	0.52	0.02	3.3	8.9	240
W229942		12.45	0.14	2.4	0.161	0.040	2.54	27.0	57.7	3.44	213	1.34	0.04	7.7	20.9	560
W229943		12.50	0.14	2.1	0.179	0.040	2.40	26.7	72.0	3.55	216	1.04	0.03	7.6	22.9	720
W229944		3.81	0.10	0.8	0.064	0.016	0.75	10.8	14.4	1.62	134	0.43	0.01	2.4	6.5	200
W229945		3.04	0.10	0.6	0.085	0.012	0.57	10.4	8.0	0.74	110	0.39	0.01	2.1	5.4	230
W229946		2.11	0.13	0.5	0.062	0.010	0.41	8.3	4.9	0.66	99	0.38	0.01	1.5	3.4	190
W229947		2.74	0.10	0.7	0.066	0.013	0.50	9.1	9.7	0.98	101	0.58	0.01	2.1	4.2	200
W229948		3.94	0.12	1.0	0.093	0.017	0.71	10.7	8.5	1.14	101	0.64	0.01	3.0	5.8	270
W229949		2.73	0.12	0.8	0.065	0.014	0.55	9.2	7.3	1.32	107	0.39	0.01	2.0	3.5	240
W229950		2.80	0.11	0.7	0.097	0.012	0.57	9.0	6.6	1.59	108	0.43	0.01	2.0	3.9	180
W229951		3.15	0.13	0.7	0.140	0.014	0.58	10.5	7.1	1.61	113	0.49	0.01	2.2	4.7	190
W229952		2.25	0.11	0.5	0.338	0.012	0.41	7.6	4.7	1.34	127	0.43	0.01	1.6	3.7	180
W229953		1.09	0.10	0.3	0.093	0.007	0.21	5.0	3.0	1.22	101	0.35	<0.01	0.9	1.3	130
W229954		8.37	0.15	1.3	1.695	0.029	1.58	21.0	19.4	2.12	197	0.68	0.02	4.9	15.2	700
W229955		0.25	0.13	<0.1	0.020	0.007	0.03	0.5	1.0	13.20	211	0.11	<0.01	0.2	1.5	190
W229956		4.76	0.14	0.8	0.102	0.019	0.87	12.4	8.2	1.74	149	0.45	0.01	3.1	7.9	230
W229957		7.87	0.19	1.7	0.121	0.029	1.62	18.8	24.5	2.97	182	0.68	0.02	4.9	12.2	390
W229958		11.45	0.10	1.9	28.4	0.047	1.84	25.2	13.2	0.38	794	3.73	0.02	6.2	26.2	550
W229959		9.44	0.11	1.8	0.143	0.031	1.91	22.5	76.9	2.60	184	0.94	0.03	5.9	16.3	490
W229960		5.11	0.10	1.0	0.084	0.016	0.96	14.6	43.0	2.45	168	0.62	0.02	3.4	8.9	280
W229961		4.25	0.09	1.1	0.086	0.016	0.89	15.8	17.3	1.93	172	0.57	0.02	3.2	6.8	300
W229962		2.05	0.11	0.7	0.063	0.008	0.45	8.5	6.2	1.01	110	0.43	0.01	1.6	2.3	190
W229963		2.88	0.10	0.7	0.084	0.011	0.56	9.3	10.3	1.74	112	0.52	0.01	2.1	4.0	200
W229964		3.31	0.11	0.8	0.087	0.015	0.55	9.8	12.4	2.09	154	0.55	0.02	2.3	5.0	280
W229965		0.23	0.13	<0.1	0.013	0.008	0.02	0.5	1.1	12.90	216	0.06	0.01	0.2	1.5	160
W229966		9.02	0.11	2.3	0.066	0.031	1.72	21.7	16.1	5.50	382	0.46	0.05	6.0	9.9	500
W229967		9.55	0.12	2.3	0.069	0.035	1.87	22.4	16.1	5.65	400	0.47	0.05	6.4	10.9	500
W229968		8.35	0.10	1.6	0.053	0.031	1.44	20.2	20.3	3.96	454	0.38	0.12	5.5	13.4	460
W229969		8.90	0.11	1.8	0.025	0.031	1.47	20.7	30.5	2.75	492	0.31	0.21	5.9	15.0	430
W229970		8.71	0.10	1.6	0.031	0.031	1.36	19.8	22.3	2.80	535	0.29	0.28	5.7	15.3	380
W229971		5.27	0.10	0.9	0.032	0.018	0.74	13.5	11.4	1.54	939	0.41	0.31	3.4	9.4	250
W229972		7.32	0.10	1.3	0.022	0.023	1.11	18.1	17.5	2.57	1270	0.33	0.31	4.8	13.7	340

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Finalized Date: 16- SEP- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17168425

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229937		9.9	105.0	0.002	0.25	0.38	8.5	3	1.6	357	0.61	<0.05	10.65	0.233	0.58	8.3
W229938		10.5	80.8	0.002	2.57	22.9	10.4	1	1.6	311	0.42	<0.05	5.54	0.266	44.2	6.4
W229939		4.3	22.4	0.002	0.06	0.17	1.8	1	0.4	912	0.14	<0.05	2.26	0.051	0.24	11.2
W229940		5.0	32.8	<0.002	0.10	0.18	2.6	2	0.5	980	0.19	<0.05	3.12	0.072	0.24	11.6
W229941		5.4	44.0	<0.002	0.11	0.19	3.1	2	0.7	921	0.24	<0.05	4.10	0.095	0.27	11.7
W229942		9.0	108.0	0.003	0.22	0.39	7.2	3	1.6	513	0.57	<0.05	9.93	0.223	0.62	6.9
W229943		8.8	101.0	0.002	0.34	0.60	7.1	3	1.5	879	0.56	<0.05	9.15	0.220	0.71	6.9
W229944		4.8	30.2	0.002	0.11	0.42	2.2	1	0.5	1330	0.17	<0.05	3.00	0.068	0.30	11.7
W229945		6.4	24.1	<0.002	0.09	0.26	1.8	1	0.4	1645	0.15	<0.05	2.44	0.055	0.21	14.4
W229946		5.3	15.8	<0.002	0.07	0.21	1.3	1	0.3	1485	0.11	<0.05	1.80	0.040	0.17	13.5
W229947		5.8	20.6	0.002	0.06	0.21	1.7	1	0.4	1525	0.14	<0.05	2.32	0.054	0.21	13.8
W229948		7.4	28.9	0.002	0.04	0.28	2.3	2	0.6	1490	0.21	<0.05	3.31	0.077	0.25	15.3
W229949		5.7	22.0	<0.002	0.03	0.42	1.7	1	0.4	1655	0.14	<0.05	2.37	0.055	0.29	12.9
W229950		5.4	24.1	0.002	0.03	0.41	1.6	2	0.4	1860	0.14	<0.05	2.39	0.054	0.31	11.1
W229951		6.5	26.5	<0.002	0.02	0.67	1.9	2	0.4	1575	0.14	<0.05	2.61	0.057	0.43	14.7
W229952		5.4	17.7	<0.002	0.18	1.17	1.4	3	0.3	1925	0.11	<0.05	1.90	0.042	1.32	13.5
W229953		4.6	8.4	<0.002	0.14	0.23	0.6	1	<0.2	2000	0.06	<0.05	0.95	0.022	0.28	11.2
W229954		7.5	74.5	<0.002	0.33	5.76	5.0	2	1.0	997	0.36	<0.05	6.06	0.139	5.69	13.0
W229955		0.9	1.5	<0.002	0.01	0.07	0.2	<1	<0.2	58.0	<0.05	<0.05	0.08	<0.005	0.05	0.7
W229956		5.6	46.2	0.002	0.20	0.36	2.8	1	0.6	1055	0.20	<0.05	3.32	0.077	0.50	12.2
W229957		11.9	79.5	0.002	0.20	0.56	4.6	2	1.0	950	0.40	<0.05	6.02	0.140	0.61	10.4
W229958		17.1	83.9	0.004	3.69	115.5	8.6	2	2.0	459	0.43	0.13	7.28	0.232	69.5	4.3
W229959		8.1	92.1	0.002	0.25	0.60	5.5	2	1.2	806	0.44	<0.05	7.66	0.167	0.70	10.4
W229960		5.9	48.5	<0.002	0.12	0.35	3.0	2	0.7	956	0.24	<0.05	4.00	0.090	0.40	11.0
W229961		6.1	36.4	<0.002	0.10	0.43	2.6	2	0.6	1080	0.21	<0.05	3.66	0.081	0.32	9.6
W229962		5.5	17.6	<0.002	0.06	0.28	1.2	1	0.3	1460	0.12	<0.05	1.74	0.040	0.18	11.7
W229963		6.8	22.1	<0.002	0.05	0.25	1.7	2	0.4	1735	0.15	<0.05	2.47	0.055	0.21	12.6
W229964		5.9	22.6	<0.002	0.05	0.46	2.0	2	0.5	1555	0.16	<0.05	2.84	0.064	0.22	9.2
W229965		0.7	1.4	<0.002	0.01	0.05	0.1	1	<0.2	55.7	<0.05	<0.05	0.21	<0.005	0.02	0.7
W229966		6.9	59.5	<0.002	0.16	0.40	5.2	2	1.7	119.0	0.44	<0.05	8.17	0.166	0.28	3.6
W229967		8.1	62.8	<0.002	0.22	0.45	5.5	3	1.7	120.5	0.46	<0.05	8.22	0.182	0.30	3.6
W229968		6.1	51.6	0.002	0.05	0.30	4.8	1	1.2	305	0.39	<0.05	6.11	0.151	0.26	5.2
W229969		5.3	56.6	0.002	0.03	0.22	5.2	2	1.3	336	0.43	<0.05	7.09	0.162	0.28	5.0
W229970		5.3	51.7	<0.002	0.04	0.24	5.1	2	1.2	416	0.42	<0.05	6.39	0.159	0.24	5.9
W229971		6.0	27.9	0.002	0.03	0.22	3.2	1	0.8	622	0.25	<0.05	3.88	0.095	0.15	10.1
W229972		11.3	42.2	<0.002	0.02	0.27	4.7	1	1.0	365	0.35	<0.05	5.65	0.134	0.19	5.6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17168425

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229937		82	0.9	15.5	46	87.1		<0.01
W229938		83	7.6	18.5	46	73.7		2.53
W229939		19	0.3	6.6	25	23.2		<0.01
W229940		28	0.3	6.8	25	28.1		<0.01
W229941		36	0.4	7.7	34	37.2		<0.01
W229942		78	0.9	16.3	57	90.7		<0.01
W229943		75	0.8	16.6	63	82.1		<0.01
W229944		24	0.3	6.3	29	29.0		<0.01
W229945		20	0.3	5.5	27	22.8		<0.01
W229946		14	0.2	4.5	17	18.3		<0.01
W229947		18	0.4	5.4	21	29.0		<0.01
W229948		27	0.4	6.1	24	41.3		0.01
W229949		19	0.3	5.2	23	29.4		<0.01
W229950		18	0.4	5.2	25	28.9		<0.01
W229951		23	0.4	5.9	25	28.0		<0.01
W229952		16	0.5	5.3	21	21.3		0.05
W229953		7	0.3	3.2	19	13.0		<0.01
W229954		52	1.6	13.7	52	51.2		0.62
W229955		2	0.1	0.8	17	<0.5		<0.01
W229956		30	0.6	6.4	22	31.1		<0.01
W229957		50	0.7	11.3	34	64.8		<0.01
W229958		66	8.6	23.6	143	73.0	3.39	7.88
W229959		58	0.7	13.6	52	69.5		0.01
W229960		31	0.4	8.4	34	42.8		<0.01
W229961		27	0.4	8.2	32	45.6		<0.01
W229962		12	0.2	4.7	24	28.5		<0.01
W229963		20	0.2	5.3	27	30.4		<0.01
W229964		23	0.3	5.9	35	32.0		<0.01
W229965		2	0.1	0.8	17	<0.5		<0.01
W229966		49	0.7	14.4	19	86.2		<0.01
W229967		54	0.8	14.5	20	87.8		<0.01
W229968		45	0.6	13.3	22	61.7		0.02
W229969		46	0.7	12.6	31	67.2		<0.01
W229970		47	0.7	11.7	34	58.4		<0.01
W229971		30	0.4	7.7	36	32.6		<0.01
W229972		45	0.5	11.7	36	48.1		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 16- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17168425

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- SEP- 2017
Account: RCM

CERTIFICATE WH17174171

Project: Nadaleen

P.O. No.: N17- 059

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 16- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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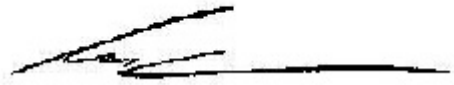
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174171

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W229973		10.80	0.06	1.68	9.4	310	0.58	0.08	27.5	0.13	20.1	3.8	18	1.02	12.0	0.66
W229974		10.66	0.07	1.46	14.3	110	0.57	0.07	27.9	0.09	19.30	5.6	16	1.01	12.7	0.73
W229975		10.60	0.06	4.40	13.5	330	1.76	0.16	15.20	0.11	47.6	9.5	44	4.19	38.3	1.85
W229976		0.26	0.67	1.94	>10000	150	0.59	2.93	26.8	0.15	26.7	5.0	27	5.85	16.8	1.42
W229977		9.84	0.03	8.63	12.2	370	2.21	0.31	3.05	0.10	85.8	14.5	70	9.02	37.2	4.12
W229978		12.73	0.04	10.10	7.9	440	2.66	0.36	0.35	<0.02	110.0	18.4	77	11.15	42.3	4.80
W229979		10.81	0.04	9.92	6.8	330	2.82	0.39	0.25	<0.02	97.8	18.7	72	11.20	36.4	4.49
W229980		12.62	0.04	9.79	12.5	340	2.61	0.36	0.24	<0.02	105.0	18.8	72	10.05	38.9	4.52
W229981		11.32	0.06	8.78	9.0	310	2.74	0.31	0.68	<0.02	84.9	16.8	70	11.50	33.0	4.43
W229982		10.57	0.07	8.50	5.4	480	2.41	0.28	0.52	<0.02	79.3	15.6	67	8.04	37.8	4.71
W229983		11.07	0.03	9.40	1.6	300	2.51	0.36	0.31	<0.02	95.3	19.0	69	19.90	47.9	4.91
W229984		5.20	0.03	9.39	2.1	300	2.69	0.40	0.31	<0.02	95.5	19.9	71	20.3	47.8	5.06
W229985		11.99	0.04	8.99	7.8	340	2.66	0.41	0.44	0.02	99.8	20.5	70	18.95	40.7	4.73
W229986		11.95	0.05	9.17	21.8	330	2.83	0.39	1.15	0.02	95.1	22.2	68	14.95	41.0	4.46
W229987		12.40	0.04	5.80	25.1	290	1.51	0.24	11.60	0.03	59.2	12.0	43	7.96	23.0	3.47
W229988		12.77	0.04	6.27	15.7	240	1.58	0.26	11.85	0.02	65.5	11.8	44	11.40	24.2	3.24
W229989		10.94	0.06	6.56	15.8	250	1.76	0.28	2.99	0.03	70.6	13.0	56	13.05	25.1	3.21
W229990		10.67	0.05	5.25	42.3	260	1.21	0.22	12.15	0.03	59.1	10.2	43	9.78	20.5	2.97
W229991		6.91	0.01	0.05	0.3	30	0.06	0.08	21.4	0.06	1.14	0.7	1	0.13	2.5	0.48
W229992		10.50	0.07	4.54	16.8	190	1.21	0.17	17.45	0.09	49.8	7.5	36	9.78	15.9	2.19
W229993		11.34	0.03	1.31	7.6	450	0.42	0.07	27.2	0.03	18.15	2.4	12	2.52	5.3	0.97
W229994		11.45	0.04	3.47	12.2	150	0.96	0.15	20.5	0.04	40.8	6.2	28	7.76	13.0	1.75
W229995		12.42	0.04	3.74	14.7	170	0.97	0.16	21.8	0.04	41.0	6.6	31	8.64	14.2	1.79
W229996		10.41	0.03	2.93	12.3	140	0.80	0.12	23.8	<0.02	34.4	5.4	23	6.36	10.9	1.59
W229997		<0.02	0.05	4.10	16.3	190	1.10	0.16	18.25	0.03	43.8	7.6	32	9.45	15.6	1.93
W229998		11.67	0.05	4.08	15.5	200	1.03	0.16	19.85	0.02	46.1	7.4	32	9.75	15.5	1.93
W229999		10.79	0.03	2.77	12.2	110	0.86	0.12	23.8	0.05	32.8	5.3	23	6.66	11.5	1.48
W230000		11.02	0.05	4.50	19.5	240	1.25	0.18	18.25	0.03	49.3	9.1	37	10.60	19.3	2.09
W232001		11.15	0.06	3.99	17.1	180	0.98	0.19	19.65	0.04	44.8	8.5	33	10.40	21.7	2.01
W232002		10.67	0.05	4.28	13.0	190	1.19	0.19	18.45	0.02	49.1	9.4	32	12.30	18.8	2.04
W232003		0.26	0.19	3.87	6560	210	0.85	0.16	12.25	0.13	37.3	11.5	44	9.72	35.7	2.96
W232004		12.00	0.04	2.68	17.4	120	0.59	0.14	25.9	<0.02	30.9	6.0	21	6.67	13.3	1.47
W232005		10.47	0.05	5.00	24.4	220	1.02	0.23	15.65	0.04	53.2	9.3	43	10.30	18.2	2.49
W232006		10.30	0.04	7.34	28.9	380	1.93	0.33	5.62	0.04	80.4	12.8	66	18.15	26.4	3.66
W232007		6.95	0.01	0.07	0.6	70	0.05	0.16	21.5	0.06	1.33	1.6	<1	0.23	3.7	0.50
W232008		8.23	0.04	4.65	24.8	200	1.07	0.23	16.10	0.05	54.9	8.9	44	11.70	18.8	2.72

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174171

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W229973		4.03	0.06	0.7	0.029	0.014	0.61	10.9	10.7	1.20	1170	0.43	0.29	2.8	6.9	210
W229974		3.59	0.05	0.6	0.037	0.013	0.55	10.5	6.3	1.52	1380	0.50	0.25	2.4	7.3	190
W229975		10.75	0.09	2.0	0.034	0.038	1.93	25.6	21.3	4.25	1860	0.40	0.23	7.4	18.3	500
W229976		4.73	0.05	0.9	6.81	0.021	0.96	13.8	9.4	0.94	2380	1.68	0.01	2.7	12.4	360
W229977		21.9	0.10	2.8	0.024	0.070	3.64	44.7	59.5	2.17	902	0.26	0.16	12.7	38.3	780
W229978		25.7	0.11	2.8	0.015	0.069	3.97	56.6	71.1	1.22	541	0.25	0.20	13.5	41.8	770
W229979		26.0	0.11	2.9	0.017	0.075	4.00	46.5	61.7	1.13	431	0.20	0.22	13.5	40.2	910
W229980		25.1	0.12	2.9	0.016	0.076	3.85	52.4	69.5	1.21	496	0.24	0.20	13.3	40.1	790
W229981		22.5	0.08	3.5	0.008	0.078	3.51	45.3	71.1	1.43	633	0.34	0.16	13.0	36.1	1270
W229982		21.3	0.09	3.3	0.006	0.071	3.17	42.9	76.6	1.48	621	0.29	0.15	12.0	34.1	1230
W229983		23.3	0.10	3.1	0.019	0.073	3.41	50.5	171.5	1.20	576	0.17	0.18	11.8	39.0	610
W229984		24.1	0.10	3.2	0.016	0.078	3.47	50.3	177.5	1.22	567	0.20	0.18	12.7	40.3	640
W229985		23.5	0.10	3.1	0.025	0.076	3.20	53.4	173.0	1.23	664	0.24	0.19	12.5	39.4	600
W229986		23.2	0.09	3.2	0.036	0.072	3.01	51.0	148.5	1.24	649	0.36	0.22	12.4	37.7	580
W229987		13.55	0.06	2.1	0.060	0.047	1.64	31.5	84.6	1.16	633	0.46	0.14	7.4	23.3	440
W229988		14.90	0.07	2.3	0.060	0.049	2.22	34.2	81.7	1.02	449	0.29	0.15	8.2	22.1	470
W229989		15.50	0.09	2.5	0.063	0.051	2.37	37.2	126.5	0.94	401	0.67	0.14	8.5	24.0	440
W229990		12.65	0.06	2.2	0.166	0.046	1.95	30.6	69.5	1.10	404	0.44	0.09	7.3	19.2	1000
W229991		0.19	0.10	<0.1	0.008	<0.005	0.02	0.5	1.4	13.25	207	0.07	<0.01	0.2	1.4	190
W229992		10.55	0.08	1.8	0.165	0.033	1.70	26.4	68.7	0.79	225	0.53	0.12	5.9	15.9	780
W229993		3.10	0.05	0.5	0.041	0.011	0.47	9.0	19.2	0.71	199	0.22	0.06	1.7	4.8	530
W229994		8.33	0.07	1.3	0.060	0.029	1.30	21.1	37.7	0.80	252	0.39	0.21	4.7	12.4	740
W229995		8.86	0.07	1.3	0.062	0.028	1.34	21.7	47.0	0.66	251	0.46	0.27	4.5	13.7	730
W229996		6.91	0.06	1.0	0.056	0.022	1.02	17.8	48.8	0.94	400	0.36	0.14	3.7	10.8	620
W229997		9.82	0.07	1.5	0.075	0.032	1.40	23.2	77.4	1.04	359	0.40	0.19	5.2	15.4	760
W229998		9.67	0.07	1.5	0.074	0.029	1.39	24.3	54.9	0.78	264	0.38	0.38	5.3	15.0	590
W229999		6.84	0.06	1.0	0.083	0.021	0.94	17.3	38.3	1.06	513	0.37	0.22	3.6	10.5	640
W230000		10.90	0.07	1.5	0.116	0.035	1.65	26.2	52.5	0.99	327	0.59	0.30	5.7	18.2	490
W232001		9.78	0.11	1.5	0.105	0.027	1.49	23.1	36.9	1.25	743	1.46	0.31	4.9	20.4	600
W232002		10.60	0.14	1.6	0.072	0.030	1.60	25.6	50.8	1.57	868	0.60	0.20	5.3	16.9	500
W232003		9.69	0.10	1.9	15.40	0.030	1.83	19.1	11.0	2.66	1220	2.03	0.02	5.7	24.7	470
W232004		6.20	0.08	0.8	0.095	0.018	0.98	15.2	24.7	1.14	424	0.44	0.17	3.1	11.0	660
W232005		11.85	0.11	1.8	0.172	0.036	1.88	28.2	42.5	1.06	348	0.54	0.29	6.4	19.3	720
W232006		18.20	0.16	2.7	0.097	0.057	2.99	41.8	63.1	1.15	439	0.67	0.20	9.9	27.3	800
W232007		0.25	0.14	<0.1	0.008	<0.005	0.03	0.6	1.1	13.35	226	0.24	<0.01	0.2	1.0	180
W232008		11.60	0.14	2.0	0.102	0.044	1.89	28.3	29.7	1.52	500	0.54	0.18	6.6	17.1	1080

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174171

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W229973		6.1	21.6	<0.002	0.03	0.28	2.7	1	0.6	699	0.21	<0.05	3.23	0.081	0.12	10.0
W229974		9.6	19.0	<0.002	0.03	0.29	2.4	1	0.6	690	0.17	<0.05	2.82	0.068	0.10	10.6
W229975		12.1	65.2	<0.002	0.04	0.29	7.0	2	1.6	307	0.54	<0.05	9.43	0.212	0.31	6.1
W229976		7.2	38.4	0.002	1.47	48.1	5.8	2	0.7	1075	0.19	0.07	3.20	0.090	23.5	6.4
W229977		14.4	101.5	<0.002	0.04	0.41	14.6	1	2.6	134.0	0.90	0.05	14.25	0.390	0.63	2.9
W229978		31.8	144.5	<0.002	0.03	0.39	18.1	1	2.8	121.5	0.97	0.06	18.25	0.409	0.75	3.7
W229979		13.1	135.5	<0.002	0.03	0.41	18.3	1	2.7	113.5	0.98	0.08	16.70	0.408	0.79	3.8
W229980		16.7	139.0	<0.002	0.02	0.46	18.3	1	2.7	112.0	0.94	0.07	17.90	0.414	0.76	3.1
W229981		22.0	148.5	<0.002	0.11	0.44	17.3	1	2.8	110.0	0.93	<0.05	15.05	0.442	0.74	2.7
W229982		22.9	131.0	<0.002	0.02	0.33	16.1	1	2.6	92.1	0.88	0.07	13.90	0.423	0.65	2.4
W229983		10.1	159.5	<0.002	0.03	0.26	17.5	1	2.6	128.5	0.89	0.07	15.75	0.422	0.81	2.8
W229984		11.4	160.5	<0.002	0.03	0.27	18.2	1	2.7	132.0	0.93	0.06	15.60	0.432	0.81	2.8
W229985		14.8	151.0	<0.002	0.05	0.33	18.2	1	2.6	129.5	0.91	0.07	15.85	0.429	0.78	3.1
W229986		34.0	137.0	<0.002	0.34	0.89	17.7	1	2.6	175.0	0.89	0.06	15.60	0.416	0.75	2.8
W229987		20.0	74.2	<0.002	0.83	0.57	10.2	1	1.6	409	0.56	<0.05	9.66	0.258	0.60	2.2
W229988		16.5	97.1	<0.002	0.87	0.33	10.9	1	1.8	452	0.62	<0.05	10.75	0.285	0.58	2.6
W229989		20.2	102.5	<0.002	1.30	0.42	11.2	1	1.8	213	0.64	<0.05	10.90	0.298	0.59	2.2
W229990		15.2	88.7	<0.002	1.80	0.44	9.5	1	1.5	503	0.53	<0.05	9.39	0.253	1.08	2.4
W229991		1.3	0.9	<0.002	<0.01	<0.05	0.2	<1	<0.2	51.7	<0.05	<0.05	0.07	<0.005	<0.02	0.6
W229992		11.8	77.4	<0.002	1.68	0.31	7.6	2	1.3	774	0.43	<0.05	7.27	0.202	0.88	2.5
W229993		3.9	22.8	<0.002	0.61	0.12	2.4	1	0.4	968	0.13	<0.05	2.26	0.058	0.25	1.3
W229994		9.1	61.7	<0.002	1.24	0.22	6.2	1	1.0	677	0.33	<0.05	5.56	0.161	0.50	2.1
W229995		9.6	63.2	<0.002	1.32	0.23	6.3	2	1.0	724	0.33	<0.05	5.64	0.153	0.57	2.3
W229996		7.5	49.2	0.002	1.04	0.21	5.2	1	0.8	899	0.27	<0.05	4.59	0.126	0.45	1.9
W229997		10.6	67.8	0.002	1.39	0.30	6.8	1	1.1	777	0.39	<0.05	6.52	0.178	0.63	2.6
W229998		10.1	67.5	<0.002	1.37	0.29	7.1	1	1.2	814	0.38	<0.05	6.47	0.178	0.65	2.5
W229999		7.1	47.9	<0.002	0.98	0.23	4.9	2	0.9	730	0.27	<0.05	4.45	0.121	0.48	1.7
W230000		11.2	80.8	0.002	1.47	0.34	7.8	1	1.3	711	0.41	<0.05	7.26	0.189	0.76	2.2
W232001		15.1	72.5	0.004	1.36	0.42	6.5	1	1.1	610	0.35	<0.05	6.76	0.169	0.89	2.3
W232002		11.1	79.1	<0.002	1.08	0.36	6.9	1	1.1	629	0.39	<0.05	7.16	0.176	0.69	2.3
W232003		11.9	75.3	0.002	2.67	22.3	9.6	2	1.5	328	0.41	<0.05	5.77	0.270	45.5	6.7
W232004		7.9	44.2	<0.002	0.77	0.23	4.2	1	0.7	998	0.23	<0.05	4.25	0.108	0.53	2.0
W232005		14.8	78.6	<0.002	1.53	0.35	7.7	1	1.3	702	0.46	<0.05	8.16	0.220	0.77	3.0
W232006		20.3	128.0	<0.002	1.87	0.44	12.4	1	2.2	234	0.73	0.06	12.30	0.347	0.80	2.9
W232007		1.2	1.4	<0.002	0.01	<0.05	0.2	<1	<0.2	49.7	<0.05	<0.05	0.12	<0.005	0.02	0.7
W232008		14.2	84.4	<0.002	1.39	0.35	8.3	1	1.5	484	0.49	<0.05	8.71	0.224	0.83	3.0

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174171

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W229973		26	0.3	6.5	26	28.5		<0.01
W229974		24	0.3	6.1	20	23.1		<0.01
W229975		54	0.9	14.1	46	73.3		<0.01
W229976		33	18.5	15.3	25	32.8	1.335	2.66
W229977		79	1.5	21.2	89	96.0		<0.01
W229978		90	1.6	24.7	110	98.2		<0.01
W229979		90	1.6	24.6	109	98.1		<0.01
W229980		87	1.5	24.1	106	100.5		<0.01
W229981		95	1.7	23.3	100	119.5		<0.01
W229982		90	1.8	22.2	96	115.0		<0.01
W229983		101	1.5	22.1	91	107.0		<0.01
W229984		104	1.5	22.8	90	110.5		<0.01
W229985		101	1.5	23.1	89	110.0		0.01
W229986		93	1.5	21.9	103	112.5		<0.01
W229987		55	1.0	15.0	62	73.7		<0.01
W229988		60	1.1	16.5	70	83.2		<0.01
W229989		65	1.2	16.0	71	88.1		<0.01
W229990		54	1.2	16.7	67	77.8		0.01
W229991		2	0.1	0.8	17	0.5		<0.01
W229992		44	0.9	13.3	68	63.2		<0.01
W229993		13	0.3	5.5	22	19.2		<0.01
W229994		33	0.7	11.1	43	49.2		<0.01
W229995		34	0.7	10.0	44	43.5		0.02
W229996		27	0.5	9.2	32	39.8		<0.01
W229997		38	0.7	11.6	54	53.6		<0.01
W229998		37	0.7	12.4	52	53.0		<0.01
W229999		27	0.5	8.8	47	39.2		<0.01
W230000		43	0.8	12.1	54	54.7		<0.01
W232001		40	0.8	10.5	55	49.1		<0.01
W232002		40	0.9	10.8	44	50.3		<0.01
W232003		86	8.1	16.4	53	63.7		2.59
W232004		24	0.5	7.5	31	27.3		<0.01
W232005		49	0.9	12.4	53	60.1		<0.01
W232006		78	1.5	18.4	97	90.4		<0.01
W232007		3	0.1	0.8	18	<0.5		<0.01
W232008		49	1.0	14.8	55	67.5		<0.01

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 24- SEP- 2017
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CERTIFICATE OF ANALYSIS WH17174171

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 16- SEP- 2017
Account: RCM

CERTIFICATE WH17168427

Project: Nadaleen

P.O. No.: N17- 060

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 11- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

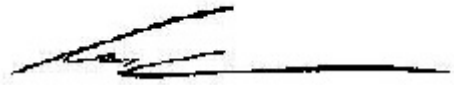
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17168427

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230117		8.93	1.44	2.23	>10000	190	0.44	0.12	23.7	0.32	31.2	7.3	24	8.47	21.4	1.38
W230118		10.69	0.69	0.98	>10000	120	0.25	0.06	31.3	0.21	13.75	3.1	10	2.73	9.7	0.68
W230119		8.87	1.23	1.91	1630	220	0.37	0.10	24.8	0.32	27.9	6.6	21	4.31	19.0	1.26
W230120		7.94	3.08	2.02	>10000	160	0.37	0.13	10.75	3.01	30.3	8.0	26	4.11	26.2	1.87
W230121		0.28	0.71	4.46	8570	200	0.75	0.22	3.50	0.51	51.0	13.9	56	13.20	57.5	4.27
W230122		11.20	0.59	0.84	513	130	0.19	0.05	29.9	0.09	16.00	3.2	10	1.56	9.7	0.87
W230123		11.28	0.03	0.98	215	160	0.31	0.06	32.1	0.16	16.95	3.7	11	3.16	10.9	0.73
W230124		7.41	0.06	1.90	106.5	210	0.41	0.11	28.7	0.27	29.8	6.9	21	7.29	20.4	1.33
W230125		6.57	0.05	1.74	69.6	140	0.39	0.09	30.2	0.22	27.5	6.3	19	6.16	18.7	1.21
W230126		7.86	0.01	0.57	34.6	590	0.22	0.04	33.6	0.09	10.75	2.1	6	1.63	5.7	0.47
W230127		<0.02	0.03	0.63	48.4	600	0.23	0.05	35.2	0.10	11.70	2.5	6	1.88	6.8	0.51
W230128		7.44	0.01	0.42	15.8	140	0.20	0.03	36.0	0.07	8.58	1.7	5	1.16	4.4	0.37
W230129		7.36	0.01	0.16	29.7	110	0.17	0.02	36.5	0.05	3.23	0.9	2	0.32	1.9	0.28
W230130		7.41	0.01	0.53	26.9	150	0.24	0.04	35.1	0.09	8.69	2.1	5	2.04	5.9	0.48
W230131		7.69	0.05	1.75	74.2	200	0.41	0.11	30.7	0.26	28.8	6.4	19	5.02	19.6	1.13
W230132		7.34	0.03	1.15	54.1	210	0.31	0.07	31.8	0.16	21.5	4.4	12	4.50	12.6	0.85
W230133		3.54	0.02	0.86	41.2	190	0.25	0.05	32.6	0.12	16.95	3.4	9	3.05	9.6	0.66
W230134		6.67	0.01	0.64	92.4	260	0.22	0.04	34.7	0.13	12.30	2.3	7	2.87	7.1	0.47
W230135		7.94	0.35	3.98	227	190	1.08	0.20	21.8	0.33	50.5	12.6	39	15.50	42.4	2.29
W230136		8.26	0.04	2.86	57.0	190	0.85	0.14	25.5	0.21	39.3	9.5	28	13.20	27.5	1.83
W230137		7.74	0.02	1.68	1625	140	0.54	0.09	31.1	0.11	21.4	5.8	18	5.45	17.0	1.23
W230138		0.28	0.09	3.65	2510	200	0.97	0.14	18.55	0.11	37.9	11.0	41	10.90	39.7	3.07
W230139		8.06	0.04	2.54	94.6	170	0.78	0.14	28.2	0.19	35.2	8.7	26	8.55	24.6	1.71
W230140		8.35	0.04	3.65	211	190	1.06	0.16	20.2	0.23	44.4	11.8	35	14.75	33.2	2.32
W230141		4.92	0.01	0.05	<0.2	60	<0.05	0.03	20.8	0.05	1.02	0.7	<1	0.10	1.3	0.46
W230142		7.33	0.04	2.12	51.7	170	0.63	0.11	27.4	0.13	32.1	7.7	22	7.22	21.5	1.55
W230143		8.45	0.07	3.30	53.8	190	0.87	0.17	22.6	0.24	43.2	11.0	35	12.85	41.8	2.16
W230144		7.66	0.02	1.37	22.9	150	0.46	0.07	31.2	0.09	22.2	4.7	15	4.34	13.2	1.04
W230145		8.35	0.03	2.29	47.6	170	0.70	0.11	27.0	0.17	34.1	7.6	24	9.08	21.4	1.66
W230146		8.30	0.07	2.41	65.0	190	0.72	0.12	27.1	0.09	32.0	9.5	31	11.30	24.6	1.80
W230147		7.76	0.01	1.14	40.9	170	0.39	0.06	33.4	0.09	20.4	4.1	12	3.47	11.5	0.86
W230148		7.53	<0.01	0.27	19.7	120	0.18	0.02	36.7	0.03	6.17	1.2	3	0.64	2.7	0.37
W230149		8.22	0.02	1.68	38.0	180	0.52	0.08	28.5	0.10	28.3	5.7	16	5.40	16.7	1.14
W230150		7.73	0.02	1.51	35.0	130	0.46	0.07	29.5	0.09	24.2	5.2	17	4.76	14.3	1.14
W230151		6.96	0.02	0.05	<0.2	50	0.06	0.03	21.7	0.05	1.14	0.7	<1	0.12	1.4	0.48
W230152		7.95	0.04	0.89	23.2	150	0.27	0.08	31.1	0.15	15.00	2.9	8	2.99	15.8	0.63

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VANCOUVER BC V6B 1L8

Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17168427

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230117		6.07	0.11	1.1	6.89	0.034	0.99	15.1	8.4	0.59	843	0.61	0.02	3.5	11.9	480
W230118		2.63	0.08	0.5	3.13	0.016	0.44	5.8	4.8	0.40	1360	0.22	0.01	1.4	4.7	200
W230119		4.99	0.09	1.0	5.89	0.015	0.87	13.8	9.2	0.53	961	0.40	0.01	3.0	10.5	270
W230120		5.64	0.10	1.1	13.70	0.041	0.86	15.2	24.7	0.21	861	0.61	0.01	3.2	13.8	1010
W230121		12.20	0.10	2.2	24.9	0.027	2.07	26.3	16.1	0.32	580	5.46	0.02	7.1	33.6	460
W230122		2.20	<0.05	0.5	3.43	0.007	0.39	7.5	4.2	0.57	273	0.18	0.01	1.3	4.8	760
W230123		2.52	<0.05	0.5	0.597	0.010	0.45	8.4	3.4	0.71	257	0.28	0.01	1.5	5.4	360
W230124		4.80	0.07	1.0	1.770	0.017	0.87	14.6	5.8	0.88	143	0.75	0.02	2.9	11.2	300
W230125		4.49	0.06	0.8	0.547	0.021	0.81	13.6	9.8	0.89	141	0.76	0.02	2.6	10.4	170
W230126		1.49	<0.05	0.3	0.204	0.006	0.26	5.0	2.4	0.45	68	0.15	0.01	0.9	2.6	140
W230127		1.69	0.06	0.3	0.214	0.007	0.29	5.5	2.7	0.48	74	0.17	0.01	1.0	3.1	170
W230128		1.11	<0.05	0.2	0.133	<0.005	0.19	3.8	1.9	0.48	67	0.05	0.01	0.6	2.0	190
W230129		0.43	<0.05	0.1	0.151	<0.005	0.07	1.5	0.9	0.54	81	<0.05	0.01	0.2	0.3	220
W230130		1.41	<0.05	0.3	0.173	0.005	0.24	4.1	2.8	0.49	74	0.12	0.01	0.8	2.5	170
W230131		4.36	0.05	0.9	1.005	0.017	0.81	15.1	6.1	0.69	116	0.52	0.02	2.8	10.1	210
W230132		3.01	0.06	0.6	0.857	0.013	0.53	11.5	4.5	0.67	110	0.36	0.01	1.8	6.5	210
W230133		2.27	0.06	0.4	0.579	0.007	0.40	8.1	3.6	0.53	93	0.19	0.01	1.3	4.8	150
W230134		1.67	<0.05	0.3	1.480	0.007	0.28	5.3	2.6	0.54	224	0.12	0.01	0.9	2.8	280
W230135		10.05	0.07	1.9	3.29	0.037	1.80	25.9	12.0	0.94	579	1.77	0.02	5.9	21.8	280
W230136		7.35	0.07	1.4	0.892	0.029	1.33	20.5	9.9	0.99	379	1.01	0.02	4.4	15.6	340
W230137		4.37	0.05	0.8	0.853	0.019	0.78	10.2	6.8	0.62	436	0.40	0.02	2.6	9.2	410
W230138		9.42	0.05	1.8	3.61	0.034	1.73	19.0	9.2	1.43	1200	1.49	0.02	6.3	23.2	380
W230139		6.67	0.05	1.3	1.125	0.029	1.18	16.6	9.6	0.90	320	0.56	0.02	3.9	14.1	610
W230140		9.52	0.06	1.8	3.60	0.042	1.65	22.3	13.2	0.96	377	0.90	0.02	5.4	20.5	270
W230141		0.17	0.07	<0.1	0.026	<0.005	0.02	0.5	0.8	13.15	197	<0.05	0.01	0.1	0.9	180
W230142		5.42	0.09	1.0	1.070	0.026	0.96	16.0	7.7	0.86	460	0.61	0.02	3.1	12.1	200
W230143		8.27	0.08	1.6	0.875	0.039	1.50	21.3	11.1	1.15	348	2.03	0.03	4.8	28.7	260
W230144		3.48	0.06	0.7	0.495	0.014	0.63	10.6	5.3	0.70	365	0.36	0.01	2.1	7.1	490
W230145		5.85	0.07	1.2	0.731	0.026	1.07	16.8	9.4	0.88	432	0.44	0.02	3.6	12.4	590
W230146		6.19	0.08	1.2	2.04	0.026	1.13	16.6	10.0	0.85	338	0.36	0.02	3.6	15.1	330
W230147		2.90	0.06	0.6	1.115	0.012	0.53	10.4	4.5	0.96	286	0.24	0.01	1.6	6.1	660
W230148		0.72	<0.05	0.2	0.261	<0.005	0.12	2.9	1.3	0.68	357	<0.05	0.01	0.4	0.8	470
W230149		4.35	0.09	0.9	1.265	0.017	0.80	14.9	6.9	1.24	204	0.38	0.02	2.5	9.1	200
W230150		3.90	0.05	0.8	1.145	0.016	0.71	11.9	6.6	1.27	282	0.24	0.02	2.3	7.8	310
W230151		0.17	0.08	<0.1	0.018	<0.005	0.02	0.6	1.0	13.60	206	<0.05	<0.01	0.2	1.0	220
W230152		2.18	0.10	0.5	0.542	0.013	0.41	6.9	2.9	0.58	214	1.27	0.01	1.2	11.0	500

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Finalized Date: 16- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17168427

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230117		6.8	48.1	<0.002	3.72	152.5	4.8	5	0.7	1495	0.24	0.22	3.64	0.140	20.2	3.6
W230118		3.6	19.7	<0.002	1.47	51.6	4.3	2	0.3	1470	0.10	0.07	1.39	0.056	8.06	1.8
W230119		6.4	39.5	<0.002	1.38	19.20	5.4	1	0.7	1810	0.20	0.08	3.11	0.125	14.40	3.2
W230120		10.4	39.7	<0.002	5.75	315	2.6	6	0.9	1025	0.23	0.27	3.33	0.145	29.7	4.9
W230121		15.5	93.9	<0.002	4.18	104.5	7.3	2	2.2	237	0.48	0.13	7.40	0.299	97.0	4.1
W230122		4.7	17.1	<0.002	0.82	12.20	2.3	1	0.3	2000	0.08	0.06	1.39	0.060	10.60	2.6
W230123		2.8	19.4	<0.002	0.66	1.23	2.4	1	0.3	2020	0.10	<0.05	1.72	0.063	2.60	2.3
W230124		6.0	36.4	<0.002	1.37	2.62	4.3	1	0.7	1975	0.20	0.05	3.31	0.122	4.91	3.8
W230125		4.6	36.1	<0.002	1.06	0.74	4.4	2	0.6	1610	0.17	0.06	2.80	0.109	2.47	3.4
W230126		1.0	10.7	<0.002	0.35	0.36	1.7	1	0.2	2610	0.05	<0.05	1.00	0.032	0.66	1.5
W230127		1.2	12.2	<0.002	0.41	0.43	1.9	1	0.3	2720	0.06	0.05	1.11	0.037	0.78	1.6
W230128		0.6	7.9	<0.002	0.27	0.20	1.4	1	0.2	2570	<0.05	<0.05	0.75	0.024	0.30	1.7
W230129		<0.5	2.9	<0.002	0.12	0.31	0.7	1	<0.2	2290	<0.05	<0.05	0.27	0.009	0.26	1.0
W230130		0.8	10.2	<0.002	0.34	0.30	1.6	1	0.2	2420	<0.05	<0.05	0.85	0.030	0.72	1.2
W230131		5.2	33.2	<0.002	1.18	0.64	3.5	2	0.7	2030	0.19	0.06	3.05	0.110	2.53	3.6
W230132		3.2	23.3	<0.002	0.80	0.50	3.2	1	0.4	2660	0.12	0.05	2.07	0.068	2.07	2.7
W230133		2.0	17.1	<0.002	0.59	0.34	2.4	1	0.3	2600	0.08	<0.05	1.56	0.050	1.38	2.3
W230134		1.2	11.8	<0.002	0.42	0.98	2.1	1	0.4	2210	0.05	<0.05	1.08	0.035	2.61	1.8
W230135		12.1	80.0	0.003	2.23	6.62	7.8	2	2.0	1225	0.41	0.07	6.46	0.230	9.57	4.0
W230136		8.6	58.7	<0.002	1.59	0.55	6.5	2	1.0	1650	0.29	0.06	4.69	0.173	4.28	3.2
W230137		4.2	35.3	<0.002	1.16	2.62	4.0	1	0.5	1740	0.17	<0.05	2.48	0.114	2.15	2.3
W230138		7.2	74.6	<0.002	2.56	9.41	8.9	1	1.4	727	0.42	0.06	5.44	0.271	10.30	2.3
W230139		6.9	51.5	<0.002	1.43	0.70	6.2	2	0.8	1800	0.26	<0.05	4.09	0.161	2.92	3.1
W230140		9.1	73.5	<0.002	2.04	1.73	8.6	1	1.2	1220	0.37	0.07	5.36	0.234	6.13	3.1
W230141		<0.5	0.7	<0.002	<0.01	<0.05	0.1	1	<0.2	51.8	<0.05	<0.05	0.05	<0.005	0.04	0.6
W230142		5.4	43.1	<0.002	1.05	0.36	5.9	1	0.7	1750	0.20	<0.05	3.44	0.126	2.32	2.5
W230143		17.7	66.1	0.002	1.69	0.41	8.1	2	1.2	1365	0.33	0.06	5.09	0.213	2.76	3.1
W230144		3.2	27.1	<0.002	0.80	0.18	3.7	1	0.5	1945	0.14	<0.05	2.25	0.088	0.85	2.3
W230145		5.8	47.0	<0.002	1.32	0.31	5.7	1	0.8	1630	0.25	0.05	3.66	0.147	1.22	2.6
W230146		6.0	48.9	<0.002	1.59	0.54	7.2	1	0.7	2000	0.24	<0.05	3.52	0.184	1.32	2.3
W230147		2.7	23.1	<0.002	0.69	0.31	3.2	1	0.4	2500	0.10	0.05	1.89	0.064	0.94	2.6
W230148		<0.5	5.0	<0.002	0.21	0.11	1.1	1	<0.2	1845	<0.05	<0.05	0.45	0.016	0.26	1.4
W230149		5.3	34.3	<0.002	0.97	0.36	4.2	1	0.5	1990	0.17	<0.05	2.91	0.103	1.22	2.7
W230150		3.9	31.2	<0.002	0.92	0.30	3.9	1	0.5	1580	0.16	<0.05	2.47	0.099	1.03	2.1
W230151		<0.5	0.8	<0.002	<0.01	<0.05	0.2	1	<0.2	54.9	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W230152		9.3	17.5	0.003	0.52	0.34	2.1	1	0.3	2020	0.09	0.07	1.56	0.051	0.63	2.0

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230117		39	1.8	18.8	38	40.2	5.12	1.18
W230118		17	0.9	12.1	20	16.2	1.755	1.03
W230119		35	2.1	16.7	37	35.2		1.46
W230120		38	3.5	27.5	214	39.1	8.60	8.26
W230121		82	5.6	20.5	74	78.7		12.75
W230122		17	1.5	15.8	8	20.2		1.53
W230123		18	0.5	13.7	16	19.6		0.02
W230124		34	1.5	17.8	29	34.5		0.05
W230125		33	0.7	20.0	24	29.2		<0.01
W230126		10	0.3	8.9	10	10.7		<0.01
W230127		11	0.3	9.9	10	12.4		<0.01
W230128		8	0.1	9.6	7	9.3		<0.01
W230129		4	0.1	5.6	4	4.9		<0.01
W230130		10	0.2	7.3	9	10.6		<0.01
W230131		29	1.0	20.5	27	33.8		<0.01
W230132		20	0.7	19.2	19	22.7		<0.01
W230133		17	0.5	15.2	14	14.8		<0.01
W230134		12	0.8	11.6	14	12.2		<0.01
W230135		66	3.3	22.1	59	68.3		0.71
W230136		50	0.8	20.3	37	52.9		0.01
W230137		30	0.9	14.6	21	32.3		0.08
W230138		74	5.1	17.3	48	68.3		0.51
W230139		45	1.1	20.1	33	47.9		0.02
W230140		64	3.8	23.2	57	63.5		0.11
W230141		2	0.1	0.8	15	<0.5		<0.01
W230142		38	0.9	21.6	32	41.6		<0.01
W230143		61	1.0	24.4	60	57.5		<0.01
W230144		26	0.5	16.8	14	28.0		<0.01
W230145		41	0.7	22.6	34	45.9		0.02
W230146		51	2.7	20.1	24	44.2		0.02
W230147		20	0.8	17.9	13	22.9		0.03
W230148		6	0.2	10.1	2	8.0		0.01
W230149		30	0.9	20.0	12	30.9		0.01
W230150		27	1.0	17.2	16	30.6		0.01
W230151		2	0.1	0.9	15	<0.5		<0.01
W230152		16	0.5	12.0	19	16.1		<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 16- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17168427

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- SEP- 2017
Account: RCM

CERTIFICATE WH17174176

Project: Nadaleen

P.O. No.: N17- 061

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 16- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

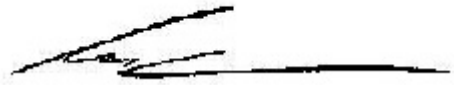
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 19- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174176

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230153		8.12	0.02	0.94	27.9	140	0.33	0.05	33.3	0.12	15.15	2.8	9	3.41	9.1	0.63
W230154		7.51	0.03	1.55	41.0	160	0.38	0.09	28.1	0.15	27.2	5.0	16	6.25	16.2	1.08
W230155		7.45	0.02	1.11	28.3	380	0.35	0.06	31.6	0.11	18.20	3.6	11	4.96	10.9	0.72
W230156		7.66	0.04	1.84	20.7	210	0.39	0.09	29.2	0.22	27.6	5.6	18	8.43	17.9	1.13
W230157		7.70	0.02	0.58	9.5	180	0.24	0.04	34.8	0.07	11.65	2.0	7	1.77	6.5	0.46
W230158		7.77	0.01	0.46	11.3	110	0.25	0.03	34.8	0.05	8.77	1.6	5	1.15	5.0	0.41
W230159		3.56	0.01	0.48	11.9	130	0.25	0.03	33.8	0.07	8.76	1.7	5	1.19	5.2	0.41
W230160		7.56	0.01	0.63	21.2	140	0.24	0.04	33.9	0.09	12.35	2.1	6	1.97	6.8	0.44
W230161		8.08	0.02	0.76	17.8	180	0.24	0.05	33.9	0.08	13.40	2.3	7	2.85	7.8	0.49
W230162		7.77	0.02	0.75	21.7	150	0.33	0.05	33.5	0.11	10.50	2.5	7	3.41	7.7	0.47
W230163		7.57	0.10	0.30	17.8	60	0.06	0.02	35.1	0.03	4.61	1.0	3	0.61	3.0	0.23
W230164		0.26	0.10	3.57	2570	210	0.98	0.13	17.75	0.13	37.0	10.4	41	9.96	40.7	2.95
W230165		8.11	0.01	0.53	26.6	110	0.16	0.04	34.3	0.05	8.74	1.8	5	1.41	5.3	0.38
W230166		7.63	0.01	0.44	13.3	100	0.18	0.03	34.8	0.05	8.36	1.6	5	1.60	4.6	0.35
W230167		6.82	<0.01	0.05	0.8	20	0.07	0.02	20.4	0.06	1.03	0.6	<1	0.11	1.6	0.46
W230168		7.84	0.01	0.45	16.6	110	0.18	0.03	33.9	0.04	8.79	1.6	4	1.46	4.7	0.35
W230169		7.84	0.01	0.41	21.6	110	0.18	0.03	35.2	0.04	8.22	1.6	4	1.15	4.9	0.35
W230170		7.62	0.02	0.37	27.1	110	0.17	0.03	34.7	0.04	7.24	1.4	4	0.92	4.6	0.29
W230171		1.26	0.08	5.30	228	240	1.78	0.21	3.76	0.07	51.1	18.5	61	24.8	49.1	4.70
W230172		12.62	0.07	5.89	1780	200	1.81	0.22	3.10	0.09	56.4	17.9	63	24.3	51.6	5.19
W230173		6.89	<0.01	0.06	5.2	20	0.06	0.04	20.0	0.05	1.12	0.6	<1	0.16	1.2	0.46
W230174		9.59	0.08	5.34	1150	200	1.46	0.20	4.44	2.05	50.0	16.3	64	18.80	45.4	4.03
W230175		11.38	0.07	3.31	709	260	0.92	0.15	11.15	2.61	32.0	7.5	35	10.40	22.8	3.18
W230176		10.81	0.07	5.98	152.0	240	1.81	0.23	2.16	0.23	59.1	16.5	69	27.9	44.0	4.52
W230177		12.49	0.07	6.55	40.6	250	1.77	0.26	2.86	0.07	61.3	18.6	69	42.2	53.7	5.17
W230178		12.42	0.06	4.55	29.7	190	1.19	0.16	3.49	0.07	42.8	15.2	58	30.4	42.0	4.87
W230179		10.48	0.07	6.05	19.9	200	1.65	0.22	3.27	0.14	56.3	18.9	77	40.3	54.0	4.01
W230180		0.26	0.19	3.94	6530	210	0.95	0.15	12.05	0.16	40.2	11.6	44	10.80	36.7	2.97
W230181		10.98	0.07	6.79	374	390	2.00	0.29	3.18	0.11	62.6	15.9	66	31.6	51.6	4.84
W230182		5.88	0.05	5.68	1685	280	1.49	0.22	4.52	0.04	52.3	16.4	58	21.1	44.0	4.60
W230183		5.55	0.05	5.85	445	190	1.48	0.24	3.76	0.02	54.8	16.6	57	22.3	47.9	4.71
W230184		12.07	0.05	5.95	504	200	1.64	0.24	3.65	0.04	54.7	15.8	61	25.5	50.6	4.73
W230185		12.03	0.05	6.45	55.5	190	1.75	0.26	2.69	0.05	59.8	18.9	71	33.1	53.3	4.86
W230186		11.99	0.07	5.89	12.4	200	1.65	0.24	1.36	0.10	55.9	16.7	71	42.6	45.7	4.37
W230187		<0.02	0.06	5.85	11.2	190	1.60	0.23	1.38	0.11	55.0	16.4	72	41.8	45.5	4.34
W230188		5.93	0.07	5.49	8.0	160	1.41	0.22	1.48	0.08	51.1	15.7	68	41.7	50.4	4.42

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 19- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174176

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230153		2.56	0.07	0.5	0.336	0.012	0.44	6.8	3.9	0.62	153	0.41	0.01	1.3	5.4	450
W230154		4.29	0.07	0.8	0.648	0.018	0.73	13.1	5.5	1.55	201	0.47	0.02	2.1	9.9	190
W230155		2.97	0.06	0.6	0.142	0.012	0.52	8.7	4.1	0.57	112	0.34	0.01	1.7	6.5	160
W230156		4.89	0.06	0.9	0.471	0.020	0.87	14.0	6.9	0.78	118	0.69	0.02	2.6	10.2	220
W230157		1.61	0.06	0.3	0.099	0.005	0.27	5.5	2.1	0.73	166	0.27	0.01	0.8	3.4	340
W230158		1.29	0.07	0.2	0.109	0.005	0.22	4.4	1.6	0.89	157	0.22	0.01	0.6	2.7	130
W230159		1.30	0.06	0.2	0.121	0.005	0.22	4.3	1.8	0.93	156	0.23	0.01	0.7	2.7	120
W230160		1.74	0.07	0.3	0.304	0.008	0.29	5.8	2.2	0.57	109	0.30	0.01	0.9	3.7	740
W230161		2.04	0.06	0.4	0.102	0.008	0.35	6.1	3.4	0.54	90	0.32	0.01	1.0	4.2	380
W230162		2.07	0.07	0.4	0.155	0.008	0.36	5.1	3.0	0.60	156	0.29	0.01	1.1	4.0	180
W230163		0.81	0.07	0.2	0.251	<0.005	0.14	2.2	0.5	0.93	159	0.12	0.01	0.4	1.6	1060
W230164		9.69	0.08	1.7	3.66	0.036	1.69	18.7	9.3	1.37	1160	1.55	0.02	5.7	23.4	380
W230165		1.48	0.05	0.3	0.467	0.005	0.25	4.2	1.5	0.54	154	0.20	0.01	0.7	2.7	130
W230166		1.20	0.07	0.2	0.054	0.005	0.21	3.9	1.9	0.78	122	0.17	0.01	0.6	2.3	100
W230167		0.17	0.13	<0.1	<0.005	<0.005	0.02	0.5	0.2	12.60	199	0.08	<0.01	0.2	1.5	180
W230168		1.26	0.08	0.2	0.084	0.005	0.21	4.0	1.7	1.12	182	0.18	0.01	0.6	2.4	290
W230169		1.15	0.07	0.2	0.143	0.006	0.19	3.8	1.4	0.86	191	0.19	0.01	0.6	2.4	270
W230170		1.05	0.07	0.2	0.218	0.005	0.17	3.4	1.1	0.51	108	0.20	0.01	0.5	2.2	340
W230171		13.95	0.07	2.6	3.02	0.059	2.48	24.9	35.6	1.17	361	0.47	0.03	8.4	35.7	420
W230172		15.85	0.08	2.7	3.92	0.063	2.83	27.3	14.6	1.81	857	0.45	0.03	9.3	35.9	500
W230173		0.21	0.08	<0.1	0.012	<0.005	0.02	0.5	<0.2	12.65	194	0.08	<0.01	0.2	1.5	180
W230174		14.15	0.08	2.5	4.85	0.058	2.53	24.1	13.9	2.41	1180	0.57	0.02	8.0	32.3	450
W230175		8.55	0.05	1.6	5.85	0.048	1.43	15.8	8.9	5.92	5820	0.95	0.02	4.6	18.1	410
W230176		15.85	0.09	2.8	3.18	0.063	2.92	28.9	11.3	1.40	404	0.88	0.03	9.2	34.0	390
W230177		17.35	0.09	3.1	0.925	0.065	3.17	29.5	15.8	1.77	522	0.51	0.03	10.2	36.0	500
W230178		11.45	0.07	2.1	0.504	0.053	2.14	20.9	19.5	1.78	551	0.44	0.02	7.0	29.1	400
W230179		15.55	0.08	2.8	0.411	0.059	2.88	28.3	31.6	2.15	591	0.39	0.03	8.8	38.2	500
W230180		10.25	0.05	2.0	16.10	0.035	1.85	21.4	13.0	2.62	1200	1.78	0.02	5.7	27.0	460
W230181		17.30	0.07	3.0	0.410	0.078	3.15	31.0	25.6	1.86	643	0.50	0.03	10.0	34.2	550
W230182		14.35	0.07	2.7	1.460	0.061	2.62	26.1	19.9	2.30	1000	0.28	0.02	8.6	32.0	510
W230183		15.00	0.07	2.8	0.939	0.064	2.70	27.7	31.6	1.95	858	0.27	0.03	8.9	32.3	490
W230184		14.85	0.07	2.7	0.443	0.063	2.72	27.6	62.6	2.02	790	0.25	0.03	8.9	32.4	550
W230185		16.55	0.08	2.8	0.086	0.072	2.99	30.0	42.4	2.26	607	0.28	0.03	9.6	38.2	550
W230186		15.10	0.08	2.6	0.165	0.063	2.70	28.3	83.7	1.68	352	0.29	0.03	8.5	31.3	430
W230187		15.05	0.08	2.6	0.157	0.057	2.66	28.0	82.5	1.67	353	0.27	0.03	8.3	31.1	430
W230188		14.10	0.06	2.5	0.121	0.063	2.31	25.8	92.4	1.71	390	0.24	0.03	8.2	32.0	410

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Finalized Date: 19- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174176

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230153		3.5	18.7	<0.002	0.54	0.20	2.1	<1	0.3	2080	0.10	<0.05	1.37	0.054	0.43	2.0
W230154		6.1	33.8	0.002	0.98	0.28	3.3	1	0.5	1990	0.16	0.05	2.56	0.089	0.82	3.0
W230155		3.9	22.5	<0.002	0.70	0.20	2.4	1	0.4	2140	0.12	<0.05	1.77	0.069	0.41	2.2
W230156		6.6	38.9	0.003	1.11	0.31	3.4	1	0.6	2390	0.19	0.07	2.84	0.112	0.68	3.4
W230157		2.4	10.6	<0.002	0.38	0.16	1.7	1	0.2	2870	0.06	<0.05	0.97	0.032	0.19	2.1
W230158		1.9	8.4	<0.002	0.31	0.15	1.2	<1	0.2	2220	0.05	<0.05	0.79	0.025	0.23	1.4
W230159		1.9	8.6	<0.002	0.32	0.17	1.3	<1	0.2	2170	0.05	<0.05	0.82	0.026	0.23	1.4
W230160		2.8	11.7	<0.002	0.40	0.30	1.6	1	0.2	2460	0.06	0.05	1.03	0.034	0.55	2.3
W230161		3.0	14.3	<0.002	0.45	0.20	1.8	1	0.3	2640	0.08	<0.05	1.19	0.041	0.33	2.1
W230162		2.9	14.5	<0.002	0.47	0.25	1.6	1	0.3	2160	0.08	<0.05	1.17	0.044	0.42	1.9
W230163		1.3	5.5	<0.002	0.17	0.28	0.7	<1	<0.2	1480	<0.05	<0.05	0.48	0.017	0.31	1.5
W230164		8.3	75.8	<0.002	2.51	9.24	7.9	1	1.4	707	0.43	0.06	4.92	0.259	9.75	2.3
W230165		2.4	10.3	<0.002	0.34	0.36	1.2	1	0.2	1980	0.06	<0.05	0.85	0.030	0.61	1.6
W230166		2.2	8.3	<0.002	0.29	0.18	1.2	1	0.2	1960	0.05	<0.05	0.72	0.025	0.26	1.6
W230167		1.2	0.8	<0.002	<0.01	0.07	0.1	<1	<0.2	48.1	<0.05	<0.05	0.06	<0.005	<0.02	0.6
W230168		2.3	8.5	<0.002	0.29	0.19	1.2	<1	0.2	1920	<0.05	<0.05	0.72	0.024	0.25	1.6
W230169		2.7	7.4	0.002	0.30	0.20	1.0	1	0.2	1950	<0.05	<0.05	0.74	0.024	0.35	1.8
W230170		1.9	6.8	<0.002	0.25	0.25	1.0	1	0.2	2090	<0.05	<0.05	0.62	0.022	0.36	1.6
W230171		17.9	106.0	<0.002	4.49	0.64	13.6	1	1.8	176.0	0.62	<0.05	7.14	0.463	5.99	1.7
W230172		18.9	125.0	<0.002	5.02	4.13	14.9	1	1.9	102.0	0.67	<0.05	7.96	0.472	9.52	1.9
W230173		1.3	1.0	<0.002	0.01	0.08	0.1	<1	<0.2	46.9	<0.05	<0.05	0.10	<0.005	0.03	0.6
W230174		46.8	108.5	<0.002	3.45	5.33	13.8	1	1.8	144.0	0.59	<0.05	6.98	0.447	10.60	1.8
W230175		106.5	62.0	0.005	2.32	7.45	8.9	1	1.3	228	0.37	<0.05	4.63	0.227	13.95	1.6
W230176		57.3	128.0	0.002	4.35	1.31	14.2	1	1.9	96.6	0.69	<0.05	8.57	0.473	6.75	2.0
W230177		19.8	141.5	<0.002	4.91	0.53	15.9	1	2.2	170.0	0.75	0.05	8.93	0.522	3.76	2.0
W230178		12.8	94.8	<0.002	3.73	0.46	11.4	1	1.5	142.0	0.50	<0.05	5.65	0.428	1.70	1.3
W230179		16.1	137.5	<0.002	1.37	0.51	16.5	1	1.9	135.5	0.69	0.05	8.19	0.505	1.51	1.8
W230180		11.1	82.2	<0.002	2.67	22.5	9.7	2	1.6	325	0.45	<0.05	6.09	0.272	46.5	6.9
W230181		17.9	144.5	<0.002	3.07	0.72	15.9	1	2.1	136.0	0.74	<0.05	9.54	0.509	2.26	2.0
W230182		13.8	116.0	<0.002	3.60	2.59	13.6	1	1.8	130.5	0.64	<0.05	8.30	0.468	3.52	1.7
W230183		12.8	124.0	<0.002	3.94	1.78	14.1	1	1.8	121.5	0.65	<0.05	8.70	0.481	3.54	1.8
W230184		15.4	121.5	<0.002	3.09	0.76	14.4	1	1.9	128.0	0.66	<0.05	8.53	0.485	2.13	1.7
W230185		18.2	143.5	<0.002	0.57	0.47	15.6	1	2.0	103.0	0.71	<0.05	9.34	0.506	0.91	1.9
W230186		17.0	136.0	<0.002	0.41	0.53	14.5	1	1.8	88.0	0.63	0.05	8.51	0.455	0.96	1.8
W230187		16.5	135.5	<0.002	0.39	0.50	14.2	1	1.9	86.6	0.63	0.05	8.54	0.460	0.93	1.7
W230188		16.3	126.5	<0.002	0.34	0.47	13.8	1	1.7	75.2	0.59	<0.05	7.95	0.460	0.95	1.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174176

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W230153		17	0.4	11.2	10	16.9	<0.01
W230154		28	0.6	20.2	15	26.7	<0.01
W230155		20	0.3	12.2	14	20.2	<0.01
W230156		32	0.5	18.4	25	33.0	<0.01
W230157		12	0.2	12.0	5	11.6	<0.01
W230158		10	0.2	8.2	4	8.6	<0.01
W230159		10	0.2	8.3	5	8.8	<0.01
W230160		11	0.4	11.2	7	11.9	<0.01
W230161		13	0.2	10.5	9	13.7	<0.01
W230162		13	0.2	8.0	8	12.3	<0.01
W230163		6	0.2	4.4	<2	6.6	<0.01
W230164		71	5.1	16.1	48	64.3	0.49
W230165		9	0.3	8.0	3	9.3	0.01
W230166		8	0.2	7.8	4	7.9	<0.01
W230167		1	0.1	0.7	15	<0.5	<0.01
W230168		8	0.1	7.7	2	7.8	<0.01
W230169		8	0.2	7.7	2	7.6	<0.01
W230170		7	0.3	6.9	2	7.4	<0.01
W230171		118	4.0	17.7	64	94.6	<0.01
W230172		125	7.9	20.0	66	100.5	0.11
W230173		2	0.1	0.7	14	0.5	<0.01
W230174		127	7.8	18.0	460	91.6	0.10
W230175		66	4.6	11.5	961	59.7	0.71
W230176		121	5.9	18.3	150	99.4	<0.01
W230177		135	1.2	21.6	67	111.5	<0.01
W230178		109	0.9	15.7	61	78.2	<0.01
W230179		145	1.0	19.6	97	101.5	0.11
W230180		85	7.6	18.3	50	70.9	2.61
W230181		133	2.9	21.1	104	106.5	<0.01
W230182		120	8.3	18.5	63	95.8	0.05
W230183		125	8.0	19.1	66	99.5	0.01
W230184		125	2.6	19.4	69	96.6	0.01
W230185		130	1.1	20.3	80	102.0	<0.01
W230186		127	1.0	18.0	86	95.1	<0.01
W230187		127	0.9	18.0	84	93.9	<0.01
W230188		126	0.9	17.1	82	92.3	<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 19- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17174176

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Finalized Date: 24- SEP- 2017
Account: RCM

CERTIFICATE WH17174167

Project: Nadaleen

P.O. No.: N17- 062

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 16- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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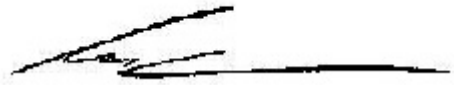
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174167

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232009		7.64	0.03	2.56	28.3	130	0.85	0.10	23.1	0.05	31.2	5.5	22	6.65	10.5	1.90
W232010		7.26	0.03	5.78	26.3	240	1.33	0.30	8.58	0.07	65.2	13.3	49	17.25	21.9	3.12
W232011		7.48	0.03	4.98	8.7	440	1.37	0.17	15.30	0.24	57.2	10.3	44	15.95	15.3	2.52
W232012		7.23	0.03	1.05	5.0	260	0.41	0.04	30.7	0.38	14.50	2.4	13	2.18	10.0	0.62
W232013		7.81	0.05	3.22	9.3	210	1.09	0.09	15.85	0.13	38.7	5.6	32	8.07	22.8	1.69
W232014		7.42	0.03	1.16	6.1	190	0.39	0.04	30.3	0.28	15.40	2.3	14	1.98	8.4	0.62
W232015		8.93	0.04	2.54	7.8	330	0.90	0.08	22.0	0.18	31.3	4.7	25	5.53	14.7	1.25
W232016		0.26	0.10	3.65	2640	210	0.86	0.13	18.70	0.12	39.7	10.7	40	10.20	41.8	3.04
W232017		7.39	0.06	3.65	62.1	190	1.02	0.10	15.90	0.11	42.6	5.9	43	7.73	26.0	1.76
W232018		8.52	0.05	3.13	10.7	190	0.86	0.08	14.60	0.08	39.6	4.9	33	7.10	21.0	1.61
W232019		4.98	0.01	0.05	2.1	30	0.07	0.02	21.0	0.06	1.14	0.7	1	0.16	2.0	0.50
W232020		8.11	0.05	3.35	7.7	190	1.01	0.08	17.15	0.08	42.8	5.4	34	9.28	21.8	1.55
W232021		6.97	0.05	4.09	3.2	260	1.34	0.11	13.75	0.09	48.3	7.1	39	13.25	32.3	1.87
W232022		7.49	0.04	4.41	4.1	370	1.32	0.10	11.60	0.08	51.8	6.1	43	11.95	30.3	1.97
W232023		6.90	0.04	4.88	2.8	290	1.51	0.13	8.94	0.08	56.8	7.2	48	13.45	30.2	2.15
W232024		4.15	0.06	5.28	3.2	260	1.51	0.13	8.43	0.08	58.7	8.0	49	14.75	34.4	2.22
W232025		7.29	0.06	5.60	3.2	360	1.86	0.14	8.46	0.06	65.5	8.8	54	16.30	35.7	2.51
W232026		7.50	0.05	3.61	8.4	360	1.32	0.10	15.95	0.08	43.1	6.9	39	9.82	27.1	1.69
W232027		7.86	0.06	3.10	7.5	330	1.14	0.09	19.00	0.09	36.5	5.7	34	7.47	22.1	1.50
W232028		7.44	0.04	2.32	4.8	850	0.85	0.07	25.2	0.07	25.7	4.3	24	5.08	15.0	1.08
W232029		7.58	0.05	4.53	14.1	290	1.51	0.10	11.20	0.10	49.7	7.2	49	12.40	26.7	1.98
W232030		7.41	0.06	4.57	27.2	290	1.48	0.13	12.05	0.09	49.6	7.9	47	13.00	37.2	1.93
W232031		7.22	0.04	3.96	62.3	180	1.43	0.10	13.55	0.09	43.1	5.9	42	10.20	25.0	1.73
W232032		7.60	0.04	1.60	58.1	370	0.66	0.05	26.8	0.08	21.4	3.0	18	2.70	9.7	0.88
W232033		7.76	0.05	2.91	98.2	360	1.05	0.09	20.5	0.10	34.5	4.2	31	7.04	18.6	1.35
W232034		0.26	0.19	3.98	6050	210	1.07	0.14	12.05	0.17	43.1	11.5	48	10.65	36.1	2.99
W232035		7.46	0.05	2.94	84.3	260	1.08	0.09	22.3	0.09	35.9	5.0	32	7.09	16.0	1.37
W232036		7.41	0.03	2.11	136.0	830	0.73	0.06	25.2	0.08	23.2	3.6	22	4.04	15.6	1.06
W232037		7.21	0.06	3.69	188.0	440	1.22	0.10	14.90	0.09	43.5	5.3	43	10.35	27.6	1.73
W232038		4.66	0.05	1.63	706	310	0.62	0.05	28.1	0.11	20.6	2.5	17	3.89	11.3	0.84
W232039		4.91	0.01	0.05	3.4	20	0.08	0.02	21.6	0.07	1.14	0.6	<1	0.24	2.4	0.49
W232040		2.89	7.31	2.65	2700	80	0.90	0.08	20.9	0.45	28.3	4.1	29	5.35	21.1	1.27
W232041		7.23	6.89	3.69	3560	100	1.09	0.10	15.15	0.46	43.9	5.8	40	7.33	21.2	1.73
W232042		7.64	7.25	4.32	>10000	210	1.01	0.12	8.23	0.79	57.0	7.2	49	8.02	28.3	2.01
W232043		8.08	0.10	2.08	568	110	0.68	0.05	21.6	0.15	26.2	3.1	21	4.06	11.7	1.04
W232044		<0.02	0.07	2.06	494	110	0.80	0.06	21.0	0.14	26.4	3.1	22	4.04	12.1	1.05

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Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174167

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232009		6.21	0.12	1.2	0.254	0.022	1.02	14.9	16.5	0.71	650	0.29	0.13	3.4	11.5	580
W232010		14.25	0.14	2.2	0.043	0.044	2.02	34.6	69.1	1.69	1160	0.24	0.14	8.1	30.8	550
W232011		12.75	0.16	1.9	0.034	0.033	1.71	31.2	57.0	2.24	1520	0.23	0.19	7.9	33.7	430
W232012		2.71	0.14	0.6	0.029	0.008	0.30	7.9	14.8	1.32	708	0.24	0.17	1.8	5.3	350
W232013		8.19	0.16	1.8	0.026	0.026	1.11	20.6	38.5	4.63	701	0.53	0.19	5.4	15.7	410
W232014		2.94	0.13	0.7	0.032	0.008	0.39	8.4	15.2	1.54	481	0.34	0.10	1.9	5.9	330
W232015		6.47	0.15	1.2	0.044	0.019	0.91	15.9	45.9	2.12	329	0.26	0.06	4.1	12.1	360
W232016		9.47	0.13	1.9	3.39	0.038	1.75	19.8	7.8	1.43	1200	1.65	0.02	5.9	24.6	400
W232017		9.26	0.13	1.8	0.074	0.028	1.50	22.6	57.6	3.77	375	0.37	0.03	5.9	16.9	440
W232018		7.80	0.16	1.7	0.049	0.025	1.11	20.7	69.5	3.66	233	0.46	0.13	5.0	14.5	450
W232019		0.22	0.15	<0.1	0.005	<0.005	0.02	0.6	1.4	12.95	224	0.15	<0.01	0.1	1.7	180
W232020		8.49	0.18	1.9	0.028	0.026	1.14	22.5	51.4	3.29	227	0.45	0.31	5.6	15.4	450
W232021		10.65	0.16	2.0	0.040	0.033	1.44	26.5	62.1	3.91	219	0.38	0.35	6.7	20.0	510
W232022		11.30	0.18	2.4	0.031	0.037	1.54	27.7	69.2	4.12	230	0.39	0.36	7.3	20.1	530
W232023		12.35	0.18	2.5	0.038	0.037	1.78	30.1	71.3	4.10	219	0.30	0.37	7.8	21.7	600
W232024		13.30	0.18	2.6	0.039	0.040	1.95	31.2	75.5	4.27	216	0.30	0.39	8.4	23.5	620
W232025		14.10	0.20	2.7	0.077	0.039	2.02	34.6	85.6	4.41	221	0.26	0.41	9.1	26.1	720
W232026		9.73	0.11	1.7	0.056	0.032	1.24	21.6	81.2	3.34	209	1.05	0.30	5.9	22.2	460
W232027		8.21	0.12	1.6	0.030	0.027	1.04	18.3	63.0	4.11	230	0.67	0.30	4.9	16.5	400
W232028		6.11	0.12	1.0	0.025	0.020	0.69	14.2	33.6	2.04	203	0.64	0.34	3.6	11.2	250
W232029		11.85	0.15	2.2	0.032	0.034	1.68	24.9	52.1	3.18	212	0.34	0.23	7.3	20.5	560
W232030		11.75	0.14	2.3	0.049	0.033	1.70	24.7	56.5	2.95	211	0.23	0.16	7.3	21.6	600
W232031		10.70	0.14	2.1	0.027	0.028	1.48	22.1	71.9	3.63	215	0.30	0.15	6.4	17.4	450
W232032		4.19	0.12	0.9	0.031	0.011	0.50	11.7	51.5	2.43	227	0.68	0.02	2.6	8.1	200
W232033		7.53	0.14	1.5	0.037	0.022	1.16	17.5	122.5	2.86	224	0.48	0.04	4.7	11.7	360
W232034		10.30	0.12	2.2	15.35	0.035	1.89	20.5	13.1	2.65	1220	2.02	0.02	5.8	26.6	480
W232035		7.78	0.13	1.5	0.039	0.021	1.16	17.8	71.1	3.07	217	0.27	0.09	4.7	13.8	360
W232036		5.52	0.11	1.0	0.033	0.017	0.78	12.8	51.2	2.21	202	0.52	0.02	3.3	9.6	270
W232037		9.53	0.12	2.2	0.042	0.028	1.89	21.3	72.8	4.50	224	0.40	0.04	5.7	16.8	530
W232038		4.31	0.13	0.8	0.084	0.011	0.73	11.4	27.8	1.70	208	0.30	0.01	2.6	6.9	250
W232039		0.20	0.19	<0.1	<0.005	<0.005	0.02	0.5	1.4	13.40	224	0.07	<0.01	0.1	1.8	250
W232040		6.99	0.13	1.1	6.36	0.020	1.24	15.3	15.6	1.14	865	0.21	0.01	4.1	12.3	280
W232041		9.57	0.14	1.8	8.58	0.028	1.84	21.4	19.6	2.35	651	0.34	0.02	5.7	17.1	410
W232042		11.65	0.15	2.3	9.03	0.033	2.07	29.1	26.4	2.81	544	0.60	0.02	6.8	19.6	600
W232043		5.28	0.14	1.4	0.217	0.018	1.02	13.4	17.0	3.24	173	0.59	0.02	3.3	8.7	300
W232044		5.41	0.15	1.3	0.217	0.011	1.01	13.1	16.9	3.19	172	0.57	0.02	3.3	8.5	300

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174167

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232009		8.2	46.7	<0.002	0.92	0.43	4.6	1	0.9	581	0.24	<0.05	4.32	0.126	0.61	1.6
W232010		12.3	90.3	<0.002	0.40	0.40	9.1	1	2.0	422	0.62	<0.05	10.10	0.256	0.47	2.4
W232011		8.7	78.8	<0.002	0.06	0.20	7.8	1	1.6	442	0.58	<0.05	9.30	0.217	0.36	3.6
W232012		5.6	14.6	<0.002	0.06	0.14	1.7	2	0.4	943	0.13	<0.05	2.24	0.052	0.10	5.0
W232013		9.2	54.9	<0.002	0.07	0.28	5.1	2	1.2	345	0.40	<0.05	6.89	0.160	0.29	6.4
W232014		6.3	17.7	<0.002	0.06	0.16	1.9	2	0.5	885	0.15	<0.05	2.47	0.058	0.12	5.3
W232015		6.4	45.9	<0.002	0.06	0.27	4.0	2	0.9	603	0.31	<0.05	5.08	0.121	0.27	6.1
W232016		8.8	79.4	<0.002	2.59	9.31	8.8	2	1.5	739	0.42	0.09	5.48	0.266	10.70	2.3
W232017		9.2	69.8	<0.002	0.15	0.43	5.6	2	1.3	433	0.42	<0.05	7.36	0.179	0.54	5.6
W232018		8.3	57.2	<0.002	0.06	0.30	4.7	2	1.1	358	0.37	<0.05	6.48	0.153	0.39	4.3
W232019		1.3	1.1	<0.002	<0.01	0.05	0.1	1	<0.2	49.0	<0.05	<0.05	0.09	<0.005	0.03	0.6
W232020		8.5	57.3	<0.002	0.06	0.31	5.1	2	1.2	425	0.40	<0.05	6.97	0.166	0.29	6.3
W232021		8.6	73.3	<0.002	0.04	0.27	6.4	2	1.5	367	0.50	<0.05	8.43	0.200	0.35	7.5
W232022		11.8	78.2	<0.002	0.03	0.27	6.7	3	1.6	341	0.53	<0.05	9.19	0.221	0.37	5.2
W232023		11.3	86.0	<0.002	0.03	0.27	7.3	3	1.7	282	0.60	<0.05	10.30	0.243	0.39	4.7
W232024		11.3	93.2	<0.002	0.04	0.30	7.9	3	1.9	270	0.63	<0.05	10.75	0.258	0.43	4.5
W232025		10.1	99.4	<0.002	0.05	0.25	8.5	2	2.1	299	0.68	<0.05	11.40	0.273	0.44	5.2
W232026		11.1	66.4	<0.002	0.05	0.27	5.9	2	1.3	447	0.45	<0.05	6.98	0.172	0.34	5.7
W232027		10.2	55.9	<0.002	0.05	0.31	5.1	2	1.2	565	0.38	<0.05	6.24	0.146	0.28	8.0
W232028		7.5	35.8	<0.002	0.09	0.24	3.8	2	0.9	814	0.28	<0.05	4.46	0.108	0.18	9.9
W232029		12.4	87.1	<0.002	0.05	0.33	7.2	2	1.7	468	0.54	<0.05	8.94	0.221	0.37	6.2
W232030		10.2	88.8	<0.002	0.04	0.35	7.2	2	1.6	502	0.56	<0.05	9.08	0.220	0.39	5.6
W232031		10.6	80.3	<0.002	0.03	0.30	6.4	2	1.4	543	0.48	<0.05	8.08	0.191	0.38	6.6
W232032		6.8	27.2	<0.002	0.04	0.27	2.7	2	0.6	874	0.19	<0.05	3.26	0.075	0.23	10.9
W232033		8.6	62.7	<0.002	0.04	0.27	4.7	2	1.1	796	0.37	<0.05	5.76	0.137	0.42	7.9
W232034		11.9	88.1	0.002	2.68	24.1	10.3	2	1.7	339	0.42	0.05	5.91	0.274	47.1	6.3
W232035		8.8	66.5	<0.002	0.04	0.34	4.8	2	1.1	856	0.35	<0.05	5.85	0.137	0.48	8.1
W232036		6.5	46.8	<0.002	0.08	0.30	3.5	1	0.7	1090	0.24	<0.05	4.00	0.098	0.37	8.5
W232037		11.1	111.0	<0.002	0.05	0.41	5.9	2	1.3	577	0.45	<0.05	7.61	0.176	0.77	6.9
W232038		5.8	46.4	<0.002	0.13	0.74	2.7	1	0.6	1005	0.19	<0.05	3.09	0.075	1.11	9.9
W232039		1.5	1.5	<0.002	<0.01	0.06	0.1	<1	<0.2	54.9	<0.05	<0.05	0.07	<0.005	0.02	0.4
W232040		7.6	73.0	<0.002	1.36	26.3	4.2	1	1.0	541	0.32	<0.05	5.11	0.122	33.1	8.5
W232041		10.9	101.0	<0.002	1.38	24.1	5.5	2	1.3	613	0.44	<0.05	7.04	0.177	43.5	9.3
W232042		14.9	104.5	<0.002	3.73	94.6	6.6	3	1.8	786	0.53	<0.05	8.81	0.206	40.5	12.5
W232043		8.0	58.0	<0.002	0.19	1.21	3.3	2	0.7	1065	0.25	<0.05	4.27	0.098	1.06	8.3
W232044		8.1	57.5	<0.002	0.18	1.05	3.4	2	0.7	1040	0.24	<0.05	4.32	0.098	0.95	8.2

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17174167

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232009		28	0.5	9.5	32	42.8		<0.01
W232010		47	1.0	16.1	82	76.7		<0.01
W232011		36	0.8	13.4	80	79.1		<0.01
W232012		17	0.2	5.4	25	21.5		<0.01
W232013		54	0.7	11.4	59	63.0		<0.01
W232014		20	0.2	5.3	23	24.3		<0.01
W232015		40	0.6	9.6	46	43.4		<0.01
W232016		75	5.5	16.6	51	65.5		0.50
W232017		55	0.9	12.9	61	65.5		0.01
W232018		51	0.6	12.3	56	62.9		0.01
W232019		2	0.1	0.8	17	0.5		<0.01
W232020		57	0.6	12.7	52	68.9		<0.01
W232021		62	0.8	13.9	68	70.6		0.01
W232022		70	0.8	15.8	71	86.6		0.01
W232023		75	0.9	16.8	75	90.0		0.01
W232024		79	0.9	17.6	81	93.0		0.01
W232025		83	1.1	19.5	88	92.4		0.01
W232026		54	0.7	13.0	65	70.3		0.02
W232027		47	0.6	11.6	57	54.1		0.01
W232028		33	0.5	8.2	39	33.8		<0.01
W232029		66	0.8	14.6	70	73.8		0.01
W232030		64	0.8	14.6	63	72.3		0.03
W232031		55	0.8	12.7	59	69.2		0.03
W232032		27	0.4	7.2	34	27.6		0.01
W232033		42	1.2	10.6	44	53.7		<0.01
W232034		87	8.2	18.6	51	72.1		2.58
W232035		43	0.6	10.8	49	48.9		<0.01
W232036		30	0.4	7.7	38	32.0		<0.01
W232037		57	0.8	13.6	61	68.7		<0.01
W232038		25	0.7	7.1	33	26.0		0.01
W232039		2	0.1	0.8	18	<0.5		<0.01
W232040		40	4.7	9.4	62	35.7		10.30
W232041		56	4.7	12.2	76	59.6		11.70
W232042		66	4.4	13.6	102	76.1	5.15	17.40
W232043		30	0.8	9.0	40	42.6		0.06
W232044		31	0.8	8.8	39	43.6		0.05

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 24- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17174167

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 24- SEP- 2017
Account: RCM

CERTIFICATE WH17176799

Project: Nadaleen

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

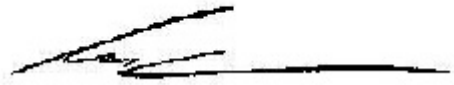
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17176799

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230189		11.21	0.06	5.58	32.5	170	1.61	0.22	1.67	0.04	54.0	17.9	67	43.1	46.6	4.52
W230190		11.28	0.07	5.20	57.9	180	1.45	0.20	1.78	0.05	50.5	17.6	63	27.9	44.4	4.02
W230191		11.35	0.06	5.84	100.0	180	1.87	0.22	1.84	0.02	56.0	20.6	66	29.1	46.5	4.16
W230192		5.68	0.04	7.12	498	250	1.74	0.28	2.64	0.04	67.6	18.0	73	22.5	61.1	5.38
W230193		5.44	0.07	6.18	3420	340	1.61	0.24	3.16	0.10	62.2	17.9	60	16.35	56.5	4.85
W230194		6.88	0.01	0.06	3.9	30	0.09	0.03	20.7	0.07	1.40	0.8	1	0.21	2.3	0.48
W230195		6.71	0.05	5.59	115.0	200	1.63	0.22	3.27	0.15	56.1	14.9	60	17.05	52.2	4.50
W230196		8.08	0.05	6.79	44.6	370	2.03	0.25	3.60	0.02	66.5	17.2	68	25.1	56.4	4.81
W230197		4.40	0.05	6.43	76.8	390	1.98	0.25	3.47	0.04	63.7	17.0	68	23.9	56.3	4.84
W230198		3.62	0.07	5.27	161.5	270	1.33	0.20	2.44	0.22	51.6	14.1	58	14.90	40.9	4.64
W230199		12.10	0.05	5.04	54.5	180	1.61	0.19	1.80	0.08	48.8	13.9	62	24.7	48.7	4.87
W230200		11.39	0.06	6.87	79.0	190	2.28	0.28	2.26	0.05	68.2	18.1	70	32.1	61.4	5.27
W230201		5.37	0.06	6.59	72.8	200	2.29	0.27	2.21	0.05	64.2	17.0	67	29.8	57.9	5.06
W230202		4.31	0.06	7.03	2150	310	1.95	0.29	3.51	0.04	71.6	19.6	67	21.8	62.7	5.33
W230203		7.10	0.01	0.07	2.5	30	0.11	0.03	21.9	0.06	1.22	0.8	1	0.21	2.1	0.52
W230204		5.79	0.08	5.63	1105	140	1.71	0.22	3.46	0.07	55.7	16.6	57	21.3	47.0	4.77
W230205		11.64	0.09	5.70	78.1	170	1.54	0.22	2.13	0.10	59.6	18.2	69	26.8	47.5	4.58
W230206		0.26	0.09	3.84	2780	210	1.08	0.14	19.35	0.12	39.8	11.4	44	10.20	46.2	3.17
W230207		12.30	0.08	6.15	74.1	190	1.70	0.23	1.84	0.05	60.1	20.9	72	30.3	53.5	5.03
W230208		11.05	0.09	5.67	68.0	150	1.62	0.22	1.69	0.06	55.7	19.5	69	24.3	48.6	4.09
W230209		11.63	0.04	6.14	119.0	180	1.66	0.23	3.05	0.05	64.6	16.0	68	23.6	55.0	5.36
W230210		11.72	0.06	7.44	220	260	2.33	0.29	2.32	0.08	73.2	18.0	75	26.1	61.5	5.20
W230211		5.56	0.08	7.86	397	220	2.18	0.33	1.92	0.15	74.7	22.3	78	24.7	57.1	5.87
W230212		0.26	0.65	1.88	>10000	140	0.52	2.60	25.8	0.15	27.8	4.8	27	5.83	16.5	1.38
W230213		4.36	0.05	3.75	978	340	0.80	0.15	6.06	0.06	39.6	11.1	48	7.99	34.1	5.03
W230214		11.03	0.08	7.91	95.9	250	2.27	0.30	1.21	0.04	77.6	20.1	84	62.6	55.3	5.44
W230215		12.08	0.07	6.21	123.5	210	1.74	0.23	3.39	0.02	61.9	18.6	70	38.6	48.9	5.03
W230216		10.41	0.12	6.19	340	220	1.78	0.21	4.29	0.06	62.3	17.7	68	35.9	46.8	4.33
W230217		11.74	0.04	6.76	242	220	2.50	0.21	6.33	0.02	63.5	17.8	79	52.4	46.8	4.83
W230218		12.05	0.04	8.45	469	310	2.76	0.24	2.30	<0.02	73.6	22.9	103	73.6	60.0	6.08
W230219		12.96	0.07	7.96	455	210	2.95	0.23	1.91	0.05	68.6	21.3	95	51.0	60.8	5.49
W230220		<0.02	0.06	7.82	468	210	2.85	0.24	2.04	0.04	69.0	21.7	96	51.7	60.0	5.57
W230221		12.09	0.06	6.01	265	210	1.79	0.24	2.86	0.22	68.3	11.0	62	23.2	34.1	3.86
W230222		12.18	0.08	6.30	114.5	220	1.99	0.26	3.07	0.16	73.6	17.1	61	28.2	38.6	4.23
W230223		11.70	0.07	5.93	172.5	220	1.73	0.25	4.60	0.26	65.4	12.8	59	24.6	35.1	4.50
W230224		11.70	0.08	6.24	59.7	230	1.72	0.25	4.69	0.27	68.1	13.1	65	25.3	36.6	4.22

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17176799

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230189		15.05	0.13	2.6	0.115	0.054	2.45	27.4	82.4	1.83	440	0.33	0.03	8.6	33.2	490
W230190		13.90	0.13	2.4	0.172	0.055	2.40	29.9	67.2	1.76	431	0.36	0.03	8.0	33.5	500
W230191		15.50	0.15	2.7	0.343	0.061	2.61	27.9	69.3	1.43	427	0.32	0.03	9.2	36.4	480
W230192		19.05	0.17	3.3	1.470	0.076	3.35	33.9	25.1	1.59	625	0.44	0.03	11.5	40.2	560
W230193		16.50	0.13	2.9	2.34	0.097	2.73	30.1	18.8	1.78	809	0.84	0.03	9.9	39.1	450
W230194		0.23	0.12	<0.1	0.015	0.013	0.03	0.7	1.3	12.90	219	0.14	<0.01	0.1	2.3	190
W230195		14.45	0.11	2.7	0.495	0.078	2.50	27.0	69.9	1.68	638	0.34	0.02	9.1	31.7	490
W230196		17.30	0.13	3.1	0.306	0.082	3.03	32.4	73.5	2.07	694	0.25	0.03	10.7	35.6	640
W230197		16.35	0.13	3.0	0.242	0.081	2.89	30.6	69.5	2.09	726	0.33	0.03	10.1	36.7	650
W230198		13.45	0.12	2.5	0.609	0.071	2.38	25.1	29.8	1.28	512	0.32	0.02	8.2	26.8	430
W230199		12.90	0.10	2.4	0.229	0.061	2.17	23.8	97.7	1.68	503	0.29	0.03	7.7	30.3	430
W230200		17.75	0.12	3.3	0.252	0.086	3.03	32.9	66.2	1.92	559	0.26	0.03	11.1	37.7	570
W230201		17.05	0.13	3.0	0.256	0.077	2.91	31.1	62.3	1.79	539	0.26	0.03	10.4	35.5	550
W230202		18.45	0.15	3.2	0.748	0.085	3.17	34.2	17.8	2.07	991	0.32	0.03	11.6	39.4	510
W230203		0.25	0.15	<0.1	0.007	<0.005	0.03	0.6	1.3	13.60	239	<0.05	<0.01	0.2	2.0	220
W230204		14.40	0.12	2.7	0.676	0.066	2.52	27.1	20.9	1.92	1240	0.27	0.02	8.9	32.7	440
W230205		14.55	0.12	2.7	0.287	0.062	2.55	27.9	35.8	1.81	569	0.33	0.03	8.9	34.6	550
W230206		9.69	0.08	1.8	3.53	0.043	1.78	19.7	9.6	1.52	1300	1.65	0.02	6.0	26.3	420
W230207		15.60	0.11	2.9	0.181	0.064	2.81	29.3	33.1	1.97	493	0.38	0.03	9.6	41.6	500
W230208		14.30	0.10	2.7	0.325	0.057	2.50	27.2	31.6	1.51	449	0.35	0.03	8.6	34.1	460
W230209		15.45	0.12	3.0	0.341	0.069	2.67	29.4	37.0	1.60	925	0.28	0.03	9.8	34.4	510
W230210		19.15	0.13	3.4	0.711	0.083	3.39	35.9	18.0	1.46	562	0.26	0.03	11.7	37.5	560
W230211		20.6	0.14	3.4	1.620	0.085	3.66	36.2	13.2	1.25	608	0.31	0.03	11.4	45.6	570
W230212		4.89	0.09	0.9	6.38	0.025	0.92	12.9	8.8	0.95	2380	1.81	0.01	2.5	14.1	360
W230213		9.14	0.08	1.8	1.700	0.045	1.71	18.5	8.2	2.63	2010	0.27	0.02	5.8	21.7	350
W230214		20.0	0.14	3.6	0.348	0.081	3.57	37.8	43.7	1.67	340	0.35	0.04	11.4	41.2	610
W230215		15.50	0.12	2.9	0.230	0.065	2.68	29.2	44.5	2.23	788	0.25	0.03	9.5	35.7	690
W230216		15.90	0.13	2.6	1.130	0.059	2.79	30.7	18.1	1.24	604	0.38	0.02	8.7	32.6	420
W230217		18.30	0.12	2.5	1.960	0.073	3.14	31.5	19.9	1.04	534	0.26	0.02	8.1	33.8	240
W230218		22.9	0.14	2.9	1.500	0.091	4.03	34.9	24.7	1.15	475	0.19	0.03	9.7	42.2	270
W230219		21.0	0.14	2.9	2.36	0.081	3.73	32.8	28.8	0.86	390	0.46	0.03	9.5	39.5	300
W230220		21.1	0.13	2.8	2.33	0.078	3.73	32.3	29.9	0.87	419	0.44	0.03	9.6	40.2	290
W230221		14.60	0.13	3.1	0.724	0.063	2.77	33.0	26.9	1.31	596	1.07	0.03	9.8	25.7	700
W230222		15.65	0.12	3.2	0.462	0.071	2.88	35.7	26.4	1.39	549	1.23	0.03	10.6	30.9	660
W230223		14.40	0.12	2.9	0.574	0.051	2.73	32.0	17.3	1.51	617	1.29	0.03	9.4	29.4	700
W230224		15.20	0.12	3.1	0.493	0.067	2.93	33.8	17.5	1.42	552	1.49	0.03	9.8	29.2	870

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VANCOUVER BC V6B 1L8

Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17176799

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230189		15.7	125.5	<0.002	0.42	0.49	16.4	2	1.8	82.6	0.61	0.06	8.08	0.461	0.85	1.7
W230190		16.4	112.5	<0.002	0.37	0.45	14.8	1	1.7	92.2	0.57	<0.05	7.50	0.444	0.77	1.5
W230191		16.6	124.5	<0.002	2.36	0.44	17.0	1	1.8	98.4	0.65	0.06	8.31	0.504	1.69	1.7
W230192		12.6	149.0	<0.002	5.06	1.57	21.6	1	2.2	213	0.84	0.07	10.25	0.584	5.12	2.0
W230193		21.3	130.0	0.003	4.20	5.40	17.3	1	2.1	226	0.71	0.06	8.82	0.496	7.77	1.7
W230194		1.6	1.2	<0.002	0.01	<0.05	0.2	<1	<0.2	48.7	<0.05	<0.05	0.13	<0.005	0.03	0.4
W230195		16.0	117.5	0.002	3.64	0.42	15.4	1	1.9	247	0.64	0.05	8.08	0.471	2.44	1.6
W230196		15.1	144.5	0.002	3.22	0.31	17.9	1	2.2	171.5	0.76	0.05	9.53	0.543	3.27	1.9
W230197		14.1	137.0	<0.002	2.53	0.44	16.7	1	2.0	253	0.71	<0.05	9.30	0.519	2.09	1.9
W230198		18.9	112.5	<0.002	4.07	0.55	14.4	1	1.7	182.0	0.58	<0.05	7.29	0.444	3.88	1.5
W230199		13.5	110.5	0.002	1.13	0.31	13.8	1	1.5	121.0	0.56	<0.05	6.99	0.449	1.30	1.5
W230200		16.3	158.5	<0.002	2.36	0.42	18.8	1	2.1	118.0	0.79	0.06	9.83	0.555	2.87	2.0
W230201		14.3	150.5	<0.002	2.64	0.40	17.9	1	2.1	112.0	0.74	<0.05	9.24	0.535	3.12	1.9
W230202		16.9	165.0	<0.002	4.99	2.55	19.5	1	2.4	150.5	0.80	0.07	9.90	0.562	5.03	2.0
W230203		1.3	1.3	<0.002	0.01	<0.05	0.2	1	<0.2	48.4	<0.05	<0.05	0.11	<0.005	0.04	0.6
W230204		15.5	128.5	<0.002	4.32	1.84	15.5	1	2.1	99.9	0.63	0.05	8.03	0.475	3.76	1.7
W230205		16.8	129.5	<0.002	1.26	0.45	14.8	1	1.8	112.0	0.62	0.05	8.04	0.482	1.50	1.7
W230206		8.8	79.9	0.002	2.74	9.01	9.5	1	1.4	778	0.40	0.05	5.40	0.285	10.90	2.3
W230207		19.3	140.0	0.002	0.86	0.46	16.0	1	1.9	97.5	0.65	0.05	8.32	0.519	1.20	1.7
W230208		18.5	125.0	<0.002	1.09	0.58	14.8	1	1.8	88.3	0.61	<0.05	8.03	0.481	1.78	1.6
W230209		13.0	137.0	<0.002	4.73	0.31	16.8	1	1.8	129.5	0.69	<0.05	8.36	0.534	3.87	1.7
W230210		16.9	170.0	<0.002	4.98	0.82	19.7	1	2.4	117.5	0.82	0.05	10.55	0.594	3.26	2.1
W230211		37.1	177.0	<0.002	5.74	2.76	21.0	1	2.6	149.0	0.79	0.06	10.75	0.556	9.49	2.1
W230212		7.2	40.1	0.003	1.45	41.7	5.7	1	0.7	1065	0.18	0.06	3.15	0.089	24.1	5.9
W230213		10.1	75.2	<0.002	3.13	3.75	10.6	<1	1.2	305	0.41	<0.05	4.95	0.328	9.64	1.0
W230214		31.8	197.0	0.002	1.58	0.64	20.0	1	2.5	75.6	0.83	<0.05	11.45	0.563	1.82	2.3
W230215		14.3	139.5	<0.002	1.59	0.45	16.0	1	1.9	115.5	0.67	0.05	8.62	0.502	2.20	1.8
W230216		13.9	140.0	0.003	3.59	1.27	16.1	1	1.9	140.0	0.61	<0.05	8.55	0.422	4.71	1.7
W230217		11.9	163.0	0.002	4.33	0.52	20.1	1	2.1	182.0	0.57	<0.05	8.52	0.396	7.25	1.7
W230218		14.3	197.5	0.003	5.73	0.72	25.4	1	2.5	89.3	0.70	<0.05	10.45	0.493	8.61	1.9
W230219		15.9	172.0	0.004	5.27	2.20	22.5	1	2.9	100.5	0.69	<0.05	9.58	0.474	10.25	2.0
W230220		16.0	170.0	0.003	5.35	2.19	23.2	1	2.6	103.0	0.69	<0.05	9.55	0.469	10.35	2.0
W230221		18.0	132.0	<0.002	2.68	1.16	12.8	1	2.1	89.3	0.70	<0.05	9.81	0.424	2.78	2.1
W230222		34.7	142.0	<0.002	3.08	0.53	13.8	1	2.2	86.8	0.74	<0.05	10.40	0.446	2.77	2.2
W230223		20.7	132.5	<0.002	3.08	0.61	12.6	1	2.0	113.0	0.68	<0.05	9.49	0.406	2.83	2.1
W230224		17.0	140.0	<0.002	2.83	0.44	13.1	1	2.1	124.5	0.71	<0.05	9.86	0.424	3.12	2.3

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Finalized Date: 24- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17176799

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230189		127	1.5	18.9	71	96.3		<0.01
W230190		121	1.0	17.6	74	88.2		<0.01
W230191		137	1.1	19.0	72	99.2		0.01
W230192		152	7.1	23.0	76	118.5		0.01
W230193		131	12.1	20.0	80	103.5		0.10
W230194		3	0.1	0.8	19	0.8		<0.01
W230195		121	3.8	18.4	85	98.2		0.01
W230196		138	1.5	21.8	74	112.0		0.01
W230197		133	2.5	21.7	81	109.0		<0.01
W230198		120	4.3	17.5	91	91.6		<0.01
W230199		121	1.0	16.8	83	85.4		0.01
W230200		144	1.9	23.0	89	113.5		<0.01
W230201		138	1.9	21.6	82	109.0		<0.01
W230202		145	7.9	22.8	85	117.5		0.16
W230203		3	0.1	0.8	18	1.0		<0.01
W230204		126	5.1	18.9	76	97.6		0.29
W230205		129	1.1	19.7	81	98.2		0.28
W230206		81	5.5	16.7	54	66.5		0.50
W230207		135	1.3	19.5	86	103.5		0.01
W230208		132	1.1	17.4	83	95.1		0.01
W230209		141	1.2	21.4	85	104.5		<0.01
W230210		156	4.3	23.7	97	123.0		0.01
W230211		156	8.6	23.6	109	118.5		0.05
W230212		34	17.7	15.0	26	31.6	1.460	2.68
W230213		88	5.3	15.3	64	63.7		0.15
W230214		151	1.5	24.1	74	135.0		0.01
W230215		131	1.4	21.8	58	105.0		0.01
W230216		127	3.5	20.0	81	95.5		0.01
W230217		146	5.2	20.6	80	85.6		0.01
W230218		184	6.2	22.4	75	99.0		0.01
W230219		172	5.5	20.8	73	96.5		0.06
W230220		172	5.4	20.7	83	97.5		0.06
W230221		103	3.6	21.4	196	103.5		0.02
W230222		107	1.9	23.1	167	113.0		0.01
W230223		101	1.6	22.0	179	101.5		<0.01
W230224		106	1.6	23.8	137	107.0		0.01

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 24- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17176799

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 28- SEP- 2017
Account: RCM

CERTIFICATE WH17180075

Project: Nadaleen

P.O. No.: N17- 064

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 25- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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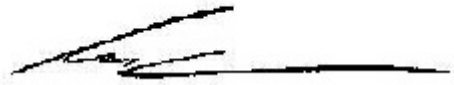
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 28- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17180075

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232045		6.96	0.06	1.88	398	120	0.62	0.07	24.6	0.16	25.8	3.0	20	4.35	11.4	0.85
W232046		7.91	0.08	2.22	143.5	150	0.77	0.08	22.4	0.15	30.6	3.8	25	4.84	13.6	0.93
W232047		7.58	0.05	1.15	212	190	0.45	0.05	27.6	0.35	16.10	1.9	12	1.74	6.4	0.47
W232048		7.27	0.07	1.57	247	90	0.57	0.07	25.4	0.28	21.9	2.7	17	2.22	8.4	0.74
W232049		6.14	0.09	1.84	256	90	0.48	0.04	21.2	0.24	25.5	2.8	21	2.58	25.3	0.96
W232050		0.29	0.19	3.68	5980	190	0.72	0.12	11.70	0.14	42.3	10.8	45	11.25	33.6	2.80
W232051		7.22	0.08	3.53	316	140	0.87	0.08	13.40	0.09	43.5	6.1	45	7.02	20.6	1.58
W232052		7.39	0.07	3.70	59.9	210	1.04	0.08	13.45	0.07	46.2	6.0	45	9.11	23.0	1.75
W232053		7.50	0.07	3.55	46.8	190	0.96	0.09	14.85	0.08	44.0	6.0	41	5.43	22.7	1.71
W232054		<0.02	0.06	3.41	43.7	180	0.91	0.08	14.85	0.07	42.4	5.9	40	5.27	22.7	1.62
W232055		6.55	0.21	1.64	213	90	0.54	0.04	24.8	0.19	23.4	3.2	19	2.04	11.3	0.98
W232056		4.77	2.59	2.96	92.1	130	0.86	0.08	18.00	0.13	40.7	5.7	35	3.82	22.0	1.47
W232057		7.93	0.07	1.91	4.2	100	0.52	0.05	23.6	0.17	24.2	3.2	22	4.27	12.4	0.82
W232058		5.54	0.07	1.13	2.0	220	0.33	0.03	24.6	1.65	25.4	2.1	14	2.60	6.3	1.22
W232059		5.82	0.08	1.19	3.5	270	0.42	0.03	18.95	0.15	20.5	3.3	14	2.66	9.2	1.21
W232060		9.57	0.12	3.32	5.9	180	1.00	0.08	13.90	0.22	39.7	6.1	37	10.55	20.6	1.68
W232061		12.17	0.06	1.30	4.3	90	0.37	0.03	24.4	0.35	20.6	1.8	16	3.00	5.2	0.85
W232062		12.43	0.06	1.45	3.6	190	0.47	0.04	28.1	0.25	20.2	2.4	17	3.14	7.9	0.74
W232063		12.39	0.06	1.69	2.6	160	0.50	0.04	27.4	0.15	20.1	2.5	21	3.92	10.8	0.72
W232064		10.96	0.05	1.27	4.2	80	0.47	0.02	28.2	0.21	18.25	2.6	15	3.20	7.6	0.71
W232065		11.82	0.06	1.70	3.0	100	0.59	0.04	25.4	0.30	23.1	3.2	20	4.35	9.0	0.87
W232066		6.99	0.01	0.04	0.2	20	<0.05	0.01	20.5	0.05	1.00	0.7	<1	0.09	2.0	0.45
W232067		11.27	0.05	1.54	2.7	160	0.56	0.04	25.8	0.19	22.0	2.7	18	3.35	8.4	0.79
W232068		10.45	0.05	0.97	2.1	130	0.33	0.02	29.1	0.04	17.95	1.8	12	1.93	3.0	0.63
W232069		11.19	0.06	4.17	4.3	120	1.42	0.09	14.50	0.06	46.7	5.9	47	9.19	32.7	1.52
W232070		0.26	0.64	1.83	>10000	140	0.49	2.67	25.4	0.15	28.1	4.4	26	6.10	14.8	1.36
W232071		10.21	0.09	4.80	10.0	160	1.57	0.13	14.40	0.08	52.5	7.9	50	10.75	29.7	1.52
W232072		11.44	0.05	1.09	3.8	60	0.42	0.02	29.8	0.04	19.30	2.3	13	2.09	4.7	0.60
W232073		11.78	0.05	2.64	6.2	130	0.94	0.06	20.3	0.08	32.0	4.8	31	6.25	15.9	1.08
W232074		5.17	0.05	2.76	7.3	110	0.91	0.06	20.1	0.09	32.3	5.4	31	6.45	17.5	1.15
W232075		10.68	0.05	2.51	7.8	150	0.94	0.06	23.6	0.07	31.4	5.2	28	6.33	16.4	1.02
W232076		11.06	0.02	3.63	4.0	130	1.18	0.08	14.55	0.13	44.1	5.5	39	8.25	41.2	1.30
W232077		11.29	0.03	3.49	4.0	250	1.25	0.09	15.30	0.11	41.9	6.0	36	8.02	20.8	1.46
W232078		7.07	0.02	0.05	0.3	20	0.06	0.01	20.4	0.07	1.17	0.7	<1	0.11	1.8	0.46
W232079		11.57	0.05	8.55	12.8	270	2.41	0.36	1.19	0.05	84.5	17.6	72	14.00	37.8	4.66
W232080		11.64	0.04	8.83	7.3	280	2.55	0.34	0.37	<0.02	92.4	19.0	76	15.60	42.7	4.69

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 28- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17180075

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232045		4.80	0.08	1.1	0.095	0.012	0.86	13.3	22.6	2.21	157	0.73	0.02	3.1	7.9	300
W232046		5.77	0.07	1.4	0.114	0.013	0.93	15.7	30.5	2.54	161	0.86	0.03	3.8	10.0	370
W232047		2.94	0.08	0.8	0.070	0.007	0.44	9.0	15.4	1.20	114	0.70	0.02	2.2	4.4	240
W232048		4.23	0.09	1.1	0.099	0.014	0.55	11.4	37.8	2.54	136	0.73	0.02	3.0	6.9	270
W232049		4.22	<0.05	1.2	0.106	0.015	0.70	13.1	36.2	3.24	178	0.96	0.02	3.2	7.8	310
W232050		9.01	0.05	1.9	16.30	0.033	1.76	21.6	9.7	2.51	1140	1.81	0.02	5.9	23.7	420
W232051		8.41	0.06	1.9	0.076	0.030	1.43	22.4	55.5	4.93	199	0.81	0.04	6.0	16.2	450
W232052		8.81	0.07	2.0	0.050	0.032	1.55	24.1	37.4	4.13	212	0.56	0.11	6.3	15.8	470
W232053		8.49	0.06	1.8	0.060	0.028	1.30	23.3	29.7	3.40	207	0.46	0.04	6.1	15.7	450
W232054		8.26	0.07	1.7	0.062	0.027	1.24	22.4	29.3	3.26	203	0.39	0.04	5.9	15.3	420
W232055		4.08	0.05	0.9	0.048	0.013	0.54	12.8	36.6	2.72	205	0.66	0.02	2.8	7.2	260
W232056		7.48	0.08	1.6	0.039	0.026	1.02	21.6	36.0	3.83	230	0.50	0.03	5.4	14.6	400
W232057		4.60	0.06	1.0	0.048	0.015	0.81	13.2	17.3	2.64	161	0.46	0.18	3.3	8.3	210
W232058		2.76	0.07	0.5	0.073	0.012	0.53	12.4	12.3	4.04	190	0.36	0.05	1.9	4.6	140
W232059		3.00	0.08	0.6	0.061	0.010	0.64	10.8	8.8	8.37	222	0.35	0.01	2.1	6.2	150
W232060		8.14	0.09	1.5	0.120	0.025	1.72	21.7	23.4	7.46	204	0.60	0.06	5.5	15.8	460
W232061		3.22	0.07	0.6	0.045	0.011	0.65	11.1	10.7	3.94	175	0.44	0.01	2.2	4.4	160
W232062		3.59	0.06	0.7	0.044	0.012	0.69	11.3	13.7	2.39	158	0.56	0.03	2.4	6.3	180
W232063		4.19	0.07	0.8	0.036	0.013	0.80	11.4	14.6	2.17	159	0.54	0.09	2.9	7.1	190
W232064		3.12	0.06	1.0	0.044	0.010	0.62	10.0	10.8	2.36	155	0.64	0.06	2.1	6.4	170
W232065		4.11	0.06	0.8	0.044	0.014	0.84	12.3	14.6	2.64	164	0.50	0.07	2.8	8.2	210
W232066		0.16	0.15	<0.1	<0.005	<0.005	0.01	0.5	1.3	12.95	195	0.12	<0.01	0.1	1.4	160
W232067		3.88	0.08	0.7	0.043	0.013	0.78	11.8	13.1	2.12	158	0.47	0.04	2.6	7.8	190
W232068		2.52	0.05	0.5	0.033	0.007	0.49	9.9	8.4	1.54	154	0.37	0.02	1.6	4.8	130
W232069		10.15	0.09	1.8	0.061	0.031	2.05	24.4	44.1	2.98	195	0.50	0.04	6.8	18.1	580
W232070		4.37	0.07	0.8	6.50	0.022	0.93	14.3	9.2	0.92	2270	1.76	0.01	2.6	12.2	330
W232071		11.50	0.10	2.2	0.101	0.035	2.39	28.0	30.9	3.30	212	0.76	0.08	7.2	20.1	600
W232072		2.79	0.07	0.5	0.033	0.008	0.57	10.4	6.6	1.71	161	0.45	0.02	1.8	4.8	150
W232073		6.43	0.08	1.4	0.037	0.019	1.34	17.0	16.5	3.28	189	0.63	0.09	4.6	11.9	350
W232074		6.86	0.10	1.4	0.042	0.022	1.39	17.5	17.5	3.42	193	0.70	0.09	4.7	14.5	350
W232075		6.23	0.10	1.1	0.039	0.018	1.26	17.1	18.1	2.30	209	0.56	0.10	4.2	12.8	300
W232076		8.78	0.09	2.0	0.051	0.029	1.83	23.3	23.2	3.23	240	0.38	0.16	6.1	14.7	480
W232077		8.85	0.10	1.8	0.061	0.027	1.82	22.5	19.3	3.58	228	0.39	0.08	6.2	10.0	410
W232078		0.21	0.14	<0.1	<0.005	<0.005	0.02	0.6	1.3	13.05	202	0.07	0.01	0.2	1.5	170
W232079		20.6	0.12	2.9	0.035	0.064	2.90	41.2	170.5	1.47	1190	0.53	0.24	11.2	38.9	680
W232080		22.1	0.13	3.2	0.019	0.079	3.12	45.5	172.0	1.29	405	0.19	0.20	12.3	39.2	580

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CERTIFICATE OF ANALYSIS WH17180075

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232045		7.4	48.2	<0.002	0.14	1.61	2.7	2	0.6	1050	0.24	<0.05	4.00	0.092	0.62	11.4
W232046		7.9	43.4	<0.002	0.24	0.32	3.2	2	0.8	1050	0.28	<0.05	4.95	0.112	0.27	10.9
W232047		7.3	20.1	<0.002	0.10	0.58	1.7	1	0.4	1485	0.16	<0.05	2.55	0.058	0.24	12.3
W232048		8.5	26.9	<0.002	0.12	0.77	2.4	2	0.6	1940	0.22	<0.05	3.69	0.082	0.29	12.1
W232049		11.8	34.0	<0.002	0.09	1.14	2.6	2	2.8	1205	0.24	<0.05	4.30	0.091	0.35	10.1
W232050		10.0	75.2	<0.002	2.50	23.6	9.0	1	1.6	308	0.41	<0.05	5.99	0.261	42.9	6.6
W232051		8.1	66.0	<0.002	0.23	0.68	5.2	3	1.3	1010	0.44	<0.05	8.22	0.176	0.68	6.4
W232052		8.4	68.8	<0.002	0.11	0.32	5.4	2	1.3	511	0.46	<0.05	8.47	0.182	0.39	6.4
W232053		7.6	57.0	<0.002	0.13	0.34	5.2	2	1.3	666	0.44	<0.05	8.30	0.173	0.35	6.6
W232054		7.0	54.2	<0.002	0.12	0.33	5.0	2	1.5	651	0.43	<0.05	7.86	0.168	0.33	6.3
W232055		5.8	24.3	<0.002	0.14	0.30	2.5	1	0.7	1005	0.21	<0.05	3.63	0.080	0.20	12.2
W232056		9.4	46.8	<0.002	0.11	0.36	4.6	1	1.2	796	0.38	<0.05	6.92	0.148	0.27	8.7
W232057		7.2	31.9	<0.002	0.02	0.29	2.9	1	0.7	590	0.23	<0.05	4.21	0.093	0.19	9.4
W232058		4.1	19.9	<0.002	0.06	0.25	1.7	1	0.5	552	0.13	<0.05	2.42	0.054	0.13	10.3
W232059		10.3	23.2	<0.002	0.08	0.35	1.9	1	0.5	281	0.14	<0.05	2.64	0.058	0.15	6.2
W232060		10.7	63.1	<0.002	0.05	0.65	5.0	2	1.3	169.5	0.41	<0.05	7.12	0.158	0.45	7.1
W232061		3.8	23.0	<0.002	0.09	0.21	2.0	1	0.5	553	0.16	<0.05	2.76	0.062	0.14	9.9
W232062		4.4	25.2	<0.002	0.05	0.22	2.3	1	0.6	762	0.18	<0.05	3.15	0.069	0.14	11.3
W232063		5.4	30.1	<0.002	0.06	0.19	2.6	1	0.7	731	0.21	<0.05	3.65	0.083	0.15	13.2
W232064		4.1	23.2	<0.002	0.08	0.20	2.0	1	0.5	867	0.15	<0.05	2.74	0.061	0.14	13.5
W232065		5.0	31.3	<0.002	0.09	0.20	2.6	1	0.6	710	0.20	<0.05	3.66	0.082	0.16	12.5
W232066		1.1	0.6	<0.002	<0.01	0.07	0.1	<1	<0.2	45.5	<0.05	<0.05	0.06	<0.005	<0.02	0.8
W232067		4.5	28.8	<0.002	0.05	0.20	2.4	1	0.6	689	0.18	<0.05	3.40	0.074	0.14	10.9
W232068		3.4	17.0	<0.002	0.03	0.14	1.6	1	0.4	816	0.11	<0.05	2.10	0.045	0.09	11.4
W232069		6.9	75.9	<0.002	0.03	0.25	6.3	1	1.5	339	0.48	<0.05	9.30	0.193	0.40	6.8
W232070		7.9	36.8	<0.002	1.41	44.6	5.1	2	0.7	1005	0.18	0.06	3.35	0.088	22.8	6.3
W232071		10.8	96.5	0.002	0.14	0.39	7.4	2	1.6	319	0.54	<0.05	9.70	0.222	0.50	6.6
W232072		3.5	19.5	<0.002	0.05	0.17	1.7	1	0.4	832	0.13	<0.05	2.35	0.052	0.11	13.3
W232073		5.1	48.5	<0.002	0.11	0.25	4.1	2	1.0	441	0.33	<0.05	5.89	0.128	0.23	10.3
W232074		5.3	51.1	<0.002	0.14	0.26	4.3	2	1.0	429	0.34	<0.05	5.97	0.134	0.23	10.2
W232075		4.4	48.1	<0.002	0.14	0.27	4.0	2	0.9	497	0.30	<0.05	5.40	0.119	0.24	8.5
W232076		6.3	66.9	<0.002	0.10	0.36	5.6	2	1.3	275	0.43	<0.05	8.25	0.176	0.32	4.3
W232077		6.6	67.0	<0.002	0.14	0.52	5.6	1	1.3	222	0.44	<0.05	7.71	0.169	0.37	3.6
W232078		1.9	0.9	<0.002	<0.01	0.06	0.1	<1	<0.2	45.8	<0.05	<0.05	0.07	<0.005	<0.02	0.5
W232079		25.9	105.5	<0.002	0.26	1.22	14.3	1	2.4	132.0	0.83	0.05	13.55	0.399	0.72	3.0
W232080		12.6	136.0	<0.002	0.20	0.45	15.7	1	2.7	120.5	0.88	0.05	14.80	0.440	0.74	2.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 28- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17180075

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W232045		30	0.5	7.4	34	40.5		0.02
W232046		38	0.5	8.5	39	48.4		0.01
W232047		19	0.3	5.4	29	28.7		<0.01
W232048		28	0.4	6.5	35	38.9		<0.01
W232049		30	0.5	8.1	37	48.0		0.01
W232050		80	7.1	17.6	48	71.3		2.64
W232051		58	0.8	12.2	52	67.8		0.01
W232052		57	0.7	13.0	63	66.7		0.01
W232053		55	0.7	12.5	58	61.5		0.01
W232054		54	0.6	12.1	58	59.8		0.01
W232055		28	1.0	7.3	30	30.2		0.01
W232056		45	13.4	11.6	54	56.0		<0.01
W232057		29	0.4	7.7	45	38.7		0.01
W232058		20	0.3	6.9	145	18.4		<0.01
W232059		20	0.3	6.3	32	20.1		<0.01
W232060		55	0.6	10.9	34	52.3		0.02
W232061		22	0.3	6.0	54	21.3		<0.01
W232062		24	0.3	5.7	56	24.5		<0.01
W232063		28	0.3	6.0	36	28.4		<0.01
W232064		21	0.3	5.2	30	21.2		<0.01
W232065		27	0.3	6.5	45	28.3		0.01
W232066		2	0.1	0.7	14	<0.5		<0.01
W232067		25	0.3	6.3	42	26.9		<0.01
W232068		17	0.2	5.1	10	16.2		<0.01
W232069		66	0.7	13.2	37	62.7		0.01
W232070		32	17.9	14.6	26	30.0	1.395	2.78
W232071		80	0.8	14.7	34	74.3		0.01
W232072		20	0.2	5.4	13	18.5		<0.01
W232073		41	0.5	9.6	23	48.8		0.01
W232074		42	0.5	9.7	24	50.5		0.01
W232075		40	0.5	9.3	23	40.4		0.01
W232076		56	0.7	13.5	28	67.2		0.02
W232077		47	0.7	12.0	23	61.0		0.01
W232078		2	0.1	0.7	15	<0.5		<0.01
W232079		94	1.5	20.6	103	97.5		0.02
W232080		102	1.5	20.4	95	110.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 28- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17180075

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

CERTIFICATE WH17185250

Project: Nadaleen

P.O. No.: N17- 065

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 22- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

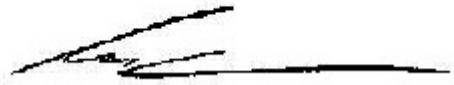
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17185250

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230225		11.09	0.08	6.20	200	210	1.96	0.25	3.88	0.19	65.2	12.1	59	21.3	35.4	4.84
W230226		11.41	0.08	5.68	281	200	1.54	0.24	3.39	0.19	63.3	11.4	55	17.60	37.3	3.98
W230227		11.73	0.06	5.90	543	220	1.40	0.26	2.47	0.07	64.0	13.5	55	19.45	39.9	4.49
W230228		0.26	0.09	3.81	2730	210	0.81	0.15	19.25	0.14	41.7	10.7	43	9.90	43.4	3.12
W230229		11.90	0.05	6.00	76.7	170	1.55	0.23	2.88	0.04	60.2	14.0	66	32.2	44.0	4.85
W230230		11.95	0.04	5.17	80.6	150	1.18	0.19	4.72	0.04	55.7	13.3	55	22.9	39.2	4.75
W230231		12.55	0.04	7.54	191.0	200	2.15	0.22	3.08	0.04	70.6	20.5	80	42.5	49.0	5.77
W230232		6.96	0.01	0.07	1.0	40	<0.05	0.02	19.95	0.08	1.40	0.6	1	0.27	2.2	0.47
W230233		11.08	0.03	4.22	164.5	150	1.24	0.14	16.90	0.04	42.5	9.9	44	19.20	30.7	2.96
W230234		11.38	0.03	3.50	47.1	190	0.84	0.16	21.0	0.07	41.5	12.5	28	17.55	25.6	2.61
W230235		10.56	0.02	2.71	39.5	120	0.69	0.13	26.1	0.03	35.2	8.7	22	13.45	19.0	1.93
W230236		12.57	0.02	2.59	58.7	120	0.70	0.12	27.3	0.07	30.8	8.7	20	9.68	19.6	1.83
W230237		5.76	0.03	3.27	74.9	460	0.87	0.20	24.7	0.05	36.8	10.0	26	12.65	24.5	2.15
W230238		11.01	0.01	1.40	40.3	90	0.47	0.11	30.5	0.04	17.40	5.0	11	5.37	11.4	1.29
W230239		11.65	0.02	2.28	32.9	140	0.69	0.15	27.2	0.07	31.1	7.7	18	7.05	18.0	1.82
W230240		11.68	0.03	3.93	84.6	130	1.07	0.17	18.30	0.05	50.3	14.7	32	14.40	29.2	3.07
W230241		11.42	0.02	2.18	215	110	0.52	0.17	26.6	0.03	28.0	8.0	18	5.51	16.3	1.53
W230242		5.02	0.13	1.50	329	110	0.36	0.08	29.6	0.05	21.7	5.1	13	3.92	12.9	1.23
W230243		5.94	3.14	2.47	>10000	110	0.38	0.20	15.60	0.61	34.4	7.5	24	6.56	20.7	1.84
W230244		6.78	0.02	0.05	251	40	0.05	0.03	21.4	0.07	1.16	0.7	1	0.26	4.9	0.51
W230245		5.58	3.01	2.02	>10000	90	0.31	0.14	22.0	0.55	25.7	5.6	20	2.95	16.6	1.47
W230246		5.40	0.72	0.57	6010	90	0.14	0.03	32.8	0.89	9.70	1.8	6	0.84	5.7	0.53
W230247		<0.02	0.73	0.58	5560	90	0.17	0.05	32.9	0.58	9.74	1.9	6	0.83	5.9	0.54
W230248		10.53	0.39	0.54	4330	80	0.17	0.03	35.6	0.04	9.83	1.8	6	1.05	5.5	0.44
W230249		10.05	0.02	0.44	112.0	120	0.20	0.03	35.4	0.02	8.67	1.5	4	1.16	4.6	0.41
W230250		0.26	0.67	1.88	>10000	140	0.48	2.87	26.2	0.17	27.2	4.5	26	5.61	15.7	1.37
W230251		10.68	0.01	0.45	97.1	110	0.16	0.03	34.0	0.04	8.30	1.5	4	1.05	4.5	0.38
W230252		11.45	0.21	0.65	6510	210	0.24	0.04	32.1	0.11	10.35	2.1	8	1.28	6.5	0.57
W230253		11.61	0.07	0.55	261	90	0.17	0.03	33.1	0.02	9.93	1.8	6	1.22	5.1	0.45
W230254		11.45	0.06	0.57	356	110	0.20	0.04	34.1	0.04	10.85	1.7	6	1.66	5.3	0.47
W230255		9.48	0.01	0.81	65.6	110	0.23	0.04	33.7	0.11	12.20	2.5	8	1.97	7.5	0.62
W230256		6.30	0.01	0.64	57.5	130	0.23	0.04	34.7	0.02	10.75	1.8	7	1.64	5.1	0.48
W230257		8.24	0.01	0.67	50.8	140	0.20	0.04	34.8	0.05	11.85	2.2	7	1.67	7.2	0.49
W230258		7.71	0.01	0.61	30.1	160	0.25	0.04	36.5	0.05	11.20	1.9	6	2.31	6.0	0.48
W230259		7.45	0.01	0.75	42.3	150	0.21	0.04	35.0	0.07	12.50	2.4	7	2.37	7.3	0.57
W230260		7.78	0.08	2.04	2800	480	0.42	0.11	28.4	0.39	33.8	6.0	21	5.29	19.4	1.44

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Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17185250

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230225		15.90	0.16	3.1	0.780	0.059	2.90	31.8	16.7	1.35	522	1.79	0.03	9.3	30.5	580
W230226		13.70	0.14	2.8	0.505	0.060	2.69	29.6	15.7	1.51	641	1.66	0.03	8.4	35.4	580
W230227		15.00	0.16	2.8	0.630	0.059	2.70	30.3	28.8	1.27	573	0.56	0.03	8.8	27.6	490
W230228		9.80	0.12	2.0	3.55	0.037	1.80	18.4	9.0	1.47	1240	1.59	0.02	5.8	23.9	400
W230229		15.15	0.13	2.7	0.271	0.065	2.78	28.0	37.4	1.98	583	0.28	0.03	8.3	28.2	450
W230230		13.05	0.15	2.3	0.601	0.050	2.35	24.1	34.6	1.38	568	0.30	0.02	6.9	26.1	350
W230231		19.70	0.14	2.6	1.215	0.072	3.49	33.5	37.5	1.01	464	0.23	0.02	8.2	36.3	260
W230232		0.21	0.13	<0.1	0.014	<0.005	0.03	0.7	1.0	12.30	203	0.07	<0.01	0.1	1.5	160
W230233		10.90	0.12	1.7	0.748	0.043	1.99	18.9	13.8	0.95	443	0.28	0.02	4.9	18.3	340
W230234		8.68	0.11	1.6	0.517	0.038	1.68	19.3	11.1	1.29	528	0.32	0.02	4.6	16.9	250
W230235		6.62	0.12	1.2	0.474	0.032	1.29	17.3	7.9	1.10	690	0.31	0.02	3.4	12.0	250
W230236		6.36	0.13	1.2	1.210	0.026	1.24	15.7	6.1	1.18	530	0.51	0.02	3.3	12.3	290
W230237		7.96	0.13	1.5	1.520	0.034	1.55	18.3	7.9	1.27	558	0.63	0.02	4.2	14.9	290
W230238		3.51	0.11	0.7	0.635	0.016	0.66	9.4	3.5	1.22	457	0.25	0.02	1.8	6.6	210
W230239		5.72	0.13	1.0	0.467	0.026	1.07	15.7	5.0	0.91	586	0.34	0.02	2.9	10.8	200
W230240		9.91	0.15	1.8	0.898	0.047	1.85	25.3	9.7	1.45	755	0.44	0.02	5.3	19.8	260
W230241		5.51	0.13	1.2	2.05	0.027	1.04	14.6	4.6	0.69	781	0.47	0.02	3.1	10.0	150
W230242		3.77	0.12	0.7	3.17	0.016	0.70	11.5	3.3	0.76	623	0.58	0.01	1.9	7.2	130
W230243		6.48	0.18	1.1	8.71	0.039	1.08	17.8	8.1	0.25	989	1.03	0.01	2.9	11.9	230
W230244		0.19	0.19	<0.1	0.021	<0.005	0.03	0.5	1.0	13.25	227	0.05	<0.01	0.1	1.4	170
W230245		5.36	0.16	0.9	6.71	0.031	0.91	13.3	5.0	0.22	1180	0.69	0.01	2.4	9.8	310
W230246		1.58	0.13	0.3	2.16	0.007	0.25	4.6	2.0	1.15	1880	0.25	0.01	0.7	2.6	610
W230247		1.60	0.09	0.3	2.15	0.009	0.26	4.7	2.1	1.14	1960	0.27	0.01	0.8	2.8	660
W230248		1.39	0.11	0.3	2.34	0.009	0.24	4.8	1.6	0.33	1900	0.25	0.01	0.7	2.6	450
W230249		1.18	0.12	0.2	1.160	0.006	0.20	4.4	1.9	0.57	297	0.29	0.01	0.6	2.1	160
W230250		4.75	0.13	0.8	6.41	0.019	0.94	13.1	8.9	0.91	2280	1.76	0.01	2.4	12.8	340
W230251		1.18	0.13	0.2	1.020	0.006	0.21	4.3	2.1	0.57	235	0.18	0.01	0.6	2.1	230
W230252		1.70	0.12	0.3	3.66	0.013	0.24	4.8	3.1	1.06	1430	0.31	0.01	0.9	3.1	1030
W230253		1.37	0.12	0.3	3.96	0.010	0.21	5.0	2.7	0.42	1040	0.27	0.01	0.7	2.4	110
W230254		1.48	0.14	0.3	2.40	0.009	0.23	5.4	2.6	0.45	526	0.25	0.01	0.7	2.6	180
W230255		2.01	0.13	0.4	1.350	0.008	0.33	5.9	3.0	0.64	173	0.39	0.01	1.0	3.8	370
W230256		1.69	0.14	0.3	0.788	0.008	0.29	4.8	2.8	0.60	245	0.19	0.01	0.9	2.5	400
W230257		1.75	0.13	0.3	1.035	0.007	0.29	5.5	2.6	0.46	102	0.47	0.01	0.8	3.3	190
W230258		1.57	0.11	0.3	0.343	0.007	0.27	5.4	2.9	0.42	125	0.27	0.01	0.8	3.0	360
W230259		1.91	0.12	0.4	0.737	0.008	0.34	6.0	3.0	0.49	229	0.37	0.01	0.9	3.7	240
W230260		5.12	0.15	1.0	4.88	0.020	0.79	15.5	8.7	1.09	706	1.25	0.01	2.5	10.7	970

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17185250

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230225		29.2	145.0	<0.002	3.76	0.91	13.4	1	2.0	108.0	0.68	<0.05	9.24	0.381	3.44	2.0
W230226		18.1	130.0	<0.002	2.47	1.03	11.5	1	1.8	92.9	0.65	0.05	9.38	0.387	2.17	2.1
W230227		13.9	137.0	<0.002	3.73	1.43	13.7	1	1.9	108.0	0.64	<0.05	9.41	0.399	4.93	1.9
W230228		9.1	83.8	<0.002	2.63	9.40	8.7	1	1.4	753	0.42	<0.05	5.80	0.269	10.80	2.3
W230229		14.0	136.5	<0.002	1.30	0.45	14.2	1	1.8	94.2	0.63	0.05	9.01	0.424	2.19	1.7
W230230		12.4	117.5	<0.002	2.85	0.46	13.0	1	1.5	171.0	0.51	<0.05	7.63	0.356	4.32	1.6
W230231		18.4	173.0	0.003	5.07	0.60	19.9	1	2.1	99.8	0.60	<0.05	9.81	0.406	5.66	1.8
W230232		1.3	1.4	<0.002	0.01	0.07	0.2	<1	<0.2	47.4	<0.05	<0.05	0.12	<0.005	0.03	0.6
W230233		9.0	91.8	0.002	2.18	1.00	10.3	1	1.5	536	0.36	<0.05	5.58	0.228	2.31	1.7
W230234		12.0	80.9	<0.002	1.82	0.35	8.1	1	1.2	565	0.34	0.07	5.31	0.195	1.64	1.7
W230235		8.4	64.3	<0.002	1.32	0.32	6.5	1	0.9	805	0.26	0.06	4.23	0.141	2.57	1.8
W230236		8.0	60.1	<0.002	1.25	0.51	6.0	1	1.0	846	0.23	0.05	3.99	0.137	3.38	1.7
W230237		10.0	75.1	0.003	1.48	0.66	7.0	1	1.1	791	0.30	0.07	5.02	0.178	4.06	2.0
W230238		4.4	30.2	<0.002	0.72	0.47	3.4	1	0.5	732	0.14	0.05	2.19	0.073	2.16	1.2
W230239		6.7	51.3	<0.002	1.15	0.30	5.6	1	0.8	729	0.21	0.05	3.68	0.115	3.52	1.5
W230240		12.3	89.4	0.002	2.21	0.57	9.5	1	1.3	465	0.38	0.06	6.20	0.222	6.25	2.0
W230241		6.7	49.0	0.002	1.07	2.90	5.0	1	0.7	677	0.22	<0.05	3.66	0.131	7.43	1.8
W230242		5.5	31.1	0.003	0.87	4.52	3.8	1	0.5	1395	0.14	<0.05	2.57	0.075	9.69	1.8
W230243		10.3	54.2	0.003	7.57	388	4.0	6	0.7	622	0.21	0.17	4.04	0.130	32.4	3.1
W230244		1.3	1.5	<0.002	0.02	0.76	0.1	1	<0.2	48.7	<0.05	<0.05	0.09	<0.005	0.08	0.7
W230245		9.2	44.0	<0.002	6.32	327	3.5	4	0.5	613	0.19	0.12	3.19	0.104	26.4	2.9
W230246		3.5	12.2	<0.002	0.75	22.4	2.9	1	0.2	1160	0.06	<0.05	1.01	0.030	7.79	2.7
W230247		3.6	12.3	<0.002	0.75	21.2	2.9	1	0.2	1165	0.05	<0.05	1.04	0.031	8.14	2.8
W230248		3.5	10.9	0.002	0.63	13.60	2.1	1	0.2	1055	0.05	<0.05	0.98	0.030	7.29	2.2
W230249		2.2	8.7	<0.002	0.29	1.54	1.5	1	0.2	1720	<0.05	<0.05	0.84	0.023	2.32	1.7
W230250		7.7	42.4	0.002	1.40	44.2	5.2	2	0.7	1040	0.17	0.06	3.42	0.086	23.7	6.1
W230251		2.3	8.7	<0.002	0.31	1.25	1.3	1	0.2	1645	<0.05	<0.05	0.82	0.025	2.15	1.5
W230252		3.2	10.6	<0.002	0.78	18.60	3.5	1	0.3	1650	0.06	<0.05	1.22	0.034	6.61	3.0
W230253		2.7	8.6	<0.002	0.40	4.76	2.5	1	0.2	1020	0.05	<0.05	0.98	0.029	7.79	1.8
W230254		2.4	9.8	<0.002	0.42	2.49	2.4	1	0.2	1480	0.05	<0.05	1.00	0.030	3.47	1.9
W230255		3.4	13.8	<0.002	0.56	0.54	1.8	1	0.3	1560	0.08	<0.05	1.37	0.045	1.96	2.1
W230256		3.0	12.8	<0.002	0.34	0.34	1.7	1	0.3	1500	0.06	<0.05	1.13	0.035	0.59	1.7
W230257		3.1	12.6	<0.002	0.43	0.56	1.7	1	0.3	2060	0.06	<0.05	1.18	0.036	0.93	2.0
W230258		3.1	12.0	<0.002	0.39	0.31	1.7	1	0.2	2210	0.06	<0.05	1.13	0.033	0.79	2.1
W230259		3.5	14.6	0.002	0.48	0.43	1.9	1	0.3	1970	0.07	<0.05	1.29	0.041	1.66	2.2
W230260		9.7	35.3	0.004	1.35	6.47	3.4	2	0.7	2190	0.19	<0.05	3.41	0.107	8.53	4.5

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Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17185250

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230225		101	2.0	20.7	92	100.5		<0.01
W230226		96	2.7	18.8	129	91.0		<0.01
W230227		108	2.4	18.9	68	92.5		0.02
W230228		78	5.4	16.5	51	64.4		0.50
W230229		122	1.1	18.3	57	93.3		<0.01
W230230		106	0.9	17.2	54	75.4		<0.01
W230231		149	1.4	20.4	63	88.1		<0.01
W230232		3	0.1	0.8	17	0.6		<0.01
W230233		79	3.0	13.2	50	56.9		<0.01
W230234		55	0.6	15.8	59	54.4		<0.01
W230235		42	0.4	14.5	37	39.2		<0.01
W230236		41	0.5	12.7	36	39.9		<0.01
W230237		52	0.7	13.8	41	61.2		<0.01
W230238		22	0.4	8.6	30	21.4		0.04
W230239		35	0.4	14.6	50	34.0		<0.01
W230240		62	1.6	18.2	53	62.5		<0.01
W230241		36	1.9	13.4	30	38.7		0.07
W230242		24	1.1	12.2	25	24.0		0.23
W230243		42	3.5	17.8	60	36.1	12.90	6.71
W230244		3	0.2	0.7	18	0.5		0.01
W230245		32	2.7	15.6	48	30.6	10.65	4.08
W230246		10	0.8	13.1	67	9.9		1.21
W230247		11	0.8	13.3	49	10.2		1.25
W230248		10	0.8	11.5	4	9.6		0.62
W230249		8	0.4	10.2	3	7.3		0.02
W230250		32	17.9	14.9	25	28.7	1.375	2.77
W230251		8	0.5	9.6	4	7.6		0.02
W230252		13	1.0	12.0	17	11.4		0.06
W230253		12	0.8	14.5	4	8.9		0.06
W230254		11	0.7	12.6	6	9.5		0.08
W230255		14	0.7	10.7	19	12.9		<0.01
W230256		12	0.5	11.1	3	11.2		<0.01
W230257		12	0.6	10.7	8	10.6		<0.01
W230258		11	0.4	10.7	6	10.5		<0.01
W230259		13	0.6	11.0	12	12.4		<0.01
W230260		36	1.7	13.8	65	32.9		0.09

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 26- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17185250

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

CERTIFICATE WH17178097

Project: Nadaleen

P.O. No.: N17- 066

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 22- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

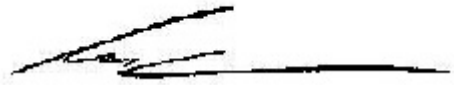
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
Hg- ICP42	High Grade Hg by ICPAES	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17178097

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230261		7.82	0.02	1.07	43.7	120	0.41	0.06	31.4	0.11	18.50	3.8	12	4.38	12.0	0.91
W230262		7.76	0.05	3.58	61.6	300	1.01	0.17	19.65	0.22	49.0	11.9	37	13.70	36.9	2.51
W230263		8.31	0.04	2.39	73.7	190	0.66	0.13	26.7	0.20	37.7	7.7	25	9.12	25.6	1.61
W230264		7.83	0.03	1.48	59.0	190	0.42	0.08	29.9	0.19	27.7	5.0	16	5.40	16.6	1.05
W230265		8.32	0.03	1.90	56.7	190	0.55	0.10	28.5	0.18	30.2	6.4	20	5.85	22.1	1.38
W230266		7.31	0.03	1.42	43.8	150	0.45	0.06	31.0	0.14	21.9	5.0	16	5.15	16.4	1.12
W230267		0.26	0.10	3.57	2600	200	0.91	0.14	18.25	0.14	40.4	10.9	41	10.65	43.4	2.98
W230268		7.35	0.03	2.10	43.9	210	0.65	0.10	27.4	0.18	29.7	6.9	23	8.72	21.4	1.53
W230269		3.61	0.03	2.07	42.0	420	0.61	0.09	27.4	0.18	29.3	6.9	21	8.57	21.4	1.50
W230270		8.38	0.05	2.99	154.5	210	0.77	0.13	22.0	0.19	38.3	10.2	33	11.70	35.1	2.14
W230271		6.89	0.03	1.99	155.5	180	0.49	0.10	27.8	0.15	30.7	6.9	23	6.63	22.2	1.45
W230272		8.22	0.02	1.47	92.6	170	0.39	0.08	29.7	0.15	35.9	5.0	16	4.15	15.7	1.03
W230273		7.58	0.04	2.33	123.5	240	0.52	0.10	26.4	0.16	33.9	8.9	27	6.86	25.5	1.78
W230274		7.74	0.02	1.03	105.5	160	0.25	0.06	30.6	0.13	18.50	3.8	11	2.80	11.7	0.86
W230275		6.85	0.03	1.29	130.0	140	0.36	0.06	31.0	0.14	22.3	4.5	14	3.68	14.4	0.99
W230276		1.77	0.02	1.25	86.5	210	0.31	0.06	31.8	0.16	23.3	4.1	13	4.03	12.5	0.81
W230277		8.09	0.02	0.91	118.0	120	0.22	0.04	32.4	0.15	15.45	3.1	9	2.27	9.7	0.63
W230278		6.94	0.01	0.06	0.9	30	0.07	0.03	20.4	0.06	1.06	0.7	1	0.29	5.3	0.46
W230279		8.12	0.02	0.56	68.8	130	0.21	0.03	33.8	0.10	10.20	2.1	6	1.49	7.6	0.44
W230280		8.38	0.03	1.05	69.8	160	0.36	0.05	31.8	0.15	17.35	3.9	12	3.17	11.9	0.73
W230281		7.26	0.02	0.66	91.5	130	0.25	0.03	34.1	0.12	10.10	2.4	6	2.29	7.3	0.50
W230282		7.06	0.02	0.76	5350	130	0.24	0.04	33.7	0.14	12.45	2.7	8	2.71	8.3	0.52
W230283		7.65	0.01	0.47	88.3	170	0.20	0.03	35.4	0.11	10.20	1.8	5	1.25	5.5	0.36
W230284		7.68	0.01	0.35	599	120	0.10	0.02	36.1	0.16	7.15	1.5	3	1.16	4.5	0.24
W230285		8.58	0.02	0.43	604	150	0.17	0.02	35.6	0.09	8.50	1.8	4	1.08	5.5	0.31
W230286		0.26	0.68	1.83	>10000	140	0.68	2.63	25.3	0.16	27.3	4.7	24	5.76	15.6	1.34
W230287		7.96	0.01	0.44	1315	140	0.12	0.03	36.7	0.10	8.58	1.8	5	1.13	5.9	0.33
W230288		8.12	0.01	0.57	2280	140	0.14	0.03	35.8	0.09	9.07	2.3	6	1.84	6.8	0.41
W230289		<0.02	0.02	0.63	2150	140	0.20	0.03	35.7	0.08	9.59	2.5	7	2.11	7.4	0.44
W230290		7.53	0.02	0.63	73.5	200	0.19	0.03	36.5	0.12	11.00	2.4	6	1.97	7.8	0.43
W230291		7.03	0.01	0.49	69.9	130	0.15	0.03	33.9	0.09	8.08	1.9	5	1.23	5.8	0.36
W230292		7.45	0.01	0.40	80.4	150	0.19	0.02	35.9	0.06	6.74	1.6	4	0.97	4.8	0.29
W230293		7.80	0.03	0.46	89.9	140	0.11	0.03	35.9	0.05	7.82	1.8	5	1.16	5.6	0.34
W230294		7.17	0.01	0.04	<0.2	20	<0.05	0.02	20.3	0.05	0.97	0.7	<1	0.10	2.4	0.46
W230295		7.96	0.47	0.73	325	160	0.18	0.04	33.1	0.11	11.65	2.7	8	1.58	8.6	0.55
W230296		7.71	0.22	0.64	490	110	0.25	0.03	34.4	0.07	9.54	2.4	7	1.56	7.7	0.52

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17178097

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230261		2.77	0.05	0.5	0.220	0.013	0.48	8.5	4.8	0.94	439	0.78	0.01	1.6	6.5	800
W230262		9.10	0.06	1.8	0.484	0.040	1.63	26.6	11.9	1.39	646	1.61	0.02	5.2	21.6	250
W230263		6.07	0.07	1.2	1.245	0.027	1.07	20.3	8.1	0.77	354	1.06	0.02	3.6	13.9	390
W230264		3.86	0.06	0.8	0.846	0.017	0.66	13.5	6.0	0.59	269	0.57	0.01	2.2	8.8	860
W230265		4.87	0.07	1.0	0.579	0.024	0.87	15.6	7.0	0.79	339	0.71	0.02	2.9	11.0	210
W230266		3.54	0.05	0.7	0.448	0.016	0.64	9.8	5.7	0.57	346	0.45	0.02	2.1	8.9	660
W230267		9.25	0.05	1.8	3.56	0.039	1.73	20.2	9.4	1.39	1180	1.58	0.02	6.2	24.1	380
W230268		5.38	0.06	1.0	0.441	0.022	0.97	14.6	7.9	0.70	339	0.57	0.02	3.2	12.1	720
W230269		5.30	0.06	1.0	0.405	0.021	0.95	14.1	7.7	0.68	329	0.59	0.02	3.2	12.2	740
W230270		7.53	0.06	1.5	1.840	0.033	1.35	19.6	10.4	1.02	444	0.88	0.02	4.4	18.2	380
W230271		5.07	0.07	1.0	3.10	0.021	0.87	15.7	7.1	0.62	385	0.58	0.01	3.0	12.5	620
W230272		3.73	0.06	0.7	2.91	0.017	0.65	11.9	4.9	0.71	331	0.51	0.01	2.2	8.4	710
W230273		5.84	0.07	1.1	4.08	0.023	1.03	17.0	7.7	0.75	322	0.54	0.02	3.5	15.4	310
W230274		2.68	0.05	0.5	3.24	0.012	0.47	9.1	3.8	0.78	311	0.33	0.01	1.5	6.4	220
W230275		3.32	0.07	0.7	3.49	0.014	0.57	11.2	4.8	1.11	466	0.36	0.01	1.9	7.7	320
W230276		3.25	0.06	0.6	3.39	0.013	0.57	11.2	4.9	0.57	149	0.36	0.01	1.9	7.1	360
W230277		2.29	0.06	0.4	7.24	0.011	0.39	7.0	3.2	0.58	555	0.27	0.01	1.3	4.8	400
W230278		0.26	0.21	<0.1	0.048	<0.005	0.03	0.5	1.1	12.60	206	0.63	0.01	0.2	4.8	170
W230279		1.54	0.13	0.3	2.31	0.008	0.24	4.7	2.1	0.45	424	0.43	0.01	0.8	4.7	390
W230280		2.82	0.14	0.6	2.70	0.009	0.47	8.6	3.8	0.68	183	0.50	0.01	1.5	6.8	310
W230281		1.77	0.14	0.4	1.290	0.008	0.30	5.0	2.6	0.57	220	0.31	0.01	0.9	4.3	360
W230282		2.03	0.14	0.4	1.460	0.011	0.34	6.1	2.9	0.58	385	0.29	0.01	1.0	4.5	360
W230283		1.29	0.14	0.2	2.000	<0.005	0.20	4.7	2.1	0.69	223	0.24	0.01	0.7	3.1	340
W230284		0.97	0.14	0.2	>100	0.010	0.15	3.3	1.8	0.43	89	0.19	0.01	0.5	2.2	310
W230285		1.13	0.12	0.2	3.30	0.006	0.17	3.9	1.9	0.43	74	0.25	0.01	0.6	3.0	360
W230286		4.83	0.15	0.9	6.23	0.024	0.90	13.1	7.4	0.88	2220	1.79	0.01	2.5	13.5	330
W230287		1.21	0.14	0.2	5.10	0.006	0.18	3.9	1.9	0.46	103	0.20	0.01	0.6	2.9	290
W230288		1.49	0.13	0.3	1.610	0.008	0.24	4.2	2.6	0.47	139	0.19	0.01	0.8	3.6	370
W230289		1.66	0.12	0.3	1.435	0.009	0.27	4.6	3.0	0.47	130	0.20	0.01	0.9	3.9	320
W230290		1.66	0.15	0.3	1.395	0.008	0.27	5.3	2.7	0.52	132	0.31	0.01	0.9	4.1	420
W230291		1.31	0.15	0.2	2.64	0.005	0.20	3.8	2.1	0.48	123	0.17	0.01	0.7	3.1	300
W230292		1.09	0.14	0.2	4.15	0.005	0.16	3.1	1.7	0.41	85	0.18	0.01	0.5	2.4	410
W230293		1.24	0.16	0.2	76.1	0.005	0.19	3.7	1.9	0.34	389	0.17	0.01	0.6	2.8	260
W230294		0.22	0.19	<0.1	0.342	<0.005	0.02	0.5	1.1	12.50	199	0.09	<0.01	0.2	1.6	240
W230295		2.05	0.16	0.4	18.20	0.006	0.29	5.4	3.3	0.22	1020	0.34	0.01	1.1	5.0	820
W230296		1.71	0.15	0.3	42.4	0.008	0.25	4.4	2.7	0.27	719	0.21	0.01	0.9	4.3	430

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17178097

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230261		4.1	22.7	0.004	0.59	0.35	2.8	1	0.4	1525	0.11	0.05	1.85	0.060	0.41	2.4
W230262		11.4	75.8	0.008	1.79	0.92	9.4	2	1.2	1340	0.39	0.08	5.87	0.203	1.24	2.7
W230263		7.9	51.1	0.005	1.26	0.60	6.1	2	1.0	1855	0.26	0.08	4.12	0.135	0.65	2.9
W230264		5.1	32.5	0.003	0.80	0.39	3.8	2	0.6	2060	0.16	0.05	2.70	0.083	0.59	2.8
W230265		6.3	41.6	0.003	0.99	0.43	5.1	2	0.9	2010	0.20	0.06	3.27	0.108	0.59	2.4
W230266		4.4	31.3	0.002	0.83	0.24	3.9	2	0.5	2000	0.15	0.07	2.22	0.088	0.57	2.3
W230267		8.7	78.1	<0.002	2.48	9.30	8.9	2	1.4	723	0.43	0.06	5.65	0.252	10.50	2.4
W230268		6.6	46.9	0.003	1.12	0.32	5.3	1	0.7	1910	0.23	0.05	3.42	0.130	1.11	2.5
W230269		6.5	46.7	0.002	1.13	0.30	5.2	2	0.7	1880	0.23	<0.05	3.31	0.129	1.03	2.4
W230270		9.1	62.0	0.003	1.64	0.99	7.9	2	1.4	1465	0.31	0.05	4.57	0.196	2.87	2.7
W230271		6.3	41.7	0.002	1.22	0.46	6.0	2	0.7	1735	0.21	0.06	3.32	0.125	2.72	2.7
W230272		4.9	31.4	0.002	0.79	0.44	3.8	2	0.5	1810	0.15	0.07	2.57	0.084	2.43	2.4
W230273		6.9	47.1	0.002	1.48	0.67	6.3	2	0.8	2030	0.24	0.06	3.62	0.165	3.68	2.5
W230274		3.5	22.2	<0.002	0.65	0.70	2.9	1	0.4	1955	0.11	0.06	1.85	0.060	2.55	2.1
W230275		4.2	27.3	<0.002	0.76	0.96	3.4	1	0.5	1515	0.13	<0.05	2.26	0.077	3.54	2.0
W230276		4.1	28.0	<0.002	0.70	0.95	3.5	2	0.4	2900	0.13	0.05	2.20	0.071	3.50	2.8
W230277		3.0	18.6	<0.002	0.57	1.38	2.3	2	0.3	1730	0.09	0.05	1.54	0.048	3.74	1.9
W230278		3.5	1.5	<0.002	<0.01	0.05	0.1	1	<0.2	48.8	<0.05	<0.05	0.07	<0.005	0.02	0.5
W230279		2.8	11.2	<0.002	0.41	0.86	1.7	2	0.2	1955	0.05	<0.05	0.97	0.032	2.56	1.9
W230280		4.2	21.2	<0.002	0.70	0.72	2.8	1	0.4	2060	0.10	0.06	1.72	0.064	4.05	2.3
W230281		2.4	12.9	<0.002	0.49	0.63	1.8	1	0.2	1980	0.06	<0.05	1.05	0.039	2.60	1.6
W230282		2.8	15.4	<0.002	0.75	7.08	1.9	1	0.3	1950	0.07	0.05	1.29	0.042	3.02	2.0
W230283		1.9	8.9	<0.002	0.34	0.79	1.4	1	0.2	1830	0.05	<0.05	0.83	0.026	1.61	1.9
W230284		1.4	6.8	<0.002	0.26	0.84	1.0	1	0.2	2110	<0.05	<0.05	0.61	0.019	0.82	1.6
W230285		1.9	7.8	<0.002	0.34	1.12	1.2	1	0.2	2340	<0.05	<0.05	0.78	0.024	1.09	1.8
W230286		7.0	39.7	<0.002	1.39	42.8	5.5	2	0.7	1020	0.18	0.06	3.23	0.085	24.1	6.1
W230287		1.9	7.9	<0.002	0.41	1.09	1.3	1	0.2	1980	<0.05	<0.05	0.79	0.025	1.07	1.6
W230288		2.1	10.6	<0.002	0.52	2.79	1.5	2	0.2	2180	0.06	0.05	0.93	0.038	1.16	1.7
W230289		2.2	12.1	<0.002	0.54	2.66	1.6	1	0.2	2180	0.07	<0.05	0.97	0.042	1.21	1.7
W230290		2.4	12.3	<0.002	0.44	0.68	1.6	2	0.3	2550	0.06	0.07	1.09	0.037	1.39	1.9
W230291		2.0	9.3	<0.002	0.33	0.52	1.3	1	0.2	1920	0.05	0.05	0.78	0.027	1.34	1.5
W230292		1.4	7.4	<0.002	0.28	0.80	1.3	1	0.2	2090	<0.05	0.05	0.61	0.023	1.57	1.5
W230293		1.8	8.6	<0.002	0.34	1.60	1.5	1	0.2	1860	0.05	<0.05	0.74	0.027	3.24	1.7
W230294		1.1	0.7	<0.002	<0.01	<0.05	0.1	1	<0.2	46.7	<0.05	<0.05	0.05	<0.005	0.03	0.6
W230295		3.5	14.1	<0.002	0.62	11.45	2.1	1	0.3	2100	0.07	0.06	1.25	0.041	16.25	2.8
W230296		3.5	11.7	<0.002	0.55	7.30	2.1	2	0.2	1720	0.07	<0.05	1.01	0.043	12.25	1.8

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17178097

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25	Hg- ICP42
	Analyte	V	W	Y	Zn	Zr	As	Au	Hg
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01	1
W230261		22	0.3	12.0	16	22.3		<0.01	
W230262		67	0.7	24.5	55	63.7		<0.01	
W230263		42	0.5	21.5	35	46.6		<0.01	
W230264		27	0.5	16.9	22	29.7		<0.01	
W230265		33	0.7	17.8	29	34.6		<0.01	
W230266		26	0.3	14.3	23	28.4		0.01	
W230267		74	5.2	17.1	49	67.6		0.50	
W230268		38	0.4	16.6	34	40.7		0.01	
W230269		38	0.4	16.4	34	40.8		<0.01	
W230270		58	0.7	21.3	45	53.3		0.01	
W230271		38	0.7	20.9	29	38.2		0.01	
W230272		27	0.6	16.4	23	28.5		<0.01	
W230273		48	1.7	20.1	38	42.8		0.01	
W230274		19	0.8	14.2	17	19.5		0.01	
W230275		25	1.0	16.9	21	24.6		0.03	
W230276		21	0.9	18.8	21	24.5		0.02	
W230277		16	0.7	12.3	14	16.2		0.09	
W230278		3	0.1	0.8	18	<0.5		<0.01	
W230279		11	0.5	10.7	10	10.3		0.10	
W230280		19	0.7	13.5	17	18.4		0.01	
W230281		13	0.4	8.4	11	11.9		0.02	
W230282		14	0.5	9.9	12	13.0		0.06	
W230283		10	0.4	9.6	8	8.4		0.02	
W230284		7	0.3	7.5	8	6.2		<0.01	116
W230285		8	0.4	8.1	7	8.0		<0.01	
W230286		31	18.0	14.8	24	30.3	1.375	2.68	
W230287		9	0.3	9.0	8	8.1		<0.01	
W230288		11	0.3	8.0	8	10.4		<0.01	
W230289		12	0.3	8.1	9	11.3		0.01	
W230290		12	0.3	9.1	11	11.5		<0.01	
W230291		10	0.3	7.1	7	8.6		0.01	
W230292		8	0.2	7.0	6	7.2		<0.01	
W230293		9	0.3	8.1	5	8.2		<0.01	
W230294		2	0.1	0.7	14	<0.5		<0.01	
W230295		13	0.7	9.8	11	13.3		0.73	
W230296		12	0.7	8.1	9	11.6		0.23	

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 26- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17178097

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- ICP42	Hg- MS42
ME- MS61	ME- OG62		

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Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17179177

Project: Nadaleen

P.O. No.: N17- 067

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

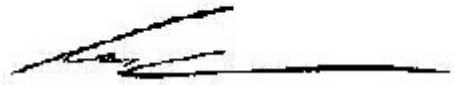
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
As- CON01	As in Concentrates	WST- SEQ

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179177

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230297		6.93	0.12	0.68	6950	110	0.22	0.06	34.0	0.05	9.51	2.5	8	2.07	10.6	0.48
W230298		3.97	0.49	0.58	>10000	80	0.17	0.05	24.6	0.12	9.59	2.1	7	1.37	8.3	0.48
W230299		4.38	2.96	0.62	>10000	60	0.16	0.05	13.35	0.37	9.23	2.1	8	1.46	9.0	0.48
W230300		4.84	0.03	0.04	307	20	<0.05	0.02	21.0	0.08	1.02	0.8	<1	0.12	2.1	0.45
W230301		4.15	1.40	0.71	>10000	80	0.13	0.05	14.30	1.50	18.40	2.6	10	1.29	11.4	0.79
W230302		3.59	0.22	0.42	937	140	0.15	0.03	33.7	0.11	7.60	1.9	5	0.94	5.8	0.37
W230303		0.24	0.63	1.83	>10000	140	0.57	2.80	25.3	0.15	29.2	5.0	27	5.84	16.4	1.35
W230304		7.76	0.03	0.32	322	90	0.13	0.03	31.9	0.04	5.76	1.5	4	0.73	5.9	0.28
W230305		7.25	0.03	0.33	284	120	0.12	0.02	35.6	0.03	5.67	1.6	4	0.83	5.0	0.25
W230306		7.72	0.07	0.69	1300	120	0.20	0.04	34.1	0.04	11.20	2.9	8	1.92	8.8	0.56
W230307		8.49	0.02	0.53	158.5	120	0.16	0.03	35.3	0.03	8.80	2.3	6	1.30	7.5	0.41
W230308		<0.02	0.02	0.57	163.0	120	0.20	0.03	34.9	0.02	8.76	2.3	7	1.41	7.8	0.43
W230309		8.65	0.02	0.74	2160	190	0.22	0.03	34.8	0.02	11.15	3.0	9	2.03	10.4	0.53
W230310		8.28	0.01	0.31	392	70	0.11	0.02	35.6	0.02	5.63	1.5	4	0.72	4.9	0.35
W230311		0.26	0.18	3.76	6280	200	0.89	0.13	12.00	0.13	43.7	11.6	46	10.60	36.6	2.85
W230312		7.81	0.02	0.98	84.8	160	0.23	0.05	32.7	0.05	18.45	3.8	12	2.78	12.9	0.74
W230313		8.04	0.01	0.88	73.6	110	0.24	0.05	33.1	0.03	12.25	3.5	11	2.61	10.9	0.69
W230314		8.32	0.05	1.56	57.8	180	0.44	0.08	29.9	0.10	25.8	5.6	19	5.19	20.3	1.09
W230315		8.61	0.04	2.01	26.3	360	0.56	0.08	26.3	0.15	27.4	7.4	27	8.54	24.5	1.44
W230316		8.48	0.05	2.17	44.5	200	0.52	0.09	27.5	0.18	30.6	7.9	27	6.45	30.1	1.59
W230317		7.67	0.05	1.45	39.0	170	0.46	0.09	29.8	0.15	23.8	5.7	18	4.43	19.8	1.25
W230318		3.64	0.04	1.26	34.2	170	0.46	0.07	30.7	0.13	21.7	5.0	15	3.65	17.3	1.18
W230319		8.13	0.06	1.98	219	210	0.44	0.09	28.4	0.23	30.8	7.8	27	5.11	28.1	1.68
W230320		7.23	0.04	1.81	115.0	700	0.50	0.09	29.1	0.21	24.2	6.6	23	5.69	22.9	1.51
W230321		7.47	0.05	1.57	64.6	170	0.56	0.08	29.4	0.19	23.0	5.8	20	5.38	20.9	1.54
W230322		8.63	0.09	3.46	76.7	370	0.87	0.14	20.3	0.25	42.2	13.1	47	15.45	44.9	2.62
W230323		8.97	0.09	4.69	31.8	300	1.09	0.19	12.45	0.33	48.8	18.1	62	21.1	59.9	3.58
W230324		9.71	0.08	4.34	35.5	310	1.13	0.17	14.30	0.27	50.3	17.9	59	19.05	54.8	3.69
W230325		9.70	0.12	5.90	52.2	470	1.50	0.29	8.95	0.30	69.0	21.1	72	28.5	69.1	3.93
W230326		4.90	0.02	0.05	1.5	30	0.07	0.03	20.3	0.05	0.91	0.7	<1	0.13	2.0	0.45
W230327		8.72	0.10	4.78	11.6	460	1.20	0.19	12.95	0.28	59.2	17.4	63	21.5	57.1	3.64
W230328		9.03	0.12	4.71	9.7	480	1.15	0.20	12.75	0.31	60.7	17.8	61	19.75	56.1	3.61
W230329		9.19	0.10	4.64	7.9	400	1.12	0.18	12.00	0.32	55.6	19.5	66	19.65	60.7	3.96
W230330		9.03	0.10	4.50	13.3	340	1.11	0.21	15.05	0.35	53.0	15.4	53	18.10	47.3	3.55
W230332		6.25	0.15	5.01	13.9	390	1.48	0.27	12.25	0.40	70.3	17.3	58	20.3	63.5	3.54
W230333		6.07	0.10	3.37	23.9	350	1.02	0.19	22.1	0.33	43.8	10.2	37	10.55	41.7	2.58

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179177

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230297		1.91	0.12	0.3	2.56	0.015	0.30	4.5	3.7	0.27	912	0.42	0.01	1.0	4.4	150
W230298		1.64	0.17	0.3	2.58	0.067	0.25	4.4	3.4	0.19	2470	0.28	0.01	0.9	3.5	180
W230299		1.79	0.22	0.3	3.22	0.123	0.27	4.3	4.8	0.12	1180	0.23	0.01	0.9	3.7	120
W230300		0.23	0.16	<0.1	0.016	<0.005	0.02	0.5	0.9	13.00	194	0.13	<0.01	0.1	1.6	180
W230301		2.05	0.15	0.4	9.28	0.077	0.29	7.4	12.1	0.10	4350	0.35	<0.01	1.1	5.3	460
W230302		1.24	0.10	0.2	3.17	0.008	0.18	3.4	2.9	0.28	1520	0.20	0.02	0.6	2.7	350
W230303		5.08	0.12	0.9	6.70	0.027	0.90	15.1	8.8	0.88	2190	1.77	0.01	2.6	13.0	330
W230304		0.94	0.12	0.2	1.645	0.007	0.14	2.5	1.8	2.91	453	0.21	0.01	0.5	2.1	430
W230305		1.00	0.10	0.2	1.160	<0.005	0.15	2.5	1.8	0.38	261	0.25	0.01	0.5	2.5	560
W230306		1.91	0.09	0.4	2.51	0.008	0.30	5.0	3.4	0.38	502	0.33	0.01	1.1	4.7	530
W230307		1.48	0.09	0.3	2.25	0.006	0.23	3.9	2.5	0.49	224	0.34	0.01	0.8	3.7	720
W230308		1.57	0.10	0.3	2.55	0.007	0.25	3.9	2.7	0.48	223	0.33	0.01	0.9	3.7	670
W230309		2.06	0.08	0.4	1.750	0.009	0.31	4.9	3.8	0.52	151	0.45	0.01	1.1	5.2	840
W230310		0.89	0.08	0.2	1.250	<0.005	0.13	2.4	1.5	0.60	228	0.26	0.01	0.5	2.2	710
W230311		10.10	0.12	1.9	14.80	0.034	1.76	22.9	11.8	2.51	1160	1.80	0.02	5.9	25.1	440
W230312		2.62	0.09	0.6	0.824	0.010	0.44	7.5	5.0	0.64	108	0.59	0.02	1.5	6.6	1130
W230313		2.36	0.08	0.5	0.861	0.008	0.39	5.7	4.2	0.60	382	0.50	0.01	1.3	6.0	840
W230314		4.24	0.10	0.8	0.788	0.015	0.69	10.9	7.7	0.83	175	0.86	0.02	2.4	10.3	1400
W230315		5.26	0.10	1.0	0.108	0.021	0.86	12.5	12.0	1.00	387	0.74	0.02	2.8	13.6	1120
W230316		5.61	0.10	1.0	0.251	0.021	0.98	14.4	9.0	1.04	318	1.08	0.02	3.2	14.9	940
W230317		3.84	0.09	0.8	0.206	0.016	0.64	9.9	5.9	1.13	432	1.70	0.02	2.1	10.3	1000
W230318		3.36	0.08	0.7	0.160	0.013	0.55	8.8	5.4	1.07	461	1.32	0.01	1.8	8.9	950
W230319		5.15	0.10	1.0	0.274	0.019	0.85	13.3	7.5	1.03	308	0.91	0.02	2.9	14.1	1350
W230320		4.89	0.08	0.9	0.170	0.018	0.78	10.1	6.9	0.92	242	0.84	0.02	2.6	11.7	1000
W230321		4.08	0.09	0.8	0.177	0.019	0.66	9.6	6.2	1.27	401	0.99	0.02	2.3	11.0	1200
W230322		9.00	0.09	1.6	0.235	0.033	1.39	19.9	31.0	1.24	558	1.19	0.04	4.8	24.8	1070
W230323		12.45	0.13	2.2	0.342	0.049	1.81	23.8	58.4	1.02	658	1.42	0.04	6.7	31.0	760
W230324		11.30	0.09	1.9	0.490	0.040	1.70	23.5	36.4	1.15	808	1.40	0.04	6.1	31.2	1000
W230325		15.60	0.13	3.1	0.907	0.059	2.41	33.6	31.3	1.30	703	2.70	0.05	9.2	38.6	630
W230326		0.17	0.07	<0.1	<0.005	<0.005	0.02	<0.5	0.9	12.55	197	0.05	<0.01	0.1	1.3	170
W230327		12.65	0.12	2.4	0.130	0.045	1.87	28.3	40.3	1.33	756	2.16	0.05	7.0	32.1	680
W230328		12.55	0.11	2.3	0.220	0.048	1.83	28.6	44.5	1.39	768	2.09	0.06	7.0	32.0	830
W230329		12.25	0.10	2.2	0.307	0.047	1.71	26.5	54.7	1.19	780	1.69	0.12	6.8	34.1	900
W230330		11.35	0.09	2.3	0.106	0.043	1.71	25.4	37.6	1.31	566	2.04	0.16	6.7	27.5	930
W230332		13.75	0.11	2.7	0.179	0.052	1.98	33.3	27.7	1.70	569	3.50	0.16	7.7	33.4	1030
W230333		8.47	0.07	1.6	0.097	0.035	1.30	20.3	15.7	1.16	430	2.72	0.13	4.6	22.6	1760

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179177

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230297		3.0	16.1	<0.002	0.76	19.50	2.4	2	0.2	1580	0.07	<0.05	1.06	0.041	8.41	1.7
W230298		2.7	13.5	<0.002	7.76	341	3.0	11	0.2	983	0.06	0.32	1.00	0.033	9.83	1.7
W230299		2.8	14.2	<0.002	>10.0	822	2.1	24	0.3	605	0.07	0.54	1.04	0.036	7.76	1.3
W230300		2.2	0.9	<0.002	0.01	0.40	0.2	<1	<0.2	49.5	<0.05	<0.05	0.07	<0.005	0.02	0.8
W230301		4.0	15.9	<0.002	8.81	394	5.2	14	0.3	464	0.07	0.33	1.31	0.040	18.25	3.6
W230302		2.2	8.8	<0.002	0.39	7.52	2.6	2	0.2	1850	<0.05	<0.05	0.79	0.026	6.99	2.0
W230303		7.1	43.3	0.002	1.40	47.1	5.8	2	0.7	1005	0.19	0.06	3.60	0.084	23.7	6.7
W230304		1.7	6.8	<0.002	0.22	2.21	1.2	1	0.2	1560	<0.05	<0.05	0.60	0.018	2.21	1.7
W230305		1.4	7.1	<0.002	0.25	1.47	1.1	1	0.2	1795	<0.05	<0.05	0.56	0.019	1.34	1.8
W230306		2.7	14.6	0.002	0.66	4.07	2.1	1	0.3	1860	0.06	<0.05	1.18	0.046	3.34	2.1
W230307		2.3	10.6	<0.002	0.40	1.63	1.6	1	0.2	1805	0.06	<0.05	0.89	0.032	2.85	2.4
W230308		2.3	11.6	<0.002	0.42	1.69	1.6	1	0.2	1775	0.06	<0.05	0.95	0.035	3.01	2.3
W230309		2.5	15.1	0.002	0.60	2.64	2.4	1	0.3	2070	0.08	<0.05	1.16	0.047	2.33	2.6
W230310		1.5	6.1	<0.002	0.27	0.85	1.0	1	<0.2	1570	<0.05	<0.05	0.53	0.019	1.25	1.8
W230311		10.8	89.0	<0.002	2.54	22.9	10.2	2	1.5	311	0.42	<0.05	6.44	0.262	44.3	7.0
W230312		3.8	21.8	0.003	0.62	0.32	3.1	2	0.3	2980	0.10	0.07	1.70	0.059	1.28	3.3
W230313		3.2	19.4	<0.002	0.52	0.38	2.4	1	0.3	1650	0.10	<0.05	1.51	0.057	0.98	2.2
W230314		5.6	35.7	0.005	0.84	0.47	4.3	2	0.6	2260	0.16	<0.05	2.63	0.097	0.88	3.8
W230315		6.0	44.1	0.004	1.01	0.38	5.6	1	0.6	1875	0.20	<0.05	2.99	0.147	0.42	3.0
W230316		7.1	49.7	0.007	1.03	0.44	6.3	2	1.0	1905	0.22	<0.05	3.41	0.145	0.53	3.2
W230317		5.0	33.0	0.005	0.67	0.36	4.1	2	0.5	1860	0.16	0.05	2.48	0.089	0.31	3.3
W230318		4.3	29.1	0.003	0.60	0.34	3.7	2	0.5	1820	0.13	<0.05	2.09	0.078	0.29	3.0
W230319		6.1	43.2	0.006	1.05	0.70	6.1	2	0.6	2010	0.20	<0.05	2.92	0.145	0.41	3.5
W230320		5.5	41.2	0.004	0.81	0.45	5.2	2	0.6	1805	0.18	<0.05	2.76	0.122	0.28	2.9
W230321		5.2	34.2	0.003	0.69	0.36	4.7	2	0.6	1640	0.16	<0.05	2.50	0.103	0.25	2.9
W230322		9.8	71.9	0.006	1.38	0.55	10.3	2	1.1	1645	0.35	0.05	5.03	0.259	0.42	3.2
W230323		11.8	97.7	0.007	1.96	0.51	14.3	2	1.4	1100	0.46	<0.05	6.46	0.366	0.71	2.8
W230324		11.3	97.5	0.006	2.18	0.40	15.0	2	1.3	1225	0.42	<0.05	5.97	0.345	0.82	3.1
W230325		18.9	138.5	0.008	2.86	0.63	16.0	2	1.8	847	0.65	0.07	10.20	0.412	1.59	3.8
W230326		1.1	0.9	<0.002	<0.01	<0.05	0.1	1	<0.2	43.7	<0.05	<0.05	0.07	<0.005	0.02	0.8
W230327		13.4	107.5	0.006	2.00	0.49	16.1	2	1.5	1095	0.48	0.05	7.04	0.347	0.68	3.6
W230328		13.9	105.5	0.009	2.41	0.50	15.5	3	1.4	1205	0.49	<0.05	7.38	0.336	0.70	3.6
W230329		12.6	96.3	0.008	2.87	0.52	15.5	2	1.3	1125	0.47	<0.05	6.59	0.379	0.48	3.3
W230330		15.0	94.6	0.008	2.28	0.50	11.3	3	1.4	1135	0.46	<0.05	7.47	0.324	0.49	3.4
W230332		17.2	114.0	0.016	2.09	0.68	13.6	3	1.6	1200	0.60	0.07	9.04	0.302	0.56	5.1
W230333		10.8	66.7	0.013	1.54	0.48	7.9	3	1.1	2080	0.34	0.07	5.20	0.196	0.37	4.1

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CERTIFICATE OF ANALYSIS WH17179177

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	As- CON01	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01	0.01
W230297		12	0.5	7.8	9	11.7			0.03
W230298		11	0.6	8.0	14	10.4	16.00		1.85
W230299		11	0.7	5.9	35	11.0	>30.0	34.6	2.06
W230300		2	<0.1	0.8	16	<0.5			<0.01
W230301		15	0.9	12.4	134	13.2	19.10		7.05
W230302		8	0.5	7.3	13	8.5			0.74
W230303		31	19.8	15.9	23	33.2	1.420		2.62
W230304		6	0.5	5.8	4	6.2			0.05
W230305		7	0.5	6.3	6	7.1			0.02
W230306		12	1.0	7.6	8	13.1			0.07
W230307		10	0.6	7.6	5	10.2			0.02
W230308		11	0.7	7.3	6	10.9			0.03
W230309		14	0.7	9.0	6	13.8			0.01
W230310		7	0.3	5.4	5	6.8			0.02
W230311		82	8.0	19.0	47	73.0			2.64
W230312		18	0.5	14.6	15	18.7			<0.01
W230313		17	0.4	8.0	12	17.9			<0.01
W230314		31	0.5	17.9	24	30.5			<0.01
W230315		44	0.5	17.9	30	36.1			<0.01
W230316		47	0.5	19.2	34	40.1			<0.01
W230317		33	0.6	16.0	23	29.3			<0.01
W230318		29	0.6	15.7	20	26.9			<0.01
W230319		47	0.6	22.1	37	37.3			0.01
W230320		41	0.4	15.8	36	33.6			<0.01
W230321		36	0.4	15.8	29	32.7			<0.01
W230322		83	0.7	22.5	54	61.7			<0.01
W230323		113	0.9	22.3	71	80.4			<0.01
W230324		104	0.9	25.3	68	87.5			<0.01
W230325		125	1.4	24.1	92	108.0			<0.01
W230326		2	0.1	0.7	16	<0.5			<0.01
W230327		111	1.0	25.3	75	82.0			<0.01
W230328		107	1.0	26.1	74	82.5			<0.01
W230329		113	1.0	25.8	76	82.7			<0.01
W230330		93	1.2	22.1	75	92.1			<0.01
W230332		107	1.2	29.7	75	89.1			0.01
W230333		70	0.7	24.1	50	59.9			<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17179177

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- CON01	As- OG62	Au- AA25	Hg- MS42
ME- MS61	ME- OG62		

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Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17179172

Project: Nadaleen

P.O. No.: N17- 068

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 24- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

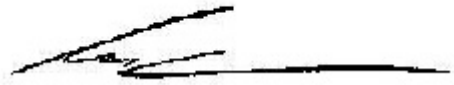
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179172

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230334		8.48	0.12	3.50	31.6	440	1.05	0.18	17.50	0.40	49.1	11.2	40	13.50	42.7	3.23
W230335		8.23	0.17	5.92	70.0	420	1.69	0.29	8.87	0.51	73.9	20.5	67	27.4	73.3	4.16
W230336		5.06	0.05	0.05	0.2	30	0.07	0.02	20.4	0.06	1.11	0.7	<1	0.13	1.6	0.44
W230337		8.25	0.13	4.98	35.2	430	1.43	0.21	12.50	0.43	63.0	17.8	59	21.0	59.6	3.90
W230338		8.40	0.10	3.00	30.9	270	0.91	0.16	22.3	0.40	39.2	7.8	33	10.50	39.4	2.22
W230339		7.92	0.05	1.66	37.1	200	0.67	0.10	31.2	0.16	23.6	4.6	19	5.81	19.5	1.23
W230340		8.18	0.06	1.78	65.2	210	0.61	0.10	28.7	0.16	22.4	5.6	21	5.95	22.2	1.35
W230341		8.59	0.08	2.97	79.4	350	0.97	0.15	22.6	0.20	37.5	8.3	32	10.80	34.0	2.31
W230342		<0.02	0.08	2.97	76.3	350	0.89	0.14	23.6	0.20	37.0	8.4	32	11.00	35.6	2.34
W230343		8.27	0.06	2.44	7.7	1080	0.84	0.13	26.1	0.16	32.9	6.8	27	9.87	29.9	1.68
W230344		9.33	0.07	2.74	15.9	340	0.84	0.14	23.7	0.21	38.1	8.8	32	11.30	35.0	1.98
W230345		8.12	0.09	3.40	22.0	320	1.07	0.19	20.2	0.24	44.1	10.2	36	14.10	42.2	2.23
W230346		7.45	0.08	3.57	24.7	330	1.14	0.20	19.00	0.20	42.3	10.5	36	17.40	47.6	2.18
W230347		0.24	0.18	3.86	5860	210	1.09	0.15	12.05	0.15	41.7	11.3	45	10.85	35.8	2.86
W230348		5.87	0.18	7.14	33.6	280	2.33	0.43	4.84	0.23	82.8	23.7	76	29.4	115.0	4.77
W230349		5.30	0.23	8.54	24.9	340	2.79	0.46	1.36	0.30	94.5	25.2	92	35.9	144.0	5.22
W230350		6.12	0.22	7.84	47.1	360	2.34	0.44	2.19	0.28	86.6	23.0	88	30.1	135.5	4.68
W230351		7.23	0.19	5.96	19.9	390	1.85	0.33	5.84	0.26	69.6	18.0	71	27.5	96.8	3.89
W230352		7.27	0.25	7.90	25.8	320	2.31	0.45	2.11	0.31	84.4	23.6	90	32.0	130.0	4.50
W230353		7.44	0.16	5.22	26.8	430	1.66	0.27	7.60	0.22	60.9	20.3	77	19.35	85.6	3.88
W230354		7.39	0.15	5.71	34.4	340	1.55	0.33	7.26	0.21	66.3	18.3	65	18.35	93.1	3.65
W230355		5.21	0.01	0.05	<0.2	30	0.10	0.04	20.8	0.06	1.16	0.6	<1	0.15	2.7	0.46
W230356		7.57	0.07	2.69	26.6	250	0.99	0.14	23.5	0.11	34.3	8.2	28	8.54	37.9	2.17
W230357		9.28	0.13	5.92	26.4	330	1.66	0.34	8.83	0.19	70.4	18.6	67	14.65	92.7	4.07
W230358		9.23	0.08	4.85	136.5	260	1.16	0.25	8.04	0.30	51.3	16.7	48	10.75	64.1	5.43
W230359		8.15	0.06	4.94	60.6	270	1.07	0.18	7.76	0.28	41.5	19.4	50	19.50	90.8	5.88
W230360		8.63	0.06	6.19	11.4	430	1.35	0.23	4.00	0.21	55.8	22.0	66	31.2	109.5	5.91
W230361		0.24	0.66	1.91	>10000	140	0.52	2.69	25.7	0.15	27.3	4.4	27	6.11	15.8	1.36
W230362		8.16	0.07	3.61	27.4	180	1.00	0.18	7.55	0.11	42.1	8.5	35	9.65	25.6	3.84
W230363		8.39	0.06	4.24	106.5	400	1.08	0.20	6.95	0.10	48.4	9.2	39	8.21	27.0	3.97
W230364		8.80	0.08	5.41	107.5	230	1.41	0.22	5.56	0.27	52.3	18.5	57	14.80	82.6	5.40
W230365		3.41	0.05	5.24	123.5	210	1.45	0.21	5.33	0.25	49.1	17.6	58	13.75	78.8	5.28
W230366		8.06	0.07	4.36	15.4	270	1.28	0.22	7.88	0.17	51.7	10.7	38	16.20	33.6	4.50
W230367		0.84	0.02	0.90	4.4	80	0.35	0.05	28.9	0.02	10.60	2.0	9	1.79	5.1	0.75
W230368		4.98	0.11	7.96	40.3	560	3.34	0.39	2.77	0.35	66.6	16.9	74	26.5	47.1	4.41
W230369		8.13	0.09	8.49	171.0	230	2.85	0.37	2.57	0.20	79.3	16.1	76	21.9	44.5	4.31

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179172

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230334		8.99	0.06	1.8	0.369	0.036	1.35	22.5	22.1	1.15	434	2.88	0.12	5.7	25.4	1020
W230335		15.75	0.09	3.0	1.670	0.065	2.32	35.6	41.5	1.35	478	4.67	0.12	9.2	42.5	810
W230336		0.17	0.10	<0.1	0.006	<0.005	0.02	0.5	1.0	12.95	192	0.68	<0.01	0.2	1.4	240
W230337		13.05	0.07	2.5	1.225	0.059	1.77	27.3	48.5	1.20	469	2.45	0.08	7.8	36.5	860
W230338		7.58	0.10	1.5	1.150	0.031	1.10	17.8	17.4	1.02	248	2.41	0.04	4.3	23.0	1210
W230339		4.34	0.07	0.9	0.930	0.018	0.61	10.6	12.7	0.82	254	1.06	0.02	2.3	10.7	1130
W230340		4.54	0.07	0.9	1.375	0.017	0.65	10.0	14.4	0.75	281	0.86	0.02	2.4	11.8	1190
W230341		7.65	0.09	1.5	1.805	0.029	1.11	17.0	29.0	1.15	358	1.47	0.03	4.1	18.8	1190
W230342		7.64	0.09	1.4	1.690	0.031	1.11	17.0	29.1	1.15	360	1.40	0.03	4.1	19.1	1150
W230343		6.31	0.08	1.3	0.158	0.021	0.92	14.8	19.9	0.81	225	1.15	0.13	3.5	15.9	1950
W230344		7.10	0.10	1.3	0.401	0.031	1.00	17.2	25.0	0.84	373	1.38	0.13	3.7	19.2	1260
W230345		8.78	0.10	1.6	0.128	0.041	1.25	21.2	21.5	1.02	342	1.63	0.29	4.7	23.0	1440
W230346		9.53	0.11	1.7	0.114	0.036	1.33	20.5	21.5	1.18	392	1.39	0.25	5.0	22.6	1240
W230347		10.50	0.08	2.0	16.40	0.035	1.82	21.8	13.9	2.58	1180	1.94	0.02	5.9	26.4	460
W230348		19.35	0.13	3.5	0.333	0.072	2.80	41.4	40.7	1.68	696	2.84	0.28	10.1	53.6	1560
W230349		22.5	0.15	3.8	0.361	0.089	3.28	46.3	60.2	1.20	501	4.74	0.50	11.7	67.6	490
W230350		20.8	0.12	3.7	0.371	0.081	3.04	41.8	50.5	1.48	517	4.21	0.39	11.0	60.7	800
W230351		15.90	0.11	3.0	0.307	0.055	2.31	34.4	31.0	2.77	570	2.60	0.38	8.8	66.6	1060
W230352		21.1	0.11	3.6	0.431	0.083	3.14	41.7	42.2	1.66	363	3.24	0.35	11.2	77.2	500
W230353		13.80	0.10	2.7	0.289	0.053	2.09	30.3	30.5	4.01	678	2.35	0.18	7.7	100.5	630
W230354		15.55	0.11	2.8	0.281	0.060	2.20	33.3	36.8	1.32	695	2.39	0.10	8.1	46.2	620
W230355		0.18	0.06	<0.1	<0.005	<0.005	0.02	0.6	1.4	13.05	204	0.13	0.01	0.2	1.6	190
W230356		6.96	0.07	1.3	0.170	0.024	1.06	15.8	11.4	1.69	525	1.01	0.03	3.7	17.1	1370
W230357		15.80	0.12	2.9	0.617	0.066	2.26	35.1	28.9	2.32	718	2.86	0.04	8.5	43.8	840
W230358		13.00	0.08	2.4	3.12	0.067	1.64	24.8	26.0	4.59	691	2.38	0.04	8.7	47.7	860
W230359		13.35	0.08	2.3	0.671	0.072	1.50	19.7	56.1	4.21	902	0.84	0.17	9.5	36.4	530
W230360		17.35	0.10	2.9	0.136	0.083	2.06	26.6	93.9	2.97	623	0.88	0.17	12.5	41.1	580
W230361		5.06	0.06	0.9	6.96	0.022	0.93	13.7	9.3	0.90	2260	1.85	0.01	2.6	12.8	340
W230362		9.26	0.07	2.1	0.400	0.039	1.38	20.0	41.5	4.35	639	1.18	0.03	6.4	14.7	400
W230363		11.00	0.09	2.1	0.246	0.051	1.65	23.3	72.3	4.03	623	1.27	0.02	6.9	15.3	450
W230364		15.15	0.09	2.8	0.173	0.069	1.81	25.1	70.8	3.63	709	0.72	0.08	9.7	33.4	560
W230365		14.10	0.10	2.7	0.182	0.068	1.74	28.1	66.0	3.48	688	0.82	0.08	9.1	32.8	530
W230366		11.70	0.08	2.6	0.287	0.054	1.85	24.4	30.7	4.49	861	0.83	0.07	8.2	19.4	470
W230367		2.24	<0.05	0.4	0.044	0.009	0.36	5.4	10.9	1.38	282	0.47	0.06	1.2	3.9	480
W230368		23.2	0.12	3.0	0.690	0.082	3.73	31.9	74.9	1.46	505	4.18	0.05	11.1	40.2	2850
W230369		24.2	0.13	3.2	0.768	0.066	3.78	39.1	60.6	1.54	621	2.35	0.05	11.7	36.2	2160

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Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179172

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230334		18.1	70.7	0.009	2.33	0.65	9.9	2	1.2	1765	0.39	0.07	5.68	0.220	0.39	3.8
W230335		21.0	125.0	0.017	3.49	0.89	16.8	3	2.0	946	0.65	0.06	9.68	0.384	0.82	4.7
W230336		5.1	0.9	<0.002	<0.01	0.13	0.1	1	<0.2	48.4	<0.05	<0.05	0.16	<0.005	<0.02	0.9
W230337		16.6	95.3	0.010	3.41	0.67	14.6	2	1.6	1215	0.54	0.07	7.42	0.357	0.68	3.4
W230338		14.3	56.7	0.006	1.75	0.37	7.0	2	1.0	2150	0.32	0.05	4.55	0.178	0.36	4.0
W230339		6.0	31.4	0.004	0.85	0.20	4.1	1	0.6	1625	0.17	<0.05	2.44	0.096	0.19	2.8
W230340		5.8	33.6	0.002	0.95	0.21	4.6	1	0.7	1605	0.17	<0.05	2.43	0.116	0.20	2.5
W230341		9.2	56.2	0.006	1.63	0.32	7.7	2	1.0	1705	0.30	<0.05	4.20	0.181	0.36	3.2
W230342		9.2	57.1	0.003	1.63	0.32	7.6	1	1.1	1750	0.31	<0.05	4.19	0.182	0.34	3.2
W230343		7.7	47.6	0.005	1.17	0.25	6.1	2	0.8	2490	0.26	0.05	3.56	0.142	0.24	3.5
W230344		8.7	51.8	0.006	1.42	0.49	7.4	2	0.9	2170	0.28	0.05	4.04	0.172	0.28	3.4
W230345		11.0	64.6	0.008	1.54	0.85	8.0	2	1.3	1885	0.35	<0.05	5.08	0.201	0.35	3.5
W230346		11.7	70.2	0.007	1.50	0.56	8.2	2	1.5	1450	0.38	0.06	5.25	0.202	0.38	3.4
W230347		11.0	82.7	<0.002	2.64	23.2	9.5	1	1.6	331	0.43	0.05	5.93	0.275	43.7	6.5
W230348		25.3	144.0	0.018	3.81	0.89	17.6	3	2.9	373	0.76	0.16	10.75	0.374	0.97	4.5
W230349		26.9	164.5	0.026	3.83	0.91	20.4	5	3.8	160.0	0.84	0.12	12.50	0.451	0.89	5.3
W230350		25.1	147.5	0.027	3.42	0.91	18.8	4	2.9	191.0	0.82	0.14	11.60	0.415	0.84	5.2
W230351		20.6	120.5	0.021	2.72	0.75	13.3	3	2.2	296	0.65	0.10	9.20	0.329	0.71	4.4
W230352		26.3	164.0	0.028	3.52	0.91	17.5	3	3.1	203	0.83	0.11	11.80	0.411	0.93	5.1
W230353		17.1	103.5	0.014	2.47	0.72	11.3	2	2.8	396	0.59	0.09	8.01	0.296	0.62	3.3
W230354		18.6	110.5	0.017	2.43	0.71	13.6	3	2.4	568	0.59	0.10	8.68	0.309	0.64	3.9
W230355		1.3	0.9	<0.002	<0.01	<0.05	0.1	<1	<0.2	51.0	<0.05	<0.05	0.07	<0.005	<0.02	0.6
W230356		8.4	51.5	0.003	1.49	0.32	6.4	2	1.3	1810	0.26	<0.05	3.87	0.149	0.41	3.1
W230357		20.1	109.5	0.016	3.22	0.75	13.9	3	2.1	624	0.62	0.11	8.79	0.326	1.77	4.6
W230358		16.2	74.6	0.010	5.02	1.39	11.7	2	1.8	889	0.61	0.11	6.44	0.351	2.79	1.9
W230359		9.1	72.3	0.002	1.57	0.50	15.0	1	1.5	297	0.63	0.14	4.32	0.508	0.94	1.1
W230360		11.5	104.0	<0.002	0.57	0.51	17.8	2	2.1	182.5	0.82	0.18	5.99	0.574	0.60	1.6
W230361		6.7	39.6	<0.002	1.45	44.1	5.1	1	0.7	1040	0.19	0.06	3.12	0.090	22.5	5.9
W230362		15.9	61.9	<0.002	1.22	0.98	6.6	1	1.5	195.0	0.47	<0.05	5.36	0.246	0.75	1.5
W230363		13.4	73.3	<0.002	1.30	0.80	7.4	1	1.6	218	0.51	<0.05	6.02	0.263	1.00	1.6
W230364		10.6	87.8	<0.002	0.69	0.60	15.3	1	1.9	157.5	0.67	0.11	6.20	0.486	0.85	1.5
W230365		10.8	83.0	<0.002	0.74	0.62	14.0	1	1.9	156.0	0.63	0.11	5.90	0.467	0.82	1.5
W230366		20.7	88.1	<0.002	1.61	1.15	9.0	1	1.8	137.5	0.58	0.10	6.74	0.308	0.92	1.7
W230367		2.1	15.6	<0.002	0.08	0.11	1.8	1	0.4	772	0.09	<0.05	1.39	0.043	0.11	0.8
W230368		17.2	124.5	0.006	2.86	1.04	13.9	3	3.6	224	0.90	0.08	10.45	0.379	2.76	4.4
W230369		14.6	149.5	0.005	3.81	0.82	15.2	2	3.6	433	0.93	0.05	12.20	0.392	3.77	4.3

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17179172

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W230334		74	0.8	24.2	56	64.6		<0.01
W230335		132	1.4	28.0	95	100.5		<0.01
W230336		2	0.1	0.8	14	0.5		<0.01
W230337		109	1.2	24.7	91	88.6		0.01
W230338		58	0.8	22.6	62	51.5		<0.01
W230339		32	0.5	13.9	28	30.0		<0.01
W230340		38	0.5	14.6	27	30.0		<0.01
W230341		59	0.8	21.8	45	50.7		<0.01
W230342		58	0.7	21.5	42	53.0		<0.01
W230343		48	0.6	22.2	36	46.5		<0.01
W230344		56	0.7	21.8	42	48.4		<0.01
W230345		65	0.9	23.7	50	57.6		<0.01
W230346		66	0.9	22.5	52	58.7		<0.01
W230347		86	7.9	18.5	49	79.1		2.54
W230348		137	2.0	27.8	101	122.0		0.01
W230349		171	2.3	29.3	129	135.5		0.01
W230350		159	2.2	28.1	114	126.0		0.01
W230351		122	1.7	24.2	86	103.5		0.02
W230352		160	2.1	26.6	116	126.0		0.01
W230353		103	1.6	20.2	79	93.0		0.01
W230354		109	1.6	21.6	88	97.8		0.01
W230355		2	0.1	0.8	15	0.6		<0.01
W230356		48	0.7	20.6	39	46.4		0.01
W230357		114	1.7	27.5	94	99.8		0.01
W230358		109	1.8	18.4	71	84.7		0.01
W230359		152	0.8	18.4	77	84.5		0.01
W230360		173	0.9	23.1	84	110.5		<0.01
W230361		33	19.2	14.3	24	30.1	1.380	2.69
W230362		59	0.9	15.1	55	70.2		<0.01
W230363		65	1.3	17.2	58	74.5		<0.01
W230364		143	1.3	21.9	88	101.5		0.02
W230365		137	1.3	20.1	80	92.6		<0.01
W230366		77	1.0	20.7	68	84.2		<0.01
W230367		14	0.3	4.7	9	13.6		0.01
W230368		178	2.3	32.4	127	105.5		0.01
W230369		172	2.4	29.8	90	107.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17179172

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17183169

Project: Nadaleen

P.O. No.: N17- 069

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 29- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

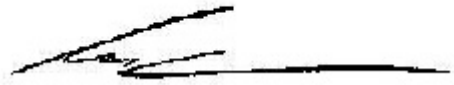
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17183169

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232081		11.25	0.09	8.93	21.9	290	2.53	0.37	0.34	<0.02	81.9	22.6	76	15.15	38.3	4.68
W232082		10.72	0.06	8.53	13.5	380	2.38	0.33	1.23	0.02	96.7	17.0	72	11.70	35.7	4.63
W232083		11.89	0.06	8.40	25.1	340	2.29	0.31	1.88	0.02	88.7	15.8	72	9.46	31.5	4.13
W232084		11.34	0.05	7.51	29.3	440	2.03	0.29	3.84	0.04	81.5	14.3	65	8.69	29.1	3.97
W232085		7.33	0.04	6.36	27.9	340	1.83	0.25	12.45	0.02	70.8	11.2	53	7.00	22.5	3.31
W232086		5.58	0.03	3.58	15.4	170	1.10	0.16	21.7	0.02	43.8	6.4	30	5.53	13.3	2.33
W232087		11.39	0.07	4.34	65.1	320	1.26	0.17	16.60	0.05	55.0	6.8	40	6.82	17.4	2.29
W232088		11.24	0.04	3.16	29.4	150	0.82	0.12	21.7	0.05	38.5	4.9	31	6.07	11.9	1.73
W232089		11.70	0.02	1.68	10.4	750	0.39	0.07	28.1	0.02	23.0	2.6	19	4.12	5.9	1.09
W232090		11.77	0.06	4.94	22.7	340	1.29	0.18	18.60	0.07	56.5	7.9	42	12.70	18.3	2.32
W232091		11.88	0.07	5.13	19.8	290	1.09	0.19	19.50	0.06	56.1	7.7	43	13.10	17.9	2.35
W232092		0.24	0.18	4.03	6490	210	0.94	0.14	12.60	0.14	41.2	11.2	48	10.55	36.5	3.10
W232093		12.67	0.04	4.46	22.6	210	1.03	0.16	17.50	0.02	52.7	7.0	40	10.60	15.4	2.30
W232094		4.53	0.05	4.69	18.7	200	1.24	0.17	16.95	0.02	55.5	7.5	40	11.35	18.3	2.41
W232095		3.83	0.06	7.28	22.9	340	1.64	0.26	9.13	0.02	79.4	11.1	56	16.30	24.0	3.97
W232096		4.28	0.07	9.24	48.1	490	2.40	0.35	1.41	0.03	97.3	17.8	75	23.2	38.1	4.28
W232097		7.83	0.04	9.78	31.3	430	2.39	0.36	0.82	<0.02	92.7	17.5	76	22.4	41.9	4.53
W232098		3.48	0.08	10.10	24.6	270	2.79	0.38	0.36	0.03	70.8	19.9	83	22.9	50.6	4.71
W232099		4.28	0.07	9.42	18.9	240	2.39	0.33	0.90	0.02	97.1	18.9	74	17.80	32.3	5.09
W232100		4.78	0.01	0.07	0.5	20	<0.05	0.03	21.3	0.06	1.09	0.7	2	0.14	2.3	0.49
W232101		7.39	0.04	8.58	11.5	360	2.40	0.31	0.53	0.03	87.9	17.0	68	20.1	37.3	4.86
W232102		7.30	0.06	6.29	10.3	450	1.68	0.22	4.32	0.10	72.6	13.1	59	16.60	91.6	2.99
W232103		3.67	0.02	7.01	4.5	360	1.79	0.18	4.23	0.10	79.3	13.1	61	17.50	67.3	3.16
W232104		3.85	0.08	1.95	7.1	210	0.70	0.06	23.0	0.18	25.2	6.2	22	2.90	13.9	1.73
W232105		7.64	0.04	2.99	8.3	250	0.94	0.14	20.1	0.32	35.6	5.7	30	6.26	19.4	1.64
W232106		<0.02	0.04	3.02	8.5	250	0.90	0.13	20.4	0.33	36.1	5.7	32	6.28	19.7	1.68
W232107		7.52	0.03	2.32	5.4	850	0.70	0.07	25.7	0.17	29.5	4.1	24	4.75	12.0	1.24
W232108		7.70	0.05	3.34	8.6	460	0.98	0.09	20.2	0.13	37.8	5.3	38	7.43	28.9	1.69
W232109		7.37	0.03	3.31	6.1	360	0.93	0.09	21.9	0.07	35.8	5.1	35	6.93	23.9	1.62
W232110		8.06	0.08	3.52	7.8	1650	1.02	0.08	18.55	0.09	43.2	6.2	38	7.51	20.0	1.74
W232111		7.16	0.13	4.21	8.5	750	1.19	0.12	16.85	0.11	45.6	7.1	44	9.18	38.0	2.03
W232112		0.24	0.69	2.04	>10000	150	0.47	2.69	27.4	0.17	28.7	4.8	29	6.14	16.3	1.47
W232113		7.81	0.03	2.72	15.0	400	0.74	0.08	24.9	0.11	30.3	5.2	27	6.28	20.8	1.30
W232114		7.75	0.06	3.11	20.8	480	1.00	0.07	20.9	0.15	37.1	5.4	33	8.44	16.7	1.49
W232115		5.06	<0.01	0.06	1.9	40	0.05	0.01	22.4	0.06	1.14	0.7	2	0.21	1.8	0.49
W232116		7.22	0.10	4.67	64.8	240	1.67	0.11	15.45	0.14	48.7	7.4	49	10.70	29.4	2.08

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Finalized Date: 27- SEP- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17183169

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232081		22.0	0.12	3.2	0.015	0.071	3.16	39.9	139.0	1.05	500	0.69	0.20	11.9	39.8	600
W232082		20.6	0.13	3.1	0.031	0.068	2.59	50.7	168.5	1.31	748	0.56	0.17	11.1	35.5	540
W232083		20.3	0.13	3.0	0.077	0.064	2.54	44.6	156.0	1.17	494	0.50	0.19	11.5	32.9	520
W232084		18.20	0.13	2.6	0.089	0.062	2.24	41.0	131.5	1.20	457	0.62	0.16	10.0	31.6	460
W232085		14.50	0.20	2.2	0.066	0.044	1.91	36.6	102.5	1.07	535	0.48	0.15	7.5	22.6	420
W232086		8.40	0.22	1.3	0.032	0.027	1.21	22.2	47.3	0.62	371	0.35	0.09	4.4	14.1	570
W232087		10.20	0.22	1.8	0.139	0.034	1.58	28.1	38.5	0.88	316	0.50	0.07	5.8	14.5	770
W232088		7.26	0.21	1.2	0.152	0.026	1.21	19.8	36.4	0.96	226	0.54	0.07	3.9	11.6	770
W232089		3.84	0.16	0.8	0.062	0.014	0.63	10.6	22.9	0.46	138	0.30	0.05	2.2	5.7	630
W232090		11.45	0.20	1.7	0.083	0.041	1.88	29.7	57.7	0.88	284	0.52	0.12	6.0	17.7	770
W232091		11.50	0.20	1.5	0.079	0.036	1.92	29.4	49.0	0.88	294	0.58	0.24	5.5	17.9	910
W232092		9.78	0.17	2.0	15.45	0.034	1.91	21.7	10.8	2.70	1220	1.87	0.02	5.6	25.3	470
W232093		10.05	0.16	1.6	0.075	0.033	1.60	27.4	55.4	1.06	436	0.57	0.21	5.3	15.8	780
W232094		10.75	0.18	1.6	0.079	0.036	1.69	29.0	57.4	1.07	449	0.54	0.24	5.6	17.1	790
W232095		16.45	0.19	2.4	0.026	0.050	2.70	41.8	50.4	1.31	874	0.41	0.20	8.9	24.5	440
W232096		21.6	0.22	2.9	0.039	0.065	3.51	51.5	65.4	1.22	390	0.60	0.18	10.8	35.9	380
W232097		22.7	0.23	2.8	0.016	0.069	3.66	47.6	92.6	1.25	415	0.55	0.18	11.0	37.1	650
W232098		25.2	0.20	3.1	0.015	0.078	3.87	33.3	119.0	1.17	322	0.49	0.17	12.4	44.1	650
W232099		22.6	0.21	3.1	0.016	0.073	3.31	51.4	132.5	1.56	501	0.75	0.08	11.7	38.9	600
W232100		0.23	0.16	<0.1	<0.005	<0.005	0.03	0.5	1.0	13.20	206	0.19	0.01	0.1	1.5	190
W232101		21.1	0.20	3.2	<0.005	0.079	3.21	45.5	82.4	1.51	425	0.27	0.06	12.3	35.1	430
W232102		15.85	0.21	2.9	0.005	0.047	2.20	39.0	66.4	2.88	993	0.43	0.29	11.6	40.9	580
W232103		17.40	0.19	2.9	<0.005	0.052	2.60	43.0	66.7	3.12	919	0.13	0.18	12.2	49.1	560
W232104		4.51	0.13	0.9	0.020	0.015	0.48	12.3	33.1	3.13	1740	0.94	0.21	2.9	9.3	260
W232105		7.43	0.14	1.2	0.016	0.024	1.04	19.4	60.1	2.76	683	0.30	0.13	4.7	15.5	380
W232106		7.45	0.14	1.3	0.021	0.024	1.04	19.5	62.0	2.83	703	0.31	0.13	4.7	15.5	390
W232107		5.56	0.14	0.9	0.025	0.019	0.79	16.0	34.9	1.84	400	0.62	0.16	3.3	11.5	280
W232108		7.95	0.17	1.4	0.020	0.026	1.09	20.2	49.2	2.85	359	0.56	0.32	5.0	15.3	560
W232109		7.89	0.16	1.3	0.014	0.023	1.09	19.5	47.1	2.89	310	0.33	0.33	4.9	14.6	430
W232110		8.39	0.16	1.6	0.059	0.026	1.12	22.8	51.7	3.11	325	0.49	0.38	5.3	16.4	610
W232111		9.90	0.18	1.8	0.066	0.032	1.34	24.4	58.1	3.28	312	0.50	0.45	6.2	19.3	690
W232112		4.94	0.13	0.9	6.90	0.023	1.02	14.8	8.8	0.99	2410	1.82	0.01	2.6	13.3	370
W232113		6.49	0.15	1.0	0.051	0.023	0.87	16.8	30.1	1.76	279	0.13	0.24	4.1	13.1	340
W232114		7.50	0.18	1.2	0.041	0.026	1.32	20.1	30.2	2.60	290	0.47	0.12	4.6	14.2	410
W232115		0.23	0.18	<0.1	<0.005	<0.005	0.02	0.5	1.1	13.65	222	<0.05	0.01	0.2	1.5	200
W232116		11.10	0.21	1.9	0.406	0.034	2.24	26.3	34.1	3.48	298	0.61	0.07	6.8	20.0	540

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17183169

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232081		13.7	130.0	<0.002	0.16	0.53	15.6	1	2.6	119.5	0.87	0.08	14.25	0.429	0.75	3.7
W232082		19.3	124.0	<0.002	0.32	0.66	14.9	1	2.5	175.5	0.81	0.06	15.75	0.394	0.64	2.9
W232083		19.9	97.7	<0.002	1.17	0.69	13.5	1	2.4	303	0.84	0.05	14.90	0.406	0.85	2.7
W232084		17.9	79.3	<0.002	1.57	0.49	12.5	1	2.2	311	0.72	<0.05	12.85	0.342	1.04	2.6
W232085		16.4	84.4	<0.002	1.15	0.42	10.4	1	1.6	461	0.56	0.05	10.25	0.278	0.70	2.6
W232086		10.9	54.7	<0.002	0.71	0.20	6.1	1	1.0	753	0.33	<0.05	6.19	0.165	0.39	2.2
W232087		10.8	73.6	0.002	1.39	0.70	7.2	1	1.6	683	0.43	<0.05	7.26	0.211	1.05	2.4
W232088		8.4	56.0	<0.002	1.28	0.37	5.0	1	1.0	871	0.29	<0.05	5.15	0.137	1.13	2.0
W232089		4.8	30.9	<0.002	0.74	0.12	2.7	1	0.5	1080	0.17	<0.05	2.96	0.079	0.47	1.4
W232090		12.1	91.2	<0.002	1.71	0.27	7.8	1	1.4	617	0.44	<0.05	7.89	0.217	1.15	2.5
W232091		12.1	90.1	<0.002	1.76	0.26	7.6	2	1.3	591	0.41	<0.05	7.60	0.203	1.09	2.7
W232092		11.0	81.7	0.002	2.69	23.1	10.1	1	1.6	337	0.43	<0.05	5.81	0.274	45.2	6.4
W232093		10.8	78.7	<0.002	1.43	0.30	7.0	1	1.4	594	0.39	<0.05	7.00	0.190	0.80	2.2
W232094		11.3	83.8	0.002	1.48	0.29	7.5	2	1.6	582	0.41	<0.05	7.31	0.202	0.78	2.2
W232095		16.1	114.0	<0.002	0.50	0.48	11.0	1	2.0	319	0.67	0.06	11.70	0.324	0.63	3.0
W232096		25.5	150.5	<0.002	0.81	0.85	14.8	1	2.8	137.5	0.81	0.07	14.45	0.385	0.77	2.7
W232097		19.6	146.5	<0.002	0.35	0.55	15.4	1	2.6	153.5	0.83	0.08	13.85	0.390	0.76	3.1
W232098		18.3	139.0	<0.002	0.09	0.61	17.0	1	3.1	158.5	0.93	0.12	11.80	0.433	0.80	2.8
W232099		23.0	142.5	<0.002	0.13	0.40	16.7	1	2.6	379	0.87	0.10	14.60	0.431	0.66	2.6
W232100		1.2	1.0	<0.002	<0.01	<0.05	0.2	<1	<0.2	48.3	<0.05	<0.05	0.08	<0.005	<0.02	0.5
W232101		13.8	145.0	<0.002	0.02	0.32	16.2	1	2.7	200	0.83	0.09	13.75	0.416	0.73	3.0
W232102		22.4	101.0	<0.002	0.04	0.28	10.2	1	2.3	165.5	0.86	<0.05	13.85	0.316	0.49	4.1
W232103		6.0	113.5	<0.002	0.02	0.24	11.1	1	2.4	203	0.90	<0.05	14.25	0.316	0.55	3.2
W232104		69.7	21.5	<0.002	0.07	0.22	3.0	2	0.7	739	0.22	<0.05	3.80	0.089	0.14	9.8
W232105		13.9	49.5	<0.002	0.09	0.21	4.8	1	1.1	652	0.35	<0.05	5.77	0.137	0.30	5.8
W232106		14.5	49.8	<0.002	0.10	0.22	4.9	1	1.1	664	0.36	<0.05	5.79	0.137	0.30	5.9
W232107		5.0	37.8	0.002	0.09	0.19	3.6	1	0.8	874	0.25	<0.05	4.06	0.103	0.20	5.7
W232108		8.4	52.2	<0.002	0.10	0.25	5.2	2	1.2	636	0.37	<0.05	6.20	0.153	0.28	6.1
W232109		8.7	51.5	<0.002	0.07	0.22	5.1	2	1.1	636	0.36	<0.05	6.11	0.151	0.27	8.2
W232110		11.3	55.6	0.002	0.19	0.44	5.4	2	1.2	620	0.40	<0.05	6.72	0.162	0.34	9.5
W232111		10.9	65.5	<0.002	0.15	0.52	6.4	3	1.4	596	0.47	<0.05	7.89	0.193	0.40	7.8
W232112		7.5	41.4	0.002	1.54	46.7	5.8	2	0.7	1130	0.18	0.05	3.32	0.092	25.5	6.3
W232113		4.9	46.1	<0.002	0.04	0.20	4.3	1	0.9	688	0.30	<0.05	4.88	0.121	0.30	5.1
W232114		9.2	75.6	<0.002	0.15	0.33	4.9	2	1.0	640	0.36	<0.05	5.90	0.143	0.72	8.0
W232115		1.2	1.2	<0.002	<0.01	<0.05	0.2	1	<0.2	53.0	<0.05	<0.05	0.09	<0.005	<0.02	0.5
W232116		15.1	121.0	<0.002	0.52	0.77	7.2	3	1.5	493	0.50	<0.05	8.76	0.217	1.30	8.9

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17183169

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232081		102	1.5	19.5	94	106.5		<0.01
W232082		88	1.4	20.9	94	103.0		<0.01
W232083		84	1.9	18.4	80	104.0		<0.01
W232084		75	2.1	16.8	90	89.1		<0.01
W232085		60	1.6	16.3	64	76.3		<0.01
W232086		34	0.7	11.2	34	50.8		<0.01
W232087		46	1.6	14.4	53	66.7		<0.01
W232088		30	0.8	9.2	36	42.9		0.01
W232089		15	0.3	5.9	18	27.2		<0.01
W232090		46	0.9	13.8	65	63.2		<0.01
W232091		46	0.9	13.0	61	53.7		<0.01
W232092		88	7.7	18.5	50	71.5		2.56
W232093		41	0.8	13.1	51	56.5		<0.01
W232094		44	0.8	13.4	53	59.2		<0.01
W232095		69	1.2	17.7	72	86.9		<0.01
W232096		92	1.5	19.5	97	103.5		<0.01
W232097		94	1.5	21.0	91	101.0		<0.01
W232098		105	1.8	18.6	113	110.0		<0.01
W232099		99	1.6	21.2	112	108.0		<0.01
W232100		2	0.1	0.8	14	<0.5		<0.01
W232101		100	1.6	21.8	122	115.5		<0.01
W232102		55	1.3	20.7	102	105.0		<0.01
W232103		59	1.2	20.4	104	106.5		<0.01
W232104		29	0.4	8.7	68	32.8		<0.01
W232105		43	0.6	10.6	51	47.6		<0.01
W232106		44	0.7	10.7	53	46.6		<0.01
W232107		32	0.4	8.7	35	33.1		<0.01
W232108		50	0.6	11.5	58	50.5		<0.01
W232109		53	0.5	10.3	55	45.7		<0.01
W232110		52	0.6	13.7	63	56.2		<0.01
W232111		61	0.7	14.5	77	63.6		0.02
W232112		35	19.0	15.8	25	32.7	1.380	2.70
W232113		35	0.5	8.6	49	45.4		<0.01
W232114		47	0.6	10.4	52	45.4		<0.01
W232115		2	0.1	0.8	17	<0.5		<0.01
W232116		68	1.5	14.0	70	70.0		<0.01

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17183169

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17184187

Project: Nadaleen

P.O. No.: N17- 070

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 30- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

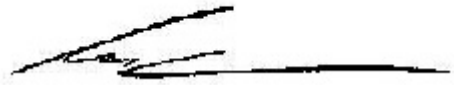
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17184187

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232117		7.59	0.25	3.99	649	150	1.31	0.11	13.50	0.13	50.9	8.5	50	8.68	22.8	1.97
W232118		6.86	9.48	3.94	>10000	130	0.99	0.14	4.38	0.96	53.4	8.4	54	7.44	26.7	2.17
W232119		5.00	0.01	0.06	61.6	30	0.06	0.05	20.8	0.06	1.20	0.7	<1	0.25	2.5	0.47
W232120		3.72	5.05	2.85	>10000	170	0.77	0.08	18.30	0.54	39.9	5.3	35	5.21	19.9	1.43
W232121		7.33	1.11	2.99	1700	110	0.73	0.09	18.80	0.22	37.1	5.5	32	5.45	15.2	1.48
W232122		4.76	0.03	3.48	516	140	0.91	0.11	14.90	0.15	43.7	6.1	36	7.18	15.3	1.94
W232123		7.68	0.02	3.59	348	190	1.06	0.10	14.80	0.14	42.2	6.1	37	6.55	12.8	1.91
W232124		7.36	0.61	4.24	3270	160	1.23	0.15	12.20	0.16	48.8	7.1	42	8.61	18.5	2.17
W232125		7.22	11.15	3.66	>10000	130	0.74	0.13	9.84	0.64	47.6	6.4	44	5.34	31.5	1.73
W232126		5.01	0.01	0.05	40.7	90	0.06	0.04	19.80	0.06	1.00	0.6	1	0.10	3.3	0.44
W232127		7.61	5.68	4.04	>10000	130	0.87	0.15	6.62	0.65	45.0	7.6	49	7.67	35.0	1.83
W232128		7.66	7.48	4.88	>10000	120	0.96	0.15	3.99	0.77	67.0	8.0	60	8.88	36.3	2.21
W232129		0.25	0.20	3.93	6430	210	0.97	0.16	12.25	0.14	46.8	12.4	46	10.65	37.9	2.96
W232130		8.23	0.39	4.34	1590	110	1.23	0.12	8.91	0.07	54.0	6.6	45	9.47	26.2	1.98
W232131		7.65	0.17	2.17	541	4280	0.69	0.07	21.1	0.17	28.1	3.6	25	4.69	12.0	1.22
W232132		7.51	0.05	2.70	26.3	480	0.85	0.08	21.0	0.25	31.3	4.5	30	7.89	16.4	1.33
W232133		8.82	0.06	3.67	74.2	250	1.23	0.11	15.15	0.16	42.8	6.0	41	10.40	22.2	1.83
W232134		3.21	0.06	3.83	19.9	200	1.23	0.10	14.50	0.13	42.7	6.5	40	10.70	21.8	1.78
W232135		8.69	0.05	3.23	44.3	250	1.06	0.09	17.85	0.26	37.0	5.2	36	9.69	19.0	1.61
W232136		8.58	0.02	1.32	633	210	0.42	0.05	29.8	0.21	19.15	2.2	14	3.21	9.8	0.78
W232137		8.51	0.02	1.32	88.0	90	0.47	0.06	27.9	0.10	22.4	2.3	13	3.05	10.5	0.76
W232138		8.13	0.04	1.57	184.5	290	0.58	0.06	26.8	0.13	21.3	2.8	17	3.03	11.4	0.88
W232139		7.28	0.04	2.83	205	140	0.94	0.09	19.45	0.17	33.8	4.9	30	5.98	17.2	1.50
W232140		7.61	0.07	4.21	40.8	230	1.11	0.11	10.90	0.11	51.6	6.2	45	7.81	25.8	2.06
W232141		8.76	0.04	4.15	27.3	250	1.22	0.12	13.80	0.11	46.7	6.3	43	7.72	23.4	1.95
W232142		7.86	0.04	2.68	17.9	370	0.96	0.08	19.55	0.09	34.0	5.2	28	4.92	16.9	1.47
W232143		7.86	0.05	2.66	42.1	710	0.88	0.09	22.5	0.08	30.8	4.7	28	4.68	15.2	1.24
W232144		6.78	0.19	9.90	9.6	380	2.71	0.41	0.26	0.02	94.8	20.1	76	14.65	44.5	4.46
W232145		7.91	0.06	9.70	17.7	360	2.72	0.42	0.15	0.04	83.4	20.2	76	15.25	42.0	4.19
W232146		7.82	0.06	9.63	18.5	360	2.82	0.41	0.17	0.06	93.7	19.8	75	12.95	43.6	4.73
W232147		6.94	0.06	10.40	17.5	450	2.75	0.43	0.12	0.06	110.5	19.7	76	10.90	49.7	4.85
W232148		8.07	0.06	10.05	17.7	340	3.16	0.43	0.16	0.03	88.5	19.7	79	15.45	45.8	5.01
W232149		0.26	0.68	1.94	>10000	140	0.55	2.97	26.9	0.15	26.9	4.8	28	6.03	15.8	1.41
W232150		6.19	0.21	9.10	13.0	450	2.35	0.37	0.25	0.03	102.0	18.3	72	14.10	39.0	4.87
W232151		<0.02	0.17	8.72	13.9	420	2.21	0.38	0.23	0.05	98.4	17.8	67	13.50	36.6	4.80
W232152		10.16	0.05	8.99	12.6	300	2.47	0.39	0.40	0.04	102.0	18.9	69	16.05	40.8	4.91

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184187

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232117		10.75	0.12	2.0	2.69	0.032	1.97	26.0	17.9	3.33	408	0.69	0.02	6.7	21.2	710
W232118		10.85	0.13	1.7	17.50	0.043	1.90	28.2	22.1	0.88	441	0.72	0.02	6.4	20.8	620
W232119		0.21	0.12	<0.1	0.016	<0.005	0.03	0.6	0.9	13.10	219	<0.05	0.01	0.2	1.7	190
W232120		7.75	0.11	1.3	11.00	0.025	1.41	20.8	13.1	1.62	780	0.28	0.01	4.5	14.3	330
W232121		8.10	0.09	1.6	6.32	0.023	1.49	18.2	9.9	2.86	778	0.28	0.02	5.1	12.9	280
W232122		9.80	0.09	1.9	1.045	0.025	1.77	22.4	11.1	3.83	345	0.26	0.02	6.4	15.8	340
W232123		8.97	0.10	1.8	0.866	0.031	1.83	22.0	13.4	4.03	339	0.24	0.02	5.8	17.0	340
W232124		11.00	0.12	2.1	3.69	0.031	2.19	25.7	16.5	3.29	459	0.21	0.02	7.2	19.8	480
W232125		9.48	0.13	1.7	16.05	0.029	1.79	24.4	14.3	2.01	889	0.38	0.02	5.8	17.3	410
W232126		0.18	0.18	<0.1	0.013	0.005	0.02	0.5	0.8	12.45	193	0.05	<0.01	0.1	1.4	170
W232127		10.45	0.14	2.0	13.05	0.033	1.97	23.7	17.2	1.97	831	0.22	0.02	6.6	19.0	580
W232128		12.55	0.15	2.6	9.62	0.035	2.34	33.9	18.1	1.84	870	0.40	0.02	7.9	21.3	670
W232129		10.75	0.14	2.1	16.30	0.035	1.88	20.3	13.3	2.62	1210	1.97	0.02	6.0	27.3	450
W232130		11.60	0.12	2.8	2.25	0.029	2.13	25.9	22.4	4.20	530	0.46	0.03	7.2	18.8	520
W232131		5.81	0.11	1.4	0.912	0.017	1.06	14.3	9.8	2.93	289	1.08	0.01	3.7	9.7	350
W232132		7.05	0.09	1.4	0.062	0.018	1.39	16.1	23.3	3.15	203	0.88	0.02	4.4	12.2	380
W232133		9.48	0.11	1.7	0.060	0.030	1.92	20.8	46.3	4.24	210	0.57	0.03	5.8	16.5	440
W232134		9.83	0.09	1.8	0.078	0.031	2.02	21.0	42.9	4.05	199	0.49	0.03	6.0	17.2	460
W232135		8.32	0.10	1.6	0.051	0.021	1.64	18.1	74.5	3.83	193	0.52	0.03	5.1	14.3	440
W232136		3.51	0.08	0.6	0.063	0.013	0.55	10.9	49.6	1.70	170	0.17	0.01	2.1	5.5	200
W232137		3.47	0.08	0.6	0.057	0.009	0.52	12.1	60.8	1.63	168	0.14	0.01	2.1	5.8	190
W232138		4.14	0.08	0.7	0.066	0.013	0.72	11.8	40.7	2.15	172	0.36	0.02	2.5	7.1	210
W232139		7.45	0.10	1.3	0.075	0.027	1.24	16.7	65.9	3.51	205	0.56	0.02	4.4	13.2	400
W232140		10.95	0.12	2.5	0.057	0.034	2.06	24.3	100.5	4.66	224	0.65	0.04	7.0	18.2	530
W232141		10.75	0.10	2.1	0.052	0.030	1.94	23.6	108.0	4.33	215	0.46	0.04	6.7	17.3	540
W232142		7.03	0.09	1.4	0.046	0.021	1.11	17.3	71.9	4.12	216	0.62	0.06	4.3	12.5	330
W232143		6.94	0.08	1.4	0.049	0.020	0.97	16.6	47.1	2.43	199	0.32	0.30	4.3	12.3	320
W232144		25.7	0.15	3.4	0.045	0.070	3.44	45.9	128.0	0.96	3400	0.34	0.31	11.8	56.7	730
W232145		26.3	0.15	3.5	0.025	0.077	3.39	39.0	147.5	0.85	2360	0.58	0.30	12.0	52.1	640
W232146		25.4	0.16	3.3	0.028	0.071	3.20	45.6	175.0	0.75	3080	0.72	0.26	11.6	49.4	690
W232147		26.3	0.20	3.3	0.031	0.072	3.11	57.2	162.0	0.53	1890	0.34	0.29	12.1	50.7	650
W232148		26.9	0.16	3.6	0.027	0.083	3.22	42.2	172.5	0.85	1080	0.49	0.24	12.5	43.5	660
W232149		5.09	0.10	0.9	6.78	0.024	0.97	13.6	9.6	0.92	2340	1.87	0.01	2.6	13.2	340
W232150		21.9	0.14	3.3	0.044	0.071	2.71	53.7	149.0	0.76	1000	0.40	0.21	11.1	35.6	890
W232151		21.7	0.15	3.4	0.046	0.062	2.60	52.1	156.5	0.74	970	0.43	0.20	10.4	36.7	840
W232152		23.1	0.18	3.2	0.048	0.067	2.89	54.2	173.5	1.23	1500	0.37	0.21	10.9	39.8	790

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184187

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232117		12.7	111.5	0.002	0.99	6.98	6.6	3	1.4	387	0.49	<0.05	8.75	0.193	10.25	8.1
W232118		13.7	106.5	<0.002	6.09	219	4.4	3	1.7	462	0.50	0.08	8.82	0.191	94.3	11.6
W232119		1.3	1.5	<0.002	0.01	0.31	0.2	1	<0.2	48.9	<0.05	<0.05	0.08	<0.005	0.16	0.4
W232120		8.2	79.5	<0.002	1.63	72.1	4.6	2	1.3	455	0.34	<0.05	5.94	0.131	54.6	12.2
W232121		7.8	88.6	<0.002	0.84	25.7	5.0	2	1.2	375	0.38	<0.05	6.49	0.142	34.7	10.1
W232122		6.5	108.5	<0.002	0.74	2.43	5.1	1	1.4	328	0.48	<0.05	8.10	0.168	2.96	3.2
W232123		6.0	102.5	<0.002	0.66	1.41	5.7	2	1.3	344	0.43	<0.05	7.38	0.172	1.88	2.8
W232124		8.1	126.5	<0.002	1.08	16.25	6.8	2	1.6	298	0.51	<0.05	8.82	0.206	18.35	3.3
W232125		11.7	106.0	0.002	3.91	158.5	5.5	3	1.5	272	0.44	0.07	7.55	0.171	100.5	10.4
W232126		1.3	0.9	<0.002	0.01	0.20	0.1	<1	<0.2	47.7	<0.05	<0.05	0.07	<0.005	0.08	0.7
W232127		10.8	110.0	<0.002	4.66	130.5	6.2	3	1.5	202	0.49	0.05	8.69	0.195	52.0	9.8
W232128		14.7	116.5	<0.002	3.98	70.9	7.3	3	1.8	223	0.60	0.06	10.70	0.237	48.0	8.3
W232129		11.8	90.5	<0.002	2.63	24.0	10.2	1	1.6	327	0.41	<0.05	6.06	0.276	46.4	6.9
W232130		11.0	107.0	<0.002	0.83	10.85	6.6	2	1.6	324	0.55	<0.05	9.73	0.216	13.95	4.2
W232131		7.2	61.5	0.002	0.50	4.94	3.3	2	0.8	1320	0.26	<0.05	4.93	0.110	5.35	6.2
W232132		8.2	92.2	<0.002	0.15	0.28	3.9	3	1.0	763	0.33	<0.05	5.61	0.129	0.74	8.7
W232133		9.9	127.0	<0.002	0.12	0.40	5.2	2	1.3	497	0.43	<0.05	7.36	0.175	1.12	7.1
W232134		9.7	132.0	<0.002	0.12	0.36	5.5	3	1.4	485	0.43	<0.05	7.69	0.183	0.99	7.2
W232135		9.2	101.5	<0.002	0.10	0.26	4.6	3	1.2	672	0.37	<0.05	6.54	0.153	0.92	6.8
W232136		4.5	38.5	0.002	0.11	0.39	2.0	2	0.5	1045	0.14	<0.05	2.66	0.060	0.53	11.8
W232137		3.7	35.7	<0.002	0.06	0.18	2.1	1	0.5	904	0.15	<0.05	2.53	0.059	0.48	9.5
W232138		4.9	49.6	<0.002	0.11	0.17	2.4	2	0.6	876	0.18	<0.05	3.20	0.073	0.52	9.9
W232139		7.6	75.1	0.002	0.25	0.31	4.2	2	1.0	893	0.33	<0.05	5.68	0.132	0.89	9.9
W232140		10.4	126.0	0.002	0.12	0.37	6.1	2	1.5	750	0.53	<0.05	9.14	0.211	1.34	6.8
W232141		9.1	113.5	<0.002	0.07	0.31	6.0	2	1.5	598	0.49	<0.05	8.37	0.203	1.22	8.3
W232142		8.1	64.4	<0.002	0.07	0.25	4.1	2	1.0	587	0.32	<0.05	5.58	0.128	0.62	9.7
W232143		8.5	52.2	<0.002	0.07	0.36	4.0	2	0.9	726	0.30	<0.05	5.45	0.127	0.44	10.5
W232144		23.3	154.0	<0.002	0.02	1.28	15.6	1	3.0	121.5	0.89	0.16	14.45	0.415	0.93	3.2
W232145		21.0	150.0	<0.002	0.02	1.71	17.0	1	2.9	114.5	0.93	0.10	14.50	0.432	0.93	3.4
W232146		22.9	147.5	<0.002	0.04	1.87	16.7	1	2.8	147.5	0.87	0.11	14.85	0.435	0.86	3.3
W232147		27.3	146.5	<0.002	0.02	1.59	17.1	1	3.3	330	0.90	0.09	15.60	0.435	0.77	3.2
W232148		28.3	140.5	<0.002	0.14	1.12	18.2	2	3.0	181.0	0.93	0.10	15.50	0.471	0.83	3.4
W232149		7.9	39.9	0.002	1.44	45.4	5.4	2	0.7	1045	0.18	0.07	3.35	0.090	25.2	6.5
W232150		22.2	137.5	<0.002	0.33	0.92	15.4	1	2.5	149.0	0.84	0.07	16.00	0.409	0.75	3.0
W232151		22.7	129.5	<0.002	0.34	0.87	13.9	1	2.4	141.5	0.80	0.05	14.60	0.389	0.76	2.8
W232152		21.5	140.5	<0.002	0.16	0.74	14.9	1	2.7	133.0	0.82	0.05	15.35	0.407	0.81	3.2

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232117		61	3.0	16.4	64	68.4		0.69
W232118		66	6.4	10.7	87	58.5	9.94	16.65
W232119		2	0.1	0.8	17	<0.5		0.01
W232120		42	3.4	15.9	69	46.6	1.110	11.70
W232121		41	3.1	14.5	57	55.0		4.30
W232122		42	3.3	12.8	57	69.7		0.10
W232123		43	2.8	12.8	60	63.2		0.01
W232124		55	3.6	14.3	61	76.4		1.53
W232125		54	4.0	16.2	73	61.4	5.87	20.3
W232126		2	0.1	0.7	15	<0.5		<0.01
W232127		57	5.2	15.7	91	70.4	7.82	18.50
W232128		73	5.9	17.8	100	87.5	5.16	25.7
W232129		87	8.2	19.2	49	76.8		2.59
W232130		65	4.7	16.6	64	98.1		1.52
W232131		37	2.0	9.6	37	53.1		0.29
W232132		45	0.5	10.3	44	47.7		<0.01
W232133		57	0.7	12.6	58	62.6		0.03
W232134		60	0.7	12.7	57	63.7		<0.01
W232135		51	0.6	11.2	51	53.8		0.01
W232136		24	0.3	6.3	36	20.9		0.02
W232137		22	0.3	7.2	27	21.2		<0.01
W232138		26	0.4	6.9	31	24.9		0.01
W232139		45	0.7	10.2	44	47.9		0.01
W232140		64	1.0	14.8	66	89.0		<0.01
W232141		65	0.8	14.1	57	77.8		<0.01
W232142		44	0.5	10.4	46	49.2		<0.01
W232143		41	0.5	9.8	49	47.0		0.02
W232144		102	3.1	22.2	100	114.0		<0.01
W232145		105	2.3	21.2	106	115.5		<0.01
W232146		103	2.2	22.3	104	112.5		<0.01
W232147		106	1.9	22.1	105	113.5		<0.01
W232148		109	1.9	22.0	96	119.0		<0.01
W232149		34	18.9	15.5	25	32.1	1.035	2.71
W232150		94	2.6	23.9	102	109.5		<0.01
W232151		90	2.5	22.0	98	106.0		<0.01
W232152		94	1.7	23.0	92	108.5		<0.01

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Finalized Date: 27- SEP- 2017
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CERTIFICATE OF ANALYSIS WH17184187

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- OCT- 2017
Account: RCM

CERTIFICATE WH17187151

Project: Nadaleen

P.O. No.: N17- 071

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 1- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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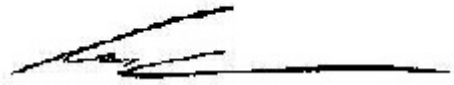
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17187151

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230370		9.33	0.10	8.42	101.0	440	3.56	0.38	2.01	0.38	82.1	17.2	77	25.5	54.8	4.35
W230371		8.83	0.11	8.27	112.0	690	3.49	0.37	1.78	0.55	82.5	17.9	74	24.1	51.4	4.68
W230372		9.14	0.08	8.94	89.9	570	3.66	0.38	1.74	0.27	89.8	20.2	78	25.6	58.3	4.55
W230373		8.13	0.12	8.14	90.6	610	3.17	0.33	1.97	0.26	79.8	17.0	74	23.1	50.6	4.40
W230374		9.62	0.14	9.05	120.5	610	3.99	0.38	1.85	0.28	88.2	19.4	82	30.5	56.7	4.73
W230375		11.09	0.11	8.74	220	1010	3.29	0.34	2.45	0.27	82.1	18.8	74	31.5	51.7	4.56
W230376		0.24	0.71	1.95	>10000	150	0.51	3.29	26.2	0.18	30.3	4.9	28	6.56	17.3	1.40
W230377		11.11	0.12	8.59	91.6	950	2.52	0.34	2.12	0.22	84.2	15.9	72	30.1	44.8	4.80
W230378		10.71	0.12	8.73	27.0	540	3.17	0.33	1.88	0.24	87.2	15.4	73	36.9	45.8	4.49
W230379		10.98	0.10	8.91	21.0	570	3.45	0.35	1.29	0.21	87.1	17.9	78	42.2	48.9	4.59
W230380		<0.02	0.09	9.01	25.7	570	3.39	0.35	1.32	0.18	86.6	18.1	88	41.2	50.0	4.59
W230381		10.76	0.11	8.95	20.4	470	3.33	0.35	1.65	0.25	87.7	19.2	74	45.1	53.4	4.73
W230382		10.14	0.11	8.85	21.1	460	3.69	0.36	1.54	0.30	88.5	19.2	73	43.1	53.2	4.47
W230383		11.20	0.08	7.37	12.6	400	3.24	0.30	3.89	0.14	76.8	16.7	64	37.4	47.0	4.13
W230384		10.07	0.09	6.61	17.4	430	2.63	0.27	5.92	1.10	78.9	15.2	58	34.7	42.0	4.22
W230385		5.63	0.07	5.34	16.1	450	1.87	0.22	7.94	0.59	65.6	11.6	49	29.0	33.4	4.10
W230386		10.42	0.09	8.21	16.9	460	2.98	0.26	3.70	0.06	105.0	14.4	58	45.2	36.5	3.49
W230387		11.61	0.09	8.66	20.8	410	3.48	0.28	2.21	0.05	102.0	15.7	65	47.5	40.9	3.82
W230388		10.18	0.09	8.72	23.5	390	3.72	0.22	2.56	0.38	106.0	16.4	64	40.8	42.0	3.73
W230389		13.56	0.11	8.86	17.9	370	3.83	0.24	2.27	0.08	105.0	16.3	67	45.2	47.1	3.41
W230390		8.24	0.23	8.97	46.4	370	3.74	0.37	1.90	0.10	102.0	21.5	69	49.6	68.1	3.24
W230391		6.59	0.02	7.05	152.0	330	2.11	0.32	7.02	0.26	88.0	16.5	37	29.2	45.9	3.98
W230392		3.86	0.04	3.68	185.5	210	1.02	0.18	13.45	0.47	48.3	9.2	22	12.30	32.2	2.97
W230393		9.17	0.19	1.53	151.5	120	0.51	0.08	17.20	0.32	20.6	5.6	18	4.34	15.1	1.43
W230394		6.80	0.01	0.05	<0.2	20	0.05	0.02	21.0	0.07	1.11	0.6	1	0.15	1.9	0.47
W230395		6.83	0.22	1.22	143.0	170	0.35	0.06	13.90	0.30	16.80	4.5	16	2.40	15.8	1.31
W230396		8.21	0.51	0.47	1060	70	0.28	0.03	16.70	0.09	8.24	2.4	11	1.05	13.1	1.01
W230397		11.14	0.36	3.47	182.5	160	1.14	0.23	10.65	1.52	40.0	13.2	35	10.50	47.5	3.00
W230398		13.49	0.19	3.47	151.5	120	1.06	0.20	6.99	0.43	37.1	14.6	36	14.15	50.1	3.24
W230399		7.00	0.01	0.06	0.2	30	0.08	0.02	20.2	0.07	1.21	0.6	1	0.20	1.6	0.46
W230400		10.57	0.08	4.09	134.5	140	1.22	0.21	10.65	0.17	40.1	12.4	41	12.90	47.2	3.40
W230401		12.83	0.09	3.07	210	110	0.96	0.13	9.84	0.14	29.1	10.7	36	10.40	42.5	2.98
W230402		11.01	0.08	4.82	87.5	170	1.70	0.27	8.37	0.09	49.0	12.8	44	21.0	48.2	3.39
W230403		11.77	0.09	4.45	1705	180	1.56	0.27	3.05	1.03	57.0	11.8	47	19.90	40.9	3.16
W230404		11.18	0.09	2.54	164.5	140	1.05	0.13	11.70	0.98	27.1	8.3	31	11.65	35.0	2.91
W230405		0.25	0.16	3.75	6120	190	0.82	0.14	11.90	0.14	40.1	12.0	45	11.05	36.2	2.89

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 6- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187151

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230370		24.1	0.17	3.0	1.020	0.084	3.91	40.2	55.4	1.33	555	2.65	0.05	11.3	39.1	1980
W230371		24.1	0.18	2.9	1.185	0.081	3.79	42.3	51.8	1.29	490	3.64	0.05	11.1	43.4	1970
W230372		26.0	0.19	3.0	0.889	0.086	4.15	45.9	44.6	1.26	527	2.45	0.05	11.6	42.9	1140
W230373		24.0	0.17	2.8	1.545	0.083	3.78	40.5	37.5	1.30	482	3.75	0.05	10.8	43.0	1270
W230374		26.6	0.20	3.0	1.785	0.086	4.16	45.6	51.4	1.30	549	4.63	0.05	11.8	48.6	1440
W230375		25.0	0.18	2.9	1.415	0.090	3.83	41.5	78.9	1.58	522	3.92	0.05	11.2	46.1	1590
W230376		5.17	0.15	0.8	6.41	0.027	0.96	15.5	10.3	0.94	2370	1.88	0.01	2.6	13.3	340
W230377		22.0	0.17	2.7	1.100	0.081	3.79	42.9	99.0	1.95	483	4.73	0.05	10.5	39.0	1300
W230378		23.6	0.17	2.8	0.979	0.085	3.98	45.7	86.9	1.74	431	4.09	0.05	10.9	38.5	1700
W230379		25.3	0.19	3.0	0.716	0.083	4.15	44.3	94.0	1.62	320	4.16	0.06	11.5	41.7	1500
W230380		25.7	0.18	3.0	0.713	0.083	4.11	44.7	99.1	1.63	326	4.11	0.06	11.3	42.6	1490
W230381		25.6	0.18	3.2	0.406	0.082	4.17	45.5	66.8	1.82	425	4.06	0.06	11.3	44.5	1530
W230382		26.0	0.18	3.2	0.454	0.087	4.20	45.3	42.0	1.74	381	4.10	0.06	11.8	46.2	1390
W230383		21.5	0.18	2.8	0.282	0.073	3.49	40.0	30.6	2.58	1030	2.37	0.05	9.9	37.3	1530
W230384		19.05	0.18	2.4	0.358	0.069	3.12	39.3	22.3	3.38	1180	3.17	0.05	8.8	32.7	1870
W230385		14.45	0.16	1.9	0.290	0.056	2.50	33.4	19.1	4.26	1440	2.77	0.04	7.0	25.4	1550
W230386		22.8	0.17	2.8	0.278	0.062	3.88	50.9	18.8	2.51	347	2.66	0.04	10.9	32.3	890
W230387		25.6	0.17	3.0	0.337	0.071	4.23	48.7	27.7	1.90	296	3.28	0.05	11.9	35.4	590
W230388		25.5	0.20	3.0	0.381	0.070	4.16	51.0	25.2	1.98	323	3.64	0.04	11.6	39.2	630
W230389		26.6	0.20	3.0	0.374	0.074	4.36	51.1	24.1	1.77	466	3.99	0.04	11.6	35.3	490
W230390		28.2	0.19	3.1	0.519	0.081	4.49	49.5	22.0	1.49	700	1.84	0.04	12.5	45.6	510
W230391		19.95	0.18	2.6	0.432	0.066	3.31	47.2	10.5	4.14	1040	3.81	0.03	9.8	37.4	440
W230392		9.73	0.16	1.4	0.394	0.037	1.72	26.1	5.8	7.67	1170	4.33	0.02	5.7	18.4	320
W230393		3.90	0.14	0.7	0.334	0.015	0.68	10.4	3.7	10.25	941	5.37	0.01	3.0	8.7	230
W230394		0.16	0.19	<0.1	0.008	0.006	0.02	0.5	0.4	13.20	214	0.06	<0.01	0.2	1.2	340
W230395		3.13	0.13	0.4	0.814	0.011	0.54	8.2	3.4	8.42	1190	19.20	0.01	1.9	10.6	270
W230396		1.29	0.14	0.2	0.375	0.007	0.21	3.8	1.4	10.25	2130	17.70	0.01	1.0	7.7	160
W230397		9.25	0.14	1.8	4.38	0.051	1.66	19.9	6.7	6.28	1390	59.9	0.02	5.6	84.6	300
W230398		9.09	0.14	1.7	3.97	0.050	1.63	18.4	9.9	3.94	718	3.81	0.02	5.1	86.6	330
W230399		0.22	0.20	<0.1	0.016	0.006	0.02	0.6	<0.2	12.95	205	0.19	0.01	0.2	1.5	200
W230400		10.75	0.15	2.0	4.51	0.054	1.97	20.0	6.7	5.90	1040	1.49	0.02	6.3	31.2	410
W230401		7.45	0.09	1.5	2.89	0.038	1.48	14.1	7.0	5.38	834	1.55	0.02	4.5	27.7	300
W230402		12.50	0.09	2.6	0.856	0.058	2.32	24.6	9.2	4.62	697	1.60	0.03	8.2	32.3	350
W230403		11.45	0.09	2.4	3.08	0.056	2.12	26.5	10.4	1.81	430	1.16	0.02	7.7	24.2	280
W230404		6.48	0.06	1.2	1.795	0.030	1.23	13.1	6.4	6.60	773	1.72	0.02	3.7	17.7	360
W230405		9.85	0.07	2.0	14.30	0.041	1.76	21.3	10.5	2.52	1160	2.01	0.02	6.2	25.3	430

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CERTIFICATE OF ANALYSIS WH17187151

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230370		16.5	162.0	0.006	3.89	0.98	18.0	2	4.6	247	0.91	0.06	13.80	0.412	4.56	4.7
W230371		19.2	172.5	0.008	4.10	1.16	19.0	2	3.7	221	0.87	0.07	13.95	0.395	4.05	4.7
W230372		16.3	179.5	0.008	4.38	0.98	21.1	2	3.8	205	0.92	0.07	15.40	0.425	3.83	4.0
W230373		17.1	156.5	0.009	4.22	1.21	18.9	2	3.5	216	0.85	0.05	13.85	0.375	4.74	4.2
W230374		19.8	180.0	0.010	4.74	1.41	20.9	2	3.9	194.5	0.92	0.05	15.55	0.408	5.70	4.8
W230375		19.4	165.0	0.008	4.38	1.10	20.7	2	3.7	441	0.89	0.08	14.10	0.397	4.72	4.4
W230376		7.6	42.0	0.003	1.49	50.2	6.1	2	0.8	1060	0.19	0.07	3.40	0.092	23.2	6.5
W230377		17.6	151.5	0.009	3.03	1.12	15.4	1	3.7	273	0.86	0.05	13.90	0.384	2.46	4.2
W230378		16.4	163.5	0.010	2.92	0.98	16.7	2	3.6	136.5	0.87	0.05	14.65	0.394	3.02	4.6
W230379		17.1	167.5	0.008	2.83	1.01	19.3	1	3.7	124.5	0.93	0.05	15.15	0.417	2.05	4.5
W230380		16.9	173.0	0.008	2.79	1.02	20.4	2	3.5	125.0	0.92	0.06	15.10	0.415	2.05	4.5
W230381		17.3	180.0	0.010	2.74	1.06	20.6	2	3.6	123.5	0.90	0.05	15.40	0.402	1.99	4.6
W230382		18.5	184.5	0.012	2.73	1.10	21.2	2	3.7	121.5	0.93	0.06	15.90	0.414	2.35	4.5
W230383		16.3	157.0	0.007	2.46	0.88	17.3	2	3.1	147.5	0.79	0.05	13.90	0.353	1.48	3.5
W230384		22.4	131.0	0.007	2.69	0.94	14.1	2	2.6	193.0	0.69	0.05	12.90	0.305	1.63	3.6
W230385		18.8	103.0	0.006	2.35	0.83	10.3	1	2.3	223	0.55	<0.05	10.60	0.243	1.29	3.1
W230386		24.5	145.5	0.011	2.20	0.76	14.1	1	2.8	216	0.84	0.05	17.75	0.329	1.31	3.8
W230387		28.6	142.0	0.013	2.50	0.84	16.8	1	3.2	155.5	0.92	<0.05	17.95	0.356	1.38	3.9
W230388		26.1	145.0	0.009	2.49	0.86	17.7	2	2.9	197.5	0.88	<0.05	17.95	0.355	1.33	4.0
W230389		21.3	145.5	0.010	2.59	0.74	19.1	2	3.3	181.5	0.89	0.06	18.30	0.362	1.39	4.3
W230390		15.5	143.0	0.010	3.01	0.87	21.7	2	2.8	151.0	0.95	0.05	17.90	0.382	1.49	4.2
W230391		18.4	126.5	0.002	3.58	1.32	15.3	1	2.0	166.5	0.73	0.07	15.00	0.294	1.37	2.3
W230392		10.9	64.8	0.006	1.90	1.52	6.4	1	1.8	223	0.43	<0.05	7.42	0.165	1.44	2.2
W230393		10.4	23.3	0.026	0.68	2.72	2.9	2	0.8	319	0.21	<0.05	3.04	0.077	0.96	3.9
W230394		1.5	1.0	<0.002	<0.01	0.08	0.1	<1	0.2	52.1	<0.05	<0.05	0.05	<0.005	0.02	0.6
W230395		13.0	18.5	0.046	0.81	3.24	2.3	2	1.4	359	0.13	<0.05	2.08	0.054	1.87	10.2
W230396		9.2	7.7	0.062	0.69	1.88	1.1	2	1.4	295	0.07	<0.05	0.96	0.029	1.06	14.1
W230397		29.6	64.4	0.040	2.85	1.82	8.7	3	2.3	190.5	0.40	0.11	5.50	0.253	4.10	11.4
W230398		28.6	64.3	0.021	2.93	1.08	9.3	2	2.1	120.0	0.36	0.13	5.13	0.259	3.69	2.2
W230399		1.4	1.0	<0.002	<0.01	0.07	0.2	<1	0.2	50.1	<0.05	<0.05	0.09	<0.005	0.03	0.7
W230400		31.9	76.2	0.008	2.87	1.21	11.3	1	1.6	146.0	0.45	0.08	5.70	0.328	5.03	1.7
W230401		29.4	55.8	0.008	2.49	1.71	8.5	1	1.8	163.0	0.30	<0.05	3.95	0.251	2.96	1.5
W230402		29.7	101.0	0.003	3.01	0.51	12.0	<1	1.5	148.0	0.58	0.08	7.62	0.338	1.73	1.5
W230403		44.4	91.1	0.005	3.07	2.03	10.5	1	2.6	93.6	0.56	0.08	7.84	0.293	4.17	1.8
W230404		37.2	47.3	0.009	2.22	1.19	6.8	1	1.8	165.0	0.27	0.05	3.37	0.188	2.61	1.6
W230405		10.9	84.0	<0.002	2.56	22.9	9.8	1	1.6	311	0.45	<0.05	6.24	0.261	42.4	6.6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187151

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230370		177	2.4	28.8	140	106.5		0.01
W230371		172	2.3	28.7	187	107.5		<0.01
W230372		164	2.9	25.7	153	112.5		<0.01
W230373		167	3.8	24.5	105	104.0		<0.01
W230374		178	4.2	27.5	131	110.5		0.01
W230375		175	2.0	24.9	112	105.0		0.01
W230376		34	18.8	15.3	26	30.5	1.285	2.69
W230377		167	1.8	22.2	97	98.3		<0.01
W230378		175	1.8	28.4	104	102.5		<0.01
W230379		173	1.9	27.3	99	109.5		<0.01
W230380		173	1.9	27.2	87	108.5		0.01
W230381		172	1.8	27.6	111	115.0		<0.01
W230382		180	1.9	27.3	144	117.5		<0.01
W230383		139	1.7	27.1	90	103.5		<0.01
W230384		127	1.5	26.7	378	90.2		<0.01
W230385		101	1.2	22.3	213	69.8		<0.01
W230386		159	1.4	27.3	48	102.0		<0.01
W230387		162	1.5	23.2	47	107.0		<0.01
W230388		157	1.4	24.3	153	107.5		<0.01
W230389		161	1.5	24.5	62	107.5		<0.01
W230390		149	1.7	23.8	61	113.5		0.01
W230391		62	2.3	20.8	42	92.5		<0.01
W230392		41	2.5	12.9	63	52.9		<0.01
W230393		56	1.4	6.6	22	23.7		0.01
W230394		1	0.1	0.8	17	<0.5		<0.01
W230395		82	1.3	4.0	48	16.8		0.01
W230396		90	0.9	4.0	6	9.1		<0.01
W230397		112	2.8	13.2	323	68.1		<0.01
W230398		79	2.2	13.6	35	64.0		<0.01
W230399		2	0.1	0.7	17	<0.5		<0.01
W230400		87	3.4	15.5	25	75.2		<0.01
W230401		69	4.0	13.0	25	61.9		<0.01
W230402		88	2.2	17.4	43	88.0		0.01
W230403		76	2.2	15.0	210	83.7		<0.01
W230404		59	2.2	12.2	213	52.4		0.01
W230405		82	7.7	17.5	48	69.3		2.52

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 6- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17187151

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE WH17187147

Project: Nadaleen

P.O. No.: N17- 072

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 1- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

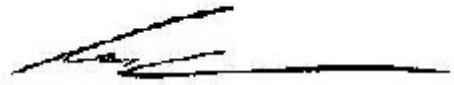
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187147

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230406		11.66	0.09	3.29	196.5	300	1.02	0.21	7.48	3.05	32.8	10.4	50	13.65	44.4	3.30
W230407		12.15	0.07	6.36	582	300	2.00	0.25	6.16	1.23	61.1	14.9	60	22.2	45.2	4.62
W230408		11.11	0.06	5.47	303	240	1.73	0.22	9.03	0.68	54.0	12.7	48	17.95	37.7	3.98
W230409		11.64	0.10	7.20	354	310	1.90	0.29	1.20	1.13	71.3	23.6	89	22.7	54.2	5.52
W230410		11.79	0.09	5.20	1915	280	1.10	0.19	2.19	0.73	51.3	15.6	77	16.10	40.9	5.03
W230411		11.93	0.13	5.55	3650	260	1.39	0.24	2.04	1.25	54.7	15.1	73	16.55	48.4	4.23
W230412		8.86	0.12	6.13	959	290	1.52	0.25	1.25	0.49	63.7	22.9	77	20.3	64.4	6.00
W230413		<0.02	0.12	5.47	844	260	1.28	0.21	1.28	0.69	54.5	18.2	68	17.75	52.7	5.92
W230414		11.05	0.10	5.93	959	290	1.28	0.22	1.59	0.28	57.5	23.0	75	16.10	76.6	4.85
W230415		12.11	0.10	6.03	1265	320	1.38	0.23	1.99	0.11	57.2	25.9	77	17.10	65.1	5.16
W230416		10.66	0.08	4.74	1060	240	1.15	0.18	2.32	0.13	46.6	14.3	69	12.90	40.0	4.29
W230417		11.38	0.08	5.95	301	200	1.73	0.22	4.05	0.25	61.2	13.6	64	20.8	38.3	4.12
W230418		12.34	0.09	5.34	410	200	1.46	0.20	3.25	0.19	54.7	13.4	62	17.45	36.3	3.81
W230419		12.69	0.09	6.58	284	230	1.93	0.24	2.64	0.16	66.8	16.7	72	23.7	47.3	5.52
W230420		11.69	0.09	6.65	271	270	1.81	0.24	2.90	0.09	66.4	19.2	74	22.6	59.3	5.05
W230421		11.22	0.09	6.05	99.9	290	1.69	0.22	3.10	0.11	64.3	19.8	70	21.9	52.0	4.84
W230422		9.90	0.08	7.21	38.9	290	1.99	0.29	2.10	0.15	75.3	20.4	79	34.5	61.2	5.09
W230423		11.04	0.08	6.61	25.6	330	1.78	0.25	2.41	0.12	67.8	19.0	74	38.5	57.3	5.24
W230424		10.26	0.08	8.15	22.2	300	2.18	0.31	1.46	0.35	84.5	22.9	83	45.9	70.1	5.25
W230425		5.97	0.08	7.39	19.4	230	2.19	0.28	2.09	0.12	78.9	23.4	78	46.1	64.2	5.38
W230426		5.57	0.08	6.86	2750	440	1.93	0.25	2.60	0.16	70.1	19.2	71	24.2	61.0	5.62
W230427		2.67	0.06	7.05	1970	430	1.92	0.26	2.84	0.13	75.4	19.1	71	25.6	63.1	5.04
W230428		9.71	0.09	6.25	1090	470	1.59	0.21	2.22	0.69	60.3	19.8	81	20.2	58.3	5.32
W230429		0.25	0.18	3.90	6520	210	0.91	0.12	12.40	0.15	42.3	11.7	47	10.50	36.9	2.91
W230430		10.21	0.06	2.97	250	210	0.59	0.08	2.03	1.11	32.2	11.8	71	9.27	29.7	3.13
W230431		11.32	0.04	3.23	56.3	670	0.52	0.09	2.98	0.08	32.9	12.1	91	16.40	31.7	4.17
W230432		6.76	0.01	0.05	0.7	20	0.05	0.01	20.8	0.06	1.15	0.7	1	0.12	2.1	0.46
W230433		10.94	0.07	5.83	97.6	220	1.63	0.22	1.54	0.10	59.9	19.6	89	27.1	54.7	5.14
W230434		10.79	0.16	5.37	63.1	320	1.39	0.20	1.61	0.02	67.1	28.1	65	31.4	28.1	4.08
W230435		11.17	0.06	5.48	101.5	240	1.43	0.19	1.81	<0.02	57.3	15.6	79	32.8	52.4	5.07
W230436		7.07	0.01	0.05	<0.2	300	0.08	0.02	20.5	0.07	1.13	0.7	1	0.53	3.1	0.46
W230437		7.20	0.08	6.28	35.0	230	1.54	0.22	2.48	0.27	63.3	19.0	76	32.5	55.3	4.85
W230438		7.50	0.07	6.83	31.3	290	1.75	0.26	2.35	0.52	71.1	16.8	79	41.8	60.0	5.10
W230439		0.25	0.70	1.88	>10000	140	0.53	2.96	25.5	0.16	28.8	4.8	28	6.01	16.5	1.40
W230440		7.71	0.05	5.48	54.4	210	1.29	0.18	1.87	0.03	56.1	15.0	82	35.8	45.7	4.75
W230441		7.76	0.09	6.07	176.0	610	1.79	0.23	0.82	0.18	60.7	17.8	74	35.9	50.0	3.99

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 11- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187147

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230406		7.83	0.06	1.7	3.32	0.034	1.54	16.5	8.9	4.09	546	3.62	0.03	4.9	23.3	270
W230407		15.05	0.10	3.0	3.56	0.066	3.03	29.6	12.8	3.58	603	1.21	0.04	10.5	31.4	460
W230408		12.95	0.07	2.6	1.830	0.051	2.66	26.3	11.1	5.24	882	0.57	0.04	8.7	25.6	430
W230409		17.70	0.11	3.6	2.24	0.067	3.42	34.7	14.4	0.96	375	1.18	0.03	12.4	43.6	330
W230410		12.60	0.09	2.6	2.40	0.050	2.44	26.2	10.9	1.20	535	1.18	0.02	8.2	32.9	300
W230411		14.25	0.11	2.7	4.52	0.060	2.63	26.9	11.3	1.17	497	1.49	0.03	8.6	33.2	280
W230412		15.90	0.11	2.9	3.20	0.060	2.91	30.8	12.9	0.91	474	1.66	0.03	9.9	44.8	410
W230413		13.70	0.10	2.5	2.91	0.055	2.57	26.6	12.3	0.88	473	1.23	0.02	8.5	38.1	360
W230414		15.30	0.11	2.8	2.78	0.060	2.83	28.7	12.6	1.02	567	1.33	0.02	9.3	40.3	340
W230415		15.30	0.09	2.8	2.82	0.052	2.83	28.8	12.5	1.14	418	1.34	0.03	9.3	45.7	300
W230416		11.40	0.09	2.3	2.10	0.045	2.16	23.1	14.7	1.15	496	1.41	0.02	7.3	30.5	350
W230417		14.75	0.10	2.6	3.55	0.059	2.87	30.3	9.9	2.14	1110	1.33	0.03	8.9	31.6	420
W230418		13.40	0.08	2.5	3.80	0.048	2.54	27.2	10.3	1.72	1470	1.19	0.02	8.3	30.6	370
W230419		16.50	0.12	3.0	4.08	0.063	3.15	32.8	11.6	1.47	810	1.25	0.03	9.9	36.7	440
W230420		17.10	0.10	3.1	2.99	0.063	3.15	31.7	14.0	1.58	909	0.71	0.03	10.3	39.9	480
W230421		15.65	0.10	3.0	1.675	0.064	2.85	31.0	22.6	1.55	597	1.12	0.03	9.5	41.0	550
W230422		18.55	0.11	3.3	0.336	0.082	3.37	36.2	64.2	2.12	527	0.47	0.04	13.0	42.2	550
W230423		16.75	0.12	2.9	0.178	0.072	3.01	32.7	80.2	2.19	613	0.68	0.03	12.0	38.3	560
W230424		20.8	0.11	3.6	0.117	0.089	3.77	40.6	50.8	2.04	388	0.51	0.04	14.8	39.1	700
W230425		18.75	0.11	3.4	0.110	0.082	3.42	37.0	55.6	2.27	527	0.51	0.04	13.3	42.6	590
W230426		17.25	0.11	3.1	2.32	0.083	3.14	34.0	20.4	1.67	506	0.55	0.03	12.3	38.6	600
W230427		18.30	0.11	3.2	1.890	0.075	3.24	35.7	20.0	1.83	502	0.55	0.03	13.5	38.8	590
W230428		16.05	0.09	2.9	2.14	0.075	2.85	28.9	29.3	1.35	522	0.90	0.02	10.2	41.2	490
W230429		9.96	0.08	1.9	14.95	0.036	1.83	22.2	11.2	2.59	1200	1.80	0.02	5.8	27.3	450
W230430		7.69	0.06	1.6	0.501	0.039	1.25	15.5	47.6	0.92	452	1.83	0.02	4.9	23.7	270
W230431		8.06	0.06	1.8	0.117	0.033	1.16	16.3	46.9	1.47	877	2.33	0.12	5.2	24.5	260
W230432		0.18	<0.05	<0.1	<0.005	<0.005	0.02	0.6	1.0	13.20	202	0.08	<0.01	0.2	1.7	170
W230433		14.95	0.09	2.7	0.270	0.063	2.51	29.1	93.3	1.55	409	1.87	0.03	9.5	38.7	470
W230434		13.80	0.11	2.5	0.307	0.055	2.40	32.6	84.6	1.65	391	0.95	0.03	8.9	37.0	440
W230435		13.90	0.10	2.6	0.086	0.059	2.18	27.6	80.0	1.83	527	1.00	0.08	9.0	34.4	460
W230436		0.19	<0.05	<0.1	<0.005	<0.005	0.03	0.5	1.1	13.05	206	0.07	<0.01	0.2	1.7	230
W230437		15.65	0.09	2.8	0.090	0.060	2.57	31.1	94.5	2.22	623	0.97	0.03	10.1	38.0	470
W230438		17.40	0.11	3.2	0.108	0.075	2.97	34.2	76.2	2.34	598	0.83	0.04	11.1	38.3	550
W230439		4.99	0.05	0.9	6.68	0.024	0.93	15.2	9.0	0.90	2270	1.79	0.01	2.6	14.5	340
W230440		13.25	0.09	2.5	0.103	0.060	2.30	27.6	66.1	1.81	512	1.30	0.07	8.5	32.5	520
W230441		15.20	0.09	2.6	0.963	0.058	2.84	30.5	32.8	1.03	218	1.37	0.02	8.0	37.3	260

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187147

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230406		79.1	61.4	0.006	2.80	0.51	7.3	1	2.9	111.0	0.36	0.06	4.98	0.262	6.04	1.8
W230407		104.5	126.0	<0.002	4.07	1.95	15.5	1	1.9	192.5	0.71	0.05	8.95	0.466	5.30	2.1
W230408		57.2	110.0	<0.002	3.37	1.40	13.2	1	1.5	218	0.61	<0.05	7.74	0.406	3.89	1.7
W230409		75.2	141.5	<0.002	5.10	2.89	18.4	1	2.0	115.5	0.80	0.08	10.30	0.568	3.74	2.3
W230410		50.2	97.7	<0.002	3.98	3.70	13.0	<1	1.6	162.5	0.58	<0.05	7.23	0.459	5.28	1.6
W230411		72.9	115.0	<0.002	3.59	6.45	14.5	1	2.0	137.5	0.61	0.05	7.83	0.428	10.60	1.7
W230412		58.7	130.5	0.003	5.73	4.37	16.6	1	2.6	153.0	0.71	0.07	9.05	0.496	8.84	2.1
W230413		53.4	113.5	<0.002	6.02	4.14	14.8	1	2.2	140.5	0.61	<0.05	7.71	0.426	8.00	1.7
W230414		44.0	122.0	0.002	3.97	4.21	16.4	<1	4.2	146.5	0.67	0.05	8.52	0.472	7.28	1.9
W230415		28.9	119.5	0.002	4.75	4.94	16.2	<1	2.6	118.0	0.67	0.05	8.28	0.482	5.13	1.8
W230416		27.4	89.2	0.002	3.28	2.82	12.6	<1	1.5	110.0	0.52	<0.05	6.38	0.388	5.60	1.4
W230417		51.3	128.5	0.002	3.30	3.15	15.7	1	1.7	122.0	0.63	0.05	8.59	0.421	7.81	2.0
W230418		22.9	115.0	0.002	2.67	3.83	15.1	<1	1.6	111.0	0.58	0.06	7.77	0.388	8.75	1.8
W230419		20.5	137.5	<0.002	5.14	2.62	16.9	1	1.8	124.0	0.69	<0.05	9.38	0.476	8.56	2.1
W230420		17.7	136.5	0.002	4.30	2.14	18.0	1	2.3	144.0	0.70	<0.05	9.15	0.505	6.33	2.0
W230421		21.8	128.5	0.002	3.85	1.37	17.2	1	2.0	173.5	0.67	0.05	8.72	0.465	4.63	1.9
W230422		17.8	164.5	<0.002	1.29	0.47	21.4	1	2.1	122.0	0.84	0.06	10.40	0.563	1.53	2.2
W230423		17.0	152.5	<0.002	1.17	0.48	20.9	1	2.0	155.0	0.74	<0.05	9.29	0.531	1.02	2.0
W230424		15.1	192.5	<0.002	1.10	0.52	24.4	<1	2.4	107.0	0.94	0.05	11.80	0.615	1.26	2.5
W230425		14.6	180.0	<0.002	0.88	0.48	23.0	1	2.2	148.5	0.85	0.05	10.60	0.572	1.04	2.2
W230426		16.7	160.0	<0.002	5.40	2.50	19.8	<1	2.0	295	0.79	0.06	9.62	0.563	6.94	2.1
W230427		17.2	169.5	<0.002	4.91	2.24	22.4	<1	2.3	288	0.83	0.07	10.15	0.569	5.71	2.1
W230428		16.0	143.5	<0.002	4.86	3.19	15.8	<1	2.0	198.5	0.68	<0.05	8.27	0.571	6.44	1.8
W230429		11.1	88.9	0.002	2.63	22.5	10.4	1	1.5	319	0.41	<0.05	5.81	0.273	43.7	6.5
W230430		9.1	61.4	<0.002	1.75	1.19	7.7	<1	1.0	114.5	0.33	<0.05	4.08	0.365	2.37	0.9
W230431		6.7	59.8	<0.002	0.46	0.36	9.9	<1	1.0	103.5	0.36	<0.05	4.18	0.392	0.97	0.9
W230432		1.3	0.9	<0.002	<0.01	<0.05	0.2	<1	<0.2	50.5	<0.05	<0.05	0.07	<0.005	0.04	0.8
W230433		21.1	130.5	<0.002	1.90	0.84	16.1	<1	1.8	128.5	0.64	0.06	8.46	0.501	2.15	1.8
W230434		32.7	129.5	<0.002	0.91	0.86	13.0	1	1.6	95.7	0.62	0.05	8.66	0.368	1.16	2.1
W230435		12.7	122.0	<0.002	0.68	0.50	15.5	1	1.6	109.5	0.63	<0.05	7.99	0.480	1.27	1.7
W230436		1.3	1.8	<0.002	0.01	0.10	0.2	1	<0.2	57.2	<0.05	<0.05	0.07	<0.005	0.03	0.6
W230437		18.2	140.5	<0.002	0.30	0.46	17.4	<1	1.7	127.0	0.68	0.05	8.89	0.520	0.80	2.0
W230438		19.3	167.5	<0.002	0.31	0.41	19.2	<1	2.0	104.0	0.78	0.06	9.73	0.555	0.96	2.1
W230439		7.9	43.1	<0.002	1.44	47.2	5.9	1	0.7	1015	0.19	<0.05	3.39	0.089	24.2	6.5
W230440		14.1	124.5	<0.002	0.63	0.63	14.7	<1	1.6	111.0	0.58	<0.05	7.56	0.457	0.88	1.6
W230441		32.7	144.5	0.002	2.67	1.22	16.3	1	1.7	120.5	0.56	<0.05	8.73	0.384	2.24	1.9

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187147

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230406		79	1.6	12.5	656	63.4		<0.01
W230407		128	3.6	21.0	374	111.5		<0.01
W230408		109	4.5	20.0	206	98.7		<0.01
W230409		166	7.7	20.4	347	130.5		0.01
W230410		129	5.8	17.0	253	98.9		0.08
W230411		127	6.2	16.5	443	102.5		0.14
W230412		137	7.5	19.4	192	109.0		0.10
W230413		118	6.5	16.7	254	91.8		0.09
W230414		137	6.5	16.7	135	120.0		0.14
W230415		147	7.5	16.4	63	104.5		0.05
W230416		105	6.3	14.9	67	83.9		0.07
W230417		113	6.0	17.9	128	99.5		0.08
W230418		103	6.2	16.3	85	100.5		0.19
W230419		129	6.8	18.7	88	112.0		0.06
W230420		149	6.8	20.3	70	114.5		0.07
W230421		139	5.2	20.7	75	105.5		<0.01
W230422		152	1.6	23.0	90	123.0		<0.01
W230423		137	1.3	21.9	96	111.5		<0.01
W230424		157	1.7	26.8	251	136.5		<0.01
W230425		149	1.5	24.9	93	124.5		<0.01
W230426		146	7.0	21.9	126	117.5		0.01
W230427		149	7.2	22.8	99	120.0		0.01
W230428		156	4.6	19.2	264	111.5		0.01
W230429		86	8.1	18.2	50	73.2		2.64
W230430		103	1.8	9.3	421	61.4		<0.01
W230431		112	1.1	11.7	70	64.8		<0.01
W230432		2	0.1	0.7	16	<0.5		<0.01
W230433		135	1.7	18.6	74	104.5		<0.01
W230434		92	1.1	18.4	49	101.0		<0.01
W230435		126	1.4	21.3	57	102.0		<0.01
W230436		2	0.1	0.7	18	<0.5		<0.01
W230437		136	1.2	20.2	148	109.0		<0.01
W230438		146	1.3	24.6	205	120.5		<0.01
W230439		33	20.6	15.6	25	34.7	1.320	2.72
W230440		124	1.1	18.3	53	93.4		<0.01
W230441		117	1.7	15.9	91	94.0		<0.01

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17187147

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17184193

Project: Nadaleen

P.O. No.: N17- 073

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 30- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

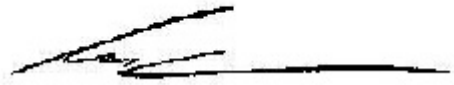
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17184193

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230442		7.76	0.06	5.79	68.4	200	1.73	0.23	1.23	0.02	63.2	16.9	69	37.5	46.8	4.45
W230443		7.79	0.05	4.79	1490	260	1.27	0.21	2.78	0.04	55.2	14.6	57	17.80	41.6	4.55
W230444		7.33	0.07	5.46	434	200	1.56	0.24	2.05	0.15	61.0	16.2	64	24.5	46.9	4.12
W230445		0.25	0.75	1.84	>10000	140	0.50	3.20	24.4	0.16	31.4	5.1	26	6.59	17.2	1.30
W230446		6.18	0.06	1.34	2410	170	0.25	0.09	3.12	0.10	18.65	4.6	29	3.37	14.3	2.66
W230447		7.26	0.05	4.95	582	230	1.24	0.20	3.05	0.08	54.4	13.3	56	22.4	38.4	3.87
W230448		4.97	0.05	6.95	65.0	240	1.91	0.30	2.19	0.03	76.3	17.9	68	47.2	48.9	4.90
W230449		7.54	<0.01	0.04	3.0	60	<0.05	0.08	19.40	0.05	1.10	0.6	1	0.12	1.3	0.44
W230450		6.74	0.07	6.93	54.5	230	2.10	0.31	2.06	0.04	75.1	20.1	71	43.8	52.2	4.91
W230451		8.17	0.07	6.91	143.5	220	2.05	0.30	2.03	0.02	75.6	20.6	70	42.4	52.7	4.74
W230452		7.78	0.07	7.16	123.0	220	2.19	0.30	2.45	0.02	77.6	18.7	72	37.6	54.6	4.78
W230453		7.04	0.06	7.04	500	220	2.00	0.32	3.06	0.02	71.6	16.4	69	31.8	53.1	4.73
W230454		7.32	0.15	6.13	408	210	1.97	0.29	3.22	0.04	70.0	14.9	60	23.2	37.7	4.01
W230455		6.90	0.09	6.57	182.5	230	2.20	0.29	3.00	0.12	70.1	14.0	62	24.7	38.4	4.34
W230456		8.28	0.09	6.71	243	240	2.32	0.29	2.39	0.12	71.9	14.5	65	23.4	39.1	4.46
W230457		7.20	0.09	7.10	539	250	2.23	0.30	2.42	0.08	76.0	15.6	67	24.8	43.4	4.57
W230458		5.06	0.01	0.05	1.2	20	0.05	0.02	20.6	0.06	1.04	0.6	1	0.12	3.5	0.46
W230459		8.04	0.08	6.50	2500	220	1.70	0.28	2.11	0.17	70.3	13.9	64	19.60	39.2	4.49
W230460		<0.02	0.07	6.58	2960	220	1.60	0.26	2.12	0.16	69.8	14.0	65	19.35	42.5	4.47
W230461		6.97	0.15	6.75	422	220	1.96	0.26	3.45	0.06	73.5	23.2	63	24.4	47.7	4.71
W230462		8.13	0.11	6.31	323	210	1.87	0.26	3.13	0.04	68.3	16.3	66	19.50	36.3	4.38
W230463		8.35	0.07	5.77	243	200	1.64	0.24	3.14	0.04	61.5	12.0	63	19.35	32.9	4.03
W230464		3.43	0.07	5.87	266	200	1.77	0.24	3.26	0.03	64.0	12.0	59	20.2	30.9	4.10
W230465		8.11	0.07	7.09	314	240	2.36	0.29	2.64	0.36	75.6	14.2	67	25.2	38.0	4.49
W230466		7.55	0.09	6.20	293	210	2.05	0.26	2.87	0.55	71.5	21.5	60	22.0	35.9	4.30
W230467		7.76	0.06	6.28	280	230	1.99	0.27	2.87	0.14	71.5	10.5	62	20.6	35.2	3.79
W230468		7.35	0.07	3.41	167.5	120	0.96	0.15	2.81	0.05	40.3	7.8	44	10.10	18.8	3.01
W230469		7.88	0.08	4.82	230	180	1.44	0.21	2.58	0.10	54.6	10.5	48	16.80	27.4	5.19
W230470		0.23	0.17	3.96	6540	210	0.87	0.14	12.60	0.12	42.8	11.7	47	10.55	36.4	2.97
W230471		7.39	0.24	6.06	4710	240	1.38	0.28	2.16	0.18	69.7	12.4	60	16.50	40.9	4.16
W230472		5.75	0.06	6.24	571	270	1.62	0.26	2.67	0.17	71.9	9.9	59	18.95	33.8	3.93
W230473		7.66	0.04	7.77	207	130	1.38	0.04	4.13	0.19	89.1	32.9	33	26.9	48.7	7.59
W230474		3.94	0.06	6.92	877	220	1.41	0.13	4.76	0.11	74.1	24.4	39	20.6	36.7	6.14
W230475		5.67	0.09	7.04	425	280	1.98	0.30	2.51	0.19	80.2	14.3	69	21.6	40.4	4.24
W230476		7.44	0.05	5.66	483	280	1.43	0.25	2.40	0.18	67.0	12.6	54	16.70	34.6	4.00
W230477		3.53	0.04	3.87	306	420	0.85	0.19	4.23	0.12	46.3	9.5	50	12.90	26.6	3.88

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184193

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230442		15.90	0.09	2.8	0.584	0.059	2.54	31.0	68.6	1.47	326	0.37	0.02	8.9	32.4	360
W230443		13.30	0.11	2.4	1.280	0.052	2.18	27.3	20.5	1.66	587	0.33	0.02	7.8	28.6	350
W230444		15.25	0.09	2.9	0.809	0.055	2.53	29.9	18.3	1.24	502	0.73	0.02	9.0	32.9	380
W230445		5.44	0.07	0.9	6.61	0.021	0.90	15.9	9.8	0.87	2220	1.97	0.01	2.8	13.7	330
W230446		3.52	<0.05	0.9	2.62	0.017	0.55	9.2	8.7	1.26	1410	0.60	0.01	2.1	9.6	140
W230447		13.45	0.08	3.2	0.848	0.047	2.25	26.2	27.0	1.73	868	0.34	0.02	8.3	25.2	400
W230448		18.90	0.12	3.3	0.143	0.068	3.12	37.2	74.4	2.24	651	0.23	0.03	11.6	33.4	540
W230449		0.16	<0.05	<0.1	0.008	<0.005	0.02	0.5	1.2	12.30	196	<0.05	<0.01	0.1	1.5	170
W230450		18.30	0.12	3.3	0.176	0.077	3.17	36.7	58.4	2.18	554	0.19	0.03	11.7	33.8	520
W230451		18.70	0.12	3.4	0.123	0.076	3.24	37.2	30.2	2.08	546	0.18	0.03	11.7	37.4	590
W230452		18.85	0.09	3.4	0.179	0.076	3.33	37.2	20.5	2.06	631	0.24	0.03	11.6	32.1	950
W230453		18.55	0.12	3.3	0.552	0.070	3.34	34.8	14.8	1.70	730	0.28	0.03	11.7	33.7	580
W230454		16.40	0.12	3.2	0.912	0.061	2.95	34.0	14.2	1.65	779	1.53	0.03	10.0	27.0	510
W230455		17.70	0.15	3.4	1.245	0.071	3.20	34.6	15.2	1.61	579	0.84	0.03	10.4	30.6	540
W230456		18.25	0.17	3.4	2.09	0.068	3.25	35.1	13.8	1.33	550	0.76	0.03	10.9	31.7	540
W230457		19.40	0.14	3.6	2.24	0.063	3.46	37.6	14.5	1.36	542	0.77	0.03	11.4	34.0	600
W230458		0.17	0.09	<0.1	0.008	<0.005	0.02	0.5	0.9	12.80	200	0.20	<0.01	0.1	1.5	190
W230459		17.45	0.13	3.6	3.56	0.056	3.14	35.0	11.4	1.22	935	0.88	0.03	10.1	29.4	540
W230460		17.50	0.13	3.2	3.46	0.053	3.19	34.4	11.7	1.22	941	0.88	0.03	10.2	29.2	540
W230461		18.10	0.14	3.2	1.200	0.067	3.23	36.1	15.3	1.79	737	0.91	0.03	10.7	36.2	550
W230462		16.75	0.13	3.2	0.683	0.061	3.06	33.7	13.2	1.59	676	1.09	0.03	9.8	33.7	550
W230463		15.05	0.12	2.8	0.854	0.059	2.74	28.9	13.3	1.50	576	0.86	0.03	9.0	26.4	480
W230464		15.50	0.14	2.8	0.844	0.054	2.82	31.6	13.7	1.54	588	0.88	0.03	9.1	26.4	490
W230465		18.85	0.14	3.5	0.699	0.071	3.38	37.1	14.9	1.43	469	1.24	0.04	11.5	30.5	570
W230466		16.50	0.15	3.1	0.549	0.067	2.96	34.7	19.1	1.49	533	0.62	0.03	10.5	33.8	560
W230467		16.50	0.13	3.3	0.497	0.058	2.99	36.1	21.0	1.46	474	0.64	0.03	10.5	24.1	580
W230468		8.62	0.11	1.8	0.335	0.035	1.57	18.5	18.6	1.06	596	0.31	0.02	5.4	16.4	330
W230469		12.55	0.13	2.6	0.984	0.052	2.27	25.4	19.7	1.11	521	0.55	0.03	7.6	24.2	450
W230470		10.70	0.10	2.2	15.65	0.037	1.87	20.6	11.2	2.69	1210	2.02	0.02	5.9	26.3	480
W230471		15.70	0.14	3.0	2.39	0.056	2.89	33.9	10.9	1.15	641	0.52	0.03	9.8	25.7	570
W230472		16.10	0.14	3.3	1.165	0.062	2.90	35.3	12.8	1.25	643	0.65	0.03	12.3	22.0	630
W230473		20.6	0.17	3.6	0.849	0.092	2.37	44.1	92.0	1.26	1260	1.82	0.03	60.2	27.9	2070
W230474		16.70	0.12	4.0	1.190	0.067	3.03	37.6	40.8	1.72	1100	1.16	0.03	37.4	28.2	1380
W230475		18.50	0.14	3.7	1.240	0.073	3.30	39.4	13.9	1.25	467	0.59	0.03	12.0	30.1	800
W230476		15.15	0.13	2.9	1.435	0.062	2.59	33.0	12.8	1.09	508	0.59	0.03	10.4	25.9	550
W230477		9.92	0.11	2.1	0.523	0.035	1.68	20.7	11.1	1.43	833	0.54	0.02	7.7	18.0	440

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184193

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230442		17.0	144.0	<0.002	1.63	0.56	16.8	1	2.0	86.9	0.65	0.06	9.17	0.418	2.25	2.0
W230443		14.2	119.0	<0.002	4.32	2.99	13.9	1	1.6	149.5	0.54	<0.05	8.07	0.381	5.25	1.7
W230444		13.9	135.0	<0.002	3.83	2.16	16.0	1	1.8	108.5	0.64	0.05	9.00	0.452	3.02	1.9
W230445		8.0	45.1	<0.002	1.40	48.6	6.2	2	0.7	997	0.20	<0.05	3.80	0.087	25.5	7.1
W230446		7.2	29.4	<0.002	1.32	11.30	4.4	<1	0.6	114.0	0.16	<0.05	2.92	0.123	11.15	0.7
W230447		12.2	122.0	<0.002	2.28	3.56	13.4	1	1.7	135.5	0.58	<0.05	8.25	0.397	4.80	1.8
W230448		12.5	183.5	<0.002	0.22	0.39	17.8	1	2.4	103.0	0.82	0.10	11.20	0.476	1.24	2.3
W230449		1.2	0.8	<0.002	<0.01	<0.05	0.1	1	<0.2	45.7	<0.05	<0.05	0.07	<0.005	0.04	0.6
W230450		15.6	178.5	<0.002	0.48	0.46	17.8	1	2.2	93.7	0.83	0.07	11.35	0.501	1.38	2.4
W230451		15.8	183.5	<0.002	0.27	0.52	17.9	1	2.4	82.4	0.84	0.05	11.65	0.491	1.25	2.4
W230452		15.7	179.5	<0.002	0.99	0.48	17.9	1	2.4	89.8	0.85	0.07	11.50	0.496	1.78	2.5
W230453		14.5	170.0	<0.002	4.08	2.01	17.6	1	2.3	85.6	0.84	0.05	10.95	0.508	3.69	2.5
W230454		15.4	146.5	<0.002	2.88	1.53	13.7	1	2.1	91.6	0.75	0.05	11.10	0.403	3.57	2.3
W230455		29.0	154.0	<0.002	3.45	1.01	14.6	1	2.2	77.7	0.79	<0.05	11.60	0.415	3.52	2.4
W230456		36.8	159.5	<0.002	3.51	1.84	15.1	2	2.5	76.9	0.77	<0.05	11.90	0.427	4.96	2.4
W230457		37.5	167.5	<0.002	3.74	2.57	16.3	1	3.0	83.4	0.83	<0.05	12.40	0.448	5.66	2.5
W230458		1.5	0.8	<0.002	0.01	0.07	0.1	1	<0.2	47.5	<0.05	<0.05	0.06	<0.005	0.02	0.6
W230459		36.1	151.5	0.002	4.00	18.75	14.6	1	2.6	72.7	0.74	<0.05	11.60	0.409	11.35	2.3
W230460		35.3	154.0	<0.002	4.05	19.65	14.8	2	3.0	72.8	0.71	<0.05	11.30	0.413	11.30	2.3
W230461		35.8	157.0	<0.002	3.67	2.53	14.8	1	3.7	121.0	0.77	<0.05	11.55	0.432	4.06	2.3
W230462		34.3	144.5	<0.002	3.26	2.51	13.5	1	2.5	113.5	0.73	0.06	10.80	0.407	2.37	2.2
W230463		37.8	132.0	<0.002	2.75	1.75	12.1	1	2.1	117.0	0.63	<0.05	9.89	0.369	2.72	2.0
W230464		37.4	133.0	0.002	2.84	1.78	12.6	2	1.9	121.5	0.65	<0.05	10.10	0.375	2.83	2.0
W230465		29.1	164.0	<0.002	3.56	1.66	14.7	1	2.4	84.2	0.86	0.07	12.45	0.452	2.87	2.5
W230466		48.7	142.5	<0.002	3.38	1.58	12.9	1	2.1	76.0	0.72	<0.05	11.65	0.421	2.02	2.3
W230467		17.0	140.5	<0.002	2.64	0.87	13.3	1	2.1	85.9	0.79	<0.05	11.55	0.421	2.10	2.3
W230468		11.4	71.4	<0.002	1.72	0.56	6.8	1	1.1	73.9	0.39	<0.05	6.28	0.225	1.48	1.3
W230469		21.6	104.0	<0.002	4.33	1.64	9.9	1	1.6	75.4	0.54	<0.05	9.08	0.309	3.60	1.7
W230470		11.7	86.1	<0.002	2.67	24.6	9.7	2	1.7	328	0.42	<0.05	6.51	0.273	45.5	6.6
W230471		22.0	130.0	<0.002	3.67	22.0	12.2	1	2.7	75.1	0.72	0.05	11.15	0.407	9.43	2.2
W230472		13.2	132.5	<0.002	2.88	2.39	12.6	1	2.0	105.0	0.86	<0.05	11.40	0.453	5.22	2.2
W230473		6.0	98.9	<0.002	5.63	0.53	18.7	1	1.7	142.0	3.02	<0.05	6.69	1.100	7.29	1.5
W230474		23.3	134.5	<0.002	4.44	3.49	14.9	2	1.8	155.5	2.00	<0.05	8.64	0.756	5.76	1.9
W230475		27.4	154.5	<0.002	3.29	2.11	14.7	1	2.4	104.5	0.84	<0.05	13.20	0.483	4.19	2.6
W230476		17.9	120.0	<0.002	3.20	2.46	11.9	1	2.0	103.0	0.74	<0.05	10.35	0.404	5.96	2.0
W230477		9.5	67.1	<0.002	2.02	0.55	7.9	1	1.1	164.5	0.54	0.05	6.75	0.306	1.92	1.3

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184193

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230442		123	1.1	18.2	51	99.1		<0.01
W230443		106	3.6	15.6	50	85.1		0.15
W230444		125	4.8	18.2	112	98.6		0.08
W230445		33	23.3	15.8	21	32.6	1.445	2.74
W230446		35	1.0	6.2	29	29.9		1.22
W230447		104	2.0	16.2	57	90.0		0.50
W230448		122	1.4	24.2	69	115.5		<0.01
W230449		2	0.1	0.7	14	<0.5		<0.01
W230450		129	1.5	22.9	68	116.0		<0.01
W230451		126	1.6	23.7	63	117.0		<0.01
W230452		130	1.5	26.0	72	119.5		<0.01
W230453		130	5.2	22.2	68	113.5		0.07
W230454		101	5.5	20.3	53	101.0		0.03
W230455		106	3.5	20.9	82	102.0		<0.01
W230456		112	4.1	21.0	72	105.5		0.01
W230457		117	5.1	22.0	70	113.0		0.02
W230458		2	0.1	0.8	14	<0.5		<0.01
W230459		107	7.9	20.6	73	99.4		2.06
W230460		109	7.6	20.7	73	129.5		1.96
W230461		111	4.8	21.4	71	104.0		0.03
W230462		105	4.4	19.9	66	96.5		0.02
W230463		96	2.9	18.2	54	96.0		0.04
W230464		98	3.0	18.3	48	111.5		0.01
W230465		115	5.2	23.3	179	109.5		0.03
W230466		101	3.9	21.2	247	98.8		0.02
W230467		103	4.9	20.7	131	132.0		<0.01
W230468		56	2.0	11.7	42	53.9		<0.01
W230469		78	4.4	16.3	72	76.4		0.02
W230470		86	8.3	18.4	52	68.1		2.62
W230471		99	9.2	19.4	105	95.7		1.56
W230472		108	6.1	20.5	103	103.5		0.09
W230473		230	4.2	28.5	108	137.5		<0.01
W230474		160	9.8	27.2	74	149.5		0.06
W230475		116	7.2	25.2	107	115.5		0.01
W230476		100	7.4	19.1	110	91.9		0.07
W230477		76	2.8	15.6	69	62.8		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17184193

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

CERTIFICATE WH17184186

Project: Nadaleen

P.O. No.: N17- 074

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 30- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

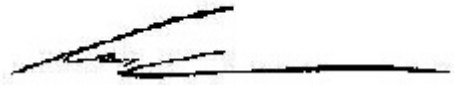
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184186

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232153		9.60	0.05	8.80	15.5	340	2.41	0.37	0.53	0.06	102.5	17.8	68	15.55	36.1	4.31
W232154		8.71	0.05	9.37	14.7	400	2.53	0.40	0.45	0.02	106.0	18.4	72	17.00	39.1	4.49
W232155		9.83	0.04	9.72	14.5	320	2.71	0.39	0.45	<0.02	106.0	18.1	72	19.50	38.6	4.65
W232156		8.47	0.05	8.78	16.0	290	2.51	0.36	0.46	<0.02	94.8	17.6	70	18.25	34.0	4.38
W232157		9.05	0.05	8.31	10.3	290	2.41	0.36	1.60	0.03	84.9	14.8	65	15.35	33.5	4.13
W232158		10.27	0.05	8.03	13.3	300	2.30	0.33	2.26	0.02	83.1	16.4	65	16.65	31.8	4.27
W232159		0.23	0.18	3.77	6290	200	0.95	0.13	11.75	0.13	40.8	11.5	45	10.50	34.1	2.80
W232160		7.91	0.04	8.10	23.4	290	2.24	0.32	3.72	<0.02	88.6	16.2	63	18.05	32.2	4.24
W232161		6.61	0.06	8.47	13.6	310	2.40	0.35	1.74	0.02	87.5	16.2	72	19.15	32.9	4.48
W232162		6.67	0.05	8.55	18.5	310	2.35	0.31	1.43	0.03	97.5	16.9	68	18.55	31.0	4.51
W232163		<0.02	0.06	8.60	17.0	320	2.48	0.31	1.44	0.03	96.5	16.9	69	18.80	31.0	4.53
W232164		9.58	0.06	8.62	15.0	330	2.42	0.34	2.29	0.02	93.5	15.8	71	18.25	32.4	4.11
W232165		6.89	<0.01	0.05	0.3	40	0.07	0.01	20.3	0.06	1.17	0.6	1	0.14	1.4	0.47
W232166		4.43	0.03	5.11	8.4	190	1.37	0.19	17.50	0.02	58.2	8.7	38	12.45	17.0	2.71
W232167		9.67	0.05	7.13	11.1	270	1.85	0.27	8.67	0.02	81.7	13.4	54	21.2	26.2	3.40
W232168		11.54	0.04	6.02	12.9	470	1.59	0.23	9.90	<0.02	72.2	10.6	56	15.00	21.7	2.97
W232169		11.50	0.05	7.08	18.1	310	2.04	0.27	4.18	0.05	83.7	13.1	62	19.80	26.5	3.30
W232170		10.81	0.03	2.85	10.1	180	0.83	0.11	17.70	0.04	37.9	5.9	26	6.84	10.3	2.11
W232171		7.45	0.06	9.21	20.9	330	2.67	0.35	1.36	0.03	98.9	18.6	67	30.4	34.4	3.11
W232172		7.23	0.03	1.99	7.9	120	0.69	0.06	24.5	0.02	30.1	3.2	20	4.83	6.7	1.51
W232173		6.78	<0.01	0.05	0.2	20	0.08	0.01	19.85	0.05	1.14	0.6	1	0.13	1.0	0.44
W232174		11.98	0.05	5.02	14.2	360	1.45	0.17	13.20	0.03	60.5	8.5	46	13.45	17.1	2.70
W232175		6.36	0.04	9.32	18.6	310	2.59	0.36	0.78	0.02	101.5	16.0	74	29.0	34.0	3.98
W232176		11.14	0.05	8.03	18.5	290	2.19	0.29	1.21	0.03	88.8	15.3	72	26.2	29.0	4.13
W232177		11.05	0.07	7.87	21.0	310	1.53	0.32	1.07	0.02	90.6	14.6	67	24.2	32.7	3.97
W232178		11.13	0.06	7.65	21.6	440	1.58	0.30	1.39	0.05	92.0	16.1	70	22.0	28.0	3.90
W232179		10.44	0.04	8.46	17.3	340	1.84	0.34	1.10	0.03	93.6	15.5	68	22.8	32.7	3.82
W232180		9.18	0.06	8.74	22.1	310	2.02	0.38	0.62	0.02	87.8	21.1	71	25.4	34.6	4.40
W232181		11.82	0.05	8.75	23.6	430	2.28	0.36	1.28	0.09	86.0	19.0	75	28.4	42.0	4.12
W232182		11.56	0.03	6.12	19.2	850	1.50	0.24	6.51	0.11	72.4	10.1	50	22.1	54.2	2.66
W232183		5.51	0.04	6.49	22.6	520	1.61	0.22	6.34	0.08	71.7	10.4	51	22.3	58.3	2.76
W232184		13.48	0.13	2.84	55.8	210	0.71	0.08	11.20	0.04	40.9	4.5	37	9.15	11.2	1.53
W232185		9.51	0.05	2.73	16.3	120	0.83	0.09	18.60	0.05	34.1	4.2	28	9.07	13.2	1.05
W232186		9.75	0.06	1.57	8.2	270	0.53	0.06	26.7	0.05	19.60	3.1	15	4.91	7.0	0.58
W232187		9.93	0.03	0.93	9.1	1660	0.32	0.04	29.8	0.06	15.40	2.2	10	2.83	7.4	0.56
W232188		0.23	0.18	3.81	6030	210	0.82	0.15	12.15	0.15	41.9	11.6	44	11.10	33.7	2.86

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CERTIFICATE OF ANALYSIS WH17184186

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232153		20.6	0.10	2.7	0.032	0.071	2.73	49.7	147.0	1.23	1180	0.45	0.21	10.1	38.1	880
W232154		22.8	0.09	2.7	0.042	0.072	2.94	51.3	156.0	1.28	678	0.48	0.22	11.0	39.6	640
W232155		23.4	0.09	2.7	0.044	0.075	3.17	53.1	169.0	1.20	784	0.30	0.25	10.9	37.1	560
W232156		21.8	0.08	2.6	0.020	0.072	2.78	46.1	145.0	1.05	755	0.46	0.22	10.0	34.4	410
W232157		20.9	0.08	2.6	0.014	0.068	2.67	40.0	130.5	1.27	929	0.36	0.23	10.0	32.3	480
W232158		19.90	0.08	2.7	0.022	0.067	2.58	38.7	115.0	1.43	1150	0.43	0.27	9.9	32.9	410
W232159		9.52	0.05	1.8	16.15	0.038	1.75	20.2	11.8	2.49	1140	1.68	0.02	5.5	25.2	420
W232160		19.75	0.09	2.9	0.021	0.070	2.51	43.7	105.0	1.32	810	0.28	0.27	10.3	32.8	400
W232161		21.0	0.08	2.9	0.037	0.071	2.63	40.8	122.0	1.06	678	0.50	0.26	10.7	35.0	420
W232162		20.5	0.08	2.9	0.065	0.066	2.71	47.6	134.0	1.22	628	0.54	0.20	10.4	33.0	570
W232163		20.7	0.08	2.9	0.048	0.068	2.74	47.0	135.5	1.22	633	0.57	0.20	10.6	32.8	560
W232164		20.5	0.08	2.8	0.063	0.066	2.77	45.6	152.5	1.19	574	0.57	0.20	10.3	33.5	510
W232165		0.19	0.10	<0.1	<0.005	0.007	0.02	0.5	1.2	12.75	201	0.09	<0.01	0.1	1.2	160
W232166		11.90	0.07	1.7	0.069	0.040	1.71	28.9	74.0	0.81	487	0.30	0.13	6.2	17.9	370
W232167		17.15	0.09	2.4	0.054	0.056	2.47	40.5	96.2	0.95	453	0.45	0.14	8.9	25.3	460
W232168		14.40	0.07	2.2	0.094	0.048	2.09	35.8	85.5	0.91	440	0.72	0.09	7.6	22.2	500
W232169		17.25	0.08	2.7	0.202	0.061	2.66	41.2	94.1	1.18	457	0.49	0.09	9.0	25.7	660
W232170		6.99	0.05	1.2	0.161	0.029	1.12	18.0	37.8	3.68	624	0.37	0.04	3.9	12.1	1050
W232171		22.8	0.10	2.8	0.145	0.072	3.71	47.8	119.5	1.02	225	0.43	0.11	11.2	35.6	450
W232172		4.78	0.07	0.9	0.112	0.021	0.80	14.3	25.8	0.66	299	0.36	0.03	2.8	7.4	950
W232173		0.19	0.11	<0.1	<0.005	0.006	0.02	0.5	1.2	12.75	190	<0.05	<0.01	0.2	1.1	160
W232174		11.80	0.08	1.9	0.120	0.042	1.95	29.7	61.6	1.28	457	0.68	0.06	6.3	18.6	950
W232175		22.0	0.09	3.1	0.015	0.074	3.41	50.7	188.0	1.10	290	0.43	0.08	11.1	34.7	460
W232176		19.00	0.08	2.7	0.028	0.059	2.96	44.1	129.0	1.09	481	0.77	0.08	9.7	31.7	770
W232177		19.55	0.17	2.7	0.039	0.059	2.92	46.5	108.5	1.14	455	1.68	0.08	10.7	36.7	610
W232178		19.65	0.17	2.8	0.045	0.065	2.84	47.3	116.0	1.16	577	1.06	0.08	10.7	32.7	700
W232179		21.3	0.17	2.6	0.052	0.066	3.19	49.2	114.5	1.19	449	0.73	0.09	10.8	33.3	440
W232180		23.0	0.17	2.8	0.041	0.069	3.38	44.6	120.0	1.23	315	0.52	0.08	11.6	40.5	440
W232181		24.6	0.20	2.8	0.052	0.070	3.40	42.7	118.5	1.51	589	0.44	0.08	14.0	46.8	600
W232182		16.35	0.17	2.8	0.058	0.053	2.37	38.3	88.8	3.60	1990	0.38	0.04	10.5	34.4	490
W232183		16.50	0.17	2.7	0.051	0.047	2.46	38.8	89.7	3.57	1800	0.28	0.05	10.6	35.9	500
W232184		7.17	0.14	2.7	0.151	0.022	1.24	20.9	15.5	4.98	635	1.28	0.03	5.3	10.7	560
W232185		7.00	0.14	2.1	0.070	0.018	1.31	17.8	11.3	4.11	222	0.50	0.02	4.6	9.8	360
W232186		4.05	0.13	1.0	0.074	0.011	0.76	10.9	5.9	1.95	123	0.42	0.01	2.6	7.7	180
W232187		2.44	0.13	0.7	0.062	0.008	0.46	7.9	3.5	1.43	115	0.21	<0.01	1.5	4.9	150
W232188		10.00	0.11	1.9	16.20	0.036	1.81	21.8	13.0	2.58	1140	1.84	0.02	5.9	25.8	450

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232153		21.3	122.5	<0.002	0.26	0.89	14.2	1	2.6	176.5	0.76	0.09	15.40	0.380	0.73	2.8
W232154		34.0	134.5	<0.002	0.37	0.88	15.5	1	2.7	229	0.81	0.06	16.70	0.396	0.77	3.0
W232155		25.1	147.0	<0.002	0.42	0.60	15.4	1	2.7	144.5	0.82	0.08	17.00	0.382	0.84	3.0
W232156		24.7	131.5	<0.002	0.22	0.62	14.3	1	2.4	122.0	0.75	0.06	15.20	0.356	0.72	2.6
W232157		20.6	109.5	<0.002	0.18	0.47	14.0	1	2.3	127.0	0.77	0.07	14.00	0.356	0.67	2.5
W232158		20.4	101.0	<0.002	0.65	0.52	13.7	1	2.4	123.5	0.73	0.06	13.70	0.358	0.64	2.8
W232159		10.1	77.4	<0.002	2.55	21.8	9.7	1	1.5	308	0.39	0.05	5.66	0.259	42.9	6.2
W232160		16.9	122.0	<0.002	0.37	0.55	13.9	1	2.3	147.5	0.75	0.05	14.25	0.388	0.67	2.6
W232161		23.2	113.0	<0.002	0.30	0.50	14.6	1	2.5	120.5	0.81	0.06	14.70	0.392	0.68	2.7
W232162		21.9	125.0	<0.002	0.82	0.55	14.2	1	2.5	127.0	0.78	0.06	15.90	0.374	0.72	2.8
W232163		21.7	122.5	<0.002	0.82	0.55	14.4	1	2.5	127.5	0.80	0.06	15.45	0.374	0.74	2.8
W232164		21.8	121.0	<0.002	0.95	0.44	14.0	1	2.4	134.5	0.79	<0.05	15.20	0.367	0.75	2.7
W232165		1.0	1.0	<0.002	<0.01	0.07	0.1	<1	<0.2	49.9	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W232166		11.6	78.4	<0.002	0.67	0.24	8.1	1	1.4	403	0.47	<0.05	9.42	0.230	0.50	2.3
W232167		18.0	113.0	<0.002	0.74	0.36	11.4	1	2.2	237	0.66	<0.05	12.70	0.327	0.63	2.7
W232168		15.5	91.9	<0.002	0.94	0.33	9.7	1	1.7	348	0.56	<0.05	11.15	0.275	0.59	2.4
W232169		17.8	122.5	<0.002	1.56	0.40	12.0	1	2.2	176.5	0.67	<0.05	12.85	0.319	0.89	2.6
W232170		9.1	50.4	<0.002	1.04	0.22	5.3	1	0.8	430	0.28	<0.05	5.04	0.139	0.57	2.1
W232171		19.2	163.0	<0.002	1.53	0.50	14.5	1	2.5	129.5	0.80	0.07	15.70	0.377	1.12	3.1
W232172		5.3	36.1	<0.002	0.95	0.18	3.7	1	0.6	1095	0.20	<0.05	3.50	0.099	0.59	1.6
W232173		1.0	1.0	<0.002	<0.01	0.07	0.1	<1	<0.2	47.5	<0.05	<0.05	0.08	<0.005	<0.02	0.8
W232174		14.2	84.6	<0.002	1.38	0.41	8.3	1	1.4	540	0.46	<0.05	8.49	0.227	0.80	2.5
W232175		16.0	156.0	<0.002	0.47	0.45	14.9	<1	2.5	112.5	0.82	0.06	16.65	0.398	0.87	2.7
W232176		21.3	136.0	<0.002	0.87	0.61	13.0	1	2.2	101.0	0.72	<0.05	14.35	0.355	0.85	2.6
W232177		24.9	139.5	0.002	0.75	0.80	12.4	<1	2.2	101.5	0.79	0.08	14.00	0.357	0.84	2.8
W232178		22.3	135.5	0.002	0.82	0.87	12.6	<1	2.1	164.0	0.77	0.06	14.05	0.347	0.86	2.8
W232179		20.5	146.0	<0.002	0.39	0.69	13.4	<1	2.4	107.0	0.79	0.06	14.40	0.366	0.79	2.8
W232180		26.1	138.0	<0.002	0.31	0.61	14.0	<1	2.5	110.0	0.83	0.06	13.95	0.364	0.77	2.9
W232181		28.4	122.5	<0.002	0.24	0.75	15.1	1	2.7	152.5	0.96	0.07	13.35	0.381	0.80	3.4
W232182		9.3	107.0	<0.002	0.24	0.31	10.2	1	2.3	225	0.76	<0.05	12.40	0.279	0.55	3.9
W232183		10.0	107.0	<0.002	0.31	0.33	10.1	<1	2.3	237	0.76	<0.05	12.65	0.292	0.57	3.8
W232184		8.7	46.7	0.002	0.18	0.47	4.3	1	1.3	173.5	0.38	<0.05	7.00	0.148	0.43	6.7
W232185		5.6	48.7	<0.002	0.16	0.28	4.1	1	1.0	305	0.35	<0.05	5.99	0.133	0.25	7.6
W232186		5.6	27.8	<0.002	0.24	0.21	2.4	<1	0.5	491	0.19	<0.05	3.17	0.072	0.19	15.3
W232187		5.3	16.1	<0.002	0.34	0.19	1.4	<1	0.3	624	0.12	<0.05	1.92	0.043	0.12	10.7
W232188		10.9	81.6	0.002	2.56	22.8	9.4	1	1.6	321	0.43	0.05	6.05	0.265	41.7	6.9

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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184186

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W232153		91	1.5	22.2	105	95.8	0.02
W232154		95	1.5	22.0	87	97.0	<0.01
W232155		92	1.4	21.3	107	96.9	0.01
W232156		85	1.3	19.1	78	90.6	<0.01
W232157		82	1.5	18.6	80	90.6	<0.01
W232158		82	1.3	18.8	78	94.2	<0.01
W232159		83	7.0	17.4	47	65.4	2.65
W232160		86	1.3	19.7	77	103.5	<0.01
W232161		88	1.4	19.3	90	103.0	<0.01
W232162		86	1.4	20.9	104	102.5	<0.01
W232163		87	1.4	20.7	92	99.5	<0.01
W232164		84	1.4	19.0	86	95.1	<0.01
W232165		2	0.1	0.7	16	<0.5	<0.01
W232166		48	0.8	13.2	52	62.1	<0.01
W232167		69	1.1	17.1	65	86.1	<0.01
W232168		58	1.0	15.7	57	77.6	<0.01
W232169		72	1.2	18.2	97	88.7	<0.01
W232170		34	0.5	11.6	38	43.8	<0.01
W232171		85	1.5	17.7	68	98.7	<0.01
W232172		21	0.4	8.7	18	34.3	<0.01
W232173		1	0.1	0.7	15	<0.5	<0.01
W232174		52	0.9	14.7	51	67.3	<0.01
W232175		90	1.4	19.1	84	106.5	<0.01
W232176		78	1.3	20.0	103	95.4	<0.01
W232177		77	1.3	19.0	97	103.0	<0.01
W232178		74	1.3	19.6	151	105.0	<0.01
W232179		82	1.4	18.6	81	102.5	<0.01
W232180		85	1.5	18.9	86	101.5	<0.01
W232181		80	1.5	19.9	111	106.5	<0.01
W232182		61	1.1	18.8	66	103.0	<0.01
W232183		62	1.1	18.7	71	107.5	<0.01
W232184		62	0.8	13.2	13	105.0	<0.01
W232185		42	0.5	10.3	14	85.3	<0.01
W232186		22	0.3	5.9	18	41.2	<0.01
W232187		15	0.2	4.7	10	25.6	<0.01
W232188		84	7.5	18.1	48	72.1	2.56

***** See Appendix Page for comments regarding this certificate *****

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CERTIFICATE OF ANALYSIS WH17184186

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE WH17187142

Project: Nadaleen

P.O. No.: N17- 075

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 1- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

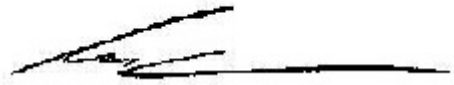
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17187142

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232189		10.74	0.06	1.20	12.3	180	0.57	0.06	28.9	0.11	15.70	2.7	14	3.95	6.4	0.58
W232190		10.07	0.07	3.10	51.7	240	1.24	0.10	18.45	0.07	41.5	5.2	33	11.00	17.0	1.07
W232191		9.40	0.04	2.14	189.5	190	0.83	0.07	10.50	0.03	35.7	2.4	28	7.76	10.0	1.59
W232192		10.59	0.07	2.02	21.8	180	0.70	0.07	24.3	0.02	29.2	3.3	19	9.34	8.1	0.98
W232193		12.06	0.06	2.36	199.5	120	0.88	0.07	25.6	0.02	31.5	3.8	22	12.10	13.0	1.03
W232194		<0.02	0.08	3.28	486	190	1.35	0.10	22.3	0.02	35.4	5.7	29	16.90	16.8	1.32
W232195		12.44	0.06	3.62	230	180	1.46	0.10	18.35	0.04	42.0	7.5	31	17.30	15.5	1.48
W232196		12.27	0.06	1.63	229	130	0.75	0.05	28.3	0.10	24.1	2.7	16	6.30	8.3	0.82
W232197		12.80	0.05	0.54	294	460	0.32	0.03	31.1	0.21	11.90	1.2	7	1.71	2.7	0.57
W232198		12.45	0.03	0.52	278	60	0.30	0.03	33.9	0.44	9.89	1.0	8	1.35	3.2	0.29
W232199		7.01	0.03	0.34	1635	50	0.18	0.02	33.8	0.54	7.50	0.9	5	0.99	2.0	0.29
W232200		7.35	0.74	1.82	>10000	90	0.59	0.06	20.5	0.96	18.15	3.1	26	6.30	13.1	0.76
W232201		0.25	0.27	4.00	>10000	180	0.76	0.19	10.05	0.66	47.8	12.1	47	9.26	56.7	3.02
W232202		6.98	<0.01	0.05	39.6	100	0.05	0.03	21.0	0.06	1.37	0.7	1	0.21	2.4	0.48
W232203		8.98	0.06	0.90	1520	50	0.37	0.03	31.4	0.24	14.65	1.9	11	3.08	5.2	0.34
W232204		11.35	0.04	0.57	456	60	0.36	0.03	31.9	0.27	9.11	1.4	8	1.62	3.2	0.28
W232205		11.40	0.04	1.05	102.0	120	0.53	0.03	30.0	0.21	15.85	2.0	12	3.44	6.2	0.49
W232206		4.84	0.05	1.15	107.5	100	0.56	0.04	30.0	0.20	16.00	2.2	14	3.89	5.7	0.55
W232207		10.18	0.05	1.22	88.5	90	0.65	0.04	29.5	0.20	15.90	2.6	15	3.91	5.9	0.57
W232208		11.68	0.05	2.09	73.4	170	1.00	0.07	24.0	0.15	27.3	3.9	22	7.46	13.0	0.98
W232209		10.66	0.05	1.05	39.5	200	0.51	0.04	31.3	0.18	15.85	1.9	13	3.53	7.3	0.40
W232210		11.08	0.15	2.58	209	180	1.04	0.07	23.7	0.07	33.5	4.6	33	7.74	13.8	1.06
W232211		11.61	0.07	3.51	471	220	1.39	0.09	12.75	0.07	42.4	5.4	37	10.45	19.1	1.51
W232212		5.63	0.03	1.68	263	140	0.78	0.06	27.8	0.05	24.9	3.1	18	4.36	10.0	0.78
W232213		6.31	0.03	1.79	266	100	0.81	0.06	27.8	0.05	22.4	3.4	18	4.63	11.0	0.85
W232214		4.39	0.75	3.88	>10000	90	0.99	0.12	6.38	0.90	42.5	6.7	45	7.58	26.8	1.79
W232215		6.29	<0.01	0.05	25.4	20	0.07	0.02	20.7	0.06	1.00	0.8	1	0.13	2.5	0.45
W232216		6.45	0.16	1.73	666	40	0.66	0.05	28.4	0.08	20.7	3.4	19	3.79	9.0	0.71
W232217		12.11	0.14	2.44	552	250	0.97	0.06	22.4	0.07	29.3	4.2	26	6.80	14.6	1.25
W232218		10.48	0.10	3.51	307	210	1.48	0.09	16.70	0.23	35.9	5.0	37	11.65	15.1	1.33
W232219		11.99	0.05	1.70	825	90	0.70	0.05	21.7	0.20	22.2	2.4	18	3.38	7.8	0.76
W232220		12.02	0.12	2.69	261	130	1.07	0.07	18.50	0.31	33.9	4.8	36	6.13	18.9	1.29
W232221		10.90	0.06	1.34	177.5	130	0.54	0.04	26.1	0.27	17.90	2.3	15	2.37	6.4	0.60
W232222		0.26	1.52	1.83	>10000	90	0.34	0.44	6.84	0.77	28.3	6.1	45	3.04	24.6	2.46
W232223		12.24	0.04	1.06	199.5	130	0.53	0.03	27.5	0.33	15.70	2.1	14	2.03	5.5	0.56
W232224		11.61	0.05	3.68	115.5	210	1.59	0.09	14.25	0.09	42.1	6.2	42	11.05	20.7	1.54

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Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187142

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232189		3.26	0.06	0.8	0.074	0.012	0.62	8.6	5.2	1.81	110	0.63	0.02	2.0	6.5	170
W232190		8.11	0.09	2.3	0.804	0.025	1.65	21.2	13.6	2.76	223	0.94	0.02	5.4	12.9	520
W232191		5.27	0.07	3.2	0.448	0.016	1.20	17.3	12.0	5.20	379	0.58	0.02	3.8	6.6	500
W232192		5.17	0.06	1.3	0.201	0.012	1.10	15.6	10.3	2.49	240	0.68	0.01	3.0	7.5	280
W232193		6.05	0.07	0.8	0.383	0.017	1.29	16.4	13.7	1.55	199	0.54	0.01	3.1	9.5	270
W232194		8.32	0.09	1.2	0.524	0.021	1.79	19.0	18.9	1.86	319	0.71	0.02	4.4	13.8	380
W232195		9.49	0.08	1.6	1.495	0.024	1.99	22.4	21.1	2.25	370	0.62	0.02	5.0	17.2	430
W232196		4.18	0.08	0.8	1.735	0.010	0.89	12.7	8.9	1.35	433	0.47	0.01	2.3	6.5	260
W232197		1.47	0.05	0.4	2.09	0.005	0.29	6.1	3.1	1.80	357	0.31	0.01	0.8	2.5	160
W232198		1.46	0.05	0.3	1.230	0.007	0.28	5.2	2.9	0.80	328	0.41	0.01	0.8	2.0	220
W232199		0.95	<0.05	0.3	1.275	0.006	0.18	4.1	1.9	0.77	548	0.35	0.01	0.6	1.5	160
W232200		5.06	0.07	1.4	8.39	0.028	0.95	10.2	13.0	1.34	792	0.96	0.01	2.9	7.8	530
W232201		11.35	0.08	2.0	25.2	0.039	1.83	26.1	14.4	0.37	774	3.89	0.02	6.0	27.2	540
W232202		0.20	0.05	<0.1	0.044	0.005	0.02	0.6	1.1	13.25	209	0.07	0.01	0.2	1.6	180
W232203		2.51	0.06	0.7	2.12	0.010	0.49	7.8	5.0	0.75	926	0.30	0.01	1.5	4.0	310
W232204		1.55	0.05	0.4	1.295	0.005	0.32	5.4	3.2	0.71	373	0.34	0.01	1.0	2.9	300
W232205		2.72	<0.05	0.7	0.595	0.008	0.59	8.5	6.0	1.27	254	0.50	0.01	1.7	5.1	350
W232206		3.14	0.05	0.7	0.976	0.012	0.65	8.6	6.9	1.38	376	0.50	0.01	1.8	5.1	370
W232207		3.27	0.05	0.7	0.394	0.009	0.68	8.7	7.0	1.46	223	0.41	0.01	1.9	5.4	330
W232208		5.71	0.07	1.4	0.266	0.017	1.24	15.0	14.6	2.19	261	0.61	0.02	3.5	9.5	370
W232209		2.83	0.06	0.5	0.142	0.007	0.60	9.2	6.1	0.65	104	0.48	0.01	1.8	4.6	210
W232210		6.59	0.07	1.3	0.813	0.017	1.47	17.3	14.3	1.73	267	1.14	0.02	4.4	12.2	410
W232211		8.87	0.08	2.3	2.44	0.026	2.05	21.9	21.2	5.21	452	0.60	0.03	5.6	12.9	400
W232212		4.58	0.05	0.9	1.920	0.016	0.90	13.5	9.9	1.38	1000	0.28	0.01	2.9	7.3	230
W232213		4.65	0.05	0.8	1.345	0.013	0.97	12.4	11.7	1.42	444	0.34	0.01	2.6	8.3	200
W232214		9.37	0.13	1.7	49.2	0.029	1.95	24.2	39.6	1.11	748	2.14	0.01	5.6	24.4	630
W232215		0.20	0.11	<0.1	0.057	<0.005	0.02	0.5	1.1	12.90	205	0.34	<0.01	0.1	2.5	180
W232216		4.03	0.10	0.7	12.70	0.013	0.93	11.8	12.8	1.01	1760	0.46	0.01	2.4	8.6	240
W232217		5.68	0.12	1.1	6.89	0.018	1.35	16.0	18.3	2.56	1700	0.55	0.01	3.5	11.6	440
W232218		8.14	0.14	1.6	2.45	0.025	2.02	19.5	28.2	4.35	786	1.02	0.02	5.1	13.4	450
W232219		3.81	0.12	1.1	0.892	0.013	0.96	12.1	9.1	4.29	464	0.65	0.01	2.7	6.1	280
W232220		6.25	0.13	1.8	1.340	0.021	1.52	18.5	16.3	3.37	339	1.02	0.02	4.4	13.4	670
W232221		2.98	0.11	0.9	1.910	0.010	0.72	10.0	7.5	1.59	858	0.74	0.01	2.3	5.4	250
W232222		4.76	0.08	0.8	15.20	0.031	0.81	14.5	29.5	0.16	340	5.61	0.01	2.4	19.6	490
W232223		2.45	0.08	0.7	1.540	0.008	0.57	9.0	7.0	1.66	429	0.54	0.01	1.8	4.5	230
W232224		8.72	0.11	1.7	0.784	0.031	1.96	22.3	31.5	4.27	277	0.62	0.03	5.7	17.6	500

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CERTIFICATE OF ANALYSIS WH17187142

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232189		6.1	22.1	<0.002	0.20	0.23	1.9	1	0.5	688	0.17	<0.05	2.46	0.054	0.16	13.2
W232190		7.6	58.8	<0.002	0.29	0.61	4.9	1	1.2	324	0.44	<0.05	6.97	0.148	1.06	7.9
W232191		5.2	41.0	<0.002	0.09	0.50	3.3	1	0.8	150.0	0.32	<0.05	5.47	0.105	0.52	4.9
W232192		5.2	38.6	<0.002	0.13	0.28	3.1	1	0.6	710	0.24	<0.05	4.09	0.082	0.46	11.8
W232193		3.9	47.7	<0.002	0.15	0.50	3.8	1	0.6	570	0.25	<0.05	4.18	0.089	1.02	9.9
W232194		4.6	66.0	<0.002	0.22	1.10	5.0	1	0.9	463	0.35	<0.05	5.86	0.123	2.05	8.8
W232195		5.6	76.1	<0.002	0.29	3.24	5.7	1	1.0	375	0.39	<0.05	6.87	0.140	5.90	9.3
W232196		3.8	33.8	0.002	0.18	2.26	2.6	1	0.5	638	0.18	<0.05	3.15	0.064	7.13	11.0
W232197		2.6	10.6	<0.002	0.19	2.60	0.9	1	0.2	628	0.07	<0.05	1.19	0.022	7.20	6.8
W232198		2.6	10.4	<0.002	0.14	3.00	0.9	<1	0.2	1005	0.07	<0.05	1.08	0.023	4.25	7.3
W232199		2.2	6.8	<0.002	0.25	7.36	0.7	1	0.2	730	<0.05	<0.05	0.74	0.015	5.79	8.6
W232200		9.7	38.6	<0.002	4.14	206	2.5	2	0.8	483	0.23	0.07	3.98	0.078	37.1	16.8
W232201		16.8	86.9	0.004	3.59	110.5	8.9	1	2.1	455	0.47	0.15	7.34	0.221	67.8	4.6
W232202		1.2	1.1	<0.002	0.01	0.19	0.1	<1	<0.2	52.3	<0.05	<0.05	0.08	<0.005	0.09	0.5
W232203		3.6	20.0	<0.002	0.24	8.05	1.6	<1	0.3	1055	0.12	<0.05	2.03	0.040	8.51	9.7
W232204		2.9	12.2	<0.002	0.14	3.99	1.0	<1	0.2	1645	0.08	<0.05	1.25	0.026	5.56	10.8
W232205		3.9	22.3	<0.002	0.11	1.17	1.7	1	0.4	1295	0.14	<0.05	2.20	0.046	1.88	8.1
W232206		3.5	24.6	<0.002	0.14	2.06	1.9	1	0.4	1340	0.15	<0.05	2.37	0.050	3.35	9.1
W232207		3.7	25.3	<0.002	0.13	1.73	2.0	1	0.4	1345	0.15	<0.05	2.53	0.052	1.51	9.3
W232208		5.2	47.4	<0.002	0.18	1.56	3.4	1	0.8	852	0.28	<0.05	4.55	0.094	1.28	9.2
W232209		5.4	22.4	<0.002	0.12	0.53	1.8	1	0.4	1040	0.15	<0.05	2.27	0.048	0.31	15.3
W232210		8.6	55.7	0.002	0.38	2.64	4.1	1	0.9	869	0.34	<0.05	5.63	0.120	3.44	14.1
W232211		7.8	74.6	0.002	0.34	4.71	5.3	1	1.5	332	0.44	<0.05	7.58	0.164	10.50	6.5
W232212		4.8	37.4	<0.002	0.25	5.51	3.0	1	0.6	630	0.22	<0.05	3.65	0.075	9.88	11.4
W232213		5.2	38.4	<0.002	0.30	2.38	2.9	1	0.6	763	0.21	<0.05	3.42	0.074	6.19	13.6
W232214		16.2	84.4	0.003	2.04	151.5	3.8	2	1.4	371	0.43	0.10	7.13	0.174	196.0	31.3
W232215		1.8	1.0	<0.002	<0.01	0.25	0.1	1	<0.2	47.5	<0.05	<0.05	0.06	<0.005	0.29	0.7
W232216		5.9	37.8	<0.002	0.49	28.1	2.9	2	0.5	661	0.18	<0.05	3.09	0.074	55.3	17.3
W232217		7.5	53.4	<0.002	0.64	12.15	3.7	2	0.7	619	0.27	<0.05	4.73	0.110	28.1	9.7
W232218		10.7	75.9	<0.002	0.70	2.76	5.3	2	1.1	466	0.39	<0.05	6.84	0.164	9.37	9.6
W232219		8.4	34.3	<0.002	0.37	2.04	2.5	2	0.5	713	0.20	<0.05	3.64	0.084	3.44	11.1
W232220		16.9	56.0	<0.002	0.83	2.75	4.2	3	0.9	976	0.34	<0.05	6.12	0.138	4.67	9.8
W232221		12.4	27.7	<0.002	0.43	1.73	2.0	2	0.4	1150	0.17	<0.05	2.92	0.068	4.35	12.4
W232222		9.0	39.0	0.003	4.59	161.0	2.9	2	1.1	338	0.17	0.13	2.91	0.101	42.2	4.3
W232223		9.9	23.0	<0.002	0.31	1.84	1.7	2	0.4	1610	0.13	<0.05	2.34	0.053	3.88	8.8
W232224		8.8	87.0	<0.002	0.54	0.47	5.7	3	1.2	477	0.43	<0.05	7.65	0.179	1.69	6.2

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187142

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232189		21	0.3	5.1	19	28.4		0.01
W232190		49	1.4	12.8	24	79.4		0.04
W232191		30	0.9	12.3	9	117.0		0.02
W232192		30	0.6	8.2	10	46.8		0.01
W232193		38	0.7	8.0	11	30.0		0.03
W232194		50	1.2	9.0	12	39.3		0.07
W232195		53	2.2	10.6	14	54.3		0.36
W232196		30	1.4	6.6	19	32.9		0.51
W232197		11	0.5	3.9	18	13.6		0.50
W232198		11	0.5	3.7	38	13.0		0.43
W232199		7	0.4	3.3	45	10.7		0.56
W232200		34	1.7	8.1	76	44.3	7.28	4.68
W232201		64	8.7	23.4	133	66.5	3.40	7.89
W232202		2	0.3	0.9	16	<0.5		0.01
W232203		18	0.9	5.8	15	28.0		1.00
W232204		13	0.5	3.9	12	14.6		0.47
W232205		21	0.7	5.3	9	25.2		0.10
W232206		23	0.8	5.5	10	27.5		0.16
W232207		25	0.7	5.6	9	27.5		0.07
W232208		34	1.0	8.6	12	47.6		0.02
W232209		21	0.5	4.7	35	17.1		<0.01
W232210		54	1.6	9.4	35	46.6		0.16
W232211		59	2.6	12.3	42	79.5		0.32
W232212		27	1.7	10.7	27	30.9		0.12
W232213		29	1.4	6.9	25	28.2		0.15
W232214		71	4.4	7.6	106	64.5	1.725	12.80
W232215		2	0.1	0.7	17	<0.5		<0.01
W232216		32	1.6	6.1	20	29.9		2.33
W232217		43	2.0	8.8	28	43.6		1.24
W232218		60	2.4	10.1	103	64.4		0.22
W232219		28	1.1	6.5	46	46.1		0.07
W232220		48	1.8	11.7	104	70.8		0.12
W232221		24	0.8	5.2	72	38.4		0.13
W232222		36	6.0	14.5	67	31.1	7.03	8.19
W232223		20	0.5	4.6	67	27.7		0.20
W232224		59	1.1	12.2	58	67.6		0.01

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17187142

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17195385

Project: Nadaleen

P.O. No.: N17- 076

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 12- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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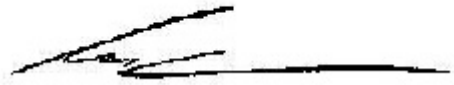
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17195385

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230478		6.67	0.03	6.86	283	290	2.14	0.25	2.68	0.11	84.0	17.8	68	29.0	43.7	3.78
W230479		7.72	0.05	7.46	1480	230	1.52	0.04	5.52	0.23	94.9	33.4	28	27.3	41.7	7.22
W230480		6.56	0.05	6.93	322	210	2.17	0.25	2.45	0.07	72.2	21.5	71	26.4	56.3	5.72
W230481		6.96	0.12	6.73	2370	210	2.02	0.28	2.88	0.11	70.0	20.6	70	22.8	62.6	5.40
W230482		8.02	0.08	7.39	313	220	2.54	0.31	3.07	0.03	78.7	22.3	71	32.6	62.0	5.28
W230483		7.90	0.05	7.99	123.0	250	2.90	0.34	1.90	0.05	83.4	20.7	75	39.0	65.4	5.38
W230484		0.24	0.10	3.56	2600	200	0.94	0.14	17.75	0.12	41.0	11.7	43	10.90	45.2	2.91
W230485		7.61	0.07	8.56	55.5	270	2.64	0.37	1.33	0.21	85.9	18.6	83	45.2	63.4	5.45
W230486		7.80	0.09	8.30	51.2	280	2.59	0.38	1.62	0.19	85.1	23.3	83	42.9	62.8	5.63
W230487		8.11	0.10	8.27	44.7	250	2.93	0.38	1.38	0.27	82.4	22.0	84	45.2	60.2	5.27
W230488		8.08	0.18	6.63	93.8	300	2.07	0.27	3.17	0.06	74.3	32.3	67	29.6	56.9	6.13
W230489		3.55	0.17	7.12	78.4	260	2.17	0.30	2.77	0.07	77.1	29.5	72	30.8	55.3	5.65
W230490		8.07	0.07	8.03	79.8	260	2.55	0.36	1.26	0.23	84.1	23.4	87	36.5	62.9	5.04
W230491		8.40	0.04	6.52	1050	360	1.72	0.27	4.57	0.17	68.7	15.7	63	20.0	47.2	4.86
W230492		2.87	0.08	8.58	435	300	2.32	0.40	1.30	0.15	86.0	26.7	81	31.7	65.8	4.13
W230493		4.88	0.03	0.06	1.4	20	0.05	0.03	20.1	0.06	1.19	0.7	1	0.14	4.7	0.46
W230494		2.34	0.06	4.22	3100	320	1.07	0.18	9.48	0.07	47.0	11.3	52	11.85	34.2	5.36
W230495		6.76	0.01	7.74	721	160	1.15	0.09	5.44	0.15	87.6	32.2	34	27.6	35.7	6.00
W230496		3.32	0.01	7.46	222	120	1.06	0.03	6.43	0.11	79.2	31.3	24	23.6	36.2	6.35
W230497		<0.02	0.02	7.87	230	120	1.12	0.03	6.11	0.12	82.2	33.5	26	25.1	39.7	6.36
W230498		4.34	<0.01	8.23	552	120	1.37	0.04	5.31	0.15	86.5	35.2	30	23.1	48.8	6.35
W230499		4.19	0.04	2.49	91.5	130	0.81	0.12	24.9	0.12	32.9	10.2	27	8.95	27.1	1.75
W230500		4.88	0.03	1.57	67.0	120	0.59	0.08	28.3	0.06	24.7	7.0	16	5.96	14.8	1.34
W230501		8.00	0.03	1.61	3040	100	0.52	0.09	27.3	0.03	20.8	5.5	16	6.06	14.9	1.11
W230502		8.05	0.02	0.69	631	70	0.23	0.03	30.8	0.03	10.85	2.4	8	2.34	8.9	0.59
W230503		7.98	0.02	1.22	69.9	120	0.33	0.05	29.8	0.02	17.50	4.1	14	4.48	11.2	0.80
W230504		4.86	<0.01	0.04	1.2	30	0.06	0.02	19.95	0.05	1.05	0.6	1	0.12	1.4	0.46
W230505		7.85	0.02	1.72	85.7	110	0.45	0.07	27.7	0.03	24.8	5.4	17	8.99	14.1	1.15
W230506		8.14	0.04	0.57	2950	90	0.19	0.02	32.6	0.02	9.92	2.1	6	1.51	5.7	0.46
W230507		7.92	0.02	0.62	63.7	90	0.20	0.02	31.9	0.04	9.75	2.1	7	1.64	5.5	0.49
W230508		7.93	0.02	0.58	39.8	90	0.19	0.02	32.5	0.04	8.62	1.9	6	1.46	4.9	0.44
W230509		0.24	0.16	3.70	6170	190	0.97	0.12	11.40	0.14	40.4	11.0	44	10.95	33.6	2.75
W230510		7.96	0.01	0.40	43.3	80	0.18	0.02	32.4	<0.02	6.66	1.3	5	1.10	3.9	0.37
W230511		7.57	0.01	0.47	19.0	80	0.21	0.02	32.9	0.02	7.22	1.6	6	1.40	5.1	0.37
W230512		7.99	0.06	4.53	107.5	180	1.19	0.21	16.00	0.11	55.7	13.5	46	17.40	37.2	2.76
W230513		7.43	0.01	1.19	34.0	90	0.37	0.05	25.3	0.07	18.75	3.5	13	3.78	9.6	0.91

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Finalized Date: 27- SEP- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17195385

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230478		20.4	0.14	3.3	0.570	0.063	3.03	41.8	15.7	1.22	621	0.74	0.03	13.1	30.7	610
W230479		20.1	0.15	2.9	1.435	0.082	3.15	49.2	62.0	1.90	1730	1.88	0.04	55.6	25.8	1820
W230480		21.0	0.12	3.1	0.791	0.073	3.10	34.9	16.2	1.19	744	0.47	0.03	11.8	42.7	660
W230481		20.1	0.13	3.1	3.20	0.070	3.04	34.6	15.0	1.50	1130	0.43	0.03	11.9	43.3	590
W230482		22.3	0.13	3.4	1.685	0.082	3.44	39.8	21.6	1.70	647	0.37	0.03	12.3	46.3	590
W230483		24.5	0.14	3.4	0.558	0.095	3.79	41.4	22.9	1.61	389	0.81	0.04	13.1	43.8	660
W230484		10.35	0.07	1.8	3.73	0.040	1.66	21.0	11.1	1.41	1200	1.79	0.02	6.4	26.8	390
W230485		24.8	0.14	3.8	0.353	0.096	3.97	43.6	22.5	1.88	324	0.78	0.04	12.9	41.2	560
W230486		24.1	0.13	3.5	0.241	0.098	3.77	41.8	28.1	1.89	388	0.74	0.04	13.0	47.5	580
W230487		23.9	0.13	3.6	0.325	0.089	3.78	41.2	30.4	1.74	356	1.37	0.04	12.7	47.2	530
W230488		18.95	0.11	2.8	0.479	0.074	3.03	36.3	23.6	2.21	611	0.86	0.04	10.3	64.6	510
W230489		20.4	0.12	3.1	0.427	0.078	3.28	38.5	23.3	2.13	551	0.63	0.04	11.0	57.4	520
W230490		23.6	0.13	3.8	0.223	0.086	3.62	42.2	76.6	1.51	299	1.04	0.04	13.2	44.3	520
W230491		18.55	0.13	2.9	1.365	0.074	3.00	34.3	14.3	1.91	977	0.96	0.03	10.2	33.0	470
W230492		25.7	0.14	3.7	1.185	0.092	3.99	42.6	17.2	0.87	279	0.79	0.04	14.0	50.9	550
W230493		0.20	0.12	<0.1	<0.005	0.005	0.02	0.6	1.1	12.85	204	0.37	0.01	0.2	3.9	220
W230494		11.50	0.06	2.1	4.58	0.047	1.87	24.2	9.7	3.60	2020	0.42	0.02	6.7	21.5	350
W230495		20.1	0.13	3.6	1.960	0.080	3.28	45.8	18.5	1.72	885	2.06	0.04	50.6	22.6	1740
W230496		18.40	0.12	3.2	0.967	0.074	2.54	41.2	32.7	2.03	1180	1.60	0.04	50.4	20.2	1770
W230497		20.1	0.12	3.4	1.005	0.076	2.64	42.6	36.7	1.96	1120	1.76	0.04	52.6	22.3	1780
W230498		21.0	0.12	2.9	0.982	0.085	2.49	44.5	62.8	1.80	1130	1.75	0.04	55.1	25.4	1850
W230499		6.99	0.07	1.2	0.299	0.031	1.15	18.9	9.2	1.08	614	1.24	0.02	3.8	20.4	290
W230500		4.41	0.08	0.9	0.529	0.020	0.74	13.5	5.6	0.72	583	0.74	0.02	2.6	9.1	140
W230501		4.58	0.08	0.8	1.455	0.019	0.76	11.5	5.4	0.70	471	0.95	0.01	2.4	8.6	150
W230502		1.74	<0.05	0.4	0.427	0.012	0.33	5.5	2.0	0.57	346	0.63	0.01	1.0	5.8	130
W230503		2.83	<0.05	0.6	0.782	0.015	0.58	9.5	3.7	0.38	154	0.38	0.02	1.6	6.8	120
W230504		0.15	0.10	<0.1	<0.005	0.005	0.02	0.5	0.8	12.60	203	0.07	0.01	0.1	1.4	150
W230505		4.12	0.05	0.8	1.365	0.020	0.83	13.8	5.4	0.51	212	0.32	0.01	2.3	8.5	170
W230506		1.42	<0.05	0.3	0.788	0.012	0.27	5.1	2.0	0.34	478	0.11	0.01	0.8	2.8	190
W230507		1.50	<0.05	0.3	0.828	0.009	0.29	4.9	2.3	0.36	298	0.11	0.01	0.8	2.8	230
W230508		1.35	<0.05	0.3	0.823	0.010	0.27	4.5	2.0	0.37	329	0.11	0.01	0.8	2.5	190
W230509		9.06	0.05	1.8	14.50	0.036	1.75	21.4	11.1	2.45	1120	1.69	0.02	5.3	24.0	410
W230510		0.99	<0.05	0.2	0.515	0.006	0.19	3.3	1.6	0.38	209	0.26	0.01	0.6	1.9	470
W230511		1.17	<0.05	0.2	0.234	0.008	0.22	3.5	1.9	0.42	237	0.41	0.02	0.6	2.1	270
W230512		10.95	0.06	2.0	2.43	0.050	2.14	31.8	14.9	1.40	401	2.60	0.03	6.1	24.2	250
W230513		2.92	<0.05	0.6	0.514	0.015	0.57	10.4	4.0	0.56	272	0.35	0.01	1.6	5.8	220

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17195385

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230478		16.6	133.0	<0.002	2.63	0.79	18.0	1	2.1	163.5	0.96	0.05	13.35	0.458	1.96	2.6
W230479		7.2	145.0	<0.002	5.30	3.49	19.7	2	1.6	274	2.99	<0.05	6.40	0.968	5.93	1.4
W230480		10.9	151.0	<0.002	5.23	2.25	20.7	1	2.3	144.5	0.87	0.05	10.55	0.502	3.06	2.1
W230481		12.0	154.5	<0.002	4.86	12.05	20.4	1	2.2	100.5	0.85	0.06	10.60	0.523	11.10	2.0
W230482		23.9	180.5	0.002	4.71	2.19	22.2	1	2.5	108.0	0.90	<0.05	12.15	0.494	7.17	2.3
W230483		16.8	192.5	<0.002	3.61	0.90	24.1	1	2.8	105.5	0.96	0.05	12.60	0.495	3.82	2.4
W230484		8.9	80.5	<0.002	2.48	9.60	9.9	2	1.4	701	0.45	0.08	5.48	0.257	10.25	2.3
W230485		23.7	210	0.002	1.52	0.87	23.5	1	2.9	106.0	0.96	0.05	13.70	0.500	1.72	2.5
W230486		22.8	197.0	0.002	1.55	0.78	23.2	1	2.8	110.0	0.97	0.06	13.30	0.530	1.64	2.5
W230487		26.8	200	<0.002	1.26	0.99	23.3	1	2.7	101.0	0.98	0.06	13.20	0.525	1.79	2.4
W230488		48.2	151.5	0.003	2.38	2.02	18.6	2	2.1	145.0	0.76	0.05	10.30	0.445	2.00	2.1
W230489		37.9	163.0	0.002	1.71	1.51	19.9	1	2.3	136.0	0.81	<0.05	10.60	0.466	1.89	2.2
W230490		17.9	179.0	<0.002	1.70	0.89	23.1	1	2.7	123.0	0.97	<0.05	13.90	0.551	2.07	2.5
W230491		12.6	139.0	<0.002	2.91	7.31	18.0	1	2.2	178.5	0.75	<0.05	10.55	0.424	7.46	1.9
W230492		20.3	178.5	<0.002	3.60	4.71	24.7	1	2.9	106.5	1.02	0.06	13.60	0.566	6.61	2.5
W230493		3.4	1.0	<0.002	<0.01	0.07	0.2	1	<0.2	47.0	<0.05	<0.05	0.07	<0.005	<0.02	0.4
W230494		9.0	79.8	<0.002	1.57	17.40	11.2	1	1.3	305	0.48	0.07	6.09	0.282	23.2	1.8
W230495		6.9	133.5	0.002	4.07	4.13	18.4	1	1.7	206	2.68	<0.05	7.03	0.918	8.72	1.8
W230496		6.0	99.0	<0.002	3.75	0.69	18.5	2	1.3	158.0	2.66	<0.05	5.47	0.962	5.93	1.4
W230497		5.9	104.5	<0.002	3.93	0.69	20.1	1	1.4	151.0	2.78	<0.05	5.58	1.005	6.58	1.5
W230498		5.1	102.0	<0.002	2.63	1.46	21.8	2	2.1	131.0	2.95	<0.05	5.52	1.045	5.28	1.4
W230499		10.9	51.4	0.006	1.20	0.67	7.0	2	0.8	1035	0.27	0.09	3.88	0.142	1.10	3.3
W230500		7.3	35.0	<0.002	0.91	0.57	4.6	1	0.5	1300	0.19	0.05	2.73	0.100	1.69	2.1
W230501		5.9	36.2	0.002	1.09	9.32	4.3	2	0.6	1110	0.17	0.06	2.61	0.091	4.87	2.1
W230502		4.6	13.7	<0.002	0.50	2.14	1.7	1	0.3	1115	0.07	<0.05	1.11	0.040	1.94	1.6
W230503		4.8	24.4	<0.002	0.73	0.43	2.8	1	0.4	1695	0.12	<0.05	1.82	0.069	2.83	2.2
W230504		1.3	0.7	<0.002	<0.01	0.07	0.2	<1	<0.2	48.5	<0.05	<0.05	0.08	<0.005	0.02	0.7
W230505		5.7	35.9	<0.002	1.08	0.64	4.2	1	0.6	1385	0.16	0.05	2.62	0.097	5.52	2.4
W230506		2.2	11.7	<0.002	0.54	10.85	1.6	1	0.2	1395	0.05	<0.05	0.93	0.033	2.88	1.7
W230507		2.3	12.3	<0.002	0.46	0.91	1.6	<1	0.2	1395	0.06	<0.05	0.95	0.035	2.41	1.7
W230508		2.2	10.8	<0.002	0.41	1.06	1.4	1	0.2	1330	0.05	<0.05	0.89	0.032	1.94	1.5
W230509		9.9	75.2	<0.002	2.52	21.4	9.3	1	1.5	303	0.37	0.05	5.49	0.257	40.9	6.0
W230510		1.5	7.6	<0.002	0.29	0.53	1.1	1	0.2	1375	<0.05	<0.05	0.65	0.023	1.25	1.7
W230511		1.7	8.4	<0.002	0.29	0.26	1.3	1	0.2	1360	<0.05	<0.05	0.72	0.026	0.76	1.7
W230512		13.6	89.1	0.007	2.62	0.90	9.9	1	1.4	837	0.44	0.07	7.04	0.255	6.51	3.5
W230513		3.9	23.7	<0.002	0.78	0.32	3.0	1	0.4	1130	0.11	<0.05	1.93	0.065	1.88	1.8

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17195385

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Au- AA25 Au ppm 0.01
W230478		114	4.1	25.5	83	124.0	<0.01
W230479		203	18.0	27.2	119	130.5	0.25
W230480		138	6.2	23.8	69	112.0	0.11
W230481		140	10.6	25.1	59	115.0	0.77
W230482		140	8.1	26.0	68	124.5	0.05
W230483		148	2.2	26.9	81	120.5	0.02
W230484		75	5.3	17.2	51	69.0	0.50
W230485		152	1.5	27.7	157	138.5	<0.01
W230486		153	1.5	27.1	154	127.5	<0.01
W230487		150	1.5	26.7	217	129.0	<0.01
W230488		125	1.1	22.7	70	103.0	<0.01
W230489		134	1.3	23.6	79	111.5	0.01
W230490		153	1.7	26.3	162	138.5	<0.01
W230491		119	6.5	22.0	137	103.5	1.13
W230492		159	6.8	26.0	135	132.5	0.01
W230493		2	0.1	0.8	17	0.6	<0.01
W230494		78	4.1	18.2	34	77.7	0.50
W230495		196	7.6	29.7	111	157.5	0.07
W230496		202	4.7	29.3	82	150.5	<0.01
W230497		216	4.8	30.2	82	155.5	<0.01
W230498		233	4.9	28.9	102	129.0	0.01
W230499		45	1.1	17.3	45	44.9	<0.01
W230500		27	0.6	15.0	25	36.0	<0.01
W230501		26	0.5	12.5	15	31.1	0.01
W230502		11	0.2	7.6	13	12.5	<0.01
W230503		19	0.3	9.7	12	19.7	<0.01
W230504		2	0.1	0.7	16	<0.5	<0.01
W230505		26	0.5	13.5	14	28.8	0.01
W230506		9	0.4	8.1	4	10.7	0.05
W230507		10	0.3	8.1	13	10.6	0.01
W230508		9	0.4	7.1	18	9.4	0.03
W230509		81	6.7	16.8	47	64.1	2.52
W230510		8	0.2	5.8	3	8.2	<0.01
W230511		9	0.2	5.6	3	8.6	<0.01
W230512		77	1.2	20.7	67	72.4	<0.01
W230513		19	0.3	13.0	22	20.6	<0.01

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17195385

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 7- OCT- 2017
Account: RCM

CERTIFICATE WH17189028

Project: Nadaleen

P.O. No.: N17- 077

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 5- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

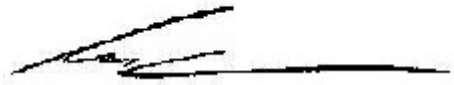
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17189028

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232225		11.82	0.04	2.30	62.4	320	0.80	0.06	22.5	0.08	27.8	4.1	24	4.68	14.2	1.20
W232226		12.69	0.05	3.42	33.6	220	1.06	0.08	15.90	0.06	41.2	5.9	37	15.40	19.5	1.65
W232227		11.87	0.05	2.38	28.6	450	0.78	0.06	22.1	0.07	29.2	4.4	25	7.51	14.9	1.21
W232228		11.83	0.05	2.56	46.5	1330	0.87	0.07	22.2	0.10	29.8	4.8	29	6.42	17.5	1.24
W232229		<0.02	0.05	2.57	44.8	1350	0.87	0.06	22.3	0.09	29.4	4.5	29	6.31	17.4	1.27
W232230		12.79	0.05	3.87	67.9	270	1.14	0.09	15.30	0.05	41.4	5.8	45	9.98	21.4	1.76
W232231		13.38	0.05	3.83	233	390	1.18	0.09	15.10	0.07	44.4	6.2	44	9.44	22.9	1.79
W232232		12.30	0.05	3.57	81.2	300	0.99	0.08	16.10	0.06	40.8	5.7	39	6.21	20.3	1.75
W232233		12.17	0.04	2.76	68.0	340	0.90	0.07	21.3	0.09	34.4	4.5	30	5.15	18.0	1.36
W232234		0.25	0.17	3.83	6290	200	0.80	0.14	12.05	0.16	42.1	12.5	47	11.65	37.6	2.87
W232235		10.88	0.05	2.23	32.4	1000	0.74	0.06	23.3	0.12	26.9	3.9	23	4.30	13.5	1.09
W232236		11.77	0.04	2.67	28.5	710	0.90	0.07	21.8	0.07	32.7	4.7	28	4.58	15.7	1.24
W232237		11.21	0.02	3.27	19.0	160	1.07	0.08	17.05	0.13	38.5	5.2	33	5.85	19.4	1.61
W232238		10.79	0.05	7.95	16.0	290	2.10	0.30	2.02	0.02	93.5	18.1	67	16.90	31.7	4.45
W232239		10.75	0.06	8.77	15.9	310	2.43	0.33	1.13	0.02	101.0	17.7	75	21.1	33.2	4.35
W232240		10.63	0.06	7.12	17.4	280	1.74	0.25	6.64	0.03	79.8	14.6	57	16.85	30.1	3.70
W232241		11.45	0.04	5.97	10.9	260	1.41	0.22	11.05	0.03	68.7	10.2	47	13.20	21.0	3.35
W232242		10.66	0.05	7.39	14.5	320	1.68	0.26	6.28	0.02	80.0	12.3	59	19.00	28.3	3.95
W232243		10.07	0.04	6.21	12.8	550	1.57	0.22	6.77	<0.02	75.4	11.0	54	17.35	21.8	3.36
W232244		6.93	0.01	0.05	0.3	20	0.05	0.03	21.3	0.06	1.02	0.7	1	0.12	2.8	0.48
W232245		10.95	0.06	6.95	16.9	310	1.78	0.26	4.37	0.02	85.6	13.6	58	19.25	25.8	3.72
W232246		12.07	0.05	5.81	15.4	280	1.49	0.22	11.75	0.03	70.0	10.2	52	16.60	21.7	2.99
W232247		8.77	0.04	4.10	15.6	260	1.04	0.14	15.65	0.08	45.4	6.5	29	12.00	14.3	2.01
W232248		9.93	0.04	3.57	13.7	170	0.85	0.12	21.2	0.03	41.1	6.1	32	9.97	14.4	2.21
W232249		11.42	0.04	2.77	13.1	190	0.79	0.09	22.2	0.05	37.8	4.2	27	7.03	9.3	1.68
W232250		10.61	0.06	2.79	10.1	150	0.65	0.09	22.2	0.04	35.8	4.4	28	5.95	9.9	1.69
W232251		4.52	0.02	2.30	8.9	120	0.61	0.08	24.5	0.02	28.8	4.2	22	5.26	8.0	1.79
W232252		7.34	0.01	0.09	<0.2	60	0.07	0.02	21.0	0.06	2.12	0.8	1	0.16	3.1	0.47
W232253		5.62	0.03	8.18	12.7	350	2.06	0.33	1.58	<0.02	87.7	18.1	69	32.4	35.4	4.97
W232254		11.43	0.03	9.04	29.8	290	2.47	0.35	0.86	<0.02	95.3	19.3	72	36.5	36.2	4.70
W232255		5.22	0.06	8.87	27.7	350	2.47	0.34	0.85	<0.02	97.4	19.0	71	35.6	38.3	4.74
W232256		9.14	0.03	8.89	27.2	290	2.58	0.39	0.48	<0.02	94.8	19.2	75	33.9	39.2	4.43
W232257		11.85	0.04	9.09	18.7	270	2.79	0.43	0.47	<0.02	94.4	20.9	74	29.1	42.9	4.38
W232258		0.19	0.65	1.89	>10000	140	0.56	2.69	25.5	0.15	27.8	5.1	28	6.13	16.7	1.36
W232259		9.14	0.07	9.06	32.7	280	2.62	0.39	0.35	<0.02	100.0	19.7	73	27.8	36.3	4.41
W232260		12.17	0.04	9.10	16.8	320	2.63	0.37	0.37	<0.02	100.5	18.4	74	21.9	42.3	4.61

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 7- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189028

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232225		5.69	0.07	1.0	0.554	0.018	1.11	15.0	33.8	3.00	207	0.57	0.02	3.7	10.3	290
W232226		8.48	0.11	1.7	0.086	0.026	1.71	21.9	69.7	3.51	210	0.42	0.17	5.7	15.5	460
W232227		5.97	0.10	1.1	0.055	0.020	1.10	16.3	54.9	3.25	205	0.59	0.07	4.0	10.7	300
W232228		6.47	0.10	1.2	0.111	0.022	1.16	16.3	63.6	2.77	204	0.50	0.02	4.2	12.1	340
W232229		6.35	0.11	1.1	0.104	0.020	1.16	16.0	62.4	2.87	211	0.47	0.02	4.2	11.4	350
W232230		8.84	0.11	1.6	0.216	0.030	1.82	22.1	73.8	3.47	216	0.39	0.03	6.0	15.7	520
W232231		9.59	0.11	1.9	0.716	0.033	1.82	23.8	62.6	3.60	277	0.43	0.03	6.5	17.1	500
W232232		8.36	0.11	1.6	0.143	0.029	1.61	21.5	76.0	3.79	217	0.35	0.03	5.7	15.2	470
W232233		6.79	0.11	1.3	0.101	0.026	1.18	18.7	75.4	3.24	213	0.37	0.02	4.7	11.8	370
W232234		10.50	0.09	2.2	14.45	0.041	1.79	22.6	11.0	2.55	1170	2.03	0.02	6.4	26.6	450
W232235		5.52	0.08	1.0	0.051	0.019	0.86	15.0	46.1	2.85	195	0.49	0.19	3.6	9.9	290
W232236		6.65	0.10	1.2	0.055	0.021	1.08	17.9	49.3	2.80	213	0.41	0.21	4.4	11.6	350
W232237		8.07	0.11	1.6	0.034	0.027	1.28	20.5	51.7	4.04	236	0.25	0.20	5.5	14.2	370
W232238		20.2	0.13	2.9	0.042	0.067	2.61	48.5	120.5	1.33	812	0.34	0.24	12.3	32.0	460
W232239		24.7	0.13	3.1	0.045	0.073	2.96	52.1	129.5	1.20	591	0.35	0.24	13.2	33.7	550
W232240		16.45	0.11	2.3	0.054	0.053	2.39	42.0	110.0	1.15	750	0.33	0.20	10.0	25.9	530
W232241		13.95	0.11	2.0	0.068	0.050	1.96	35.7	106.5	1.12	557	0.35	0.12	8.2	22.2	420
W232242		16.55	0.11	2.4	0.063	0.056	2.59	41.9	96.2	1.10	546	0.29	0.15	10.2	25.4	530
W232243		14.25	0.10	2.2	0.054	0.048	2.23	38.8	96.5	1.01	526	0.36	0.10	8.8	22.8	630
W232244		0.18	0.11	<0.1	0.006	0.005	0.02	0.5	1.2	13.10	215	0.09	<0.01	0.2	1.3	200
W232245		16.75	0.13	2.5	0.079	0.056	2.66	44.9	83.3	1.16	595	0.47	0.09	10.5	26.2	720
W232246		14.50	0.11	2.2	0.108	0.052	2.29	36.6	50.7	1.58	416	0.33	0.08	8.6	20.8	860
W232247		9.71	0.10	1.3	0.071	0.032	1.64	24.7	39.3	4.52	515	0.27	0.06	5.1	13.4	1100
W232248		8.52	0.09	1.2	0.147	0.031	1.47	21.6	28.8	0.70	323	0.42	0.05	4.6	13.6	680
W232249		6.28	0.08	1.2	0.106	0.024	1.13	19.3	22.2	0.65	231	0.34	0.04	3.9	9.5	780
W232250		6.35	0.09	1.1	0.129	0.022	1.14	18.3	21.7	0.88	289	0.42	0.04	3.7	10.1	880
W232251		5.29	0.07	1.0	0.059	0.018	0.87	14.8	30.0	0.86	729	0.20	0.03	3.2	8.3	650
W232252		0.29	0.13	<0.1	<0.005	0.005	0.03	1.0	1.3	12.90	212	0.06	0.01	0.7	1.4	190
W232253		22.9	0.13	2.9	0.015	0.069	3.18	43.7	165.5	1.17	769	0.20	0.08	12.6	36.2	410
W232254		23.2	0.14	2.9	0.012	0.067	3.58	48.6	142.0	1.28	500	0.22	0.08	12.5	36.2	750
W232255		22.8	0.13	2.9	0.014	0.072	3.51	50.0	137.0	1.28	516	0.21	0.08	12.8	36.6	640
W232256		23.9	0.14	3.3	0.018	0.069	3.62	49.9	141.5	1.24	371	0.21	0.08	11.2	40.0	360
W232257		24.4	0.16	3.0	0.026	0.072	3.75	49.5	139.5	1.26	342	0.28	0.09	11.3	42.0	470
W232258		4.98	0.08	0.9	6.38	0.026	0.94	14.0	9.3	0.91	2320	1.87	0.01	2.6	14.1	340
W232259		24.2	0.16	3.2	0.031	0.075	3.73	52.1	131.0	1.21	327	0.26	0.09	11.6	40.1	530
W232260		24.0	0.15	3.4	0.029	0.082	3.68	54.1	139.5	1.26	349	0.29	0.08	11.8	40.4	650

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Finalized Date: 7- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189028

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232225		6.1	54.8	<0.002	0.23	0.28	3.8	2	0.7	765	0.27	<0.05	4.46	0.108	1.12	8.8
W232226		7.2	95.2	<0.002	0.18	0.23	5.5	2	1.1	485	0.41	<0.05	6.90	0.171	0.96	6.1
W232227		6.4	60.3	<0.002	0.11	0.19	3.9	1	0.8	809	0.28	<0.05	4.74	0.115	0.62	9.0
W232228		7.0	53.5	<0.002	0.25	0.26	4.2	1	0.8	1035	0.31	<0.05	5.04	0.122	0.78	8.9
W232229		6.8	53.4	<0.002	0.25	0.25	4.2	1	0.8	1045	0.29	<0.05	4.95	0.124	0.74	8.5
W232230		6.6	77.3	<0.002	0.30	0.26	5.8	1	1.1	642	0.43	<0.05	7.20	0.191	1.10	6.3
W232231		8.3	81.2	<0.002	0.40	1.25	6.2	1	1.2	634	0.47	<0.05	8.00	0.194	2.60	6.9
W232232		7.5	72.9	<0.002	0.45	0.29	5.4	1	1.1	689	0.41	<0.05	6.98	0.176	0.96	5.9
W232233		6.2	54.3	<0.002	0.18	0.25	4.5	1	0.9	764	0.33	<0.05	5.65	0.133	0.49	7.5
W232234		11.3	88.2	0.002	2.57	24.3	10.3	1	1.7	318	0.48	<0.05	6.58	0.265	44.4	6.8
W232235		6.8	40.6	<0.002	0.13	0.24	3.6	1	0.7	775	0.25	<0.05	4.35	0.107	0.29	10.0
W232236		7.3	48.4	<0.002	0.11	0.24	4.3	2	0.9	743	0.31	<0.05	5.33	0.130	0.28	9.2
W232237		6.2	57.1	<0.002	0.03	0.21	5.3	1	1.1	424	0.39	<0.05	6.52	0.158	0.26	4.3
W232238		21.8	121.0	<0.002	0.54	0.56	16.4	<1	2.2	127.0	0.80	0.05	15.05	0.381	0.65	2.7
W232239		21.6	110.0	<0.002	0.68	0.45	17.5	<1	2.4	123.0	0.88	0.05	17.10	0.410	0.69	2.9
W232240		17.8	107.5	<0.002	0.85	0.41	11.4	<1	2.5	215	0.65	0.05	11.65	0.322	0.59	2.5
W232241		14.2	86.8	<0.002	0.71	0.29	9.7	<1	1.5	302	0.55	<0.05	9.91	0.271	0.53	2.4
W232242		19.5	110.0	<0.002	0.97	0.35	11.9	<1	2.0	231	0.67	<0.05	12.55	0.344	0.59	2.3
W232243		17.6	95.8	<0.002	1.07	0.35	10.0	<1	1.6	270	0.57	<0.05	10.20	0.287	0.51	2.3
W232244		1.0	0.8	<0.002	<0.01	<0.05	0.2	<1	<0.2	49.0	<0.05	<0.05	0.23	<0.005	<0.02	0.8
W232245		18.2	117.5	<0.002	1.33	0.40	12.0	<1	1.9	196.0	0.68	<0.05	12.85	0.318	0.74	2.6
W232246		12.9	106.5	<0.002	1.32	0.30	10.5	1	1.6	384	0.57	<0.05	9.72	0.281	0.79	2.8
W232247		9.1	73.6	<0.002	0.92	0.22	6.5	<1	1.1	327	0.36	<0.05	6.26	0.173	0.51	2.1
W232248		9.1	64.6	<0.002	1.55	0.25	5.8	1	1.1	863	0.32	<0.05	5.59	0.157	0.84	2.1
W232249		6.8	50.9	<0.002	1.19	0.18	4.7	1	0.8	866	0.29	<0.05	4.65	0.139	0.66	1.9
W232250		7.2	47.8	<0.002	1.03	0.21	4.7	1	0.8	1005	0.26	<0.05	4.59	0.133	0.71	1.8
W232251		8.2	37.1	<0.002	0.57	0.53	3.8	1	0.6	850	0.22	<0.05	3.90	0.114	0.43	1.6
W232252		1.0	1.1	<0.002	<0.01	0.08	0.2	<1	<0.2	50.9	<0.05	<0.05	0.16	0.005	<0.02	0.6
W232253		10.6	100.0	<0.002	0.15	0.40	16.2	<1	2.3	121.0	0.83	0.06	14.70	0.381	0.72	2.4
W232254		23.4	160.5	<0.002	0.18	0.43	17.0	<1	2.3	109.0	0.83	0.07	15.85	0.402	0.79	2.5
W232255		23.7	161.0	<0.002	0.20	0.42	17.1	<1	2.4	108.5	0.82	0.06	16.45	0.395	0.79	2.6
W232256		35.7	163.5	<0.002	0.22	0.45	16.4	1	2.6	104.0	0.89	0.06	16.65	0.409	0.96	2.9
W232257		25.0	165.5	<0.002	0.20	0.60	17.0	1	2.6	113.0	0.86	0.05	16.35	0.400	0.99	2.9
W232258		7.2	40.9	0.003	1.42	46.6	5.7	2	0.7	1025	0.19	0.05	3.50	0.091	24.2	6.2
W232259		20.3	165.0	<0.002	0.16	0.64	15.8	1	2.7	124.0	0.90	0.05	16.50	0.400	1.01	3.2
W232260		18.4	162.5	<0.002	0.19	0.69	16.8	1	2.7	133.5	0.88	0.06	16.10	0.429	0.95	2.9

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Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W232225		38	0.8	8.7	41	40.0		<0.01
W232226		54	0.6	12.8	53	68.6		0.01
W232227		39	0.4	9.2	41	46.5		<0.01
W232228		39	0.5	9.6	44	49.4		<0.01
W232229		40	0.5	9.5	47	48.0		0.01
W232230		59	0.6	12.8	55	67.6		0.01
W232231		56	0.9	13.5	62	75.2		0.04
W232232		55	0.6	12.4	58	68.1		0.01
W232233		45	0.5	11.0	48	53.8		0.01
W232234		84	8.1	18.4	48	71.7		2.48
W232235		35	0.4	8.6	43	42.0		<0.01
W232236		40	0.4	10.0	46	51.3		0.01
W232237		48	0.6	11.7	53	64.2		<0.01
W232238		81	1.4	20.7	87	111.0		<0.01
W232239		89	1.6	21.3	90	116.5		<0.01
W232240		68	1.2	18.5	82	92.9		<0.01
W232241		56	1.0	15.5	74	79.6		<0.01
W232242		72	1.2	17.4	68	94.6		<0.01
W232243		59	1.0	16.8	55	89.9		<0.01
W232244		2	<0.1	0.7	17	<0.5		<0.01
W232245		68	1.3	19.8	66	100.5		0.01
W232246		61	1.1	18.4	68	89.7		<0.01
W232247		41	0.7	9.8	34	51.4		<0.01
W232248		35	0.6	9.1	43	48.3		<0.01
W232249		29	0.6	10.5	38	49.5		<0.01
W232250		28	0.6	10.1	33	44.5		0.01
W232251		24	0.4	8.0	25	39.7		<0.01
W232252		3	0.1	0.9	18	<0.5		<0.01
W232253		80	1.5	18.8	96	112.0		<0.01
W232254		89	1.5	21.2	91	115.0		<0.01
W232255		88	1.5	21.5	90	116.0		<0.01
W232256		92	1.6	20.3	91	108.5		0.01
W232257		91	1.6	20.4	86	102.5		<0.01
W232258		33	18.8	15.5	24	31.2	1.320	2.63
W232259		89	1.7	21.9	82	106.5		<0.01
W232260		96	1.6	23.4	88	109.0		<0.01

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ALS Canada Ltd.

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North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 7- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17189028

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE WH17184182

Project: Nadaleen

P.O. No.: N17- 078

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 30- AUG- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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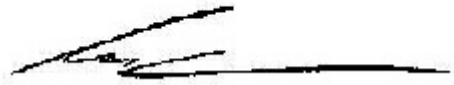
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184182

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230514		8.04	0.01	0.68	41.1	110	0.21	0.05	34.6	0.02	9.79	3.1	8	1.88	7.1	0.50
W230515		8.02	0.01	0.39	38.6	80	0.13	0.03	36.3	0.02	6.87	2.4	5	1.06	5.0	0.35
W230516		7.72	0.01	0.65	51.3	100	0.26	0.04	34.2	0.04	11.30	3.2	8	1.86	7.4	0.50
W230517		7.65	0.01	0.89	53.2	120	0.26	0.06	33.6	0.06	14.45	3.9	10	2.68	9.6	0.62
W230518		8.08	0.15	0.64	80.4	110	0.15	0.13	34.6	0.07	11.35	2.2	7	1.65	13.1	0.50
W230519		8.34	0.04	1.01	312	110	0.18	0.09	32.1	0.05	16.00	3.4	11	2.44	11.2	0.67
W230520		7.57	0.02	0.48	125.5	90	0.20	0.05	34.9	0.47	8.71	1.8	5	1.22	5.6	0.36
W230521		<0.02	0.02	0.50	129.0	90	0.20	0.05	36.3	0.38	8.99	1.9	6	1.27	5.6	0.38
W230522		8.47	0.02	0.58	634	70	0.12	0.05	34.4	0.03	10.85	2.2	7	1.32	6.4	0.45
W230523		6.98	0.01	0.59	134.0	80	0.15	0.05	33.2	0.04	10.90	2.1	6	1.65	6.0	0.45
W230524		0.26	0.27	3.76	>10000	180	0.57	0.18	10.00	0.68	44.9	12.0	45	8.98	54.6	2.97
W230525		9.09	0.02	1.05	2500	110	0.21	0.08	32.0	0.07	15.05	3.7	11	3.26	12.0	0.74
W230526		4.79	0.04	2.55	454	130	0.50	0.14	25.8	0.20	37.3	8.4	27	8.84	26.3	1.59
W230527		7.03	0.02	1.19	3540	110	0.25	0.08	30.7	0.08	18.85	3.9	12	2.88	12.6	0.92
W230528		5.55	0.05	3.43	>10000	140	0.45	0.20	5.81	0.59	59.4	10.6	44	7.14	36.7	2.60
W230529		6.46	0.10	4.18	>10000	180	0.52	0.22	4.32	1.40	64.6	12.9	51	8.58	41.4	3.13
W230530		5.02	0.01	0.04	53.6	110	0.05	0.07	21.1	0.08	1.17	0.6	<1	0.12	2.3	0.48
W230531		6.27	0.15	0.89	>10000	110	0.21	0.06	31.4	0.17	13.50	3.1	11	1.81	10.3	0.85
W230532		7.71	0.04	1.25	263	120	0.33	0.08	31.7	0.11	19.15	4.2	14	2.79	12.6	0.96
W230533		7.62	0.04	1.16	259	100	0.27	0.08	33.2	0.05	17.00	4.0	13	2.54	12.7	0.84
W230534		6.77	0.02	0.63	65.6	110	0.27	0.05	34.3	0.04	11.40	2.4	8	1.78	6.8	0.53
W230535		3.59	0.03	0.73	82.8	90	0.24	0.06	33.5	0.04	12.15	2.9	9	1.90	10.1	0.60
W230536		8.06	0.03	1.47	93.2	130	0.37	0.09	30.4	0.11	23.1	5.6	16	7.40	17.0	1.03
W230537		7.75	0.02	0.75	128.5	80	0.25	0.05	34.2	0.12	12.65	3.0	8	2.22	8.7	0.59
W230538		3.68	0.07	0.40	281	60	0.15	0.05	34.2	0.03	7.33	1.6	5	1.02	5.2	0.36
W230539		4.03	3.31	1.04	>10000	70	0.12	0.07	11.85	4.68	19.55	3.5	19	2.14	11.6	1.40
W230540		6.20	0.01	0.06	45.4	70	<0.05	0.04	21.0	0.07	1.22	0.8	2	0.18	3.0	0.48
W230541		7.70	1.10	0.75	2850	80	0.21	0.05	32.6	0.22	12.90	2.7	10	1.64	8.3	0.66
W230542		3.95	0.14	0.68	177.5	100	0.28	0.06	33.9	0.04	11.05	2.5	7	1.59	6.4	0.55
W230543		5.11	0.03	1.96	4810	140	0.54	0.11	28.1	0.07	29.9	6.7	20	4.61	17.8	1.33
W230544		3.75	1.69	2.52	>10000	120	0.41	0.14	9.56	1.66	42.7	9.3	31	5.47	35.2	2.49
W230545		0.25	0.68	4.51	8680	240	0.74	0.22	3.55	0.55	52.5	14.6	61	12.50	60.6	4.34
W230546		3.57	0.01	0.41	897	30	0.17	0.04	24.7	<0.02	6.03	1.6	6	1.04	5.6	1.39
W230547		8.08	0.01	0.20	461	30	0.10	0.03	26.7	<0.02	4.88	0.9	2	0.44	3.0	1.09
W230548		8.12	0.02	0.50	100.5	100	0.22	0.04	33.5	0.07	8.90	2.0	6	1.38	5.7	0.51
W230549		8.10	0.03	1.30	95.8	200	0.35	0.08	30.6	0.14	22.9	4.7	14	3.85	13.2	0.93

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Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184182

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230514		1.79	0.12	0.3	0.516	0.007	0.32	5.0	2.6	0.38	169	0.35	0.01	0.9	3.1	370
W230515		1.09	0.13	0.2	0.362	<0.005	0.18	3.3	1.7	0.82	190	0.19	0.01	0.5	1.8	520
W230516		1.80	0.16	0.3	0.498	0.006	0.31	5.6	2.6	0.61	246	0.34	0.01	0.9	3.2	530
W230517		2.49	0.16	0.5	0.751	0.009	0.42	7.3	3.8	0.48	200	0.43	0.01	1.3	4.6	210
W230518		1.70	0.07	0.3	1.065	0.015	0.30	5.9	1.7	0.41	206	0.37	0.01	0.9	3.3	370
W230519		2.67	0.07	0.5	2.93	0.015	0.48	8.4	2.9	0.46	177	0.51	0.01	1.4	5.4	250
W230520		1.32	0.07	0.2	1.915	0.009	0.22	4.5	2.0	0.39	227	0.25	0.01	0.7	2.5	430
W230521		1.41	0.10	0.3	1.815	0.007	0.23	4.6	2.2	0.40	236	0.27	0.01	0.7	2.9	440
W230522		1.59	0.08	0.3	3.19	0.015	0.27	5.6	2.3	0.30	334	0.31	0.01	0.9	3.2	250
W230523		1.56	0.08	0.3	2.83	0.009	0.27	5.4	2.7	0.31	155	0.29	0.01	0.8	3.2	200
W230524		10.60	0.13	1.8	29.6	0.041	1.73	24.4	12.8	0.36	757	3.62	0.02	5.5	26.5	520
W230525		2.82	0.07	0.5	3.96	0.015	0.48	7.7	3.5	0.38	241	0.52	0.01	1.5	5.9	310
W230526		6.92	0.11	1.3	9.86	0.024	1.20	17.8	7.4	0.65	324	1.75	0.01	3.5	15.4	240
W230527		3.15	0.08	0.6	5.39	0.013	0.57	9.1	3.2	0.50	352	0.59	0.01	1.7	6.6	350
W230528		9.54	0.12	1.7	34.4	0.029	1.56	29.7	19.1	0.24	353	2.25	0.01	4.6	20.1	390
W230529		11.95	0.13	2.0	38.2	0.031	1.92	31.4	20.1	0.30	330	3.11	0.01	5.5	24.5	300
W230530		0.17	0.09	<0.1	0.037	0.005	0.01	0.5	0.8	13.35	214	0.11	<0.01	0.1	1.5	170
W230531		2.53	0.06	0.6	4.87	0.012	0.41	6.8	3.5	0.29	936	0.48	0.01	1.2	5.3	220
W230532		3.45	0.06	0.6	4.26	0.011	0.58	9.7	3.5	1.02	382	0.75	0.01	1.7	7.1	250
W230533		3.09	0.08	0.6	3.68	0.016	0.54	8.8	3.2	0.51	330	0.58	0.01	1.6	6.4	350
W230534		1.68	0.07	0.3	1.405	0.007	0.29	5.6	2.3	0.47	226	0.31	0.01	0.9	3.6	350
W230535		1.93	0.07	0.4	1.655	0.009	0.34	6.1	2.7	0.48	228	0.38	0.01	1.1	4.3	360
W230536		3.90	0.06	0.7	2.43	0.013	0.69	11.1	5.3	0.65	247	0.63	0.01	2.1	9.1	540
W230537		2.04	0.08	0.4	2.79	0.009	0.32	6.2	3.2	0.45	242	0.30	0.01	1.0	4.4	350
W230538		1.17	0.08	0.2	2.50	0.008	0.18	3.7	1.5	0.55	730	0.24	0.01	0.6	2.3	410
W230539		3.19	0.10	0.5	21.5	0.023	0.43	10.1	37.2	0.11	890	1.03	<0.01	1.2	6.4	450
W230540		0.19	0.07	<0.1	0.020	<0.005	0.02	0.6	1.2	13.25	207	0.16	<0.01	0.2	1.9	170
W230541		2.03	0.08	0.4	6.70	0.008	0.35	6.6	5.6	0.23	845	0.53	0.01	1.0	4.4	410
W230542		1.83	0.06	0.3	2.43	0.006	0.32	6.0	2.2	0.45	591	0.28	0.01	1.0	3.8	530
W230543		5.47	0.09	1.0	5.50	0.024	0.94	15.1	6.2	0.57	690	0.84	0.01	2.7	11.0	190
W230544		7.13	0.13	1.3	39.5	0.048	1.14	21.2	17.5	0.31	902	1.45	0.01	3.3	16.5	1630
W230545		12.70	0.09	2.3	24.9	0.027	2.09	27.6	16.7	0.32	585	5.72	0.02	6.6	35.1	440
W230546		1.07	<0.05	0.2	2.51	<0.005	0.18	2.8	1.6	7.97	1460	0.37	0.01	0.5	3.0	480
W230547		0.56	<0.05	0.1	1.935	0.006	0.08	2.1	1.1	6.31	1000	0.14	0.01	0.3	1.4	460
W230548		1.32	0.06	0.3	1.540	0.006	0.24	4.1	2.4	1.01	401	0.19	0.01	0.7	3.0	990
W230549		3.37	0.07	0.7	2.10	0.014	0.63	10.8	5.9	0.70	178	0.33	0.01	1.9	7.7	300

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CERTIFICATE OF ANALYSIS WH17184182

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230514		3.2	12.8	0.002	0.43	0.23	1.6	1	0.3	1755	0.07	<0.05	1.10	0.036	1.16	2.1
W230515		1.8	7.5	0.002	0.26	0.18	1.1	2	<0.2	1415	<0.05	<0.05	0.67	0.021	0.72	1.9
W230516		2.5	12.9	<0.002	0.44	0.22	1.9	1	0.2	1520	0.07	<0.05	1.17	0.034	1.14	2.1
W230517		3.6	17.7	0.002	0.57	0.31	2.4	2	0.4	1825	0.09	<0.05	1.54	0.047	2.12	2.5
W230518		3.9	12.5	<0.002	0.43	0.64	1.7	1	0.3	1490	0.06	0.08	1.08	0.035	1.81	1.9
W230519		4.0	20.7	0.003	0.67	0.85	2.4	1	0.3	1430	0.10	0.06	1.70	0.057	3.78	2.1
W230520		2.1	9.8	<0.002	0.34	1.00	1.3	1	0.2	1370	0.05	<0.05	0.84	0.027	2.22	1.7
W230521		2.3	10.4	0.002	0.36	1.03	1.4	1	0.2	1430	0.05	<0.05	0.92	0.028	2.29	1.8
W230522		2.5	11.8	0.002	0.47	1.46	3.3	1	0.2	1045	0.06	<0.05	1.06	0.033	5.06	1.9
W230523		2.4	12.2	0.002	0.40	0.65	1.7	1	0.2	1585	0.06	<0.05	1.05	0.033	4.34	1.9
W230524		16.3	81.2	0.003	3.46	106.0	8.1	2	1.9	434	0.39	0.13	6.66	0.219	62.1	3.9
W230525		3.6	21.4	0.003	0.83	7.14	3.0	1	0.6	1495	0.11	<0.05	1.74	0.062	7.47	2.2
W230526		8.5	55.0	0.005	1.68	7.68	5.9	2	0.9	1085	0.26	0.07	4.19	0.140	18.90	3.3
W230527		4.4	24.0	0.003	1.08	11.10	3.1	1	0.5	1505	0.12	<0.05	2.05	0.065	11.60	2.4
W230528		13.3	70.9	0.006	5.34	162.0	4.7	3	1.6	229	0.34	0.17	5.74	0.188	61.8	5.2
W230529		16.6	84.4	0.010	4.91	152.0	3.6	4	1.5	225	0.43	0.22	6.88	0.229	62.6	5.5
W230530		1.4	0.7	<0.002	0.01	0.30	0.1	1	<0.2	51.7	<0.05	<0.05	0.05	<0.005	0.11	0.5
W230531		5.5	18.1	<0.002	1.42	49.3	4.0	1	0.3	1605	0.09	<0.05	1.48	0.050	9.42	2.0
W230532		5.1	24.5	0.003	0.85	5.35	3.5	1	0.5	1725	0.13	<0.05	2.11	0.068	8.32	2.6
W230533		8.2	22.5	0.002	0.80	2.56	3.1	1	0.5	1380	0.11	<0.05	2.03	0.062	5.51	2.4
W230534		4.1	12.1	<0.002	0.45	0.38	1.8	1	0.2	1440	0.06	<0.05	1.15	0.036	2.55	1.9
W230535		5.3	13.7	0.002	0.51	0.46	1.9	1	0.5	1425	0.08	<0.05	1.37	0.043	3.14	2.1
W230536		6.7	29.2	0.002	0.90	0.65	3.6	1	0.6	1355	0.15	<0.05	2.46	0.089	4.11	2.9
W230537		3.9	13.8	<0.002	0.53	0.39	1.9	1	0.3	1365	0.08	<0.05	1.25	0.045	4.08	1.9
W230538		2.6	7.9	<0.002	0.33	2.74	1.4	1	0.2	1070	<0.05	<0.05	0.75	0.022	4.85	1.6
W230539		8.3	18.8	<0.002	4.57	237	1.9	6	0.4	316	0.09	0.24	1.66	0.050	32.4	3.5
W230540		1.2	1.1	<0.002	0.01	0.27	0.2	<1	<0.2	47.8	<0.05	<0.05	0.08	<0.005	0.04	0.5
W230541		4.8	15.0	<0.002	0.77	22.7	1.6	1	0.3	1020	0.08	0.07	1.29	0.041	13.80	2.5
W230542		3.0	13.6	<0.002	0.51	2.76	2.0	1	0.2	1410	0.07	<0.05	1.23	0.037	5.94	1.6
W230543		7.1	41.2	0.002	1.50	6.08	5.1	1	0.6	1130	0.20	<0.05	3.32	0.107	13.65	2.2
W230544		19.0	50.7	0.004	8.29	111.5	4.3	2	2.2	375	0.24	0.13	4.39	0.128	86.8	6.0
W230545		15.8	96.0	0.002	4.22	101.0	7.4	2	2.4	241	0.50	0.15	7.29	0.297	97.8	4.1
W230546		4.3	7.4	0.003	0.38	2.50	1.2	1	0.2	335	<0.05	<0.05	0.58	0.022	5.27	1.6
W230547		2.8	3.5	<0.002	0.21	1.56	0.9	1	<0.2	507	<0.05	<0.05	0.30	0.010	3.68	1.2
W230548		1.9	10.1	<0.002	0.34	0.29	1.4	1	0.2	1565	0.05	<0.05	0.85	0.029	2.65	1.4
W230549		4.3	26.4	<0.002	0.83	0.39	3.3	1	0.5	2170	0.13	<0.05	2.34	0.080	3.90	2.5

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 27- SEP- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17184182

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230514		11	0.3	9.0	6	11.2		<0.01
W230515		7	0.3	7.9	3	7.3		<0.01
W230516		12	0.5	11.4	8	12.5		<0.01
W230517		15	0.7	12.5	9	15.8		<0.01
W230518		11	0.8	11.0	16	11.0		<0.01
W230519		17	1.4	11.6	10	16.5		<0.01
W230520		9	0.8	9.1	62	9.4		<0.01
W230521		9	0.8	9.4	51	9.8		0.01
W230522		11	1.1	12.2	7	10.5		0.07
W230523		10	0.9	10.3	8	10.2		0.03
W230524		62	8.1	21.8	131	63.8	3.50	7.88
W230525		18	1.3	10.8	13	19.3		0.08
W230526		45	3.6	16.8	37	42.6		0.29
W230527		21	1.7	12.8	15	19.8		1.71
W230528		65	5.3	24.7	69	55.7	6.31	14.55
W230529		80	6.9	30.9	144	70.3	3.92	16.55
W230530		2	0.1	0.8	19	<0.5		0.01
W230531		17	1.7	15.6	19	15.7	1.420	1.71
W230532		22	1.6	14.8	20	20.8		0.63
W230533		19	1.6	14.0	14	18.9		0.05
W230534		11	0.8	11.2	7	11.5		<0.01
W230535		13	1.0	11.1	6	13.7		0.01
W230536		26	1.6	13.8	16	25.5		0.01
W230537		14	1.4	10.5	29	12.7		<0.01
W230538		8	0.7	8.8	4	7.8		0.10
W230539		18	1.5	10.5	342	16.5	7.84	10.90
W230540		2	0.1	0.8	16	<0.5		<0.01
W230541		13	1.2	10.9	21	13.0		2.54
W230542		11	1.0	10.5	10	13.2		0.11
W230543		32	2.6	14.0	20	32.2		0.15
W230544		44	3.7	15.7	256	43.8	13.85	2.43
W230545		84	5.9	20.0	79	75.0		12.90
W230546		7	0.7	6.3	3	6.7		0.03
W230547		4	0.4	5.9	2	4.0		0.01
W230548		10	0.6	7.7	8	10.3		<0.01
W230549		23	1.2	15.3	19	23.2		<0.01

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 27- SEP- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17184182

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE WH17189024

Project: Nadaleen

P.O. No.: N17- 079

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 5- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

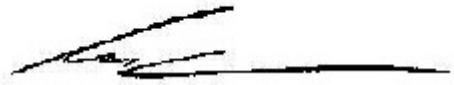
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189024

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230550		8.88	0.04	1.85	63.3	180	0.42	0.09	28.6	0.23	29.4	5.8	19	6.21	17.1	1.20
W230551		8.53	0.02	1.04	23.1	210	0.32	0.06	32.1	0.14	17.40	3.4	11	3.69	10.1	0.82
W230552		8.61	0.73	2.29	55.5	190	0.59	0.10	26.8	0.15	31.0	8.1	26	9.35	22.3	1.72
W230553		8.12	0.03	2.03	79.2	160	0.58	0.10	28.8	0.17	33.1	6.6	20	6.88	19.5	1.43
W230554		0.04	0.03	2.16	76.8	180	0.66	0.10	28.0	0.16	34.1	7.0	21	7.41	20.0	1.50
W230555		8.86	0.03	1.77	154.0	110	0.48	0.09	24.2	0.05	27.1	5.7	18	4.77	16.9	1.67
W230556		8.51	0.02	0.79	240	80	0.25	0.05	27.8	0.03	14.20	2.9	8	1.88	8.5	0.91
W230557		7.68	0.04	1.35	114.5	110	0.34	0.07	31.1	0.07	21.1	4.9	15	3.21	14.6	0.99
W230558		3.63	0.03	1.24	97.9	100	0.30	0.07	30.1	0.05	20.0	4.3	14	2.99	13.0	0.88
W230559		7.77	0.03	0.82	428	60	0.21	0.04	24.0	0.03	14.10	2.8	9	1.80	9.3	0.97
W230560		7.55	0.01	0.31	57.3	20	0.15	0.02	22.2	0.05	5.92	1.1	4	0.63	3.6	0.65
W230561		0.25	0.65	1.87	>10000	140	0.51	2.51	25.8	0.16	26.4	4.6	26	6.02	14.3	1.35
W230562		8.70	0.01	0.62	106.5	40	0.20	0.04	25.5	0.02	9.66	2.0	6	1.58	6.2	0.72
W230563		7.85	0.02	0.56	49.6	90	0.23	0.04	32.8	0.03	10.50	2.1	6	1.26	6.7	0.57
W230564		7.10	0.38	0.49	>10000	70	0.16	0.03	30.9	0.53	9.46	1.9	6	1.20	6.3	0.98
W230565		4.97	<0.01	0.06	22.4	40	0.06	0.03	21.0	0.06	1.11	0.6	1	0.45	1.7	0.49
W230566		7.97	0.02	0.41	63.7	60	0.11	0.04	28.2	0.03	8.06	1.8	4	0.87	7.6	0.93
W230567		7.58	0.02	0.39	255	30	0.13	0.03	22.9	0.04	8.87	1.8	4	0.86	7.2	1.52
W230568		6.79	0.01	0.38	46.8	120	0.15	0.03	34.9	0.02	7.58	1.9	4	1.02	6.1	0.33
W230569		7.17	0.02	0.54	31.6	110	0.19	0.04	34.8	0.03	9.42	2.5	6	1.50	7.5	0.40
W230570		6.40	0.01	0.28	27.0	60	0.12	0.02	34.3	0.02	5.06	1.4	3	0.65	4.2	0.29
W230571		3.32	0.36	6.53	7.2	270	1.69	0.26	9.63	0.02	80.7	10.1	49	6.91	32.3	3.17
W230572		9.75	0.07	6.93	9.5	260	1.74	0.29	4.35	0.02	84.0	14.9	55	7.45	27.5	3.94
W230573		9.64	0.04	5.58	9.8	220	1.31	0.22	5.82	0.03	68.9	11.6	47	6.03	21.7	3.24
W230574		8.07	0.04	6.10	10.6	240	1.51	0.26	10.70	0.05	75.9	9.7	52	6.82	23.3	2.97
W230575		10.04	0.04	8.02	15.5	260	2.04	0.35	1.35	0.02	97.8	16.9	67	11.55	37.8	4.39
W230576		9.24	0.04	7.78	5.6	260	2.03	0.32	2.10	0.03	89.4	13.9	66	9.53	34.5	4.20
W230577		0.25	0.10	3.56	2540	190	0.89	0.15	17.75	0.13	41.1	10.4	40	10.20	41.6	2.89
W230578		8.85	0.04	6.20	12.7	200	1.61	0.25	5.12	0.02	73.8	16.4	52	7.03	26.6	4.15
W230579		10.83	0.05	8.77	10.9	290	2.06	0.34	1.46	<0.02	96.8	15.3	70	10.60	35.7	4.20
W230580		11.69	0.05	6.79	13.7	250	1.64	0.26	6.95	0.04	79.2	14.5	52	8.90	27.3	3.43
W230581		10.00	0.03	4.95	10.4	200	1.20	0.19	17.25	0.03	63.8	8.8	39	6.51	19.0	2.68
W230582		11.14	0.04	5.58	8.9	240	1.31	0.19	15.65	0.06	68.0	9.4	46	7.72	20.6	2.65
W230583		10.29	0.03	3.31	5.6	1190	0.83	0.13	23.1	0.04	43.5	5.7	28	3.99	12.7	1.87
W230584		11.84	0.05	5.57	8.4	310	1.31	0.22	14.40	0.04	66.5	9.0	42	7.75	18.9	2.52
W230585		5.26	0.01	0.04	<0.2	30	<0.05	0.03	20.6	0.05	1.12	0.8	1	0.11	1.9	0.46

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189024

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230550		4.58	0.07	1.0	2.49	0.023	0.87	16.4	6.4	0.99	247	0.47	0.02	2.7	6.7	250
W230551		2.56	0.06	0.5	0.535	0.013	0.49	8.8	3.9	0.95	324	0.42	0.02	1.5	2.3	690
W230552		5.66	0.07	1.2	1.105	0.024	1.08	16.8	8.4	0.81	313	0.60	0.02	3.2	10.9	250
W230553		5.26	0.07	1.1	1.700	0.023	0.95	17.3	7.6	0.70	360	0.52	0.02	3.2	8.0	380
W230554		5.53	0.09	1.2	1.615	0.028	1.01	18.0	8.4	0.73	362	0.57	0.02	3.3	8.6	330
W230555		4.55	0.07	0.9	3.01	0.021	0.82	13.9	5.7	4.77	663	0.44	0.01	2.6	6.9	1190
W230556		2.08	0.08	0.4	2.01	0.010	0.36	7.1	2.8	5.28	525	0.33	0.01	1.1	1.7	270
W230557		3.45	0.09	0.7	2.39	0.013	0.64	10.5	4.8	2.15	228	0.62	0.01	2.0	4.3	620
W230558		3.07	0.08	0.6	2.20	0.014	0.59	9.9	4.3	2.45	240	0.56	0.01	1.8	3.9	510
W230559		2.18	0.10	0.4	2.36	0.011	0.37	6.9	3.3	6.78	500	0.39	0.01	1.1	2.1	280
W230560		0.88	0.12	0.2	0.874	0.005	0.13	2.9	1.5	10.95	604	0.14	0.01	0.4	<0.2	340
W230561		4.70	0.10	0.9	6.94	0.021	0.92	13.6	8.7	0.89	2280	1.69	0.01	2.5	9.2	330
W230562		1.65	0.08	0.3	1.480	0.008	0.29	4.8	2.4	7.49	439	0.18	0.01	1.0	0.4	140
W230563		1.48	0.09	0.3	1.030	0.005	0.26	5.2	2.0	1.32	282	0.23	0.01	0.8	<0.2	450
W230564		1.33	0.09	0.3	2.75	0.009	0.22	4.3	2.1	3.18	1160	0.20	0.01	0.6	<0.2	250
W230565		0.24	0.16	<0.1	<0.005	<0.005	0.03	0.6	1.2	12.65	217	0.11	<0.01	0.2	<0.2	170
W230566		1.20	0.10	0.2	0.974	0.005	0.19	3.3	1.8	4.32	596	0.47	0.01	0.6	4.6	300
W230567		1.16	0.09	0.2	1.565	0.007	0.17	3.7	1.9	9.70	1020	0.23	0.01	0.5	3.3	340
W230568		1.07	0.09	0.2	0.670	0.005	0.18	3.2	2.0	0.48	135	0.26	0.01	0.6	3.3	500
W230569		1.53	0.12	0.3	0.952	0.005	0.25	4.0	2.6	0.55	145	0.29	0.01	0.8	4.4	590
W230570		0.83	0.11	0.1	0.693	<0.005	0.13	2.0	1.5	0.96	224	0.15	0.01	0.4	2.4	520
W230571		16.40	0.16	2.4	0.039	0.054	2.01	40.0	85.5	0.85	512	0.61	0.35	8.3	22.2	460
W230572		17.40	0.18	2.5	0.022	0.052	2.16	41.2	69.6	1.20	927	0.67	0.32	8.7	28.5	570
W230573		13.95	0.16	2.2	0.071	0.037	1.80	34.2	61.9	1.01	832	0.84	0.30	7.0	21.9	520
W230574		15.50	0.17	2.2	0.198	0.046	1.97	37.2	101.5	1.03	594	0.83	0.33	7.8	21.9	590
W230575		20.6	0.20	2.9	0.036	0.056	2.41	48.1	103.0	1.33	529	0.81	0.28	10.1	34.5	790
W230576		20.1	0.18	2.9	0.016	0.061	2.43	44.0	92.0	1.36	598	0.69	0.29	9.8	30.1	620
W230577		9.83	0.12	1.9	3.52	0.036	1.67	19.0	9.0	1.35	1150	1.63	0.02	6.1	23.6	360
W230578		15.75	0.18	2.3	0.033	0.045	1.85	36.8	78.3	1.47	787	0.76	0.24	7.7	27.6	490
W230579		21.6	0.20	2.9	0.023	0.065	2.78	48.9	133.5	1.38	431	0.63	0.32	10.4	33.3	470
W230580		16.75	0.16	2.5	0.029	0.048	2.23	39.4	64.6	1.60	693	0.53	0.31	8.4	26.7	670
W230581		12.20	0.14	1.8	0.136	0.034	1.60	31.0	54.4	0.84	517	0.78	0.34	6.2	19.0	610
W230582		13.80	0.15	2.1	0.118	0.040	1.83	34.0	54.1	0.95	322	0.65	0.46	7.2	20.6	760
W230583		8.47	0.11	1.2	0.063	0.024	0.99	20.9	52.5	0.63	288	0.50	0.30	4.2	12.9	1000
W230584		14.00	0.16	2.0	0.078	0.034	1.74	33.2	87.2	0.94	402	0.49	0.45	7.1	20.0	610
W230585		0.18	0.13	<0.1	<0.005	<0.005	0.01	0.5	1.3	12.40	197	0.07	<0.01	0.1	1.9	160

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189024

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230550		6.3	37.2	<0.002	1.08	0.37	4.0	1	0.6	2030	0.20	<0.05	3.24	0.115	4.23	2.8
W230551		3.6	20.0	<0.002	0.57	0.21	2.5	1	0.4	1865	0.11	<0.05	1.75	0.062	2.10	2.0
W230552		7.0	45.2	<0.002	1.37	0.34	5.6	1	0.8	1920	0.25	<0.05	3.38	0.172	3.58	2.3
W230553		6.9	41.2	0.003	1.17	0.44	5.2	1	0.7	1995	0.24	<0.05	3.44	0.129	4.69	2.8
W230554		7.2	44.4	<0.002	1.20	0.45	5.4	1	0.7	1920	0.25	<0.05	3.69	0.137	4.72	2.7
W230555		9.7	33.9	<0.002	1.02	1.55	4.5	1	0.6	707	0.19	<0.05	2.87	0.110	5.28	2.6
W230556		6.9	14.6	<0.002	0.55	3.23	2.2	<1	0.3	733	0.08	<0.05	1.39	0.045	4.38	2.2
W230557		8.4	26.7	0.003	0.91	2.61	3.3	1	0.5	1160	0.15	<0.05	2.29	0.085	4.16	2.9
W230558		7.2	23.1	0.002	0.80	2.32	3.0	1	0.4	1010	0.13	0.05	2.08	0.079	3.46	2.6
W230559		13.0	15.1	<0.002	0.63	4.93	2.2	<1	0.3	550	0.08	<0.05	1.37	0.047	3.62	1.9
W230560		4.8	5.4	<0.002	0.20	2.07	0.9	1	0.2	236	<0.05	<0.05	0.53	0.017	1.58	1.3
W230561		6.9	38.5	<0.002	1.38	43.0	5.1	1	0.7	1010	0.20	<0.05	3.18	0.088	21.7	6.0
W230562		7.4	12.0	<0.002	0.37	2.69	1.4	<1	0.2	651	0.07	<0.05	1.01	0.039	2.64	1.5
W230563		6.3	10.8	<0.002	0.43	1.76	1.4	1	0.2	1805	0.06	<0.05	0.99	0.032	2.23	1.7
W230564		7.4	9.0	<0.002	1.19	71.5	1.5	3	0.3	1340	0.05	0.14	0.81	0.027	5.47	1.6
W230565		1.3	2.3	<0.002	0.01	0.18	0.1	<1	<0.2	50.9	<0.05	<0.05	0.09	<0.005	0.06	0.8
W230566		5.7	7.6	<0.002	0.32	2.23	1.3	1	0.2	953	<0.05	<0.05	0.69	0.026	1.85	1.4
W230567		4.5	6.9	<0.002	0.28	2.49	1.2	<1	0.4	436	<0.05	<0.05	0.69	0.021	2.60	1.4
W230568		5.1	7.3	<0.002	0.30	0.82	1.1	1	0.2	1900	<0.05	<0.05	0.72	0.022	1.13	1.9
W230569		3.1	10.5	<0.002	0.39	0.94	1.5	1	0.2	1900	0.05	<0.05	0.94	0.033	1.83	2.1
W230570		2.5	5.2	<0.002	0.19	1.21	0.8	1	0.2	1340	<0.05	<0.05	0.48	0.018	1.29	1.6
W230571		10.6	93.1	<0.002	0.17	0.44	10.0	<1	2.0	319	0.60	<0.05	11.70	0.293	0.48	2.2
W230572		19.9	99.5	<0.002	0.88	0.52	11.2	<1	2.1	151.0	0.62	<0.05	12.95	0.300	0.50	2.8
W230573		19.8	81.7	<0.002	1.16	0.47	8.8	1	1.7	184.5	0.50	<0.05	10.20	0.245	0.46	2.3
W230574		15.0	89.6	<0.002	1.73	0.37	9.7	1	1.8	407	0.56	<0.05	11.10	0.265	0.69	2.6
W230575		27.3	116.0	<0.002	0.82	0.85	14.0	<1	2.5	132.0	0.73	0.07	15.20	0.350	0.62	2.8
W230576		14.5	109.5	<0.002	0.32	0.36	12.9	1	2.3	123.5	0.73	0.05	14.00	0.334	0.59	2.8
W230577		8.6	74.6	0.002	2.43	9.55	8.6	1	1.5	694	0.40	0.07	5.91	0.260	10.80	2.3
W230578		18.8	87.4	<0.002	0.64	0.50	10.3	<1	1.9	182.0	0.56	0.08	11.30	0.268	0.41	2.4
W230579		16.3	130.0	<0.002	0.44	0.44	13.8	<1	2.4	124.0	0.78	0.05	16.05	0.374	0.61	2.9
W230580		18.7	101.5	<0.002	0.71	0.50	11.0	<1	1.9	194.5	0.61	<0.05	11.95	0.301	0.52	2.9
W230581		16.7	73.5	<0.002	1.48	0.40	7.7	1	1.5	524	0.44	<0.05	8.96	0.206	0.52	2.6
W230582		13.9	85.5	0.002	1.71	0.33	8.5	1	1.7	381	0.51	<0.05	9.85	0.242	0.51	2.8
W230583		8.6	46.1	<0.002	1.29	0.21	5.2	1	1.0	613	0.30	<0.05	5.84	0.140	0.31	2.3
W230584		13.9	81.7	<0.002	1.65	0.33	8.4	1	1.6	387	0.50	<0.05	10.05	0.235	0.47	2.7
W230585		1.2	0.7	<0.002	<0.01	0.05	0.2	1	<0.2	48.9	<0.05	<0.05	0.06	<0.005	<0.02	0.5

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Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189024

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230550		33	1.3	17.8	30	32.8		<0.01
W230551		19	0.5	13.2	16	18.9		<0.01
W230552		48	4.1	18.7	35	39.1		<0.01
W230553		36	2.2	21.5	27	38.8		<0.01
W230554		39	2.1	21.7	29	39.9		<0.01
W230555		33	2.9	16.3	12	33.8		<0.01
W230556		14	1.4	12.4	3	14.7		0.03
W230557		25	2.1	14.3	5	22.1		<0.01
W230558		24	1.8	14.1	3	19.7		<0.01
W230559		15	1.5	9.6	4	12.9		0.03
W230560		6	0.4	5.8	15	5.5		0.03
W230561		33	16.6	14.4	23	29.9	1.325	2.72
W230562		11	1.0	7.9	3	9.9		0.10
W230563		10	0.9	8.4	4	9.6		0.01
W230564		9	0.8	7.8	49	8.6	1.500	2.24
W230565		2	0.1	0.7	19	<0.5		<0.01
W230566		8	0.9	7.1	5	7.6		0.03
W230567		8	0.5	7.0	6	7.0		0.06
W230568		7	0.7	6.1	3	7.7		<0.01
W230569		10	1.0	6.9	6	10.0		0.01
W230570		6	0.6	4.5	3	5.7		0.06
W230571		62	2.7	15.7	47	80.4		<0.01
W230572		66	1.3	17.7	61	92.9		<0.01
W230573		54	1.0	14.3	69	75.1		0.01
W230574		57	1.1	15.4	75	75.5		<0.01
W230575		83	1.4	21.4	102	99.7		<0.01
W230576		79	1.4	19.4	63	93.4		<0.01
W230577		72	5.6	15.5	47	65.5		0.50
W230578		61	1.1	15.6	63	76.1		<0.01
W230579		84	1.5	17.4	77	97.9		<0.01
W230580		66	1.3	17.0	67	82.4		<0.01
W230581		45	0.9	13.4	51	60.8		<0.01
W230582		53	1.1	15.0	66	72.9		<0.01
W230583		29	0.7	9.9	36	43.5		<0.01
W230584		49	1.0	12.9	82	66.3		<0.01
W230585		2	0.1	0.7	17	<0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189024

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
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Finalized Date: 10- OCT- 2017
Account: RCM

CERTIFICATE WH17189035

Project: Nadaleen

P.O. No.: N17- 080

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 5- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

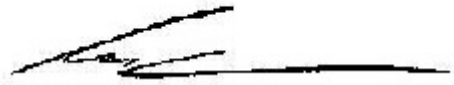
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17189035

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232261		12.09	0.18	8.58	12.8	290	2.10	0.36	1.98	0.13	89.0	17.0	95	27.0	46.7	4.77
W232262		12.31	0.07	8.43	16.3	340	2.28	0.26	1.54	0.10	91.1	15.9	87	31.9	33.3	4.20
W232263		7.84	0.04	7.86	15.4	380	2.01	0.29	4.47	0.05	77.8	11.5	69	32.0	35.0	3.53
W232264		5.17	0.09	2.21	16.3	870	0.69	0.06	23.7	0.05	27.3	6.1	22	6.62	8.7	1.98
W232265		11.98	0.07	0.84	10.5	2100	0.34	0.03	30.7	0.04	11.35	2.5	10	2.64	6.4	0.69
W232266		12.52	0.05	1.71	20.0	350	0.65	0.05	25.5	0.09	20.8	2.9	19	4.59	12.2	0.78
W232267		13.00	0.05	1.75	16.0	210	0.67	0.05	27.8	0.08	20.1	3.3	18	5.85	9.1	0.68
W232268		12.62	0.06	2.50	190.5	160	0.93	0.06	17.75	0.09	33.1	3.8	29	6.61	13.0	1.29
W232269		11.55	0.06	2.86	106.5	130	1.09	0.07	17.55	0.09	34.1	4.1	31	8.22	20.1	1.11
W232270		11.86	0.03	1.22	25.5	330	0.51	0.03	24.1	0.07	16.70	2.0	12	4.01	21.4	0.63
W232271		11.11	0.05	1.52	17.5	80	0.65	0.04	26.4	0.05	17.70	2.4	17	5.98	5.5	0.55
W232272		11.50	0.05	2.90	32.0	120	1.14	0.07	16.90	0.06	36.0	3.6	30	13.25	13.6	0.87
W232273		11.67	0.06	1.14	3850	160	0.44	0.04	19.30	0.03	14.55	2.0	11	3.81	4.9	0.56
W232274		10.78	0.06	2.04	148.0	160	0.75	0.05	14.00	0.03	25.6	2.2	23	6.65	7.6	0.91
W232275		10.80	0.08	3.50	49.7	240	1.48	0.08	15.75	0.04	39.4	5.0	32	16.10	12.8	1.28
W232276		10.67	0.09	3.57	63.4	240	1.27	0.08	20.8	0.26	38.8	5.7	32	16.35	15.3	1.16
W232277		10.62	0.04	1.99	27.4	120	0.81	0.05	26.9	0.15	25.4	2.9	21	10.00	8.3	0.68
W232278		5.51	0.05	2.05	27.2	170	0.81	0.05	27.5	0.14	27.2	3.1	21	11.25	9.8	0.68
W232279		11.18	0.05	2.36	19.2	390	0.86	0.06	25.2	0.13	27.8	3.5	26	12.80	10.1	0.83
W232280		10.51	0.05	1.69	19.4	100	0.60	0.05	26.9	0.13	19.45	2.5	20	6.25	6.6	0.75
W232281		7.05	<0.01	0.07	0.8	60	0.09	0.02	21.1	0.08	1.42	0.8	1	0.18	2.1	0.47
W232282		11.01	0.08	3.34	441	180	1.17	0.17	19.20	0.08	37.0	5.1	36	13.75	13.5	1.22
W232283		0.25	0.18	3.86	6040	210	0.90	0.14	11.70	0.16	41.2	11.0	47	10.70	34.1	2.88
W232284		10.75	0.05	1.90	19.5	100	0.71	0.06	25.8	0.06	23.3	3.4	22	8.88	12.1	0.74
W232285		10.38	0.04	2.19	21.1	110	0.79	0.06	26.3	0.14	26.6	3.5	26	11.90	15.1	0.76
W232286		<0.02	0.04	2.02	19.2	100	0.64	0.06	27.0	0.11	24.9	3.4	23	10.75	14.7	0.71
W232287		11.66	0.08	0.96	14.1	690	0.33	0.04	33.4	0.19	12.85	1.9	12	4.59	5.7	0.58
W232288		10.98	0.09	0.95	27.8	110	0.34	0.03	34.3	0.22	13.65	2.0	14	4.11	5.9	0.43
W232289		10.47	0.03	1.85	87.7	240	0.68	0.06	27.9	0.08	22.8	3.2	21	7.31	12.1	0.74
W232290		10.70	0.04	2.70	384	110	1.06	0.08	23.8	0.08	31.0	3.6	29	9.80	19.5	0.82
W232291		0.23	0.64	1.91	>10000	150	0.51	2.75	26.2	0.15	28.2	4.5	28	6.07	14.5	1.38
W232292		10.12	0.04	0.82	441	50	0.30	0.03	32.9	0.19	13.20	1.3	10	2.02	7.3	0.32
W232293		9.39	0.26	2.82	6610	170	0.82	0.08	22.0	0.50	35.1	4.5	33	6.53	17.9	1.01
W232294		4.30	0.56	3.46	>10000	110	0.82	0.10	10.30	0.97	50.2	5.8	42	7.98	18.6	1.59
W232295		7.51	0.01	0.06	9.3	30	0.06	0.02	20.9	0.06	1.23	0.7	1	0.39	0.8	0.47
W232296		7.17	0.15	3.73	192.5	140	1.33	0.09	15.95	0.12	45.5	6.4	43	15.20	17.3	1.41

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189035

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232261		21.4	0.14	2.9	0.031	0.071	3.10	46.5	180.5	2.14	1360	0.42	0.07	12.3	47.5	580
W232262		21.2	0.17	3.0	0.040	0.066	3.16	47.5	165.5	1.96	810	0.35	0.06	12.4	46.8	600
W232263		19.35	0.13	2.9	0.022	0.059	2.99	42.1	118.5	2.89	1400	0.25	0.06	11.9	42.4	570
W232264		5.40	0.07	1.0	0.075	0.014	0.82	14.2	22.6	2.30	1200	0.56	0.01	3.1	11.0	310
W232265		2.12	0.05	0.6	0.062	0.006	0.40	6.2	3.1	1.95	428	1.06	<0.01	1.4	4.8	140
W232266		4.24	0.08	1.5	0.156	0.013	0.82	11.1	5.8	2.40	267	0.34	0.01	2.9	6.0	290
W232267		4.31	0.11	1.2	0.164	0.015	0.83	10.9	6.7	2.10	182	0.44	0.01	2.8	6.9	280
W232268		6.18	0.14	2.1	1.085	0.021	1.24	16.3	9.3	5.55	231	0.79	0.02	4.3	9.0	400
W232269		6.81	0.14	2.5	1.330	0.020	1.43	16.8	10.9	5.11	245	0.81	0.02	4.6	9.1	410
W232270		3.12	0.12	0.9	1.270	0.009	0.61	8.8	5.2	5.66	202	0.25	0.01	2.0	4.5	210
W232271		3.86	0.14	1.0	0.156	0.011	0.78	9.6	7.1	2.75	128	0.59	0.01	2.5	5.1	250
W232272		7.23	0.15	2.0	0.369	0.026	1.54	17.5	15.5	6.23	200	0.48	0.02	4.9	8.0	520
W232273		2.90	0.17	0.7	0.752	0.013	0.58	7.9	6.4	11.05	470	0.56	0.01	1.8	4.3	200
W232274		4.91	0.15	2.4	0.666	0.013	1.07	12.4	11.7	8.31	344	0.48	0.02	3.4	4.8	410
W232275		8.47	0.17	1.9	0.676	0.021	1.91	19.2	22.0	5.03	307	0.62	0.02	4.8	11.4	450
W232276		8.54	0.16	1.3	0.814	0.026	1.91	19.4	20.8	2.27	225	0.70	0.02	4.6	14.2	450
W232277		4.72	0.11	1.2	0.117	0.012	1.13	12.3	11.8	1.62	190	0.53	0.01	2.9	6.9	440
W232278		5.04	0.12	1.2	0.156	0.016	1.18	13.3	13.1	1.54	192	0.50	0.01	3.0	7.1	430
W232279		5.89	0.13	1.3	0.109	0.015	1.37	13.4	15.5	2.04	179	0.57	0.02	3.5	8.7	440
W232280		4.06	0.12	1.2	0.087	0.011	0.97	10.0	9.0	2.44	212	0.47	0.01	2.7	4.9	380
W232281		0.27	0.22	<0.1	0.005	0.005	0.03	0.6	1.2	13.20	207	0.09	0.01	0.3	1.8	200
W232282		8.34	0.15	2.2	0.188	0.026	1.96	18.5	19.6	3.26	243	0.79	0.02	5.5	11.6	390
W232283		9.60	0.08	2.1	15.10	0.037	1.82	19.8	11.9	2.56	1150	1.91	0.02	5.9	24.8	450
W232284		4.85	0.09	1.0	0.120	0.016	1.09	12.4	11.4	1.87	138	0.47	0.02	3.1	7.1	330
W232285		5.58	0.12	1.2	0.074	0.021	1.30	13.7	14.2	1.68	123	0.30	0.02	3.7	7.6	450
W232286		5.16	0.12	1.1	0.068	0.018	1.19	13.2	12.8	1.58	122	0.30	0.02	3.4	7.4	420
W232287		2.41	0.09	0.4	0.069	0.008	0.55	7.5	5.2	0.94	108	0.68	0.01	1.5	5.0	210
W232288		2.36	0.10	0.5	0.066	0.007	0.54	8.1	5.3	0.68	103	0.82	0.01	1.6	4.8	240
W232289		4.49	0.12	0.9	0.611	0.017	1.04	12.0	10.6	1.63	546	0.37	0.01	2.9	7.0	260
W232290		6.75	0.13	1.5	6.26	0.022	1.49	15.5	18.1	1.78	3380	0.22	0.02	4.4	9.1	530
W232291		4.78	0.10	0.9	6.42	0.023	0.95	13.4	9.6	0.92	2260	1.90	0.01	2.6	12.8	350
W232292		2.05	0.08	0.4	3.96	0.011	0.44	7.4	3.4	0.49	3060	0.49	0.01	1.3	2.3	200
W232293		7.00	0.09	1.6	15.50	0.023	1.52	18.3	15.6	1.34	3470	0.93	0.01	4.6	11.7	550
W232294		8.67	0.11	2.0	50.0	0.024	1.78	26.0	35.9	1.40	2330	1.20	0.01	6.0	14.9	620
W232295		0.23	0.15	<0.1	0.041	0.005	0.03	0.6	1.1	12.95	204	<0.05	<0.01	0.2	1.7	210
W232296		9.30	0.13	2.2	1.950	0.030	2.14	22.5	24.8	3.33	525	1.23	0.03	6.1	17.4	510

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189035

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232261		29.3	129.5	<0.002	0.15	0.94	12.9	<1	2.6	134.5	0.90	0.09	14.70	0.370	0.75	2.9
W232262		25.7	148.5	<0.002	0.14	0.48	13.1	<1	2.6	116.5	0.90	<0.05	14.95	0.359	0.74	2.8
W232263		9.5	116.5	<0.002	0.19	0.35	10.8	1	2.4	186.0	0.90	<0.05	13.40	0.326	0.64	2.9
W232264		32.8	35.0	<0.002	0.62	0.51	3.1	1	0.7	567	0.23	<0.05	4.05	0.087	0.31	12.5
W232265		8.5	14.9	<0.002	0.14	0.36	1.2	1	0.3	713	0.10	<0.05	1.76	0.040	0.14	13.1
W232266		6.0	31.5	<0.002	0.07	0.38	2.4	1	0.6	569	0.21	<0.05	3.66	0.082	0.27	7.9
W232267		5.5	32.5	0.003	0.09	0.41	2.5	1	0.6	563	0.21	<0.05	3.52	0.082	0.38	10.8
W232268		8.2	46.7	0.003	0.25	1.79	3.5	2	0.9	272	0.32	<0.05	5.55	0.122	3.30	9.5
W232269		6.6	51.7	0.002	0.19	2.67	3.9	1	1.0	270	0.34	<0.05	6.17	0.137	4.31	8.2
W232270		4.5	20.8	<0.002	0.15	0.24	1.8	1	0.5	367	0.15	<0.05	2.48	0.056	0.74	11.7
W232271		5.6	27.0	0.002	0.15	0.18	2.2	1	0.6	578	0.19	<0.05	3.05	0.070	0.53	15.3
W232272		7.1	55.8	<0.002	0.29	0.23	4.0	1	1.0	201	0.37	<0.05	5.93	0.136	0.90	9.8
W232273		5.0	19.2	<0.002	0.50	5.35	1.7	1	0.5	160.0	0.13	<0.05	2.26	0.053	2.12	13.5
W232274		6.1	36.8	0.002	0.32	0.73	2.8	1	0.7	142.5	0.27	<0.05	4.57	0.098	1.83	7.4
W232275		9.5	66.1	<0.002	0.44	0.44	4.7	1	1.0	344	0.36	<0.05	6.47	0.141	1.56	10.6
W232276		9.7	70.3	<0.002	0.46	0.44	4.8	1	1.0	508	0.34	<0.05	6.00	0.135	1.54	10.1
W232277		5.5	41.1	<0.002	0.24	0.19	2.8	1	0.6	881	0.21	<0.05	3.80	0.083	0.45	6.2
W232278		5.7	43.8	<0.002	0.24	0.19	2.9	1	0.6	909	0.22	<0.05	3.96	0.086	0.46	6.4
W232279		6.6	50.6	<0.002	0.26	0.21	3.4	1	0.8	1025	0.25	<0.05	4.50	0.102	0.51	6.6
W232280		5.3	33.7	<0.002	0.21	0.21	2.3	1	0.6	980	0.19	<0.05	3.30	0.077	0.49	7.0
W232281		1.4	1.1	<0.002	<0.01	0.13	0.2	1	<0.2	54.5	<0.05	<0.05	0.12	0.005	<0.02	0.6
W232282		10.6	72.2	0.002	0.53	1.73	4.9	2	1.2	837	0.41	<0.05	6.92	0.158	1.64	8.7
W232283		11.3	85.4	0.002	2.55	24.4	8.9	1	1.7	321	0.41	<0.05	5.75	0.263	43.4	6.2
W232284		7.3	43.0	<0.002	0.17	0.20	2.8	1	0.7	669	0.23	<0.05	3.85	0.087	0.52	10.9
W232285		7.7	51.2	<0.002	0.19	0.20	3.3	1	0.8	669	0.27	<0.05	4.58	0.100	0.43	13.0
W232286		7.7	46.7	<0.002	0.18	0.19	3.1	1	0.7	697	0.24	<0.05	4.33	0.092	0.40	13.3
W232287		6.1	19.7	<0.002	0.23	0.17	1.4	1	0.4	1000	0.12	<0.05	1.99	0.043	0.26	16.1
W232288		5.6	19.4	0.002	0.18	0.15	1.5	1	0.4	951	0.11	<0.05	2.09	0.044	0.34	16.4
W232289		5.4	40.3	<0.002	0.16	1.45	2.6	1	0.7	788	0.21	<0.05	3.64	0.083	2.75	11.8
W232290		7.1	61.2	<0.002	0.23	7.90	3.9	1	1.0	594	0.32	<0.05	5.55	0.123	29.5	10.8
W232291		8.1	42.4	<0.002	1.41	47.0	5.0	1	0.7	1055	0.19	<0.05	3.33	0.087	24.6	6.1
W232292		4.4	16.6	0.003	0.15	5.02	1.3	1	0.4	1355	0.10	<0.05	1.70	0.037	18.05	13.0
W232293		11.7	61.9	<0.002	0.92	35.8	3.8	2	1.1	579	0.35	<0.05	5.87	0.130	65.2	19.4
W232294		17.2	78.0	<0.002	1.90	116.0	2.9	2	1.6	551	0.43	0.13	7.72	0.162	231	30.7
W232295		1.3	1.8	<0.002	0.01	0.12	0.1	1	<0.2	53.8	<0.05	<0.05	0.06	<0.005	0.51	0.5
W232296		10.0	88.7	0.002	0.45	2.76	5.4	2	1.3	474	0.45	<0.05	7.65	0.171	7.55	10.7

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189035

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232261		76	1.3	19.5	125	101.0		<0.01
W232262		72	1.4	21.8	120	103.5		<0.01
W232263		61	1.3	18.6	89	96.7		0.02
W232264		39	0.4	7.7	28	33.9		<0.01
W232265		17	0.2	3.9	8	22.4		<0.01
W232266		29	0.5	6.9	12	50.9		<0.01
W232267		30	0.4	6.6	10	44.0		<0.01
W232268		50	1.5	10.0	17	79.9		0.04
W232269		49	1.3	10.5	20	85.0		0.07
W232270		21	0.5	5.5	22	31.5		<0.01
W232271		26	0.4	5.8	15	36.1		<0.01
W232272		47	0.7	10.4	15	71.1		<0.01
W232273		21	0.9	4.9	12	25.2		0.05
W232274		31	1.3	8.6	14	84.0		0.07
W232275		51	1.4	9.6	17	67.3		0.01
W232276		60	0.9	8.4	102	45.7		0.01
W232277		33	0.4	7.0	19	43.9		<0.01
W232278		34	0.4	7.3	20	44.4		0.02
W232279		42	0.4	7.8	17	45.9		<0.01
W232280		32	0.4	6.8	19	42.5		<0.01
W232281		3	0.1	0.9	19	<0.5		<0.01
W232282		53	1.2	10.9	22	78.8		<0.01
W232283		85	7.7	17.4	47	71.6		2.58
W232284		32	0.4	7.3	20	35.9		<0.01
W232285		37	0.5	8.4	36	42.9		<0.01
W232286		35	0.4	7.9	33	38.0		<0.01
W232287		23	0.2	4.1	43	15.0		<0.01
W232288		24	0.2	4.3	37	16.8		<0.01
W232289		29	0.8	6.9	20	30.2		0.17
W232290		42	1.7	9.6	30	51.4		0.88
W232291		33	19.5	14.7	25	30.8	1.360	2.68
W232292		20	0.6	4.3	26	12.8		0.67
W232293		50	2.3	9.8	76	52.4		3.91
W232294		63	3.6	9.6	124	67.3	1.510	19.15
W232295		3	0.1	0.8	16	<0.5		<0.01
W232296		71	1.7	12.3	54	74.5		0.41

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 10- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17189035

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE WH17192243

Project: Nadaleen

P.O. No.: N17- 081

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

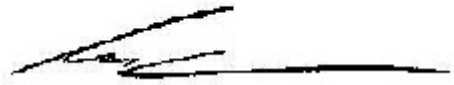
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192243

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232297		10.84	0.05	2.73	116.0	180	1.03	0.09	19.40	0.04	33.4	4.7	29	9.89	14.8	1.13
W232298		6.48	0.03	1.05	96.3	150	0.43	0.04	30.6	0.05	15.15	2.0	12	2.84	6.1	0.53
W232299		6.72	0.03	1.99	42.4	80	0.82	0.06	25.7	0.03	23.9	3.9	21	5.54	12.1	0.94
W232300		5.09	0.05	1.61	>10000	150	0.58	0.07	21.1	0.14	19.25	2.9	20	4.39	13.0	0.78
W232301		7.55	0.01	0.04	23.0	50	0.06	0.03	21.1	0.06	1.11	0.7	1	0.12	2.5	0.46
W232302		5.84	0.05	1.11	1080	1230	0.50	0.04	30.6	0.17	13.95	2.3	13	1.80	6.6	0.59
W232303		11.45	0.07	1.43	299	520	0.53	0.04	29.7	0.18	15.75	2.7	16	2.60	7.6	0.59
W232304		12.00	0.03	2.28	124.5	80	0.88	0.06	24.6	0.10	27.2	4.2	24	6.02	12.2	0.99
W232305		12.04	0.05	2.59	60.9	120	0.80	0.07	24.1	0.09	30.6	4.7	29	9.16	17.9	1.10
W232306		12.44	0.06	4.24	68.4	610	1.38	0.11	16.05	0.04	42.6	8.0	49	16.65	22.1	1.74
W232307		<0.02	0.05	4.19	67.3	600	1.29	0.10	16.05	0.04	42.6	8.0	48	17.00	21.9	1.76
W232308		11.75	0.08	4.20	154.5	270	1.31	0.11	13.75	0.04	45.1	7.7	47	13.30	19.2	1.87
W232309		11.21	0.05	2.36	83.0	440	0.83	0.07	24.5	0.04	28.7	4.0	28	7.12	11.1	1.05
W232310		11.60	0.07	3.77	84.1	220	1.21	0.09	17.55	0.03	43.1	7.4	42	12.55	17.6	1.70
W232311		11.46	0.05	1.16	16.1	230	0.33	0.04	30.8	0.06	18.05	2.3	14	3.03	6.4	0.55
W232312		11.69	0.04	1.75	26.7	110	0.62	0.05	27.4	0.08	24.1	3.4	20	4.16	9.9	0.79
W232313		11.68	0.04	1.55	42.4	210	0.46	0.04	29.4	0.05	23.4	3.2	18	3.45	8.6	0.87
W232314		10.76	0.08	3.05	39.0	150	1.04	0.07	20.2	0.05	38.6	5.6	34	7.10	15.5	1.39
W232315		5.42	0.06	2.39	31.4	180	0.76	0.05	24.9	0.04	32.5	4.3	27	5.33	11.8	1.19
W232316		10.16	0.14	5.64	64.4	320	1.76	0.14	8.00	0.05	62.7	10.2	61	13.40	29.0	2.49
W232317		10.84	0.09	3.27	40.7	160	1.09	0.08	18.85	0.08	39.3	5.9	36	6.79	18.0	1.54
W232318		10.85	0.03	1.32	37.8	400	0.49	0.04	30.1	0.25	16.30	2.4	16	2.37	7.0	0.64
W232319		10.99	0.03	0.62	20.1	410	0.21	0.02	33.0	0.22	11.50	1.2	8	0.94	3.4	0.33
W232320		0.30	0.09	3.67	2620	200	0.93	0.14	18.55	0.11	39.0	11.1	44	10.70	41.5	3.02
W232321		11.05	0.07	2.29	45.6	280	0.69	0.06	20.2	0.19	27.8	3.7	26	5.61	11.8	1.18
W232322		10.78	0.07	2.09	61.4	420	0.62	0.05	18.90	0.12	27.9	3.5	23	4.63	10.8	1.04
W232323		7.06	0.01	0.05	0.4	20	<0.05	0.02	20.7	0.06	1.02	0.6	1	0.15	1.7	0.45
W232324		10.78	0.11	2.37	44.8	380	0.83	0.07	24.1	0.12	30.8	4.4	30	5.95	18.3	1.08
W232325		10.97	0.08	1.36	28.4	490	0.48	0.04	29.9	0.17	21.4	2.8	18	3.06	10.9	0.63
W232326		10.95	0.05	1.46	37.4	190	0.54	0.04	26.2	0.15	21.3	2.5	17	2.80	7.1	0.71
W232327		11.05	0.07	1.30	20.9	130	0.49	0.04	28.0	0.40	19.85	2.4	16	3.20	7.5	0.67
W232328		12.45	0.07	3.68	24.4	280	1.19	0.08	11.95	0.09	43.0	6.2	43	13.35	20.6	1.90
W232329		0.26	0.72	1.91	>10000	150	0.49	2.70	26.3	0.14	28.4	4.9	27	6.04	15.8	1.40
W232330		10.31	0.05	9.03	26.2	320	2.43	0.33	0.97	0.02	100.5	15.2	75	17.80	34.0	4.34
W232331		10.45	0.04	7.79	11.7	310	1.91	0.31	4.46	<0.02	88.3	14.0	65	17.95	29.4	4.31
W232332		10.97	0.05	8.26	11.8	340	2.17	0.33	2.19	0.04	94.0	14.2	68	20.6	35.7	3.98

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Finalized Date: 12- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192243

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232297		6.99	0.08	1.6	0.243	0.019	1.56	18.0	14.7	3.44	222	0.58	0.02	4.5	11.5	320
W232298		2.66	0.05	0.5	0.160	0.009	0.57	8.0	5.3	1.03	123	0.31	0.01	1.6	5.0	130
W232299		5.00	0.07	0.8	0.281	0.013	1.06	13.4	11.1	1.58	146	0.32	0.01	2.9	9.8	230
W232300		4.10	0.11	0.6	5.92	0.042	0.85	11.1	7.3	0.98	1570	0.23	0.01	2.4	7.4	310
W232301		0.15	<0.05	<0.1	<0.005	<0.005	0.02	0.5	0.9	12.90	199	0.08	<0.01	0.1	1.4	170
W232302		2.71	<0.05	0.5	2.32	0.009	0.57	7.5	5.1	1.12	416	0.40	<0.01	1.6	5.6	140
W232303		3.57	0.05	0.7	0.741	0.009	0.75	8.3	7.3	1.25	220	0.40	0.01	2.1	6.8	200
W232304		5.61	0.08	1.0	0.582	0.015	1.23	15.0	14.5	1.79	339	0.54	0.02	3.2	11.0	340
W232305		6.41	0.07	1.0	0.177	0.018	1.42	17.3	19.0	1.65	167	0.47	0.02	3.8	13.0	490
W232306		10.65	0.08	2.0	0.139	0.032	2.40	23.0	34.3	4.05	197	0.80	0.03	6.6	19.5	580
W232307		10.70	0.09	1.9	0.125	0.030	2.40	23.4	34.4	4.01	200	0.78	0.03	6.6	19.7	590
W232308		10.60	0.09	2.2	0.251	0.028	2.37	24.1	27.0	4.25	234	0.96	0.03	6.4	19.8	540
W232309		5.77	0.06	1.2	0.130	0.019	1.30	15.5	17.6	1.94	167	0.52	0.02	3.6	10.1	350
W232310		9.48	0.08	1.9	0.155	0.029	2.11	23.0	26.6	3.92	208	0.88	0.03	5.8	18.3	520
W232311		2.97	0.06	0.6	0.094	0.009	0.65	10.5	7.5	0.82	120	0.47	0.01	2.0	5.4	220
W232312		4.49	0.06	0.8	0.084	0.014	0.98	13.6	11.7	1.09	123	0.66	0.02	2.9	8.1	280
W232313		3.94	0.06	0.7	0.097	0.011	0.87	13.1	9.7	1.49	136	0.48	0.01	2.5	7.5	240
W232314		7.85	0.08	1.6	0.154	0.025	1.73	20.2	21.7	2.12	165	0.80	0.03	4.8	14.7	380
W232315		6.00	0.07	1.2	0.117	0.017	1.37	17.3	16.1	1.86	163	0.71	0.02	3.7	11.5	320
W232316		14.20	0.12	2.6	0.251	0.046	3.26	32.7	41.8	3.54	217	1.49	0.04	8.7	26.2	680
W232317		8.06	0.09	1.7	0.147	0.024	1.84	20.7	24.7	2.67	170	0.79	0.03	5.0	15.5	460
W232318		3.37	0.05	0.7	0.142	0.010	0.73	8.7	8.8	1.90	131	0.40	0.01	2.2	5.8	230
W232319		1.55	0.05	0.5	0.105	0.005	0.34	6.2	4.0	1.18	112	0.35	0.01	1.1	2.5	160
W232320		9.33	0.08	1.8	3.58	0.037	1.70	19.7	8.5	1.42	1160	1.55	0.02	6.0	24.9	390
W232321		5.51	0.07	1.7	0.238	0.017	1.33	14.6	20.0	3.62	159	0.82	0.03	3.9	9.4	430
W232322		5.12	0.08	1.6	0.230	0.012	1.27	14.9	16.7	3.59	203	0.90	0.04	3.6	8.7	350
W232323		0.15	<0.05	<0.1	0.011	<0.005	0.02	0.5	1.0	12.75	196	<0.05	<0.01	0.2	1.5	180
W232324		6.09	0.08	1.4	0.221	0.018	1.31	17.3	22.2	2.30	162	0.83	0.03	4.2	11.6	480
W232325		3.44	0.05	0.9	0.198	0.011	0.68	12.5	11.0	1.32	119	0.96	0.06	2.7	6.2	270
W232326		3.62	0.07	1.1	0.209	0.011	0.78	11.3	12.6	2.17	194	0.69	0.03	2.8	5.6	250
W232327		3.32	0.05	0.9	0.149	0.012	0.61	11.0	21.6	2.13	136	0.88	0.10	2.4	5.4	250
W232328		9.17	0.09	2.1	0.099	0.029	1.77	22.5	122.5	5.90	222	0.90	0.16	6.0	17.0	490
W232329		5.01	0.08	0.9	6.84	0.020	0.93	14.7	8.4	0.93	2260	1.82	0.01	2.6	13.7	350
W232330		22.5	0.14	3.2	0.036	0.068	2.84	52.6	123.5	1.22	520	0.29	0.27	12.3	34.6	630
W232331		19.70	0.14	2.9	0.047	0.058	2.61	45.1	92.5	1.22	691	0.38	0.26	11.3	31.2	540
W232332		21.4	0.14	3.1	0.031	0.062	2.87	48.5	112.0	1.13	466	0.40	0.24	11.8	33.0	500

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232297		6.7	63.0	<0.002	0.21	0.34	4.2	2	0.9	587	0.33	<0.05	5.85	0.127	0.82	10.1
W232298		4.1	23.3	<0.002	0.09	0.35	1.7	1	0.4	954	0.12	<0.05	1.96	0.045	0.43	14.0
W232299		5.1	44.4	<0.002	0.15	0.43	3.1	1	0.6	824	0.21	<0.05	3.72	0.085	0.81	12.4
W232300		5.4	36.2	<0.002	6.75	222	2.6	5	0.5	683	0.18	0.06	3.11	0.071	19.55	9.4
W232301		1.2	0.8	<0.002	<0.01	0.08	0.1	<1	<0.2	50.3	<0.05	<0.05	0.06	<0.005	<0.02	0.5
W232302		5.3	22.9	<0.002	0.30	3.96	1.7	1	0.3	1480	0.11	<0.05	2.04	0.047	8.16	19.3
W232303		5.9	29.8	<0.002	0.19	1.62	2.2	1	0.4	1315	0.16	<0.05	2.58	0.061	3.35	19.3
W232304		6.5	51.0	<0.002	0.25	0.89	3.5	1	0.6	977	0.24	<0.05	4.32	0.097	1.34	14.0
W232305		6.3	59.7	<0.002	0.24	0.28	4.0	1	0.8	887	0.28	<0.05	5.02	0.111	0.49	10.6
W232306		8.7	98.5	<0.002	0.37	0.37	6.6	2	1.3	700	0.48	<0.05	8.38	0.195	0.76	8.8
W232307		8.6	98.3	<0.002	0.36	0.37	6.5	2	1.3	694	0.47	<0.05	8.29	0.191	0.75	8.9
W232308		9.6	96.0	<0.002	0.44	0.42	6.4	2	1.3	712	0.46	<0.05	8.76	0.196	1.01	9.2
W232309		5.7	52.8	<0.002	0.22	0.25	3.6	1	0.7	1155	0.27	<0.05	4.80	0.108	0.56	10.3
W232310		8.8	87.0	<0.002	0.40	0.30	5.9	2	1.1	768	0.43	<0.05	7.67	0.170	0.60	9.1
W232311		5.0	27.5	<0.002	0.12	0.14	1.8	1	0.4	1305	0.15	<0.05	2.61	0.056	0.20	15.1
W232312		5.9	41.4	<0.002	0.15	0.15	2.9	1	0.6	1080	0.21	<0.05	3.75	0.080	0.30	14.4
W232313		5.3	36.5	<0.002	0.15	0.17	2.5	1	0.5	1185	0.19	<0.05	3.26	0.072	0.29	13.9
W232314		8.0	71.9	<0.002	0.28	0.24	4.9	2	0.9	904	0.36	<0.05	6.40	0.141	0.45	9.3
W232315		6.4	56.0	<0.002	0.21	0.19	3.7	1	0.8	1035	0.28	<0.05	4.91	0.111	0.33	10.0
W232316		12.1	133.5	0.002	0.61	0.44	8.7	2	1.7	663	0.65	<0.05	11.65	0.261	0.89	6.5
W232317		8.2	75.2	<0.002	0.39	0.29	5.0	2	1.0	1090	0.38	<0.05	6.71	0.154	0.63	8.8
W232318		5.6	29.6	<0.002	0.17	0.19	2.1	1	0.4	1675	0.17	<0.05	2.87	0.063	0.33	12.3
W232319		3.4	13.4	<0.002	0.11	0.11	1.0	1	0.2	1405	0.08	<0.05	1.46	0.030	0.20	11.6
W232320		8.4	80.0	<0.002	2.55	9.08	8.8	1	1.3	733	0.41	<0.05	5.41	0.265	10.10	2.3
W232321		9.2	54.3	<0.002	0.29	0.26	3.4	2	0.7	888	0.29	<0.05	5.25	0.113	0.63	10.0
W232322		8.3	54.1	<0.002	0.32	0.43	3.2	2	0.7	1075	0.26	<0.05	4.55	0.101	0.76	8.8
W232323		1.1	0.9	<0.002	<0.01	<0.05	0.1	1	<0.2	48.4	<0.05	<0.05	0.07	<0.005	<0.02	0.9
W232324		7.8	64.1	0.002	0.30	0.28	3.8	2	0.8	1200	0.31	<0.05	5.41	0.118	0.53	12.9
W232325		7.3	32.7	<0.002	0.21	0.22	2.2	1	0.7	1410	0.19	<0.05	3.28	0.071	0.44	16.1
W232326		7.4	36.3	<0.002	0.21	0.32	2.4	2	0.5	1830	0.21	<0.05	3.50	0.076	0.52	11.8
W232327		7.6	30.0	<0.002	0.17	0.27	2.1	2	0.5	1945	0.18	<0.05	3.10	0.064	0.42	12.9
W232328		9.2	86.1	<0.002	0.24	0.32	5.7	3	1.1	527	0.44	<0.05	7.94	0.182	0.54	5.1
W232329		8.3	41.8	0.002	1.44	45.3	5.6	1	0.6	1060	0.19	<0.05	3.39	0.089	23.2	6.3
W232330		20.7	139.0	<0.002	0.47	0.48	16.3	<1	2.5	120.5	0.87	<0.05	16.85	0.407	0.80	2.9
W232331		20.8	116.5	<0.002	0.57	0.36	12.9	<1	2.1	178.5	0.78	<0.05	13.20	0.360	0.67	2.7
W232332		19.9	131.0	<0.002	0.62	0.36	14.2	<1	2.6	132.0	0.83	0.05	14.95	0.383	0.73	2.8

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192243

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232297		44	0.8	10.5	29	60.3		0.01
W232298		20	0.3	4.4	19	19.6		<0.01
W232299		31	0.5	6.8	26	31.7		0.01
W232300		29	0.6	6.3	26	24.2	14.15	1.13
W232301		2	0.1	0.7	17	<0.5		<0.01
W232302		21	0.7	4.2	29	17.3		0.25
W232303		27	0.7	4.7	35	27.7		0.02
W232304		39	0.8	7.4	41	38.3		0.02
W232305		44	0.5	9.3	39	38.5		0.01
W232306		71	0.7	12.9	32	75.2		<0.01
W232307		70	0.7	12.8	32	75.4		<0.01
W232308		71	0.9	13.7	35	80.5		0.01
W232309		41	0.5	8.0	23	46.1		<0.01
W232310		64	0.7	13.0	29	70.6		<0.01
W232311		23	0.2	5.3	18	25.4		<0.01
W232312		32	0.3	6.9	29	32.6		0.01
W232313		29	0.3	6.6	23	27.6		0.02
W232314		51	0.6	11.8	31	60.0		<0.01
W232315		40	0.4	10.0	25	44.8		0.01
W232316		91	1.0	17.0	51	94.8		0.01
W232317		54	0.7	11.4	42	61.0		<0.01
W232318		23	0.3	5.0	32	27.8		<0.01
W232319		12	0.2	3.9	19	18.3		<0.01
W232320		75	5.0	16.7	48	65.8		0.51
W232321		40	0.6	8.6	36	62.2		<0.01
W232322		33	0.5	8.3	32	56.8		0.03
W232323		3	0.1	0.7	16	<0.5		<0.01
W232324		43	0.5	10.3	40	52.1		0.01
W232325		29	0.3	5.8	27	32.0		0.01
W232326		26	0.4	6.5	23	43.6		0.01
W232327		24	0.3	5.8	37	33.3		<0.01
W232328		62	0.7	13.8	52	76.3		0.01
W232329		34	17.1	16.1	23	33.3	1.350	2.76
W232330		92	1.5	21.8	95	113.0		0.01
W232331		78	1.3	19.9	85	101.0		<0.01
W232332		85	1.5	20.8	101	106.5		0.03

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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17192243

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE WH17189036

Project: Nadaleen

P.O. No.: N17- 082

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 5- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

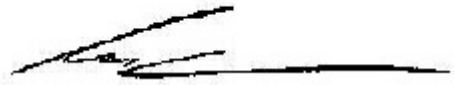
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189036

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230586		10.24	0.07	4.62	7.3	420	1.21	0.17	16.65	<0.02	55.4	7.6	34	6.27	16.5	2.22
W230587		11.37	0.03	4.30	6.3	220	1.09	0.16	18.25	<0.02	53.6	7.6	29	6.34	15.6	2.36
W230588		10.86	0.03	2.41	5.0	100	0.64	0.10	24.2	<0.02	33.5	4.6	20	3.35	9.8	1.40
W230589		9.15	0.06	6.41	12.0	230	1.55	0.24	11.95	0.04	79.0	12.2	51	11.00	26.6	2.84
W230590		8.74	0.04	4.57	9.9	190	1.19	0.17	18.55	0.04	56.3	7.7	36	7.88	18.5	2.14
W230591		12.52	0.05	4.70	9.2	180	1.15	0.17	15.65	0.03	54.2	8.0	38	7.97	18.4	2.22
W230592		0.25	0.09	3.62	2580	200	0.77	0.14	18.35	0.11	41.3	10.6	41	10.45	42.4	2.95
W230593		10.19	0.03	4.09	11.2	180	0.95	0.16	18.35	0.05	49.5	6.9	33	6.42	17.0	1.81
W230594		6.96	0.01	0.04	0.3	390	0.05	0.02	19.95	0.05	1.12	0.8	<1	0.16	1.8	0.45
W230595		12.10	0.04	4.16	8.0	260	1.11	0.15	17.80	0.05	48.9	7.0	34	7.02	16.1	2.04
W230596		10.73	0.04	4.55	8.9	200	1.18	0.17	16.40	0.05	56.2	8.1	34	9.23	17.7	2.32
W230597		12.24	0.05	4.10	9.7	200	1.06	0.16	17.20	0.04	50.6	6.7	35	9.12	16.0	2.04
W230598		12.11	0.06	5.06	9.6	330	1.22	0.17	12.15	0.06	65.0	8.0	40	11.25	19.6	2.43
W230599		5.43	0.04	4.75	8.8	320	1.23	0.17	12.75	0.07	60.1	7.9	39	10.60	22.1	2.29
W230600		10.28	0.03	2.25	5.0	150	0.63	0.09	25.7	0.03	31.1	4.1	17	4.92	9.2	1.27
W230601		9.52	0.04	4.13	8.4	240	1.07	0.17	16.65	0.03	52.0	7.2	29	10.70	15.8	2.01
W230602		9.73	0.03	3.53	10.8	220	1.09	0.14	17.90	0.02	44.9	6.6	30	10.50	14.0	1.76
W230603		<0.02	0.03	3.55	10.5	220	1.15	0.13	18.20	0.03	45.8	6.7	28	10.75	14.2	1.73
W230604		10.04	0.03	3.15	8.6	170	1.10	0.11	19.15	0.03	39.2	5.9	25	9.82	12.2	1.76
W230605		10.82	0.02	1.91	7.4	140	0.61	0.07	24.9	0.06	18.90	4.4	16	5.95	9.1	1.29
W230606		11.65	0.02	2.90	8.7	190	1.04	0.10	22.0	0.05	38.7	6.2	26	10.30	15.8	1.36
W230607		10.57	0.02	2.18	5.9	130	0.77	0.09	26.4	0.09	25.1	4.5	19	9.43	10.3	1.04
W230608		8.36	0.02	1.77	6.9	120	0.65	0.07	21.9	0.14	21.3	4.1	16	5.40	11.0	1.04
W230609		7.21	0.01	1.77	5.3	150	0.63	0.07	20.5	0.09	20.2	3.9	17	5.03	9.7	1.22
W230610		7.45	0.05	4.05	9.6	290	1.45	0.16	17.70	0.19	43.4	8.3	38	13.90	20.0	1.98
W230611		7.40	0.01	0.04	0.2	20	0.08	0.14	19.55	0.06	1.06	0.7	<1	0.13	3.1	0.45
W230612		8.76	0.10	7.87	23.0	340	3.05	0.36	4.74	0.27	89.3	16.3	67	29.3	38.2	4.06
W230613		11.37	0.07	8.60	18.3	470	3.26	0.34	2.53	0.17	99.3	16.3	70	32.0	36.8	3.96
W230614		11.03	0.08	8.79	16.7	490	3.43	0.35	1.98	0.17	104.5	16.5	72	33.6	37.8	3.99
W230615		12.14	0.07	8.62	18.2	430	3.39	0.32	2.12	0.14	100.0	16.4	69	32.8	39.7	4.23
W230616		0.25	0.18	3.80	6290	200	1.08	0.13	11.90	0.15	40.6	11.8	47	10.40	36.0	2.83
W230617		12.67	0.07	8.67	22.3	420	3.65	0.29	1.44	0.15	99.6	16.1	72	34.8	36.4	4.03
W230618		11.67	0.10	8.54	15.9	330	3.79	0.30	1.64	0.18	97.5	15.6	69	37.8	39.3	4.19
W230619		10.51	0.09	8.84	13.2	340	3.62	0.29	1.79	0.39	112.5	14.2	65	48.4	36.3	3.90
W230620		13.46	0.06	8.64	14.5	370	3.77	0.28	1.62	0.26	108.0	15.0	64	45.4	34.0	3.90
W230621		12.95	0.10	8.38	20.5	320	3.48	0.28	2.13	0.21	108.0	15.7	62	37.0	37.8	4.18

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VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189036

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230586		11.20	0.14	1.6	0.070	0.033	1.33	27.1	80.6	1.27	410	0.40	0.39	5.5	17.2	470
W230587		10.65	0.13	1.5	0.036	0.034	1.31	26.2	56.3	1.43	586	0.32	0.36	5.3	15.7	390
W230588		6.10	0.13	1.0	0.024	0.013	0.67	15.3	36.6	0.98	559	0.31	0.31	3.3	9.2	420
W230589		16.50	0.16	2.2	0.066	0.050	2.06	39.4	57.4	1.26	552	0.68	0.80	7.9	25.0	540
W230590		11.60	0.14	1.7	0.057	0.035	1.52	27.6	51.2	1.51	363	0.56	0.50	5.7	17.0	570
W230591		12.00	0.13	1.9	0.057	0.038	1.63	26.7	44.3	1.46	384	0.40	0.55	6.1	16.6	510
W230592		9.90	0.13	2.0	3.69	0.040	1.69	19.4	8.9	1.38	1180	1.67	0.02	6.2	23.6	370
W230593		10.15	0.14	1.6	0.079	0.026	1.40	24.5	63.6	1.30	309	0.50	0.30	5.1	14.7	580
W230594		0.18	0.11	<0.1	<0.005	<0.005	0.02	0.5	1.4	12.05	197	0.19	<0.01	0.1	1.9	160
W230595		10.50	0.15	1.7	0.045	0.029	1.33	24.1	37.6	1.46	350	0.35	0.74	5.4	15.2	490
W230596		11.40	0.16	1.6	0.038	0.034	1.56	27.4	44.4	1.88	445	0.48	0.53	5.6	17.1	480
W230597		10.55	0.14	1.8	0.066	0.032	1.46	24.4	33.1	1.56	274	0.49	0.51	5.8	15.1	770
W230598		13.05	0.18	2.4	0.120	0.034	1.95	31.6	63.3	1.47	293	0.52	0.42	7.2	17.6	590
W230599		12.25	0.15	2.2	0.084	0.038	1.80	29.5	57.1	1.47	281	0.46	0.42	6.7	16.4	580
W230600		5.73	0.13	1.0	0.050	0.019	0.91	14.5	30.5	0.97	218	0.20	0.10	3.1	8.3	370
W230601		10.30	0.15	1.6	0.084	0.031	1.75	25.6	51.5	1.99	382	0.33	0.05	5.2	14.6	320
W230602		8.46	0.09	1.3	0.106	0.029	1.46	22.6	61.6	1.50	317	0.36	0.04	4.7	13.6	400
W230603		8.71	0.11	1.3	0.116	0.026	1.49	22.8	63.3	1.50	313	0.36	0.04	4.8	13.7	390
W230604		7.68	0.10	1.3	0.103	0.026	1.33	19.9	41.7	2.34	345	0.28	0.05	4.3	12.4	450
W230605		4.77	0.08	0.7	0.054	0.018	0.86	9.5	16.3	3.45	298	0.36	0.02	2.5	8.4	580
W230606		7.09	0.11	1.0	0.061	0.024	1.26	19.4	25.0	1.75	251	0.49	0.06	3.7	12.0	2030
W230607		5.47	0.10	0.8	0.055	0.021	0.97	12.4	19.8	1.53	221	0.43	0.04	2.8	8.9	700
W230608		4.61	0.11	0.7	0.052	0.017	0.80	10.1	15.0	5.72	264	0.45	0.02	2.5	8.6	660
W230609		4.59	0.09	0.7	0.057	0.017	0.80	9.7	15.8	6.24	321	0.48	0.02	2.4	8.6	920
W230610		10.40	0.14	1.5	0.132	0.034	1.80	21.3	61.0	1.99	356	0.97	0.03	5.4	17.2	1390
W230611		0.18	0.12	<0.1	0.008	<0.005	0.02	0.5	1.2	12.30	198	0.05	<0.01	0.1	1.6	170
W230612		21.1	0.14	2.7	0.308	0.077	3.51	43.8	97.2	2.79	618	4.52	0.05	10.5	36.2	720
W230613		22.9	0.15	2.8	0.223	0.075	3.84	48.1	103.0	1.89	396	2.90	0.05	11.3	37.1	770
W230614		23.5	0.17	3.0	0.213	0.081	3.93	50.7	81.0	1.70	338	2.68	0.05	11.9	36.9	870
W230615		23.3	0.16	2.9	0.208	0.078	3.91	49.3	62.4	1.73	371	3.08	0.05	11.9	38.8	750
W230616		9.94	0.08	1.9	14.45	0.039	1.75	20.6	14.3	2.51	1160	1.77	0.02	5.8	25.8	440
W230617		24.2	0.14	2.9	0.153	0.077	4.08	48.6	43.1	1.56	336	2.72	0.05	12.2	35.4	700
W230618		23.3	0.16	3.2	0.147	0.084	3.98	48.6	43.2	1.69	361	2.95	0.05	12.1	35.2	530
W230619		24.1	0.17	3.0	0.149	0.072	4.15	53.1	44.3	1.67	370	3.11	0.05	12.2	33.4	1030
W230620		24.4	0.18	3.0	0.207	0.070	4.07	50.4	48.4	1.61	335	3.61	0.05	12.3	33.6	920
W230621		23.4	0.16	3.2	0.401	0.067	3.82	52.9	46.6	1.88	480	3.93	0.04	11.7	36.8	800

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Finalized Date: 11- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189036

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230586		11.1	64.4	0.002	1.27	0.29	6.9	1	1.2	443	0.39	<0.05	8.04	0.188	0.33	2.2
W230587		10.3	64.0	<0.002	1.23	0.27	6.7	1	1.3	422	0.38	<0.05	7.60	0.183	0.31	1.9
W230588		6.2	33.5	0.002	0.79	0.26	4.1	1	0.7	457	0.23	<0.05	4.62	0.113	0.19	1.5
W230589		15.9	102.5	0.003	1.90	0.59	10.2	1	1.8	326	0.56	0.05	11.30	0.259	0.57	2.8
W230590		11.1	73.8	<0.002	1.49	0.33	7.1	1	1.4	487	0.41	0.06	7.87	0.192	0.52	2.3
W230591		11.8	79.0	0.002	1.48	0.36	7.2	1	1.5	314	0.43	<0.05	8.32	0.204	0.51	2.4
W230592		8.8	76.0	0.002	2.46	9.91	8.9	1	1.5	706	0.42	0.05	6.06	0.267	11.05	2.4
W230593		10.3	68.9	0.002	1.29	0.30	6.3	1	1.3	492	0.37	<0.05	7.32	0.175	0.62	2.2
W230594		1.1	0.9	<0.002	0.01	0.05	0.1	1	<0.2	49.9	<0.05	<0.05	0.09	<0.005	<0.02	0.5
W230595		10.8	66.5	<0.002	1.28	0.28	6.7	1	1.3	371	0.39	<0.05	7.64	0.181	0.54	2.4
W230596		11.3	74.2	0.002	1.24	0.36	7.4	1	1.2	416	0.39	<0.05	7.80	0.188	0.48	2.2
W230597		10.9	71.1	<0.002	1.33	0.29	6.7	1	1.2	512	0.41	<0.05	7.66	0.192	0.50	2.2
W230598		13.5	95.4	0.002	1.53	0.35	8.3	1	1.8	374	0.51	<0.05	9.50	0.245	0.58	2.4
W230599		12.8	88.9	<0.002	1.40	0.34	7.7	1	2.1	379	0.46	<0.05	9.13	0.226	0.54	2.3
W230600		6.1	44.3	<0.002	0.64	0.18	3.8	1	0.7	596	0.23	<0.05	4.47	0.104	0.29	1.6
W230601		10.4	80.5	<0.002	0.90	0.27	6.5	1	1.1	386	0.36	<0.05	7.80	0.171	0.42	2.1
W230602		10.1	68.6	<0.002	0.95	0.28	6.0	1	1.0	467	0.33	<0.05	6.51	0.157	0.42	1.8
W230603		10.0	69.2	0.002	0.95	0.28	6.2	1	1.0	473	0.35	<0.05	6.54	0.159	0.41	1.8
W230604		9.1	60.8	0.002	0.91	0.24	5.3	1	0.9	520	0.32	<0.05	5.76	0.144	0.43	1.7
W230605		4.8	37.4	<0.002	0.75	0.22	3.4	1	0.6	651	0.19	<0.05	3.20	0.092	0.39	1.2
W230606		7.4	54.4	<0.002	0.72	0.22	5.4	1	1.3	712	0.28	<0.05	4.95	0.132	0.47	1.9
W230607		5.8	41.7	<0.002	0.48	0.21	4.0	1	0.7	742	0.20	<0.05	3.66	0.099	0.37	1.5
W230608		4.5	33.7	0.002	0.40	0.22	3.4	1	0.9	436	0.18	<0.05	3.13	0.085	0.37	1.6
W230609		4.5	33.5	0.002	0.41	0.19	3.4	1	0.8	426	0.18	<0.05	3.07	0.086	0.36	1.5
W230610		9.2	74.8	0.003	0.94	0.38	7.1	1	1.4	528	0.41	<0.05	7.09	0.196	0.87	2.6
W230611		1.3	0.8	<0.002	0.01	0.06	0.2	<1	<0.2	47.2	<0.05	<0.05	0.06	<0.005	<0.02	0.7
W230612		19.4	152.0	0.007	1.82	1.11	14.1	1	3.1	171.5	0.81	0.07	14.30	0.316	1.86	4.2
W230613		19.2	163.5	0.005	1.73	0.93	15.2	1	3.3	202	0.87	<0.05	16.00	0.339	1.66	4.1
W230614		19.3	178.0	0.008	1.60	0.94	16.0	1	3.4	218	0.92	0.06	16.75	0.356	1.80	4.1
W230615		19.0	177.0	0.010	1.83	0.95	15.6	1	3.7	184.5	0.88	<0.05	16.65	0.346	1.87	3.7
W230616		11.1	79.2	0.002	2.56	22.7	10.2	1	1.6	314	0.42	<0.05	6.14	0.261	45.6	6.7
W230617		16.3	182.5	0.012	1.64	0.82	15.9	1	3.3	158.0	0.92	0.05	16.75	0.354	1.52	3.7
W230618		16.5	189.0	0.014	1.66	0.84	16.2	2	3.2	156.0	0.89	<0.05	16.55	0.351	1.52	3.8
W230619		17.2	180.0	0.012	1.52	0.78	15.3	1	3.0	156.5	0.94	<0.05	18.75	0.336	1.36	5.0
W230620		17.9	169.0	0.013	1.51	0.79	15.0	1	3.0	140.5	0.94	<0.05	18.05	0.323	1.36	4.6
W230621		19.5	175.5	0.014	1.74	0.98	14.9	2	3.0	167.5	0.92	0.05	18.10	0.312	1.50	4.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17189036

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W230586		41	0.8	11.4	43	51.9	<0.01
W230587		38	0.8	10.5	44	51.4	<0.01
W230588		24	0.5	7.4	26	34.5	0.01
W230589		59	1.2	15.7	74	74.6	<0.01
W230590		42	0.8	11.9	56	61.2	<0.01
W230591		43	0.8	11.8	44	62.2	<0.01
W230592		73	5.6	15.9	50	68.8	0.50
W230593		38	0.8	10.7	43	54.0	<0.01
W230594		1	0.1	0.7	15	<0.5	<0.01
W230595		38	0.8	11.6	53	58.8	<0.01
W230596		42	0.8	12.6	60	54.3	<0.01
W230597		41	0.9	12.1	48	61.6	<0.01
W230598		50	1.0	14.8	59	85.4	<0.01
W230599		47	0.9	13.8	59	72.9	<0.01
W230600		21	0.5	7.5	27	33.9	0.01
W230601		37	0.7	11.1	46	55.3	<0.01
W230602		34	0.7	11.4	38	50.1	<0.01
W230603		34	0.6	11.5	38	50.3	<0.01
W230604		31	0.6	9.4	35	45.0	<0.01
W230605		23	0.5	5.6	30	25.6	<0.01
W230606		35	0.6	13.0	28	40.1	<0.01
W230607		28	0.4	7.3	41	29.5	0.01
W230608		25	0.4	5.8	47	26.0	<0.01
W230609		27	0.4	6.4	18	24.7	<0.01
W230610		59	0.9	13.2	73	55.6	<0.01
W230611		2	0.1	0.7	16	<0.5	<0.01
W230612		133	1.8	23.4	95	98.1	0.01
W230613		139	1.9	24.6	88	98.0	<0.01
W230614		145	2.0	26.1	98	105.0	<0.01
W230615		144	1.9	23.4	86	118.5	<0.01
W230616		84	7.6	17.8	47	67.5	2.62
W230617		155	1.9	23.5	77	102.0	<0.01
W230618		163	1.8	23.7	84	113.0	<0.01
W230619		178	1.6	29.0	120	108.0	<0.01
W230620		172	1.6	26.6	97	104.0	<0.01
W230621		159	1.7	27.3	83	106.5	<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17189036

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

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Finalized Date: 10- OCT- 2017
Account: RCM

CERTIFICATE WH17190946

Project: Nadaleen

P.O. No.: N17- 083

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 7- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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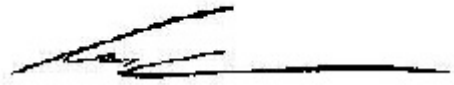
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190946

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230622		11.91	0.11	8.63	80.5	360	3.42	0.30	1.78	0.17	93.7	15.2	69	32.1	36.8	4.27
W230623		10.15	0.09	8.18	406	590	2.91	0.30	2.97	0.16	100.5	13.8	62	22.4	35.1	4.26
W230624		9.79	0.08	8.60	43.3	390	3.17	0.29	1.68	0.18	97.7	15.1	66	32.7	34.2	4.39
W230625		11.93	0.08	8.56	24.7	380	3.33	0.30	1.30	0.13	95.6	15.5	70	31.8	34.3	4.00
W230626		5.01	0.08	8.67	30.9	370	3.44	0.28	1.47	0.17	96.8	16.4	69	33.4	38.3	4.12
W230627		11.95	0.11	8.73	66.2	570	3.64	0.33	2.20	0.37	97.8	17.2	69	31.2	44.5	4.45
W230628		10.94	0.12	8.61	25.2	490	3.47	0.33	1.88	0.20	94.7	16.3	67	35.0	40.2	4.24
W230629		11.14	0.08	8.78	18.4	410	3.21	0.30	1.49	0.20	99.7	15.6	70	36.7	37.3	4.49
W230630		11.70	0.08	8.76	18.6	360	3.01	0.31	1.72	0.17	99.8	16.6	70	35.5	37.4	4.54
W230631		11.93	0.08	8.72	16.6	390	3.25	0.30	1.78	0.13	96.6	15.7	70	37.8	35.0	4.42
W230632		6.57	0.04	0.06	<0.2	50	0.06	0.04	20.8	0.06	1.20	0.8	1	0.15	2.5	0.47
W230633		10.99	0.07	9.17	16.5	430	2.96	0.32	1.56	0.18	108.5	16.3	72	37.8	37.7	4.32
W230634		10.64	0.08	8.61	18.5	490	2.77	0.29	1.78	0.20	105.5	15.8	65	30.2	34.8	4.37
W230635		11.18	0.09	8.27	15.7	480	3.19	0.31	1.60	0.32	91.9	16.3	69	31.7	37.4	4.16
W230636		10.34	0.14	8.14	25.2	550	3.05	0.39	1.55	0.38	84.2	17.7	76	31.9	51.8	4.69
W230637		11.04	0.09	7.34	17.2	360	2.62	0.32	2.91	0.21	76.1	15.5	64	35.2	43.6	4.16
W230638		10.66	0.08	6.68	18.1	500	2.25	0.27	4.95	0.17	68.1	14.6	58	29.6	35.7	4.21
W230639		11.04	0.16	8.10	24.0	540	3.06	0.43	2.23	0.56	83.6	17.0	73	33.5	53.5	4.69
W230640		10.27	0.14	8.69	22.7	490	3.16	0.40	1.91	0.58	84.5	18.2	80	40.9	54.3	4.84
W230641		0.26	0.19	3.87	6430	200	0.90	0.16	12.00	0.17	42.7	12.1	46	10.80	36.8	2.93
W230642		10.53	0.10	8.66	24.5	520	2.81	0.39	1.17	0.15	87.7	18.8	75	37.8	49.0	4.74
W230643		9.98	0.09	8.64	18.7	1480	2.99	0.29	2.10	0.13	94.0	15.4	66	40.6	37.2	4.31
W230644		10.14	0.08	9.08	29.9	1130	3.10	0.29	2.49	0.36	111.0	15.1	65	42.4	35.1	4.30
W230645		<0.02	0.08	8.60	30.8	1050	2.97	0.29	2.49	0.38	108.5	15.3	65	42.8	35.5	4.27
W230646		12.31	0.10	8.03	209	600	3.24	0.23	2.89	0.38	92.7	15.8	63	31.9	38.6	4.13
W230647		6.36	0.09	8.50	148.5	430	3.88	0.25	2.08	0.31	92.9	15.8	66	35.6	38.5	3.82
W230648		10.23	0.06	8.24	47.5	360	3.34	0.31	3.09	0.09	97.0	17.8	57	37.1	45.8	3.76
W230649		7.61	0.06	6.05	39.6	350	1.84	0.30	7.80	0.26	81.6	13.6	37	25.4	38.1	2.92
W230650		12.38	0.07	1.42	61.2	250	0.64	0.07	16.45	0.44	20.2	4.0	11	4.98	13.0	1.74
W230651		11.76	0.11	0.99	423	100	0.57	0.06	17.00	0.41	13.80	3.4	7	2.74	9.1	1.14
W230652		7.05	0.01	0.04	0.7	100	0.05	0.27	19.80	0.06	1.07	0.6	1	0.14	1.4	0.45
W230653		12.05	0.41	0.51	301	50	0.49	0.04	18.45	0.89	9.76	4.8	7	1.08	8.9	1.17
W230654		12.77	0.55	0.90	673	80	0.55	0.08	16.95	1.46	11.80	5.1	10	3.02	14.9	1.41
W230655		0.25	0.67	1.78	>10000	130	0.54	2.73	23.6	0.17	29.5	4.8	26	5.83	15.1	1.32
W230656		7.19	0.39	3.18	105.0	120	1.09	0.21	12.45	1.10	38.6	8.8	27	14.90	30.5	2.44
W230657		12.07	0.19	4.55	152.5	180	1.34	0.25	8.59	0.53	47.3	13.9	43	20.9	46.3	3.86

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 10- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190946

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230622		23.1	0.17	3.4	0.415	0.079	4.12	45.0	29.8	1.28	365	2.79	0.04	12.4	34.8	620
W230623		23.0	0.19	3.1	0.446	0.068	3.89	48.5	15.3	1.77	449	2.97	0.04	11.9	33.8	680
W230624		23.9	0.17	3.2	0.375	0.065	4.12	47.1	29.6	1.40	374	3.13	0.05	12.2	35.1	590
W230625		24.1	0.18	3.1	0.259	0.071	4.13	46.8	19.6	1.50	348	2.97	0.05	12.6	36.1	710
W230626		24.2	0.17	3.2	0.320	0.072	4.19	46.6	24.3	1.52	375	3.05	0.05	12.5	36.6	720
W230627		24.6	0.19	3.5	0.312	0.085	4.16	47.7	35.1	1.66	432	2.99	0.04	13.1	39.0	660
W230628		23.2	0.19	3.6	0.286	0.072	3.98	47.0	59.0	1.75	421	3.52	0.04	12.4	37.3	590
W230629		23.5	0.17	3.2	0.207	0.064	4.07	49.1	60.6	1.74	368	3.45	0.05	12.5	36.0	560
W230630		23.6	0.18	3.2	0.179	0.064	4.10	48.8	46.8	1.82	427	3.26	0.05	12.2	38.2	680
W230631		24.0	0.18	3.1	0.192	0.071	4.20	46.4	28.7	1.80	456	3.11	0.05	12.5	35.3	780
W230632		0.20	0.09	<0.1	<0.005	<0.005	0.02	0.6	1.2	13.25	207	0.09	0.01	0.2	1.6	190
W230633		25.1	0.17	3.3	0.229	0.070	4.22	53.4	33.7	1.71	377	3.09	0.05	13.1	36.5	730
W230634		24.3	0.19	3.3	0.202	0.066	4.14	48.9	28.7	1.77	373	3.98	0.05	12.7	35.8	760
W230635		23.3	0.16	3.3	0.286	0.083	3.98	44.4	44.6	1.53	361	3.19	0.04	12.3	36.9	990
W230636		22.4	0.16	3.0	0.512	0.071	3.70	41.5	86.0	1.45	249	4.99	0.05	11.7	44.5	3630
W230637		20.0	0.15	2.8	0.272	0.069	3.49	37.7	51.9	2.15	627	3.97	0.06	10.1	35.9	1390
W230638		18.35	0.16	2.5	0.196	0.060	3.16	34.8	30.4	2.99	872	4.92	0.05	9.2	34.2	870
W230639		22.1	0.18	3.2	0.357	0.077	3.72	41.7	27.8	1.84	318	6.95	0.06	11.1	43.6	2830
W230640		23.6	0.17	3.2	0.366	0.084	4.08	42.3	36.6	1.85	368	6.93	0.06	11.7	43.2	2300
W230641		10.50	0.11	2.1	15.05	0.034	1.81	22.1	11.3	2.61	1170	1.93	0.02	6.4	26.8	460
W230642		24.2	0.17	3.3	0.525	0.072	4.07	42.2	35.3	1.63	382	4.24	0.06	12.3	44.0	940
W230643		23.3	0.17	3.4	0.401	0.075	4.04	44.6	30.8	1.99	410	3.32	0.05	12.2	34.4	620
W230644		24.3	0.19	3.2	0.484	0.072	4.17	51.7	31.0	1.90	440	3.38	0.05	12.5	34.0	960
W230645		24.8	0.19	3.3	0.452	0.067	4.07	49.5	31.4	1.85	443	3.58	0.05	12.7	35.0	970
W230646		24.5	0.17	3.3	0.933	0.065	3.88	42.0	18.5	1.76	514	3.52	0.05	12.3	36.1	490
W230647		25.5	0.18	3.3	0.656	0.076	4.31	41.5	15.6	1.45	379	4.30	0.05	12.5	37.0	450
W230648		23.4	0.19	2.9	0.283	0.068	3.96	47.1	11.6	1.94	1300	1.04	0.04	11.7	41.5	480
W230649		15.85	0.11	2.4	0.270	0.054	2.98	42.6	6.4	4.74	913	3.91	0.04	9.7	31.3	410
W230650		3.75	0.05	0.7	0.336	0.015	0.69	10.7	2.8	9.91	1280	2.93	0.01	2.7	10.7	240
W230651		2.67	0.05	0.5	0.381	0.009	0.48	6.6	1.9	10.60	1410	11.05	0.01	1.9	9.1	240
W230652		0.16	0.09	<0.1	<0.005	<0.005	0.02	0.5	0.8	12.75	200	0.09	<0.01	0.1	1.5	160
W230653		1.45	0.06	0.3	1.030	0.014	0.25	4.3	1.8	11.55	2240	277	0.01	1.2	15.4	190
W230654		2.48	0.05	0.5	1.685	0.016	0.45	5.4	2.7	10.35	1070	181.0	0.01	1.8	39.5	150
W230655		4.94	0.07	0.9	6.24	0.020	0.91	15.1	8.2	0.87	2100	2.01	0.01	2.6	13.1	320
W230656		8.10	0.08	1.7	2.02	0.041	1.58	19.5	5.8	7.03	605	5.18	0.02	5.4	58.3	290
W230657		11.80	0.09	2.3	3.04	0.062	2.29	23.3	7.6	4.90	888	3.16	0.03	7.2	68.4	400

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190946

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230622		16.5	164.5	0.012	3.72	0.93	15.5	1	3.3	158.0	0.95	<0.05	15.55	0.378	2.89	3.6
W230623		16.7	152.5	0.011	3.51	1.19	14.5	1	2.8	302	0.90	0.05	16.45	0.331	2.52	3.9
W230624		17.3	164.5	0.010	2.91	0.84	15.3	2	3.3	143.0	0.96	<0.05	16.60	0.359	2.25	3.6
W230625		15.8	173.0	0.013	1.74	0.84	15.7	1	3.4	157.0	0.99	0.05	16.05	0.364	1.72	3.7
W230626		17.4	173.5	0.018	1.90	0.91	15.7	2	3.7	155.5	0.98	0.06	16.40	0.365	1.74	3.7
W230627		18.1	169.5	0.016	2.76	2.63	16.3	1	3.9	299	0.99	<0.05	16.35	0.383	2.26	4.0
W230628		18.7	170.0	0.017	1.83	1.03	15.2	1	3.2	196.5	1.00	0.05	16.15	0.363	1.68	4.2
W230629		16.7	186.0	0.015	1.66	0.91	15.8	1	3.3	140.5	0.97	0.07	16.70	0.356	1.52	3.8
W230630		16.8	188.5	0.017	1.73	0.95	15.8	1	3.3	143.0	0.98	0.05	15.90	0.365	1.58	3.8
W230631		16.7	177.0	0.011	1.61	0.87	15.7	1	3.4	158.0	0.98	0.06	15.60	0.366	1.82	3.9
W230632		1.3	0.9	<0.002	0.01	0.11	0.2	1	<0.2	48.8	<0.05	<0.05	0.09	<0.005	<0.02	0.8
W230633		18.1	192.5	0.016	1.80	0.92	15.8	1	3.6	155.5	1.05	<0.05	18.30	0.378	1.79	3.7
W230634		18.8	167.5	0.018	1.69	0.90	14.3	1	3.2	172.5	1.00	0.06	17.55	0.341	1.55	3.9
W230635		17.1	168.0	0.015	1.83	0.88	15.5	1	3.3	172.0	0.97	<0.05	15.45	0.367	1.58	3.8
W230636		17.9	178.0	0.012	2.31	1.04	16.6	2	3.4	220	0.93	0.05	13.60	0.406	3.44	5.3
W230637		14.2	172.0	0.008	1.57	0.99	14.3	1	3.1	142.0	0.80	0.05	12.45	0.337	2.22	4.0
W230638		14.7	152.0	0.009	1.55	1.08	12.5	1	2.9	169.5	0.71	0.05	11.00	0.290	1.84	3.7
W230639		18.0	175.0	0.010	2.22	1.23	15.7	2	3.6	181.0	0.89	0.07	13.50	0.357	2.68	5.4
W230640		18.0	189.5	0.010	2.12	1.20	16.7	2	3.8	149.0	0.90	0.07	13.80	0.378	2.62	5.2
W230641		10.9	85.0	<0.002	2.56	23.9	10.3	1	1.7	320	0.46	<0.05	6.17	0.268	44.6	6.6
W230642		19.9	175.5	0.012	2.30	1.15	16.5	2	3.7	152.0	0.98	0.08	14.40	0.383	2.70	4.0
W230643		16.7	158.5	0.012	2.04	0.91	14.9	1	3.2	189.0	1.02	0.06	15.55	0.357	1.79	3.6
W230644		19.1	163.0	0.014	2.75	0.82	14.5	1	3.1	256	1.01	0.05	18.20	0.343	2.24	4.3
W230645		19.6	151.0	0.012	2.76	0.82	14.8	1	3.1	253	1.02	<0.05	17.70	0.343	2.30	4.3
W230646		21.9	119.0	0.007	3.73	1.95	15.0	1	2.9	175.0	0.97	<0.05	15.25	0.340	2.99	3.8
W230647		21.4	130.0	0.004	3.45	0.98	15.4	1	3.0	183.5	0.99	<0.05	15.65	0.350	2.46	3.8
W230648		18.3	132.0	0.004	3.23	0.80	15.0	1	2.6	147.5	0.90	0.05	15.50	0.332	1.53	2.5
W230649		15.0	112.0	0.005	2.23	0.72	10.3	1	1.6	227	0.71	<0.05	13.00	0.265	1.24	2.7
W230650		6.7	25.6	0.009	0.78	0.54	2.6	1	0.5	300	0.20	<0.05	2.80	0.069	0.68	1.7
W230651		43.4	18.5	0.018	0.65	0.92	1.9	1	0.6	200	0.14	<0.05	1.87	0.050	0.82	3.3
W230652		1.3	0.9	<0.002	<0.01	0.07	0.1	<1	<0.2	51.3	<0.05	<0.05	0.09	<0.005	<0.02	0.6
W230653		31.4	9.5	0.542	0.97	2.86	1.2	3	1.4	246	0.08	<0.05	1.04	0.032	3.98	18.6
W230654		30.9	18.7	0.209	1.19	2.73	2.2	3	1.4	207	0.13	<0.05	1.74	0.065	3.91	8.3
W230655		9.0	40.7	0.003	1.39	46.7	5.3	1	0.7	976	0.19	0.05	3.33	0.085	23.3	6.2
W230656		39.2	61.5	0.024	2.04	1.00	6.7	2	1.1	158.5	0.40	0.09	5.61	0.205	5.41	3.5
W230657		38.9	88.7	0.018	3.38	1.31	11.1	3	1.5	158.5	0.52	0.09	6.65	0.349	8.27	2.5

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190946

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230622		174	2.6	23.4	83	116.5		<0.01
W230623		162	4.4	22.7	73	109.5		<0.01
W230624		164	2.1	22.1	88	111.0		<0.01
W230625		160	2.2	22.9	76	111.0		<0.01
W230626		163	2.1	23.2	95	110.0		<0.01
W230627		180	3.0	24.6	121	124.0		<0.01
W230628		194	2.3	24.6	87	124.5		<0.01
W230629		164	1.9	23.4	91	116.0		<0.01
W230630		173	1.9	24.2	86	112.5		<0.01
W230631		160	2.0	24.6	75	108.5		<0.01
W230632		3	0.1	0.8	18	0.8		<0.01
W230633		171	2.1	24.1	102	116.5		<0.01
W230634		171	1.8	23.0	87	110.5		<0.01
W230635		173	2.0	23.5	132	113.5		<0.01
W230636		186	2.0	33.9	144	106.0		<0.01
W230637		154	1.8	26.1	90	97.7		<0.01
W230638		128	1.6	20.7	63	90.2		<0.01
W230639		195	1.9	36.3	173	108.5		<0.01
W230640		198	1.9	34.8	201	113.0		<0.01
W230641		87	8.4	18.9	48	73.6		2.56
W230642		171	2.1	25.0	91	111.0		<0.01
W230643		167	1.9	23.7	70	115.0		<0.01
W230644		173	1.9	26.6	142	112.5		<0.01
W230645		174	2.0	27.0	144	111.5		<0.01
W230646		158	5.9	21.9	139	111.5		0.01
W230647		158	3.1	21.5	129	115.0		<0.01
W230648		104	1.9	22.3	52	102.5		<0.01
W230649		64	1.4	18.0	42	86.0		<0.01
W230650		23	1.4	6.7	81	24.9		<0.01
W230651		40	1.2	4.4	125	17.7		<0.01
W230652		2	0.1	0.7	17	<0.5		<0.01
W230653		242	1.5	3.9	220	12.1		0.01
W230654		93	2.4	4.0	335	20.9		<0.01
W230655		32	17.3	15.4	25	32.2	1.315	2.74
W230656		63	1.7	11.6	207	62.3		0.01
W230657		104	2.5	17.6	65	82.4		<0.01

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 10- OCT- 2017
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CERTIFICATE OF ANALYSIS WH17190946

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE WH17190949

Project: Nadaleen

P.O. No.: N17- 084

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 7- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

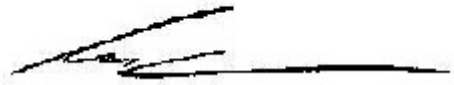
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17190949

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230658		12.18	0.16	5.57	86.0	360	1.70	0.35	6.47	0.20	51.4	16.9	49	26.4	61.2	4.21
W230659		4.64	0.08	4.54	107.0	310	1.36	0.23	6.03	0.07	42.4	13.5	43	21.4	40.3	3.45
W230660		7.77	0.07	3.00	101.5	140	0.83	0.20	5.96	0.09	35.6	10.6	34	11.90	27.4	3.35
W230661		5.00	0.06	0.05	0.8	30	0.10	0.06	21.3	0.07	1.07	0.8	1	0.15	3.1	0.47
W230662		12.97	0.09	6.64	53.6	270	1.94	0.35	3.60	0.08	63.0	20.2	66	35.4	67.6	4.64
W230663		11.64	0.08	5.14	309	230	1.64	0.33	6.74	0.17	55.0	10.2	43	19.85	29.2	3.71
W230664		10.65	0.10	4.74	5600	160	1.22	0.23	2.88	0.59	47.0	13.9	59	13.85	42.9	3.60
W230665		0.25	0.67	1.91	>10000	140	0.60	2.87	26.1	0.15	27.7	5.2	27	6.16	16.6	1.41
W230666		10.40	0.10	6.02	1175	250	1.69	0.26	3.01	0.20	58.8	20.4	62	22.1	56.7	4.49
W230667		11.38	0.07	6.97	178.5	220	1.90	0.30	3.05	0.19	65.2	17.8	71	28.4	66.2	5.05
W230668		11.30	0.05	6.63	393	180	1.96	0.27	3.40	0.14	62.6	16.1	67	29.8	59.0	5.09
W230669		<0.02	0.07	6.70	406	190	1.98	0.28	3.51	0.15	63.9	17.0	69	29.7	58.4	5.20
W230670		7.22	0.09	6.73	45.8	280	1.92	0.29	4.28	0.13	65.6	18.1	66	30.8	59.3	5.40
W230671		0.25	0.11	3.77	2680	200	0.96	0.16	19.05	0.13	38.7	11.3	44	10.55	43.2	3.12
W230672		7.37	0.09	6.92	74.3	220	2.04	0.29	2.77	0.14	65.6	21.9	71	28.8	60.5	5.61
W230673		7.12	0.07	6.30	241	280	1.57	0.24	3.58	0.14	58.4	18.3	65	19.80	53.6	5.57
W230674		7.46	0.07	5.67	2630	380	1.34	0.22	2.49	0.15	52.3	15.2	66	13.55	50.1	4.72
W230675		7.54	0.08	4.60	>10000	170	1.05	0.20	0.97	0.15	43.7	13.2	61	11.10	41.6	4.03
W230676		7.31	0.05	5.53	1895	240	1.46	0.24	1.88	0.04	54.2	12.6	65	13.15	42.6	4.32
W230677		7.52	0.08	7.85	1865	290	2.23	0.34	1.91	0.10	75.9	23.6	79	20.5	63.9	5.59
W230678		7.05	0.06	5.83	4000	210	1.37	0.22	1.78	0.10	53.8	17.6	72	13.60	52.1	5.08
W230679		7.97	0.04	3.04	327	100	0.62	0.11	2.13	0.08	38.1	10.8	63	8.06	26.4	3.43
W230680		5.35	0.03	0.05	7.0	20	0.05	0.05	21.9	0.06	1.08	0.8	1	0.13	2.9	0.49
W230681		8.43	0.06	6.99	611	200	1.87	0.28	1.93	0.22	65.4	22.4	81	25.6	57.5	5.80
W230682		8.67	0.08	7.77	103.0	310	2.20	0.31	2.46	0.14	71.9	19.0	78	27.2	64.6	5.78
W230683		7.68	0.06	3.19	156.5	160	0.71	0.13	3.46	0.07	33.3	11.1	62	9.22	28.8	4.06
W230684		8.02	0.05	2.78	1185	120	0.47	0.10	2.60	0.07	29.2	10.7	61	5.94	24.7	3.23
W230685		8.36	0.07	3.28	788	150	0.70	0.13	3.25	0.08	37.0	10.6	69	8.86	26.7	3.71
W230686		8.13	0.06	2.24	422	150	0.56	0.13	4.58	0.06	30.8	8.1	45	6.34	17.6	3.53
W230687		7.73	0.08	4.57	509	240	1.21	0.20	2.55	0.10	46.9	13.6	59	14.90	33.9	3.83
W230688		8.11	0.07	5.08	136.0	290	1.30	0.24	3.90	0.10	51.4	14.6	51	18.35	36.5	4.53
W230689		8.88	0.09	7.33	465	320	2.22	0.31	2.69	0.15	73.1	29.4	72	32.7	61.5	6.10
W230690		8.93	0.07	6.63	17.9	240	1.92	0.28	3.26	0.06	66.3	18.8	75	35.4	55.8	5.67
W230691		7.24	0.06	7.76	7.5	250	2.19	0.34	1.86	0.07	78.4	17.9	83	45.7	65.6	5.16
W230692		3.61	0.04	7.83	4.7	270	2.41	0.34	1.79	0.12	79.8	18.0	82	47.2	66.8	5.21
W230693		6.79	0.06	6.70	11.9	220	1.94	0.28	2.87	0.06	67.0	16.2	76	38.1	56.8	5.54

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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VANCOUVER BC V6B 1L8

Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190949

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230658		14.65	0.13	2.6	2.61	0.067	2.75	25.2	11.7	3.72	749	1.96	0.03	8.7	50.2	490
W230659		11.35	0.10	2.0	2.32	0.047	2.23	20.8	12.4	3.26	664	1.15	0.02	6.6	35.8	380
W230660		7.57	0.08	1.5	1.500	0.038	1.34	17.6	11.8	3.01	678	0.71	0.02	5.2	23.6	270
W230661		0.17	<0.05	<0.1	0.007	<0.005	0.02	0.5	1.0	13.10	202	0.06	<0.01	0.1	1.6	170
W230662		17.45	0.13	3.1	1.440	0.072	3.28	30.1	14.3	2.25	657	0.76	0.03	10.6	42.8	490
W230663		12.70	0.10	2.5	1.655	0.058	2.47	27.7	10.6	3.62	1210	0.57	0.03	8.3	22.6	440
W230664		12.20	0.10	2.3	6.34	0.051	2.15	23.9	15.9	1.57	1080	0.74	0.02	7.8	29.5	340
W230665		5.01	0.09	0.9	6.73	0.023	0.93	13.9	9.2	0.92	2290	1.73	0.01	2.7	13.8	340
W230666		15.40	0.12	3.0	1.705	0.063	2.62	28.3	52.3	1.59	534	0.37	0.03	10.2	37.7	450
W230667		17.60	0.13	3.2	0.924	0.079	3.21	31.6	47.2	1.86	614	0.40	0.03	11.9	36.9	520
W230668		16.85	0.12	3.3	1.140	0.068	3.06	30.4	31.3	1.90	722	0.35	0.03	11.4	33.0	540
W230669		17.00	0.13	3.5	1.210	0.067	3.13	30.9	31.2	1.95	741	0.36	0.03	11.5	34.3	550
W230670		17.30	0.14	3.4	0.834	0.069	2.96	31.7	84.1	1.83	669	0.43	0.03	11.8	37.6	600
W230671		9.81	0.09	1.9	3.61	0.035	1.75	19.6	9.6	1.47	1220	1.60	0.02	6.3	25.1	400
W230672		17.65	0.13	3.5	0.779	0.073	3.20	31.6	54.4	1.64	620	0.45	0.03	11.8	39.7	530
W230673		15.50	0.12	3.1	1.265	0.064	2.93	28.1	34.6	1.99	939	0.38	0.03	10.6	37.1	540
W230674		14.20	0.12	2.8	3.15	0.054	2.61	25.4	23.4	1.35	615	0.30	0.02	9.2	32.3	460
W230675		11.95	0.11	2.3	4.49	0.045	2.04	21.7	20.0	0.61	396	0.37	0.02	7.4	27.5	300
W230676		13.90	0.12	2.6	2.80	0.051	2.60	26.5	15.4	1.06	495	0.36	0.03	9.0	26.7	590
W230677		19.85	0.15	3.5	2.56	0.072	3.70	36.4	15.8	1.32	414	0.51	0.03	13.1	41.4	620
W230678		14.50	0.11	2.8	3.16	0.053	2.70	26.4	17.9	1.04	543	0.36	0.02	9.4	34.9	470
W230679		7.93	0.07	1.9	1.080	0.027	1.33	16.3	10.8	0.87	551	0.36	0.01	5.5	22.5	260
W230680		0.16	0.05	<0.1	<0.005	0.005	0.02	0.5	1.0	13.35	216	0.08	<0.01	0.1	1.5	190
W230681		17.75	0.13	3.3	1.110	0.061	3.22	32.2	17.3	1.12	660	0.61	0.03	11.5	39.7	610
W230682		19.55	0.16	3.6	0.802	0.075	3.59	34.4	32.6	1.45	489	0.41	0.03	13.0	40.0	620
W230683		8.21	0.09	1.7	0.470	0.029	1.39	16.2	18.4	1.43	692	0.36	0.01	5.4	22.4	260
W230684		7.19	0.08	1.7	1.190	0.027	1.25	14.3	9.8	1.07	549	0.31	0.01	4.9	19.9	260
W230685		8.42	0.09	1.8	2.23	0.032	1.48	17.9	13.2	1.41	572	0.66	0.01	5.3	21.1	340
W230686		5.73	0.08	1.3	1.510	0.022	1.03	14.9	9.7	1.90	1110	0.48	0.01	3.7	15.9	300
W230687		11.60	0.10	2.3	1.190	0.041	2.12	23.2	13.8	1.22	548	0.50	0.02	7.7	27.4	350
W230688		13.00	0.11	2.6	0.783	0.047	2.36	25.4	22.3	1.78	881	0.38	0.02	8.3	26.0	440
W230689		19.15	0.15	3.5	0.709	0.074	3.31	35.2	28.5	1.89	578	0.57	0.03	12.5	45.6	620
W230690		17.35	0.14	3.2	0.198	0.075	2.97	32.6	55.9	2.38	835	0.36	0.03	11.2	35.7	1020
W230691		20.5	0.16	3.7	0.078	0.081	3.61	38.4	94.8	2.19	459	0.27	0.04	13.5	38.2	620
W230692		20.7	0.18	3.8	0.068	0.079	3.64	38.9	105.0	2.19	435	0.27	0.04	13.8	38.6	630
W230693		17.05	0.14	3.2	0.061	0.065	2.98	32.2	115.5	2.46	865	0.36	0.03	11.5	34.2	630

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Finalized Date: 11- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190949

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230658		27.6	110.5	0.008	3.55	0.69	15.0	2	1.9	165.0	0.60	0.12	7.35	0.423	7.93	2.0
W230659		26.6	86.7	0.002	2.57	0.90	11.8	1	1.4	169.5	0.45	0.05	6.34	0.338	4.56	1.5
W230660		27.1	54.2	0.002	2.30	0.89	7.6	1	1.0	160.5	0.37	0.05	4.66	0.226	4.18	1.0
W230661		1.3	0.9	<0.002	<0.01	0.09	0.1	1	<0.2	48.1	<0.05	<0.05	0.06	<0.005	<0.02	0.6
W230662		32.6	136.5	<0.002	4.19	0.52	18.8	1	2.1	122.0	0.73	0.12	9.10	0.540	3.20	1.8
W230663		33.7	100.5	<0.002	2.79	2.87	11.3	1	1.7	180.5	0.61	0.07	8.26	0.320	6.86	1.8
W230664		25.7	88.7	<0.002	2.83	10.35	14.4	1	1.6	98.9	0.53	0.07	6.59	0.430	17.10	1.5
W230665		7.0	42.5	<0.002	1.41	44.9	5.8	1	0.6	1045	0.19	0.06	3.38	0.089	24.1	6.4
W230666		25.0	114.5	<0.002	3.40	3.01	16.7	1	2.2	172.5	0.72	0.06	8.69	0.514	5.57	1.8
W230667		16.0	145.0	<0.002	4.08	0.68	20.0	<1	2.3	126.0	0.82	0.07	9.83	0.609	3.49	2.0
W230668		12.8	145.5	<0.002	4.27	1.34	19.4	<1	2.0	158.5	0.79	0.07	9.48	0.573	3.72	2.0
W230669		13.3	145.5	<0.002	4.39	1.36	19.8	<1	2.0	159.5	0.81	<0.05	9.73	0.577	3.91	2.0
W230670		17.0	141.5	<0.002	4.54	0.51	19.3	1	2.0	180.0	0.82	0.08	9.84	0.580	4.87	2.1
W230671		8.7	81.6	0.002	2.60	9.44	9.2	1	1.4	749	0.45	0.06	5.63	0.271	11.15	2.4
W230672		17.6	148.0	<0.002	5.03	0.52	19.4	<1	2.2	147.5	0.85	0.05	9.90	0.584	2.80	2.1
W230673		18.3	130.0	<0.002	4.84	1.10	17.4	<1	1.8	172.0	0.76	0.06	8.85	0.547	3.90	1.8
W230674		17.0	111.5	<0.002	3.92	5.81	15.9	<1	1.7	198.5	0.67	0.06	7.99	0.518	10.20	1.7
W230675		17.2	86.6	<0.002	3.70	22.9	10.2	1	1.4	94.3	0.53	<0.05	6.81	0.440	13.05	1.4
W230676		10.9	113.5	<0.002	3.61	3.02	13.6	<1	1.7	144.0	0.64	0.05	8.30	0.467	9.62	1.7
W230677		19.1	162.5	0.002	5.20	4.21	21.3	1	2.5	161.5	0.93	0.08	11.20	0.642	7.31	2.3
W230678		14.5	114.5	<0.002	4.66	7.24	16.0	1	1.7	122.5	0.67	<0.05	7.88	0.560	8.25	1.6
W230679		6.1	57.7	<0.002	2.28	1.81	8.9	<1	1.0	92.8	0.39	<0.05	4.43	0.442	4.33	1.0
W230680		1.2	0.9	<0.002	<0.01	0.08	0.2	1	<0.2	47.3	<0.05	<0.05	0.06	<0.005	0.02	0.5
W230681		18.2	148.0	<0.002	5.34	2.88	19.8	1	2.2	116.5	0.82	0.06	9.82	0.627	5.01	2.0
W230682		17.5	156.0	<0.002	5.18	0.59	21.0	<1	2.3	188.0	0.97	0.06	10.55	0.656	5.14	2.2
W230683		7.9	62.7	<0.002	2.43	0.68	9.0	<1	1.1	153.5	0.39	<0.05	4.49	0.358	2.43	0.9
W230684		6.4	52.9	<0.002	1.90	2.96	8.1	<1	1.0	97.4	0.34	<0.05	3.98	0.385	5.74	0.9
W230685		9.9	64.1	<0.002	2.36	2.86	9.1	1	1.1	117.5	0.38	<0.05	4.91	0.344	7.67	1.2
W230686		11.4	44.9	<0.002	1.75	2.64	5.6	<1	0.7	151.0	0.28	<0.05	4.14	0.201	4.69	1.0
W230687		20.4	95.3	<0.002	2.69	3.33	11.4	1	1.4	131.0	0.56	<0.05	7.00	0.381	4.61	1.5
W230688		18.3	113.0	<0.002	3.01	1.76	12.7	1	1.6	177.5	0.60	0.05	8.18	0.387	3.31	1.7
W230689		16.8	162.0	<0.002	4.27	2.46	21.1	1	2.3	183.0	0.88	0.05	10.70	0.589	3.56	2.2
W230690		20.0	154.5	<0.002	1.12	0.61	18.3	1	2.2	151.0	0.81	0.06	9.60	0.529	1.17	2.0
W230691		16.8	197.5	<0.002	0.24	0.41	21.7	<1	2.5	118.0	0.96	0.07	11.70	0.611	1.19	2.4
W230692		15.2	200	<0.002	0.23	0.36	22.3	1	2.5	105.0	0.99	0.08	11.85	0.624	1.18	2.4
W230693		17.3	167.5	<0.002	0.15	0.30	19.1	<1	2.0	148.5	0.82	0.05	9.73	0.545	0.99	2.0

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CERTIFICATE OF ANALYSIS WH17190949

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230658		124	1.7	19.6	45	97.4		<0.01
W230659		94	1.9	15.9	35	78.2		<0.01
W230660		62	2.2	11.4	29	55.8		<0.01
W230661		2	0.1	0.7	17	<0.5		<0.01
W230662		149	1.5	21.1	46	111.5		<0.01
W230663		81	3.3	17.9	79	89.3		0.02
W230664		122	7.5	15.5	217	86.2		0.65
W230665		33	18.4	16.0	24	34.1	1.365	2.70
W230666		138	6.7	20.4	99	107.5		0.02
W230667		158	2.2	22.7	118	120.0		<0.01
W230668		151	7.1	22.7	87	119.0		0.05
W230669		153	7.1	23.2	92	120.0		0.06
W230670		150	1.6	23.8	89	121.5		<0.01
W230671		77	5.6	17.3	49	69.7		0.51
W230672		154	1.4	22.6	94	120.5		0.06
W230673		140	4.2	21.5	89	111.0		0.01
W230674		140	7.7	18.8	99	101.0		0.10
W230675		124	9.5	15.3	85	84.9	1.615	0.64
W230676		125	7.9	19.2	51	94.7		0.15
W230677		170	13.6	24.7	96	131.0		0.03
W230678		157	9.8	18.4	91	101.5		0.16
W230679		128	3.8	10.0	58	66.8		0.06
W230680		3	0.1	0.8	18	<0.5		<0.01
W230681		171	8.1	23.6	145	122.5		0.18
W230682		170	2.4	24.4	139	133.0		<0.01
W230683		102	2.9	11.0	50	63.7		0.02
W230684		110	4.2	9.2	52	59.8		0.32
W230685		99	4.3	12.6	49	66.5		0.19
W230686		54	2.4	10.3	34	48.5		0.33
W230687		99	5.9	15.4	74	83.6		0.23
W230688		102	5.3	18.6	81	91.0		0.05
W230689		154	5.9	24.2	107	126.5		0.19
W230690		141	1.3	24.3	72	114.0		<0.01
W230691		159	1.6	26.1	77	134.5		<0.01
W230692		161	1.6	26.5	96	146.0		<0.01
W230693		145	1.3	24.7	72	116.5		<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 11- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17190949

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- OCT- 2017
Account: RCM

CERTIFICATE WH17187143

Project: Nadaleen

P.O. No.: N17- 085

This report is for 27 Rock samples submitted to our lab in Whitehorse, YT, Canada on 1- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

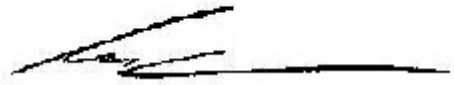
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187143

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232333		10.16	0.04	5.76	8.3	230	1.40	0.24	2.34	0.14	55.6	16.5	90	32.2	49.9	4.40
W232334		10.45	0.05	6.71	10.7	250	1.80	0.27	1.94	0.10	70.6	20.2	81	42.2	58.8	4.70
W232335		9.70	0.06	6.14	21.0	220	1.51	0.24	1.94	0.10	59.4	17.2	90	33.3	54.1	4.77
W232336		10.69	0.05	6.31	33.3	220	1.72	0.24	2.04	0.09	61.4	17.6	77	35.7	52.3	4.62
W232337		6.91	<0.01	0.05	<0.2	30	0.05	0.03	20.9	0.05	1.28	0.8	1	0.28	1.9	0.48
W232338		11.73	0.07	5.77	941	230	1.36	0.23	3.44	0.29	58.2	21.5	63	13.45	55.4	4.93
W232339		11.36	0.04	7.07	4190	300	1.51	0.30	1.26	0.30	69.0	21.5	79	14.65	65.6	4.96
W232340		5.81	0.05	7.28	586	290	1.71	0.31	1.96	0.30	71.2	20.9	77	16.55	72.3	5.34
W232341		12.20	0.05	7.31	73.2	280	1.99	0.29	2.10	0.50	71.0	20.1	80	20.8	70.4	5.40
W232342		0.25	0.18	3.91	6500	210	0.90	0.15	12.20	0.15	42.0	12.8	47	10.80	42.8	2.96
W232343		11.15	0.04	6.83	54.1	210	1.72	0.28	1.90	0.21	69.0	19.8	81	28.0	68.1	5.35
W232344		10.59	0.06	7.55	63.4	270	1.94	0.31	1.48	0.10	75.2	24.2	81	29.4	70.9	5.66
W232345		11.70	0.04	7.61	33.4	240	1.96	0.32	1.71	0.09	76.9	22.3	79	33.4	72.8	5.56
W232346		11.70	0.06	7.13	40.6	220	1.78	0.29	1.70	0.02	68.0	22.4	78	39.5	69.6	5.48
W232347		<0.02	0.06	7.27	40.6	230	1.78	0.30	1.77	0.03	69.7	22.5	80	40.1	71.7	5.53
W232348		11.13	0.05	7.36	49.5	250	1.90	0.30	1.73	<0.02	75.6	21.8	79	39.3	71.2	5.45
W232349		10.30	0.03	6.65	50.8	230	1.65	0.26	2.51	<0.02	64.5	20.7	75	26.3	66.3	5.14
W232350		10.57	0.05	6.59	59.3	270	1.57	0.26	2.48	0.02	65.7	22.0	75	28.3	65.8	5.24
W232351		6.84	<0.01	0.05	0.6	30	0.06	0.02	20.1	0.05	1.27	0.7	1	0.20	1.9	0.46
W232352		10.65	0.04	7.10	63.8	230	1.66	0.28	2.42	0.16	70.3	19.7	77	30.7	65.5	5.31
W232353		5.11	0.08	7.79	746	350	2.02	0.32	2.66	0.17	75.1	25.4	72	18.90	66.9	5.23
W232354		11.31	0.11	3.89	82.2	280	1.06	0.10	12.70	0.19	46.2	6.6	46	14.20	24.6	1.44
W232355		10.89	0.20	4.19	132.5	270	1.19	0.10	13.75	0.33	45.7	7.3	50	12.40	26.7	1.37
W232356		0.25	0.63	1.84	>10000	140	0.49	2.92	25.1	0.17	28.2	5.2	27	6.00	18.0	1.35
W232357		11.89	0.10	3.94	864	160	1.33	0.11	11.20	0.06	48.2	6.8	48	13.90	27.3	1.82
W232358		11.59	0.07	3.92	49.9	350	1.39	0.13	12.05	0.05	45.3	6.5	44	17.80	29.9	1.72
W232359		10.53	0.05	7.57	122.0	260	2.15	0.32	2.31	0.47	76.0	20.9	74	25.6	68.6	4.94

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187143

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232333		15.70	0.14	2.5	0.186	0.057	2.60	26.7	128.5	1.82	567	2.36	0.05	10.0	32.1	420
W232334		19.15	0.16	2.9	0.256	0.069	3.22	34.3	104.5	1.87	503	1.03	0.05	11.9	38.8	1080
W232335		16.55	0.14	2.6	0.193	0.059	2.89	29.1	101.5	1.87	532	1.76	0.04	10.7	34.7	480
W232336		17.70	0.13	2.6	0.347	0.060	2.99	31.6	79.6	1.70	563	1.15	0.04	10.7	35.5	430
W232337		0.23	0.09	<0.1	0.010	0.006	0.02	0.6	1.3	13.20	208	0.35	0.01	0.2	1.6	170
W232338		16.20	0.12	2.5	2.19	0.055	2.78	27.9	12.4	1.74	690	2.00	0.03	10.7	38.8	740
W232339		20.8	0.13	3.0	10.25	0.049	3.41	32.9	12.5	0.94	491	0.79	0.03	13.4	45.3	600
W232340		20.6	0.13	3.2	1.090	0.071	3.53	34.7	14.4	1.29	543	0.88	0.03	14.0	41.4	600
W232341		20.8	0.12	3.2	0.322	0.076	3.52	34.5	37.5	1.99	709	0.87	0.03	13.7	39.1	580
W232342		11.30	0.10	1.9	14.15	0.035	1.85	21.6	12.1	2.62	1200	2.16	0.02	6.9	29.1	450
W232343		19.35	0.13	3.1	0.131	0.073	3.13	32.4	95.5	2.18	655	0.77	0.03	13.3	39.0	670
W232344		21.5	0.13	3.3	0.104	0.081	3.52	36.2	95.9	2.16	476	0.72	0.04	14.4	47.4	630
W232345		21.9	0.15	3.3	0.078	0.080	3.51	37.1	126.5	2.24	595	0.77	0.04	14.7	44.5	580
W232346		19.85	0.13	3.2	0.070	0.074	3.18	33.1	134.5	2.21	565	0.51	0.04	13.7	44.0	570
W232347		20.2	0.12	3.2	0.071	0.073	3.26	33.4	137.0	2.28	588	0.48	0.05	13.8	44.3	580
W232348		20.8	0.13	3.2	0.070	0.074	3.25	35.4	126.0	2.25	591	0.43	0.04	13.9	43.1	580
W232349		18.45	0.12	2.9	0.041	0.066	3.16	30.7	83.2	2.47	693	0.33	0.05	12.3	41.6	520
W232350		18.55	0.13	3.0	0.042	0.065	3.12	31.3	83.8	2.47	655	0.41	0.04	12.4	42.1	570
W232351		0.21	0.07	<0.1	0.006	<0.005	0.02	0.6	1.3	12.60	198	0.11	0.01	0.2	1.5	180
W232352		19.45	0.11	3.1	0.063	0.070	3.35	33.6	54.5	2.39	686	0.47	0.04	13.0	39.4	550
W232353		21.5	0.12	3.4	0.773	0.077	3.68	36.6	14.8	1.61	724	1.37	0.03	14.0	42.9	620
W232354		10.35	0.08	2.2	0.235	0.027	2.36	24.1	25.7	3.26	153	1.24	0.03	7.5	17.5	690
W232355		11.50	0.10	2.6	0.670	0.030	2.43	23.5	22.6	3.39	224	1.65	0.03	8.2	19.1	860
W232356		5.38	0.06	0.8	5.98	0.021	0.92	15.0	8.7	0.89	2230	2.01	0.01	3.0	14.0	330
W232357		10.95	0.09	2.1	0.961	0.028	2.21	24.4	29.3	5.44	297	1.27	0.03	7.4	20.3	520
W232358		10.75	0.09	1.9	0.506	0.028	2.30	23.2	35.2	4.57	209	0.72	0.03	7.2	19.5	470
W232359		21.3	0.13	3.2	0.195	0.078	3.58	36.3	29.5	1.96	596	0.82	0.04	14.0	39.5	620

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 1- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187143

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232333		14.2	123.0	<0.002	0.44	0.49	15.6	1	1.9	109.0	0.67	<0.05	10.10	0.424	1.00	1.8
W232334		18.5	154.0	0.002	0.62	0.57	19.0	1	2.3	116.5	0.79	0.05	11.80	0.472	1.33	2.2
W232335		13.6	133.5	<0.002	0.53	0.47	16.6	1	2.0	97.6	0.71	0.05	10.35	0.461	1.01	1.9
W232336		19.5	143.5	<0.002	0.92	0.58	17.4	2	2.1	102.5	0.70	0.05	10.75	0.421	1.19	2.0
W232337		1.5	1.5	<0.002	0.01	0.05	0.2	1	<0.2	47.1	<0.05	<0.05	0.09	<0.005	<0.02	0.7
W232338		22.0	112.5	<0.002	3.92	13.55	15.8	1	1.9	131.0	0.72	0.05	9.91	0.449	9.25	1.8
W232339		16.5	142.0	<0.002	4.83	54.3	17.0	2	2.6	99.6	0.90	0.07	11.85	0.578	46.6	2.1
W232340		40.4	150.0	<0.002	5.10	4.71	20.4	1	2.5	123.0	0.93	0.05	12.45	0.583	3.31	2.2
W232341		24.1	154.5	<0.002	1.66	0.77	20.4	1	2.4	129.0	0.92	<0.05	12.60	0.571	2.43	2.2
W232342		12.6	82.8	<0.002	2.62	26.7	10.9	2	1.8	326	0.46	<0.05	7.21	0.271	46.8	7.0
W232343		18.7	151.0	<0.002	0.26	0.56	19.9	1	2.3	102.0	0.87	0.05	11.60	0.567	1.31	2.2
W232344		27.4	171.5	<0.002	0.63	0.80	20.4	1	2.6	93.0	0.96	0.05	13.20	0.574	1.31	2.4
W232345		23.4	179.0	<0.002	0.45	0.74	20.8	1	2.6	108.5	0.98	0.05	13.00	0.578	1.31	2.5
W232346		23.5	165.5	<0.002	0.33	0.71	19.3	1	2.4	92.1	0.92	0.05	12.20	0.564	1.16	2.2
W232347		23.6	167.5	<0.002	0.31	0.63	20.1	1	2.5	92.2	0.92	0.05	12.40	0.580	1.14	2.2
W232348		17.4	167.5	<0.002	0.28	0.60	20.2	1	2.5	103.0	0.93	0.07	12.45	0.578	1.13	2.2
W232349		14.9	167.0	<0.002	0.10	0.42	19.0	1	2.2	111.5	0.81	0.05	11.10	0.537	1.09	2.1
W232350		16.5	164.0	<0.002	0.10	0.44	19.3	1	2.1	129.5	0.84	0.07	11.05	0.538	1.01	2.0
W232351		1.4	1.3	<0.002	<0.01	<0.05	0.2	<1	<0.2	44.8	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W232352		18.6	164.0	<0.002	0.18	0.75	19.2	1	2.4	167.0	0.88	0.07	12.25	0.555	1.04	2.2
W232353		29.7	172.5	<0.002	4.82	3.17	21.0	2	2.6	178.0	0.97	0.05	13.60	0.559	4.27	2.5
W232354		11.5	81.9	<0.002	0.48	0.36	6.2	3	1.4	406	0.51	<0.05	10.05	0.194	0.84	7.7
W232355		13.7	85.5	0.003	0.61	1.87	6.9	5	1.5	392	0.58	<0.05	11.40	0.206	2.23	11.2
W232356		10.3	39.3	0.002	1.40	44.8	5.8	2	0.7	1025	0.21	<0.05	3.95	0.087	25.8	6.6
W232357		10.2	83.7	<0.002	0.59	3.92	6.6	3	1.5	202	0.52	<0.05	10.50	0.192	3.42	5.7
W232358		9.7	87.0	<0.002	0.57	0.50	6.4	3	1.5	223	0.51	<0.05	9.97	0.188	1.11	6.2
W232359		25.5	171.0	<0.002	1.91	0.71	20.3	1	2.6	158.5	0.96	0.06	13.15	0.551	1.87	2.4

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Finalized Date: 1- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17187143

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232333		115	1.1	18.5	87	96.1		<0.01
W232334		131	1.3	25.5	82	112.5		<0.01
W232335		122	1.2	19.3	88	103.5		<0.01
W232336		119	1.3	19.7	83	101.0		<0.01
W232337		2	0.1	0.9	17	<0.5		<0.01
W232338		120	9.4	19.7	159	95.7		0.61
W232339		157	15.0	22.8	89	114.5		4.78
W232340		155	11.4	24.3	233	122.5		0.02
W232341		151	2.2	27.2	269	140.0		<0.01
W232342		86	8.7	19.3	51	73.8		2.47
W232343		149	1.5	24.9	112	119.5		<0.01
W232344		149	1.7	25.9	92	129.0		<0.01
W232345		148	1.7	26.0	82	135.0		<0.01
W232346		146	1.6	24.3	67	122.5		<0.01
W232347		151	1.6	25.5	67	124.0		<0.01
W232348		149	1.6	25.2	63	125.5		<0.01
W232349		140	1.3	22.5	66	113.0		<0.01
W232350		139	1.4	23.7	66	121.0		0.01
W232351		2	0.1	0.9	16	0.6		<0.01
W232352		143	1.4	23.5	95	118.5		<0.01
W232353		147	9.3	24.9	96	125.0		0.22
W232354		59	0.9	15.6	48	89.1		<0.01
W232355		69	2.2	15.6	42	98.1		0.36
W232356		31	22.1	16.9	26	33.1	1.335	2.65
W232357		64	3.1	16.4	36	82.0		0.38
W232358		63	1.0	15.1	40	71.0		<0.01
W232359		145	1.7	25.1	198	122.0		<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 1- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17187143

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE WH17190030

Project: Nadaleen

P.O. No.: N17- 086

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 6- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

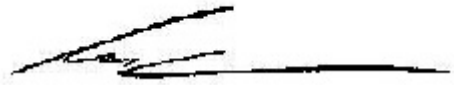
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190030

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230694		7.27	0.11	6.45	22.4	220	2.04	0.24	2.57	0.12	64.4	25.4	77	37.6	59.7	5.51
W230695		6.90	0.08	5.30	21.7	350	1.57	0.19	3.77	0.11	56.1	20.0	71	29.7	49.6	5.37
W230696		7.23	0.07	6.66	32.2	280	2.10	0.26	2.17	0.13	68.3	20.3	75	35.8	57.9	5.11
W230697		7.14	0.05	4.94	14.1	180	1.38	0.16	4.47	0.06	47.1	14.2	64	17.65	44.3	5.63
W230698		7.29	0.06	6.92	33.3	210	2.16	0.27	2.20	0.06	68.2	19.8	77	41.2	61.2	4.99
W230699		7.59	0.05	7.12	37.4	220	2.23	0.29	1.83	0.06	74.1	17.1	77	44.1	62.2	4.77
W230700		3.73	0.05	7.05	36.8	210	2.20	0.28	1.92	0.07	73.9	17.7	76	43.4	62.8	4.90
W230701		8.59	0.05	6.77	49.9	210	2.06	0.26	2.41	0.08	68.4	15.6	74	41.8	57.6	4.90
W230702		8.78	0.04	6.12	31.4	240	1.90	0.22	2.29	0.12	59.9	17.6	76	30.6	54.3	4.92
W230703		8.32	0.08	6.62	49.7	520	2.01	0.25	2.75	0.10	66.8	21.3	79	32.4	59.0	4.07
W230704		8.38	0.05	5.59	44.4	480	1.61	0.19	2.94	0.12	55.0	16.8	73	24.0	49.0	4.91
W230705		8.30	0.06	5.32	280	460	1.18	0.17	3.37	0.10	47.8	17.3	66	15.05	49.3	4.26
W230706		0.25	0.26	3.80	>10000	180	0.69	0.17	9.89	0.65	42.9	11.6	48	8.83	54.0	2.93
W230707		6.87	0.04	2.74	143.5	260	0.50	0.09	2.47	0.10	32.3	10.8	59	5.12	30.2	3.24
W230708		7.37	0.04	2.09	66.4	250	0.35	0.06	2.29	0.07	23.1	8.2	53	4.33	22.1	2.42
W230709		7.50	0.16	4.67	103.5	400	1.26	0.18	1.51	0.23	47.4	19.8	68	15.75	44.7	4.60
W230710		7.57	0.06	7.12	116.0	230	1.99	0.28	1.33	0.03	68.6	18.2	79	32.6	61.5	5.13
W230711		5.04	0.01	0.04	0.6	20	0.07	0.03	20.1	0.07	0.87	0.9	<1	0.13	2.9	0.47
W230712		7.25	0.07	6.87	91.0	200	1.75	0.29	1.47	0.03	68.6	19.2	77	30.4	57.7	5.41
W230713		<0.02	0.07	7.11	76.3	220	1.84	0.29	1.35	0.04	66.8	22.7	76	29.8	59.5	5.62
W230714		7.43	0.05	5.97	46.5	230	1.49	0.23	2.51	0.14	58.5	17.4	66	22.5	55.2	4.92
W230715		7.38	0.12	5.61	98.0	170	1.56	0.21	1.60	0.02	53.1	20.2	69	19.70	47.3	4.73
W230716		7.94	0.06	5.88	79.1	180	1.69	0.22	1.64	<0.02	57.6	15.7	73	25.8	55.5	5.12
W230717		7.48	0.08	6.13	89.5	280	1.65	0.23	2.04	0.20	61.3	19.6	71	30.4	54.6	5.05
W230718		7.48	0.05	5.24	76.7	290	1.27	0.19	2.77	0.10	49.9	16.4	64	19.55	48.2	4.57
W230719		7.04	0.04	2.49	166.5	100	0.48	0.09	2.59	0.04	27.0	8.9	45	6.07	24.2	3.13
W230720		7.80	0.05	3.81	247	190	0.86	0.14	2.63	0.03	42.6	11.9	49	11.90	31.5	3.09
W230721		7.34	0.07	5.53	84.4	210	1.56	0.20	3.88	<0.02	61.1	16.5	55	25.2	43.4	4.42
W230722		0.26	1.60	1.83	>10000	90	0.30	0.46	6.92	0.86	28.8	6.3	44	3.15	27.6	2.46
W230723		6.90	0.05	1.77	57.2	90	0.38	0.08	3.94	0.02	19.60	7.8	29	3.93	13.2	2.78
W230724		7.80	0.08	6.40	6940	270	1.67	0.27	1.77	0.34	65.7	20.3	65	20.9	49.1	4.93
W230725		7.84	0.07	5.16	1595	300	1.02	0.21	1.52	0.24	48.5	16.4	57	14.20	44.5	4.04
W230726		8.30	0.05	2.79	3870	140	0.50	0.11	2.27	0.06	29.9	9.8	50	6.19	31.8	3.69
W230727		7.90	0.07	4.41	2530	190	0.93	0.16	1.43	0.13	42.6	14.2	54	11.00	39.8	4.43
W230728		8.60	0.09	7.08	2940	220	1.59	0.29	1.35	0.22	68.3	19.3	73	18.40	65.0	5.27
W230729		4.92	<0.01	0.05	3.9	20	0.08	0.02	20.6	0.06	1.02	0.8	1	0.15	2.7	0.46

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190030

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230694		17.05	0.12	3.1	0.127	0.071	2.76	30.3	155.0	2.24	666	0.58	0.03	11.0	42.9	570
W230695		13.95	0.10	2.6	0.183	0.054	2.06	26.2	162.5	2.51	1090	0.35	0.03	8.9	35.1	690
W230696		17.75	0.12	3.1	0.117	0.072	2.91	32.1	111.0	2.17	519	0.45	0.03	11.6	37.5	520
W230697		12.35	0.08	2.2	0.111	0.056	1.81	22.1	92.9	2.74	1420	0.24	0.03	8.0	29.0	470
W230698		18.20	0.11	3.3	0.083	0.074	2.82	32.6	99.9	2.39	549	0.42	0.04	11.7	36.4	510
W230699		19.15	0.12	3.5	0.059	0.070	2.98	35.5	102.0	2.23	389	0.34	0.04	12.6	35.9	560
W230700		18.95	0.12	3.4	0.060	0.081	2.89	35.0	104.0	2.25	411	0.33	0.04	12.5	36.6	550
W230701		17.50	0.10	3.1	0.054	0.066	2.76	32.9	96.1	2.37	559	0.38	0.04	11.6	33.8	540
W230702		15.70	0.10	2.8	0.093	0.070	2.21	28.5	95.3	2.18	527	0.44	0.03	10.4	35.6	500
W230703		17.75	0.10	3.2	0.184	0.073	2.45	31.4	105.0	2.02	556	0.42	0.03	11.3	36.7	560
W230704		14.30	0.09	2.7	0.258	0.055	1.86	26.1	112.0	1.80	672	0.37	0.02	9.2	34.1	500
W230705		13.30	0.09	2.4	0.555	0.055	1.67	22.8	108.5	1.59	738	0.37	0.02	8.3	30.8	400
W230706		10.45	0.08	1.7	27.6	0.045	1.69	23.3	14.8	0.35	762	3.40	0.02	5.5	25.6	530
W230707		7.80	0.06	1.7	0.223	0.033	0.81	15.5	54.3	1.07	502	0.44	0.01	5.4	19.8	260
W230708		5.43	0.05	1.4	0.091	0.022	0.62	10.8	53.3	1.06	474	0.33	0.01	3.7	16.9	210
W230709		12.70	0.07	2.3	0.779	0.053	1.87	22.8	110.5	1.15	442	1.11	0.02	7.8	34.4	370
W230710		19.10	0.16	3.4	0.093	0.072	2.93	33.9	118.5	1.93	398	0.51	0.03	11.3	38.8	560
W230711		0.21	0.21	<0.1	0.013	<0.005	0.01	<0.5	1.3	12.45	196	0.06	<0.01	0.1	4.4	150
W230712		18.30	0.15	3.2	0.066	0.069	2.89	33.0	132.5	2.09	465	0.37	0.03	11.1	36.6	630
W230713		18.90	0.16	3.3	0.071	0.069	2.98	33.2	123.5	2.06	467	0.39	0.03	11.5	41.4	540
W230714		16.05	0.17	2.9	0.069	0.063	2.57	29.0	93.4	2.16	781	0.32	0.03	9.8	33.5	470
W230715		15.45	0.15	2.8	0.211	0.053	2.27	26.7	66.1	1.67	368	0.41	0.02	8.7	35.2	380
W230716		16.15	0.16	3.0	0.096	0.065	2.46	28.4	90.1	1.89	436	0.40	0.03	10.0	35.0	450
W230717		16.90	0.17	3.1	0.266	0.063	2.73	30.0	77.6	1.97	529	0.49	0.03	10.3	36.2	540
W230718		14.25	0.18	2.7	0.142	0.056	2.38	23.7	36.8	1.85	651	0.39	0.02	8.6	32.6	440
W230719		6.73	0.10	1.5	0.238	0.025	1.11	12.7	15.5	1.04	576	0.33	0.01	4.1	17.5	230
W230720		10.20	0.13	1.9	0.373	0.031	1.71	19.7	15.9	1.20	551	0.42	0.02	6.2	21.9	490
W230721		15.05	0.14	3.1	0.454	0.050	2.53	31.3	25.1	2.03	836	0.33	0.03	10.0	30.9	530
W230722		5.44	0.10	0.9	15.80	0.032	0.81	13.8	25.7	0.16	343	6.04	0.01	2.5	19.2	490
W230723		4.16	0.07	1.0	0.282	0.019	0.78	9.7	13.8	1.46	894	0.35	0.01	2.5	13.8	220
W230724		17.45	0.14	3.0	5.52	0.066	3.02	32.4	14.4	1.02	475	0.79	0.03	10.1	36.0	600
W230725		13.45	0.10	2.4	2.97	0.048	2.15	23.8	17.2	0.83	592	0.50	0.02	7.8	32.0	500
W230726		7.51	0.09	1.6	4.36	0.025	1.21	14.3	10.5	0.98	1010	0.40	0.01	4.5	19.4	280
W230727		11.90	0.11	2.1	5.86	0.039	1.86	20.0	14.3	0.79	842	0.47	0.01	6.7	29.6	350
W230728		19.50	0.15	3.1	5.82	0.059	2.96	33.3	20.2	0.90	648	0.76	0.02	10.8	38.0	680
W230729		0.23	0.19	<0.1	0.029	0.006	0.02	0.5	1.3	12.65	210	0.15	<0.01	0.1	4.2	180

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VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190030

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230694		19.8	156.0	<0.002	0.65	0.70	19.4	<1	2.0	121.0	0.79	0.06	9.64	0.538	1.10	2.1
W230695		17.4	117.5	<0.002	0.62	0.55	17.2	1	1.7	171.0	0.65	0.05	7.79	0.486	1.16	1.7
W230696		16.1	166.5	<0.002	0.79	0.48	18.9	<1	2.1	129.5	0.80	0.06	10.35	0.544	1.30	2.1
W230697		13.5	96.5	<0.002	0.33	0.38	15.3	1	1.5	199.5	0.56	<0.05	6.76	0.445	0.78	1.5
W230698		15.6	161.0	<0.002	0.28	0.49	19.7	1	2.2	98.4	0.84	0.06	10.10	0.557	0.97	2.0
W230699		15.8	168.0	<0.002	0.27	0.46	20.0	1	2.4	95.8	0.90	<0.05	11.20	0.576	1.04	2.3
W230700		14.5	167.5	<0.002	0.30	0.49	20.8	1	2.4	104.0	0.88	0.06	11.05	0.558	1.00	2.2
W230701		13.0	153.5	<0.002	0.21	0.36	18.6	<1	2.2	130.5	0.82	0.06	10.10	0.549	0.90	2.1
W230702		12.4	120.0	<0.002	0.59	0.42	17.5	1	1.9	127.0	0.72	<0.05	8.85	0.521	1.00	1.8
W230703		14.6	129.5	<0.002	1.64	0.54	19.6	1	2.1	239	0.81	<0.05	9.83	0.574	1.39	2.0
W230704		12.3	97.5	<0.002	2.42	0.48	16.9	<1	1.6	257	0.66	<0.05	7.75	0.508	1.90	1.6
W230705		11.7	81.4	<0.002	3.22	1.16	15.7	1	1.8	262	0.57	<0.05	6.94	0.495	3.17	1.4
W230706		16.5	78.9	0.004	3.46	103.0	8.4	1	1.9	436	0.39	0.13	6.61	0.215	65.6	4.1
W230707		5.6	40.4	<0.002	1.57	0.66	9.4	1	1.2	138.5	0.36	<0.05	4.44	0.409	1.27	0.9
W230708		4.4	32.7	<0.002	0.55	0.37	6.3	1	0.9	128.0	0.27	<0.05	3.22	0.316	0.55	0.7
W230709		52.3	95.4	<0.002	2.54	1.76	13.3	1	1.6	147.0	0.54	0.05	6.98	0.431	2.12	1.5
W230710		13.2	153.0	0.002	0.47	0.65	19.6	1	2.2	81.8	0.82	0.06	9.95	0.594	1.10	2.0
W230711		1.3	0.8	<0.002	0.01	0.08	0.2	1	<0.2	42.8	<0.05	<0.05	0.05	<0.005	<0.02	0.6
W230712		13.8	157.0	<0.002	0.31	0.59	18.5	1	2.2	91.9	0.80	0.06	9.84	0.563	1.10	2.1
W230713		18.4	165.5	<0.002	0.52	0.77	19.6	1	2.3	92.8	0.83	0.08	9.90	0.568	1.15	2.1
W230714		11.8	137.5	<0.002	0.24	0.54	16.4	<1	2.2	126.0	0.73	<0.05	8.63	0.498	1.14	1.8
W230715		19.1	128.0	0.002	1.23	0.85	16.7	<1	1.8	91.1	0.64	<0.05	7.87	0.475	2.17	1.7
W230716		8.7	139.5	<0.002	0.78	0.35	17.2	<1	1.9	97.9	0.72	0.06	8.31	0.536	1.37	1.8
W230717		23.5	144.5	<0.002	1.40	0.61	17.0	<1	2.0	115.0	0.75	0.09	8.79	0.512	1.83	1.8
W230718		15.4	111.5	<0.002	1.82	1.06	14.6	1	1.7	132.5	0.63	0.06	7.35	0.475	1.32	1.5
W230719		5.4	47.5	<0.002	1.58	1.60	7.5	<1	0.9	88.8	0.30	<0.05	3.77	0.288	1.15	0.8
W230720		7.6	74.6	<0.002	2.11	2.72	9.8	<1	1.4	122.5	0.47	<0.05	5.74	0.338	2.03	1.3
W230721		9.5	120.0	<0.002	2.87	0.87	14.1	<1	1.9	137.0	0.74	0.07	8.81	0.447	3.50	1.9
W230722		9.9	37.6	0.003	4.68	164.0	2.9	2	1.2	340	0.19	0.11	3.02	0.099	43.4	4.4
W230723		10.9	29.6	<0.002	0.99	0.76	3.9	1	0.7	111.5	0.20	<0.05	3.09	0.144	0.80	0.7
W230724		46.8	123.0	0.002	4.07	26.2	15.2	1	2.2	122.0	0.74	0.06	9.86	0.464	10.85	2.0
W230725		12.5	90.1	<0.002	3.77	10.70	13.8	1	1.7	180.0	0.56	<0.05	7.26	0.433	11.30	1.4
W230726		6.5	51.2	<0.002	2.45	12.45	7.8	1	1.7	119.0	0.34	<0.05	4.60	0.305	13.40	0.9
W230727		11.7	85.2	<0.002	4.36	15.20	11.9	<1	1.6	128.0	0.50	0.05	6.49	0.395	17.85	1.3
W230728		17.4	137.5	<0.002	5.04	15.20	17.7	1	4.3	333	0.79	0.05	9.92	0.527	20.0	2.0
W230729		1.2	0.9	<0.002	0.01	0.05	0.2	1	<0.2	48.3	<0.05	<0.05	0.08	<0.005	0.03	0.7

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190030

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230694		139	1.3	22.5	97	111.5		<0.01
W230695		134	1.2	21.3	79	92.0		<0.01
W230696		141	1.3	22.5	112	116.0		<0.01
W230697		116	1.0	18.8	65	82.3		<0.01
W230698		148	1.3	22.2	72	116.5		<0.01
W230699		146	1.3	24.6	75	123.0		<0.01
W230700		144	1.3	24.7	80	123.0		<0.01
W230701		141	1.2	23.2	78	115.0		<0.01
W230702		139	1.2	20.5	94	105.5		<0.01
W230703		153	1.7	22.4	92	115.5		<0.01
W230704		138	1.6	18.9	96	97.0		<0.01
W230705		140	2.9	16.9	94	87.1		<0.01
W230706		63	8.1	21.3	135	62.1	3.50	7.95
W230707		112	2.0	9.6	71	62.9		<0.01
W230708		92	1.2	6.6	61	48.6		<0.01
W230709		128	1.3	13.5	168	86.2		<0.01
W230710		158	1.5	23.4	66	115.5		<0.01
W230711		2	0.1	0.6	17	<0.5		<0.01
W230712		152	1.6	22.3	62	110.0		<0.01
W230713		148	1.9	22.0	67	116.5		<0.01
W230714		132	1.5	21.2	112	99.8		<0.01
W230715		133	1.4	16.2	51	94.7		<0.01
W230716		142	1.2	18.4	57	103.0		<0.01
W230717		136	1.5	20.4	144	105.5		<0.01
W230718		128	2.9	16.4	70	91.0		<0.01
W230719		81	3.0	8.5	47	48.8		0.02
W230720		92	3.7	13.8	35	67.8		0.07
W230721		106	1.6	19.3	50	102.0		<0.01
W230722		36	6.7	15.6	67	29.6	7.18	8.46
W230723		39	1.1	7.2	19	32.3		<0.01
W230724		122	7.8	19.9	170	106.5		1.69
W230725		115	8.5	14.9	115	81.9		0.77
W230726		85	4.6	10.0	26	55.7		1.14
W230727		111	7.1	13.0	53	73.0		1.28
W230728		145	12.0	20.9	90	106.0		1.11
W230729		2	0.1	0.7	18	<0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17190030

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE WH17190037

Project: Nadaleen

P.O. No.: N17- 087

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 6- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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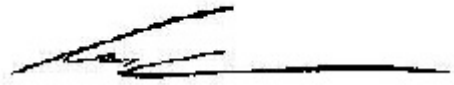
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190037

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230730		7.84	0.09	7.38	1470	280	1.89	0.30	1.37	0.16	70.7	20.5	77	24.2	69.6	4.97
W230731		5.06	<0.01	0.05	3.3	50	0.07	0.03	20.6	0.05	1.09	0.8	1	0.14	1.5	0.45
W230732		7.37	0.06	5.37	829	210	1.29	0.21	1.59	0.03	54.1	16.0	64	17.05	44.3	4.35
W230733		4.51	0.04	2.44	3500	150	0.47	0.09	2.54	0.06	25.3	6.8	50	5.45	21.7	3.05
W230734		7.11	0.05	5.38	596	170	1.17	0.20	2.30	0.06	54.4	15.4	70	17.40	50.7	4.42
W230735		7.07	0.07	3.70	3410	130	0.83	0.14	3.31	0.10	38.9	15.2	50	9.79	41.7	4.32
W230736		5.06	0.01	0.05	7.7	40	0.08	0.12	20.6	0.06	1.10	0.8	1	0.19	2.1	0.45
W230737		5.34	0.08	7.38	2170	260	1.95	0.28	1.39	1.22	70.9	23.2	77	24.6	65.0	5.27
W230738		5.89	0.10	6.78	467	240	1.96	0.27	2.06	1.49	67.7	18.9	69	24.8	56.5	5.02
W230739		8.85	0.14	6.30	359	180	1.70	0.24	1.98	0.06	60.6	19.8	72	22.6	57.8	4.94
W230740		<0.02	0.11	6.19	333	180	1.62	0.22	2.01	0.05	56.8	18.7	71	21.4	56.7	4.59
W230741		8.08	0.06	3.79	264	120	0.92	0.13	2.40	0.03	38.7	11.1	58	10.95	32.4	3.50
W230742		7.59	0.04	1.72	379	50	0.28	0.07	2.34	<0.02	18.80	5.6	41	4.33	15.2	2.49
W230743		6.66	0.07	1.54	625	40	0.29	0.08	1.85	<0.02	17.85	4.8	37	3.38	14.7	2.64
W230744		8.58	0.08	7.77	742	270	2.38	0.33	1.57	0.15	75.2	18.4	80	32.4	54.7	5.24
W230745		7.45	0.08	7.41	99.8	260	2.22	0.31	2.22	0.05	71.9	20.6	70	28.5	56.6	5.51
W230746		7.58	0.05	7.23	83.4	310	2.06	0.29	2.28	0.07	68.0	18.1	76	30.3	56.3	4.67
W230747		7.77	0.07	5.71	266	170	1.51	0.23	2.40	0.04	59.1	15.8	67	21.5	42.4	4.70
W230748		7.32	0.08	7.90	2380	220	1.89	0.33	1.31	0.17	75.0	19.4	82	26.4	56.6	5.72
W230749		0.26	0.17	3.84	6330	210	0.84	0.14	12.15	0.13	41.4	11.7	47	10.75	36.9	2.89
W230750		7.59	0.06	6.53	191.5	290	1.43	0.26	2.62	0.06	64.6	18.5	73	23.1	53.1	4.91
W230751		7.04	0.06	6.91	223	260	1.53	0.29	1.71	0.14	70.5	21.3	75	23.9	59.7	5.24
W230752		7.67	0.08	6.15	321	190	1.47	0.24	2.10	0.05	61.9	17.3	70	23.7	47.2	4.77
W230753		7.28	0.09	7.51	454	190	2.13	0.26	1.57	0.04	73.2	25.8	85	32.5	61.2	4.91
W230754		6.88	0.06	5.70	506	160	1.17	0.22	2.55	0.03	58.6	13.2	68	18.90	47.2	5.19
W230755		3.25	0.04	5.59	435	150	1.13	0.20	2.71	0.04	58.8	12.4	64	18.35	44.9	4.86
W230756		7.53	0.08	6.01	838	150	1.45	0.21	1.61	0.08	56.0	17.4	77	24.0	47.7	4.42
W230757		7.35	0.10	6.30	342	200	1.44	0.24	2.40	0.25	66.2	18.0	70	22.8	44.8	4.22
W230758		7.31	0.05	5.79	43.7	330	1.29	0.20	3.92	0.02	57.2	16.0	67	23.0	44.5	4.84
W230759		7.98	0.08	6.46	188.0	270	1.55	0.23	4.68	0.09	66.7	19.0	68	27.3	48.6	4.57
W230760		6.47	0.06	8.96	27.7	340	2.24	0.38	1.96	0.04	97.3	27.4	87	43.0	69.5	4.19
W230761		4.53	0.03	3.67	14.5	150	0.95	0.17	19.75	0.07	40.0	12.8	33	15.05	27.9	2.56
W230762		5.15	0.02	2.43	21.8	160	0.72	0.11	24.8	0.06	31.5	9.2	22	10.15	19.9	1.79
W230763		0.26	0.68	1.81	>10000	140	0.47	2.78	24.3	0.16	27.3	4.6	27	6.05	15.5	1.33
W230764		7.54	0.01	0.95	19.8	130	0.37	0.05	31.4	0.04	12.55	3.2	10	3.86	8.4	0.71
W230765		7.26	0.01	1.08	14.5	130	0.33	0.06	31.5	0.03	16.30	3.8	11	4.43	9.8	0.81

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 12- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190037

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230730		19.90	0.17	3.5	2.89	0.079	3.43	35.5	16.0	1.02	432	0.91	0.03	11.0	40.9	580
W230731		0.26	0.21	<0.1	0.014	0.006	0.02	0.5	1.1	12.35	212	0.05	<0.01	0.1	4.3	160
W230732		14.25	0.13	2.5	1.225	0.049	2.35	26.8	17.9	0.91	478	1.10	0.02	8.0	31.2	480
W230733		5.91	0.06	1.4	2.94	0.023	0.99	12.6	11.9	1.00	848	1.40	0.01	3.8	14.6	290
W230734		14.65	0.13	2.7	0.889	0.056	2.35	26.7	22.6	1.18	532	0.85	0.02	8.9	32.4	510
W230735		9.58	0.12	1.8	3.07	0.036	1.55	18.1	15.1	1.47	1190	1.21	0.01	5.8	24.8	420
W230736		0.25	0.17	<0.1	0.019	<0.005	0.02	0.5	1.2	12.45	203	0.08	<0.01	0.2	4.3	180
W230737		20.8	0.16	3.6	3.88	0.085	3.43	36.1	16.2	0.99	731	0.98	0.02	11.6	41.8	560
W230738		18.70	0.16	3.2	2.65	0.063	3.17	33.6	13.7	1.26	712	0.97	0.02	10.6	36.3	610
W230739		17.45	0.13	2.9	1.220	0.055	2.85	30.5	18.8	1.18	588	1.13	0.02	9.6	36.3	490
W230740		16.75	0.14	2.9	1.255	0.055	2.80	28.6	18.1	1.18	566	1.09	0.02	9.2	34.7	480
W230741		10.25	0.11	1.9	0.973	0.036	1.71	18.1	11.3	1.08	636	1.45	0.01	5.7	22.2	430
W230742		4.43	0.08	1.0	0.939	0.022	0.74	9.3	9.1	0.87	604	1.64	0.01	2.5	12.5	190
W230743		4.38	0.08	1.1	1.420	0.018	0.67	9.0	7.1	0.68	603	1.49	0.01	2.2	10.5	130
W230744		22.1	0.17	3.7	1.685	0.085	3.61	38.6	17.3	1.11	389	1.90	0.03	11.2	37.8	590
W230745		20.6	0.19	3.5	0.769	0.070	3.44	36.0	23.1	1.41	537	0.84	0.03	11.3	39.0	530
W230746		18.30	0.10	3.0	0.978	0.076	3.24	34.1	22.8	1.44	423	0.73	0.03	10.7	35.6	460
W230747		14.25	0.10	2.5	1.195	0.059	2.61	28.4	15.9	1.34	509	0.90	0.02	8.9	29.7	510
W230748		20.6	0.12	3.3	7.15	0.079	3.56	36.4	23.1	0.97	336	1.29	0.03	11.6	39.8	530
W230749		10.05	0.07	2.0	14.75	0.038	1.78	21.4	11.1	2.57	1190	1.84	0.02	5.9	25.4	450
W230750		17.05	0.08	3.0	0.938	0.067	2.79	31.2	30.2	1.48	630	0.58	0.03	10.7	35.8	500
W230751		18.15	0.11	3.3	1.365	0.070	2.87	33.7	39.2	1.04	454	0.60	0.02	11.8	38.6	570
W230752		15.95	0.09	2.6	2.13	0.062	2.83	31.6	17.2	1.20	514	0.71	0.02	9.4	31.6	560
W230753		19.50	0.12	3.0	2.71	0.072	3.45	35.7	13.0	1.10	508	0.42	0.03	10.7	40.0	410
W230754		14.55	0.10	2.6	3.30	0.057	2.51	28.0	9.6	1.37	639	0.74	0.02	9.2	28.3	560
W230755		14.25	0.09	2.5	3.16	0.057	2.51	27.6	9.2	1.42	648	0.64	0.02	9.0	27.4	640
W230756		15.80	0.08	2.4	3.00	0.056	2.72	28.0	10.3	1.01	441	0.84	0.02	8.4	29.7	330
W230757		16.45	0.10	2.7	1.775	0.060	2.75	31.9	19.3	1.30	488	0.79	0.03	9.6	31.3	440
W230758		15.20	0.11	2.6	1.005	0.056	2.58	28.4	25.3	1.87	734	0.59	0.03	9.2	29.7	480
W230759		16.95	0.10	2.4	0.871	0.065	2.92	33.1	25.8	2.15	936	0.40	0.03	8.8	38.2	400
W230760		25.7	0.14	3.1	0.526	0.094	4.28	49.0	27.4	1.28	498	0.58	0.04	12.7	62.2	450
W230761		9.56	0.08	1.6	0.589	0.039	1.74	22.2	8.6	1.30	679	0.90	0.02	5.1	18.3	300
W230762		6.30	0.07	1.1	0.234	0.030	1.15	16.8	5.0	1.05	578	0.53	0.02	3.5	11.6	230
W230763		4.84	0.07	0.8	6.37	0.021	0.89	13.6	8.3	0.87	2190	1.88	0.01	2.5	12.0	320
W230764		2.46	0.06	0.5	0.151	0.013	0.45	6.9	3.8	0.81	222	0.41	0.01	1.4	4.1	120
W230765		2.81	0.07	0.6	0.158	0.015	0.52	8.6	5.3	0.60	194	0.30	0.01	1.6	5.0	150

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190037

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230730		20.4	156.0	<0.002	5.01	5.61	18.4	1	5.5	169.0	0.81	0.05	10.55	0.521	10.90	2.1
W230731		1.3	0.9	<0.002	0.01	<0.05	0.2	<1	<0.2	50.4	<0.05	<0.05	0.07	<0.005	0.02	0.5
W230732		11.8	109.0	0.002	4.16	2.53	13.6	1	1.7	158.5	0.58	0.05	7.74	0.428	4.39	1.5
W230733		5.4	45.1	<0.002	1.72	7.32	6.4	<1	0.9	165.5	0.29	<0.05	3.95	0.241	9.54	0.8
W230734		12.4	112.5	<0.002	4.08	2.23	15.1	<1	2.3	146.5	0.63	0.05	8.18	0.510	3.47	1.5
W230735		18.0	74.8	<0.002	3.24	9.72	10.2	1	3.1	159.0	0.41	0.05	5.41	0.299	7.85	1.1
W230736		1.2	1.1	<0.002	<0.01	0.11	0.2	1	<0.2	48.9	<0.05	<0.05	0.09	<0.005	0.02	0.6
W230737		24.6	169.0	0.002	5.11	15.65	19.6	1	3.8	156.5	0.88	0.07	10.95	0.537	11.65	2.1
W230738		23.2	156.0	<0.002	4.83	5.61	17.5	1	2.4	141.0	0.78	<0.05	10.20	0.496	7.75	2.0
W230739		13.4	139.5	0.003	4.32	2.24	16.9	<1	3.7	99.3	0.69	<0.05	9.07	0.467	3.38	1.8
W230740		13.0	133.5	<0.002	4.22	2.11	16.3	<1	3.3	95.7	0.69	<0.05	8.77	0.456	3.20	1.7
W230741		9.2	79.6	<0.002	2.25	1.83	9.8	1	1.7	117.5	0.42	<0.05	5.46	0.313	2.22	1.1
W230742		7.2	33.1	<0.002	1.51	1.44	4.5	<1	0.6	75.1	0.19	<0.05	2.93	0.165	2.49	0.6
W230743		6.3	29.9	<0.002	1.22	2.55	3.7	<1	0.6	70.1	0.16	<0.05	3.08	0.136	3.45	0.7
W230744		24.7	180.5	<0.002	5.00	2.78	20.2	1	2.9	250	0.84	<0.05	11.60	0.473	4.99	2.3
W230745		21.3	170.0	<0.002	4.79	0.75	19.7	1	2.5	226	0.82	0.05	10.80	0.501	3.75	2.2
W230746		18.3	163.0	0.002	4.01	0.72	19.4	<1	2.2	216	0.81	0.08	10.50	0.488	4.85	2.1
W230747		15.2	130.0	<0.002	4.05	0.78	14.6	<1	1.8	93.7	0.64	0.06	8.57	0.423	4.34	1.8
W230748		20.4	176.0	<0.002	5.76	11.45	19.9	1	2.7	133.0	0.86	0.06	11.30	0.530	20.3	2.3
W230749		10.4	82.4	0.002	2.60	23.0	9.9	1	1.6	318	0.43	0.05	5.98	0.268	44.5	6.3
W230750		13.3	141.5	<0.002	4.29	0.83	16.9	<1	2.1	256	0.75	0.06	10.10	0.526	4.45	2.0
W230751		16.2	149.5	<0.002	5.11	1.03	18.5	<1	2.4	240	0.86	0.06	10.90	0.580	6.37	2.1
W230752		17.0	142.0	<0.002	4.20	1.42	15.5	<1	2.0	106.0	0.71	0.05	9.30	0.449	5.76	1.9
W230753		25.1	177.0	<0.002	4.63	3.45	20.2	<1	2.4	86.5	0.76	<0.05	10.80	0.498	7.77	2.0
W230754		12.0	128.5	<0.002	4.68	1.90	14.5	1	2.0	167.0	0.67	<0.05	8.75	0.447	9.04	1.8
W230755		10.9	129.5	<0.002	4.52	1.87	14.6	<1	1.9	122.5	0.62	<0.05	8.33	0.437	8.50	1.7
W230756		15.7	138.0	0.002	3.92	0.90	16.0	<1	2.3	61.3	0.60	<0.05	8.47	0.401	8.65	1.6
W230757		23.1	135.0	<0.002	3.62	1.29	15.9	<1	2.2	156.5	0.69	0.05	9.75	0.427	6.04	2.0
W230758		16.2	122.5	<0.002	3.50	0.64	14.5	<1	1.9	317	0.65	<0.05	8.46	0.443	4.73	1.7
W230759		16.9	139.0	0.002	3.26	1.29	16.0	<1	2.1	210	0.66	0.06	9.19	0.385	4.31	1.7
W230760		14.4	185.0	<0.002	3.41	0.77	21.8	<1	3.3	196.0	0.91	0.05	14.70	0.454	2.69	2.3
W230761		16.6	79.5	0.004	1.72	0.61	8.4	<1	1.3	504	0.36	0.06	5.47	0.203	1.64	1.9
W230762		7.3	53.3	0.002	1.21	0.60	6.0	1	0.9	746	0.25	0.08	3.85	0.136	1.56	1.8
W230763		7.2	39.1	0.002	1.38	44.6	5.3	1	0.7	999	0.19	<0.05	3.27	0.085	23.5	5.9
W230764		3.3	20.0	0.002	0.60	0.32	2.4	1	0.4	1330	0.09	<0.05	1.56	0.055	1.18	1.8
W230765		3.8	23.8	<0.002	0.73	0.36	2.8	1	0.4	1640	0.12	0.05	1.82	0.063	0.99	2.1

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190037

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230730		144	7.9	21.0	119	109.5		0.12
W230731		2	0.1	0.7	17	<0.5		<0.01
W230732		118	5.4	16.6	51	82.6		0.04
W230733		67	3.9	8.0	20	46.6		0.48
W230734		138	5.2	16.8	59	93.0		0.04
W230735		80	4.5	12.8	59	59.8		1.04
W230736		2	0.1	0.7	16	<0.5		<0.01
W230737		147	8.6	22.2	454	117.5		1.04
W230738		134	7.4	22.6	416	104.0		0.19
W230739		131	5.8	18.4	64	98.4		0.07
W230740		129	5.8	18.1	65	98.6		0.07
W230741		88	3.5	12.7	31	63.3		0.05
W230742		44	1.5	6.6	20	32.9		0.04
W230743		39	1.5	5.7	15	32.3		0.09
W230744		140	5.5	26.2	106	125.0		0.05
W230745		137	2.8	22.5	83	118.5		<0.01
W230746		139	2.6	21.2	85	107.0		<0.01
W230747		113	2.9	19.4	66	91.9		0.03
W230748		148	8.3	23.7	118	117.5		2.94
W230749		85	7.6	18.0	48	68.0		2.64
W230750		135	4.0	20.6	70	108.0		<0.01
W230751		146	6.2	23.5	107	117.5		<0.01
W230752		123	4.7	20.5	69	93.3		0.10
W230753		155	7.3	21.7	67	105.5		0.07
W230754		116	8.0	19.9	69	91.9		0.02
W230755		114	7.9	21.1	70	88.9		0.02
W230756		125	7.7	17.4	75	93.2		0.01
W230757		121	5.7	19.6	107	95.6		<0.01
W230758		118	2.3	19.4	63	93.0		<0.01
W230759		112	3.9	19.7	74	85.2		0.03
W230760		116	4.3	25.3	87	113.0		<0.01
W230761		61	0.9	15.1	65	58.5		<0.01
W230762		40	0.6	13.6	42	41.7		<0.01
W230763		31	18.1	15.0	25	30.6	1.355	2.76
W230764		16	0.2	9.0	17	16.8		<0.01
W230765		17	0.2	10.1	19	20.1		<0.01

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17190037

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 6- OCT- 2017
Account: RCM

CERTIFICATE WH17192256

Project: Nadaleen

P.O. No.: N17- 088

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

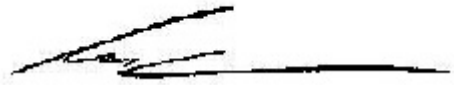
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17192256

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232360		10.86	0.05	5.95	8.6	210	1.61	0.26	14.20	<0.02	70.2	11.5	43	13.70	21.4	3.22
W232361		10.50	0.04	6.77	10.7	850	1.79	0.30	4.01	0.02	82.0	12.9	54	15.80	25.4	3.76
W232362		10.38	0.07	6.52	11.3	240	1.77	0.30	5.51	<0.02	75.5	13.2	53	16.35	25.4	3.33
W232363		10.69	0.07	6.17	14.3	330	1.56	0.29	5.95	0.03	81.0	13.7	53	16.90	25.9	3.17
W232364		11.51	0.06	6.62	14.1	340	1.51	0.29	3.29	0.02	76.7	13.8	55	15.10	26.7	3.65
W232365		10.81	0.09	9.40	19.9	390	2.89	0.44	1.22	0.03	107.5	19.9	73	35.3	37.8	3.97
W232366		11.96	0.08	8.54	21.5	380	2.64	0.41	2.42	0.04	90.0	21.6	67	31.8	38.3	4.02
W232367		11.20	0.06	6.52	14.4	240	1.87	0.28	8.74	0.03	79.0	14.1	57	26.2	29.8	3.34
W232368		11.17	0.04	6.84	13.3	260	1.83	0.30	9.24	0.02	84.3	12.9	56	22.1	29.7	3.03
W232369		12.18	0.05	4.51	21.1	280	1.17	0.18	18.95	0.05	55.5	12.7	39	14.70	26.7	2.26
W232370		10.46	0.03	4.29	13.7	360	1.04	0.18	17.35	0.03	51.7	7.8	35	11.95	15.5	2.48
W232371		7.20	<0.01	0.05	<0.2	60	0.06	0.03	21.1	0.05	1.18	0.7	1	0.12	1.3	0.47
W232372		10.62	0.10	10.40	35.3	310	2.81	0.40	0.46	0.03	104.0	21.6	80	31.4	48.8	4.17
W232373		9.40	0.09	10.60	44.2	400	2.81	0.46	0.28	0.02	80.0	22.6	87	28.7	48.6	4.58
W232374		10.86	0.05	8.60	11.9	560	2.12	0.33	1.63	<0.02	89.5	16.0	65	29.4	36.8	4.12
W232375		10.84	0.04	8.27	1.0	800	2.24	0.34	1.00	0.02	89.4	15.9	71	39.5	30.1	4.66
W232376		4.04	0.04	8.45	0.9	610	2.67	0.31	1.13	0.03	90.9	16.9	71	40.1	26.8	4.86
W232377		11.17	0.05	8.47	2.8	910	2.51	0.38	0.54	<0.02	93.5	17.1	69	35.0	40.1	4.52
W232378		11.08	0.02	9.02	5.7	1350	2.84	0.38	0.30	<0.02	96.4	18.5	75	42.0	29.4	5.18
W232379		10.74	0.02	9.12	28.7	550	2.96	0.44	0.36	<0.02	98.0	21.7	74	24.2	24.7	4.64
W232380		5.58	0.02	8.79	181.5	480	2.73	0.31	0.91	<0.02	96.0	19.8	70	23.1	33.9	5.03
W232381		<0.02	0.03	8.94	193.0	490	2.82	0.34	0.93	<0.02	100.0	20.2	72	24.1	34.6	5.02
W232382		7.31	0.44	3.09	143.0	300	0.88	0.09	10.55	0.13	40.5	5.8	37	5.72	17.2	1.60
W232383		8.69	0.24	1.83	991	290	0.44	0.06	8.61	0.06	29.0	2.8	26	2.68	7.4	1.07
W232384		0.24	0.28	3.93	>10000	180	0.69	0.22	10.40	0.60	47.1	12.0	47	8.78	53.8	2.99
W232385		11.99	0.22	1.72	236	110	0.55	0.06	15.40	0.05	25.0	6.7	23	2.78	20.0	1.01
W232386		11.28	0.09	0.96	187.5	80	0.29	0.04	18.30	0.45	13.80	3.8	11	1.53	13.3	0.55
W232387		7.48	0.01	0.05	2.4	30	0.09	0.07	20.2	0.06	1.10	0.7	1	0.13	2.1	0.44
W232388		12.44	0.10	0.79	249	60	0.24	0.03	19.30	0.05	11.00	2.7	10	1.23	9.4	0.50
W232389		11.88	0.10	1.04	58.1	70	0.48	0.04	19.35	0.02	14.85	2.5	11	2.13	9.9	0.50
W232390		10.89	0.10	0.83	99.1	60	0.31	0.04	19.55	0.02	11.40	2.1	9	1.40	11.3	0.52
W232391		0.24	0.19	3.83	6230	200	1.00	0.15	12.05	0.13	43.1	11.7	45	10.15	35.5	2.81
W232392		10.17	0.06	2.68	1010	260	0.80	0.07	14.05	0.06	35.2	3.6	29	5.30	8.6	1.13
W232393		11.45	0.04	3.04	66.4	320	1.09	0.09	12.65	0.09	43.4	3.3	33	9.99	14.4	1.22
W232394		11.16	0.06	2.42	21.7	220	0.89	0.06	16.60	0.08	30.5	4.3	23	7.10	13.9	1.10
W232395		9.89	0.06	2.24	21.9	180	0.76	0.06	18.85	0.09	30.2	3.9	22	6.85	12.9	1.01

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Finalized Date: 6- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192256

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232360		15.35	0.18	2.3	0.045	0.043	2.04	36.8	66.5	0.97	488	0.27	0.18	7.9	22.8	420
W232361		17.60	0.19	2.6	0.058	0.052	2.34	42.5	110.5	1.34	646	0.30	0.14	9.0	27.2	440
W232362		17.00	0.17	2.6	0.060	0.051	2.40	40.0	93.1	0.92	484	0.42	0.15	8.9	26.5	520
W232363		15.90	0.20	2.6	0.063	0.050	2.25	42.0	57.1	0.90	535	0.40	0.11	8.5	22.9	870
W232364		17.25	0.17	2.9	0.083	0.048	2.43	41.3	65.7	1.12	529	0.41	0.11	9.1	28.0	510
W232365		25.9	0.21	3.7	0.111	0.079	3.93	57.5	97.9	1.08	330	0.37	0.13	13.2	37.7	480
W232366		24.1	0.18	3.5	0.102	0.073	3.64	45.7	88.5	1.09	422	0.40	0.12	12.2	39.4	510
W232367		17.25	0.18	2.8	0.129	0.060	2.64	40.9	65.4	1.16	488	0.37	0.09	9.2	25.5	1090
W232368		17.75	0.17	2.8	0.102	0.051	2.89	43.6	52.3	0.98	504	0.37	0.07	9.3	23.8	910
W232369		11.55	0.14	1.8	0.154	0.036	1.93	28.6	30.5	0.95	628	0.42	0.05	6.0	17.7	870
W232370		10.60	0.14	1.7	0.078	0.033	1.72	26.8	58.2	1.15	1010	0.24	0.04	5.6	17.1	670
W232371		0.17	0.18	<0.1	<0.005	0.005	0.01	0.6	1.2	13.30	206	<0.05	0.01	0.1	1.2	170
W232372		27.3	0.26	3.0	0.042	0.075	4.20	54.5	142.0	1.23	535	0.40	0.09	13.0	41.8	720
W232373		28.2	0.18	2.8	0.039	0.071	4.56	38.0	148.0	1.25	430	0.36	0.10	13.5	46.4	620
W232374		21.6	0.20	3.2	0.021	0.063	3.52	48.2	146.5	1.74	1220	0.21	0.07	11.5	34.1	490
W232375		22.0	0.17	3.6	0.046	0.073	3.49	47.0	129.5	1.61	776	0.24	0.05	12.0	35.6	610
W232376		23.0	0.20	3.6	0.051	0.082	3.57	47.9	138.5	1.69	922	0.22	0.05	12.6	36.8	570
W232377		23.1	0.20	3.7	0.051	0.080	3.61	49.8	131.0	1.43	346	0.20	0.05	11.9	38.0	500
W232378		24.7	0.20	3.6	0.353	0.082	3.82	52.6	142.0	1.28	189	0.21	0.05	12.7	43.2	490
W232379		26.2	0.19	3.8	0.496	0.085	3.76	50.7	125.5	0.58	101	0.19	0.05	13.7	42.8	530
W232380		24.2	0.20	3.6	0.541	0.075	3.89	51.4	109.0	0.85	187	0.31	0.05	12.9	46.4	540
W232381		24.9	0.22	3.7	0.552	0.084	4.05	53.0	113.5	0.86	186	0.32	0.05	13.5	48.0	540
W232382		8.12	0.17	3.0	1.020	0.027	1.39	20.1	14.6	5.72	498	4.56	0.02	5.5	14.3	1630
W232383		4.51	0.11	3.3	1.065	0.017	0.81	14.1	9.6	4.57	334	2.99	0.02	3.8	7.5	1240
W232384		11.10	0.20	2.0	27.6	0.038	1.78	26.1	14.5	0.37	781	3.87	0.02	5.8	26.6	560
W232385		4.60	0.16	2.2	1.490	0.015	0.78	12.4	9.0	8.81	379	2.31	0.02	3.1	8.5	650
W232386		2.56	0.18	1.0	1.580	0.009	0.42	7.6	5.7	11.15	286	0.67	0.01	1.6	4.7	250
W232387		0.22	0.25	<0.1	0.012	<0.005	0.02	0.5	1.1	12.75	199	<0.05	<0.01	0.2	1.2	190
W232388		2.28	0.20	0.6	1.320	0.008	0.35	6.2	5.0	11.65	283	1.02	0.01	1.4	5.3	260
W232389		3.04	0.25	0.7	1.075	0.009	0.50	8.4	7.4	11.65	283	0.56	0.01	1.7	4.5	230
W232390		2.27	0.25	0.5	1.190	0.006	0.36	6.8	4.9	11.30	398	0.41	0.01	1.3	3.3	190
W232391		10.45	0.20	2.1	15.00	0.038	1.80	22.4	12.9	2.56	1180	1.96	0.02	5.9	25.4	450
W232392		7.00	0.19	2.3	9.32	0.022	1.26	17.9	16.4	7.96	481	0.28	0.02	4.6	7.7	510
W232393		8.14	0.21	3.0	2.97	0.025	1.54	22.5	18.4	6.20	320	0.59	0.02	5.3	6.9	500
W232394		6.00	0.08	1.7	0.767	0.021	1.12	15.0	10.9	6.01	223	0.86	0.13	3.6	10.1	350
W232395		5.71	0.12	2.0	0.462	0.016	1.11	15.1	10.8	4.86	186	0.57	0.02	3.6	8.7	310

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 6- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192256

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232360		15.8	98.3	<0.002	0.61	0.31	10.0	1	1.7	335	0.57	0.07	10.85	0.274	0.57	2.7
W232361		20.3	112.5	<0.002	0.90	0.39	11.7	1	2.0	157.5	0.65	0.08	12.25	0.314	0.69	2.4
W232362		19.3	106.5	<0.002	1.11	0.44	10.6	1	1.9	246	0.63	<0.05	11.70	0.307	0.62	2.6
W232363		18.6	107.0	<0.002	1.24	0.43	10.3	1	2.2	238	0.62	0.06	11.50	0.287	0.71	2.7
W232364		21.6	108.0	<0.002	1.58	0.44	10.4	1	2.1	165.5	0.66	0.06	12.85	0.322	0.72	2.6
W232365		27.4	188.0	<0.002	1.92	0.51	16.4	1	3.1	121.5	0.98	0.05	17.20	0.445	1.16	3.4
W232366		28.1	152.5	<0.002	1.85	0.54	15.3	1	3.2	151.5	0.86	0.05	14.25	0.410	1.14	2.9
W232367		18.2	133.5	<0.002	1.61	0.36	11.6	2	2.6	268	0.65	0.06	12.20	0.319	1.08	3.0
W232368		15.3	139.0	<0.002	1.32	0.38	11.1	1	2.9	363	0.67	0.05	12.80	0.309	1.14	2.8
W232369		13.3	90.6	<0.002	1.39	0.43	7.3	1	2.7	744	0.43	0.06	8.00	0.204	1.56	2.8
W232370		12.4	77.5	<0.002	0.66	0.59	6.7	1	1.3	673	0.40	<0.05	7.55	0.196	0.87	2.3
W232371		1.2	0.8	<0.002	<0.01	<0.05	0.1	<1	<0.2	50.5	<0.05	<0.05	0.07	<0.005	<0.02	0.7
W232372		30.5	168.5	<0.002	0.24	0.76	16.0	1	3.1	130.0	0.94	0.10	15.90	0.420	1.23	3.7
W232373		38.4	138.5	<0.002	0.21	0.79	15.6	1	2.9	130.5	1.01	0.11	13.55	0.432	1.30	3.8
W232374		15.4	163.5	<0.002	0.19	0.39	13.8	1	2.5	132.0	0.82	0.06	14.50	0.394	1.14	2.5
W232375		12.6	182.5	<0.002	0.06	0.42	15.6	1	2.6	147.0	0.86	0.08	14.80	0.444	1.26	2.4
W232376		12.5	187.0	<0.002	0.05	0.40	16.4	<1	2.7	143.5	0.88	0.07	14.70	0.450	1.13	2.5
W232377		12.5	182.5	<0.002	0.08	0.41	16.5	1	2.6	195.5	0.85	0.11	15.10	0.433	1.09	2.8
W232378		13.0	197.5	<0.002	0.63	0.56	17.9	1	2.8	206	0.87	0.10	16.20	0.457	1.98	2.9
W232379		12.4	172.0	<0.002	4.45	0.40	18.2	1	3.0	214	0.96	0.08	16.05	0.477	3.39	2.5
W232380		12.0	175.0	<0.002	4.93	0.62	17.3	1	2.9	178.5	0.90	0.12	15.95	0.446	3.35	2.6
W232381		12.8	181.5	<0.002	4.98	0.61	18.0	1	3.0	184.5	0.91	0.10	16.30	0.451	3.49	2.7
W232382		18.3	49.2	0.009	0.69	2.31	4.8	3	1.1	121.5	0.41	<0.05	7.61	0.161	2.75	8.8
W232383		12.8	27.5	0.010	0.55	2.56	3.0	2	0.6	89.4	0.29	<0.05	4.89	0.106	2.25	6.0
W232384		18.0	84.3	0.003	3.61	112.0	8.4	2	2.1	448	0.41	0.14	7.05	0.227	71.3	4.5
W232385		11.6	26.8	0.002	0.46	1.40	2.7	2	2.1	128.5	0.23	<0.05	4.44	0.091	1.95	10.5
W232386		7.1	14.0	<0.002	0.24	0.62	1.5	1	1.2	111.0	0.12	<0.05	2.36	0.048	1.39	15.3
W232387		1.2	1.0	<0.002	<0.01	0.05	0.2	<1	<0.2	46.4	<0.05	<0.05	0.17	<0.005	0.02	0.7
W232388		8.1	11.4	0.002	0.30	0.70	1.3	1	0.7	98.8	0.10	<0.05	1.80	0.039	1.44	20.3
W232389		5.6	16.7	0.002	0.24	0.51	1.8	<1	0.7	109.5	0.13	<0.05	2.27	0.050	1.22	16.4
W232390		4.9	12.2	<0.002	0.23	0.75	1.4	1	0.9	128.0	0.10	<0.05	1.69	0.038	1.96	15.3
W232391		11.5	83.7	0.002	2.58	24.5	9.9	2	1.7	320	0.41	0.05	6.28	0.271	46.1	7.0
W232392		7.1	44.3	<0.002	0.59	3.06	4.1	1	0.9	159.5	0.33	<0.05	6.18	0.131	12.60	7.5
W232393		9.7	54.0	<0.002	0.29	0.67	4.8	1	1.1	149.0	0.39	<0.05	7.43	0.157	3.16	6.2
W232394		6.7	39.4	0.002	0.14	0.19	4.2	2	0.7	256	0.26	<0.05	4.56	0.121	0.76	10.9
W232395		5.4	37.9	<0.002	0.18	0.17	3.7	2	0.8	386	0.27	<0.05	4.88	0.111	1.11	8.3

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232360		57	1.1	14.6	58	77.8		<0.01
W232361		66	1.3	17.6	86	88.6		<0.01
W232362		63	1.3	15.5	58	87.6		<0.01
W232363		60	1.3	18.4	56	86.5		<0.01
W232364		66	1.3	15.5	63	96.2		<0.01
W232365		98	1.9	21.1	90	122.0		<0.01
W232366		94	1.8	20.9	120	113.0		<0.01
W232367		69	1.4	19.6	61	95.4		<0.01
W232368		64	1.4	18.7	61	90.6		<0.01
W232369		44	0.9	12.5	55	63.3		<0.01
W232370		41	0.9	11.1	60	57.3		<0.01
W232371		2	0.1	0.7	17	<0.5		<0.01
W232372		93	1.7	20.4	96	93.7		<0.01
W232373		96	1.6	16.5	104	92.1		<0.01
W232374		82	1.8	18.3	94	105.5		<0.01
W232375		93	1.6	20.8	96	116.0		<0.01
W232376		95	1.6	21.2	100	121.0		<0.01
W232377		97	1.7	21.8	94	122.0		<0.01
W232378		105	1.7	22.9	93	122.5		<0.01
W232379		104	1.9	23.9	102	124.0		<0.01
W232380		97	3.2	22.4	98	120.0		<0.01
W232381		97	3.2	22.9	97	124.0		<0.01
W232382		100	2.6	13.1	26	108.0		0.09
W232383		76	1.6	11.0	10	117.0		0.11
W232384		66	9.0	22.1	140	65.0	3.40	7.92
W232385		38	1.4	8.6	12	78.5		0.04
W232386		16	0.8	5.1	30	33.0		0.01
W232387		2	0.1	0.7	16	<0.5		<0.01
W232388		16	0.8	4.1	8	20.3		0.01
W232389		24	0.9	5.0	3	22.8		0.01
W232390		26	0.9	4.1	3	15.5		0.05
W232391		84	8.2	17.8	48	70.2		2.55
W232392		42	2.1	11.0	12	80.4		0.10
W232393		58	1.3	13.4	22	104.5		0.02
W232394		50	0.7	10.5	16	62.3		0.01
W232395		37	0.9	9.9	12	72.7		<0.01

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 6- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17192256

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

2103 Dollarton Hwy
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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

CERTIFICATE WH17192264

Project: Nadaleen

P.O. No.: N17- 089

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

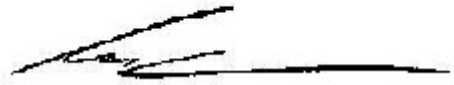
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192264

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232396		11.22	0.02	1.64	7.7	210	0.51	0.04	28.8	0.11	20.7	2.8	18	6.09	7.2	0.54
W232397		11.02	0.05	0.99	10.3	150	0.33	0.04	29.5	0.04	12.50	2.0	10	4.26	5.3	0.51
W232398		10.95	0.06	1.33	19.8	290	0.39	0.04	28.3	0.07	16.45	2.6	13	4.58	7.1	0.62
W232399		11.08	0.05	2.97	19.2	680	0.83	0.07	16.90	0.15	40.5	5.1	32	17.85	19.1	1.22
W232400		11.36	0.04	3.09	12.6	260	0.75	0.07	9.72	0.05	42.8	3.2	34	18.85	16.8	1.43
W232401		5.69	0.04	3.32	16.4	260	0.86	0.08	10.00	0.06	45.2	3.8	37	20.6	13.6	1.46
W232402		10.83	0.08	3.76	24.6	260	1.09	0.09	13.25	0.04	44.5	6.6	34	31.1	17.0	1.66
W232403		10.02	0.06	3.65	28.7	190	1.04	0.08	20.2	0.04	42.6	6.7	31	39.7	18.2	1.55
W232404		9.80	0.13	2.82	40.1	250	0.73	0.05	25.3	0.11	32.7	5.0	24	20.2	13.6	1.05
W232405		10.34	0.04	1.61	50.6	2890	0.54	0.04	26.4	0.22	18.40	2.6	15	6.11	7.5	0.77
W232406		11.46	0.04	2.82	97.3	860	0.90	0.07	19.85	0.11	35.9	4.5	25	12.05	12.3	1.18
W232407		9.95	0.04	1.19	283	90	0.41	0.03	29.3	0.16	15.10	2.2	13	3.41	6.1	0.63
W232408		0.24	0.09	3.75	2660	200	0.87	0.14	18.70	0.12	39.9	10.6	43	9.93	43.1	3.02
W232409		6.00	0.06	2.42	68.9	250	0.82	0.06	21.9	0.07	30.0	4.1	22	7.47	11.5	1.16
W232410		6.48	0.04	1.14	30.0	1100	0.40	0.03	29.9	0.19	14.65	2.2	12	3.29	7.4	0.57
W232411		6.12	0.05	2.78	36.0	210	0.93	0.07	20.6	0.11	30.9	4.6	28	9.23	20.4	1.27
W232412		6.90	0.03	0.88	15.3	370	0.33	0.03	31.1	0.19	11.70	1.8	10	2.45	5.1	0.48
W232413		7.14	0.04	1.84	25.3	260	0.61	0.04	26.9	0.13	21.5	3.4	18	5.78	13.6	0.89
W232414		0.25	0.70	1.91	>10000	140	0.53	2.76	26.0	0.18	28.8	4.8	27	5.95	16.3	1.38
W232415		7.98	0.03	1.25	41.4	140	0.44	0.04	28.8	0.20	18.30	2.4	16	3.66	12.7	0.64
W232416		5.41	0.05	1.11	32.4	130	0.39	0.04	31.8	0.17	15.15	2.4	12	2.68	9.7	0.54
W232417		6.90	0.02	0.78	127.5	350	0.35	0.03	33.2	0.11	12.90	1.6	9	1.68	7.8	0.44
W232418		3.56	0.32	1.63	>10000	50	0.46	0.05	20.9	0.51	18.05	2.9	18	3.02	12.7	0.70
W232419		6.01	0.62	2.78	>10000	70	0.55	0.10	8.10	0.87	30.6	4.2	34	5.01	19.6	1.01
W232420		6.97	0.01	0.04	91.8	40	0.05	0.02	20.7	0.07	0.94	0.7	<1	0.11	1.5	0.45
W232421		5.38	0.22	0.87	8410	150	0.36	0.03	30.3	0.27	10.55	1.7	6	1.57	8.7	0.49
W232422		7.30	0.07	1.75	229	750	0.62	0.04	26.6	0.14	24.3	3.1	19	3.74	9.3	0.86
W232423		1.01	0.19	3.52	>10000	80	0.82	0.09	13.85	0.33	14.75	5.0	42	6.70	14.2	1.34
W232424		7.40	0.03	0.06	20.0	90	0.07	0.06	20.5	0.10	1.21	0.8	1	0.19	2.9	0.48
W232425		6.01	0.06	0.92	1185	460	0.32	0.03	31.6	0.14	14.30	1.8	11	1.89	7.9	0.79
W232426		7.14	0.06	1.54	224	390	0.66	0.04	28.1	0.11	21.8	2.6	16	3.37	8.5	0.75
W232427		6.81	0.18	4.29	603	250	1.63	0.10	12.15	0.07	49.4	7.4	45	11.10	20.0	2.10
W232428		2.75	0.16	4.98	146.5	390	2.00	0.11	9.03	0.05	53.1	8.5	51	13.80	26.6	2.38
W232429		5.38	0.09	4.99	463	720	1.68	0.12	10.55	0.05	54.6	6.8	51	13.60	35.6	2.13
W232430		2.24	0.54	3.74	>10000	180	0.95	0.09	6.31	0.83	48.3	5.0	47	7.48	23.4	2.24
W232431		<0.02	0.54	3.72	>10000	170	0.95	0.10	5.98	0.78	49.5	5.1	51	7.55	23.5	2.21

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192264

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232396		4.09	0.08	1.0	0.079	0.012	0.86	11.3	6.3	1.51	111	0.15	0.01	2.6	5.7	300
W232397		2.63	0.06	0.7	0.057	0.007	0.55	7.0	4.0	2.10	111	0.63	0.01	1.5	4.4	160
W232398		3.42	0.10	0.9	0.064	0.010	0.70	8.8	5.4	2.28	132	0.53	0.01	2.0	6.3	220
W232399		7.56	0.15	2.4	0.069	0.026	1.83	18.7	12.3	3.10	202	0.46	0.03	4.7	10.4	630
W232400		7.71	0.15	3.3	0.074	0.024	2.00	20.3	11.8	5.28	279	0.67	0.03	5.0	8.4	550
W232401		8.80	0.14	3.4	0.064	0.028	2.12	21.2	13.0	5.40	285	0.70	0.04	5.6	9.3	570
W232402		9.66	0.15	2.1	0.116	0.026	2.33	22.4	19.4	4.36	268	0.75	0.03	4.9	15.5	520
W232403		9.30	0.13	1.5	0.070	0.025	2.11	20.0	20.8	2.09	231	0.41	0.04	4.5	17.0	450
W232404		7.11	0.11	0.9	0.148	0.018	1.59	15.9	12.5	1.34	229	0.82	0.02	3.3	12.5	350
W232405		4.10	0.12	1.2	0.369	0.011	0.94	9.8	6.2	1.72	238	0.68	0.01	2.3	6.0	290
W232406		7.20	0.16	2.2	0.120	0.019	1.70	16.3	13.3	2.30	234	0.48	0.02	4.0	10.8	510
W232407		3.14	0.12	1.0	0.092	0.010	0.68	8.2	5.5	1.54	162	0.36	0.01	1.8	4.9	300
W232408		9.73	0.09	1.8	3.73	0.037	1.74	17.8	8.3	1.44	1220	1.54	0.02	5.6	22.5	390
W232409		6.27	0.10	1.5	0.133	0.018	1.37	14.4	12.1	3.18	177	0.67	0.02	3.6	9.5	280
W232410		3.04	0.10	0.7	0.192	0.012	0.63	8.2	6.2	1.44	143	0.44	0.01	1.7	5.1	210
W232411		7.03	0.12	1.6	0.161	0.022	1.54	15.1	16.9	3.50	169	0.68	0.02	4.1	11.3	390
W232412		2.41	0.10	0.4	0.114	0.006	0.48	6.9	6.1	1.37	113	0.45	0.01	1.3	3.9	180
W232413		4.84	0.12	1.0	0.077	0.015	0.98	11.6	15.7	2.15	130	0.29	0.02	2.7	8.3	280
W232414		5.12	0.11	0.9	6.92	0.023	0.94	13.2	8.4	0.93	2340	1.80	0.01	2.5	12.4	360
W232415		3.28	0.10	0.6	0.059	0.012	0.64	10.8	9.0	1.33	127	0.16	0.01	2.0	5.7	470
W232416		2.96	0.11	0.5	0.157	0.011	0.58	9.2	6.7	0.86	121	0.28	0.01	1.7	5.3	260
W232417		2.16	0.10	0.3	0.322	0.007	0.40	8.0	4.4	0.79	272	0.11	0.01	1.2	3.6	240
W232418		4.40	0.10	0.7	7.58	0.040	0.80	9.4	8.5	0.79	10500	0.31	0.01	2.5	7.4	280
W232419		7.06	0.10	1.3	13.60	0.062	1.37	16.7	15.0	1.34	5760	0.52	0.01	4.1	11.6	620
W232420		0.22	0.22	<0.1	0.009	<0.005	0.01	<0.5	0.8	12.85	203	0.07	<0.01	0.1	1.5	180
W232421		2.40	0.11	0.4	4.41	0.011	0.44	6.0	5.5	0.67	10750	0.29	0.01	1.3	4.1	180
W232422		4.65	0.09	1.0	1.125	0.013	0.91	12.5	9.6	1.54	275	0.62	0.01	2.8	7.0	260
W232423		9.05	0.12	1.7	24.8	0.032	1.80	9.1	17.7	1.71	838	1.27	0.01	5.4	13.7	500
W232424		0.23	0.18	<0.1	0.017	0.006	0.02	0.6	1.1	12.55	208	0.07	0.01	0.2	2.0	190
W232425		2.27	0.11	0.5	7.99	0.008	0.48	7.9	5.3	1.40	657	0.34	0.01	1.4	4.3	200
W232426		3.85	0.12	0.8	1.020	0.013	0.81	11.7	10.5	1.33	229	0.44	0.01	2.5	6.9	240
W232427		10.70	0.14	2.2	1.575	0.034	2.31	24.5	33.9	3.77	513	1.23	0.02	6.4	20.4	530
W232428		12.25	0.16	2.5	0.786	0.037	2.73	27.1	39.0	4.07	279	1.27	0.03	7.2	23.3	570
W232429		12.25	0.15	2.3	1.790	0.043	2.67	28.6	32.0	3.18	311	0.58	0.03	7.5	21.7	690
W232430		9.17	0.11	2.7	38.0	0.039	1.91	24.3	18.7	3.58	852	0.94	0.02	5.9	14.5	430
W232431		9.36	0.11	2.5	40.5	0.042	1.88	25.0	17.9	3.38	792	1.11	0.02	6.0	14.8	430

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CERTIFICATE OF ANALYSIS WH17192264

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232396		3.9	30.2	<0.002	0.10	0.13	2.5	1	0.6	523	0.19	<0.05	3.43	0.076	0.23	4.9
W232397		4.9	17.4	<0.002	0.09	0.16	1.4	1	0.4	749	0.11	<0.05	2.02	0.046	0.34	14.0
W232398		5.7	22.3	<0.002	0.13	0.24	1.8	2	0.5	706	0.14	<0.05	2.74	0.061	0.45	11.9
W232399		7.6	65.1	<0.002	0.11	0.27	4.1	1	1.0	335	0.36	<0.05	6.42	0.149	0.49	5.8
W232400		7.9	68.0	<0.002	0.08	0.19	4.4	1	1.0	165.5	0.40	<0.05	7.23	0.160	0.43	3.4
W232401		8.6	74.7	<0.002	0.09	0.23	4.7	1	1.1	170.0	0.43	<0.05	8.00	0.176	0.49	3.7
W232402		7.2	82.8	<0.002	0.23	0.29	5.3	1	1.1	345	0.37	<0.05	7.00	0.159	0.96	6.8
W232403		5.5	84.3	<0.002	0.12	0.21	5.1	1	1.0	484	0.34	<0.05	6.31	0.144	0.58	7.3
W232404		7.3	60.2	<0.002	0.22	0.28	4.0	1	0.8	834	0.25	<0.05	4.78	0.106	0.62	12.0
W232405		5.1	34.5	<0.002	0.39	0.47	2.2	1	0.5	3300	0.17	<0.05	3.18	0.069	0.87	5.4
W232406		6.9	64.0	<0.002	0.27	0.23	3.9	1	0.8	1170	0.29	<0.05	5.81	0.124	0.57	6.2
W232407		4.2	24.1	<0.002	0.11	0.43	1.8	1	0.4	1440	0.13	<0.05	2.45	0.057	0.40	9.4
W232408		9.0	77.3	<0.002	2.61	9.54	8.2	1	1.5	735	0.42	0.06	5.46	0.273	10.70	2.1
W232409		6.6	54.4	<0.002	0.23	0.25	3.5	1	0.8	863	0.28	<0.05	4.86	0.114	0.43	10.2
W232410		5.5	23.1	<0.002	0.19	0.32	1.7	1	0.4	1310	0.13	<0.05	2.34	0.053	0.40	11.4
W232411		10.6	61.4	<0.002	0.27	0.27	3.9	2	0.9	1010	0.31	<0.05	5.70	0.130	0.48	12.0
W232412		5.9	18.1	<0.002	0.11	0.13	1.4	1	0.3	1290	0.09	<0.05	1.78	0.041	0.25	13.6
W232413		8.7	46.2	<0.002	0.17	0.19	2.7	1	0.6	1220	0.19	<0.05	3.58	0.084	0.37	12.2
W232414		7.8	40.8	0.002	1.46	45.9	5.1	1	0.7	1050	0.20	<0.05	3.28	0.090	24.4	5.9
W232415		7.5	31.0	<0.002	0.10	0.17	1.9	1	0.5	1390	0.15	<0.05	2.69	0.061	0.36	11.7
W232416		7.1	23.9	<0.002	0.14	0.18	1.7	1	0.4	1200	0.13	<0.05	2.40	0.054	0.44	11.3
W232417		4.8	16.5	<0.002	0.13	0.45	1.3	1	0.3	1080	0.09	<0.05	1.68	0.038	0.91	9.7
W232418		9.0	36.8	<0.002	5.91	300	2.2	3	0.7	716	0.18	0.11	3.40	0.074	28.2	17.9
W232419		11.5	57.5	<0.002	8.72	342	2.7	3	1.2	964	0.31	0.18	5.62	0.126	46.8	21.7
W232420		1.3	0.6	<0.002	0.01	0.25	0.1	<1	<0.2	50.1	<0.05	<0.05	0.06	<0.005	0.06	0.5
W232421		6.4	17.7	<0.002	0.65	23.4	1.3	<1	0.4	841	0.10	0.05	1.70	0.039	15.65	13.7
W232422		6.4	41.4	<0.002	0.30	1.24	2.6	1	0.6	976	0.20	<0.05	3.63	0.083	3.68	12.4
W232423		9.2	79.2	0.003	3.50	144.0	3.3	2	1.4	848	0.41	0.09	6.18	0.165	88.7	24.6
W232424		3.1	1.2	<0.002	0.01	0.18	0.2	<1	<0.2	49.2	<0.05	<0.05	0.11	<0.005	0.04	1.1
W232425		5.7	18.7	0.002	0.31	11.15	1.4	1	0.4	875	0.11	<0.05	1.87	0.041	29.1	13.8
W232426		6.0	34.7	<0.002	0.21	0.94	2.4	1	0.6	857	0.18	<0.05	3.25	0.072	3.88	12.6
W232427		9.4	96.2	0.002	0.56	2.60	6.2	1	1.4	551	0.47	<0.05	8.38	0.190	4.86	7.3
W232428		10.1	110.5	0.002	0.62	0.88	7.1	2	1.6	435	0.54	<0.05	9.33	0.222	1.55	5.1
W232429		10.3	107.0	0.002	0.45	3.20	7.2	1	1.7	504	0.56	<0.05	9.63	0.223	5.47	7.1
W232430		9.3	81.8	<0.002	5.20	256	5.6	4	1.7	268	0.45	0.15	7.83	0.178	180.0	5.6
W232431		9.2	82.4	0.002	5.42	267	5.5	4	1.6	266	0.44	0.19	7.87	0.176	180.5	5.5

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 10- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192264

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232396		24	0.3	6.8	7	35.9		0.01
W232397		19	0.2	4.2	6	23.3		<0.01
W232398		21	0.3	5.5	13	30.8		<0.01
W232399		49	0.5	12.3	17	84.9		0.01
W232400		49	0.8	12.9	15	112.0		<0.01
W232401		53	0.7	13.5	16	120.5		0.01
W232402		54	0.6	11.0	21	74.7		0.01
W232403		57	0.5	9.9	25	50.5		<0.01
W232404		53	0.5	7.4	40	27.4		0.01
W232405		25	0.7	5.8	28	43.7		0.02
W232406		42	0.6	9.7	30	78.4		0.01
W232407		23	0.4	5.6	15	31.8		0.02
W232408		75	5.5	15.2	50	64.8		0.49
W232409		39	0.7	8.4	34	53.5		0.01
W232410		19	0.3	5.1	37	22.5		0.01
W232411		40	0.8	8.9	56	57.0		0.01
W232412		17	0.2	4.1	40	14.5		<0.01
W232413		27	0.4	6.7	43	29.7		0.01
W232414		33	19.7	14.4	25	29.4	1.340	2.67
W232415		23	0.2	7.5	44	20.3		0.01
W232416		25	0.3	5.4	30	16.1		0.01
W232417		17	0.3	4.9	24	11.9		0.02
W232418		34	1.4	10.8	75	23.2	12.00	2.33
W232419		57	2.3	17.4	122	40.9	19.00	3.76
W232420		2	0.1	0.7	17	<0.5		<0.01
W232421		22	0.9	6.5	43	11.2		1.47
W232422		33	1.0	7.1	45	32.0		0.03
W232423		70	2.3	8.0	71	56.5	6.43	2.16
W232424		2	0.1	0.8	19	<0.5		<0.01
W232425		23	0.6	5.5	26	13.2		0.42
W232426		31	0.8	6.6	38	28.2		0.02
W232427		76	1.8	13.1	51	77.1		0.16
W232428		87	1.8	14.3	47	87.5		0.01
W232429		94	2.8	14.0	53	80.5		0.18
W232430		69	3.4	10.5	50	88.8	8.31	16.15
W232431		68	3.3	10.5	46	88.5	9.25	16.80

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To: **ATAC RESOURCES LTD.**
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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 10- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17192264

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 9- OCT- 2017
Account: RCM

CERTIFICATE WH17190047

Project: Nadaleen

P.O. No.: N17- 090

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 6- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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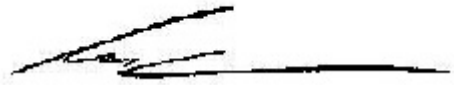
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 9- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190047

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230766		7.33	0.01	0.83	13.3	120	0.27	0.06	33.2	0.02	11.25	3.0	10	2.70	7.9	0.60
W230767		7.86	0.01	0.58	9.6	110	0.15	0.04	35.8	<0.02	9.23	2.1	7	1.71	5.6	0.39
W230768		8.41	0.01	0.90	19.2	140	0.26	0.06	33.4	0.05	12.75	3.0	11	2.62	8.7	0.63
W230769		7.88	0.01	0.45	10.3	100	0.20	0.03	34.9	0.04	8.40	1.7	5	1.43	4.8	0.34
W230770		8.14	0.01	0.85	39.9	110	0.33	0.05	33.2	0.08	15.15	3.1	9	2.97	8.5	0.59
W230771		8.38	0.02	0.99	36.3	140	0.33	0.07	32.5	0.09	14.90	3.5	11	3.07	9.9	0.72
W230772		8.36	0.01	0.68	11.9	150	0.20	0.04	32.9	0.04	11.30	2.6	8	2.20	6.8	0.47
W230773		8.36	0.01	0.61	10.3	140	0.31	0.04	35.3	0.05	11.00	2.3	7	1.66	6.4	0.50
W230774		8.47	0.02	1.27	18.6	1360	0.50	0.07	30.9	0.07	20.7	4.1	13	4.65	12.2	0.99
W230775		0.24	0.28	3.91	>10000	180	0.69	0.20	10.35	0.60	45.1	11.9	47	9.03	55.4	3.05
W230776		8.47	0.01	0.83	26.2	180	0.33	0.05	33.9	0.05	13.80	2.9	9	2.92	8.1	0.70
W230777		3.74	0.01	1.12	22.5	210	0.45	0.07	32.9	0.08	16.55	3.7	12	3.96	10.8	0.92
W230778		8.03	0.01	0.46	11.8	140	0.21	0.03	34.5	0.10	9.64	1.9	5	1.12	4.9	0.76
W230779		8.16	0.02	1.02	165.0	160	0.38	0.06	31.3	0.12	17.05	3.7	11	2.55	11.0	0.87
W230780		7.43	0.02	1.61	72.7	340	0.40	0.10	29.4	0.15	26.7	5.8	18	4.81	17.5	1.17
W230781		7.33	0.03	1.72	329	170	0.60	0.09	29.0	0.15	26.9	6.3	19	6.22	19.0	1.26
W230782		7.39	0.03	1.62	88.6	270	0.48	0.08	30.0	0.14	28.2	5.6	18	5.45	16.3	1.21
W230783		7.30	0.02	1.72	88.4	190	0.57	0.09	29.2	0.16	25.8	6.0	17	6.43	18.0	1.03
W230784		7.41	0.03	2.01	75.1	200	0.61	0.10	26.7	0.15	28.8	7.7	24	7.00	21.8	1.52
W230785		0.26	0.66	1.89	>10000	140	0.57	2.84	25.6	0.16	27.3	4.9	28	6.15	16.3	1.37
W230786		7.91	0.03	2.28	77.0	210	0.72	0.11	26.8	0.16	35.2	7.6	24	8.19	24.3	1.63
W230787		8.52	0.03	1.55	59.7	160	0.59	0.08	29.9	0.14	24.4	5.5	17	4.76	16.4	1.21
W230788		8.09	0.03	1.85	80.2	160	0.52	0.09	28.8	0.14	29.0	6.5	21	5.57	19.1	1.30
W230789		8.43	0.02	1.35	37.7	130	0.47	0.07	31.5	0.14	18.55	3.8	13	4.38	10.9	0.78
W230790		7.32	0.01	0.70	19.4	180	0.29	0.04	34.5	0.08	14.05	2.8	8	2.17	8.2	0.58
W230791		6.83	0.01	0.87	19.7	140	0.31	0.05	32.1	0.06	14.50	3.0	9	2.62	8.5	0.63
W230792		4.95	0.03	1.32	174.0	180	0.41	0.07	30.3	0.12	23.4	5.1	15	3.82	16.8	0.89
W230793		3.97	0.03	1.86	84.2	160	0.42	0.09	27.6	0.15	26.5	6.8	20	4.51	18.7	1.33
W230794		5.11	0.03	1.49	123.5	140	0.41	0.08	29.4	0.12	22.1	5.2	17	3.39	15.5	1.10
W230795		4.88	0.01	0.05	1.4	40	0.05	0.03	21.4	0.05	1.24	0.8	5	0.15	2.0	0.48
W230796		6.74	0.04	2.32	146.0	220	0.59	0.13	27.2	0.22	36.7	8.2	25	6.37	25.2	1.60
W230797		7.55	0.03	1.81	89.7	140	0.45	0.08	28.7	0.14	28.3	5.9	20	4.60	18.0	1.33
W230798		<0.02	0.02	1.85	90.6	140	0.47	0.09	28.6	0.12	28.8	6.0	20	4.65	18.6	1.36
W230799		7.09	0.03	2.06	157.0	170	0.62	0.09	29.9	0.16	31.6	6.7	23	5.15	20.7	1.47
W230800		6.81	0.04	1.92	204	260	0.52	0.08	28.6	0.14	31.2	6.7	25	4.87	19.3	1.55
W230801		4.73	0.01	0.04	<0.2	20	<0.05	0.04	21.2	0.05	1.03	0.6	1	0.11	2.7	0.49

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 9- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190047

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230766		2.17	0.05	0.5	0.123	0.008	0.40	6.0	4.2	0.44	154	0.16	0.01	1.1	4.7	350
W230767		1.52	0.08	0.3	0.079	0.006	0.27	4.7	3.1	0.37	124	0.25	0.01	0.8	3.3	340
W230768		2.35	0.07	0.5	0.248	0.008	0.40	6.7	4.2	0.54	199	0.62	0.01	1.2	5.4	490
W230769		1.23	0.09	0.2	0.090	<0.005	0.20	4.2	3.0	0.58	176	0.24	0.01	0.6	2.8	290
W230770		2.21	0.09	0.4	0.261	0.011	0.39	8.2	5.1	0.56	154	0.49	0.01	1.2	5.2	230
W230771		2.58	0.08	0.5	0.380	0.012	0.44	7.8	5.1	0.69	170	0.58	0.01	1.4	5.9	360
W230772		1.79	0.08	0.4	0.136	0.006	0.31	5.7	3.8	0.34	100	0.27	0.01	1.0	4.1	210
W230773		1.63	0.09	0.3	0.078	0.008	0.28	5.5	3.6	0.57	229	0.29	0.01	0.8	3.6	580
W230774		3.29	0.10	0.7	0.163	0.012	0.58	10.4	6.2	0.71	241	0.50	0.01	1.8	7.5	300
W230775		10.55	0.10	1.9	25.5	0.046	1.79	24.3	15.1	0.37	791	3.68	0.02	5.5	26.9	550
W230776		2.20	0.07	0.4	0.118	0.007	0.38	6.8	4.1	0.58	279	0.31	0.01	1.2	4.8	360
W230777		2.89	0.07	0.6	0.161	0.014	0.50	8.3	5.1	0.68	282	0.45	0.01	1.5	6.7	440
W230778		1.31	0.06	0.2	0.124	0.014	0.19	5.0	2.5	0.85	408	0.15	0.01	0.6	2.7	630
W230779		2.66	0.07	0.5	0.972	0.010	0.45	8.5	3.8	0.69	419	0.44	0.01	1.5	6.4	220
W230780		4.09	0.09	0.8	0.947	0.013	0.71	12.9	5.1	0.82	387	0.55	0.01	2.2	10.3	530
W230781		4.62	0.09	0.8	1.675	0.022	0.77	13.5	6.3	0.69	569	0.57	0.01	2.4	11.2	190
W230782		4.17	0.09	0.8	1.150	0.021	0.73	13.7	6.2	0.67	286	0.49	0.01	2.4	10.0	450
W230783		4.53	0.08	0.8	1.235	0.014	0.78	14.5	7.5	0.89	277	0.37	0.02	2.2	10.1	260
W230784		5.29	0.10	1.0	1.020	0.024	0.92	14.9	7.7	0.78	288	0.55	0.02	2.8	13.8	340
W230785		4.89	0.08	0.9	6.12	0.022	0.93	13.9	9.2	0.92	2290	1.84	0.01	2.6	13.9	340
W230786		5.88	0.09	1.2	0.568	0.022	1.05	17.2	8.7	0.78	393	0.57	0.02	3.4	13.4	280
W230787		3.99	0.08	0.8	0.413	0.019	0.71	12.2	5.9	0.70	384	0.38	0.02	2.3	9.6	610
W230788		4.80	0.07	1.0	0.744	0.017	0.85	14.6	7.0	1.03	331	0.49	0.02	2.7	11.4	340
W230789		3.54	0.07	0.7	0.444	0.016	0.63	9.0	5.5	0.56	483	0.24	0.01	2.0	6.4	420
W230790		1.88	0.07	0.4	0.112	0.008	0.32	6.8	3.2	0.61	162	0.22	0.01	1.0	4.4	510
W230791		2.28	0.07	0.4	0.164	0.008	0.41	7.0	3.7	0.57	292	0.22	0.01	1.2	5.0	440
W230792		3.48	0.08	0.8	0.418	0.015	0.61	12.1	4.8	0.73	179	0.37	0.01	1.9	8.7	240
W230793		4.95	0.09	1.0	0.873	0.021	0.84	13.6	5.5	0.84	250	0.51	0.01	2.7	11.6	630
W230794		4.03	0.09	0.9	1.065	0.014	0.67	11.1	4.3	0.86	392	0.39	0.01	2.1	8.9	360
W230795		0.19	0.11	<0.1	0.008	<0.005	0.02	0.6	1.1	13.50	208	0.40	<0.01	0.2	1.9	200
W230796		5.79	0.12	1.2	1.555	0.026	1.06	17.4	6.7	0.90	345	0.82	0.01	3.2	15.0	340
W230797		4.45	0.10	0.9	0.913	0.024	0.80	14.4	3.6	0.64	368	0.47	0.01	2.5	11.1	190
W230798		4.53	0.10	0.9	0.916	0.022	0.83	14.5	3.8	0.65	372	0.48	0.01	2.5	11.3	200
W230799		4.93	0.10	1.1	1.500	0.026	0.93	15.8	4.6	0.74	369	0.64	0.01	2.9	12.7	430
W230800		4.79	0.09	1.0	2.74	0.025	0.81	16.2	4.3	0.67	374	0.45	0.01	2.7	13.1	1390
W230801		0.14	0.11	<0.1	0.008	0.006	0.01	0.5	0.6	13.30	215	0.07	<0.01	0.1	1.7	190

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 9- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190047

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230766		3.0	16.7	<0.002	0.56	0.30	2.1	1	0.3	1690	0.09	<0.05	1.35	0.048	0.26	1.8
W230767		2.2	11.0	<0.002	0.38	0.30	1.5	1	0.2	1635	0.06	<0.05	0.97	0.032	0.18	2.0
W230768		3.5	17.0	0.002	0.61	0.37	2.3	1	0.3	1615	0.09	<0.05	1.51	0.050	0.31	2.5
W230769		1.8	8.6	0.002	0.31	0.19	1.3	1	0.2	1550	<0.05	<0.05	0.84	0.025	0.15	1.7
W230770		3.2	17.1	0.003	0.58	0.37	2.6	1	0.3	1645	0.08	<0.05	1.54	0.048	0.38	2.5
W230771		3.9	19.6	0.002	0.68	0.52	2.5	2	0.3	1945	0.10	<0.05	1.76	0.056	0.54	2.3
W230772		2.5	13.6	<0.002	0.42	0.22	1.7	1	0.2	1860	0.07	<0.05	1.25	0.039	0.22	1.9
W230773		2.2	12.2	0.003	0.39	0.13	1.9	1	0.2	2020	0.06	<0.05	1.08	0.033	0.23	2.1
W230774		4.5	25.8	0.003	0.92	0.27	3.4	2	0.4	2080	0.12	<0.05	2.36	0.070	0.63	2.5
W230775		17.3	83.2	0.003	3.61	112.0	8.3	2	2.0	449	0.39	0.12	7.00	0.230	66.5	4.1
W230776		3.4	17.0	<0.002	0.54	0.25	2.2	1	0.3	2110	0.08	<0.05	1.45	0.046	0.47	2.1
W230777		4.8	22.1	0.002	0.75	0.31	2.9	1	0.4	2160	0.11	0.06	2.00	0.062	0.68	2.6
W230778		2.2	8.6	<0.002	0.25	0.17	1.4	1	0.2	2010	0.05	<0.05	0.80	0.025	0.25	1.4
W230779		3.5	20.6	<0.002	0.63	0.72	3.1	1	0.4	1980	0.11	<0.05	1.79	0.059	1.39	1.9
W230780		5.6	33.0	0.003	0.92	0.64	4.2	1	0.6	1625	0.16	<0.05	2.91	0.097	1.33	2.7
W230781		5.8	37.6	<0.002	1.04	0.45	5.0	2	0.6	1330	0.16	<0.05	2.94	0.108	2.23	2.5
W230782		5.4	34.7	<0.002	0.92	0.34	4.7	2	0.6	2010	0.16	0.06	2.83	0.098	1.32	2.5
W230783		5.5	37.5	<0.002	0.81	0.73	4.3	1	0.6	2150	0.16	0.06	2.93	0.092	1.22	2.2
W230784		6.1	42.8	0.002	1.20	0.36	5.9	2	0.6	2030	0.20	<0.05	3.18	0.146	1.24	2.1
W230785		8.1	40.6	<0.002	1.44	46.3	5.5	2	0.7	1035	0.20	0.05	3.55	0.089	24.6	6.2
W230786		7.1	48.4	0.002	1.27	0.35	6.0	2	1.4	1755	0.25	<0.05	3.91	0.143	1.07	2.5
W230787		5.1	31.6	0.003	0.89	0.34	4.1	2	0.6	1885	0.16	<0.05	2.71	0.102	1.02	2.1
W230788		5.9	39.0	0.002	1.09	0.46	4.9	2	0.7	1775	0.18	0.05	3.13	0.118	1.32	2.3
W230789		4.2	28.4	0.002	0.69	0.30	3.3	2	0.5	1535	0.15	<0.05	2.29	0.083	0.97	1.6
W230790		2.8	13.8	<0.002	0.48	0.18	2.1	1	0.3	2570	0.07	<0.05	1.34	0.041	0.68	2.0
W230791		3.1	17.4	0.002	0.53	0.13	2.3	1	0.3	1765	0.09	<0.05	1.54	0.052	0.58	1.7
W230792		5.2	25.9	0.003	0.73	0.62	3.6	1	0.8	2420	0.14	0.05	2.47	0.079	0.88	2.6
W230793		6.4	36.7	0.002	1.20	1.04	4.3	2	0.6	1805	0.18	<0.05	3.21	0.121	1.47	2.3
W230794		5.0	28.6	<0.002	0.93	1.46	4.2	2	0.5	1790	0.14	<0.05	2.55	0.094	1.69	2.0
W230795		1.3	0.9	<0.002	<0.01	<0.05	0.2	1	<0.2	51.8	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W230796		8.0	44.4	0.006	1.37	1.24	5.9	1	0.8	1805	0.22	<0.05	3.97	0.139	2.51	3.3
W230797		6.0	35.3	0.002	1.04	0.54	4.8	1	0.6	1900	0.18	<0.05	2.93	0.114	1.87	2.3
W230798		5.6	35.5	0.003	1.08	0.56	5.0	1	0.5	1915	0.18	<0.05	3.03	0.118	1.85	2.3
W230799		6.3	39.8	0.002	1.24	0.93	5.2	1	0.6	1930	0.21	<0.05	3.36	0.129	2.33	2.8
W230800		5.9	36.0	0.002	1.34	1.72	7.0	2	0.6	2430	0.20	0.05	3.07	0.133	3.81	2.7
W230801		1.3	0.5	<0.002	<0.01	<0.05	0.2	<1	<0.2	53.1	<0.05	<0.05	0.05	<0.005	<0.02	0.8

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VANCOUVER BC V6B 1L8

Finalized Date: 9- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17190047

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230766		13	0.2	8.6	9	15.1		<0.01
W230767		9	0.1	7.1	4	10.3		<0.01
W230768		16	0.3	9.6	19	15.9		<0.01
W230769		8	0.1	9.6	7	8.4		<0.01
W230770		15	0.3	14.5	17	14.3		<0.01
W230771		17	0.3	12.2	16	17.5		<0.01
W230772		12	0.2	10.3	6	12.1		<0.01
W230773		11	0.2	11.9	8	11.5		<0.01
W230774		21	0.3	14.4	16	21.4		<0.01
W230775		65	8.2	22.6	138	65.3	3.31	8.03
W230776		14	0.2	12.3	9	14.4		<0.01
W230777		19	0.3	13.6	12	19.2		<0.01
W230778		8	0.2	9.3	23	10.1		<0.01
W230779		19	0.8	14.2	17	17.0		<0.01
W230780		30	1.1	18.1	25	28.0		0.01
W230781		33	1.5	17.5	27	28.0		<0.01
W230782		30	1.3	20.7	26	30.2		<0.01
W230783		28	1.6	15.3	30	27.1		0.01
W230784		42	1.1	18.0	33	33.3		<0.01
W230785		33	18.5	15.2	25	30.4	1.385	2.57
W230786		41	0.7	22.8	34	39.7		<0.01
W230787		28	0.7	17.2	24	28.9		0.01
W230788		34	1.2	18.2	29	32.3		<0.01
W230789		21	0.6	13.0	23	23.2		<0.01
W230790		13	0.2	12.0	11	13.2		<0.01
W230791		15	0.3	10.9	11	15.1		<0.01
W230792		23	0.7	17.1	18	22.6		0.01
W230793		33	1.9	14.6	26	34.2		0.01
W230794		27	1.8	15.3	22	27.4		0.05
W230795		2	0.1	0.8	17	<0.5		<0.01
W230796		42	2.2	20.5	36	37.6		0.01
W230797		33	1.7	17.9	28	32.2		<0.01
W230798		33	1.7	17.9	30	32.6		<0.01
W230799		37	2.2	18.5	33	37.3		<0.01
W230800		40	2.8	25.2	33	42.2		<0.01
W230801		3	<0.1	0.7	18	<0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 9- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17190047

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE WH17192277

Project: Nadaleen

P.O. No.: N17- 091

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

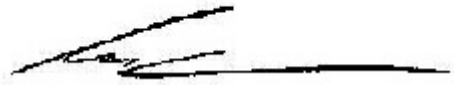
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192277

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230802		3.89	0.05	0.62	298	90	0.25	0.03	35.2	0.08	12.95	2.1	7	1.08	6.0	0.66
W230803		3.53	0.04	2.42	2680	220	0.44	0.10	25.8	0.20	31.1	8.5	30	5.34	24.3	1.81
W230804		4.48	0.71	2.42	>10000	160	0.45	0.11	19.90	0.37	34.8	8.5	30	4.67	25.1	1.94
W230805		5.02	0.01	0.04	8.2	110	0.05	0.02	20.4	0.05	1.07	0.7	1	0.12	1.1	0.48
W230806		2.29	0.12	1.62	233	170	0.38	0.07	30.1	0.14	24.2	5.6	18	3.59	15.9	1.28
W230807		<0.02	0.12	1.79	255	170	0.48	0.08	29.5	0.14	26.9	6.4	21	4.10	18.0	1.40
W230808		5.21	0.13	1.43	8500	130	0.29	0.07	31.0	0.13	22.4	4.9	17	3.42	14.3	1.09
W230809		2.54	1.74	3.59	>10000	180	0.45	0.18	15.45	0.68	52.6	11.7	41	7.20	37.4	2.69
W230810		4.94	0.01	0.05	8.8	50	<0.05	0.02	21.5	0.07	1.07	0.7	1	0.14	2.3	0.49
W230811		6.98	0.25	1.85	2540	170	0.47	0.09	29.1	0.21	27.5	6.0	21	5.88	18.8	1.34
W230812		8.01	0.04	1.50	113.5	180	0.50	0.06	30.7	0.31	22.9	5.4	18	4.01	16.0	1.21
W230813		3.93	0.07	1.91	331	170	0.51	0.09	28.5	0.10	29.4	7.1	25	4.95	23.6	1.75
W230814		6.67	1.00	3.57	>10000	250	0.65	0.16	18.25	0.44	43.9	12.6	48	8.30	47.4	3.31
W230815		0.26	1.68	1.85	>10000	100	0.22	0.45	6.96	0.81	29.2	6.6	45	3.15	27.8	2.50
W230816		5.40	0.04	0.75	259	90	0.27	0.03	33.4	0.08	12.10	2.7	9	1.55	8.8	0.61
W230817		8.13	0.05	1.31	301	110	0.32	0.06	31.1	0.12	18.80	4.9	16	2.69	16.3	1.04
W230818		8.07	0.04	1.64	202	120	0.43	0.09	29.4	0.13	23.8	7.1	18	3.64	23.6	1.25
W230819		8.04	0.05	1.74	279	170	0.39	0.08	29.8	0.23	28.3	6.2	22	3.59	23.5	1.33
W230820		8.63	0.08	3.72	289	220	0.76	0.17	22.6	0.22	40.6	12.8	46	12.90	46.7	2.22
W230821		8.09	0.08	2.41	238	170	0.49	0.10	27.2	0.18	28.0	9.2	30	6.07	28.3	1.62
W230822		8.02	0.11	2.21	1110	150	0.40	0.11	28.4	0.22	32.5	8.0	27	4.87	30.7	1.64
W230823		7.74	0.06	1.66	199.0	160	0.41	0.08	30.3	0.17	23.7	6.3	20	5.09	22.2	1.30
W230824		7.30	0.02	0.92	126.5	120	0.28	0.05	32.5	0.13	15.40	3.5	10	2.14	12.2	0.88
W230825		6.92	0.03	0.79	2820	70	0.25	0.04	33.6	0.08	12.70	3.0	8	1.98	9.8	0.78
W230826		3.40	0.02	0.71	1710	70	0.31	0.04	33.5	0.07	11.85	2.7	8	1.76	9.2	0.75
W230827		6.60	0.07	2.78	73.5	160	0.70	0.14	23.7	0.25	39.4	10.1	34	8.89	36.3	1.93
W230828		7.46	0.05	1.36	32.3	400	0.47	0.06	31.3	0.13	22.8	5.0	17	4.99	17.4	1.23
W230829		6.43	0.06	3.21	35.1	200	0.75	0.13	22.5	0.19	35.0	12.3	45	15.15	39.8	2.14
W230830		7.30	0.03	1.31	18.7	130	0.35	0.06	31.1	0.09	18.65	5.2	17	4.94	16.6	1.12
W230831		8.31	0.03	1.02	45.6	130	0.32	0.05	32.8	0.08	18.25	3.7	12	3.22	13.2	0.80
W230832		7.45	0.03	1.17	32.2	130	0.31	0.05	32.6	0.06	16.20	4.6	15	4.42	13.9	0.93
W230833		7.07	0.04	1.39	48.9	100	0.45	0.08	31.9	0.09	20.1	5.8	15	6.31	19.0	0.93
W230834		7.75	0.02	0.90	95.8	120	0.28	0.05	33.8	0.04	15.45	3.6	10	3.14	11.6	0.67
W230835		0.26	0.66	1.87	>10000	140	0.47	2.64	25.7	0.14	27.1	4.7	26	5.95	15.2	1.36
W230836		7.14	0.01	0.38	58.8	90	0.13	0.02	35.8	0.02	5.79	1.5	4	0.97	4.5	0.42
W230837		6.27	0.02	0.51	107.0	130	0.14	0.02	34.9	0.03	8.28	2.1	6	1.41	6.4	0.39

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192277

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230802		1.58	<0.05	0.3	2.57	0.014	0.25	5.3	1.4	0.36	1190	0.22	0.01	0.8	3.3	930
W230803		6.27	0.07	1.2	5.82	0.022	1.01	15.2	4.7	0.65	499	0.70	0.01	3.3	15.1	880
W230804		6.56	0.08	1.2	7.52	0.026	1.05	17.4	7.1	0.35	1610	0.65	0.01	3.4	15.3	680
W230805		0.15	<0.05	<0.1	<0.005	<0.005	0.01	0.5	0.9	12.65	203	0.08	<0.01	0.1	1.3	170
W230806		4.22	0.06	0.8	3.30	0.017	0.72	11.8	3.4	0.58	591	0.43	0.01	2.3	9.5	590
W230807		4.74	0.07	0.9	3.62	0.018	0.79	13.6	3.7	0.61	579	0.47	0.01	2.6	10.9	540
W230808		3.86	0.06	0.8	6.04	0.023	0.61	11.3	3.2	0.41	886	0.50	0.01	2.1	8.2	530
W230809		9.72	0.10	1.6	19.60	0.030	1.60	26.9	8.7	0.28	2010	0.96	0.01	4.9	21.8	780
W230810		0.17	<0.05	<0.1	0.006	0.005	0.02	0.5	1.0	13.15	206	0.08	<0.01	0.2	1.4	200
W230811		4.89	0.06	0.9	3.18	0.022	0.79	14.3	6.0	0.66	1470	0.75	0.01	2.6	11.2	710
W230812		3.71	0.05	0.8	2.41	0.015	0.65	11.9	3.5	0.89	401	0.52	0.01	2.1	9.3	550
W230813		4.90	0.06	1.0	4.75	0.024	0.82	12.9	3.7	0.90	456	1.02	0.01	2.7	14.1	1190
W230814		9.45	0.12	1.7	16.05	0.041	1.44	21.1	8.4	1.20	1080	2.08	0.01	5.0	26.3	1000
W230815		5.32	0.09	0.9	16.25	0.022	0.80	14.9	23.0	0.17	336	6.03	0.01	2.5	19.7	500
W230816		2.09	<0.05	0.4	2.43	0.012	0.32	4.9	2.4	0.38	2190	0.46	0.01	1.1	4.6	850
W230817		3.44	<0.05	0.7	2.95	0.015	0.56	7.9	4.0	0.67	2060	0.64	0.01	1.8	9.2	900
W230818		4.38	<0.05	0.8	1.945	0.018	0.70	11.1	5.3	0.89	499	0.80	0.01	2.4	12.6	750
W230819		4.51	0.05	0.8	1.530	0.018	0.76	13.7	4.9	0.91	256	1.03	0.01	2.4	13.6	1660
W230820		9.67	0.07	1.7	2.79	0.041	1.63	19.6	13.4	1.02	394	1.80	0.02	5.2	26.4	1070
W230821		6.43	0.06	1.1	1.855	0.022	1.06	13.6	7.5	0.86	436	1.13	0.02	3.5	16.8	830
W230822		5.73	0.06	1.1	3.00	0.026	0.97	15.4	6.5	0.68	1260	1.19	0.01	3.1	16.5	1510
W230823		4.32	<0.05	0.8	1.435	0.021	0.69	11.1	5.5	0.80	470	1.05	0.01	2.4	12.3	980
W230824		2.41	<0.05	0.5	0.824	0.012	0.37	6.7	2.9	0.78	543	0.62	0.01	1.3	6.0	920
W230825		2.13	<0.05	0.4	0.882	0.013	0.34	5.5	3.2	0.67	735	0.61	0.01	1.1	4.8	620
W230826		1.96	<0.05	0.3	0.820	0.012	0.31	5.1	2.9	0.65	723	0.56	0.01	1.0	4.3	590
W230827		7.19	0.07	1.3	0.554	0.030	1.21	18.3	10.2	1.19	300	1.41	0.02	3.9	20.9	1750
W230828		3.59	0.05	0.7	0.157	0.014	0.59	10.4	6.1	0.92	377	0.68	0.02	2.0	10.2	1100
W230829		8.29	0.06	1.5	0.343	0.032	1.41	17.0	13.9	1.12	212	0.97	0.02	4.4	23.3	1110
W230830		3.36	<0.05	0.6	0.250	0.016	0.57	7.9	5.4	0.77	418	0.60	0.02	1.9	9.6	920
W230831		2.64	<0.05	0.5	0.413	0.011	0.44	7.7	4.1	0.77	295	0.63	0.01	1.4	6.9	1120
W230832		2.92	<0.05	0.6	0.245	0.013	0.51	7.0	5.1	0.62	252	0.55	0.01	1.8	8.0	1050
W230833		3.62	<0.05	0.8	0.345	0.013	0.60	10.0	6.5	0.71	613	0.77	0.02	2.0	9.7	720
W230834		2.40	<0.05	0.5	0.444	0.010	0.38	6.5	3.6	0.73	214	0.61	0.01	1.3	5.9	800
W230835		4.93	0.06	0.8	6.85	0.021	0.92	14.2	8.2	0.90	2230	1.79	0.01	2.6	13.0	340
W230836		0.97	<0.05	0.2	0.307	<0.005	0.15	2.5	1.9	1.00	219	0.22	0.01	0.5	1.9	520
W230837		1.34	<0.05	0.2	0.645	0.007	0.23	3.5	2.4	0.40	132	0.26	0.01	0.7	3.3	900

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192277

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230802		2.6	10.3	<0.002	0.46	4.75	3.7	1	0.3	1435	0.05	<0.05	1.00	0.032	4.28	1.3
W230803		8.7	44.8	0.003	1.75	9.00	6.0	1	0.8	1710	0.23	0.05	3.41	0.160	7.48	2.9
W230804		11.9	48.1	0.003	3.02	77.8	5.4	2	0.8	1230	0.24	0.10	3.61	0.167	13.15	2.7
W230805		0.7	0.7	<0.002	<0.01	0.08	0.1	<1	<0.2	52.2	<0.05	<0.05	0.07	<0.005	0.04	0.8
W230806		4.8	31.1	0.003	1.09	4.04	4.6	1	0.5	1630	0.16	<0.05	2.53	0.104	5.01	2.1
W230807		5.3	35.6	0.002	1.18	4.27	5.1	1	0.6	1580	0.18	0.05	2.77	0.117	5.55	2.3
W230808		4.9	28.3	<0.002	1.46	15.20	4.1	1	0.5	1330	0.14	<0.05	2.33	0.087	12.00	2.2
W230809		14.9	71.4	0.005	4.43	131.0	6.5	3	1.0	711	0.35	0.16	5.87	0.219	50.2	4.8
W230810		0.8	1.0	<0.002	<0.01	0.10	0.1	<1	<0.2	52.1	<0.05	<0.05	0.07	<0.005	0.10	0.7
W230811		6.7	36.4	0.003	1.30	14.40	5.2	2	0.6	1600	0.20	0.05	2.87	0.110	5.22	2.8
W230812		7.2	29.3	0.003	0.98	4.41	4.1	1	0.5	1695	0.15	<0.05	2.32	0.100	2.76	2.4
W230813		19.3	36.0	0.007	1.30	10.25	5.6	1	0.6	1570	0.19	<0.05	2.75	0.135	3.57	2.9
W230814		70.4	66.2	0.009	3.80	115.5	9.6	3	1.6	1060	0.36	0.11	4.98	0.246	22.4	3.3
W230815		9.4	42.0	0.003	4.66	160.5	2.9	2	1.2	350	0.18	0.10	3.00	0.101	43.0	4.4
W230816		3.6	14.5	0.003	0.58	8.88	2.3	1	0.3	1465	0.07	<0.05	1.13	0.047	6.35	2.1
W230817		5.2	26.1	0.004	0.88	8.91	3.6	1	0.4	1520	0.13	<0.05	1.85	0.088	7.32	2.3
W230818		6.1	33.7	0.003	0.88	3.08	4.7	1	0.6	1515	0.18	0.06	2.54	0.094	3.90	2.2
W230819		5.9	33.9	0.005	0.96	2.32	5.4	1	0.6	2300	0.18	<0.05	2.63	0.104	3.02	3.6
W230820		11.2	76.8	0.009	1.84	1.90	9.0	1	1.2	1675	0.37	<0.05	5.19	0.252	6.06	3.7
W230821		6.8	49.7	0.005	1.26	1.96	5.7	1	0.8	1565	0.24	0.05	3.32	0.182	4.21	2.9
W230822		7.0	46.4	0.008	1.46	8.50	6.3	1	0.7	1430	0.22	0.06	3.13	0.138	7.32	3.8
W230823		5.3	34.5	0.005	0.99	1.55	4.6	1	0.6	1680	0.17	0.05	2.44	0.106	3.10	2.7
W230824		3.0	18.7	0.002	0.50	0.85	2.5	1	0.3	1525	0.09	<0.05	1.48	0.051	1.54	1.9
W230825		2.1	17.1	0.002	0.50	5.53	2.1	1	0.3	1375	0.08	<0.05	1.25	0.044	1.79	1.5
W230826		1.9	14.2	<0.002	0.42	3.65	2.1	1	0.3	1380	0.08	<0.05	1.09	0.040	1.68	1.4
W230827		8.7	58.0	0.010	1.36	0.47	7.5	1	0.9	1420	0.28	<0.05	3.95	0.182	2.86	4.3
W230828		4.2	28.0	0.003	0.76	0.25	4.1	1	0.5	1795	0.15	<0.05	2.03	0.090	1.09	2.6
W230829		8.8	66.2	0.007	1.69	0.42	8.3	1	1.0	1565	0.31	0.05	4.06	0.260	1.56	2.9
W230830		3.8	27.2	0.003	0.84	0.21	3.6	1	0.4	1985	0.14	<0.05	1.86	0.097	0.65	2.4
W230831		3.3	21.4	0.003	0.58	0.41	2.8	1	0.4	1965	0.11	<0.05	1.57	0.060	0.75	2.7
W230832		3.7	23.7	0.002	0.78	0.22	3.2	1	0.4	1955	0.12	<0.05	1.80	0.089	0.91	2.6
W230833		4.6	29.1	0.002	0.70	0.23	3.5	1	0.5	1150	0.15	<0.05	2.27	0.078	0.99	1.9
W230834		3.0	18.4	0.004	0.56	0.44	2.4	1	0.3	1640	0.10	<0.05	1.47	0.051	0.99	2.8
W230835		6.8	41.0	0.002	1.41	46.3	5.4	1	0.7	1035	0.19	0.06	3.22	0.087	22.7	6.1
W230836		1.4	6.3	0.002	0.30	0.34	1.0	1	<0.2	1240	<0.05	<0.05	0.57	0.021	0.70	1.5
W230837		3.1	9.9	0.002	0.36	2.67	1.6	1	0.2	2320	0.05	<0.05	0.75	0.032	1.06	2.2

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Finalized Date: 12- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17192277

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230802		14	1.0	19.2	14	16.1		0.28
W230803		49	5.3	19.2	39	47.7		0.04
W230804		48	6.5	19.3	51	48.0	2.37	4.28
W230805		3	0.1	0.8	17	<0.5		<0.01
W230806		32	3.2	17.8	24	31.3		0.43
W230807		35	3.5	19.1	26	34.6		0.38
W230808		28	3.2	17.0	22	29.6		0.54
W230809		68	6.7	19.1	80	60.4	3.00	7.20
W230810		3	0.1	0.8	18	<0.5		<0.01
W230811		35	3.1	20.0	31	37.1		1.46
W230812		31	3.3	16.7	31	29.1		0.05
W230813		46	4.6	19.3	20	37.2		0.02
W230814		83	10.0	21.5	94	64.9	2.42	2.58
W230815		36	6.5	16.5	65	32.0	6.04	8.20
W230816		15	1.6	10.4	12	13.9		1.39
W230817		30	3.2	14.2	18	25.0		1.68
W230818		33	3.0	14.5	22	31.5		0.14
W230819		40	2.7	21.5	27	32.0		0.03
W230820		81	4.0	20.1	55	61.2		0.05
W230821		53	3.7	14.9	40	44.1		0.04
W230822		48	3.3	22.6	40	39.2		1.60
W230823		37	2.0	15.5	29	31.2		0.10
W230824		20	1.1	11.0	17	19.0		0.20
W230825		18	0.7	8.7	12	15.3		0.49
W230826		17	0.6	8.5	10	13.7		0.51
W230827		62	1.3	27.1	44	49.2		0.01
W230828		32	0.8	16.7	23	27.5		0.01
W230829		75	1.1	21.8	52	53.2		<0.01
W230830		29	1.2	14.4	20	25.1		<0.01
W230831		22	1.2	14.8	16	19.7		0.01
W230832		25	1.0	11.4	19	23.9		<0.01
W230833		30	0.9	12.2	21	28.5		<0.01
W230834		17	0.8	10.8	13	17.4		<0.01
W230835		34	16.4	15.3	23	33.3	1.425	2.79
W230836		8	0.3	4.9	3	8.2		0.01
W230837		10	0.9	7.7	7	9.1		0.02

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 12- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17192277

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Yellowknife located at 3 Coronation Drive, PO Box 1919, Yellowknife, NT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 21- OCT- 2017
Account: RCM

CERTIFICATE WH17197025

Project: Nadaleen

P.O. No.: N17- 092

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

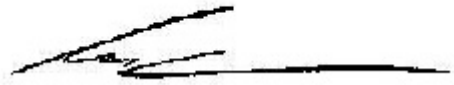
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197025

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232432		4.22	0.07	2.28	2110	780	0.67	0.07	19.60	0.10	29.4	3.7	23	5.07	13.0	1.23
W232433		5.47	0.07	3.21	41.2	150	1.01	0.10	14.95	0.04	38.2	4.8	30	12.20	16.0	1.51
W232434		2.90	0.04	1.76	90.7	690	0.68	0.06	27.4	0.05	24.2	2.9	17	4.18	9.3	0.90
W232435		4.37	0.23	2.11	8400	810	0.64	0.06	26.2	0.19	25.5	3.7	22	4.42	12.6	1.01
W232436		7.75	0.02	1.29	31.5	2150	0.51	0.04	30.4	0.07	17.55	2.4	13	3.26	8.1	0.68
W232437		7.01	0.03	1.95	32.2	570	0.66	0.06	28.4	0.03	21.0	3.8	19	5.17	12.7	0.86
W232438		6.70	0.04	1.53	22.2	420	0.64	0.04	30.0	0.03	17.10	2.9	16	3.43	9.8	0.70
W232439		7.09	0.03	1.97	101.0	680	0.84	0.07	26.7	0.04	24.8	4.6	19	4.28	12.8	0.88
W232440		7.73	0.03	1.82	46.0	660	0.74	0.05	28.5	0.05	22.0	4.3	19	4.42	12.4	0.76
W232441		8.81	0.05	1.47	42.8	300	0.71	0.05	29.2	0.04	17.45	3.6	15	3.91	9.5	0.65
W232442		7.80	0.05	2.95	3140	190	1.19	0.08	21.3	0.05	34.3	6.0	31	7.73	21.2	1.14
W232443		7.37	0.08	2.21	2510	230	0.79	0.06	25.2	0.03	28.7	3.9	23	4.77	17.4	0.78
W232444		0.26	0.17	3.73	6500	210	1.00	0.15	12.10	0.16	40.4	12.7	42	10.35	38.0	2.93
W232445		2.79	0.59	2.80	>10000	140	0.77	0.08	11.85	0.14	31.3	5.3	32	4.17	17.1	1.35
W232446		6.46	0.08	1.31	1690	60	0.50	0.05	27.2	0.05	16.75	3.3	15	2.35	9.0	0.55
W232447		1.86	0.87	2.24	>10000	80	0.52	0.09	10.50	0.54	17.15	3.6	27	3.46	12.7	1.15
W232448		<0.02	0.87	2.29	>10000	80	0.58	0.09	10.10	0.46	18.20	3.7	29	3.62	13.6	1.14
W232449		5.22	0.14	2.78	946	110	0.87	0.08	18.20	0.07	33.4	5.8	29	5.63	18.0	1.08
W232450		6.37	<0.01	0.04	10.0	20	0.05	0.03	21.6	0.08	1.09	1.1	1	0.13	2.0	0.47
W232451		8.39	0.10	2.87	121.5	150	1.20	0.08	17.30	0.04	38.1	5.2	30	7.21	17.2	1.27
W232452		7.41	0.11	2.33	54.1	370	1.01	0.06	20.1	0.07	30.8	4.6	26	6.45	18.9	1.25
W232453		7.10	0.07	1.19	57.3	170	0.64	0.04	29.5	0.05	20.0	3.2	14	2.86	10.0	0.57
W232454		7.95	0.30	1.95	7650	90	0.73	0.05	17.45	0.07	24.0	5.4	20	3.79	15.6	1.26
W232455		7.83	0.19	3.40	3500	180	0.97	0.11	20.2	0.17	38.3	7.1	35	5.45	32.5	1.32
W232456		7.10	3.03	4.26	>10000	240	1.03	0.14	10.85	0.88	51.6	8.5	42	6.22	38.7	2.05
W232457		5.59	0.12	3.50	932	130	1.18	0.10	16.35	0.14	45.6	5.6	39	6.39	26.1	1.33
W232458		6.20	0.81	3.24	>10000	110	0.91	0.10	18.95	0.43	41.3	7.1	38	5.13	26.8	1.05
W232459		3.22	0.76	2.83	>10000	100	0.77	0.09	21.6	0.44	39.0	5.8	31	4.59	22.0	0.89
W232460		3.95	0.08	2.63	458	100	0.91	0.08	26.2	0.11	32.7	6.3	29	4.89	20.2	0.85
W232461		7.85	0.05	3.33	465	120	1.18	0.10	21.6	0.09	37.8	6.9	36	6.70	22.1	1.12
W232462		0.26	0.70	1.94	>10000	150	0.57	3.55	27.2	0.17	28.5	5.5	28	6.27	16.8	1.44
W232463		7.47	0.05	1.26	3600	80	0.53	0.04	32.0	0.24	19.05	3.3	14	2.45	12.2	0.57
W232464		4.64	0.05	3.28	253	140	1.26	0.10	17.85	0.22	40.2	6.7	32	5.39	26.4	1.36
W232465		6.47	0.21	4.32	>10000	210	1.35	0.14	11.50	0.13	52.2	8.8	45	8.62	30.9	1.85
W232466		5.11	<0.01	0.04	16.2	20	0.06	0.97	21.5	0.06	1.02	1.0	<1	0.09	2.1	0.46
W232467		5.31	0.04	2.95	1230	160	0.82	0.10	21.4	0.09	34.9	5.3	31	5.30	27.7	1.45

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CERTIFICATE OF ANALYSIS WH17197025

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232432		5.64	0.06	1.6	4.83	0.015	1.27	13.9	10.3	3.70	447	0.29	0.01	3.6	10.3	280
W232433		7.90	0.08	2.4	0.089	0.024	1.97	17.6	16.1	4.09	204	0.52	0.03	5.5	12.4	360
W232434		4.55	0.06	0.9	0.469	0.013	0.99	11.8	8.5	1.71	155	0.44	0.01	2.8	8.3	190
W232435		5.31	0.07	1.1	5.40	0.019	1.17	12.5	10.1	1.67	301	0.40	0.01	3.3	9.8	240
W232436		3.37	0.08	0.6	0.166	0.010	0.75	8.9	6.9	1.24	133	0.50	<0.01	2.0	6.3	150
W232437		5.01	0.12	0.9	0.183	0.013	1.13	10.8	10.8	1.50	148	0.32	0.01	2.9	9.9	200
W232438		3.88	0.11	0.7	0.226	0.012	0.86	8.9	9.6	1.32	132	0.35	0.01	2.2	7.3	160
W232439		5.29	0.08	1.0	0.884	0.015	1.11	12.3	12.5	1.50	215	0.48	0.01	3.0	11.6	240
W232440		4.90	0.13	0.9	0.338	0.011	1.05	11.5	11.4	1.51	151	0.55	0.01	2.9	9.2	300
W232441		3.90	0.14	0.8	0.314	0.014	0.84	9.3	10.7	1.49	174	0.50	0.01	2.2	7.3	200
W232442		7.75	0.18	1.3	1.410	0.025	1.63	17.1	21.8	1.84	793	0.53	0.02	4.5	13.8	560
W232443		6.02	0.18	1.0	1.940	0.015	1.24	15.1	12.7	1.63	2280	0.33	0.01	3.4	9.0	490
W232444		10.35	0.11	2.1	14.90	0.035	1.86	20.3	13.1	2.60	1190	1.88	0.02	6.0	28.1	460
W232445		7.93	0.13	1.6	7.98	0.039	1.55	15.0	12.6	3.88	3120	0.76	0.01	4.5	12.0	350
W232446		3.62	0.11	0.8	2.18	0.009	0.75	8.6	7.5	1.77	2760	0.56	0.01	2.2	6.2	200
W232447		5.92	0.13	1.5	32.7	0.014	1.21	8.5	13.1	3.92	3390	1.23	0.02	3.7	9.0	390
W232448		6.40	0.10	1.6	31.6	0.015	1.24	9.0	13.6	3.89	3330	1.22	0.01	3.9	9.6	400
W232449		7.36	0.13	1.9	4.16	0.021	1.56	15.8	19.0	3.56	4280	0.84	0.02	4.8	13.2	440
W232450		0.19	0.19	<0.1	0.016	<0.005	0.02	0.5	1.0	13.20	217	0.21	<0.01	0.1	1.4	180
W232451		7.59	0.18	2.0	1.055	0.023	1.62	18.2	22.9	3.78	738	1.08	0.02	5.2	13.7	490
W232452		6.29	0.16	1.6	0.516	0.016	1.33	15.3	14.9	3.23	487	0.84	0.02	4.1	11.4	600
W232453		3.26	0.16	0.7	0.523	0.009	0.67	10.6	6.5	2.61	686	0.76	0.01	2.3	5.8	250
W232454		5.16	0.14	1.4	3.14	0.015	1.07	10.9	9.2	7.31	1970	0.80	0.02	3.4	11.0	310
W232455		9.31	0.17	1.6	6.94	0.030	1.96	18.8	11.7	1.67	2300	0.24	0.01	5.6	17.8	430
W232456		11.90	0.15	2.2	41.0	0.032	2.40	26.0	17.3	1.80	5800	0.48	0.02	7.2	21.4	530
W232457		9.53	0.15	2.1	5.27	0.030	1.98	22.1	14.7	2.99	2310	0.36	0.02	6.3	15.4	520
W232458		8.47	0.18	1.6	6.95	0.028	1.79	22.7	12.4	1.48	1510	0.41	0.01	5.5	17.0	450
W232459		7.62	0.19	1.5	6.09	0.026	1.54	20.0	10.6	1.27	1630	0.27	0.01	4.9	13.6	420
W232460		6.99	0.22	1.4	1.530	0.019	1.44	16.5	9.7	1.33	832	0.64	0.01	4.8	13.9	360
W232461		8.76	0.21	1.7	1.085	0.024	1.90	19.6	12.9	2.22	603	0.51	0.02	5.9	15.3	460
W232462		5.08	0.13	0.9	6.95	0.020	1.00	13.3	9.8	0.95	2380	1.77	0.01	2.7	13.9	360
W232463		3.36	0.12	0.7	1.065	0.012	0.69	9.5	4.5	1.23	898	0.97	0.01	2.2	4.8	320
W232464		8.52	0.16	1.9	0.812	0.027	1.79	20.3	11.9	4.21	737	0.50	0.02	5.5	15.3	450
W232465		11.85	0.17	2.4	4.62	0.038	2.28	26.7	20.1	4.50	1110	0.43	0.03	7.6	21.8	500
W232466		0.18	0.20	<0.1	0.008	0.006	0.02	0.5	0.9	13.00	206	0.12	<0.01	0.1	1.4	180
W232467		7.81	0.21	1.4	4.15	0.023	1.45	17.1	11.5	2.36	1670	0.32	0.02	4.9	15.4	340

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	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232432		5.8	49.8	<0.002	0.36	12.70	3.4	1	0.8	587	0.26	<0.05	4.97	0.111	18.20	7.0
W232433		7.3	76.4	<0.002	0.17	0.30	4.8	1	1.2	454	0.40	<0.05	7.06	0.163	0.46	7.7
W232434		5.8	37.6	<0.002	0.15	0.69	2.8	1	0.7	811	0.21	<0.05	3.67	0.084	1.47	13.8
W232435		5.9	46.5	<0.002	0.73	30.6	3.0	1	0.8	755	0.26	<0.05	4.30	0.100	25.9	13.3
W232436		4.7	27.7	<0.002	0.15	0.18	2.1	1	0.5	974	0.15	<0.05	2.50	0.058	0.40	13.7
W232437		4.9	42.6	<0.002	0.12	0.28	3.1	1	0.7	798	0.21	<0.05	3.63	0.090	0.39	12.0
W232438		4.3	30.7	<0.002	0.10	0.14	2.5	1	0.5	894	0.17	<0.05	2.85	0.068	0.31	13.1
W232439		4.8	42.0	<0.002	0.20	1.52	3.4	2	0.7	773	0.23	<0.05	4.05	0.091	3.04	13.6
W232440		5.5	39.1	<0.002	0.17	0.30	3.2	1	0.6	816	0.22	<0.05	3.82	0.085	0.61	14.2
W232441		4.9	30.1	<0.002	0.17	0.27	2.5	1	0.5	953	0.16	<0.05	2.97	0.067	0.70	16.2
W232442		6.5	60.3	<0.002	0.57	6.42	4.9	2	1.0	563	0.33	<0.05	6.06	0.132	5.16	11.6
W232443		5.3	44.0	<0.002	0.49	6.72	3.8	1	0.8	677	0.27	<0.05	4.62	0.101	6.94	12.9
W232444		10.9	83.7	<0.002	2.69	22.5	10.5	1	1.7	330	0.45	<0.05	6.34	0.272	42.5	7.2
W232445		6.9	56.8	<0.002	5.53	210	5.0	5	1.1	259	0.34	0.10	6.15	0.134	33.8	9.7
W232446		5.6	26.7	<0.002	0.31	7.22	2.4	1	0.4	1020	0.16	<0.05	3.09	0.067	7.19	18.7
W232447		9.1	45.0	<0.002	1.10	110.5	2.7	2	1.1	252	0.28	0.15	4.96	0.113	125.0	29.8
W232448		9.4	46.9	<0.002	1.23	115.0	2.9	2	1.1	252	0.31	0.15	5.13	0.116	123.5	29.8
W232449		8.1	59.5	<0.002	0.56	9.24	4.8	3	1.0	503	0.37	<0.05	6.64	0.146	14.40	9.7
W232450		1.1	0.9	<0.002	<0.01	0.12	0.2	1	<0.2	52.7	<0.05	<0.05	0.06	<0.005	0.10	0.8
W232451		9.4	61.8	<0.002	0.57	0.80	4.7	3	1.1	555	0.38	<0.05	6.88	0.149	2.59	9.0
W232452		8.4	48.7	<0.002	0.51	0.45	3.9	2	1.1	557	0.30	<0.05	6.04	0.120	1.08	10.4
W232453		7.9	22.9	<0.002	0.25	1.21	2.2	1	0.5	773	0.17	<0.05	3.15	0.063	2.11	16.3
W232454		11.0	40.0	<0.002	0.95	28.8	3.3	3	1.3	255	0.26	<0.05	4.55	0.099	13.95	10.6
W232455		6.6	72.4	<0.002	0.71	29.3	5.9	2	1.7	384	0.42	<0.05	7.01	0.168	34.4	7.8
W232456		11.0	95.4	<0.002	2.25	207	5.8	2	2.6	236	0.56	0.38	9.62	0.208	162.5	11.5
W232457		8.5	74.8	<0.002	0.42	14.25	6.0	2	1.8	322	0.47	0.05	8.31	0.187	20.4	5.7
W232458		7.4	69.4	<0.002	1.93	96.4	5.0	2	2.0	383	0.42	0.06	7.04	0.163	30.0	12.5
W232459		6.5	61.2	<0.002	1.50	75.6	4.8	2	1.4	416	0.36	<0.05	6.12	0.139	25.8	11.6
W232460		6.9	57.0	<0.002	0.34	3.80	4.5	1	1.4	683	0.34	<0.05	6.02	0.134	5.35	14.2
W232461		7.9	72.2	<0.002	0.34	1.82	5.5	1	1.5	614	0.45	<0.05	7.81	0.173	2.70	11.9
W232462		7.2	41.1	<0.002	1.53	45.4	5.9	1	0.7	1090	0.20	0.06	3.57	0.094	23.2	7.0
W232463		5.0	27.4	<0.002	0.35	9.97	2.2	1	1.1	922	0.16	<0.05	2.91	0.063	2.99	9.1
W232464		8.6	71.4	<0.002	0.23	1.49	5.4	1	1.7	438	0.42	<0.05	7.59	0.165	1.75	5.5
W232465		9.0	97.1	<0.002	2.00	43.5	7.3	3	1.7	264	0.57	<0.05	10.50	0.218	18.95	6.3
W232466		1.2	0.7	<0.002	<0.01	0.11	0.1	1	<0.2	48.1	<0.05	<0.05	0.08	<0.005	0.03	0.7
W232467		6.7	69.9	<0.002	0.52	25.5	4.9	1	1.6	470	0.38	<0.05	6.13	0.145	10.10	11.5

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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197025

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232432		37	1.8	8.5	26	53.3		1.02
W232433		51	0.8	10.5	26	80.9		0.01
W232434		29	1.1	6.2	26	30.5		<0.01
W232435		34	1.4	6.9	24	35.9		2.04
W232436		21	0.4	5.0	24	21.7		<0.01
W232437		32	0.5	6.0	21	31.4		<0.01
W232438		25	0.4	5.0	14	24.1		<0.01
W232439		31	0.7	7.3	16	34.0		0.06
W232440		29	0.5	6.8	23	30.4		<0.01
W232441		26	0.5	5.4	16	27.6		<0.01
W232442		46	1.9	10.1	16	46.4		0.06
W232443		40	1.6	9.2	9	33.8		0.26
W232444		84	8.2	18.6	48	70.4		2.52
W232445		47	2.4	10.1	21	56.1	10.90	2.30
W232446		23	1.2	7.0	9	27.8		1.43
W232447		46	4.8	10.0	40	50.0	1.080	7.09
W232448		48	4.8	10.2	42	52.6	1.355	7.03
W232449		46	2.3	11.6	16	67.0		0.68
W232450		1	0.1	0.7	17	<0.5		<0.01
W232451		46	2.0	11.4	15	72.4		0.03
W232452		40	1.1	10.9	31	57.8		0.02
W232453		25	0.9	6.1	15	25.6		0.09
W232454		31	1.8	7.5	15	47.0		1.06
W232455		52	2.5	11.7	41	52.5		2.57
W232456		66	4.1	15.4	87	77.1	1.575	15.50
W232457		52	3.2	13.8	35	75.6		1.23
W232458		51	2.6	24.0	56	57.8	2.76	2.66
W232459		43	2.2	26.0	58	51.5	2.14	2.31
W232460		39	1.9	9.8	31	48.6		0.20
W232461		49	2.2	11.1	28	61.4		0.02
W232462		33	18.7	15.5	24	32.8	1.340	2.76
W232463		18	0.8	6.7	14	24.7		0.14
W232464		49	2.0	11.8	37	63.4		0.02
W232465		63	3.0	14.4	43	83.4	1.960	1.02
W232466		1	0.1	0.7	15	<0.5		<0.01
W232467		42	1.9	10.6	38	45.7		0.65

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Project: Nadaleen

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Account: RCM

CERTIFICATE OF ANALYSIS WH17197025

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
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Finalized Date: 19- OCT- 2017
Account: RCM

CERTIFICATE WH17197031

Project: Nadaleen

P.O. No.: N17- 093

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

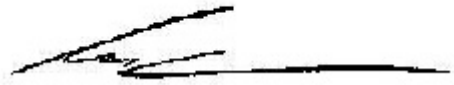
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17197031

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230838		6.67	0.04	0.57	99.5	90	0.15	0.04	29.8	0.06	9.19	2.2	7	1.46	9.4	0.51
W230839		3.37	0.12	0.25	2.2	60	<0.05	0.03	29.1	0.04	1.78	1.0	5	0.51	7.7	0.26
W230840		6.16	0.03	0.11	7.2	40	<0.05	0.02	32.9	0.06	0.98	0.5	2	0.44	5.4	0.09
W230841		4.34	0.17	4.45	121.5	200	1.05	0.18	12.70	0.14	43.8	11.2	50	18.00	42.6	3.14
W230842		3.98	0.26	7.05	229	360	2.37	0.30	0.63	0.36	64.9	23.7	87	29.1	90.3	5.05
W230843		2.74	0.60	5.54	560	220	1.79	0.23	0.70	0.26	56.3	12.8	71	22.8	60.7	3.49
W230844		0.21	0.65	1.87	>10000	140	0.55	3.10	25.4	0.16	26.9	7.8	28	6.24	19.9	1.39
W230845		4.40	0.10	7.23	599	220	2.35	0.28	0.19	0.43	70.1	25.9	85	23.1	77.0	5.19
W230846		6.73	0.08	7.05	250	230	2.38	0.29	0.81	0.37	71.8	24.3	74	24.6	78.0	5.61
W230847		2.60	0.10	6.62	196.5	190	2.05	0.27	1.50	0.23	61.7	24.6	70	20.9	63.8	5.92
W230848		2.91	0.05	7.43	221	220	2.35	0.31	1.95	0.18	68.5	24.0	72	24.6	67.3	5.37
W230849		7.00	<0.01	0.07	1.2	30	0.06	0.02	20.5	0.07	1.20	2.9	2	0.23	4.2	0.49
W230850		3.95	0.06	6.47	210	210	1.75	0.25	3.23	0.22	62.2	22.7	64	20.1	62.5	5.15
W230851		5.67	0.09	7.25	>10000	190	1.90	0.30	1.65	0.63	68.3	23.9	73	21.9	92.6	5.80
W230852		10.87	0.07	6.55	1560	170	1.63	0.25	2.44	0.27	60.6	21.3	67	19.45	58.8	5.21
W230853		9.72	0.09	4.69	3560	120	1.13	0.17	1.28	0.28	41.6	21.9	65	14.60	54.9	4.61
W230854		9.41	0.05	2.77	4190	90	0.59	0.11	1.49	0.13	28.2	11.5	46	7.85	31.0	3.15
W230855		8.83	0.11	3.95	9180	140	0.90	0.17	0.23	0.20	38.3	16.2	62	9.67	43.3	4.12
W230856		8.17	0.05	6.07	1085	160	1.43	0.24	1.38	0.11	55.8	21.5	66	19.75	63.5	5.02
W230857		10.80	0.06	7.70	3630	190	2.01	0.32	1.41	0.43	71.9	23.7	76	29.4	64.5	5.64
W230858		5.47	0.05	7.50	971	190	2.04	0.32	1.77	0.18	70.7	28.3	71	31.1	64.1	5.63
W230859		7.64	0.05	7.89	610	190	2.01	0.33	1.28	0.30	74.4	20.8	73	28.9	65.4	5.71
W230860		4.66	0.01	0.06	3.7	50	0.05	0.03	20.1	0.06	1.29	2.8	1	0.22	7.0	0.51
W230861		3.54	0.06	6.76	>10000	230	1.31	0.28	0.18	0.28	63.6	24.1	82	17.75	53.9	5.41
W230862		8.25	0.07	6.66	885	200	1.43	0.26	2.19	0.19	61.8	20.7	72	20.4	59.3	5.04
W230863		0.26	0.18	3.87	6450	200	0.86	0.15	12.00	0.18	39.3	13.4	44	10.75	38.1	2.92
W230864		9.93	0.04	6.92	300	210	1.83	0.29	2.85	0.07	66.5	20.0	69	24.1	62.5	5.45
W230865		10.20	0.05	6.79	161.0	220	1.62	0.27	2.20	0.05	61.8	21.7	71	24.7	63.5	5.47
W230866		5.64	0.06	6.69	181.0	210	1.80	0.27	2.17	0.05	62.4	24.3	69	24.7	68.8	5.68
W230867		11.46	0.05	6.64	125.5	190	1.78	0.25	1.81	0.11	61.8	21.3	78	31.5	65.7	5.24
W230868		11.93	0.09	5.61	116.5	190	1.39	0.21	2.45	0.06	54.2	21.6	71	22.6	53.0	4.68
W230869		11.44	0.06	5.84	155.5	190	1.39	0.21	2.62	0.05	55.6	22.0	73	27.0	59.5	5.02
W230870		11.41	0.07	5.23	138.5	210	1.36	0.20	2.00	0.04	50.9	18.4	65	21.1	63.9	4.47
W230871		11.22	0.05	5.13	99.8	240	1.21	0.20	2.03	0.19	48.1	16.9	63	20.8	52.7	4.09
W230872		<0.02	0.05	5.31	101.0	250	1.31	0.21	2.12	0.19	50.0	17.4	64	21.1	55.8	4.29
W230873		10.28	0.04	4.51	82.5	210	1.01	0.16	2.18	0.11	41.2	15.8	63	17.15	42.5	3.84

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197031

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230838		1.58	<0.05	0.3	0.843	0.009	0.26	4.2	2.9	1.82	185	0.38	0.01	0.8	3.9	590
W230839		0.57	<0.05	0.1	0.015	<0.005	0.03	0.8	2.8	0.78	70	0.07	0.07	0.3	1.9	40
W230840		0.28	0.05	<0.1	0.007	<0.005	0.03	0.5	2.5	0.79	16	0.08	0.02	0.2	0.9	10
W230841		10.85	0.07	2.4	1.195	0.049	1.76	20.1	21.4	0.84	298	0.65	0.13	6.8	22.4	360
W230842		19.60	0.14	3.5	6.25	0.084	3.31	32.0	16.0	0.50	201	2.27	0.03	11.3	44.7	520
W230843		15.70	0.11	3.0	9.44	0.063	2.59	27.0	19.0	0.46	334	0.92	0.02	9.9	22.5	350
W230844		5.43	0.06	1.0	6.25	0.021	0.95	13.5	9.6	0.90	2260	1.84	0.01	2.9	14.2	330
W230845		19.70	0.16	3.5	3.40	0.075	3.38	32.2	17.1	0.45	654	0.54	0.03	12.5	56.4	580
W230846		19.60	0.16	3.5	2.36	0.088	3.31	33.8	22.9	0.69	719	0.47	0.03	12.3	50.3	600
W230847		18.00	0.15	3.1	1.555	0.075	3.08	29.7	21.2	0.95	550	0.51	0.03	11.5	47.6	510
W230848		20.6	0.16	3.5	0.904	0.079	3.52	33.1	19.8	1.25	556	0.45	0.03	13.1	49.1	550
W230849		0.23	0.09	<0.1	0.006	0.006	0.03	0.6	1.2	12.80	201	0.06	0.01	0.2	2.0	180
W230850		17.65	0.13	3.3	1.440	0.076	3.04	29.9	13.4	1.76	840	0.33	0.02	11.6	45.5	510
W230851		19.90	0.17	3.6	8.80	0.070	3.43	32.2	14.8	1.05	533	0.54	0.03	12.5	54.3	690
W230852		18.15	0.13	3.2	4.19	0.064	3.11	28.9	13.6	1.36	893	0.39	0.02	11.7	45.3	510
W230853		13.60	0.08	2.5	6.10	0.043	2.13	21.2	12.8	0.68	550	0.46	0.01	8.4	42.2	370
W230854		8.02	0.05	1.7	4.79	0.026	1.25	13.9	10.6	0.65	498	0.35	0.01	5.1	22.8	250
W230855		11.30	0.09	2.4	7.78	0.037	1.80	18.9	11.8	0.28	147	0.37	0.01	7.2	31.6	300
W230856		17.15	0.12	3.0	3.05	0.056	2.92	26.8	11.0	0.87	764	0.37	0.02	10.6	40.1	490
W230857		22.0	0.14	3.9	3.80	0.070	3.73	35.1	13.0	1.02	710	0.59	0.03	13.6	45.8	550
W230858		20.9	0.15	3.8	2.74	0.073	3.61	34.3	12.5	1.18	835	0.48	0.03	13.4	46.7	570
W230859		22.3	0.15	4.0	3.45	0.070	3.76	36.2	13.6	0.96	655	0.64	0.03	13.8	42.6	570
W230860		0.24	0.09	<0.1	0.008	0.006	0.03	0.6	1.0	12.65	204	0.08	<0.01	0.2	1.6	170
W230861		19.65	0.14	3.6	40.0	0.052	2.87	30.7	20.6	0.39	86	0.48	0.02	12.2	43.0	440
W230862		18.50	0.12	3.3	3.51	0.058	2.99	29.4	17.9	1.26	775	0.46	0.02	11.5	40.0	450
W230863		10.80	0.06	2.1	14.60	0.035	1.83	20.4	10.2	2.56	1180	1.92	0.02	6.3	27.0	440
W230864		19.45	0.11	3.3	0.936	0.074	3.27	31.5	19.4	1.62	767	0.41	0.03	12.5	40.1	650
W230865		18.85	0.13	3.4	0.424	0.076	3.15	29.7	31.5	1.38	709	0.38	0.03	11.9	41.7	530
W230866		18.90	0.13	3.3	0.507	0.075	3.09	30.0	31.7	1.39	683	0.38	0.03	12.0	45.8	500
W230867		18.65	0.12	3.4	0.169	0.074	3.06	29.5	40.5	2.14	606	0.33	0.03	11.8	40.2	530
W230868		15.65	0.11	3.0	0.093	0.059	2.61	25.7	50.8	2.19	728	0.38	0.03	10.1	37.4	490
W230869		16.10	0.11	3.3	0.072	0.062	2.59	26.9	64.2	2.36	695	0.33	0.03	10.5	37.7	510
W230870		14.50	0.12	2.9	0.083	0.056	2.30	24.3	52.4	1.95	504	0.25	0.03	9.4	33.0	480
W230871		13.95	0.11	2.7	0.101	0.050	2.24	23.2	81.0	1.84	516	0.37	0.03	8.8	31.5	400
W230872		14.60	0.10	2.9	0.095	0.058	2.38	23.9	82.8	1.93	542	0.39	0.03	9.1	32.1	430
W230873		12.20	0.09	2.7	0.068	0.045	1.86	20.0	79.7	1.67	532	0.40	0.02	7.8	31.0	380

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CERTIFICATE OF ANALYSIS WH17197031

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230838		4.3	11.6	<0.002	0.43	2.31	1.6	1	0.4	1285	0.06	<0.05	0.98	0.038	1.15	2.2
W230839		1.0	1.6	<0.002	0.05	0.14	0.9	1	0.2	320	<0.05	<0.05	0.26	0.030	0.29	0.1
W230840		0.6	1.5	<0.002	0.21	0.18	0.5	1	0.2	406	<0.05	<0.05	0.14	0.009	0.27	0.1
W230841		11.3	80.2	0.002	0.15	1.20	10.7	<1	1.5	270	0.51	0.06	7.24	0.368	3.93	1.4
W230842		23.2	151.5	0.024	0.37	8.37	23.2	7	2.2	65.7	0.78	0.07	11.45	0.535	10.40	2.3
W230843		16.8	120.0	0.018	1.87	9.31	20.5	3	1.7	95.5	0.66	0.06	9.61	0.475	13.85	2.0
W230844		7.1	40.9	0.003	1.43	44.4	6.3	1	0.7	1035	0.20	0.06	3.53	0.089	24.5	6.5
W230845		22.8	158.5	0.003	1.41	7.12	22.3	<1	2.2	54.7	0.84	0.07	11.35	0.571	12.70	2.4
W230846		22.7	156.0	0.004	2.97	2.80	23.7	2	2.2	77.5	0.82	0.06	11.05	0.571	7.53	2.3
W230847		18.2	145.5	0.005	4.38	1.78	20.2	2	2.0	87.2	0.76	0.05	10.00	0.555	5.79	2.0
W230848		12.2	168.5	0.004	4.96	1.91	21.2	1	2.4	108.5	0.86	0.07	11.35	0.588	8.66	2.3
W230849		1.1	1.5	<0.002	<0.01	0.07	0.4	<1	<0.2	48.5	<0.05	<0.05	0.13	<0.005	0.03	0.7
W230850		16.8	144.5	0.002	4.57	2.68	19.5	<1	2.0	178.5	0.79	0.07	9.96	0.529	7.48	2.0
W230851		18.4	161.0	0.003	6.04	70.0	18.4	<1	2.3	105.5	0.89	0.11	10.85	0.585	40.7	2.6
W230852		15.9	148.5	0.003	4.84	20.2	19.8	<1	2.0	145.5	0.78	0.08	9.67	0.562	19.65	2.1
W230853		11.8	104.0	<0.002	4.56	29.2	14.0	<1	2.2	68.4	0.56	0.07	6.62	0.497	26.7	1.5
W230854		7.6	58.3	<0.002	2.59	21.4	8.0	<1	1.2	62.9	0.35	0.06	4.30	0.328	22.3	0.9
W230855		16.1	80.6	<0.002	4.22	22.3	9.4	<1	1.4	47.1	0.47	0.08	5.96	0.417	25.8	1.3
W230856		15.8	143.0	0.002	4.98	11.50	18.2	<1	2.9	78.8	0.72	0.07	9.15	0.531	11.55	1.9
W230857		33.9	192.0	0.002	5.79	18.95	23.4	<1	2.5	76.2	0.96	0.07	11.95	0.616	13.15	2.4
W230858		34.2	189.5	<0.002	5.58	8.61	22.0	<1	2.5	74.2	0.91	0.05	11.70	0.587	9.67	2.4
W230859		18.8	188.5	0.002	5.70	10.50	22.3	<1	2.6	73.3	0.94	0.07	12.25	0.592	12.70	2.5
W230860		1.1	1.4	<0.002	0.01	0.08	0.3	<1	<0.2	48.8	<0.05	<0.05	0.14	<0.005	0.04	0.7
W230861		16.9	135.5	<0.002	5.79	70.6	14.3	<1	2.0	78.7	0.82	0.10	10.35	0.611	42.7	2.1
W230862		15.3	137.5	<0.002	4.66	7.58	21.5	<1	2.2	136.0	0.78	0.07	9.70	0.567	11.25	1.9
W230863		11.0	83.4	0.002	2.61	23.6	10.7	1	1.6	321	0.44	0.05	6.38	0.268	45.8	7.0
W230864		17.2	154.5	0.002	4.99	2.10	19.8	<1	2.2	169.0	0.84	0.05	10.55	0.562	4.00	2.1
W230865		19.3	151.5	<0.002	4.85	0.94	19.7	<1	2.2	183.0	0.82	0.06	9.86	0.573	2.93	2.0
W230866		22.1	151.5	0.002	5.06	1.14	19.7	<1	2.9	167.5	0.84	0.05	9.94	0.564	3.14	2.0
W230867		15.9	163.5	<0.002	0.54	0.51	19.9	<1	2.7	123.5	0.80	0.07	9.78	0.566	1.76	2.0
W230868		13.9	139.5	<0.002	0.44	0.61	17.2	<1	2.1	150.5	0.69	<0.05	8.37	0.500	1.12	1.8
W230869		17.5	151.5	<0.002	0.30	0.54	17.7	<1	2.8	151.5	0.72	0.06	8.68	0.522	1.04	1.8
W230870		13.9	138.5	0.002	0.29	0.55	15.6	<1	3.4	129.5	0.63	<0.05	8.18	0.465	1.13	1.7
W230871		14.5	132.0	<0.002	0.29	0.46	14.5	<1	2.4	110.0	0.60	0.05	7.79	0.438	1.11	1.6
W230872		14.9	138.5	0.002	0.30	0.50	14.9	<1	2.6	117.5	0.62	0.05	8.16	0.462	1.16	1.7
W230873		11.9	96.3	<0.002	0.16	0.34	13.3	<1	1.5	107.0	0.52	0.05	7.09	0.438	0.76	1.4

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 19- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197031

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230838		10	1.3	7.1	9	9.5		<0.01
W230839		8	0.4	1.0	6	3.6		<0.01
W230840		4	0.1	0.6	4	1.7		<0.01
W230841		101	2.2	13.0	64	82.3		<0.01
W230842		165	8.8	21.3	95	112.5		0.38
W230843		129	10.2	17.3	56	100.0		1.83
W230844		32	18.4	15.7	25	32.2	1.350	2.74
W230845		156	9.0	24.5	131	116.5		0.32
W230846		153	6.8	26.4	128	116.5		0.18
W230847		145	6.1	22.2	107	103.0		0.05
W230848		154	4.8	24.7	109	117.5		0.01
W230849		2	0.1	0.8	18	0.6		<0.01
W230850		139	8.1	22.4	108	104.5		0.05
W230851		155	12.7	25.8	127	113.5	1.015	8.22
W230852		146	11.9	22.4	111	106.5		2.84
W230853		142	8.6	16.3	101	85.5		3.63
W230854		95	3.6	10.3	55	57.2		2.95
W230855		117	7.2	14.7	88	75.3		2.54
W230856		145	9.6	21.1	65	100.0		1.21
W230857		166	13.7	26.7	256	126.0		1.33
W230858		154	12.7	26.7	86	124.0		0.35
W230859		159	13.6	27.6	130	130.5		1.10
W230860		2	0.1	0.9	16	0.6		<0.01
W230861		168	16.2	25.7	89	114.5	2.04	3.45
W230862		153	10.3	21.5	104	109.0		0.57
W230863		84	8.2	18.7	49	69.8		2.57
W230864		143	6.1	23.3	71	110.0		0.05
W230865		153	2.4	22.2	72	109.0		<0.01
W230866		151	2.6	22.3	69	107.5		<0.01
W230867		150	1.7	22.3	90	111.0		<0.01
W230868		131	2.0	20.6	68	98.6		<0.01
W230869		134	1.9	21.7	76	105.0		<0.01
W230870		122	2.2	19.3	66	96.1		<0.01
W230871		116	2.3	17.6	93	90.6		<0.01
W230872		121	2.4	17.9	90	94.9		<0.01
W230873		115	1.8	15.4	68	87.3		<0.01

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VANCOUVER BC V6B 1L8

Finalized Date: 19- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197031

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 20- OCT- 2017
Account: RCM

CERTIFICATE WH17197038

Project: Nadaleen

P.O. No.: N17- 094

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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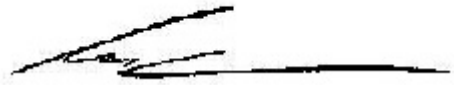
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 20- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197038

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232468		8.18	0.05	2.52	2230	130	0.91	0.08	23.5	0.09	31.9	5.4	28	5.16	21.6	1.31
W232469		7.30	0.05	2.12	152.0	250	0.79	0.08	25.7	0.26	26.6	4.7	23	3.12	17.0	1.03
W232470		8.96	0.09	4.01	95.0	180	1.35	0.14	14.95	0.18	49.7	8.9	43	8.03	26.8	1.81
W232471		6.68	0.05	4.48	124.0	260	1.52	0.14	11.05	0.17	54.7	9.3	43	10.85	96.2	2.03
W232472		7.65	0.04	7.19	78.0	260	2.22	0.26	3.97	0.18	81.4	12.5	66	25.4	84.6	3.15
W232473		7.53	0.06	4.05	581	180	1.55	0.16	11.95	0.21	47.7	10.8	42	8.89	54.4	1.99
W232474		4.73	0.01	0.05	1.2	20	0.06	0.02	21.8	0.06	1.05	1.0	1	0.13	1.7	0.49
W232475		5.00	0.06	3.68	177.0	140	1.54	0.11	14.00	0.18	42.4	7.8	38	7.05	71.9	1.64
W232476		2.81	0.18	4.71	3040	180	1.52	0.20	10.35	0.16	52.7	10.6	44	8.95	109.5	2.37
W232477		0.26	0.27	3.75	>10000	180	0.72	0.19	9.76	0.62	43.5	12.2	46	8.76	54.7	2.97
W232478		7.64	0.01	7.15	108.0	230	2.14	0.25	4.00	0.15	75.4	12.7	64	22.4	81.8	3.54
W232479		6.51	0.03	5.54	66.8	520	1.74	0.18	8.09	0.98	60.9	10.9	46	15.40	71.4	2.80
W232480		2.46	0.27	1.27	256	100	0.51	0.04	26.2	0.15	21.0	3.3	14	2.14	7.4	0.76
W232481		1.49	0.30	1.79	288	100	0.65	0.05	24.7	0.08	27.1	3.9	18	3.37	8.0	0.96
W232482		1.83	0.17	1.69	195.0	90	0.72	0.06	22.9	0.09	25.4	5.0	18	3.28	12.1	0.90
W232483		1.95	0.07	2.30	385	1080	0.79	0.08	20.5	0.10	32.4	4.2	23	4.69	11.9	1.29
W232484		2.93	0.13	2.62	521	150	0.93	0.08	21.6	0.13	34.6	5.4	25	6.02	15.7	1.42
W232485		4.09	0.23	5.49	485	300	1.61	0.19	10.00	0.06	58.1	9.9	43	12.05	29.2	2.73
W232486		7.35	0.86	3.98	499	230	1.31	0.12	15.85	0.11	46.0	7.5	39	9.87	22.6	1.87
W232487		6.08	0.08	3.65	384	240	1.26	0.11	16.80	0.10	43.0	7.1	38	8.63	22.4	1.88
W232488		6.40	0.06	3.55	502	220	1.23	0.11	17.60	0.15	43.1	6.4	35	8.39	22.2	1.64
W232489		4.82	0.06	3.43	365	270	1.25	0.10	17.70	0.09	43.2	6.1	34	7.80	19.1	1.62
W232490		4.23	0.07	3.04	434	210	1.16	0.09	19.70	0.09	38.6	5.8	29	7.31	18.5	1.52
W232491		8.27	0.11	6.48	456	400	1.83	0.23	12.00	0.07	70.5	12.7	42	10.05	29.3	3.40
W232492		<0.02	0.11	6.27	449	400	1.73	0.22	11.60	0.07	69.0	12.4	43	9.86	28.0	3.32
W232493		7.40	0.06	6.57	342	450	1.74	0.21	10.10	0.07	73.2	16.7	47	8.77	27.7	4.12
W232494		8.10	0.01	8.37	72.8	840	2.58	0.35	0.86	<0.02	91.9	17.8	74	30.0	20.0	4.96
W232495		0.26	0.67	1.88	>10000	150	0.56	2.85	26.0	0.17	27.9	5.3	28	6.12	16.2	1.38
W232496		8.03	0.01	8.53	27.0	360	2.72	0.31	0.49	0.02	94.6	18.1	74	27.8	25.7	4.85
W232497		8.02	0.02	8.37	79.3	450	2.54	0.34	0.76	<0.02	88.9	16.6	65	23.9	29.7	4.52
W232498		7.47	0.04	3.14	191.5	290	1.07	0.08	15.65	0.07	36.0	4.5	31	7.08	21.6	1.41
W232499		8.14	0.03	2.50	22.6	130	0.99	0.07	23.5	0.08	30.3	5.4	27	9.42	17.0	1.05
W232500		3.80	0.03	2.44	20.3	140	0.99	0.07	23.6	0.07	29.3	5.0	27	9.10	16.5	0.99
W232501		8.12	0.05	1.39	26.2	130	0.52	0.04	28.5	0.10	18.20	3.5	17	4.25	8.3	0.72
W232502		4.90	<0.01	0.05	0.2	20	0.07	0.02	21.1	0.06	1.22	1.1	1	0.13	2.2	0.47
W232503		8.68	0.02	2.50	7.8	200	0.95	0.07	22.9	0.07	29.9	4.8	25	12.55	17.5	1.08

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CERTIFICATE OF ANALYSIS WH17197038

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232468		6.64	0.17	1.2	1.305	0.022	1.25	15.1	10.3	2.39	1450	0.33	0.02	4.3	12.7	320
W232469		5.68	0.17	1.0	0.633	0.021	1.00	12.9	9.9	1.88	1860	0.42	0.02	3.7	10.1	260
W232470		10.80	0.17	1.9	0.271	0.031	1.81	25.0	39.1	2.92	2130	0.36	0.04	6.9	21.6	480
W232471		12.10	0.16	2.3	0.179	0.035	2.04	27.2	37.2	3.91	2650	0.29	0.04	7.8	25.6	440
W232472		19.10	0.19	2.9	0.144	0.052	3.34	42.7	81.2	2.73	1510	0.13	0.05	12.5	49.0	480
W232473		11.10	0.15	2.0	0.926	0.033	1.97	24.3	30.8	3.71	2900	0.33	0.04	7.0	23.2	430
W232474		0.20	0.17	<0.1	<0.005	0.006	0.02	0.5	1.0	13.10	217	0.08	<0.01	0.1	1.4	170
W232475		9.96	0.12	1.8	1.050	0.032	1.79	22.0	11.8	3.38	2950	1.04	0.04	6.4	21.5	400
W232476		12.55	0.14	2.0	5.31	0.044	2.24	28.0	18.9	3.66	3730	0.80	0.04	7.9	24.8	440
W232477		10.45	0.11	2.0	30.0	0.041	1.78	23.4	14.1	0.36	775	3.54	0.02	5.5	27.0	540
W232478		18.35	0.16	2.9	0.535	0.056	3.24	41.5	97.1	2.83	1700	0.15	0.05	12.2	48.6	480
W232479		14.15	0.14	2.0	0.109	0.044	2.55	32.7	48.4	5.11	2610	0.27	0.04	8.7	33.3	440
W232480		3.13	0.10	0.7	0.742	0.013	0.56	10.1	13.4	1.46	899	0.28	0.04	1.9	6.2	200
W232481		4.57	0.13	0.9	0.194	0.016	0.75	12.9	19.3	1.86	1000	0.25	0.09	2.8	8.1	240
W232482		4.13	0.15	1.1	0.345	0.016	0.77	12.5	14.8	2.18	1240	0.57	0.04	2.7	7.7	270
W232483		5.63	0.14	1.6	0.354	0.019	1.13	15.9	21.6	2.59	777	0.26	0.03	3.7	9.6	310
W232484		6.74	0.18	1.3	1.615	0.026	1.21	17.3	20.2	2.97	686	0.27	0.03	4.0	11.4	410
W232485		13.45	0.17	2.3	0.391	0.044	2.54	30.9	43.2	1.91	574	0.35	0.05	8.2	22.8	480
W232486		10.30	0.17	2.0	0.289	0.036	1.93	24.6	31.4	2.64	418	0.37	0.04	6.5	18.0	440
W232487		9.35	0.17	1.7	0.338	0.032	1.76	22.6	25.9	2.98	710	0.36	0.03	6.1	15.9	410
W232488		9.36	0.16	1.8	0.418	0.032	1.74	22.7	26.9	2.89	413	0.32	0.03	5.9	15.6	420
W232489		9.02	0.19	1.8	0.544	0.031	1.69	22.7	30.3	3.02	366	0.33	0.03	5.9	15.2	400
W232490		7.76	0.15	1.5	0.239	0.025	1.42	19.6	34.4	2.95	366	0.31	0.03	4.9	13.8	340
W232491		15.90	0.18	2.5	0.064	0.053	2.27	37.1	91.4	0.98	1040	0.40	0.22	9.7	29.0	660
W232492		15.45	0.18	2.4	0.061	0.049	2.23	35.8	87.8	0.96	1010	0.40	0.22	9.4	28.1	650
W232493		16.20	0.14	2.8	0.054	0.052	2.04	38.0	87.0	1.40	1260	0.54	0.53	16.8	36.0	1070
W232494		22.9	0.18	3.4	0.183	0.075	4.01	47.7	99.0	1.37	243	0.22	0.06	11.9	39.8	470
W232495		4.98	0.11	0.9	6.79	0.020	0.94	13.6	9.2	0.89	2310	1.87	0.01	2.6	13.1	350
W232496		22.8	0.18	3.5	0.058	0.083	4.25	50.0	55.5	1.31	239	0.19	0.06	12.5	39.8	590
W232497		22.3	0.19	3.4	0.199	0.077	4.13	48.2	26.4	1.05	264	0.20	0.05	12.3	37.3	530
W232498		8.16	0.13	1.5	0.348	0.028	1.61	18.2	11.0	5.67	1080	0.44	0.02	5.2	8.0	480
W232499		6.71	0.16	1.4	0.171	0.020	1.32	15.4	12.2	2.30	319	0.49	0.02	4.3	12.6	390
W232500		6.43	0.16	1.4	0.143	0.021	1.29	15.1	11.9	2.26	313	0.45	0.02	4.2	11.8	380
W232501		3.73	0.16	0.8	0.107	0.013	0.75	9.6	6.6	2.01	258	0.55	0.02	2.4	7.0	210
W232502		0.23	0.23	<0.1	<0.005	0.006	0.02	0.6	1.0	12.65	205	0.14	0.01	0.2	1.4	210
W232503		6.46	0.20	1.3	0.044	0.025	1.33	15.3	15.5	2.35	256	0.31	0.03	4.2	11.3	300

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 20- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197038

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232468		7.5	62.7	<0.002	0.49	14.50	4.4	2	1.3	491	0.32	<0.05	5.73	0.126	2.22	14.5
W232469		10.8	49.6	<0.002	0.27	1.11	3.8	1	0.9	678	0.27	<0.05	4.96	0.105	1.73	13.1
W232470		13.6	87.5	<0.002	0.33	0.49	6.8	2	1.7	369	0.53	<0.05	9.16	0.204	0.86	6.9
W232471		11.3	92.6	<0.002	0.34	0.27	7.6	1	2.1	251	0.59	<0.05	9.79	0.219	1.05	6.2
W232472		3.5	152.0	<0.002	0.36	0.33	12.1	1	3.1	113.0	0.92	<0.05	15.30	0.337	1.37	2.5
W232473		13.3	86.2	<0.002	0.34	2.39	6.9	2	2.2	278	0.52	<0.05	9.09	0.204	2.47	5.1
W232474		1.0	0.9	<0.002	<0.01	0.08	0.1	1	<0.2	48.1	<0.05	<0.05	0.07	<0.005	<0.02	0.6
W232475		18.9	79.8	<0.002	0.13	1.72	6.2	1	2.2	348	0.47	<0.05	7.77	0.181	1.79	6.0
W232476		81.2	101.0	0.002	0.63	22.8	7.6	1	2.2	231	0.58	<0.05	9.67	0.222	9.50	10.3
W232477		18.0	79.3	0.004	3.57	108.5	8.4	1	2.0	443	0.40	0.10	6.85	0.218	65.2	4.4
W232478		4.7	139.5	0.002	0.81	0.50	11.7	<1	2.6	122.0	0.92	<0.05	15.25	0.329	2.22	2.4
W232479		10.5	108.5	0.002	0.43	0.46	9.3	<1	2.1	163.5	0.68	<0.05	10.85	0.241	1.02	2.9
W232480		8.6	21.4	<0.002	0.04	1.72	2.2	<1	0.5	593	0.14	<0.05	2.57	0.058	0.71	8.1
W232481		8.2	31.0	<0.002	0.01	1.53	3.0	<1	0.6	596	0.21	<0.05	3.80	0.084	0.56	8.6
W232482		15.6	29.3	<0.002	0.02	1.12	2.7	<1	0.6	598	0.20	<0.05	3.88	0.081	0.52	8.8
W232483		7.7	44.0	<0.002	0.05	1.34	3.8	<1	0.8	496	0.28	<0.05	5.20	0.114	0.95	6.6
W232484		7.4	50.3	<0.002	0.05	4.12	4.5	<1	0.9	535	0.29	0.05	5.06	0.125	4.76	6.6
W232485		13.5	104.5	<0.002	0.06	2.27	9.2	1	1.9	272	0.63	0.05	10.50	0.271	1.27	4.9
W232486		12.1	79.1	<0.002	0.07	1.95	6.7	1	1.5	330	0.50	<0.05	8.39	0.200	1.18	6.6
W232487		13.5	70.3	0.002	0.08	1.78	6.0	1	1.4	312	0.44	<0.05	7.94	0.179	1.10	6.5
W232488		11.2	71.4	0.002	0.08	1.84	6.0	1	1.3	335	0.43	<0.05	7.93	0.177	1.36	6.8
W232489		9.3	68.6	<0.002	0.08	0.98	5.8	1	1.3	389	0.43	<0.05	7.80	0.174	1.12	6.7
W232490		8.4	60.9	<0.002	0.06	1.02	5.0	1	1.1	403	0.37	<0.05	6.39	0.148	0.99	6.6
W232491		15.8	105.0	0.002	0.03	1.68	10.9	<1	1.9	514	0.74	0.05	11.00	0.323	0.96	4.2
W232492		15.5	103.0	<0.002	0.03	1.65	10.7	<1	1.9	496	0.69	<0.05	10.40	0.317	0.97	4.0
W232493		15.3	90.7	<0.002	0.05	1.44	11.8	<1	1.9	501	1.09	0.06	10.50	0.481	0.62	3.0
W232494		27.8	182.5	<0.002	0.70	0.70	17.5	<1	2.7	394	0.89	0.08	15.45	0.446	1.35	2.6
W232495		8.4	39.2	0.003	1.46	46.2	5.7	1	0.8	1020	0.19	0.05	3.51	0.089	25.3	6.7
W232496		17.2	187.0	<0.002	0.14	0.46	17.5	<1	2.8	155.5	0.94	0.09	16.25	0.461	1.27	2.7
W232497		18.2	181.5	<0.002	2.37	0.71	16.2	<1	2.8	157.5	0.92	0.08	15.75	0.438	2.07	2.6
W232498		7.1	58.4	<0.002	0.41	1.17	5.1	1	1.1	249	0.39	<0.05	6.57	0.153	1.57	7.9
W232499		7.9	49.7	<0.002	0.54	0.28	4.2	1	1.0	503	0.35	<0.05	5.76	0.124	0.48	11.3
W232500		7.5	47.9	<0.002	0.48	0.24	4.1	1	0.9	505	0.32	<0.05	5.60	0.120	0.42	11.1
W232501		6.6	27.1	<0.002	0.23	0.29	2.3	1	0.6	743	0.16	<0.05	3.27	0.070	0.28	14.2
W232502		1.3	0.9	<0.002	<0.01	0.07	0.2	<1	<0.2	52.6	<0.05	<0.05	0.09	<0.005	<0.02	0.8
W232503		7.4	53.2	<0.002	0.08	0.17	4.0	<1	1.0	480	0.31	<0.05	5.30	0.124	0.31	9.0

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 20- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197038

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232468		38	1.2	10.5	41	44.8		0.01
W232469		31	0.9	8.7	55	38.3		0.01
W232470		61	1.0	14.0	72	64.1		0.01
W232471		56	1.0	15.3	68	78.7		0.01
W232472		49	1.3	18.4	95	100.5		<0.01
W232473		59	1.9	14.0	67	68.9		0.07
W232474		1	0.1	0.7	15	<0.5		<0.01
W232475		51	1.7	13.0	64	62.0		0.05
W232476		66	3.2	14.8	93	68.2		0.55
W232477		63	8.7	22.9	134	65.0	3.31	8.14
W232478		52	1.4	19.2	99	102.5		<0.01
W232479		62	1.2	17.1	88	70.9		<0.01
W232480		20	1.2	7.5	33	22.8		0.05
W232481		27	1.1	8.6	30	34.8		0.03
W232482		25	1.1	8.8	31	38.5		0.03
W232483		33	0.8	10.3	33	55.5		0.06
W232484		38	1.3	10.1	35	43.9		0.49
W232485		68	1.9	16.2	65	79.9		0.08
W232486		56	3.6	13.4	54	66.4		0.03
W232487		52	1.2	12.9	50	59.3		0.03
W232488		51	1.1	12.7	59	67.0		0.10
W232489		51	1.0	12.9	43	62.8		0.06
W232490		44	0.9	11.3	44	53.3		0.03
W232491		67	1.7	17.5	74	83.9		0.01
W232492		66	1.5	17.5	72	81.0		0.01
W232493		85	1.3	19.2	85	103.5		0.01
W232494		103	2.3	21.2	86	114.0		<0.01
W232495		33	18.7	15.6	26	32.4	1.430	2.74
W232496		106	1.8	22.6	86	118.5		<0.01
W232497		96	2.7	20.6	81	112.0		0.04
W232498		48	1.8	11.5	24	51.3		0.09
W232499		38	0.5	9.6	26	48.7		0.01
W232500		38	0.5	9.4	29	47.5		<0.01
W232501		22	0.4	5.8	27	28.9		0.02
W232502		2	0.1	0.8	17	<0.5		<0.01
W232503		37	0.5	8.9	37	44.8		0.01

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Finalized Date: 20- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197038

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 21- OCT- 2017
Account: RCM

CERTIFICATE WH17197048

Project: Nadaleen

P.O. No.: N17- 095

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

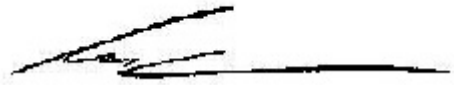
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17197048

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230874		10.39	0.05	4.32	51.7	200	1.08	0.16	2.03	0.06	43.1	14.9	64	17.95	41.7	3.59
W230875		10.04	0.08	4.50	188.5	350	1.25	0.17	1.97	0.06	45.9	14.2	54	14.85	38.6	3.45
W230876		8.19	0.08	7.46	110.5	460	2.02	0.30	1.68	0.10	72.0	20.4	74	24.7	55.0	5.25
W230877		0.26	0.65	1.89	>10000	150	0.58	2.95	26.0	0.15	28.1	5.3	27	6.24	16.7	1.38
W230878		8.96	0.10	8.53	126.5	400	2.63	0.34	1.63	0.06	80.3	18.9	79	32.4	56.8	5.89
W230879		11.67	0.07	7.96	719	340	2.30	0.35	2.11	0.13	76.1	24.6	74	28.3	57.8	5.88
W230880		11.25	0.05	5.81	2240	390	1.47	0.25	3.98	0.08	55.8	18.7	63	15.15	50.8	4.77
W230881		10.79	0.17	6.52	234	210	2.08	0.28	1.76	0.04	71.9	29.7	71	27.4	57.3	4.56
W230882		10.43	0.05	5.75	910	210	1.50	0.22	2.77	0.05	61.6	16.6	64	17.60	51.4	4.28
W230883		10.66	0.07	5.84	3310	410	1.46	0.22	2.72	0.10	64.8	15.9	62	15.55	45.5	4.30
W230884		10.90	0.06	5.71	162.5	360	1.57	0.22	1.91	0.04	61.3	17.4	64	21.3	48.0	4.97
W230885		11.05	0.06	5.22	82.7	250	1.38	0.20	1.86	0.03	54.7	15.3	66	21.7	47.6	4.30
W230886		10.45	0.07	6.15	130.0	280	1.82	0.22	1.76	0.19	61.5	17.7	73	27.4	45.8	4.03
W230887		11.61	0.06	5.88	121.5	200	1.78	0.22	1.83	0.16	59.6	17.9	68	24.5	49.1	4.55
W230888		7.73	0.05	8.06	261	220	2.82	0.25	1.10	0.03	74.1	27.0	96	35.7	59.0	5.16
W230889		5.99	0.06	6.98	444	180	2.01	0.22	4.72	0.03	67.4	22.6	77	25.0	53.1	5.70
W230890		7.37	0.04	3.95	230	140	1.21	0.18	17.85	0.07	46.3	14.6	35	12.35	32.1	3.10
W230891		5.79	0.05	5.96	1980	200	1.52	0.26	11.10	0.09	66.7	21.2	49	19.20	46.0	3.42
W230892		6.54	1.18	6.68	>10000	240	1.32	0.32	1.54	0.57	74.9	25.3	67	16.55	53.6	3.90
W230893		3.32	1.09	6.59	>10000	230	1.29	0.31	1.94	0.53	74.0	24.7	66	17.00	53.2	3.77
W230894		7.17	1.79	4.61	>10000	280	0.65	0.24	1.49	0.89	51.2	17.9	50	9.92	46.1	3.53
W230895		7.13	0.03	0.06	82.6	30	0.06	0.02	21.6	0.07	1.18	0.8	1	0.18	2.7	0.46
W230896		4.93	0.12	6.93	1165	280	1.46	0.20	2.40	0.16	63.8	19.4	81	19.35	44.4	3.26
W230897		5.00	0.24	7.15	8240	350	1.41	0.23	2.00	0.20	66.6	21.9	84	19.65	55.6	4.79
W230898		5.93	0.39	8.02	2650	420	1.64	0.33	3.39	0.21	86.3	23.1	81	21.5	54.0	3.97
W230899		8.67	10.75	4.32	>10000	240	0.55	0.23	0.24	1.13	58.3	15.1	47	15.10	37.2	3.04
W230900		7.74	0.02	0.05	91.0	20	0.05	0.02	20.7	0.06	1.14	0.8	<1	0.11	2.9	0.45
W230901		7.33	2.03	1.16	>10000	90	0.11	0.07	0.67	3.39	14.75	3.7	15	1.91	12.1	0.90
W230902		5.35	2.04	1.28	>10000	140	0.16	0.07	2.91	5.06	14.75	4.0	18	2.08	13.2	1.07
W230903		<0.02	2.09	1.29	>10000	140	0.12	0.06	2.94	5.03	15.10	4.1	18	2.07	13.5	1.09
W230904		10.20	1.01	1.24	>10000	120	0.19	0.06	27.3	0.27	21.2	4.1	14	2.37	11.4	0.95
W230905		0.26	1.41	2.90	>10000	110	0.50	0.25	7.35	0.73	42.3	10.0	44	7.88	29.9	2.87
W230906		11.01	2.72	1.66	>10000	140	0.28	0.08	20.9	1.61	28.9	5.2	19	3.55	15.6	1.41
W230907		10.98	0.27	0.84	1130	110	0.22	0.04	32.5	0.12	15.00	3.0	9	2.41	7.7	0.60
W230908		11.07	0.02	0.58	77.1	110	0.17	0.03	32.6	0.05	10.40	2.3	6	1.93	6.0	0.43
W230909		10.48	0.15	0.66	72.0	100	0.15	0.04	33.1	0.07	12.30	2.6	7	1.80	6.6	0.45

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197048

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230874		11.45	0.13	2.3	0.087	0.049	1.98	20.9	131.5	1.54	442	0.47	0.03	7.1	27.4	370
W230875		11.85	0.12	2.3	0.160	0.046	2.09	22.3	79.3	1.38	417	0.40	0.02	7.1	26.7	410
W230876		19.55	0.17	3.2	1.075	0.077	3.72	36.3	29.4	1.92	337	0.77	0.03	11.1	42.1	550
W230877		5.11	0.09	0.9	6.61	0.022	0.95	13.7	9.3	0.90	2330	1.89	0.01	2.7	13.4	340
W230878		22.1	0.16	3.7	1.965	0.086	4.27	39.1	16.5	1.50	301	1.03	0.04	11.8	42.5	660
W230879		21.7	0.16	3.7	1.550	0.088	3.96	38.0	16.2	1.42	566	0.75	0.03	12.0	47.6	600
W230880		14.95	0.13	2.9	1.625	0.064	2.73	26.8	15.8	2.11	1040	0.31	0.02	9.7	33.9	580
W230881		17.95	0.14	3.2	0.670	0.072	3.15	34.5	41.4	1.44	429	0.89	0.03	11.9	47.5	460
W230882		15.30	0.15	2.7	0.638	0.065	2.74	30.0	25.7	1.61	568	0.28	0.03	10.0	33.3	490
W230883		15.50	0.15	2.4	2.46	0.059	2.84	30.0	15.8	1.49	674	0.37	0.02	9.2	31.4	820
W230884		14.85	0.15	2.6	0.384	0.061	2.61	29.2	53.6	1.48	494	0.25	0.02	9.4	33.8	620
W230885		13.40	0.13	2.4	0.206	0.057	2.36	26.5	89.7	1.74	490	0.23	0.03	8.5	30.5	400
W230886		16.10	0.15	2.6	0.290	0.063	3.00	30.1	55.4	1.52	481	0.56	0.03	9.2	32.6	420
W230887		15.50	0.14	2.7	0.622	0.063	2.75	28.7	58.1	1.26	489	0.32	0.02	9.0	33.9	390
W230888		21.9	0.16	2.8	1.005	0.083	3.93	36.5	28.6	0.91	513	0.20	0.03	10.0	38.1	220
W230889		18.40	0.14	2.5	1.825	0.072	3.28	33.3	28.7	1.57	932	0.30	0.03	9.3	34.1	280
W230890		10.45	0.12	1.7	3.57	0.048	1.97	25.8	7.8	1.86	1000	0.83	0.02	5.8	22.3	390
W230891		15.80	0.14	2.7	3.25	0.067	2.99	35.6	12.1	1.58	1360	0.29	0.03	8.8	28.2	340
W230892		18.95	0.18	2.9	21.3	0.081	3.34	39.8	13.8	0.50	514	0.61	0.03	10.4	35.5	380
W230893		18.75	0.17	2.9	18.90	0.077	3.29	38.6	14.0	0.51	527	0.64	0.03	10.7	33.8	350
W230894		12.85	0.13	2.1	19.90	0.043	2.22	30.0	15.6	0.31	420	1.44	0.02	6.7	27.2	350
W230895		0.22	0.11	<0.1	0.015	<0.005	0.03	0.6	1.0	13.10	208	0.06	<0.01	0.2	1.4	190
W230896		18.35	0.15	2.6	4.11	0.057	3.45	31.2	15.8	1.15	911	0.20	0.02	9.0	29.9	280
W230897		19.55	0.17	2.4	7.33	0.067	3.46	32.1	16.6	0.81	982	0.20	0.02	9.4	33.7	240
W230898		23.4	0.18	2.9	6.01	0.078	4.18	41.7	17.0	1.28	1320	0.72	0.03	12.7	47.0	340
W230899		12.10	0.17	1.9	14.80	0.054	1.87	30.2	26.7	0.27	248	0.68	0.02	6.3	24.5	330
W230900		0.18	0.10	<0.1	0.011	<0.005	0.02	0.5	0.8	12.55	202	0.11	<0.01	0.1	1.5	210
W230901		3.46	0.14	0.5	12.00	0.114	0.53	8.1	17.1	0.10	55	0.20	<0.01	1.6	6.4	360
W230902		3.72	0.12	0.6	16.90	0.077	0.57	8.0	22.2	0.10	75	0.60	0.01	1.7	7.4	1170
W230903		3.80	0.11	0.6	15.90	0.076	0.58	8.2	22.4	0.10	78	0.60	0.01	1.8	7.6	1190
W230904		3.41	0.10	0.6	3.71	0.028	0.60	11.5	4.7	0.40	1260	0.63	0.01	1.8	6.7	310
W230905		7.78	0.13	1.5	22.9	0.056	1.34	22.4	13.3	1.80	1060	3.94	0.02	4.4	22.5	330
W230906		4.68	0.11	0.8	8.98	0.040	0.68	14.9	11.2	0.23	1740	0.87	0.01	2.4	9.2	520
W230907		2.23	0.10	0.4	1.525	0.010	0.39	7.3	3.1	0.35	1780	0.44	0.01	1.2	4.4	370
W230908		1.53	0.10	0.3	1.020	0.005	0.28	5.0	2.3	0.33	238	0.36	0.01	0.9	3.3	270
W230909		1.76	0.12	0.3	1.295	0.008	0.32	5.9	2.3	0.32	241	0.36	0.01	1.0	3.7	250

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197048

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230874		12.6	92.5	<0.002	0.25	0.38	12.0	<1	1.5	122.0	0.51	<0.05	6.78	0.417	0.85	1.4
W230875		13.7	90.8	<0.002	1.34	1.03	11.6	<1	1.7	180.5	0.54	<0.05	7.26	0.379	1.37	1.5
W230876		27.7	162.5	0.003	2.53	1.34	20.5	<1	2.6	278	0.80	0.05	11.65	0.503	3.26	2.5
W230877		8.3	40.1	<0.002	1.46	46.0	5.7	1	0.7	1030	0.19	0.05	3.60	0.091	25.0	6.7
W230878		26.6	190.5	0.004	4.96	1.32	21.7	<1	3.0	130.0	0.85	<0.05	12.85	0.515	5.94	2.7
W230879		31.6	174.0	0.002	5.75	6.22	22.1	<1	2.8	117.5	0.88	0.07	12.20	0.541	4.13	2.5
W230880		18.1	113.0	<0.002	4.13	4.08	16.5	<1	2.1	199.5	0.71	0.05	8.75	0.519	6.05	1.9
W230881		31.8	153.0	0.002	2.78	1.55	19.0	1	2.2	107.5	0.76	0.05	11.20	0.525	2.26	2.1
W230882		12.5	124.0	<0.002	3.34	4.14	16.2	<1	1.9	118.5	0.69	<0.05	8.80	0.499	2.09	1.7
W230883		13.6	124.5	<0.002	3.76	6.47	15.5	<1	1.9	159.0	0.63	0.06	8.40	0.458	6.98	1.7
W230884		12.6	125.0	<0.002	3.06	0.68	15.5	<1	1.9	138.0	0.65	<0.05	8.40	0.486	2.73	1.7
W230885		13.3	114.5	<0.002	0.43	0.46	14.0	1	1.6	83.3	0.59	<0.05	7.72	0.452	1.26	1.6
W230886		18.9	143.0	<0.002	0.70	0.63	16.0	<1	1.9	96.8	0.62	<0.05	8.82	0.430	1.81	1.9
W230887		17.3	133.5	<0.002	3.09	0.56	16.4	<1	1.8	105.5	0.62	<0.05	8.47	0.449	2.98	1.7
W230888		14.6	190.5	<0.002	4.63	0.95	25.1	1	2.5	84.6	0.71	<0.05	10.65	0.477	3.58	1.8
W230889		12.7	154.0	<0.002	4.78	3.97	21.4	<1	2.4	125.5	0.63	<0.05	9.66	0.425	6.03	1.9
W230890		13.0	89.0	0.003	2.26	1.56	10.0	1	1.4	467	0.39	0.09	6.05	0.223	8.95	1.9
W230891		14.6	134.0	<0.002	2.94	13.10	15.5	1	1.9	274	0.62	0.10	9.29	0.349	10.00	2.2
W230892		19.8	149.0	0.002	7.39	326	9.7	3	2.2	116.0	0.71	0.31	11.60	0.405	92.5	2.8
W230893		19.1	146.0	0.003	7.32	328	9.9	4	2.2	113.5	0.70	0.27	11.30	0.405	85.1	2.7
W230894		18.4	99.2	0.005	5.67	211	6.6	3	1.5	125.5	0.47	0.34	7.19	0.275	87.8	4.7
W230895		1.2	1.2	<0.002	0.01	0.41	0.2	1	<0.2	49.6	<0.05	<0.05	0.12	<0.005	0.12	0.6
W230896		11.6	144.0	0.002	2.46	18.40	19.6	<1	1.9	79.3	0.63	<0.05	9.82	0.431	18.15	1.7
W230897		12.8	150.0	<0.002	4.54	55.0	20.2	1	2.4	101.0	0.64	0.08	9.19	0.438	38.9	1.6
W230898		23.6	148.0	<0.002	3.28	38.4	21.2	1	2.8	128.0	0.84	0.06	13.20	0.447	28.7	1.8
W230899		13.9	88.9	0.002	5.90	211	4.7	3	1.4	132.5	0.46	0.19	7.12	0.254	63.1	2.5
W230900		1.1	0.9	<0.002	0.01	0.34	0.2	1	<0.2	47.1	<0.05	<0.05	0.08	<0.005	0.09	0.7
W230901		3.7	25.3	<0.002	>10.0	680	0.9	15	0.4	65.0	0.11	0.38	1.73	0.065	9.42	2.3
W230902		4.1	27.2	0.002	7.23	340	1.2	8	0.5	133.5	0.12	0.19	2.31	0.071	10.90	3.4
W230903		4.0	27.9	<0.002	7.34	345	1.2	8	0.5	136.5	0.12	0.20	2.34	0.072	11.00	3.4
W230904		4.4	28.0	0.002	2.47	92.1	4.7	4	0.4	1180	0.12	0.09	2.08	0.069	11.00	2.7
W230905		17.3	66.2	0.003	4.94	194.0	5.3	4	1.3	180.5	0.31	0.18	4.81	0.174	71.4	5.9
W230906		6.2	32.7	0.002	3.74	145.5	6.0	3	0.5	788	0.17	0.13	2.90	0.093	23.7	2.7
W230907		2.8	17.1	<0.002	0.64	4.60	4.0	1	0.3	1400	0.09	<0.05	1.49	0.049	4.59	2.4
W230908		2.1	11.9	<0.002	0.42	0.98	1.5	1	0.2	1520	0.06	<0.05	1.03	0.036	3.03	2.1
W230909		2.3	14.1	<0.002	0.46	1.71	1.7	1	0.2	1590	0.07	<0.05	1.19	0.039	4.05	2.2

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230874		112	2.2	15.1	53	80.7		<0.01
W230875		100	2.7	14.0	52	81.4		0.01
W230876		145	4.4	22.4	83	113.5		<0.01
W230877		33	19.6	16.4	25	32.6	1.320	2.82
W230878		157	1.9	26.5	72	125.0		<0.01
W230879		157	7.8	25.9	89	127.0		0.07
W230880		134	11.0	21.1	73	100.5		0.05
W230881		145	5.6	22.1	67	119.5		<0.01
W230882		131	8.8	20.4	63	102.5		<0.01
W230883		127	9.4	22.2	58	92.6		0.76
W230884		132	2.7	20.4	72	98.5		<0.01
W230885		120	2.2	17.5	67	92.6		<0.01
W230886		126	2.0	19.1	98	99.4		0.01
W230887		131	1.3	19.1	87	100.0		<0.01
W230888		170	4.4	21.9	77	100.5		<0.01
W230889		141	6.9	20.7	78	96.1		<0.01
W230890		66	2.1	19.5	46	68.3		<0.01
W230891		96	4.7	22.8	54	99.4		1.10
W230892		116	6.9	20.0	81	111.0	7.63	19.70
W230893		114	6.7	19.4	72	108.0	7.83	18.80
W230894		83	6.2	15.4	91	81.3	4.08	21.5
W230895		2	0.1	0.8	18	<0.5		0.01
W230896		146	8.1	17.3	48	98.6		2.86
W230897		149	13.8	18.4	66	93.3		9.18
W230898		108	12.4	22.6	66	107.5		3.65
W230899		73	6.1	23.3	105	71.4	6.04	21.8
W230900		2	0.1	0.8	15	<0.5		0.02
W230901		20	1.0	11.0	252	19.7	28.9	4.60
W230902		22	1.1	30.3	355	23.4	14.75	5.23
W230903		22	1.3	30.6	354	23.9	14.10	5.22
W230904		20	1.1	14.5	28	23.7	3.08	1.89
W230905		51	4.9	19.7	107	57.7	7.61	13.05
W230906		29	2.0	20.8	140	32.8	4.73	6.67
W230907		14	0.8	14.1	32	15.7		0.29
W230908		10	0.5	8.8	10	10.8		0.03
W230909		11	0.6	10.5	11	12.4		0.09

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197048

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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CERTIFICATE WH17197061

Project: Nadaleen

P.O. No.: N17- 096

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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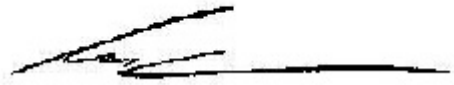
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17197061

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230910		10.56	0.05	0.57	39.6	100	0.20	0.03	33.7	0.04	10.55	2.3	6	1.70	5.9	0.43
W230911		10.00	0.01	0.83	62.4	100	0.28	0.05	35.1	0.08	15.45	3.1	8	2.86	8.3	0.58
W230912		13.26	0.06	0.85	77.7	100	0.25	0.05	31.9	0.07	15.35	3.2	9	2.43	8.5	0.59
W230913		10.67	0.04	0.91	76.6	80	0.30	0.05	32.4	0.19	15.65	3.4	9	3.07	8.9	0.65
W230914		7.91	0.04	0.39	49.6	80	0.25	0.02	35.2	0.04	7.47	1.7	5	0.81	4.6	0.33
W230915		11.46	0.03	0.55	72.8	90	0.27	0.03	35.1	0.05	11.55	2.4	6	1.17	6.2	0.42
W230916		5.51	0.03	0.54	54.2	90	0.20	0.03	33.5	0.05	11.00	2.3	6	1.10	6.2	0.41
W230917		10.59	0.04	1.06	101.0	110	0.34	0.06	31.6	0.09	16.05	4.8	11	2.76	14.2	0.76
W230918		11.14	0.04	0.42	72.1	90	0.20	0.03	36.0	0.04	8.13	2.6	5	0.89	6.3	0.35
W230919		10.96	0.06	1.26	164.0	110	0.40	0.08	32.2	0.10	20.4	5.3	13	5.44	13.8	0.86
W230920		10.97	0.04	0.85	72.4	110	0.28	0.05	34.6	0.06	13.10	3.8	9	2.58	9.9	0.62
W230921		7.03	0.01	0.05	<0.2	90	0.07	0.02	22.2	0.05	1.09	1.2	1	0.14	2.0	0.49
W230922		10.84	0.09	1.01	105.0	100	0.31	0.06	31.1	0.09	14.90	4.3	11	2.46	11.8	0.71
W230923		10.99	0.02	1.16	70.5	120	0.37	0.06	32.3	0.10	18.60	4.7	12	3.16	13.3	0.82
W230924		10.60	0.05	0.83	80.0	110	0.29	0.04	31.8	0.09	13.90	3.6	9	2.26	10.1	0.66
W230925		11.14	0.56	3.44	8130	210	0.98	0.18	20.0	0.21	45.7	11.7	37	14.00	36.5	2.27
W230926		<0.02	0.59	3.38	8270	220	1.09	0.19	20.5	0.23	46.3	11.9	37	14.15	36.5	2.29
W230927		11.13	0.04	2.63	75.7	200	0.92	0.15	27.1	0.23	36.6	8.9	27	9.67	26.5	1.77
W230928		11.19	0.02	1.48	24.6	170	0.54	0.07	30.0	0.14	24.4	5.8	15	6.20	16.5	1.08
W230929		11.16	0.03	2.38	27.4	170	0.80	0.12	26.7	0.23	33.6	8.9	24	10.95	26.6	1.68
W230930		11.34	0.01	0.65	7.3	110	0.35	0.03	35.4	0.12	11.45	3.4	8	2.01	8.6	0.69
W230931		11.34	0.03	1.88	17.8	180	0.52	0.09	28.4	0.17	29.0	7.3	21	7.95	20.9	1.44
W230932		10.99	0.02	1.71	43.0	150	0.50	0.08	31.0	0.17	22.8	6.9	18	5.94	19.5	1.30
W230933		10.87	0.02	1.27	45.6	240	0.46	0.07	32.6	0.12	18.85	5.3	14	3.42	14.9	0.99
W230934		10.77	0.03	2.12	2460	200	0.62	0.09	26.5	0.18	28.4	8.0	23	4.93	23.1	1.63
W230935		0.26	0.17	3.73	6500	210	1.09	0.15	12.10	0.16	42.4	12.6	43	10.85	37.8	2.93
W230936		11.09	0.04	1.97	99.4	160	0.55	0.09	27.5	0.16	27.9	8.0	23	5.53	23.0	1.64
W230937		10.92	0.02	2.87	85.7	200	0.83	0.12	25.8	0.19	34.1	11.3	30	9.45	32.3	2.06
W230938		11.71	0.03	2.10	138.0	180	0.60	0.10	28.4	0.19	34.4	8.5	24	7.04	23.9	1.63
W230939		11.40	0.01	1.12	168.5	140	0.38	0.06	30.2	0.08	19.10	5.1	12	2.85	14.0	1.10
W230940		11.32	0.03	1.72	94.8	160	0.56	0.08	31.0	0.18	29.0	6.7	18	4.53	18.9	1.21
W230941		10.31	0.03	1.90	135.5	160	0.64	0.09	28.5	0.17	30.6	7.0	18	5.73	20.4	1.43
W230942		11.01	0.03	2.50	115.0	190	0.67	0.11	26.6	0.19	33.0	8.8	25	9.91	25.3	1.68
W230943		7.01	<0.01	0.04	1.5	90	<0.05	0.02	21.4	0.08	1.12	1.1	1	0.11	2.0	0.47
W230944		11.34	0.02	1.70	39.3	230	0.69	0.08	29.3	0.16	27.4	6.6	17	7.33	18.9	1.26
W230945		0.28	1.63	1.82	>10000	100	0.28	0.47	7.15	0.90	29.1	6.9	46	3.14	28.8	2.54

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197061

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230910		1.55	0.10	0.3	1.045	0.006	0.27	4.9	2.3	0.56	382	0.34	0.01	0.9	3.2	370
W230911		2.23	0.10	0.4	1.170	0.009	0.41	7.6	3.2	0.49	193	0.41	0.01	1.2	4.7	160
W230912		2.28	0.10	0.4	1.465	0.009	0.41	7.3	3.2	0.44	390	0.44	0.01	1.3	4.9	270
W230913		2.42	0.10	0.4	1.955	0.011	0.44	7.7	3.6	0.44	379	0.47	0.01	1.3	5.1	210
W230914		1.10	0.10	0.2	0.831	0.005	0.19	3.6	1.6	0.49	335	0.23	0.01	0.6	2.3	430
W230915		1.54	0.11	0.3	0.981	0.007	0.27	5.2	2.1	0.51	265	0.26	0.01	0.8	3.3	470
W230916		1.46	0.09	0.3	1.070	0.007	0.26	5.0	2.0	0.50	236	0.24	0.01	0.8	3.2	560
W230917		3.11	0.07	0.6	2.12	0.016	0.52	7.9	4.4	0.61	291	0.75	0.01	1.6	8.0	150
W230918		1.25	0.09	0.2	0.918	0.005	0.20	3.7	1.7	0.30	400	0.30	0.01	0.6	2.4	380
W230919		3.46	0.10	0.7	4.30	0.017	0.61	9.7	5.1	0.33	458	0.55	0.01	1.8	7.5	170
W230920		2.30	0.11	0.5	1.945	0.012	0.42	6.4	2.8	0.32	363	0.45	0.01	1.2	5.0	140
W230921		0.20	0.20	<0.1	0.008	0.006	0.02	0.5	1.0	13.50	216	0.08	<0.01	0.1	1.5	200
W230922		2.86	0.15	0.5	1.945	0.013	0.50	7.3	3.3	0.41	812	0.67	0.01	1.4	6.4	260
W230923		3.16	0.11	0.6	1.365	0.016	0.58	8.8	4.0	0.68	308	0.70	0.01	1.7	7.2	540
W230924		2.21	0.11	0.4	0.992	0.011	0.41	6.5	3.0	0.56	353	0.56	0.01	1.2	5.0	380
W230925		8.96	0.15	1.8	3.36	0.041	1.70	23.2	11.6	1.43	1170	1.76	0.02	4.8	21.2	310
W230926		9.01	0.12	1.8	3.30	0.048	1.71	23.4	11.4	1.43	1160	1.76	0.02	4.8	21.8	320
W230927		6.83	0.12	1.4	1.115	0.032	1.28	18.1	10.5	1.04	348	1.29	0.02	3.8	15.8	450
W230928		3.93	0.12	0.8	0.216	0.018	0.74	11.5	6.1	0.70	308	0.68	0.02	2.2	8.9	170
W230929		6.38	0.15	1.2	0.264	0.030	1.17	15.7	8.6	1.01	401	0.96	0.02	3.3	14.7	240
W230930		1.83	0.11	0.4	0.070	0.008	0.32	5.2	2.6	0.55	464	0.17	0.01	0.9	4.0	1570
W230931		4.89	0.10	1.1	0.151	0.022	0.93	12.8	6.5	0.84	363	0.64	0.02	2.8	12.0	490
W230932		4.55	0.10	1.0	0.399	0.019	0.83	10.2	5.6	0.65	370	0.58	0.02	2.5	10.6	220
W230933		3.38	0.11	0.7	0.483	0.017	0.62	8.1	4.4	0.53	363	0.43	0.01	1.9	7.9	1600
W230934		5.44	0.10	1.1	0.983	0.026	1.04	13.1	6.6	0.89	488	0.69	0.02	3.0	13.7	300
W230935		10.20	0.11	2.1	16.35	0.039	1.88	21.0	12.9	2.60	1170	1.99	0.02	6.0	27.6	450
W230936		5.17	0.11	1.0	1.150	0.023	0.96	13.2	5.9	0.75	388	0.50	0.02	2.8	13.5	190
W230937		7.47	0.10	1.6	2.09	0.032	1.40	17.3	8.7	0.82	524	0.73	0.02	4.3	19.2	1020
W230938		5.73	0.13	1.2	2.27	0.025	1.02	16.2	5.7	0.77	400	0.69	0.02	3.2	14.1	890
W230939		3.04	0.10	0.6	1.855	0.017	0.54	8.9	3.6	0.55	389	0.29	0.01	1.7	7.2	510
W230940		4.68	0.12	1.0	1.870	0.019	0.84	12.8	5.7	0.81	347	0.62	0.02	2.6	10.6	770
W230941		5.06	0.10	1.1	1.855	0.024	0.93	14.7	7.1	0.66	345	0.53	0.02	3.0	11.3	350
W230942		6.54	0.11	1.4	1.660	0.027	1.22	16.4	8.7	0.72	390	0.68	0.02	3.6	14.4	430
W230943		0.18	0.16	<0.1	0.005	0.006	0.01	0.5	0.8	12.85	203	0.07	<0.01	0.1	1.4	180
W230944		4.59	0.13	0.9	0.783	0.018	0.85	12.7	7.5	0.70	321	0.57	0.02	2.5	10.5	200
W230945		5.23	0.10	0.9	16.30	0.021	0.83	13.5	27.0	0.17	343	6.34	0.01	2.5	20.5	510

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197061

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230910		2.0	11.9	<0.002	0.40	1.28	1.5	1	0.2	1530	0.06	<0.05	0.99	0.033	3.28	1.8
W230911		3.0	18.7	<0.002	0.59	0.71	2.1	1	0.3	1440	0.09	<0.05	1.47	0.047	4.37	2.3
W230912		3.0	19.5	<0.002	0.61	1.25	2.2	1	0.3	1470	0.09	<0.05	1.55	0.049	4.51	2.3
W230913		3.0	21.4	<0.002	0.69	0.86	2.4	1	0.3	1290	0.09	<0.05	1.54	0.051	5.77	2.1
W230914		1.6	8.1	<0.002	0.29	0.82	1.3	1	0.2	1520	<0.05	<0.05	0.73	0.023	2.44	1.7
W230915		2.2	11.6	<0.002	0.40	0.51	1.7	1	0.2	1530	0.06	<0.05	1.02	0.032	3.02	2.3
W230916		2.4	11.3	<0.002	0.39	0.48	1.6	1	0.3	1490	0.06	<0.05	1.01	0.032	2.98	2.1
W230917		5.4	23.5	<0.002	0.80	1.57	3.0	1	0.4	1375	0.12	<0.05	1.90	0.064	6.46	2.6
W230918		2.2	9.0	<0.002	0.32	0.69	1.4	1	0.2	1765	0.05	<0.05	0.79	0.024	3.14	2.2
W230919		5.1	30.0	0.003	0.90	1.52	3.5	1	0.5	1705	0.13	<0.05	2.14	0.071	11.20	2.9
W230920		3.5	18.6	0.002	0.63	0.97	2.5	1	0.3	1760	0.10	<0.05	1.49	0.050	5.71	2.2
W230921		1.6	0.9	<0.002	<0.01	0.07	0.2	1	<0.2	55.4	<0.05	<0.05	0.07	<0.005	0.02	0.8
W230922		4.0	22.9	0.002	0.70	1.72	2.9	1	0.3	1540	0.12	<0.05	1.75	0.057	6.46	2.2
W230923		4.6	26.1	0.003	0.78	0.40	3.2	1	0.4	1655	0.13	<0.05	1.99	0.066	4.43	2.7
W230924		3.5	16.6	<0.002	0.58	1.02	2.6	1	0.3	1670	0.08	<0.05	1.53	0.048	3.05	2.3
W230925		12.9	70.2	0.008	2.37	12.60	8.7	2	1.2	1160	0.37	0.06	5.57	0.205	9.52	3.4
W230926		13.7	70.2	0.010	2.40	12.80	8.7	2	1.2	1195	0.39	<0.05	5.70	0.205	9.97	3.5
W230927		9.4	54.8	0.004	1.55	0.54	6.7	1	0.9	1915	0.29	<0.05	4.44	0.156	5.23	3.1
W230928		5.5	32.8	0.002	0.87	0.25	4.0	1	0.5	2130	0.16	<0.05	2.57	0.091	1.52	2.4
W230929		8.4	51.8	0.002	1.36	0.38	5.8	1	0.8	1555	0.26	<0.05	3.93	0.147	1.59	3.2
W230930		2.6	13.4	0.003	0.41	0.13	2.4	1	0.3	1875	0.08	<0.05	1.16	0.043	0.22	1.7
W230931		7.0	40.2	0.004	1.17	0.29	5.1	1	0.7	1595	0.22	<0.05	3.30	0.126	0.95	3.2
W230932		5.9	34.5	0.002	1.11	0.36	4.3	1	0.6	1735	0.20	<0.05	2.80	0.122	1.35	2.4
W230933		4.7	25.3	0.002	0.81	0.45	3.6	1	0.4	2130	0.14	<0.05	2.13	0.087	1.14	2.6
W230934		7.2	42.5	0.004	1.33	4.26	5.9	1	0.7	1730	0.23	<0.05	3.23	0.146	1.56	2.5
W230935		12.2	83.3	0.002	2.68	24.3	10.6	1	1.6	330	0.45	<0.05	6.27	0.272	46.8	7.2
W230936		6.8	38.8	0.002	1.31	2.00	5.6	1	0.7	1700	0.21	<0.05	3.13	0.145	1.25	2.4
W230937		9.6	57.8	0.003	1.79	4.18	8.1	1	1.0	1335	0.33	<0.05	4.46	0.220	1.80	2.4
W230938		8.9	43.6	0.004	1.41	3.81	6.3	1	0.7	1660	0.25	<0.05	3.70	0.141	1.71	3.5
W230939		5.8	22.8	0.002	0.86	3.57	4.4	1	0.4	1850	0.12	<0.05	1.90	0.076	1.70	2.0
W230940		6.9	37.0	0.002	1.10	4.11	4.7	1	0.7	1805	0.19	<0.05	3.10	0.109	1.61	3.2
W230941		7.9	38.9	0.002	1.26	3.97	5.2	<1	0.7	1665	0.24	<0.05	3.37	0.125	1.09	2.5
W230942		8.6	51.2	0.002	1.42	2.63	6.6	1	0.9	1680	0.27	<0.05	3.94	0.173	1.12	2.7
W230943		1.4	0.7	<0.002	<0.01	0.07	0.2	<1	<0.2	53.6	<0.05	<0.05	0.06	<0.005	<0.02	0.6
W230944		6.4	37.2	0.002	1.01	0.63	5.3	1	0.7	1905	0.18	<0.05	3.00	0.107	0.71	2.7
W230945		11.1	40.7	0.002	4.78	167.5	3.1	2	1.2	360	0.20	0.11	3.12	0.104	44.5	4.9

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197061

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230910		10	0.6	9.8	7	10.6		0.17
W230911		13	0.8	12.6	13	14.5		0.04
W230912		14	1.0	11.9	11	16.2		0.13
W230913		15	1.1	12.2	37	16.4		0.21
W230914		7	0.5	8.3	4	8.9		0.08
W230915		10	0.7	11.8	7	11.3		0.08
W230916		10	0.7	10.6	6	11.4		0.13
W230917		17	1.4	12.4	15	19.3		0.06
W230918		7	0.6	10.1	6	8.7		0.10
W230919		20	1.8	14.7	12	21.7		0.17
W230920		15	1.0	10.6	9	15.0		0.23
W230921		1	0.1	0.8	18	<0.5		0.01
W230922		17	1.2	12.1	13	18.8		0.37
W230923		20	1.5	12.4	17	20.8		0.04
W230924		15	1.1	11.5	16	15.4		0.06
W230925		65	4.1	21.7	38	59.6		1.22
W230926		65	4.1	20.6	40	59.5		1.27
W230927		45	1.3	20.2	41	49.1		0.01
W230928		26	0.4	17.0	23	26.7		0.02
W230929		42	0.5	19.7	38	41.8		0.01
W230930		13	0.2	10.0	13	21.0		0.01
W230931		35	0.4	19.1	28	37.6		<0.01
W230932		32	0.8	13.4	26	31.4		<0.01
W230933		23	0.8	13.9	15	27.2		0.01
W230934		41	2.3	18.8	33	37.1		0.03
W230935		85	8.3	19.1	49	72.5		2.63
W230936		41	2.8	17.0	31	36.1		0.02
W230937		58	5.6	19.1	46	64.4		<0.01
W230938		40	4.7	22.1	33	43.6		<0.01
W230939		22	2.8	17.5	16	23.2		0.02
W230940		31	3.4	19.1	25	34.4		0.01
W230941		35	3.8	20.5	28	36.9		<0.01
W230942		46	4.1	19.3	41	45.6		<0.01
W230943		1	0.1	0.7	17	<0.5		<0.01
W230944		31	1.2	18.3	25	29.9		0.01
W230945		37	8.6	16.7	66	31.4	7.07	8.37

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VANCOUVER BC V6B 1L8

Finalized Date: 21- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197061

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 25- OCT- 2017
Account: RCM

CERTIFICATE WH17197066

Project: Nadaleen

P.O. No.: N17- 097

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 14- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

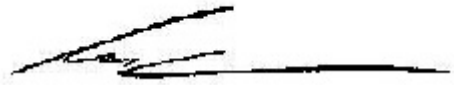
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
As- CON01	As in Concentrates	WST- SEQ

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 25- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197066

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232504		8.10	0.06	4.09	15.0	230	1.31	0.12	13.40	0.08	43.8	6.7	45	20.6	25.1	1.85
W232505		8.44	0.12	3.32	15.9	190	1.25	0.10	17.40	0.17	41.0	7.1	35	18.35	21.0	1.56
W232506		3.87	0.03	3.45	16.6	190	1.40	0.10	18.00	0.08	42.2	7.2	36	18.90	20.2	1.59
W232507		8.25	0.06	3.81	25.0	200	1.50	0.12	15.00	0.07	44.5	6.5	38	19.50	22.1	1.73
W232508		7.67	0.03	2.81	57.9	130	1.04	0.08	18.95	0.08	32.2	4.5	28	9.80	15.3	1.11
W232509		8.10	0.03	3.13	83.1	210	1.05	0.09	20.9	0.06	34.7	5.5	31	10.00	19.3	1.04
W232510		0.26	0.64	1.85	>10000	140	0.59	2.96	26.6	0.17	27.9	5.5	26	6.09	17.1	1.38
W232511		8.30	0.05	2.11	38.1	100	0.74	0.07	24.9	0.07	26.2	4.3	21	6.46	14.8	0.89
W232512		5.52	0.05	1.18	37.0	110	0.50	0.04	28.8	0.04	17.70	2.5	14	3.28	7.1	0.64
W232513		4.62	0.35	2.00	>10000	70	0.60	0.06	15.30	0.13	25.7	3.3	26	3.52	11.5	0.71
W232514		4.65	0.02	0.04	135.5	20	0.06	0.02	20.7	0.07	1.03	0.8	<1	0.09	1.8	0.47
W232515		3.96	0.12	1.55	>10000	60	0.59	0.05	22.5	0.07	21.8	2.7	21	3.62	9.7	0.55
W232516		5.47	0.14	3.18	4690	120	0.90	0.06	16.45	0.05	38.6	5.2	34	7.61	16.1	1.23
W232517		6.36	0.75	2.42	>10000	70	0.56	0.07	11.35	0.20	32.4	4.0	31	4.58	16.2	0.91
W232518		<0.02	0.74	2.42	>10000	70	0.52	0.07	11.25	0.21	31.9	3.9	31	4.51	16.0	0.90
W232519		6.88	0.12	3.53	6800	130	1.18	0.10	11.90	0.07	42.1	6.4	41	12.60	24.0	1.35
W232520		3.88	0.12	4.05	>10000	140	1.42	0.11	8.96	0.08	50.3	7.2	46	13.25	27.9	1.57
W232521		4.96	0.08	2.84	>10000	110	0.87	0.07	15.70	0.08	36.1	5.4	35	7.23	16.5	1.25
W232522		3.04	0.04	1.09	>10000	50	0.27	0.05	5.13	0.13	13.35	1.9	16	2.42	7.1	0.48
W232523		4.95	0.01	0.04	188.0	50	0.06	0.02	21.1	0.07	1.11	0.8	1	0.12	2.2	0.48
W232524		4.65	0.04	1.34	208	90	0.50	0.03	25.2	0.07	19.00	2.4	14	3.10	6.4	0.47
W232525		7.67	0.08	1.48	669	100	0.53	0.05	28.5	0.21	22.5	3.0	18	3.65	11.3	0.46
W232526		0.29	0.29	3.83	>10000	190	0.58	0.18	10.05	0.65	45.7	12.0	48	9.31	55.2	3.04
W232527		6.21	0.03	0.91	90.6	70	0.46	0.03	28.6	0.18	13.45	1.8	10	1.76	5.6	0.42
W232528		6.48	0.05	0.92	4290	40	0.40	0.03	18.80	0.04	13.05	2.2	11	1.82	10.7	1.03
W232529		3.49	0.05	0.95	964	40	0.40	0.03	19.50	0.03	13.15	2.4	11	2.06	9.8	1.00
W232530		7.72	0.36	1.46	>10000	80	0.43	0.05	17.80	0.07	19.65	5.2	18	3.08	22.0	2.44
W232531		7.44	0.09	1.11	9050	50	0.32	0.03	25.7	0.06	21.1	2.6	16	2.55	10.7	0.70
W232532		7.48	0.05	1.01	249	60	0.41	0.03	30.4	0.03	16.75	2.4	11	2.22	8.2	0.47
W232533		7.74	0.06	0.85	125.0	80	0.44	0.03	30.8	0.04	14.10	2.2	11	2.08	6.4	0.45
W232534		7.66	0.05	1.47	104.0	80	0.79	0.04	25.7	0.04	20.6	3.2	16	4.99	9.0	0.84
W232535		7.43	0.04	1.46	78.6	70	0.66	0.04	22.8	0.03	19.75	2.6	14	4.57	8.2	0.92
W232536		8.16	0.04	1.07	33.3	70	0.56	0.03	32.0	0.04	15.60	2.3	12	3.92	6.6	0.41
W232537		8.04	0.04	1.64	44.1	90	0.69	0.04	28.8	0.05	22.4	3.4	17	6.37	12.3	0.63
W232538		7.67	0.06	2.80	65.4	180	1.20	0.07	18.35	0.04	34.4	4.4	28	14.00	14.9	1.20
W232539		7.93	0.10	3.57	55.9	170	1.49	0.08	15.55	0.05	44.4	6.5	39	17.00	21.5	1.54

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Finalized Date: 25- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197066

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232504		10.50	0.11	2.0	0.044	0.030	2.16	24.5	28.8	4.58	291	0.53	0.05	6.1	20.3	460
W232505		8.94	0.14	1.8	0.044	0.030	1.88	21.0	23.5	3.07	242	0.26	0.04	5.7	17.5	400
W232506		9.21	0.17	1.8	0.034	0.032	1.93	21.9	24.5	3.12	245	0.30	0.04	5.9	18.2	420
W232507		9.78	0.15	2.1	0.042	0.031	2.24	22.4	24.1	4.38	257	0.35	0.04	6.3	18.0	450
W232508		7.15	0.17	1.7	0.136	0.023	1.57	16.8	15.2	3.60	234	0.41	0.02	4.7	10.7	350
W232509		8.23	0.21	1.6	0.317	0.026	1.72	18.4	15.9	2.21	212	0.28	0.02	5.3	12.3	390
W232510		5.00	0.12	0.9	6.90	0.021	0.95	13.3	9.2	0.91	2280	1.87	0.01	2.6	13.6	340
W232511		5.38	0.09	0.9	0.175	0.017	1.13	14.3	10.2	2.12	229	0.34	0.02	3.6	9.0	270
W232512		3.09	0.10	0.6	0.283	0.011	0.65	9.7	5.5	1.92	230	0.50	0.01	2.0	5.6	180
W232513		5.33	0.14	1.0	1.885	0.058	1.02	14.4	11.6	2.00	772	0.70	0.01	3.4	7.8	280
W232514		0.19	0.13	<0.1	0.005	<0.005	0.02	0.5	1.0	12.55	196	0.12	<0.01	0.2	1.6	180
W232515		4.24	0.15	0.9	0.867	0.034	0.82	11.4	8.0	1.84	402	0.54	0.01	2.8	5.2	260
W232516		8.11	0.15	1.7	1.085	0.023	1.71	20.1	16.1	3.55	607	0.55	0.02	5.3	10.7	430
W232517		6.45	0.14	1.2	2.99	0.042	1.21	17.6	18.7	2.08	999	0.87	0.01	4.0	9.2	340
W232518		6.39	0.16	1.2	3.12	0.043	1.22	17.3	18.4	2.05	1010	0.83	0.01	4.0	8.8	340
W232519		9.13	0.13	1.8	1.805	0.027	1.91	21.9	17.2	4.05	516	0.75	0.02	5.9	15.0	420
W232520		11.00	0.15	2.2	2.49	0.036	2.23	25.7	21.7	5.07	607	0.91	0.02	7.0	17.1	490
W232521		7.59	0.14	1.6	2.50	0.024	1.52	19.3	13.5	4.61	527	0.97	0.02	5.0	12.0	380
W232522		2.91	0.15	0.7	2.09	0.155	0.59	6.7	5.6	1.40	470	0.39	0.01	1.9	4.6	260
W232523		0.20	0.15	<0.1	<0.005	<0.005	0.02	0.5	0.8	12.90	205	0.06	<0.01	0.2	1.6	190
W232524		3.25	0.15	1.1	0.449	0.009	0.71	10.3	6.0	1.80	144	1.03	0.01	2.4	4.9	230
W232525		3.80	0.14	1.0	0.345	0.013	0.81	12.6	6.0	1.28	131	0.92	0.01	2.9	6.2	330
W232526		10.45	0.13	1.8	28.1	0.049	1.79	25.0	13.8	0.36	789	3.53	0.02	5.7	27.4	550
W232527		2.28	0.11	0.7	0.530	0.008	0.50	6.8	3.4	1.98	254	0.32	0.01	1.5	3.8	220
W232528		2.28	0.11	0.7	0.882	0.009	0.49	6.3	4.6	8.78	653	0.41	0.01	1.5	5.1	160
W232529		2.42	0.11	0.5	0.630	0.008	0.51	6.7	5.0	9.73	570	0.50	0.02	1.5	5.6	170
W232530		3.38	0.11	1.1	3.42	0.023	0.77	9.8	5.5	5.58	1440	1.67	0.01	2.7	11.9	250
W232531		2.84	0.11	0.7	1.060	0.017	0.61	10.5	4.3	4.48	622	0.61	0.01	2.0	6.1	220
W232532		2.65	0.11	0.7	0.690	0.009	0.55	8.5	4.5	1.54	237	0.37	0.01	1.7	5.2	170
W232533		2.23	0.11	0.4	0.611	0.008	0.46	7.5	3.9	1.63	284	0.37	0.01	1.5	5.1	160
W232534		3.88	0.12	0.7	0.512	0.011	0.82	11.3	7.8	4.19	277	0.44	0.01	2.4	7.5	230
W232535		3.80	0.11	0.8	0.708	0.011	0.81	10.7	8.9	6.57	387	0.37	0.01	2.3	6.2	220
W232536		2.76	0.10	0.5	0.314	0.009	0.58	9.0	6.9	1.01	112	0.35	0.01	1.7	5.3	170
W232537		4.19	0.13	0.8	0.519	0.014	0.92	12.6	9.8	1.21	141	0.38	0.01	2.6	8.1	280
W232538		6.90	0.14	1.6	0.594	0.020	1.66	30.0	18.0	3.94	232	0.74	0.02	4.6	11.4	360
W232539		9.26	0.16	1.9	0.597	0.027	2.06	23.2	24.9	3.40	217	1.05	0.03	5.9	17.3	510

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Finalized Date: 25- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197066

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232504		12.0	97.6	<0.002	0.08	0.49	6.5	3	1.5	254	0.50	<0.05	7.78	0.199	0.49	5.2
W232505		27.6	78.2	<0.002	0.06	0.51	5.7	2	1.5	359	0.45	<0.05	7.22	0.171	0.41	7.3
W232506		8.4	82.3	<0.002	0.05	0.29	5.9	1	1.3	367	0.45	<0.05	7.49	0.173	0.43	7.8
W232507		12.7	87.6	<0.002	0.14	0.35	6.2	2	1.4	287	0.51	<0.05	8.34	0.197	0.52	6.5
W232508		7.0	59.3	<0.002	0.15	0.41	4.6	1	1.1	349	0.39	<0.05	6.21	0.141	0.49	8.6
W232509		8.6	66.2	<0.002	0.28	0.54	5.3	2	1.2	401	0.41	<0.05	6.67	0.155	0.83	8.4
W232510		8.3	40.9	0.002	1.46	47.3	5.8	2	0.7	1045	0.20	<0.05	3.46	0.089	25.6	6.8
W232511		7.4	45.7	<0.002	0.41	0.32	3.4	2	0.7	580	0.27	<0.05	4.31	0.104	0.49	10.5
W232512		6.1	25.0	<0.002	0.28	0.37	2.0	2	0.4	866	0.15	<0.05	2.52	0.059	0.53	14.6
W232513		9.0	45.2	<0.002	4.77	176.0	3.1	6	0.7	256	0.24	0.08	4.21	0.097	7.33	14.5
W232514		4.0	0.8	<0.002	0.02	0.30	0.1	1	<0.2	48.1	<0.05	<0.05	0.08	<0.005	0.02	0.7
W232515		7.3	33.2	<0.002	2.22	104.0	2.6	3	0.6	592	0.20	0.05	3.47	0.077	3.32	14.1
W232516		8.9	68.3	<0.002	0.67	12.20	5.0	2	1.0	282	0.39	<0.05	6.80	0.157	3.92	8.5
W232517		9.0	54.7	<0.002	3.40	133.5	3.4	5	0.8	170.0	0.29	0.06	5.09	0.116	12.55	15.7
W232518		9.9	54.1	<0.002	3.35	134.5	3.3	4	0.8	167.5	0.28	0.05	4.98	0.116	12.75	15.5
W232519		7.2	77.8	<0.002	0.85	16.10	5.6	2	1.2	217	0.43	<0.05	7.54	0.174	5.16	6.0
W232520		8.6	91.8	<0.002	1.41	35.3	6.7	4	1.4	137.0	0.51	<0.05	9.75	0.203	7.87	3.4
W232521		8.2	64.7	<0.002	1.24	26.8	4.6	3	1.0	325	0.36	<0.05	6.21	0.144	10.10	9.7
W232522		4.4	24.9	<0.002	>10.0	610	1.7	22	0.5	70.9	0.13	0.27	2.35	0.055	8.34	5.3
W232523		1.8	0.9	<0.002	0.01	0.31	0.1	1	<0.2	49.7	<0.05	<0.05	0.08	<0.005	0.02	0.6
W232524		6.4	28.2	<0.002	0.22	1.18	2.0	2	0.4	781	0.17	<0.05	2.93	0.066	1.75	11.9
W232525		6.6	30.3	<0.002	0.27	0.40	2.4	2	0.7	669	0.20	<0.05	3.47	0.077	1.02	15.4
W232526		16.5	85.6	0.003	3.63	112.0	8.6	2	1.9	447	0.41	0.15	6.77	0.225	67.8	4.2
W232527		6.4	17.3	<0.002	0.25	1.17	1.4	2	0.4	760	0.11	<0.05	1.94	0.045	1.50	8.6
W232528		7.1	17.2	<0.002	0.43	8.57	1.4	2	0.8	161.5	0.11	<0.05	2.02	0.046	1.67	11.4
W232529		6.4	18.0	<0.002	0.26	3.11	1.6	1	0.7	142.5	0.11	<0.05	2.04	0.046	1.67	12.6
W232530		23.4	29.4	<0.002	3.29	44.9	2.3	3	1.8	219	0.19	0.05	3.25	0.073	11.80	13.6
W232531		7.5	22.8	<0.002	0.74	14.80	1.9	2	0.8	442	0.14	<0.05	2.62	0.057	2.90	12.6
W232532		7.6	21.2	<0.002	0.32	1.83	1.7	2	0.6	932	0.13	<0.05	2.32	0.050	1.68	16.3
W232533		8.2	16.6	<0.002	0.30	1.60	1.4	2	0.4	1060	0.10	<0.05	1.88	0.041	1.63	18.6
W232534		6.5	30.4	<0.002	0.42	0.69	2.5	1	0.5	601	0.18	<0.05	3.11	0.068	1.09	14.5
W232535		4.5	29.3	<0.002	0.24	0.55	2.4	1	0.5	375	0.17	<0.05	2.96	0.067	0.94	12.7
W232536		4.0	22.1	<0.002	0.28	0.25	1.8	2	0.4	825	0.12	<0.05	2.11	0.049	0.48	17.2
W232537		4.9	34.6	<0.002	0.35	0.27	2.7	2	0.6	614	0.19	<0.05	3.39	0.077	0.66	15.3
W232538		6.1	59.9	<0.002	0.43	0.34	4.4	2	0.9	335	0.32	<0.05	5.87	0.137	0.79	8.3
W232539		7.2	80.6	<0.002	0.49	0.49	5.8	2	1.2	319	0.42	<0.05	7.43	0.170	0.85	6.6

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Finalized Date: 25- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197066

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	As- CON01	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01	0.01
W232504		61	0.7	14.5	33	76.4			0.01
W232505		52	0.6	12.0	51	61.4			<0.01
W232506		53	0.6	12.5	31	62.0			0.01
W232507		56	0.7	13.2	34	75.4			<0.01
W232508		44	0.8	10.1	15	56.9			0.01
W232509		49	1.0	10.3	14	56.6			0.03
W232510		32	19.0	15.8	23	32.6	1.360		2.80
W232511		32	0.5	7.8	16	39.6			0.02
W232512		21	0.5	5.1	8	25.2			0.02
W232513		34	2.4	7.6	38	40.2	10.05		3.85
W232514		1	0.1	0.8	18	<0.5			0.01
W232515		30	1.7	6.6	12	38.1	4.41		1.61
W232516		50	3.2	11.9	15	66.1			0.83
W232517		42	3.0	8.3	35	44.8	6.21		4.41
W232518		42	2.9	8.1	35	44.4	6.13		4.59
W232519		57	3.5	13.3	17	67.4			1.28
W232520		67	4.4	14.9	15	85.4	1.515		2.12
W232521		48	3.2	10.9	16	64.5	1.360		3.07
W232522		20	1.1	4.0	17	25.7	>30.0	40.6	2.72
W232523		1	0.1	0.8	16	<0.5			0.01
W232524		21	0.9	6.0	11	40.7			0.06
W232525		29	0.8	6.7	32	41.3			0.02
W232526		65	8.3	22.4	133	67.4	3.43		7.92
W232527		15	0.6	4.8	8	27.0			0.04
W232528		16	0.8	4.1	6	24.4			0.12
W232529		17	0.8	4.1	8	19.5			0.18
W232530		24	1.4	6.2	7	42.4	2.26		3.15
W232531		21	1.0	6.6	9	28.0			0.43
W232532		17	1.0	4.8	8	26.6			0.09
W232533		16	0.9	4.2	15	17.0			0.20
W232534		25	0.8	5.8	13	28.4			0.03
W232535		25	0.9	5.9	9	32.2			0.02
W232536		20	0.6	4.6	11	22.2			0.01
W232537		28	0.5	6.5	26	33.0			0.01
W232538		47	0.9	10.3	25	64.4			0.01
W232539		61	1.0	13.0	27	76.0			0.02

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CERTIFICATE OF ANALYSIS WH17197066

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- CON01	As- OG62	Au- AA25	Hg- MS42
ME- MS61	ME- OG62		

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CERTIFICATE WH17197077

Project: Nadaleen

P.O. No.: N17- 098

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 13- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES
As- CON01	As in Concentrates	WST- SEQ

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17197077

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230946		10.92	0.02	1.54	35.7	170	0.52	0.08	29.6	0.15	25.6	5.4	16	5.32	15.7	1.09
W230947		10.51	0.03	1.74	46.2	570	0.50	0.08	28.9	0.16	28.4	6.2	19	5.47	17.5	1.26
W230948		5.34	0.04	3.68	106.0	210	1.02	0.15	19.45	0.22	47.4	14.0	46	12.70	39.0	2.59
W230949		11.15	0.02	0.77	48.1	120	0.28	0.04	31.3	0.09	16.25	3.1	8	1.84	8.6	0.62
W230950		6.98	0.01	0.06	3.1	270	<0.05	0.02	20.9	0.06	1.05	0.8	1	0.13	2.5	0.46
W230951		10.44	0.02	0.80	75.8	110	0.25	0.04	32.9	0.09	14.30	3.1	9	1.79	9.2	0.57
W230952		10.29	0.02	0.40	99.0	100	0.19	0.02	34.7	0.06	7.05	1.9	4	0.82	5.1	0.37
W230953		10.80	0.01	0.44	47.1	110	0.23	0.03	33.8	0.10	9.76	1.9	5	0.91	6.1	0.33
W230954		11.03	0.01	0.54	52.2	110	0.14	0.03	33.3	0.11	9.65	2.5	6	1.28	6.9	0.44
W230955		5.65	0.02	0.61	60.3	110	0.15	0.03	34.0	0.10	11.15	2.7	7	1.40	7.6	0.46
W230956		10.67	0.02	0.65	62.5	190	0.16	0.03	33.7	0.13	12.95	2.6	7	1.44	8.0	0.45
W230957		11.49	0.07	0.87	88.3	180	0.22	0.04	33.5	0.16	18.10	3.4	9	1.84	11.0	0.59
W230958		11.49	0.08	0.73	74.3	120	0.18	0.04	34.5	0.16	14.20	2.9	8	1.67	9.3	0.51
W230959		11.15	0.05	0.47	67.9	90	0.18	0.02	35.0	0.06	8.06	2.2	5	1.11	6.4	0.38
W230960		6.00	0.08	0.44	552	80	0.15	0.02	35.2	0.04	6.89	1.8	5	0.83	5.9	0.34
W230961		3.87	1.05	0.37	>10000	30	0.08	0.03	10.00	0.27	5.89	1.4	5	0.61	5.5	0.41
W230962		6.77	<0.01	0.04	57.3	60	0.05	0.01	21.7	0.08	1.10	1.0	4	0.12	2.3	0.50
W230963		9.01	0.48	1.09	1410	110	0.26	0.05	33.3	0.09	15.45	4.1	13	2.05	14.3	0.76
W230964		<0.02	0.47	1.09	1480	110	0.23	0.06	33.3	0.09	16.00	4.0	13	2.06	14.4	0.76
W230965		10.04	0.07	0.66	74.5	80	0.20	0.04	32.3	0.12	11.80	2.8	8	1.56	11.0	0.60
W230966		11.54	0.02	0.92	71.6	100	0.28	0.05	31.7	0.07	15.45	3.5	10	2.01	14.1	0.70
W230967		11.02	0.03	1.44	76.2	110	0.39	0.07	29.2	0.09	23.3	5.5	18	3.53	18.8	1.03
W230968		11.34	0.04	1.51	75.1	120	0.48	0.07	31.2	0.12	22.9	6.0	20	3.83	21.1	1.18
W230969		8.41	0.04	1.29	70.7	120	0.43	0.07	30.1	0.12	22.2	5.1	16	3.46	20.0	1.15
W230970		0.26	0.28	3.81	>10000	180	0.77	0.18	10.00	0.68	46.3	12.1	46	9.17	56.0	3.02
W230971		5.88	0.05	1.85	113.5	130	0.49	0.10	27.5	0.16	32.3	6.7	22	4.89	26.3	1.35
W230972		7.61	0.02	0.98	45.6	110	0.34	0.04	31.2	0.09	16.85	4.1	12	3.00	13.0	0.83
W230973		6.21	0.03	0.97	100.0	110	0.35	0.05	32.2	0.11	18.30	4.1	12	2.28	13.7	0.90
W230974		7.51	0.02	1.02	53.0	110	0.35	0.05	31.3	0.06	16.60	3.7	12	2.31	12.9	0.73
W230975		7.69	0.03	1.14	63.6	150	0.29	0.06	32.1	0.07	20.3	4.2	13	2.26	14.8	0.87
W230976		0.27	1.59	1.81	>10000	100	0.27	0.45	6.89	0.84	29.6	6.4	46	2.91	27.9	2.45
W230977		7.21	0.02	0.88	86.6	130	0.24	0.04	33.1	0.06	14.55	3.5	10	1.50	11.3	0.76
W230978		7.39	0.02	0.82	52.4	110	0.23	0.04	31.9	0.06	16.25	3.2	10	1.62	11.1	0.73
W230979		7.38	0.04	1.49	87.5	150	0.47	0.06	30.6	0.15	21.1	5.8	19	3.27	19.5	1.26
W230980		7.75	0.02	0.78	51.7	110	0.34	0.04	33.4	0.09	12.95	3.2	10	1.77	11.4	0.85
W230981		7.50	0.04	0.95	40.1	130	0.38	0.05	31.5	0.13	14.80	3.9	12	2.33	14.5	0.93

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 25- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197077

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230946		4.01	0.11	0.8	0.249	0.018	0.74	12.5	6.3	0.75	328	0.53	0.02	2.3	9.2	640
W230947		4.64	0.12	0.9	0.128	0.018	0.83	14.4	6.9	0.70	365	0.45	0.02	2.8	10.5	760
W230948		9.67	0.13	1.7	0.312	0.044	1.79	24.3	12.8	1.09	408	0.70	0.02	5.4	24.8	280
W230949		2.01	0.09	0.4	0.324	0.009	0.37	7.9	2.7	0.78	247	0.23	0.01	1.2	4.7	330
W230950		0.21	0.12	<0.1	<0.005	<0.005	0.02	0.5	1.0	12.55	212	0.07	0.01	0.2	1.6	180
W230951		2.12	0.11	0.4	0.845	0.010	0.39	6.2	3.0	0.75	211	0.34	0.01	1.2	5.0	410
W230952		1.09	0.10	0.2	1.110	0.006	0.19	3.4	1.6	0.57	171	0.17	0.01	0.6	2.5	150
W230953		1.21	0.08	0.2	0.811	0.005	0.21	4.0	1.4	0.53	114	0.38	0.01	0.6	3.3	370
W230954		1.45	0.10	0.3	1.085	0.005	0.25	4.1	1.9	0.44	107	0.20	0.01	0.8	4.0	510
W230955		1.61	0.10	0.3	1.225	0.009	0.29	4.6	2.0	0.45	113	0.22	0.01	0.9	4.3	550
W230956		1.72	0.10	0.3	1.180	0.006	0.31	5.7	2.4	0.41	91	0.28	0.01	1.0	4.4	200
W230957		2.35	0.10	0.4	2.17	0.010	0.41	8.4	2.9	0.52	240	0.39	0.01	1.3	6.3	400
W230958		2.02	0.10	0.4	1.900	0.009	0.35	6.2	2.8	0.63	414	0.33	0.01	1.1	5.1	550
W230959		1.35	0.09	0.2	1.325	0.006	0.22	3.7	1.9	0.44	290	0.21	0.01	0.7	3.3	340
W230960		1.28	0.09	0.2	0.791	0.006	0.21	3.1	1.8	0.54	2680	0.16	0.01	0.6	2.8	220
W230961		1.09	0.13	0.2	1.875	0.122	0.17	2.6	7.4	0.93	4650	0.25	<0.01	0.5	3.0	460
W230962		0.27	0.16	<0.1	<0.005	0.006	0.02	0.5	1.1	13.45	210	0.16	<0.01	0.1	2.3	220
W230963		2.97	0.11	0.6	2.20	0.010	0.53	6.2	3.1	0.40	2220	0.75	0.01	1.5	7.9	1440
W230964		2.99	0.11	0.5	2.11	0.010	0.53	6.4	3.2	0.41	2280	0.77	0.01	1.5	7.7	1470
W230965		1.78	0.09	0.3	0.787	0.010	0.31	4.8	2.4	0.54	461	0.59	0.01	0.9	5.3	840
W230966		2.41	0.09	0.4	0.588	0.009	0.45	6.4	3.1	0.62	287	0.68	0.01	1.3	6.7	670
W230967		3.76	0.10	0.7	0.827	0.017	0.69	10.1	4.9	0.69	262	0.71	0.01	2.1	10.4	990
W230968		3.93	0.10	0.8	0.744	0.016	0.72	10.2	5.1	0.82	470	0.78	0.01	2.3	11.4	1120
W230969		3.39	0.10	0.6	0.723	0.016	0.61	10.2	4.9	0.89	293	0.80	0.01	1.9	10.3	1350
W230970		10.55	0.12	1.8	27.9	0.052	1.78	25.2	13.7	0.36	779	3.55	0.02	5.8	28.0	550
W230971		4.77	0.11	0.9	0.529	0.020	0.89	15.1	5.4	1.01	311	1.15	0.01	2.6	14.0	1710
W230972		2.57	0.09	0.5	0.499	0.010	0.46	6.8	3.7	0.66	291	0.61	0.01	1.5	7.6	900
W230973		2.48	0.09	0.5	0.641	0.011	0.45	7.3	3.3	0.73	432	0.57	0.01	1.5	7.7	1230
W230974		2.64	0.09	0.5	0.600	0.012	0.49	7.0	3.8	0.61	283	0.64	0.01	1.4	7.3	860
W230975		2.88	0.10	0.6	0.610	0.011	0.54	9.0	3.8	0.93	544	0.73	0.01	1.7	7.8	1470
W230976		5.05	0.11	0.8	15.35	0.042	0.82	14.7	25.0	0.16	342	5.76	0.01	2.5	19.6	500
W230977		2.33	0.09	0.5	0.567	0.010	0.42	5.8	2.4	0.82	582	0.57	0.01	1.2	6.2	1130
W230978		2.17	0.08	0.4	0.475	0.008	0.39	6.3	2.6	0.64	301	0.59	0.01	1.1	6.1	1080
W230979		3.83	0.09	0.7	0.574	0.018	0.68	9.7	5.2	0.79	322	0.58	0.01	2.1	11.0	800
W230980		2.05	0.09	0.4	0.311	0.009	0.36	5.3	3.2	0.64	440	0.48	0.01	1.1	6.0	750
W230981		2.40	0.09	0.5	0.311	0.010	0.44	6.1	3.7	0.70	208	0.72	0.01	1.4	7.7	1120

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 25- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197077

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230946		5.0	33.8	0.002	0.95	0.37	4.0	1	0.5	1850	0.16	0.05	2.54	0.095	0.55	2.4
W230947		5.6	38.2	<0.002	1.08	0.34	4.7	2	0.6	1780	0.19	0.05	2.86	0.117	0.61	2.2
W230948		10.8	77.6	0.003	2.46	0.68	9.8	1	1.2	1100	0.37	0.07	5.41	0.281	1.24	2.7
W230949		2.7	16.5	<0.002	0.51	0.46	2.4	1	0.3	1930	0.08	0.05	1.39	0.048	0.56	1.8
W230950		1.0	0.9	<0.002	<0.01	<0.05	0.2	1	<0.2	56.9	<0.05	<0.05	0.10	<0.005	0.02	0.9
W230951		2.8	17.7	<0.002	0.56	0.44	2.2	1	0.3	1600	0.08	0.05	1.32	0.048	0.81	2.0
W230952		2.1	8.0	<0.002	0.35	1.58	1.2	1	0.2	1770	<0.05	<0.05	0.72	0.024	1.20	1.2
W230953		2.4	8.8	<0.002	0.33	0.75	1.2	1	0.2	1840	0.05	<0.05	0.81	0.025	1.15	1.7
W230954		1.9	10.5	<0.002	0.46	0.79	1.6	1	0.2	1770	0.06	<0.05	0.91	0.040	1.62	1.6
W230955		2.2	11.8	<0.002	0.48	0.90	1.8	1	0.3	1790	0.06	<0.05	1.04	0.043	1.83	1.7
W230956		2.5	13.1	<0.002	0.48	1.14	1.7	1	0.2	2600	0.07	<0.05	1.16	0.039	2.18	2.0
W230957		3.2	18.5	<0.002	0.66	3.99	2.3	1	0.3	2060	0.09	<0.05	1.60	0.053	4.78	2.3
W230958		2.7	14.7	<0.002	0.53	3.86	2.0	1	0.3	1460	0.07	<0.05	1.27	0.044	4.46	2.3
W230959		2.0	9.6	<0.002	0.38	3.71	1.5	1	0.2	1740	0.05	<0.05	0.78	0.030	3.98	1.7
W230960		1.8	9.0	<0.002	0.35	3.73	1.5	1	0.2	1820	<0.05	<0.05	0.68	0.025	2.39	1.4
W230961		2.1	7.4	<0.002	>10.0	1380	1.0	18	0.2	234	<0.05	0.31	0.64	0.020	5.20	1.5
W230962		1.2	0.8	<0.002	<0.01	0.27	0.2	1	<0.2	51.6	<0.05	<0.05	0.07	<0.005	<0.02	0.7
W230963		4.1	25.3	0.004	0.86	10.20	2.9	1	0.4	1570	0.10	<0.05	1.65	0.065	7.26	3.4
W230964		4.2	25.7	0.003	0.87	11.35	3.0	1	0.5	1620	0.11	<0.05	1.68	0.065	7.43	3.5
W230965		2.7	13.4	0.002	0.49	0.98	2.0	1	0.4	1870	0.06	<0.05	1.02	0.039	3.48	2.2
W230966		3.4	20.2	0.004	0.62	0.38	2.5	1	0.5	1860	0.09	<0.05	1.41	0.051	2.91	2.5
W230967		5.0	31.4	0.005	0.91	0.43	4.6	1	0.6	2050	0.14	<0.05	2.18	0.095	3.06	2.9
W230968		5.1	32.3	0.004	1.05	0.39	4.1	1	0.7	1880	0.16	<0.05	2.23	0.120	3.43	2.8
W230969		5.2	28.2	0.007	0.98	0.41	3.5	1	0.6	2070	0.14	<0.05	2.03	0.085	2.55	3.2
W230970		16.7	83.1	0.003	3.62	112.0	8.8	1	1.9	454	0.40	0.13	6.76	0.224	68.9	4.2
W230971		6.8	39.4	0.009	1.14	0.55	5.5	1	0.7	1890	0.18	<0.05	2.94	0.111	2.69	3.7
W230972		3.4	21.2	0.004	0.68	0.35	2.9	1	0.4	1950	0.10	<0.05	1.46	0.077	1.41	2.3
W230973		3.6	20.9	0.004	0.70	0.59	3.0	1	0.4	2190	0.10	<0.05	1.50	0.071	1.59	2.5
W230974		3.5	22.4	0.004	0.62	0.38	3.1	1	0.4	2350	0.10	<0.05	1.53	0.059	1.26	2.4
W230975		4.2	24.2	0.005	0.74	0.37	3.0	1	0.4	2070	0.12	<0.05	1.93	0.068	1.42	3.8
W230976		9.5	39.8	0.003	4.62	160.0	3.0	2	1.2	348	0.17	0.10	2.93	0.101	41.9	4.3
W230977		3.2	19.1	0.002	0.62	1.07	2.6	1	0.3	2040	0.09	<0.05	1.35	0.052	1.17	2.8
W230978		3.0	17.4	0.004	0.57	0.77	2.9	1	0.3	2120	0.08	<0.05	1.28	0.048	0.84	2.5
W230979		4.7	30.9	0.003	0.91	1.66	4.2	1	0.5	1760	0.14	<0.05	2.06	0.110	1.06	2.1
W230980		2.6	15.3	0.003	0.44	0.32	2.6	1	0.4	1970	0.08	<0.05	1.13	0.052	0.53	1.7
W230981		3.6	19.9	0.003	0.65	0.31	3.0	1	0.4	2100	0.10	<0.05	1.40	0.075	0.68	2.2

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CERTIFICATE OF ANALYSIS WH17197077

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	As- CON01	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01	0.01
W230946		27	0.6	16.4	24	30.7			<0.01
W230947		31	0.5	18.1	28	37.8			<0.01
W230948		79	1.4	24.3	57	66.1			<0.01
W230949		14	0.6	13.5	12	15.8			0.01
W230950		2	0.1	0.8	18	0.5			<0.01
W230951		14	0.7	11.0	7	14.7			<0.01
W230952		8	0.5	6.6	8	7.9			<0.01
W230953		8	0.5	8.4	8	8.4			0.01
W230954		11	0.8	8.8	9	11.2			0.01
W230955		12	0.8	9.4	9	12.2			0.01
W230956		11	0.6	9.6	12	12.0			0.01
W230957		15	0.8	12.7	15	15.6			0.02
W230958		14	0.7	12.6	12	13.8			0.02
W230959		9	0.5	8.4	6	9.2			0.03
W230960		7	0.6	6.1	4	7.4			0.15
W230961		7	0.5	13.2	18	6.9	>30.0	37.2	1.81
W230962		3	0.1	0.7	16	<0.5			<0.01
W230963		21	1.2	12.8	14	20.4			0.58
W230964		21	1.2	13.0	15	20.6			0.61
W230965		13	0.7	8.9	18	12.2			0.09
W230966		18	0.9	10.6	15	15.9			0.05
W230967		27	1.7	16.4	22	27.3			0.04
W230968		32	1.5	15.1	25	30.6			0.03
W230969		28	1.3	16.5	23	25.7			0.03
W230970		64	8.1	23.5	132	67.4	3.57		7.91
W230971		38	1.4	24.1	31	35.2			0.01
W230972		21	0.6	13.0	18	19.9			0.02
W230973		23	0.6	15.0	18	20.8			0.04
W230974		20	0.5	11.8	15	17.4			0.02
W230975		21	0.7	15.6	15	21.8			0.05
W230976		36	6.2	16.6	66	30.9	7.49		8.12
W230977		17	0.9	12.6	13	16.9			0.03
W230978		17	0.7	13.4	13	15.2			0.08
W230979		34	2.0	15.7	26	28.5			0.01
W230980		18	0.5	10.7	15	16.0			0.01
W230981		23	0.5	12.5	16	19.7			0.01

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Finalized Date: 25- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17197077

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- CON01	As- OG62	Au- AA25	Hg- MS42
ME- MS61	ME- OG62		

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- OCT- 2017
Account: RCM

CERTIFICATE WH17198296

Project: Nadaleen

P.O. No.: N17- 099

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 15- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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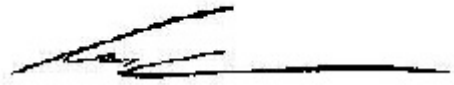
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232540		8.02	0.08	3.93	46.3	210	1.40	0.10	14.55	0.07	46.3	6.9	43	18.65	18.0	1.58
W232541		7.46	0.11	3.61	38.8	260	1.22	0.09	17.10	0.07	44.6	6.6	40	16.80	22.3	1.54
W232542		7.28	0.06	3.20	54.0	170	1.29	0.07	21.5	0.07	36.3	6.0	33	15.10	17.2	1.14
W232543		7.24	0.06	1.74	117.5	290	0.69	0.04	27.8	0.16	22.2	4.4	19	7.61	18.6	1.19
W232544		7.53	0.06	1.97	64.0	310	0.74	0.04	28.0	0.14	22.6	4.3	20	10.90	11.1	0.99
W232545		0.20	0.19	4.16	6860	220	1.06	0.13	12.55	0.17	42.3	13.0	48	11.05	40.1	3.07
W232546		7.25	0.06	1.48	81.3	130	0.49	0.04	29.5	0.11	19.90	3.2	17	7.00	8.0	0.70
W232547		7.24	0.06	2.91	121.5	180	1.13	0.08	22.3	0.11	33.1	5.1	31	15.00	14.7	1.33
W232548		3.91	0.37	3.33	>10000	180	1.02	0.07	11.95	0.09	39.7	11.0	34	11.95	25.7	1.43
W232549		5.57	0.06	3.26	181.0	150	1.26	0.06	14.20	0.05	38.5	4.6	34	14.15	13.6	1.36
W232550		2.61	0.55	5.60	>10000	180	2.30	0.12	7.00	0.44	57.4	10.6	48	28.8	21.7	1.90
W232551		4.65	<0.01	0.04	71.0	20	<0.05	0.01	21.0	0.07	1.10	1.0	1	0.11	1.9	0.46
W232552		4.93	0.30	2.46	>10000	180	0.85	0.05	18.50	0.13	28.4	4.1	28	8.05	15.1	1.04
W232553		7.56	0.31	1.46	>10000	80	0.61	0.04	26.1	0.16	21.6	3.4	16	3.36	10.1	0.53
W232554		6.69	0.06	1.14	232	50	0.61	0.03	27.4	0.06	15.25	2.8	14	3.57	7.4	0.98
W232555		7.52	0.08	1.25	53.5	240	0.62	0.03	29.2	0.10	16.20	2.9	14	4.54	7.6	0.45
W232556		0.20	1.60	3.09	>10000	120	0.61	0.24	7.78	0.81	43.6	10.9	47	8.61	32.4	3.01
W232557		7.65	0.08	1.70	510	110	0.67	0.05	23.2	0.07	24.3	3.1	20	5.39	11.0	0.62
W232558		2.84	0.09	0.77	66.7	80	0.51	0.03	32.5	0.07	13.20	2.1	10	2.49	8.6	0.35
W232559		4.61	0.90	3.37	>10000	140	1.07	0.10	14.50	0.12	40.5	6.1	38	12.50	28.0	1.40
W232560		<0.02	0.91	3.41	>10000	130	1.14	0.10	14.35	0.11	40.2	5.8	36	12.35	27.8	1.40
W232561		5.72	0.19	1.55	563	70	0.62	0.05	28.4	0.06	21.7	3.6	18	4.55	13.2	0.70
W232562		1.81	0.96	2.50	>10000	100	0.73	0.07	20.8	0.24	28.0	4.7	25	5.25	17.1	0.87
W232563		2.09	0.44	0.96	4540	40	0.38	0.03	26.8	0.09	13.40	2.3	10	1.96	8.9	0.44
W232564		5.32	0.20	0.37	>10000	20	0.18	0.02	19.50	0.05	7.16	1.1	5	0.66	5.4	0.79
W232565		2.62	0.14	0.38	>10000	20	0.20	0.02	19.95	0.04	7.44	1.1	5	0.79	3.6	0.78
W232566		7.93	0.12	0.89	>10000	40	0.36	0.03	18.75	0.05	12.10	1.9	8	2.43	7.2	0.86
W232567		7.61	0.09	2.49	>10000	80	1.06	0.07	14.40	0.07	28.2	4.2	25	10.20	17.0	0.80
W232568		7.95	0.11	1.39	5840	70	0.65	0.03	17.40	0.04	15.95	3.4	16	5.51	9.4	0.92
W232569		8.03	0.09	0.61	6100	50	0.28	0.02	19.90	0.04	8.95	1.8	7	1.76	7.6	0.54
W232570		7.84	0.11	0.80	>10000	40	0.34	0.03	19.75	0.06	10.70	2.2	8	2.18	8.0	1.04
W232571		7.95	0.11	0.57	>10000	30	0.25	0.03	20.1	0.05	9.74	1.6	7	1.07	9.5	1.06
W232572		7.31	0.15	0.75	6310	30	0.29	0.03	14.90	0.14	10.15	3.4	8	1.71	11.0	7.98
W232573		7.12	0.07	0.89	9710	40	0.35	0.03	18.40	0.02	11.65	1.8	9	2.31	6.3	0.94
W232574		4.95	0.07	0.05	17.5	40	0.06	0.07	20.9	0.09	1.25	0.7	1	0.18	4.8	0.49
W232575		3.79	0.14	0.59	2440	50	0.36	0.02	19.10	0.03	8.65	1.6	6	1.07	4.9	0.87

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232540		9.43	0.10	2.2	0.480	0.030	2.27	24.0	25.3	3.27	222	0.87	0.03	6.5	16.7	490
W232541		8.85	0.17	1.8	0.410	0.030	2.05	23.2	22.8	2.20	207	0.77	0.03	5.8	16.2	590
W232542		7.78	0.19	1.6	0.325	0.023	1.79	18.7	21.9	1.85	182	0.65	0.02	4.5	14.2	440
W232543		4.48	0.13	0.7	0.732	0.014	0.93	11.7	9.5	2.22	237	0.63	0.01	2.4	11.1	370
W232544		4.76	0.12	0.8	0.187	0.014	1.05	11.9	10.3	1.72	196	0.54	0.01	2.7	10.4	360
W232545		9.85	0.06	2.0	14.85	0.036	1.91	21.6	12.7	2.73	1260	1.90	0.02	6.1	28.4	490
W232546		3.39	0.08	0.8	0.256	0.013	0.81	10.5	6.5	1.47	202	0.39	0.01	2.3	6.7	240
W232547		6.91	0.14	1.6	0.581	0.021	1.57	17.3	13.0	2.57	234	0.47	0.02	4.6	12.9	400
W232548		7.66	0.12	2.5	2.65	0.021	1.66	19.7	14.8	3.69	607	0.64	0.02	5.3	11.8	430
W232549		7.46	0.15	2.6	0.899	0.023	1.74	19.7	16.0	5.14	245	0.77	0.03	5.2	11.4	400
W232550		13.35	0.12	1.8	3.52	0.039	2.84	30.9	36.2	3.15	694	0.59	0.02	7.1	23.3	610
W232551		0.22	0.20	<0.1	0.012	0.005	0.02	0.5	0.9	13.30	209	0.09	<0.01	0.1	1.3	170
W232552		5.73	0.18	1.2	2.04	0.023	1.23	14.4	11.6	2.92	623	0.61	0.01	3.5	8.6	400
W232553		3.60	0.17	1.0	1.475	0.017	0.73	11.4	5.6	2.04	538	0.84	0.01	2.6	7.4	270
W232554		2.81	0.14	0.7	2.89	0.011	0.58	8.3	5.2	3.29	312	0.51	0.01	1.8	5.9	220
W232555		3.07	0.14	0.9	0.368	0.010	0.64	9.1	6.4	1.57	119	0.88	0.01	2.0	5.1	250
W232556		7.89	0.10	1.7	23.6	0.033	1.39	23.0	16.5	1.90	1110	4.01	0.02	4.6	24.1	340
W232557		4.04	0.15	1.8	1.810	0.010	0.85	12.6	7.8	1.71	153	0.60	0.01	2.9	6.1	400
W232558		1.88	0.14	0.5	0.922	0.006	0.39	7.8	3.8	0.86	117	0.60	0.01	1.2	3.6	190
W232559		8.01	0.16	2.2	3.38	0.028	1.68	20.9	17.2	4.21	1120	2.24	0.02	5.4	15.4	600
W232560		7.94	0.16	2.1	3.49	0.031	1.69	20.4	16.7	4.20	1100	2.13	0.02	5.2	15.3	610
W232561		3.85	0.16	0.9	1.940	0.015	0.78	12.0	8.1	1.82	316	1.05	0.01	2.6	8.0	350
W232562		6.01	0.14	1.4	3.69	0.020	1.24	14.3	11.4	2.69	1140	1.03	0.01	3.5	10.7	400
W232563		2.31	0.14	0.5	2.58	0.011	0.46	8.1	3.6	5.31	922	0.46	0.01	1.4	4.2	210
W232564		1.06	0.18	0.3	1.895	0.008	0.17	4.6	2.1	11.55	932	0.08	0.01	0.6	1.9	210
W232565		1.10	0.12	0.3	1.310	0.005	0.18	4.7	2.4	11.80	825	0.09	0.02	0.7	1.8	230
W232566		2.44	0.15	0.6	1.960	0.009	0.43	6.7	4.9	11.20	680	0.32	0.01	1.5	4.0	280
W232567		6.83	0.18	1.6	1.485	0.018	1.24	15.0	17.2	8.54	458	0.71	0.02	4.2	10.0	520
W232568		3.87	0.17	0.9	1.060	0.009	0.68	8.7	9.5	10.55	514	0.80	0.02	2.4	7.5	360
W232569		1.70	0.17	0.3	0.805	0.005	0.28	5.4	4.6	12.30	406	0.36	0.01	1.0	4.1	260
W232570		2.28	0.16	0.5	1.535	0.006	0.38	6.0	6.2	11.80	781	0.64	0.02	1.4	4.5	170
W232571		1.62	0.15	0.4	3.17	0.008	0.26	6.1	3.5	11.60	901	0.64	0.01	1.1	3.2	180
W232572		2.01	<0.05	0.6	9.74	0.009	0.34	5.7	4.1	8.13	751	0.56	0.01	1.3	17.5	160
W232573		2.35	0.10	0.7	1.500	<0.005	0.40	6.3	5.7	11.35	340	0.57	0.02	1.5	3.8	210
W232574		0.19	0.08	<0.1	0.008	0.009	0.03	0.6	1.0	13.20	212	0.10	0.01	0.2	1.5	240
W232575		1.62	0.11	0.4	1.505	<0.005	0.26	5.1	3.4	11.00	666	0.54	0.01	1.0	2.9	150

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	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232540		8.3	87.9	<0.002	0.45	0.92	6.2	2	1.3	291	0.46	<0.05	8.50	0.191	0.84	6.3
W232541		7.6	78.2	<0.002	0.30	0.73	5.7	1	1.2	303	0.43	<0.05	7.72	0.166	0.88	7.2
W232542		6.7	69.2	<0.002	0.26	0.65	5.0	1	0.9	470	0.34	<0.05	6.24	0.133	0.85	10.1
W232543		7.5	34.8	0.002	0.43	0.55	2.9	1	0.5	631	0.18	<0.05	3.23	0.069	1.16	15.8
W232544		8.4	40.3	<0.002	0.42	0.65	3.1	1	0.6	652	0.19	<0.05	3.68	0.079	0.92	16.2
W232545		11.4	88.3	0.002	2.82	23.8	10.4	1	1.7	343	0.44	<0.05	6.17	0.287	44.4	6.7
W232546		5.7	29.1	0.002	0.32	0.51	2.3	1	0.5	633	0.17	<0.05	3.05	0.070	0.89	11.5
W232547		7.8	58.2	0.002	0.69	0.92	4.5	2	1.0	359	0.33	<0.05	6.24	0.138	1.58	9.0
W232548		7.9	64.2	<0.002	1.37	30.5	4.9	2	2.3	175.5	0.40	0.06	7.33	0.161	9.31	6.4
W232549		7.2	62.1	<0.002	0.43	0.91	4.8	1	1.1	214	0.39	<0.05	7.34	0.157	1.71	8.0
W232550		8.8	114.0	<0.002	3.53	114.0	8.1	4	1.4	101.0	0.53	0.05	9.93	0.216	11.90	9.0
W232551		1.3	0.7	<0.002	<0.01	0.29	0.1	<1	<0.2	46.5	<0.05	<0.05	0.07	<0.005	0.02	0.6
W232552		5.0	47.0	<0.002	1.77	53.7	3.6	2	0.8	580	0.26	<0.05	4.54	0.109	6.15	8.3
W232553		7.0	29.5	<0.002	0.90	28.7	2.3	1	0.5	475	0.17	<0.05	3.30	0.069	3.19	17.6
W232554		5.2	21.3	<0.002	0.39	1.17	1.8	1	0.4	603	0.14	<0.05	2.40	0.054	1.98	16.3
W232555		5.2	24.0	<0.002	0.21	0.53	2.0	1	0.4	805	0.15	<0.05	2.74	0.060	0.54	12.5
W232556		19.5	68.8	<0.002	5.28	199.0	5.5	3	1.4	188.0	0.35	0.21	5.32	0.182	73.9	6.5
W232557		5.5	33.1	<0.002	0.22	1.76	2.6	2	0.6	389	0.22	<0.05	4.25	0.085	1.25	11.4
W232558		3.7	14.6	<0.002	0.14	0.46	1.2	1	0.3	608	0.09	<0.05	1.71	0.036	0.70	10.9
W232559		12.1	66.0	0.002	2.15	49.6	5.2	3	1.2	186.5	0.40	0.06	7.59	0.159	10.20	12.3
W232560		11.8	65.9	<0.002	2.17	47.6	5.0	3	1.1	186.0	0.40	0.06	7.44	0.160	10.00	12.2
W232561		7.9	30.4	0.002	0.49	3.26	2.6	1	0.6	650	0.19	<0.05	3.46	0.074	4.60	13.5
W232562		9.4	46.2	<0.002	2.29	63.8	3.4	3	0.8	378	0.27	0.06	4.81	0.102	10.85	19.6
W232563		7.3	16.8	0.003	0.54	11.50	1.5	1	0.4	256	0.10	<0.05	1.96	0.042	5.99	21.0
W232564		4.4	6.0	<0.002	1.24	37.7	0.7	1	0.5	71.4	<0.05	<0.05	0.86	0.018	4.38	9.2
W232565		3.6	6.4	<0.002	1.07	33.3	0.7	1	0.3	74.2	<0.05	<0.05	0.87	0.018	3.28	9.0
W232566		7.0	15.2	<0.002	0.91	15.30	1.5	1	0.4	83.3	0.10	<0.05	1.83	0.041	4.34	12.5
W232567		8.9	46.3	<0.002	1.10	15.55	4.0	1	1.2	85.3	0.29	<0.05	5.13	0.112	3.36	14.8
W232568		9.3	25.3	<0.002	0.77	9.04	2.2	1	0.6	78.0	0.17	<0.05	2.96	0.065	2.86	14.2
W232569		9.6	9.9	<0.002	0.65	9.94	1.0	1	0.3	79.8	0.07	<0.05	1.29	0.028	1.46	18.9
W232570		11.8	13.6	<0.002	1.03	21.6	1.4	1	0.5	78.4	0.09	<0.05	1.75	0.037	3.64	21.3
W232571		10.0	9.3	<0.002	1.00	18.15	1.0	1	0.8	96.2	0.06	<0.05	1.18	0.026	5.33	19.4
W232572		53.0	13.2	<0.002	9.34	19.95	1.3	1	0.4	91.5	0.09	<0.05	1.69	0.034	31.3	17.0
W232573		10.3	13.6	<0.002	1.43	13.40	1.4	1	0.3	97.0	0.09	<0.05	1.79	0.042	2.69	15.7
W232574		1.8	1.2	<0.002	<0.01	0.20	0.2	<1	<0.2	51.6	<0.05	<0.05	0.09	<0.005	0.02	0.8
W232575		5.7	9.2	<0.002	0.38	4.92	1.0	1	0.2	135.0	0.07	<0.05	1.19	0.028	2.40	15.5

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 26- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17198296

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232540		66	1.0	13.5	29	79.2		0.03
W232541		67	0.8	13.1	34	66.0		0.02
W232542		56	1.1	9.9	34	56.2		0.01
W232543		31	0.6	6.4	69	23.4		0.01
W232544		36	0.5	6.7	65	30.6		0.01
W232545		90	7.9	18.2	53	68.8		2.50
W232546		25	0.7	6.2	37	29.6		0.02
W232547		45	1.7	10.0	40	59.4		0.07
W232548		46	2.7	11.6	21	89.7	1.310	2.33
W232549		49	1.2	11.7	16	92.8		0.01
W232550		82	3.6	11.4	68	64.0	4.93	1.41
W232551		2	0.1	0.7	16	<0.5		0.01
W232552		42	1.9	8.7	17	43.9	2.80	0.49
W232553		27	1.6	7.0	26	37.6	1.165	0.45
W232554		22	1.2	5.3	17	25.2		0.01
W232555		25	0.7	5.4	13	32.7		<0.01
W232556		55	5.3	18.9	115	55.4	7.84	12.80
W232557		33	1.3	8.1	11	67.2		0.07
W232558		20	0.6	4.1	9	17.5		<0.01
W232559		60	3.4	12.5	18	77.8	2.49	2.69
W232560		61	3.3	12.2	18	77.0	2.46	2.63
W232561		29	1.7	7.7	9	34.5		0.14
W232562		44	2.7	8.2	36	51.9	3.33	2.24
W232563		34	1.7	5.5	10	18.3		0.31
W232564		15	0.7	3.2	7	8.9	2.19	0.58
W232565		14	0.7	3.4	5	9.5	1.865	0.33
W232566		21	1.4	4.5	6	20.9	0.945	0.25
W232567		42	2.6	9.0	16	55.7	1.290	0.11
W232568		26	1.6	6.0	9	33.3		0.05
W232569		10	1.0	3.7	8	11.1		0.02
W232570		15	1.5	3.5	11	17.0	1.165	0.10
W232571		16	1.2	3.4	7	11.7	1.215	0.14
W232572		15	1.7	3.8	25	19.7		0.46
W232573		17	1.1	4.0	5	23.6		0.04
W232574		2	0.1	0.8	20	<0.5		<0.01
W232575		16	1.4	3.2	9	13.6		0.05

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VANCOUVER BC V6B 1L8

Finalized Date: 26- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17198296

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 29- OCT- 2017
Account: RCM

CERTIFICATE WH17203340

Project: Nadaleen

P.O. No.: N17- 100

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

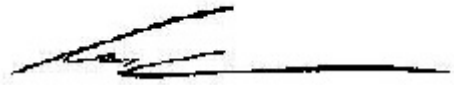
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 29- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203340

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W230982		7.59	0.07	1.92	50.4	150	0.49	0.11	28.6	0.22	29.4	6.8	22	6.22	28.1	1.38
W230983		7.72	0.06	1.69	44.4	200	0.37	0.17	28.4	0.19	25.4	6.1	22	5.62	21.6	1.35
W230984		7.84	0.09	2.90	83.1	270	0.48	0.20	23.0	0.33	34.5	11.1	42	9.58	43.2	2.11
W230985		7.71	0.08	2.44	87.3	190	0.48	0.21	24.1	0.27	35.5	9.4	36	8.55	32.3	1.86
W230986		0.26	0.64	1.86	>10000	140	0.42	2.75	25.6	0.16	28.6	4.7	27	6.08	15.7	1.38
W230987		7.74	0.03	0.80	34.5	110	0.25	0.12	32.8	0.11	11.90	3.3	10	2.96	10.6	0.89
W230988		7.20	0.07	1.67	67.2	150	0.44	0.14	28.2	0.20	22.1	6.1	20	5.46	24.2	1.39
W230989		7.49	0.07	2.86	51.2	230	0.65	0.18	22.3	0.25	35.1	11.0	42	12.70	36.8	2.52
W230990		7.22	0.12	4.83	73.1	290	1.08	0.31	13.75	0.43	52.1	17.6	61	18.10	63.2	3.41
W230991		7.98	0.04	1.15	26.7	120	0.31	0.11	31.4	0.15	15.15	4.6	15	4.54	15.8	1.53
W230992		4.30	0.15	6.13	134.5	470	1.47	0.37	6.20	0.55	75.8	22.2	76	29.7	76.3	4.09
W230993		4.33	0.17	5.80	27.8	160	0.76	0.17	4.14	0.29	37.2	33.3	76	18.35	136.0	7.66
W230994		6.97	0.10	7.00	42.6	170	1.35	0.24	3.44	0.30	46.8	37.7	76	25.2	157.5	8.33
W230995		9.12	0.10	6.13	112.5	160	1.04	0.20	3.67	0.37	46.6	35.3	66	28.0	131.5	6.65
W230996		1.04	1.42	6.18	261	190	1.55	0.19	4.02	0.46	41.7	41.1	67	36.9	145.5	7.30
W230997		1.28	1.25	3.36	342	180	0.72	0.14	8.99	0.34	28.5	12.3	25	11.80	34.5	3.56
W230998		8.14	0.21	8.25	891	380	1.73	0.33	2.20	0.28	89.5	23.4	64	27.4	56.7	4.79
W230999		11.70	0.11	9.21	313	290	2.82	0.40	2.03	0.29	101.0	20.3	73	36.5	47.0	4.88
W231000		9.59	0.15	8.35	176.0	270	2.65	0.44	2.91	0.42	84.7	20.9	64	34.0	46.3	4.84
W231001		8.27	0.31	7.94	293	260	2.16	0.34	4.76	0.07	87.9	14.8	56	30.7	33.3	3.67
W231002		10.51	0.22	7.75	>10000	290	1.52	0.30	2.71	0.26	92.5	16.7	52	25.3	33.4	3.54
W231003		7.20	0.01	0.05	10.8	30	0.08	0.08	21.4	0.07	1.20	0.8	2	0.13	2.6	0.48
W231004		10.65	0.19	8.11	6400	310	1.25	0.36	2.19	0.33	91.4	16.8	60	21.3	37.6	4.69
W231005		<0.02	0.19	8.30	6600	320	1.20	0.33	2.18	0.25	89.7	17.2	61	20.7	38.1	4.80
W231006		4.97	0.31	6.70	2630	490	1.31	0.28	5.03	0.23	72.5	14.4	52	18.35	39.7	4.84
W231007		5.61	0.28	4.31	1020	310	0.79	0.18	2.58	0.16	41.0	12.7	54	13.30	40.4	4.98
W231008		9.38	0.30	5.95	435	230	1.25	0.26	2.06	0.17	58.4	16.3	65	21.3	48.2	4.72
W231009		11.73	0.16	7.32	493	260	1.62	0.34	2.64	0.32	76.0	15.5	66	23.9	40.6	4.67
W231010		6.82	0.11	7.79	355	320	1.86	0.30	5.01	0.14	87.2	15.1	61	23.3	29.5	4.05
W231011		0.26	0.19	3.91	6550	210	0.74	0.14	12.20	0.18	40.7	12.0	44	10.75	36.4	2.92
W231012		11.29	0.63	9.16	209	330	2.28	0.33	1.84	0.23	101.0	18.4	70	33.4	42.4	4.90
W231013		6.02	0.19	9.17	198.5	350	2.80	0.36	1.85	0.20	106.0	20.4	71	34.9	45.4	5.02
W231014		10.23	0.16	7.27	150.5	370	1.87	0.30	1.59	0.22	72.4	19.1	75	25.9	53.4	5.20
W231015		7.67	0.12	4.41	112.5	440	1.03	0.15	6.15	0.11	41.1	15.3	59	15.60	42.0	5.50
W231016		7.05	<0.01	0.05	0.7	40	<0.05	0.02	21.4	0.09	1.15	0.7	2	0.16	1.6	0.47
W231017		8.20	0.09	5.83	90.6	440	0.97	0.21	2.90	0.21	53.4	18.6	77	24.4	54.2	4.88

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Finalized Date: 29- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203340

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W230982		4.83	0.10	0.9	0.262	0.022	0.87	13.5	5.9	0.77	496	1.64	0.02	2.7	16.0	1070
W230983		4.36	<0.05	1.0	0.224	0.017	0.76	11.7	4.4	0.73	405	0.64	0.02	2.5	10.7	980
W230984		7.32	<0.05	1.5	0.451	0.033	1.30	15.9	7.4	0.89	368	1.41	0.02	4.1	22.7	1070
W230985		6.65	<0.05	1.3	0.434	0.026	1.10	16.1	7.1	1.01	573	1.07	0.02	3.5	16.8	1150
W230986		4.89	<0.05	1.0	7.53	0.021	0.93	14.4	6.4	0.90	2240	1.74	0.01	2.6	11.9	340
W230987		1.98	<0.05	0.5	0.093	0.011	0.35	5.4	3.1	0.69	1160	0.39	0.03	1.2	4.9	710
W230988		4.36	<0.05	0.9	0.308	0.019	0.74	10.6	4.9	0.85	853	0.94	0.02	2.4	10.9	820
W230989		7.47	<0.05	1.5	0.227	0.032	1.19	16.6	12.9	1.03	286	1.01	0.11	4.2	20.6	1350
W230990		13.20	0.05	2.5	0.293	0.051	2.08	25.2	28.6	1.28	433	2.25	0.04	7.1	32.3	1010
W230991		3.00	<0.05	0.7	0.296	0.013	0.47	7.0	12.7	0.97	640	0.99	0.02	1.6	8.1	1350
W230992		16.70	0.07	3.2	1.845	0.067	2.52	35.5	75.4	1.14	461	4.60	0.05	8.9	43.6	1370
W230993		17.05	0.11	2.4	0.144	0.075	0.92	16.1	98.4	2.13	1460	1.03	0.44	10.7	60.5	550
W230994		21.1	0.14	2.7	0.108	0.103	1.96	22.1	142.5	2.10	1220	0.60	0.13	14.0	60.1	740
W230995		18.20	0.13	2.5	0.175	0.081	2.36	21.6	127.0	2.77	1320	1.19	0.17	11.2	50.2	610
W230996		18.25	0.15	2.1	0.845	0.086	2.39	19.5	139.5	2.31	1400	1.05	0.05	10.9	66.6	580
W230997		9.03	0.11	1.5	2.45	0.042	1.39	12.6	17.1	4.98	2560	0.67	0.03	4.8	20.0	250
W230998		24.1	0.14	3.2	5.95	0.073	3.45	45.8	22.0	1.32	1350	3.66	0.04	12.0	48.7	760
W230999		27.1	0.20	3.4	3.10	0.074	4.18	52.1	18.6	1.24	867	3.85	0.04	12.9	44.9	890
W231000		23.5	0.17	3.0	2.37	0.072	3.80	44.7	20.3	1.55	717	2.48	0.05	11.1	42.0	1320
W231001		21.6	0.19	2.7	2.74	0.056	3.62	47.6	16.3	1.55	957	0.56	0.06	10.0	32.5	600
W231002		21.8	0.19	2.7	19.00	0.050	3.53	48.7	17.0	1.09	1890	0.76	0.05	9.6	34.7	500
W231003		0.21	0.12	<0.1	0.010	<0.005	0.02	0.6	1.0	13.40	217	0.26	<0.01	0.1	1.6	180
W231004		23.0	0.17	2.9	18.20	0.058	3.86	47.1	9.0	1.28	1480	2.16	0.04	10.2	37.5	930
W231005		23.4	0.19	3.1	18.80	0.058	3.90	47.3	9.2	1.28	1480	2.24	0.04	10.3	37.1	940
W231006		19.10	0.15	2.7	13.75	0.051	3.11	37.6	10.4	2.50	2510	1.67	0.03	9.6	30.5	1500
W231007		12.10	0.10	2.3	8.45	0.044	1.97	21.1	12.1	1.24	1190	0.91	0.02	6.7	28.1	740
W231008		16.95	0.13	3.2	5.70	0.062	2.83	28.9	12.9	1.21	707	0.95	0.03	9.5	38.2	380
W231009		20.5	0.14	3.5	4.99	0.067	3.09	39.1	19.5	1.46	592	1.78	0.03	11.1	36.0	380
W231010		21.3	0.18	3.0	1.420	0.067	3.63	45.1	10.4	2.32	734	1.51	0.05	10.2	33.6	510
W231011		10.90	0.12	2.3	16.70	0.042	1.85	21.7	8.4	2.63	1240	1.97	0.02	6.0	26.2	470
W231012		26.5	0.17	3.6	1.075	0.083	4.38	51.0	10.0	1.57	503	4.14	0.04	12.5	43.9	600
W231013		27.9	0.19	3.8	1.030	0.085	4.40	53.7	12.1	1.59	510	4.31	0.04	13.3	48.4	610
W231014		20.9	0.16	3.4	2.61	0.073	3.37	35.8	16.9	1.21	353	1.69	0.03	11.1	44.9	420
W231015		12.20	0.13	2.2	1.445	0.050	2.03	19.8	18.9	3.01	1000	0.46	0.03	6.8	32.7	1060
W231016		0.19	0.10	<0.1	0.005	<0.005	0.02	0.6	0.6	13.40	210	0.09	<0.01	0.1	1.6	180
W231017		16.10	0.12	3.0	2.31	0.069	2.64	25.5	42.7	1.59	588	0.58	0.03	9.4	39.5	500

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 29- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203340

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W230982		12.4	42.2	0.007	1.01	0.43	4.7	1	0.7	1580	0.20	<0.05	3.07	0.117	1.30	3.3
W230983		7.5	36.4	0.005	0.94	0.46	4.7	1	0.6	1665	0.18	<0.05	2.72	0.120	0.76	2.8
W230984		13.1	58.7	0.007	1.68	0.70	6.9	1	1.2	1370	0.28	0.05	4.03	0.249	1.17	3.5
W230985		9.0	53.1	0.007	1.35	0.89	6.7	1	0.8	1360	0.25	<0.05	3.79	0.190	0.96	3.9
W230986		9.0	40.5	0.002	1.40	44.9	4.8	1	0.7	1025	0.19	0.07	3.69	0.088	24.6	6.6
W230987		3.4	17.0	0.002	0.51	0.31	2.2	<1	0.3	1630	0.09	<0.05	1.26	0.063	0.32	1.6
W230988		6.1	37.4	0.004	0.92	0.80	4.1	1	1.1	1590	0.17	<0.05	2.66	0.116	0.68	2.6
W230989		9.5	57.9	0.008	1.92	0.47	7.7	1	1.0	1655	0.29	<0.05	4.27	0.240	0.53	3.2
W230990		18.8	102.5	0.011	2.30	0.70	12.5	1	1.8	953	0.50	0.06	7.44	0.350	1.07	3.3
W230991		4.2	23.0	0.003	0.80	0.28	3.5	1	0.4	1620	0.12	<0.05	1.76	0.082	0.33	2.2
W230992		20.9	128.5	0.018	3.77	1.19	16.5	2	2.1	617	0.65	0.08	9.78	0.431	1.90	5.5
W230993		13.9	64.7	0.002	0.30	0.45	23.4	1	1.7	58.9	0.73	0.27	4.09	0.764	1.16	1.1
W230994		12.0	128.0	0.005	0.27	0.43	28.5	1	2.3	62.5	0.98	0.31	4.72	0.753	2.14	1.2
W230995		13.5	154.0	0.008	0.42	0.52	23.6	2	2.0	62.0	0.82	0.25	4.83	0.618	2.19	1.2
W230996		10.1	147.5	0.003	2.25	0.50	26.8	1	1.9	79.7	0.77	0.22	3.90	0.647	13.40	1.0
W230997		6.9	67.8	0.006	1.36	2.37	10.3	1	1.1	82.0	0.35	0.06	3.66	0.196	4.31	1.0
W230998		20.2	160.0	0.010	4.28	9.06	17.8	2	3.8	188.0	0.93	0.07	13.90	0.401	15.30	3.3
W230999		23.9	192.0	0.010	4.76	2.86	18.2	1	4.6	148.5	1.03	0.07	16.50	0.394	8.96	4.2
W231000		23.7	177.0	0.004	4.51	1.88	16.5	1	3.7	160.5	0.90	0.09	13.55	0.371	6.43	4.3
W231001		20.7	161.5	<0.002	2.99	1.81	13.7	1	2.7	142.5	0.78	<0.05	13.45	0.328	7.34	3.0
W231002		21.9	160.0	0.002	3.68	68.2	16.1	2	2.6	101.5	0.76	0.10	13.15	0.318	76.0	3.3
W231003		1.6	0.9	<0.002	<0.01	0.14	0.1	<1	<0.2	50.5	<0.05	<0.05	0.08	<0.005	0.10	0.5
W231004		24.7	160.0	0.004	4.58	52.8	19.9	1	3.2	107.5	0.81	0.09	13.90	0.331	68.9	3.9
W231005		25.5	162.5	0.006	4.70	51.3	20.4	1	3.2	109.5	0.85	0.09	14.20	0.341	71.4	4.1
W231006		19.7	132.0	0.008	4.05	37.3	17.6	<1	2.5	273	0.77	0.06	10.90	0.349	54.5	2.8
W231007		19.7	85.1	0.003	4.81	20.4	14.2	1	1.7	161.0	0.50	<0.05	6.01	0.373	29.5	1.5
W231008		21.5	120.5	0.002	4.71	8.31	16.8	1	2.1	120.5	0.74	0.06	8.78	0.458	17.15	2.0
W231009		27.8	137.5	0.004	4.45	11.25	17.1	1	2.6	131.5	0.88	0.08	11.90	0.447	12.60	2.8
W231010		21.5	149.0	0.004	2.58	7.91	14.0	1	2.6	190.5	0.82	0.08	13.25	0.331	4.30	3.1
W231011		11.8	84.2	0.002	2.68	25.6	10.2	1	1.7	330	0.47	0.05	6.06	0.272	44.2	6.5
W231012		23.5	173.5	0.020	2.99	4.89	16.7	1	3.7	135.0	1.06	0.05	16.70	0.377	3.90	3.7
W231013		25.7	179.5	0.022	3.06	5.58	17.9	1	3.9	136.5	1.09	0.06	17.45	0.383	3.71	4.1
W231014		25.5	144.0	0.010	4.51	4.75	19.4	1	2.6	135.0	0.85	0.08	11.20	0.526	10.30	2.6
W231015		13.3	83.7	<0.002	4.48	0.93	14.5	<1	1.4	353	0.51	<0.05	5.57	0.411	4.49	1.3
W231016		1.6	1.0	<0.002	<0.01	0.09	0.2	<1	<0.2	50.1	<0.05	<0.05	0.08	<0.005	0.04	0.7
W231017		16.3	117.0	0.003	4.26	0.92	17.0	<1	2.0	226	0.68	0.05	7.51	0.547	6.37	1.7

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 29- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203340

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W230982		40	0.5	19.3	36	34.3		0.02
W230983		39	0.7	17.6	35	32.1		0.05
W230984		71	1.0	20.9	57	48.0		0.03
W230985		64	1.2	21.8	41	43.1		0.03
W230986		32	19.4	15.5	28	31.8	1.330	2.67
W230987		19	0.3	9.2	18	16.6		<0.01
W230988		37	0.7	14.2	34	31.1		0.05
W230989		74	0.6	20.2	52	50.2		<0.01
W230990		115	1.1	19.8	79	81.5		<0.01
W230991		29	0.3	9.7	21	27.6		<0.01
W230992		155	1.5	30.2	89	101.0		<0.01
W230993		228	1.3	20.5	113	91.3		0.01
W230994		243	1.5	24.1	121	100.5		<0.01
W230995		203	1.0	20.8	92	87.9		0.01
W230996		210	6.3	21.7	127	78.0		<0.01
W230997		69	4.5	15.2	65	54.0		0.29
W230998		154	7.5	24.2	110	114.0		1.64
W230999		171	7.9	25.6	125	114.5		0.03
W231000		141	6.6	26.8	171	107.0		0.02
W231001		75	6.7	18.9	82	92.8		0.02
W231002		71	6.4	15.1	120	92.7	0.959	11.55
W231003		2	0.1	0.8	19	<0.5		0.01
W231004		110	14.1	20.5	112	101.5		7.12
W231005		112	14.8	21.1	92	102.5		7.20
W231006		124	9.4	23.3	79	100.0		12.35
W231007		111	5.6	14.2	65	79.4		6.74
W231008		136	6.1	18.3	82	104.5		0.52
W231009		134	11.0	20.2	152	116.0		0.23
W231010		96	8.9	20.1	91	107.5		0.03
W231011		87	8.6	18.3	51	75.4		2.54
W231012		170	3.5	24.7	109	120.5		0.01
W231013		172	3.7	26.6	107	132.0		<0.01
W231014		165	3.2	19.8	98	120.0		0.01
W231015		123	3.1	15.2	88	79.7		<0.01
W231016		3	0.1	0.8	19	<0.5		<0.01
W231017		154	2.0	17.5	128	102.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 29- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17203340

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- OCT- 2017
Account: RCM

CERTIFICATE WH17203346

Project: Nadaleen

P.O. No.: N17- 101

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

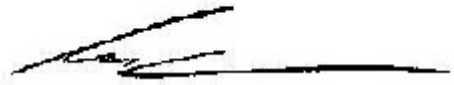
ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 24- OCT- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203346

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232576		7.26	0.07	0.47	1285	40	0.35	0.02	19.60	0.06	10.30	1.0	7	0.99	5.7	1.13
W232577		7.85	0.04	0.84	193.0	50	0.49	0.04	19.05	0.03	12.40	1.7	8	2.70	7.5	0.98
W232578		7.04	0.05	1.31	144.5	80	0.51	0.06	17.90	0.24	15.50	2.1	10	4.28	9.8	1.12
W232579		7.74	0.03	1.01	103.5	220	0.42	0.05	18.60	0.11	13.95	1.9	10	2.55	8.6	1.00
W232580		3.62	0.02	0.96	110.5	220	0.37	0.05	18.95	0.42	12.50	1.9	7	2.50	7.9	1.01
W232581		7.62	0.03	0.71	327	60	0.32	0.03	19.30	0.04	10.70	1.4	8	1.89	6.6	0.86
W232582		7.62	0.03	0.63	342	50	0.36	0.04	18.90	0.10	10.10	1.4	6	1.45	7.1	1.02
W232583		8.36	0.02	0.30	897	30	0.22	0.03	20.4	0.04	6.35	1.1	4	0.54	8.1	0.72
W232584		5.01	0.02	0.04	4.1	50	0.06	0.03	21.1	0.08	1.04	0.6	1	0.11	2.5	0.45
W232585		8.45	0.04	3.07	556	180	0.97	0.12	14.50	0.24	33.2	4.5	22	8.59	13.8	2.07
W232586		7.95	0.03	2.79	106.5	170	0.92	0.13	15.35	0.68	30.1	3.6	23	7.70	12.7	1.66
W232587		8.29	0.02	2.66	80.0	180	0.97	0.10	15.75	0.39	29.9	4.9	21	8.36	13.6	1.79
W232588		7.68	0.04	3.72	74.2	250	1.15	0.15	17.25	0.21	39.9	5.1	31	10.40	18.5	1.44
W232589		0.26	0.18	3.94	6540	210	0.92	0.14	12.40	0.16	42.8	12.0	48	10.85	36.9	2.94
W232590		7.87	0.06	3.45	87.7	180	1.11	0.13	17.60	0.09	37.3	5.4	28	8.64	20.0	1.55
W232591		5.55	0.08	3.63	977	180	1.04	0.13	17.60	0.08	37.7	7.3	29	6.32	13.8	1.84
W232592		4.68	0.15	3.58	>10000	230	0.97	0.15	15.05	0.09	38.1	6.7	28	6.45	13.9	1.91
W232593		4.96	0.01	0.07	30.2	20	0.05	0.02	21.0	0.06	1.15	0.6	1	0.12	1.9	0.48
W232594		6.20	0.13	2.78	>10000	280	0.75	0.11	15.55	0.12	31.0	6.5	24	5.17	16.2	3.51
W232595		<0.02	0.13	2.66	>10000	280	0.70	0.11	15.30	0.12	28.8	6.2	24	4.91	15.5	3.42
W232596		4.12	0.14	3.61	7300	220	1.07	0.12	13.35	0.07	38.9	7.5	32	7.68	18.4	3.55
W232597		5.03	0.18	3.26	3480	200	0.90	0.10	13.90	0.09	33.8	7.1	31	7.01	16.1	3.10
W232598		0.26	1.67	1.82	>10000	90	0.26	0.56	7.12	0.82	27.4	6.3	46	3.10	27.1	2.48
W232599		8.31	0.11	1.83	3200	190	0.70	0.06	16.30	0.05	19.85	4.2	19	3.82	6.6	2.68
W232600		8.17	0.06	4.27	509	290	1.55	0.14	12.00	0.04	46.1	7.4	35	13.50	15.6	2.39
W232601		7.95	0.04	7.02	279	370	3.01	0.26	4.39	0.04	68.7	9.1	65	28.0	45.1	1.99
W232602		5.41	0.11	6.98	270	310	2.55	0.33	6.62	0.02	72.7	15.8	56	25.3	33.3	2.38
W232603		3.94	0.08	7.08	7540	300	2.99	0.39	4.39	0.04	77.6	15.5	59	27.4	34.5	2.72
W232604		7.67	0.03	9.58	142.0	350	3.38	0.48	1.12	<0.02	108.5	16.9	73	44.3	42.2	3.05
W232605		9.67	0.05	9.57	151.5	360	2.91	0.47	1.12	<0.02	112.5	15.9	72	44.7	34.7	3.41
W232606		5.91	0.07	7.07	442	490	1.92	0.38	6.26	<0.02	88.2	16.1	49	22.0	24.7	4.78
W232607		8.54	0.02	5.50	38.5	240	1.50	0.25	17.10	0.02	61.5	8.8	37	24.5	21.3	2.39
W232608		7.50	0.05	7.79	55.2	290	2.17	0.38	7.46	<0.02	99.1	12.8	61	39.6	32.6	3.66
W232609		8.36	0.07	5.83	25.8	200	1.57	0.26	13.15	0.05	71.9	9.4	42	26.2	22.0	3.01
W232610		8.13	0.06	5.10	22.2	220	1.20	0.22	14.35	0.04	70.5	7.9	40	16.90	18.2	2.43
W232611		5.81	0.07	4.95	42.4	230	1.17	0.20	13.15	<0.02	79.4	9.2	38	14.55	19.2	2.62

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203346

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232576		1.16	<0.05	0.3	1.150	<0.005	0.23	5.9	2.8	11.50	797	0.35	0.01	0.8	3.2	160
W232577		2.23	0.05	0.5	1.315	0.007	0.43	6.6	5.1	11.80	633	0.06	0.01	1.3	5.4	1030
W232578		3.51	0.05	0.6	1.330	0.008	0.66	8.5	7.0	10.80	540	0.09	0.02	2.0	7.6	700
W232579		2.78	<0.05	0.5	0.669	0.009	0.49	7.3	5.9	11.10	581	0.09	0.02	1.6	5.4	1120
W232580		2.55	<0.05	0.5	0.710	0.006	0.50	6.6	5.5	11.00	567	0.10	0.02	1.4	5.4	910
W232581		1.94	0.05	0.5	0.308	0.006	0.37	5.6	5.0	11.40	565	0.10	0.02	1.1	3.8	1170
W232582		1.77	0.05	0.4	0.613	<0.005	0.33	5.5	4.9	11.10	623	0.09	0.02	1.1	3.8	1010
W232583		0.87	0.05	0.2	0.961	<0.005	0.16	3.4	2.7	12.25	641	0.08	0.02	0.7	3.3	480
W232584		0.14	0.05	<0.1	<0.005	<0.005	0.02	0.5	1.0	12.95	210	0.08	<0.01	0.1	1.4	160
W232585		7.69	0.06	1.4	0.676	0.026	1.62	16.8	12.0	8.48	377	0.34	0.03	4.3	13.0	830
W232586		6.83	0.08	1.1	0.825	0.026	1.49	15.6	9.4	8.94	413	0.21	0.02	3.8	10.8	410
W232587		6.56	0.08	1.3	0.524	0.024	1.42	15.4	10.0	8.38	416	0.45	0.02	3.9	11.1	600
W232588		9.23	0.08	1.7	0.450	0.029	2.00	20.1	10.5	4.64	316	0.42	0.03	5.3	12.6	650
W232589		10.30	0.09	2.1	14.80	0.035	1.93	21.2	12.5	2.64	1190	1.94	0.02	6.0	26.3	450
W232590		8.65	0.08	1.7	0.618	0.030	1.86	19.2	9.4	4.13	342	0.53	0.02	5.0	11.4	890
W232591		8.57	0.08	1.7	1.155	0.029	1.96	19.0	8.5	4.44	572	0.52	0.02	5.1	14.0	550
W232592		8.88	0.08	1.8	2.32	0.033	1.90	19.6	8.9	4.62	1140	0.69	0.02	5.1	14.2	580
W232593		0.21	0.06	<0.1	0.005	<0.005	0.02	0.5	1.0	13.00	206	0.08	0.01	0.3	1.6	180
W232594		7.11	0.08	1.4	4.73	0.029	1.47	16.2	6.6	6.60	917	0.64	0.02	4.0	16.5	440
W232595		6.86	0.07	1.4	5.13	0.024	1.39	15.5	6.3	6.47	900	0.63	0.02	3.8	16.0	440
W232596		9.25	0.07	2.0	4.75	0.027	1.89	20.3	9.2	6.56	880	1.82	0.02	5.3	17.9	640
W232597		8.06	0.07	2.0	10.80	0.025	1.68	16.5	10.5	6.78	1440	2.81	0.02	4.9	17.9	710
W232598		5.09	0.08	0.9	14.55	0.025	0.84	13.6	25.0	0.17	338	5.97	0.01	2.4	19.3	490
W232599		4.60	<0.05	1.2	3.41	0.011	0.94	10.3	6.7	7.84	775	1.79	0.02	2.8	10.0	360
W232600		10.40	0.07	2.1	1.040	0.032	2.21	23.8	12.1	5.87	627	0.63	0.03	6.0	15.6	550
W232601		21.1	0.11	3.5	1.815	0.059	4.26	35.4	23.5	2.12	293	0.28	0.05	11.9	21.8	680
W232602		18.60	0.10	3.2	0.969	0.069	3.94	39.5	20.1	2.32	401	0.46	0.05	10.4	28.1	800
W232603		20.6	0.12	2.8	1.735	0.061	4.25	40.7	19.9	1.69	540	0.38	0.04	10.7	38.4	540
W232604		25.6	0.13	3.1	0.367	0.073	5.45	59.2	21.6	1.01	324	0.26	0.04	12.5	36.2	380
W232605		26.7	0.15	3.0	0.183	0.080	5.43	62.2	18.7	0.98	379	0.40	0.04	12.6	36.6	510
W232606		21.2	0.14	2.3	0.170	0.062	4.27	45.1	14.2	1.38	659	0.51	0.03	10.0	34.8	1370
W232607		13.60	0.09	1.9	0.051	0.039	2.87	33.8	18.3	0.99	434	0.24	0.03	7.0	20.5	370
W232608		20.9	0.12	2.7	0.041	0.055	4.40	56.5	43.0	1.18	674	0.36	0.04	10.9	32.6	620
W232609		14.05	0.10	2.3	0.043	0.049	3.00	39.2	32.8	1.10	336	0.34	0.03	7.9	21.8	310
W232610		12.15	0.10	2.4	0.028	0.038	2.63	37.3	27.5	0.95	302	0.25	0.03	7.8	18.7	320
W232611		12.05	0.08	2.5	0.028	0.041	2.56	41.3	27.8	1.01	412	0.28	0.03	7.7	20.5	220

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203346

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232576		7.1	7.9	0.002	0.41	2.91	0.8	<1	0.2	112.5	0.06	<0.05	0.97	0.023	2.04	12.1
W232577		8.0	15.5	<0.002	0.48	1.94	1.5	<1	0.3	84.6	0.10	<0.05	1.64	0.043	2.03	4.5
W232578		9.6	24.3	<0.002	0.68	1.24	2.4	<1	0.5	102.0	0.13	<0.05	2.48	0.063	2.19	3.0
W232579		7.2	18.2	<0.002	0.52	1.54	2.0	<1	0.5	92.8	0.11	<0.05	1.94	0.048	1.26	2.0
W232580		6.7	16.9	<0.002	0.52	1.43	1.8	<1	0.4	93.7	0.10	<0.05	1.80	0.044	1.27	1.7
W232581		6.2	12.6	<0.002	0.31	1.66	1.4	<1	0.3	86.0	0.07	<0.05	1.43	0.033	0.81	2.6
W232582		5.1	11.0	<0.002	0.41	1.25	1.3	1	0.3	90.7	0.07	<0.05	1.36	0.031	1.07	4.6
W232583		4.9	5.0	<0.002	0.26	1.98	0.7	<1	0.2	70.6	<0.05	<0.05	0.69	0.016	1.11	2.3
W232584		1.5	0.8	<0.002	<0.01	0.11	0.1	<1	<0.2	50.7	<0.05	<0.05	0.07	<0.005	<0.02	0.5
W232585		13.4	59.0	<0.002	1.82	2.12	5.1	<1	0.9	86.5	0.31	<0.05	5.17	0.145	1.83	3.2
W232586		9.1	54.7	<0.002	1.01	0.99	4.8	<1	0.8	77.5	0.27	<0.05	4.68	0.131	1.26	3.0
W232587		14.4	52.2	<0.002	0.96	1.34	4.4	<1	0.9	138.5	0.27	<0.05	4.79	0.127	1.39	4.0
W232588		11.3	75.2	<0.002	0.66	0.52	6.0	1	1.2	358	0.36	<0.05	6.27	0.174	0.95	5.8
W232589		11.8	86.6	<0.002	2.66	24.0	9.7	1	1.6	324	0.42	0.05	6.24	0.271	47.3	6.7
W232590		12.1	68.7	<0.002	0.65	0.48	5.7	1	1.1	471	0.37	<0.05	5.90	0.165	1.14	11.0
W232591		12.6	68.3	0.003	0.75	4.24	5.6	1	1.1	412	0.36	<0.05	6.09	0.171	4.51	7.9
W232592		13.2	69.8	<0.002	2.05	40.8	6.0	2	1.2	256	0.39	<0.05	6.42	0.166	8.76	10.7
W232593		1.5	0.9	<0.002	<0.01	0.11	0.2	<1	0.2	48.6	<0.05	<0.05	0.14	0.005	0.02	0.5
W232594		12.1	51.7	<0.002	2.70	38.8	4.6	3	0.9	280	0.29	<0.05	4.81	0.126	16.90	7.0
W232595		11.8	49.6	<0.002	2.74	40.7	4.4	2	0.9	276	0.27	<0.05	4.57	0.122	17.10	6.7
W232596		11.9	67.1	0.002	1.63	17.70	5.8	2	1.1	236	0.39	<0.05	6.58	0.169	16.80	8.3
W232597		10.5	55.4	0.004	1.01	19.25	5.0	2	1.1	207	0.35	<0.05	6.47	0.149	38.8	8.1
W232598		10.4	40.2	0.002	4.59	159.0	2.9	1	1.2	343	0.17	0.14	2.96	0.099	42.8	4.4
W232599		7.0	29.4	0.002	0.51	9.46	2.7	1	0.7	216	0.22	<0.05	3.64	0.084	11.85	7.0
W232600		9.5	80.9	<0.002	0.40	2.29	6.7	1	1.3	167.5	0.44	<0.05	7.43	0.195	3.26	6.2
W232601		8.6	119.5	<0.002	0.55	2.12	13.3	1	2.5	92.3	0.84	0.06	10.85	0.393	2.91	4.6
W232602		12.8	143.5	0.002	0.54	2.06	13.1	<1	2.4	160.5	0.76	0.08	12.20	0.345	2.60	6.0
W232603		15.4	120.5	<0.002	1.52	15.95	13.2	1	2.4	115.5	0.78	0.07	12.70	0.349	5.55	4.1
W232604		15.5	186.0	<0.002	1.82	0.70	16.3	<1	2.9	77.3	0.90	0.08	18.20	0.413	1.75	2.5
W232605		20.5	189.5	<0.002	1.69	0.65	16.9	<1	2.9	83.0	0.91	0.07	18.55	0.408	1.88	2.9
W232606		19.9	90.0	<0.002	3.37	1.74	13.1	<1	2.4	284	0.73	0.09	12.65	0.312	2.11	3.6
W232607		12.0	111.0	<0.002	0.39	0.32	8.3	<1	1.5	514	0.53	0.07	9.17	0.227	0.68	3.0
W232608		17.0	100.0	<0.002	0.51	0.39	14.1	<1	2.4	234	0.78	0.09	15.75	0.350	1.01	3.5
W232609		25.1	122.0	<0.002	0.93	0.39	8.7	1	1.7	373	0.57	0.05	10.30	0.266	0.79	3.1
W232610		17.6	106.5	<0.002	0.61	0.46	7.6	1	1.5	430	0.59	<0.05	9.75	0.272	0.64	2.8
W232611		16.0	105.0	0.002	0.47	0.55	7.3	<1	1.8	378	0.57	<0.05	9.88	0.286	0.70	2.7

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Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203346

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232576		14	0.7	3.3	9	10.5		0.04
W232577		14	0.7	5.7	6	19.0		0.01
W232578		18	1.2	6.8	58	26.7		0.01
W232579		14	0.9	6.9	23	19.5		0.01
W232580		14	0.9	6.5	120	18.5		0.02
W232581		11	0.6	6.7	4	16.1		0.01
W232582		10	0.6	6.8	16	15.2		0.01
W232583		6	0.3	4.7	9	8.1		0.02
W232584		2	0.1	0.8	17	<0.5		<0.01
W232585		40	2.3	11.0	73	49.9		0.01
W232586		38	1.8	9.8	373	42.1		0.01
W232587		39	1.0	11.0	154	45.9		<0.01
W232588		52	1.0	12.0	116	63.9		0.02
W232589		84	7.7	18.9	50	75.1		2.53
W232590		50	1.2	12.4	42	68.6		0.01
W232591		53	2.5	11.8	29	62.8		0.39
W232592		56	3.1	12.2	33	64.1	2.70	1.56
W232593		2	0.1	0.8	18	0.5		<0.01
W232594		40	2.3	9.6	92	48.3	2.19	0.81
W232595		38	2.3	9.2	79	46.4	2.40	0.84
W232596		51	3.1	11.9	20	67.8		1.09
W232597		44	3.3	11.6	23	66.7		1.22
W232598		36	7.8	15.3	67	29.1	7.07	8.15
W232599		28	1.6	7.4	19	42.1		0.73
W232600		60	3.4	13.1	19	76.8		0.58
W232601		114	8.2	19.2	34	123.5		0.35
W232602		105	7.1	23.6	35	111.5		0.12
W232603		96	7.3	19.2	25	97.6		1.33
W232604		109	3.1	22.3	32	108.0		0.03
W232605		107	2.3	24.7	36	107.5		0.01
W232606		85	3.2	31.2	37	85.1		0.02
W232607		61	1.0	16.0	37	69.2		0.01
W232608		95	1.6	24.1	58	96.9		0.01
W232609		65	1.1	17.8	75	80.0		<0.01
W232610		57	1.0	16.4	65	85.2		<0.01
W232611		58	1.2	16.8	54	84.6		<0.01

***** See Appendix Page for comments regarding this certificate *****

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Project: Nadaleen

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 24- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17203346

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 24- OCT- 2017
Account: RCM

CERTIFICATE WH17203348

Project: Nadaleen

P.O. No.: N17- 102

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

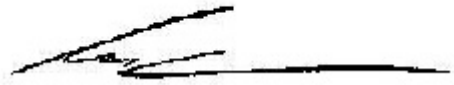
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203348

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231018		2.78	1.99	4.25	217	380	1.12	0.16	3.49	0.11	39.4	14.1	53	14.20	40.2	3.90
W231019		10.31	0.12	6.68	609	240	1.47	0.26	1.88	0.15	64.3	16.1	76	20.8	62.9	4.78
W231020		7.25	0.10	7.03	>10000	260	1.65	0.31	1.10	0.26	69.4	23.7	74	23.5	65.3	4.35
W231021		7.01	0.01	0.06	9.4	30	0.05	0.03	20.2	0.07	1.16	0.6	1	0.25	1.8	0.47
W231022		7.03	0.09	6.78	843	240	1.78	0.30	3.07	0.15	68.0	19.6	68	23.4	63.2	5.33
W231023		9.22	0.11	5.65	500	240	1.52	0.20	2.75	0.11	51.0	21.2	71	22.6	54.4	3.46
W231024		<0.02	0.12	5.58	476	230	1.29	0.19	2.65	0.08	50.5	21.0	70	22.4	52.6	3.37
W231025		4.63	0.05	3.00	168.0	130	0.90	0.12	5.35	0.06	32.0	9.9	39	11.10	26.1	3.63
W231026		7.91	0.06	6.53	170.0	280	1.95	0.26	4.17	0.12	64.0	15.7	66	26.8	55.7	4.05
W231027		8.54	0.07	6.74	125.0	240	2.29	0.27	2.54	0.14	62.3	18.9	69	32.7	59.6	4.50
W231028		8.63	0.09	6.38	228	310	2.03	0.28	2.60	0.13	62.7	19.3	68	28.7	55.6	4.83
W231029		0.26	0.67	1.85	>10000	140	0.58	3.04	23.6	0.20	27.4	4.8	26	6.34	15.9	1.30
W231030		8.70	0.09	5.65	231	220	1.79	0.26	2.50	0.16	58.0	15.7	61	24.1	44.9	4.25
W231031		8.19	0.09	6.31	213	240	2.20	0.27	2.33	0.18	67.8	19.1	68	26.9	53.0	4.56
W231032		8.47	0.07	6.19	307	230	1.86	0.25	2.60	0.14	61.8	18.8	64	23.1	53.7	4.32
W231033		8.60	0.07	5.28	54.9	170	1.61	0.18	2.58	0.11	54.3	18.5	67	24.5	49.5	4.34
W231034		8.84	0.07	5.29	53.6	190	1.60	0.20	2.59	0.13	52.2	18.1	66	24.7	47.4	4.38
W231035		7.47	0.06	4.73	58.2	260	1.40	0.15	2.22	0.07	45.1	15.1	65	20.6	41.7	4.03
W231036		8.48	0.11	4.03	185.0	240	1.07	0.15	2.19	0.08	37.4	11.9	50	14.55	34.3	3.36
W231037		8.00	0.13	6.65	153.5	310	1.95	0.27	1.13	0.20	60.4	19.3	84	27.0	59.5	5.10
W231038		5.21	0.01	0.06	1.0	20	0.05	0.03	20.7	0.10	1.22	0.5	2	0.20	1.7	0.47
W231039		8.50	0.07	5.51	89.5	270	1.41	0.22	2.17	0.18	51.2	17.0	70	22.0	53.7	5.05
W231040		7.94	0.07	6.16	58.8	210	1.76	0.24	2.91	0.33	59.4	21.1	71	27.8	54.6	5.01
W231041		8.16	0.05	6.66	130.5	320	1.84	0.26	2.93	0.09	64.1	17.3	72	28.5	54.6	5.05
W231042		0.26	0.29	4.04	>10000	180	0.72	0.19	10.10	0.65	46.0	12.0	47	9.64	53.8	3.04
W231043		8.33	0.07	6.87	318	220	2.10	0.27	2.73	0.08	69.0	20.1	69	22.1	56.2	5.18
W231044		8.05	0.11	6.32	1125	270	1.55	0.24	2.67	0.07	61.7	20.6	68	17.60	51.2	4.62
W231045		3.73	0.09	6.20	931	320	1.58	0.22	2.53	0.07	59.5	21.5	73	17.50	55.1	5.02
W231046		7.11	0.05	4.98	87.2	250	1.29	0.16	2.77	0.06	46.5	18.1	64	19.25	43.2	4.85
W231047		7.90	0.06	3.35	43.6	160	0.84	0.14	2.80	0.07	33.3	10.2	41	11.10	24.1	2.68
W231048		8.17	0.07	3.56	96.0	170	0.96	0.15	2.84	0.04	35.6	11.3	41	14.65	30.9	2.89
W231049		6.77	0.04	2.29	41.8	140	0.53	0.09	3.01	0.07	25.5	6.1	33	7.76	18.0	2.32
W231050		8.58	0.06	3.92	53.8	160	1.05	0.15	2.15	0.02	39.4	11.4	49	14.35	29.3	2.77
W231051		8.43	0.10	7.29	105.5	320	2.28	0.25	1.51	0.03	69.8	25.2	81	27.9	57.4	4.66
W231052		8.53	0.05	6.81	69.6	250	1.99	0.23	1.85	0.09	64.7	18.3	85	26.6	57.1	4.68
W231053		8.03	0.07	4.76	126.5	220	1.30	0.18	2.44	0.09	45.3	14.0	60	15.90	38.8	3.66

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Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203348

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231018		10.55	0.09	2.0	1.885	0.046	1.78	17.7	51.0	1.65	816	1.31	0.03	6.6	28.9	360
W231019		17.95	0.14	3.3	4.00	0.056	3.01	28.0	16.9	1.18	662	0.53	0.03	10.9	36.1	460
W231020		19.65	0.13	3.5	26.6	0.063	2.84	30.5	28.7	0.81	552	0.43	0.02	11.9	48.6	500
W231021		0.17	0.07	<0.1	0.006	<0.005	0.02	0.5	1.1	12.60	200	0.11	<0.01	0.1	1.4	180
W231022		17.60	0.14	3.1	4.36	0.076	3.09	29.2	16.7	1.72	1240	0.35	0.03	10.8	38.2	440
W231023		15.05	0.11	2.9	2.52	0.056	2.51	22.8	26.8	1.26	597	0.37	0.02	8.7	37.3	400
W231024		15.10	0.12	2.7	2.59	0.059	2.50	22.5	26.1	1.22	567	0.37	0.02	8.7	37.5	390
W231025		7.60	0.09	1.5	0.794	0.034	1.35	14.6	17.2	2.29	919	0.25	0.02	5.1	18.5	360
W231026		16.60	0.11	3.3	1.465	0.070	3.02	28.1	20.7	2.29	595	0.38	0.03	11.0	33.7	560
W231027		17.00	0.13	3.3	1.850	0.071	3.19	27.5	23.1	1.56	434	0.46	0.03	10.9	35.4	450
W231028		17.05	0.12	3.3	3.60	0.063	2.99	27.6	24.5	1.49	517	1.01	0.03	10.7	39.5	460
W231029		4.94	0.10	0.9	6.78	0.023	0.90	13.1	10.0	0.84	2110	1.84	0.01	2.6	13.2	320
W231030		14.85	0.10	3.0	3.48	0.061	2.61	25.9	24.2	1.28	539	0.68	0.03	9.4	33.4	470
W231031		16.60	0.12	3.3	3.53	0.070	2.94	29.7	25.3	1.25	537	0.71	0.03	10.5	38.1	510
W231032		16.25	0.13	3.3	2.31	0.066	2.88	27.1	39.2	1.36	646	0.35	0.03	10.5	35.1	460
W231033		14.10	0.12	2.7	0.586	0.059	2.35	23.6	98.6	1.73	592	0.31	0.03	9.0	34.8	390
W231034		13.95	0.11	2.8	0.444	0.060	2.38	22.5	93.1	1.86	594	0.24	0.03	8.7	33.9	370
W231035		12.10	0.10	2.3	0.286	0.054	1.99	19.6	99.9	1.48	491	0.42	0.02	7.3	30.7	310
W231036		10.40	0.11	2.2	0.270	0.040	1.74	17.1	92.8	1.24	461	0.51	0.02	6.1	23.4	330
W231037		16.65	0.10	3.2	1.355	0.063	3.01	26.9	41.8	1.50	301	1.11	0.03	10.0	44.1	470
W231038		0.18	0.08	<0.1	<0.005	<0.005	0.03	0.6	1.2	12.75	211	0.13	<0.01	0.2	1.4	180
W231039		13.55	0.13	2.7	0.557	0.072	2.47	22.4	55.1	1.79	518	0.80	0.03	8.3	35.1	470
W231040		15.35	0.09	2.9	0.148	0.079	2.85	25.9	55.4	2.35	649	0.55	0.03	9.7	35.2	510
W231041		16.55	0.12	3.0	0.232	0.064	2.98	28.6	56.1	2.15	696	0.34	0.03	10.4	33.0	590
W231042		10.65	0.12	1.9	29.6	0.044	1.78	22.7	15.6	0.36	783	3.74	0.02	5.6	26.5	540
W231043		17.35	0.10	3.4	1.245	0.066	3.22	30.2	19.0	1.55	736	0.37	0.02	11.5	36.8	540
W231044		16.35	0.12	3.2	2.01	0.058	2.81	27.0	19.4	1.52	871	0.28	0.02	10.4	36.8	480
W231045		15.40	0.07	2.9	1.870	0.058	2.83	28.5	18.7	1.45	767	0.30	0.03	10.1	37.4	510
W231046		12.25	0.06	2.4	0.303	0.046	2.18	23.2	55.9	1.45	567	0.41	0.02	7.8	36.9	470
W231047		7.93	0.05	1.7	0.113	0.032	1.57	16.2	27.7	1.36	624	0.43	0.02	4.9	18.2	320
W231048		8.51	0.05	1.7	0.093	0.034	1.70	17.7	43.1	1.51	660	0.47	0.02	5.2	18.9	320
W231049		5.26	0.05	1.2	0.056	0.021	1.06	12.5	28.3	1.33	746	0.30	0.02	3.4	12.2	220
W231050		8.95	0.06	1.9	0.063	0.036	1.81	19.2	39.8	1.32	435	0.33	0.03	5.8	21.0	310
W231051		18.20	0.07	3.2	0.127	0.070	3.47	33.6	40.7	1.91	323	0.26	0.03	12.1	43.9	610
W231052		16.80	0.07	3.1	0.074	0.068	3.18	30.7	88.0	2.03	435	0.40	0.03	11.4	36.8	570
W231053		11.60	0.07	2.3	0.277	0.047	2.11	22.3	65.1	1.58	547	0.36	0.02	7.3	25.4	510

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231018		11.9	80.1	0.003	2.88	3.50	13.3	<1	1.4	194.0	0.46	0.07	5.84	0.359	5.90	1.4
W231019		16.9	135.0	<0.002	4.80	7.56	20.7	<1	2.7	105.5	0.81	<0.05	9.27	0.560	12.35	2.0
W231020		25.9	137.0	<0.002	4.78	36.5	20.0	1	3.8	124.5	0.83	0.09	10.20	0.563	28.2	2.2
W231021		2.0	1.2	<0.002	<0.01	0.15	0.2	<1	<0.2	49.5	<0.05	<0.05	0.08	<0.005	0.04	0.8
W231022		24.2	141.0	<0.002	5.11	7.65	19.1	1	2.7	144.0	0.76	0.06	9.75	0.527	15.10	2.0
W231023		16.0	112.5	<0.002	2.50	4.19	15.3	<1	2.0	101.0	0.63	0.09	7.23	0.502	7.92	1.5
W231024		16.3	112.0	<0.002	2.45	4.07	15.4	<1	2.0	99.0	0.64	0.08	7.31	0.493	7.59	1.5
W231025		9.3	59.5	<0.002	1.86	1.54	9.0	<1	1.1	190.5	0.36	<0.05	4.42	0.293	2.68	1.0
W231026		16.5	133.0	<0.002	3.37	2.42	16.7	<1	2.7	173.5	0.82	0.05	9.49	0.527	3.58	2.0
W231027		19.2	139.5	<0.002	4.30	0.73	18.2	<1	2.3	134.5	0.78	0.08	9.28	0.551	2.83	2.0
W231028		23.2	135.0	<0.002	4.67	2.14	17.1	<1	2.9	152.5	0.75	0.08	9.17	0.505	9.13	2.1
W231029		8.8	38.8	0.002	1.40	47.7	5.5	1	0.8	1005	0.19	0.07	3.25	0.086	25.4	6.4
W231030		19.6	119.0	0.002	3.90	1.87	14.8	1	2.2	139.5	0.67	0.10	8.79	0.463	10.45	2.0
W231031		22.2	132.0	<0.002	4.20	6.94	16.6	1	2.4	131.0	0.73	0.08	9.58	0.499	11.00	2.1
W231032		19.7	128.5	<0.002	3.89	3.50	17.2	<1	3.0	144.0	0.72	<0.05	9.06	0.513	6.66	1.9
W231033		17.6	114.5	<0.002	1.27	0.56	15.7	<1	1.8	144.5	0.64	0.05	7.49	0.476	1.85	1.5
W231034		19.5	116.0	<0.002	0.66	0.57	15.5	<1	1.7	144.5	0.63	0.07	7.49	0.456	1.30	1.6
W231035		14.4	95.3	<0.002	1.04	0.51	13.1	<1	1.4	146.0	0.51	<0.05	6.28	0.445	1.49	1.3
W231036		13.9	79.9	<0.002	1.49	0.79	9.3	<1	2.1	152.5	0.42	<0.05	5.94	0.367	1.81	1.3
W231037		25.9	142.5	0.003	2.50	0.68	18.1	1	2.7	147.5	0.71	0.07	8.90	0.564	4.57	2.1
W231038		2.0	1.1	<0.002	<0.01	0.12	0.2	<1	<0.2	48.1	<0.05	<0.05	0.07	<0.005	0.02	0.6
W231039		22.4	116.0	0.002	1.77	0.63	15.0	1	2.9	152.0	0.60	0.07	7.54	0.484	3.63	1.6
W231040		18.3	139.0	<0.002	0.71	0.70	16.3	<1	2.1	196.5	0.67	0.06	8.55	0.516	1.33	1.8
W231041		17.8	141.5	<0.002	1.80	0.55	17.0	<1	2.3	270	0.76	0.06	9.51	0.533	2.11	1.9
W231042		18.6	82.3	0.003	3.68	111.0	8.4	1	2.1	457	0.42	0.14	6.76	0.226	71.7	4.4
W231043		19.5	148.0	<0.002	5.01	2.77	17.8	<1	2.4	162.0	0.82	0.06	9.85	0.569	5.08	2.0
W231044		16.9	130.0	<0.002	4.56	4.84	17.5	<1	2.6	129.0	0.74	<0.05	8.71	0.548	8.35	1.9
W231045		18.8	123.0	<0.002	4.86	4.24	16.7	<1	2.4	122.0	0.71	0.06	9.39	0.537	7.06	1.8
W231046		17.2	103.0	<0.002	3.90	0.59	13.5	<1	1.7	138.0	0.55	0.05	6.90	0.459	2.51	1.4
W231047		16.1	72.6	<0.002	0.76	0.38	7.6	<1	1.1	124.0	0.38	<0.05	5.54	0.254	0.75	1.1
W231048		16.2	81.3	<0.002	0.44	0.59	8.1	<1	2.4	129.0	0.39	<0.05	6.16	0.261	0.76	1.2
W231049		7.8	51.0	<0.002	0.21	0.31	5.0	<1	0.8	131.0	0.25	<0.05	3.98	0.198	0.50	0.8
W231050		11.7	83.8	<0.002	0.37	0.50	9.0	<1	1.2	115.5	0.42	<0.05	6.24	0.317	0.73	1.3
W231051		19.3	160.0	<0.002	0.72	0.77	18.4	<1	2.2	124.5	0.82	<0.05	11.20	0.567	1.09	2.1
W231052		12.3	145.5	<0.002	0.16	0.35	18.1	<1	2.0	105.0	0.76	0.06	10.40	0.588	0.93	1.9
W231053		12.4	89.4	<0.002	1.26	0.73	12.5	<1	1.5	140.0	0.53	<0.05	7.27	0.401	1.50	1.4

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203348

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W231018		96	12.6	13.7	71	69.0		0.34
W231019		161	9.5	20.1	87	112.5		0.21
W231020		162	11.6	22.2	104	123.0	1.475	1.09
W231021		2	0.1	0.8	17	0.5		<0.01
W231022		147	7.3	20.5	83	107.5		0.42
W231023		157	4.7	16.6	70	98.4		0.27
W231024		154	4.7	16.0	69	95.6		0.26
W231025		74	2.0	13.9	46	57.1		0.13
W231026		143	5.5	20.1	87	112.5		0.02
W231027		149	1.5	20.1	84	118.5		<0.01
W231028		140	3.6	19.8	78	115.5		<0.01
W231029		32	19.1	15.2	24	32.3	1.465	2.75
W231030		128	3.2	18.6	86	99.6		0.02
W231031		137	5.7	20.7	92	115.5		0.03
W231032		138	4.4	20.2	98	107.5		0.10
W231033		133	1.3	17.4	84	94.5		<0.01
W231034		128	1.2	17.7	78	95.9		<0.01
W231035		126	1.9	14.3	78	81.4		<0.01
W231036		103	1.5	12.0	65	72.2		0.02
W231037		176	2.1	18.6	113	109.5		<0.01
W231038		3	0.1	0.8	18	0.5		<0.01
W231039		139	2.5	16.4	93	89.9		<0.01
W231040		138	2.3	19.6	232	101.0		<0.01
W231041		143	1.5	21.5	78	109.0		<0.01
W231042		66	8.8	21.6	136	67.6	3.62	7.75
W231043		147	6.2	22.6	83	117.5		0.05
W231044		150	9.1	20.6	69	110.5		0.62
W231045		147	7.9	20.4	76	102.5		0.55
W231046		126	2.1	15.9	63	85.4		<0.01
W231047		70	1.6	11.9	54	56.7		<0.01
W231048		70	1.1	13.6	41	61.1		<0.01
W231049		54	0.7	8.9	74	43.4		<0.01
W231050		86	1.2	12.4	33	68.0		<0.01
W231051		148	2.2	21.6	59	116.5		<0.01
W231052		157	2.3	20.3	93	111.5		<0.01
W231053		110	2.6	15.7	74	86.2		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 24- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17203348

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE WH17207388

Project: Nadaleen

P.O. No.: N17- 103

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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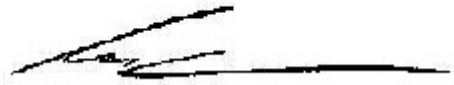
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 2- NOV- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207388

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232612		1.39	0.06	4.20	4.4	430	0.76	0.04	16.20	0.08	55.3	16.6	27	1.98	17.4	3.54
W232613		5.64	0.05	8.70	26.1	390	2.29	0.34	2.25	0.05	85.0	18.3	67	9.98	35.2	5.01
W232614		9.92	0.97	9.39	15.6	390	2.36	0.35	1.08	0.08	94.4	23.1	72	11.55	40.6	4.53
W232615		9.75	0.07	9.67	23.0	360	2.33	0.35	0.28	0.05	78.7	22.0	74	10.70	40.3	4.74
W232616		9.91	0.08	9.56	7.7	370	2.35	0.38	0.24	0.02	72.7	17.7	75	10.95	43.1	4.13
W232617		10.07	0.20	9.42	9.1	360	2.20	0.37	0.24	0.02	64.8	19.2	74	8.81	37.6	4.28
W232618		4.56	0.92	9.11	12.9	380	2.35	0.35	0.27	0.05	69.0	29.1	76	11.00	35.1	4.34
W232619		3.61	0.12	9.63	11.0	400	2.33	0.33	0.18	<0.02	63.5	16.2	76	12.15	34.2	4.36
W232620		0.29	0.17	3.77	6410	200	0.81	0.12	11.90	0.14	41.4	11.5	45	11.40	34.8	2.85
W232621		11.06	0.46	9.50	27.5	380	2.23	0.33	0.23	0.58	77.8	19.7	75	12.50	31.3	4.01
W232622		11.96	0.10	9.03	6.8	410	2.20	0.30	0.24	0.02	66.1	15.6	72	12.70	29.4	4.52
W232623		11.46	0.06	9.01	6.6	420	2.06	0.30	0.34	<0.02	69.9	15.6	70	12.75	30.8	4.74
W232624		12.06	0.19	9.51	48.0	370	2.22	0.33	0.23	0.11	81.7	28.8	76	12.85	36.1	4.27
W232625		12.16	0.05	9.56	10.0	350	2.52	0.33	0.21	0.03	74.7	19.2	74	12.85	34.2	4.19
W232626		11.91	0.05	9.81	11.3	650	2.51	0.35	0.22	0.02	70.8	17.5	74	11.90	38.9	4.27
W232627		9.96	0.04	10.50	12.4	360	2.62	0.36	0.21	<0.02	66.4	18.7	84	13.70	37.6	4.39
W232628		10.60	0.04	9.53	7.9	330	2.66	0.35	0.19	<0.02	53.0	16.8	76	13.05	35.6	4.43
W232629		12.17	0.03	10.20	11.4	370	2.70	0.32	0.19	0.02	59.6	17.1	83	14.00	42.8	4.80
W232630		9.77	0.05	10.00	11.5	370	2.77	0.36	0.18	<0.02	64.9	17.9	80	12.95	39.3	4.72
W232631		8.17	0.06	9.86	16.7	370	2.74	0.36	0.24	<0.02	65.9	22.0	79	13.40	40.9	4.66
W232632		10.30	0.05	10.00	14.9	390	2.67	0.37	0.20	<0.02	57.5	21.0	79	14.25	43.6	4.51
W232633		10.33	0.05	9.91	7.9	540	2.65	0.37	0.17	<0.02	54.6	17.6	78	14.05	44.0	4.42
W232634		10.25	0.04	9.09	9.9	360	2.58	0.32	0.24	<0.02	54.7	17.2	75	13.40	35.4	4.55
W232635		11.07	0.07	9.36	14.5	370	2.79	0.35	0.22	0.02	56.3	17.5	77	15.80	37.3	4.25
W232636		11.26	0.09	9.24	13.1	380	2.41	0.34	0.24	0.03	64.5	18.2	75	14.60	42.1	4.42
W232637		12.59	0.06	7.18	4.6	430	2.01	0.29	1.26	0.03	76.5	14.9	61	16.80	23.4	3.63
W232638		<0.02	0.07	7.33	5.0	430	2.08	0.30	1.32	0.02	77.1	15.1	61	16.85	23.3	3.71
W232639		12.26	0.03	7.89	3.0	460	2.25	0.23	1.26	0.03	80.6	15.8	64	19.90	25.6	3.85
W232640		7.00	<0.01	0.08	<0.2	30	0.06	0.02	19.30	0.06	1.58	0.7	1	0.22	2.4	0.44
W232641		12.31	0.02	7.47	3.0	400	2.02	0.28	1.00	0.03	78.6	14.6	61	23.5	17.2	4.28
W232642		12.53	0.05	8.14	4.8	370	2.08	0.24	0.72	<0.02	81.9	15.7	63	26.3	25.6	3.79
W232643		12.46	0.87	7.78	10.8	520	2.12	0.20	1.60	0.03	76.9	16.9	57	17.65	237	3.74
W232644		5.37	0.78	7.95	10.0	380	2.24	0.18	1.63	0.03	79.5	17.1	59	18.45	228	3.74
W232645		11.77	0.19	8.20	15.0	570	2.33	0.38	1.40	<0.02	81.5	17.7	60	16.10	55.8	4.13
W232646		7.03	<0.01	0.05	<0.2	30	0.06	0.02	20.8	0.07	1.12	0.7	1	0.13	1.5	0.48
W232647		0.28	0.68	1.92	>10000	150	0.55	2.58	25.7	0.16	28.1	4.6	26	5.75	15.7	1.40

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Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207388

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232612		9.83	0.16	2.7	0.027	0.042	0.42	26.8	41.1	2.16	599	0.56	1.52	27.1	26.0	1210
W232613		22.3	0.22	3.0	0.022	0.070	3.22	41.2	62.5	1.08	2490	0.65	0.32	14.9	37.1	760
W232614		24.3	0.23	3.1	0.059	0.078	3.29	47.9	71.2	1.19	984	0.50	0.38	15.7	43.9	770
W232615		24.7	0.22	2.9	0.034	0.078	3.59	36.3	69.7	1.04	1620	0.29	0.24	13.5	42.3	640
W232616		24.6	0.22	3.0	0.029	0.075	3.65	33.4	84.3	1.05	769	0.20	0.21	13.5	43.0	700
W232617		23.8	0.20	2.9	0.031	0.076	3.64	29.7	120.5	1.12	875	0.22	0.19	13.1	39.6	580
W232618		23.4	0.20	2.9	0.034	0.070	3.50	32.8	70.3	1.15	682	0.86	0.22	12.9	42.4	490
W232619		24.5	0.21	3.1	0.018	0.073	3.68	30.0	71.3	1.25	987	0.20	0.23	13.8	40.3	430
W232620		9.77	0.16	2.0	15.65	0.034	1.80	21.7	9.9	2.55	1150	1.80	0.02	6.0	26.3	440
W232621		23.6	0.22	3.1	0.056	0.072	3.59	39.0	62.9	1.25	483	1.26	0.24	13.8	37.8	570
W232622		23.1	0.20	3.0	0.013	0.068	3.47	31.6	58.2	1.33	743	0.18	0.21	13.1	37.0	660
W232623		22.8	0.20	3.0	0.006	0.072	3.34	34.4	65.9	1.41	891	0.22	0.20	12.9	37.4	620
W232624		24.5	0.22	3.1	0.030	0.073	3.43	41.6	77.4	1.35	708	0.54	0.22	14.1	44.3	470
W232625		24.7	0.22	2.8	0.014	0.072	3.89	35.9	70.1	1.28	738	0.28	0.22	13.6	39.7	800
W232626		25.2	0.21	2.6	0.015	0.070	3.84	34.1	88.1	1.24	506	0.21	0.22	13.3	40.9	750
W232627		27.5	0.22	2.7	0.008	0.072	4.21	30.4	62.9	1.28	511	0.30	0.31	14.4	43.6	820
W232628		25.3	0.21	2.8	0.017	0.075	3.84	24.0	60.2	1.23	447	0.25	0.29	13.7	42.0	820
W232629		26.6	0.23	2.7	0.005	0.070	4.09	27.1	62.9	1.32	674	0.22	0.30	14.7	45.0	730
W232630		25.7	0.21	2.7	0.012	0.075	4.05	30.1	62.0	1.29	837	0.31	0.26	13.9	44.3	680
W232631		26.0	0.22	2.7	0.023	0.070	4.01	30.5	65.0	1.30	928	0.31	0.24	14.1	45.5	770
W232632		26.1	0.20	2.7	0.006	0.072	4.09	26.0	63.4	1.29	824	0.25	0.24	14.1	45.1	720
W232633		26.4	0.20	2.7	<0.005	0.071	4.06	23.8	70.3	1.27	468	0.24	0.24	13.9	43.8	680
W232634		23.4	0.21	2.8	0.005	0.073	3.71	24.6	64.3	1.35	713	0.26	0.22	12.9	39.6	850
W232635		24.7	0.20	2.9	0.019	0.076	3.88	25.8	64.4	1.34	397	0.29	0.23	13.8	40.9	810
W232636		24.0	0.22	2.7	0.006	0.071	3.82	30.0	88.1	1.35	835	0.22	0.22	13.3	39.6	660
W232637		18.30	0.21	2.9	0.006	0.063	3.11	39.7	93.6	1.61	821	0.28	0.07	11.4	33.9	640
W232638		18.35	0.33	3.0	0.007	0.066	3.19	39.8	94.5	1.65	849	0.31	0.07	11.4	34.9	670
W232639		19.95	0.23	3.0	0.005	0.067	3.49	42.4	88.2	1.67	835	0.13	0.08	11.9	33.5	800
W232640		0.24	0.14	<0.1	<0.005	<0.005	0.03	0.8	1.3	12.30	184	0.12	0.01	0.3	1.7	250
W232641		19.00	0.22	3.1	0.022	0.065	3.41	40.2	75.5	1.51	685	0.11	0.08	11.9	31.1	560
W232642		20.9	0.22	3.1	0.019	0.063	3.59	43.6	96.0	1.53	445	0.11	0.08	12.2	33.8	450
W232643		18.90	0.10	3.0	<0.005	0.056	3.33	40.1	129.5	1.92	1220	3.16	0.08	10.5	35.3	460
W232644		19.35	0.12	3.0	0.009	0.056	3.38	41.8	122.5	1.93	1270	3.25	0.08	10.6	33.2	510
W232645		19.65	0.13	2.9	0.048	0.057	3.40	42.9	103.5	1.67	890	2.37	0.08	10.8	36.4	520
W232646		0.15	<0.05	<0.1	<0.005	<0.005	0.02	0.5	1.2	13.25	205	0.22	<0.01	0.1	1.7	170
W232647		4.77	0.06	0.8	6.28	0.016	0.96	14.1	9.0	0.92	2280	1.80	0.01	2.5	13.8	340

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Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207388

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232612		3.3	14.7	<0.002	0.06	0.20	9.2	1	1.0	907	1.50	<0.05	4.32	0.733	0.11	1.3
W232613		12.7	116.5	<0.002	0.07	1.27	14.4	<1	2.5	197.5	0.97	0.06	13.35	0.443	0.72	2.8
W232614		22.9	141.0	<0.002	0.07	1.28	15.4	<1	2.6	163.5	1.05	0.07	14.95	0.460	0.79	2.9
W232615		16.0	134.5	<0.002	0.06	1.28	15.2	<1	2.7	122.5	0.91	0.09	13.65	0.409	0.82	2.9
W232616		15.3	134.0	<0.002	0.03	0.66	15.3	<1	2.7	128.0	0.91	0.09	12.85	0.407	0.79	2.8
W232617		15.1	133.0	<0.002	0.08	0.72	15.0	<1	2.7	231	0.89	0.09	12.20	0.417	0.82	2.7
W232618		21.9	134.0	<0.002	0.10	0.62	14.7	<1	2.6	110.5	0.89	0.06	12.40	0.394	0.77	2.7
W232619		18.5	144.5	<0.002	0.05	0.69	15.5	<1	2.8	92.8	0.97	0.06	12.35	0.435	0.78	2.9
W232620		10.2	84.5	<0.002	2.57	23.7	9.6	1	1.6	308	0.42	<0.05	5.83	0.265	44.7	6.2
W232621		38.8	150.5	<0.002	0.32	1.84	14.9	1	2.7	97.8	0.96	<0.05	14.25	0.422	1.03	3.3
W232622		9.2	140.0	<0.002	0.07	0.46	14.7	<1	2.6	89.5	0.89	0.05	12.35	0.409	0.79	2.2
W232623		13.1	137.5	<0.002	0.06	0.44	14.6	<1	2.6	93.0	0.88	0.05	12.75	0.394	0.76	2.3
W232624		72.9	150.5	0.002	0.23	2.25	15.8	<1	2.7	93.5	0.94	0.05	14.75	0.423	0.96	3.3
W232625		15.2	142.0	<0.002	0.11	0.63	15.3	<1	2.7	108.5	0.89	0.06	13.25	0.390	0.85	3.3
W232626		15.9	139.5	<0.002	0.11	0.55	14.9	<1	2.6	190.0	0.93	0.07	12.55	0.392	0.86	2.7
W232627		17.6	141.0	<0.002	0.14	0.60	16.1	<1	2.8	115.5	0.97	0.07	12.65	0.417	0.97	3.3
W232628		10.2	124.5	<0.002	0.11	0.47	15.3	<1	2.7	99.4	0.93	0.06	10.80	0.412	0.85	3.2
W232629		22.5	135.5	<0.002	0.13	0.49	16.2	<1	2.8	110.0	0.99	0.06	11.95	0.419	0.82	3.0
W232630		18.6	135.5	<0.002	0.20	0.54	15.9	<1	2.7	110.5	0.95	0.07	12.75	0.414	0.90	3.1
W232631		21.3	132.5	<0.002	0.12	0.62	15.9	<1	3.0	106.0	0.94	0.07	12.35	0.408	0.84	3.3
W232632		22.6	127.0	<0.002	0.07	0.59	15.6	<1	3.0	110.0	0.97	0.06	11.90	0.411	0.85	3.3
W232633		7.5	126.0	<0.002	0.04	0.45	15.9	<1	2.8	113.5	0.96	0.06	11.20	0.408	0.88	3.1
W232634		22.4	121.0	<0.002	0.05	0.48	15.3	<1	2.5	107.0	0.88	0.05	11.00	0.412	0.79	3.0
W232635		12.7	130.0	<0.002	0.11	0.60	15.7	<1	2.7	100.5	0.93	0.06	10.10	0.427	0.83	2.8
W232636		18.6	132.5	<0.002	0.04	0.49	15.4	<1	2.6	147.0	0.90	0.07	12.25	0.404	0.80	3.0
W232637		52.5	150.5	<0.002	0.03	0.51	13.6	<1	2.1	267	0.75	0.05	13.25	0.387	0.85	2.1
W232638		57.9	151.5	<0.002	0.04	0.54	13.5	<1	2.1	274	0.78	<0.05	13.65	0.404	0.90	2.1
W232639		21.4	171.0	<0.002	0.01	0.44	14.3	<1	2.3	151.5	0.80	<0.05	14.30	0.408	0.87	2.4
W232640		1.0	1.5	<0.002	<0.01	0.12	0.2	<1	<0.2	45.3	<0.05	<0.05	0.14	0.005	0.02	0.8
W232641		12.1	176.5	<0.002	0.01	0.56	13.9	<1	2.3	124.5	0.79	<0.05	13.35	0.415	0.88	1.9
W232642		15.0	183.5	<0.002	0.02	0.42	13.9	<1	2.3	115.0	0.79	0.05	14.95	0.384	1.02	2.2
W232643		14.1	151.5	<0.002	0.05	0.40	13.5	<1	2.0	132.5	0.73	<0.05	13.80	0.380	0.91	2.2
W232644		10.0	156.0	<0.002	0.05	0.41	14.2	<1	2.1	134.0	0.76	<0.05	13.80	0.391	0.84	2.2
W232645		16.9	148.5	<0.002	0.62	0.46	14.8	<1	2.1	185.5	0.77	0.06	14.35	0.397	1.24	2.4
W232646		1.2	1.0	<0.002	0.01	0.09	0.1	<1	<0.2	48.3	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W232647		7.3	40.5	<0.002	1.47	44.5	5.5	1	0.6	1055	0.18	0.05	3.15	0.088	21.6	5.9

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207388

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W232612		97	0.7	15.7	49	111.5		<0.01
W232613		96	1.6	21.2	96	108.5		<0.01
W232614		101	3.8	22.4	124	111.5		<0.01
W232615		96	1.6	18.6	96	101.5		<0.01
W232616		100	1.7	18.9	91	106.5		<0.01
W232617		98	1.9	16.4	96	102.0		<0.01
W232618		90	4.2	17.7	154	104.0		0.01
W232619		95	1.8	17.6	106	109.0		<0.01
W232620		83	7.5	18.3	49	70.8		2.62
W232621		91	3.1	18.7	140	110.5		<0.01
W232622		87	1.6	18.0	95	105.5		<0.01
W232623		86	1.4	18.2	101	104.0		<0.01
W232624		89	1.5	19.2	127	111.5		<0.01
W232625		90	1.5	18.5	106	99.0		<0.01
W232626		85	1.5	16.4	99	89.3		<0.01
W232627		93	1.6	16.5	95	94.3		<0.01
W232628		93	1.5	15.8	109	97.4		<0.01
W232629		93	1.5	16.0	107	96.8		<0.01
W232630		95	1.6	16.4	112	97.5		<0.01
W232631		93	1.5	18.0	107	100.0		<0.01
W232632		92	1.5	15.7	116	95.4		<0.01
W232633		91	1.5	14.9	106	93.6		<0.01
W232634		96	1.4	16.5	114	96.6		<0.01
W232635		98	1.5	16.5	114	102.5		<0.01
W232636		90	1.4	16.4	123	94.0		<0.01
W232637		84	1.4	18.4	92	104.5		<0.01
W232638		87	1.4	19.0	95	105.5		<0.01
W232639		87	1.4	19.9	101	109.0		<0.01
W232640		2	0.1	0.8	15	0.5		<0.01
W232641		89	1.4	18.9	87	113.0		<0.01
W232642		80	1.3	21.0	98	113.5		<0.01
W232643		80	1.2	18.4	115	109.0		<0.01
W232644		82	1.3	19.3	112	109.5		<0.01
W232645		89	1.3	19.2	112	106.0		<0.01
W232646		2	0.1	0.7	17	<0.5		<0.01
W232647		33	17.2	15.4	25	31.0	1.420	2.64

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207388

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 31- OCT- 2017
Account: RCM

CERTIFICATE WH17207391

Project: Nadaleen

P.O. No.: N17- 104

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

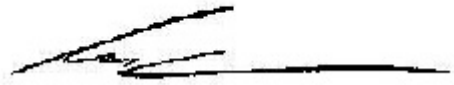
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17207391

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231054		8.09	0.20	6.47	2970	300	1.57	0.29	3.60	0.16	65.5	17.3	62	19.65	55.6	4.57
W231055		8.65	0.14	6.70	814	220	1.99	0.29	3.12	0.08	67.5	19.6	69	22.9	60.5	5.11
W231056		8.49	0.17	5.98	7180	200	1.56	0.26	4.37	0.12	58.3	16.8	60	14.85	56.8	4.23
W231057		8.67	0.08	5.92	354	210	1.57	0.24	3.01	0.11	58.3	16.1	64	18.30	52.5	4.70
W231058		0.26	0.19	3.90	6520	210	0.92	0.14	12.20	0.15	43.0	12.0	45	10.90	39.8	2.95
W231059		8.93	0.09	6.55	126.5	230	1.71	0.25	2.08	0.13	62.7	23.2	71	22.6	58.9	6.46
W231060		8.61	0.06	6.81	124.0	210	1.95	0.27	1.76	0.26	67.2	21.4	83	31.6	59.9	5.27
W231061		7.95	0.08	6.31	94.3	290	1.73	0.26	2.23	0.15	63.7	18.8	78	29.8	57.8	5.15
W231062		8.37	0.10	6.75	134.5	260	1.92	0.28	1.86	0.09	67.7	22.9	81	35.1	61.0	5.26
W231063		7.99	0.06	5.97	184.0	350	1.51	0.23	2.29	0.11	60.2	18.8	72	24.6	52.1	5.02
W231064		9.05	0.07	6.01	306	650	1.58	0.23	3.17	0.12	59.5	16.9	72	25.0	52.0	5.13
W231065		8.77	0.06	7.37	180.0	250	1.98	0.32	2.35	0.03	78.6	18.7	75	24.6	57.1	5.40
W231066		5.08	0.04	0.06	0.4	30	0.08	0.05	20.8	0.07	1.32	0.5	1	0.25	2.8	0.49
W231067		8.58	0.06	7.18	340	320	2.05	0.30	2.46	0.04	76.0	18.3	76	22.4	57.3	5.20
W231068		8.60	0.05	7.25	109.5	250	2.26	0.29	2.23	0.03	77.3	18.4	77	24.6	59.5	5.09
W231069		7.91	0.06	7.58	135.0	280	2.22	0.31	2.87	0.03	78.9	19.4	70	22.9	59.6	5.14
W231070		7.32	0.06	7.33	5320	300	1.84	0.28	3.33	0.05	77.2	20.0	67	17.80	58.7	5.06
W231071		<0.02	0.06	7.16	5320	290	1.96	0.29	3.25	0.06	75.6	19.5	66	17.30	56.3	4.73
W231072		7.15	0.07	7.27	167.5	290	2.13	0.29	2.79	0.02	76.3	18.4	74	23.0	58.9	5.47
W231073		7.87	0.05	7.03	331	240	2.01	0.28	3.09	0.03	73.5	18.2	78	27.2	58.2	5.12
W231074		7.86	0.06	7.44	1545	620	2.11	0.30	2.71	0.05	79.4	19.8	78	32.7	61.2	5.21
W231075		3.65	0.07	7.77	1815	370	2.16	0.31	2.73	0.05	81.9	20.5	79	34.7	63.6	5.53
W231076		7.93	0.07	7.21	257	250	2.12	0.29	2.29	0.04	77.3	19.5	75	37.5	58.9	5.31
W231077		8.18	0.06	7.61	40.3	250	1.95	0.31	2.20	0.04	82.4	19.6	79	43.3	63.3	5.45
W231078		8.04	0.04	7.34	145.5	280	2.16	0.28	2.40	0.05	77.1	18.7	74	26.1	61.3	5.32
W231079		7.83	0.06	6.37	110.5	1220	1.68	0.27	4.35	0.05	66.8	16.9	62	24.7	51.8	5.44
W231080		4.75	0.01	0.07	<0.2	50	0.07	0.04	21.5	0.07	1.72	0.6	1	0.24	1.8	0.49
W231081		8.48	0.05	5.75	95.0	1220	1.63	0.22	5.60	0.03	61.4	14.8	57	27.2	46.9	5.50
W231082		0.26	0.66	1.91	>10000	160	0.45	2.95	26.3	0.18	29.0	4.5	28	6.42	15.8	1.43
W231083		8.14	0.06	7.40	886	220	2.03	0.30	2.74	0.04	77.7	19.7	72	34.3	56.8	5.50
W231084		8.36	0.06	7.76	593	220	2.18	0.31	2.92	0.04	81.5	19.4	71	33.3	61.4	5.46
W231085		8.27	0.07	6.88	92.5	420	2.00	0.27	3.13	0.20	73.5	17.7	71	37.5	55.4	5.39
W231086		8.14	0.06	7.10	58.2	350	2.04	0.29	2.70	0.13	76.8	18.9	76	36.2	58.8	5.46
W231087		8.38	0.05	7.41	64.9	250	2.12	0.30	2.46	0.06	78.4	18.8	76	39.7	60.2	5.50
W231088		8.16	0.07	7.83	65.0	270	2.12	0.31	2.15	0.03	82.1	21.5	80	40.6	61.5	5.58
W231089		7.99	0.06	6.76	30.8	250	1.85	0.27	2.85	0.12	73.4	18.8	71	39.8	55.6	5.36

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CERTIFICATE OF ANALYSIS WH17207391

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231054		17.40	0.14	2.9	2.45	0.065	3.09	31.4	17.6	1.98	706	0.76	0.03	10.2	32.6	620
W231055		18.40	0.14	3.1	1.250	0.074	3.25	32.7	23.1	1.75	614	0.75	0.03	11.0	38.8	530
W231056		15.60	0.11	2.8	6.12	0.061	2.91	28.0	12.8	2.26	1400	0.62	0.03	9.7	30.7	450
W231057		15.45	0.11	2.7	1.405	0.054	2.84	27.9	16.1	1.54	805	0.74	0.03	9.7	30.8	470
W231058		10.50	0.08	1.9	15.60	0.033	1.89	22.1	11.8	2.62	1180	2.01	0.02	6.1	24.5	450
W231059		17.00	0.11	3.0	0.469	0.067	3.08	30.5	35.8	1.55	576	0.67	0.03	10.7	41.7	480
W231060		17.80	0.13	3.3	0.186	0.073	3.21	32.0	96.2	2.19	505	0.51	0.03	11.3	37.7	520
W231061		16.65	0.12	2.8	0.154	0.063	2.85	30.2	108.5	2.22	713	0.47	0.03	10.4	34.9	470
W231062		17.85	0.14	3.1	0.130	0.074	3.02	32.4	116.0	2.15	543	0.45	0.03	11.3	39.4	520
W231063		15.65	0.11	2.7	0.242	0.066	2.79	29.3	82.8	2.08	724	0.35	0.03	9.8	34.1	520
W231064		15.85	0.12	2.7	0.246	0.062	2.86	30.0	70.2	2.25	927	0.47	0.03	9.9	31.6	490
W231065		17.55	0.10	3.4	0.327	0.075	3.63	36.6	31.0	2.08	648	0.33	0.03	11.3	35.2	590
W231066		0.19	<0.05	<0.1	<0.005	<0.005	0.03	0.6	1.1	13.10	214	0.18	<0.01	0.2	1.4	190
W231067		17.00	0.10	3.3	0.286	0.075	3.51	35.1	28.0	2.33	543	0.24	0.03	11.1	35.3	610
W231068		17.40	0.11	3.5	0.308	0.071	3.57	35.6	29.4	2.22	526	0.26	0.03	11.4	34.8	600
W231069		18.40	0.12	3.7	0.519	0.082	3.72	37.0	20.6	1.72	658	0.38	0.03	11.9	37.1	600
W231070		17.65	0.09	3.4	1.235	0.086	3.60	36.2	13.7	1.77	555	0.26	0.03	11.6	39.0	570
W231071		17.30	0.10	3.5	1.190	0.077	3.48	35.0	12.9	1.73	538	0.22	0.03	11.4	37.9	560
W231072		17.55	0.08	3.4	0.364	0.079	3.56	35.4	20.4	2.04	701	0.26	0.03	11.4	37.9	570
W231073		16.90	0.10	3.4	0.214	0.069	3.42	34.2	29.5	2.22	664	0.18	0.03	11.1	37.4	590
W231074		18.30	0.11	3.6	0.412	0.077	3.62	36.6	29.4	2.07	636	0.32	0.03	11.8	38.6	580
W231075		18.95	0.11	3.9	0.444	0.089	3.78	37.8	31.2	2.14	623	0.33	0.03	12.3	40.8	610
W231076		17.40	0.11	3.4	0.170	0.077	3.43	35.6	69.3	2.43	586	0.22	0.04	11.5	37.6	580
W231077		18.60	0.12	3.7	0.139	0.090	3.64	37.2	95.5	2.50	579	0.29	0.04	12.3	40.2	590
W231078		17.50	0.11	3.4	0.146	0.083	3.57	35.8	34.3	2.33	609	0.26	0.03	11.6	37.6	630
W231079		15.25	0.08	2.9	0.331	0.072	3.07	30.0	30.7	2.50	1280	0.31	0.02	10.1	32.4	510
W231080		0.18	<0.05	<0.1	<0.005	<0.005	0.03	0.8	1.1	12.85	210	0.09	0.01	0.2	1.3	190
W231081		13.60	0.07	2.6	0.242	0.063	2.79	26.9	27.4	2.89	1540	0.16	0.02	9.2	28.9	470
W231082		4.69	0.05	0.9	7.07	0.026	0.95	13.9	9.1	0.94	2310	1.87	0.01	2.5	14.9	340
W231083		17.40	0.11	3.6	0.405	0.077	3.61	35.7	20.6	1.99	769	0.27	0.03	11.4	38.7	610
W231084		18.40	0.11	3.9	0.518	0.088	3.77	37.8	18.1	1.76	874	0.29	0.03	12.1	37.7	620
W231085		16.35	0.09	3.1	0.101	0.079	3.29	33.9	32.1	2.54	934	0.34	0.03	10.8	34.8	560
W231086		17.05	0.10	3.5	0.098	0.083	3.34	35.7	37.9	2.53	749	0.33	0.03	11.3	37.0	590
W231087		17.45	0.10	3.6	0.105	0.077	3.57	36.3	46.4	2.45	705	0.25	0.03	11.7	37.6	600
W231088		18.70	0.12	3.7	0.180	0.084	3.76	38.6	44.1	2.37	628	0.29	0.03	12.3	40.9	620
W231089		16.35	0.09	3.4	0.120	0.078	3.25	33.5	48.1	2.46	816	0.31	0.03	10.9	36.9	580

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207391

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231054		16.9	140.5	<0.002	3.72	6.22	17.5	<1	2.4	178.5	0.72	0.08	9.82	0.486	9.40	2.0
W231055		25.4	148.0	<0.002	4.53	3.45	18.4	<1	2.5	146.5	0.77	<0.05	10.05	0.520	4.41	2.0
W231056		12.2	122.0	<0.002	3.15	16.90	16.9	<1	1.9	152.5	0.67	0.05	8.47	0.480	14.85	1.7
W231057		13.6	124.5	<0.002	4.01	2.63	16.3	<1	1.9	130.0	0.69	<0.05	8.48	0.503	5.18	1.7
W231058		11.7	87.9	0.002	2.65	22.0	10.5	1	1.6	331	0.43	<0.05	6.11	0.275	47.2	6.5
W231059		26.0	140.5	<0.002	4.64	0.90	18.0	<1	2.1	164.0	0.75	0.05	9.06	0.573	3.07	1.9
W231060		19.0	158.0	<0.002	0.25	0.70	19.5	<1	2.1	111.0	0.79	0.05	9.65	0.602	1.25	2.0
W231061		20.2	141.5	<0.002	0.17	0.64	17.6	<1	1.9	148.0	0.71	0.06	8.79	0.554	1.05	1.8
W231062		18.4	150.5	<0.002	0.26	0.85	19.7	<1	2.2	113.5	0.78	0.07	9.64	0.597	1.12	2.0
W231063		20.2	132.0	<0.002	0.24	1.04	16.9	<1	1.9	125.0	0.70	<0.05	8.40	0.518	1.30	1.7
W231064		17.2	139.0	<0.002	1.24	0.68	17.2	<1	1.9	188.0	0.69	<0.05	8.46	0.521	1.50	1.7
W231065		16.6	160.5	<0.002	1.86	0.82	17.7	<1	2.4	114.0	0.88	0.08	10.90	0.565	2.12	2.2
W231066		1.8	1.5	<0.002	<0.01	0.39	0.2	<1	<0.2	46.8	<0.05	<0.05	0.09	0.005	<0.02	0.6
W231067		15.9	146.5	<0.002	0.68	1.90	17.4	<1	2.3	169.5	0.86	0.05	10.40	0.573	1.32	2.1
W231068		18.6	151.5	<0.002	1.05	1.05	17.8	<1	2.4	133.0	0.84	<0.05	10.55	0.565	1.50	2.1
W231069		18.6	158.0	<0.002	4.64	0.79	18.8	<1	2.4	138.5	0.89	0.06	11.40	0.587	3.43	2.3
W231070		16.7	139.0	<0.002	4.03	19.75	18.1	<1	2.5	161.5	0.85	0.07	10.55	0.582	2.19	2.1
W231071		16.0	135.5	<0.002	3.71	18.90	17.8	<1	2.5	158.0	0.86	0.06	10.50	0.568	2.04	2.1
W231072		19.1	142.5	<0.002	2.02	1.89	17.5	<1	2.4	153.0	0.84	0.07	10.40	0.569	2.18	2.1
W231073		12.5	138.0	<0.002	0.43	2.58	17.3	<1	2.3	163.0	0.83	<0.05	10.20	0.566	1.18	2.1
W231074		16.6	150.0	<0.002	1.51	5.37	19.0	<1	2.4	217	0.87	0.06	10.70	0.588	1.88	2.2
W231075		18.9	156.0	<0.002	1.85	6.34	19.6	<1	2.6	229	0.92	0.05	11.35	0.615	2.22	2.3
W231076		16.9	153.5	<0.002	0.33	1.21	18.3	<1	2.4	138.5	0.84	0.05	10.30	0.577	1.15	2.1
W231077		17.5	167.0	<0.002	0.12	0.65	19.2	<1	2.5	147.0	0.89	0.06	11.05	0.613	1.04	2.3
W231078		15.2	150.0	<0.002	0.46	0.91	18.3	<1	2.3	185.0	0.86	<0.05	10.45	0.581	1.17	2.1
W231079		18.8	125.5	<0.002	2.08	1.66	15.9	<1	2.1	275	0.74	0.05	8.87	0.517	2.08	1.8
W231080		1.6	1.5	<0.002	<0.01	0.22	0.2	<1	<0.2	52.0	<0.05	<0.05	0.12	0.005	<0.02	1.1
W231081		14.2	117.5	<0.002	1.30	0.84	14.0	<1	1.9	293	0.68	0.05	7.68	0.453	1.71	1.7
W231082		8.7	37.6	<0.002	1.46	44.7	5.4	1	0.7	1055	0.19	0.07	3.28	0.091	24.8	6.2
W231083		19.6	158.5	<0.002	3.11	2.25	17.6	<1	2.4	118.0	0.85	<0.05	10.70	0.565	2.97	2.2
W231084		16.7	171.5	<0.002	4.30	2.44	18.8	<1	2.5	137.0	0.91	<0.05	11.40	0.600	3.50	2.3
W231085		22.4	154.0	<0.002	0.21	0.48	16.7	<1	2.2	155.5	0.79	0.05	9.93	0.540	1.07	2.0
W231086		17.8	162.5	<0.002	0.19	0.46	17.9	<1	2.3	128.0	0.84	0.07	10.45	0.576	1.13	2.2
W231087		17.0	172.0	<0.002	0.23	0.53	18.2	<1	2.3	142.5	0.87	0.07	10.85	0.579	1.17	2.2
W231088		18.3	179.5	<0.002	0.42	0.66	19.1	<1	2.6	121.0	0.91	0.09	11.50	0.615	1.34	2.3
W231089		18.3	162.0	<0.002	0.23	0.47	17.0	<1	2.1	143.5	0.79	0.06	9.87	0.550	1.14	2.0

***** See Appendix Page for comments regarding this certificate *****

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207391

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W231054		131	7.9	20.8	71	107.0		0.44
W231055		138	6.1	21.3	72	114.0		0.02
W231056		128	10.2	20.1	61	103.5		1.70
W231057		135	8.1	19.1	76	95.2		0.11
W231058		87	8.0	18.3	48	75.0		2.63
W231059		155	2.9	20.2	95	111.0		<0.01
W231060		161	1.9	21.9	131	117.5		<0.01
W231061		151	2.0	20.9	90	106.0		<0.01
W231062		158	1.6	22.3	80	117.5		<0.01
W231063		137	1.6	20.3	94	101.0		0.05
W231064		137	2.3	19.5	81	101.0		0.02
W231065		146	3.7	22.9	80	112.0		<0.01
W231066		2	0.1	0.8	21	0.5		<0.01
W231067		146	5.4	21.7	82	107.0		<0.01
W231068		146	2.7	23.1	91	110.5		0.16
W231069		152	4.3	25.1	75	121.0		<0.01
W231070		151	17.2	22.4	64	113.5		0.01
W231071		147	16.8	22.1	63	114.0		0.01
W231072		148	6.9	22.0	80	114.5		<0.01
W231073		148	10.3	22.6	70	114.5		<0.01
W231074		154	9.0	23.8	77	120.0		<0.01
W231075		162	9.3	26.4	77	127.5		<0.01
W231076		149	2.6	23.1	82	114.5		<0.01
W231077		156	1.5	25.3	91	124.5		<0.01
W231078		150	5.6	23.8	84	115.0		<0.01
W231079		130	3.2	21.2	78	97.3		<0.01
W231080		3	0.1	1.0	19	0.8		<0.01
W231081		116	2.6	20.3	69	86.8		<0.01
W231082		34	19.8	15.1	26	30.3	1.430	2.69
W231083		149	4.9	23.9	81	115.5		0.29
W231084		155	7.3	25.1	89	125.0		0.04
W231085		139	1.5	22.5	109	107.0		<0.01
W231086		149	1.8	23.2	100	114.0		<0.01
W231087		149	1.5	24.0	85	116.0		<0.01
W231088		158	1.7	25.0	87	123.0		<0.01
W231089		142	1.9	23.0	91	116.0		0.01

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Project: Nadaleen

Finalized Date: 31- OCT- 2017
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CERTIFICATE OF ANALYSIS WH17207391

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE WH17207392

Project: Nadaleen

P.O. No.: N17- 105

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

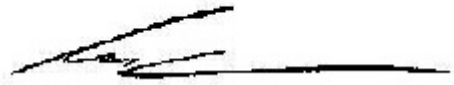
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17207392

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231090		8.49	0.06	6.81	89.7	220	1.81	0.41	2.40	0.04	67.1	17.8	70	41.6	63.1	5.30
W231091		8.09	0.07	7.56	69.0	320	2.19	0.35	2.00	0.02	72.3	20.3	72	35.0	60.3	5.54
W231092		8.24	0.07	7.73	89.9	240	2.38	0.35	1.70	0.03	75.7	20.6	75	32.8	61.3	5.32
W231093		0.27	0.27	3.77	>10000	180	0.72	0.19	10.10	0.63	42.3	11.6	46	8.64	53.5	2.96
W231094		8.63	0.07	7.47	101.0	230	2.00	0.33	1.45	0.03	71.9	20.4	73	39.2	59.3	5.22
W231095		8.69	0.06	7.63	75.8	240	2.10	0.35	1.53	0.04	74.7	20.4	74	42.7	61.8	5.34
W231096		7.62	0.05	7.49	62.5	300	2.21	0.34	1.66	0.03	73.5	20.0	73	37.7	60.4	5.21
W231097		8.87	0.05	7.83	64.6	240	2.44	0.35	1.46	0.02	76.7	19.5	76	35.1	61.0	5.48
W231098		8.01	0.11	7.93	80.6	290	2.44	0.36	2.02	0.05	75.8	22.5	72	30.1	60.4	5.44
W231099		7.76	0.10	6.90	101.0	250	2.15	0.29	2.00	0.04	67.0	20.0	70	32.7	57.6	5.25
W231100		3.71	0.09	6.84	73.6	230	2.06	0.28	1.98	0.03	64.7	19.5	71	31.2	57.2	4.97
W231101		8.50	0.09	7.73	52.1	240	2.47	0.35	1.15	0.09	73.1	22.6	77	39.5	55.7	5.31
W231102		9.17	0.04	6.69	32.5	300	1.88	0.28	2.59	0.13	63.8	14.2	71	32.5	52.7	5.01
W231103		8.61	0.07	7.59	32.8	280	2.01	0.32	1.87	0.26	70.8	21.9	76	33.6	55.4	5.30
W231104		8.16	0.08	7.72	19.9	310	2.15	0.33	1.79	0.90	72.4	21.5	77	33.4	56.8	5.47
W231105		8.40	0.08	7.58	31.7	310	2.14	0.33	1.46	0.13	70.4	21.7	75	36.0	55.4	5.17
W231106		8.13	0.08	6.28	23.0	210	1.69	0.27	1.70	0.13	62.5	16.5	69	28.6	50.8	4.53
W231107		8.02	0.04	5.89	40.2	210	1.64	0.25	2.49	0.03	60.8	16.1	68	29.7	51.5	4.67
W231108		8.15	0.04	6.20	98.5	190	1.74	0.26	2.08	0.06	58.3	18.3	77	25.8	56.0	5.15
W231109		7.90	0.05	6.24	57.5	190	1.79	0.24	2.19	0.03	57.9	21.6	71	30.1	61.8	5.23
W231110		6.97	0.05	6.07	72.4	190	1.46	0.24	2.30	0.16	56.2	23.4	76	28.9	64.2	5.11
W231111		6.67	0.04	5.89	150.0	270	1.50	0.24	2.21	0.15	51.9	21.8	76	24.0	62.8	5.16
W231112		7.48	0.04	5.40	49.2	330	1.39	0.22	2.42	0.22	48.8	21.4	72	18.35	59.3	4.77
W231113		0.73	0.16	6.38	42.5	300	0.97	0.16	2.36	0.34	31.7	32.3	90	9.14	131.5	7.51
W231114		2.86	0.08	7.45	49.5	240	1.48	0.28	2.15	0.22	52.5	42.8	86	24.1	166.5	8.36
W231115		6.59	0.11	7.56	41.4	380	1.60	0.27	2.98	0.29	53.4	40.2	83	22.0	167.5	8.49
W231116		0.26	0.60	1.78	>10000	140	0.50	2.85	24.3	0.14	23.9	4.9	26	5.39	16.6	1.32
W231117		7.54	0.09	7.05	67.1	160	1.19	0.25	3.11	0.21	49.0	35.3	78	22.6	155.0	8.28
W231118		6.96	0.01	0.05	15.5	30	<0.05	0.04	20.2	0.07	1.03	0.6	1	0.15	2.0	0.49
W231119		9.88	0.08	6.47	64.8	190	1.30	0.22	3.87	0.38	46.5	32.2	71	21.2	140.5	6.88
W231120		7.46	0.07	6.71	93.5	150	1.25	0.22	2.99	0.30	43.2	33.8	75	24.3	157.5	7.48
W231121		<0.02	0.08	6.88	115.0	150	1.41	0.23	3.03	0.33	44.3	34.7	76	24.7	162.0	7.65
W231122		11.18	0.08	6.84	82.5	170	1.45	0.23	3.49	0.36	44.7	36.5	73	31.3	164.0	7.56
W231123		9.08	0.08	6.88	74.8	190	1.53	0.24	2.93	0.23	43.9	34.1	74	32.0	159.0	7.33
W231124		7.02	0.01	0.09	5.0	30	0.05	0.04	20.0	0.07	1.24	0.8	1	0.42	4.7	0.51
W231125		8.59	0.09	5.99	81.6	340	1.62	0.30	4.83	0.52	59.4	22.8	71	21.3	94.1	5.49

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207392

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231090		17.15	0.11	3.2	0.092	0.072	3.24	32.6	33.2	2.32	708	0.21	0.03	11.3	34.6	570
W231091		19.20	0.12	3.5	0.242	0.077	3.62	36.4	23.8	1.79	597	0.35	0.03	12.3	38.2	580
W231092		20.1	0.13	3.5	0.165	0.081	3.68	37.0	24.6	2.09	489	0.47	0.03	13.4	37.0	600
W231093		10.15	0.10	1.8	27.4	0.040	1.70	23.4	14.3	0.36	740	3.38	0.02	5.6	26.1	530
W231094		19.20	0.14	3.4	0.129	0.077	3.60	35.5	36.8	2.11	461	0.34	0.03	12.2	37.4	600
W231095		19.95	0.13	3.6	0.108	0.082	3.63	36.5	54.0	2.21	490	0.26	0.04	13.1	38.3	640
W231096		19.45	0.15	3.5	0.097	0.076	3.56	36.2	40.3	2.14	511	0.30	0.03	12.9	38.2	590
W231097		20.0	0.16	3.6	0.118	0.084	3.77	37.0	37.6	2.14	444	0.26	0.03	12.8	38.3	580
W231098		20.5	0.14	3.4	0.329	0.084	3.80	36.7	21.4	1.47	558	0.33	0.03	12.9	40.9	630
W231099		18.05	0.12	3.1	0.230	0.073	3.25	33.2	34.0	1.66	547	0.34	0.03	11.0	36.9	560
W231100		17.55	0.13	3.3	0.225	0.071	3.28	32.3	30.5	1.63	524	0.31	0.03	10.7	35.8	540
W231101		20.5	0.14	3.5	0.454	0.076	3.73	36.5	34.0	1.76	390	0.50	0.03	11.1	42.5	570
W231102		17.10	0.12	3.0	0.212	0.072	3.19	31.7	42.6	2.22	732	0.63	0.03	10.5	29.3	520
W231103		19.70	0.15	3.5	0.429	0.073	3.71	35.7	32.0	2.14	510	0.54	0.04	11.5	40.5	580
W231104		20.2	0.15	3.5	0.474	0.083	3.74	36.5	36.6	2.10	512	0.64	0.04	11.6	42.2	650
W231105		19.90	0.14	3.5	0.469	0.075	3.65	35.5	38.7	1.97	427	0.50	0.04	11.4	42.6	560
W231106		16.35	0.14	3.0	0.238	0.064	2.98	30.3	52.2	1.89	432	0.48	0.03	9.7	32.1	660
W231107		15.15	0.13	2.9	0.100	0.061	2.72	28.4	62.9	2.14	738	0.53	0.03	10.0	31.2	460
W231108		15.75	0.13	3.0	0.067	0.064	2.88	29.0	55.8	2.10	644	0.49	0.03	10.5	34.4	470
W231109		17.35	0.11	2.8	0.073	0.062	2.85	27.9	84.0	2.17	717	0.33	0.03	10.4	39.2	550
W231110		17.00	0.12	2.9	0.072	0.057	2.73	27.3	140.0	2.16	658	0.57	0.03	10.1	41.3	530
W231111		16.45	0.09	2.9	0.203	0.060	2.49	25.4	175.0	1.93	557	0.49	0.03	9.9	39.8	470
W231112		15.15	0.10	2.7	0.206	0.054	2.10	23.0	249	1.96	604	0.41	0.02	9.2	39.1	420
W231113		16.90	0.09	2.1	0.061	0.071	1.02	13.5	132.5	1.60	1660	0.51	1.24	9.6	64.6	510
W231114		22.8	0.11	3.0	0.062	0.103	2.29	23.6	169.5	0.99	910	0.55	0.20	15.7	65.2	800
W231115		23.2	0.09	3.4	0.077	0.104	2.39	24.6	148.5	1.52	988	0.56	0.16	15.6	66.6	790
W231116		4.87	0.08	0.8	6.62	0.020	0.89	12.2	9.0	0.86	2120	1.70	0.01	2.5	13.8	310
W231117		20.6	0.08	2.9	0.036	0.092	1.78	21.8	119.0	2.84	953	0.38	0.40	14.0	59.9	710
W231118		0.19	0.05	<0.1	<0.005	<0.005	0.02	0.5	1.5	12.80	200	0.10	<0.01	0.2	1.8	160
W231119		18.40	0.10	2.8	0.048	0.092	2.05	19.9	103.5	2.51	1380	2.35	0.30	12.5	53.4	650
W231120		19.20	0.11	2.7	0.046	0.100	1.78	19.3	103.5	3.13	931	0.55	0.44	12.6	59.0	650
W231121		20.2	0.09	2.7	0.040	0.090	1.82	19.5	105.0	3.20	938	0.54	0.45	12.8	60.4	660
W231122		20.3	0.10	2.8	0.042	0.093	2.05	20.6	108.5	3.47	940	0.50	0.40	12.9	59.7	680
W231123		20.1	0.09	2.7	0.026	0.092	2.31	19.8	127.0	3.14	807	0.42	0.35	12.7	58.9	670
W231124		0.30	0.05	<0.1	<0.005	<0.005	0.03	0.6	1.6	12.90	207	0.09	0.01	0.3	2.0	170
W231125		16.60	0.10	3.1	0.481	0.084	2.79	28.6	41.0	2.79	841	1.95	0.06	11.5	44.7	500

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207392

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231090		15.3	164.5	<0.002	0.27	0.65	17.8	1	2.2	131.5	0.82	0.08	10.15	0.528	1.05	2.0
W231091		16.8	172.5	<0.002	2.64	1.15	19.6	<1	2.4	242	0.88	0.05	11.55	0.556	2.94	2.2
W231092		18.1	179.0	<0.002	0.88	1.20	21.2	1	2.6	136.0	0.90	0.06	11.45	0.549	1.70	2.1
W231093		16.1	79.7	0.002	3.47	105.5	8.7	1	1.9	429	0.39	0.14	6.72	0.215	65.1	3.9
W231094		19.0	184.0	<0.002	0.44	0.79	19.3	1	2.5	92.2	0.85	0.05	11.15	0.535	1.26	2.1
W231095		15.8	190.5	<0.002	0.31	0.58	20.8	<1	2.5	107.5	0.90	0.07	11.30	0.542	1.18	2.1
W231096		17.9	185.5	<0.002	0.38	0.55	20.5	<1	2.5	157.0	0.86	0.08	11.15	0.538	1.13	2.1
W231097		15.2	189.5	<0.002	0.56	0.58	20.3	<1	2.5	117.0	0.90	0.05	11.60	0.561	1.29	2.2
W231098		21.3	184.5	<0.002	4.35	0.87	21.8	1	2.6	144.0	0.89	0.05	11.50	0.545	2.92	2.2
W231099		16.2	163.5	<0.002	2.58	0.84	19.0	1	2.2	132.5	0.78	<0.05	10.30	0.527	1.90	1.9
W231100		15.5	159.0	<0.002	2.39	0.76	18.3	1	2.2	134.5	0.76	<0.05	9.88	0.515	1.81	1.9
W231101		26.7	184.5	<0.002	1.45	0.83	21.9	1	2.6	108.0	0.79	<0.05	11.20	0.492	1.30	2.1
W231102		10.9	162.5	<0.002	0.82	0.49	17.9	1	2.1	175.0	0.74	<0.05	9.55	0.496	1.13	1.8
W231103		23.8	185.0	<0.002	1.28	0.75	20.4	1	2.4	132.5	0.82	<0.05	10.75	0.503	1.28	2.1
W231104		30.4	188.0	<0.002	1.39	0.92	21.4	1	2.5	123.0	0.84	<0.05	11.10	0.514	1.39	2.2
W231105		26.5	183.0	<0.002	1.35	0.82	20.9	<1	2.5	103.5	0.83	<0.05	11.20	0.492	1.27	2.2
W231106		16.8	148.5	<0.002	0.68	0.63	16.7	1	2.0	135.0	0.69	<0.05	9.36	0.469	1.04	1.8
W231107		10.8	138.0	<0.002	0.27	0.38	16.4	<1	1.9	150.0	0.69	<0.05	8.79	0.502	0.98	1.7
W231108		14.2	139.0	<0.002	0.35	0.82	17.5	1	1.9	115.5	0.71	0.05	8.84	0.544	0.97	1.7
W231109		14.0	158.0	<0.002	0.44	0.55	20.4	<1	1.9	136.0	0.76	<0.05	8.52	0.516	1.04	1.7
W231110		13.6	152.0	<0.002	0.26	0.37	21.0	<1	1.8	139.5	0.74	<0.05	8.22	0.533	0.97	1.7
W231111		13.9	138.5	<0.002	1.70	0.48	19.6	<1	1.7	196.5	0.72	<0.05	7.92	0.547	1.67	1.6
W231112		14.6	112.0	<0.002	1.62	0.40	18.2	<1	1.6	203	0.64	<0.05	7.17	0.521	1.16	1.5
W231113		8.9	82.2	<0.002	0.06	0.53	26.0	1	1.3	61.5	0.65	0.16	3.42	0.777	0.86	1.0
W231114		13.5	156.5	<0.002	0.12	0.47	33.0	1	2.2	48.9	0.99	0.31	5.46	0.784	1.54	1.3
W231115		12.9	164.5	0.002	0.08	0.37	33.6	1	2.2	54.4	1.00	0.32	5.55	0.772	1.45	1.5
W231116		7.4	40.0	0.002	1.37	36.5	5.9	1	0.7	976	0.24	<0.05	2.98	0.084	23.1	5.6
W231117		10.5	117.5	0.002	0.16	0.32	29.5	1	2.0	61.4	0.92	0.25	4.94	0.742	1.18	1.3
W231118		1.8	1.1	<0.002	<0.01	0.09	0.2	<1	<0.2	49.6	0.07	<0.05	0.07	0.005	0.02	0.5
W231119		11.7	137.5	0.004	0.49	0.41	25.9	1	1.9	69.9	0.84	0.20	4.75	0.668	2.07	1.3
W231120		10.0	123.5	0.003	0.33	0.42	27.5	1	1.8	60.9	0.84	0.22	4.41	0.718	1.18	1.2
W231121		10.2	126.5	0.003	0.33	0.46	29.0	2	1.9	61.4	0.84	0.24	4.51	0.721	1.20	1.2
W231122		10.8	140.5	0.003	0.44	0.47	29.6	2	2.2	79.0	0.84	0.30	4.49	0.733	1.29	1.2
W231123		10.6	146.5	0.002	0.29	0.35	29.2	1	1.9	73.4	0.83	0.26	4.67	0.706	1.19	1.2
W231124		1.5	2.2	<0.002	0.01	0.08	0.3	<1	<0.2	51.1	0.07	<0.05	0.10	0.007	<0.02	0.6
W231125		15.4	141.5	0.006	1.96	0.66	20.9	1	2.2	104.5	0.80	0.20	7.86	0.525	5.83	1.7

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W231090		134	1.4	22.6	83	114.0		<0.01
W231091		144	2.9	23.8	82	120.5		<0.01
W231092		143	3.0	24.8	83	121.5		<0.01
W231093		63	8.5	21.4	137	64.6	3.50	7.95
W231094		139	1.7	24.8	85	118.5		<0.01
W231095		142	1.5	25.7	84	123.5		<0.01
W231096		140	1.5	25.0	79	120.0		<0.01
W231097		146	1.8	25.3	82	124.0		<0.01
W231098		150	2.0	25.1	80	119.0		<0.01
W231099		145	1.8	22.7	68	110.5		<0.01
W231100		145	1.8	21.4	67	110.0		<0.01
W231101		150	1.3	24.7	85	119.5		<0.01
W231102		134	1.3	21.3	94	107.0		<0.01
W231103		146	1.3	23.5	122	117.5		<0.01
W231104		147	1.4	24.6	229	118.5		<0.01
W231105		144	1.4	23.9	98	119.0		<0.01
W231106		132	1.2	21.3	102	100.5		<0.01
W231107		133	1.3	19.4	64	100.0		0.03
W231108		149	2.2	24.9	60	104.5		0.01
W231109		137	1.2	21.0	63	99.3		<0.01
W231110		148	1.3	19.9	121	98.1		0.01
W231111		147	1.7	18.1	103	110.5		<0.01
W231112		142	1.4	17.2	108	90.2		<0.01
W231113		218	2.3	19.6	113	75.5		<0.01
W231114		248	1.1	25.7	116	113.0		0.01
W231115		246	2.0	28.4	116	124.5		0.01
W231116		31	15.9	13.9	24	29.4	1.365	2.76
W231117		230	1.0	24.0	116	106.5		<0.01
W231118		2	0.1	0.7	17	0.6		<0.01
W231119		205	0.9	23.0	101	99.4		<0.01
W231120		223	0.8	21.9	109	108.5		<0.01
W231121		228	0.9	22.6	112	104.5		0.01
W231122		227	0.7	23.5	110	104.0		<0.01
W231123		226	0.8	22.5	104	101.0		<0.01
W231124		3	0.1	0.8	19	1.0		<0.01
W231125		160	1.5	21.1	94	104.5		0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207392

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Finalized Date: 31- OCT- 2017
Account: RCM

CERTIFICATE WH17207395

Project: Nadaleen

P.O. No.: N17- 106

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207395

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232648		12.08	0.02	8.89	90.2	490	2.89	0.33	0.49	<0.02	95.4	17.1	74	27.9	18.2	5.10
W232649		12.33	0.02	9.31	18.2	500	2.39	0.34	0.37	<0.02	99.7	18.7	74	23.5	15.7	5.56
W232650		12.05	0.01	8.71	131.5	720	2.69	0.37	0.25	0.02	93.5	16.2	66	20.7	10.5	5.01
W232651		12.47	0.01	8.93	7.7	430	2.70	0.35	0.47	<0.02	96.7	16.9	69	25.2	12.3	4.53
W232652		11.67	0.01	9.15	5.4	430	2.70	0.35	0.41	<0.02	98.5	17.7	71	27.3	10.5	5.05
W232653		11.15	0.03	9.12	7.2	580	2.46	0.35	0.67	0.02	100.0	16.5	67	23.0	12.7	5.03
W232654		10.53	0.09	8.60	8.3	360	2.33	0.32	0.47	<0.02	95.7	11.9	74	26.1	150.5	4.55
W232655		10.92	0.24	5.73	34.7	230	1.82	0.23	9.74	0.06	68.2	19.5	38	15.55	190.0	2.31
W232656		5.60	0.18	2.81	77.4	280	0.94	0.09	20.4	0.56	35.1	8.4	30	4.01	28.7	1.49
W232657		11.19	0.29	5.12	70.5	240	1.60	0.17	10.85	0.10	63.7	21.2	41	12.90	95.1	2.15
W232658		0.26	0.63	1.89	>10000	140	0.52	2.57	25.8	0.16	28.1	4.3	27	6.17	15.0	1.38
W232659		11.15	0.09	2.38	16.5	110	0.71	0.08	23.1	0.30	29.8	4.6	25	6.44	15.7	0.91
W232660		12.26	0.04	1.98	19.7	150	0.70	0.06	25.6	0.09	24.6	3.2	20	4.95	11.6	0.94
W232661		12.10	0.06	3.56	22.2	270	1.11	0.09	16.65	0.09	43.3	5.4	38	13.85	22.3	1.62
W232662		12.53	0.04	3.49	14.5	130	1.09	0.09	15.90	0.06	45.0	5.3	38	16.45	16.3	1.63
W232663		12.04	0.04	1.76	10.0	90	0.55	0.06	25.6	0.11	23.0	2.8	20	7.56	8.5	0.81
W232664		12.41	0.04	2.83	10.8	290	0.82	0.07	21.9	0.05	33.3	4.5	31	12.50	16.8	1.28
W232665		12.38	0.05	1.62	30.2	90	0.56	0.05	28.1	0.11	19.60	2.6	19	3.91	11.0	0.78
W232666		12.01	0.05	1.80	26.7	120	0.64	0.06	27.9	0.15	21.7	2.9	21	5.30	10.9	0.75
W232667		11.50	0.06	1.83	26.6	160	0.57	0.06	26.0	0.27	22.6	3.1	22	5.43	10.7	0.87
W232668		<0.02	0.05	1.81	26.9	150	0.53	0.06	25.9	0.25	22.3	3.0	21	5.32	10.7	0.85
W232669		11.40	0.05	1.46	21.6	90	0.45	0.04	29.0	0.20	17.80	2.5	16	4.43	8.8	0.67
W232670		6.99	0.01	0.04	0.3	80	0.06	0.03	20.8	0.07	1.16	0.5	1	0.12	1.9	0.46
W232671		10.68	0.04	3.63	42.4	260	1.20	0.11	17.40	0.09	42.1	5.6	36	17.40	23.2	1.65
W232672		11.25	0.07	3.54	76.7	240	1.12	0.10	17.20	0.08	43.9	5.8	38	15.95	18.2	1.59
W232673		0.26	0.30	4.15	>10000	190	0.73	0.20	11.00	0.68	47.2	11.5	47	9.94	56.4	3.21
W232674		11.01	0.05	2.22	188.0	120	0.75	0.06	17.95	0.10	28.5	3.9	28	7.63	12.5	1.04
W232675		10.82	0.04	2.97	92.4	160	1.02	0.08	16.70	0.07	35.4	5.2	36	19.05	16.7	1.26
W232676		10.61	0.02	2.34	24.0	130	0.88	0.08	23.6	0.11	27.6	3.7	24	9.63	15.5	1.13
W232677		10.79	0.04	1.57	39.4	350	0.55	0.05	25.8	0.09	20.2	2.8	17	3.07	10.4	0.80
W232678		6.94	0.01	0.07	0.3	150	0.10	0.02	21.0	0.08	1.23	0.6	1	0.37	1.8	0.48
W232679		11.08	0.09	2.25	18.1	160	0.82	0.06	23.5	0.34	25.2	3.5	26	9.05	11.2	1.00
W232680		11.10	0.04	2.57	12.6	270	0.78	0.07	21.6	0.10	31.8	3.6	29	11.20	15.6	1.24
W232681		10.92	0.11	2.21	22.4	190	0.82	0.06	23.0	0.10	27.1	4.2	24	7.83	15.1	1.17
W232682		11.74	0.18	4.04	114.0	310	1.42	0.11	11.40	0.06	46.1	7.4	45	26.1	25.2	2.15
W232683		5.94	0.20	4.25	94.8	330	1.27	0.12	10.95	0.08	45.4	7.8	47	26.7	28.0	2.14

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207395

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232648		21.8	0.11	3.3	0.519	0.072	4.41	47.6	51.9	1.21	281	0.46	0.08	11.7	37.1	500
W232649		22.6	0.11	3.3	0.225	0.078	4.59	51.1	38.5	1.40	274	0.34	0.08	11.8	41.6	480
W232650		21.7	0.11	3.0	0.902	0.081	4.29	48.2	28.6	0.94	203	0.22	0.07	11.5	36.2	510
W232651		22.4	0.11	3.1	0.253	0.079	4.56	49.7	30.6	1.28	347	0.20	0.08	11.7	38.7	560
W232652		23.0	0.12	3.1	0.020	0.080	4.70	48.6	44.2	1.28	270	0.22	0.09	12.2	38.2	480
W232653		22.1	0.11	3.1	0.092	0.077	4.49	51.2	90.2	1.42	347	0.19	0.08	11.7	36.5	490
W232654		20.7	0.13	3.4	0.112	0.070	4.07	48.8	107.5	1.44	230	0.19	0.08	11.6	34.6	460
W232655		14.00	0.09	2.6	0.046	0.055	2.61	34.4	70.0	2.18	1840	1.21	0.05	8.6	25.2	410
W232656		6.89	0.06	1.4	0.171	0.023	1.26	16.9	26.7	3.40	3290	0.79	0.04	4.6	12.3	350
W232657		12.20	0.07	2.5	0.072	0.047	2.31	31.5	77.6	2.91	2570	1.64	0.06	7.9	22.6	470
W232658		4.55	<0.05	0.9	7.12	0.019	0.96	13.7	8.8	0.92	2260	1.84	0.01	2.5	12.5	340
W232659		5.57	0.05	1.5	0.066	0.018	1.05	15.1	14.5	2.32	2920	1.00	0.05	4.0	11.5	300
W232660		4.58	0.05	1.0	0.032	0.018	0.88	12.5	16.9	2.51	1950	0.49	0.03	3.1	8.5	240
W232661		8.24	0.05	1.8	0.090	0.029	1.51	21.3	70.0	3.55	1140	0.65	0.06	5.7	14.7	580
W232662		7.97	0.06	2.1	0.067	0.031	1.46	21.5	69.7	3.94	836	0.62	0.13	5.8	13.7	440
W232663		3.93	<0.05	1.2	0.063	0.015	0.74	11.6	22.3	2.44	736	0.48	0.13	2.9	6.9	250
W232664		6.68	0.05	1.4	0.049	0.025	1.17	16.2	54.8	2.04	512	0.26	0.14	4.5	11.8	360
W232665		3.77	<0.05	0.7	0.132	0.012	0.77	10.2	12.1	1.51	373	0.42	0.02	2.5	6.8	230
W232666		4.21	<0.05	0.9	0.116	0.019	0.84	11.3	17.9	1.48	310	0.51	0.06	2.8	7.4	270
W232667		4.35	<0.05	0.9	0.141	0.017	0.89	11.2	9.0	2.13	329	0.47	0.04	2.9	7.8	270
W232668		4.26	<0.05	1.0	0.163	0.016	0.87	11.3	8.9	2.08	326	0.47	0.03	2.8	7.6	260
W232669		3.40	<0.05	0.7	0.109	0.011	0.75	9.8	7.7	1.78	297	0.61	0.02	2.3	5.9	190
W232670		0.15	<0.05	<0.1	<0.005	0.005	0.02	0.5	1.0	13.00	201	0.15	<0.01	0.1	1.4	180
W232671		8.63	0.05	1.8	0.184	0.029	1.86	20.5	36.9	3.89	271	0.56	0.04	5.6	15.5	410
W232672		8.30	0.06	2.0	0.281	0.030	1.87	21.5	22.9	4.34	266	0.61	0.03	5.7	14.5	390
W232673		10.40	0.06	2.0	30.1	0.044	1.87	24.5	13.9	0.39	810	3.79	0.02	5.7	26.0	580
W232674		5.45	0.10	1.3	0.603	0.020	1.15	15.4	14.6	3.69	238	0.65	0.02	3.9	9.9	300
W232675		7.51	0.12	1.6	0.260	0.024	1.54	18.6	38.1	3.30	197	0.42	0.04	5.1	13.7	400
W232676		5.55	<0.05	1.3	0.098	0.021	1.12	14.4	42.6	2.58	160	0.19	0.03	3.8	9.6	300
W232677		3.67	<0.05	0.8	0.084	0.013	0.77	10.8	10.6	2.50	164	0.56	0.02	2.5	6.6	190
W232678		0.23	<0.05	<0.1	<0.005	<0.005	0.04	0.6	1.3	13.20	210	0.09	0.01	0.2	1.3	160
W232679		5.11	0.05	1.4	0.092	0.021	1.15	12.9	25.9	2.91	174	0.99	0.03	3.6	9.1	310
W232680		6.02	<0.05	1.4	0.061	0.024	1.40	15.7	22.5	2.97	178	0.42	0.03	4.1	10.5	380
W232681		5.19	<0.05	1.0	0.126	0.022	1.19	13.7	17.5	3.02	171	0.85	0.03	3.4	10.6	270
W232682		9.44	0.08	2.2	0.207	0.028	2.25	22.1	59.2	6.09	227	1.47	0.05	6.2	19.9	520
W232683		9.82	0.05	2.2	0.202	0.030	2.38	21.8	58.6	6.07	230	1.45	0.06	6.4	20.7	550

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Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207395

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232648		20.5	189.5	<0.002	1.13	1.19	16.6	<1	2.8	210	0.91	0.08	14.70	0.453	4.07	2.2
W232649		23.0	199.5	<0.002	0.66	0.78	17.3	<1	2.8	269	0.90	0.07	15.20	0.459	1.81	2.2
W232650		20.2	182.5	<0.002	2.72	0.98	16.4	<1	2.7	397	0.85	0.07	14.80	0.427	4.10	2.1
W232651		18.7	196.5	<0.002	0.14	0.70	16.4	<1	2.8	193.0	0.88	<0.05	14.85	0.432	1.70	2.4
W232652		18.8	197.5	<0.002	0.01	0.71	17.1	<1	2.8	135.0	0.91	0.05	15.00	0.446	1.15	2.3
W232653		17.8	191.0	<0.002	0.05	0.61	16.1	<1	2.7	296	0.88	0.08	14.90	0.441	1.14	2.7
W232654		12.2	186.0	<0.002	0.05	0.51	15.9	<1	2.7	163.5	0.87	0.09	14.40	0.431	1.20	3.3
W232655		39.5	113.0	<0.002	0.12	0.40	10.0	1	2.0	383	0.64	<0.05	10.35	0.292	0.69	6.7
W232656		52.6	45.7	<0.002	0.50	0.70	4.2	1	1.1	555	0.35	<0.05	6.06	0.140	0.68	9.9
W232657		51.2	93.7	<0.002	0.68	0.53	8.4	1	1.8	368	0.60	<0.05	9.89	0.257	0.72	7.9
W232658		7.4	36.7	0.002	1.42	42.8	5.2	1	0.7	1045	0.19	<0.05	3.19	0.089	24.2	6.0
W232659		30.0	40.4	0.002	0.19	0.28	3.4	1	0.9	758	0.30	<0.05	5.36	0.120	0.46	10.5
W232660		9.7	34.4	<0.002	0.13	0.23	2.8	1	0.8	723	0.24	<0.05	4.17	0.098	0.35	11.5
W232661		12.2	64.6	<0.002	0.28	0.29	4.9	2	1.3	432	0.46	<0.05	7.54	0.179	0.59	7.4
W232662		10.3	65.9	<0.002	0.25	0.27	4.9	2	1.3	608	0.45	0.06	8.03	0.183	0.55	6.7
W232663		8.5	32.9	<0.002	0.17	0.26	2.5	1	0.7	1365	0.23	<0.05	4.14	0.091	0.35	12.3
W232664		6.8	57.5	<0.002	0.11	0.18	3.9	1	1.1	529	0.36	<0.05	5.56	0.138	0.43	9.1
W232665		7.4	34.0	<0.002	0.26	0.29	2.3	1	0.6	874	0.19	<0.05	3.33	0.078	0.43	11.7
W232666		8.7	35.1	<0.002	0.29	0.30	2.5	1	0.7	761	0.20	<0.05	3.58	0.088	0.38	12.0
W232667		9.9	33.8	<0.002	0.42	0.32	2.6	1	0.7	711	0.21	<0.05	3.69	0.088	0.52	12.2
W232668		9.9	33.4	<0.002	0.41	0.34	2.6	1	0.7	696	0.21	<0.05	3.66	0.087	0.53	12.1
W232669		9.0	28.4	<0.002	0.40	0.27	2.1	1	0.6	787	0.18	<0.05	3.02	0.072	0.49	13.7
W232670		1.6	0.8	<0.002	<0.01	0.05	0.1	<1	<0.2	54.9	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W232671		8.1	77.9	<0.002	0.33	0.30	5.1	1	1.4	432	0.42	<0.05	7.10	0.175	0.77	6.9
W232672		8.9	73.6	<0.002	0.34	0.50	5.0	1	1.3	407	0.44	<0.05	7.41	0.175	1.05	8.0
W232673		18.6	81.1	0.003	3.82	117.5	8.1	1	2.2	469	0.41	0.13	6.95	0.239	70.6	4.2
W232674		6.5	53.6	<0.002	0.30	1.05	3.4	1	0.8	410	0.27	<0.05	4.74	0.112	2.06	8.8
W232675		7.2	75.5	<0.002	0.31	0.43	4.5	2	1.0	326	0.37	<0.05	6.16	0.148	1.07	6.8
W232676		5.6	46.8	<0.002	0.20	0.18	3.4	1	0.9	502	0.28	<0.05	4.78	0.113	0.43	7.5
W232677		5.3	29.5	<0.002	0.16	0.30	2.2	<1	0.6	658	0.19	<0.05	3.18	0.075	0.35	9.2
W232678		1.6	2.0	<0.002	<0.01	<0.05	0.2	<1	<0.2	54.8	<0.05	<0.05	0.09	<0.005	0.02	0.8
W232679		8.6	45.0	<0.002	0.20	0.29	3.2	1	0.8	692	0.27	<0.05	4.83	0.111	0.43	12.0
W232680		7.4	59.8	<0.002	0.11	0.16	3.6	1	0.9	533	0.33	<0.05	5.47	0.127	0.48	9.1
W232681		7.3	50.8	<0.002	0.20	0.27	3.2	2	0.9	633	0.25	<0.05	4.43	0.107	0.49	10.3
W232682		13.4	97.2	0.002	0.65	0.53	5.7	3	1.4	268	0.48	<0.05	8.18	0.198	2.37	5.7
W232683		13.4	102.0	0.002	0.59	0.55	5.9	3	1.6	265	0.51	<0.05	8.51	0.210	2.12	5.8

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207395

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232648		108	2.0	19.6	96	103.0		0.01
W232649		107	1.6	19.3	98	108.0		<0.01
W232650		94	2.0	18.6	91	99.2		<0.01
W232651		101	1.7	19.3	94	102.5		<0.01
W232652		101	1.7	19.5	95	102.5		0.03
W232653		101	4.2	19.5	89	103.5		<0.01
W232654		116	1.9	20.8	87	112.0		<0.01
W232655		81	1.2	15.9	79	86.9		<0.01
W232656		42	0.8	9.7	155	47.9		<0.01
W232657		75	1.1	15.7	78	82.4		<0.01
W232658		33	19.2	14.5	23	29.2	1.330	2.65
W232659		34	0.5	8.2	86	42.3		<0.01
W232660		29	0.4	6.9	40	32.2		<0.01
W232661		53	0.7	12.3	60	56.7		0.01
W232662		48	0.7	11.7	52	79.0		<0.01
W232663		24	0.4	6.6	38	36.5		<0.01
W232664		44	0.5	9.0	35	42.2		0.01
W232665		25	0.4	5.7	29	23.9		<0.01
W232666		28	0.4	6.4	49	28.6		<0.01
W232667		28	0.4	6.6	61	30.8		<0.01
W232668		28	0.4	6.6	56	30.1		<0.01
W232669		23	0.3	5.3	42	24.2		0.03
W232670		2	0.1	0.8	18	<0.5		<0.01
W232671		53	0.7	11.4	49	54.1		0.02
W232672		52	0.8	11.9	41	61.4		0.01
W232673		68	8.6	21.7	144	62.8	3.36	7.95
W232674		34	0.8	9.0	45	48.8		0.01
W232675		48	0.6	11.4	36	58.9		0.01
W232676		37	0.5	8.1	36	37.6		<0.01
W232677		23	0.4	6.1	27	26.2		<0.01
W232678		3	0.1	0.8	19	<0.5		<0.01
W232679		41	0.4	7.7	62	42.8		<0.01
W232680		41	0.5	9.0	45	45.9		<0.01
W232681		38	0.4	8.0	49	34.6		0.01
W232682		66	0.8	13.3	50	70.5		0.01
W232683		70	0.8	13.1	52	72.2		0.01

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Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207395

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 1- NOV- 2017
Account: RCM

CERTIFICATE WH17207397

Project: Nadaleen

P.O. No.: N17- 107

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
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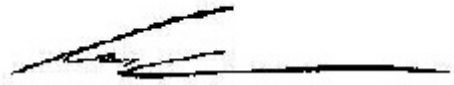
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 1- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207397

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232684		11.32	0.09	3.99	55.3	280	1.32	0.09	11.65	0.07	45.5	6.2	48	24.6	21.5	1.93
W232685		13.16	0.05	1.99	34.8	180	0.74	0.05	23.7	0.11	25.4	3.4	23	8.57	10.6	0.96
W232686		12.03	0.06	1.64	27.6	230	0.56	0.05	27.9	0.05	20.2	2.7	20	7.57	9.0	0.62
W232687		0.26	0.29	4.01	>10000	190	0.73	0.18	10.65	0.71	45.6	11.4	46	9.50	55.3	3.10
W232688		11.67	0.05	1.38	26.7	160	0.51	0.04	26.4	0.06	19.05	2.6	18	6.40	7.6	0.63
W232689		11.89	0.06	2.01	77.2	190	0.74	0.05	20.4	0.12	27.4	3.3	23	9.04	9.5	0.77
W232690		5.09	0.08	1.15	5710	220	0.34	0.04	24.2	0.16	16.45	1.5	12	2.72	4.8	0.39
W232691		6.94	0.08	1.63	67.6	320	0.50	0.05	21.8	0.14	23.9	2.7	20	5.57	9.2	0.71
W232692		3.16	0.05	1.11	2410	80	0.34	0.03	11.20	0.02	19.80	1.2	13	2.20	3.7	1.16
W232693		<0.02	0.04	1.10	2660	90	0.28	0.03	11.05	0.03	20.4	1.2	15	2.21	3.8	1.16
W232694		5.94	0.09	1.62	5340	120	0.39	0.05	10.40	0.03	22.6	1.5	18	3.90	4.9	0.94
W232695		7.68	0.05	0.05	25.2	60	0.05	0.03	21.2	0.06	1.22	0.8	1	0.13	3.3	0.47
W232696		12.10	0.11	2.57	56.7	220	0.82	0.08	14.90	0.13	36.5	4.1	30	10.55	14.2	0.98
W232697		4.99	0.07	1.19	41.4	170	0.48	0.05	27.0	0.22	17.95	2.3	20	4.20	9.3	0.54
W232698		9.88	0.11	0.83	3810	50	0.42	0.04	31.6	0.14	12.10	1.8	11	1.84	7.8	0.42
W232699		11.50	0.07	1.35	195.5	100	0.58	0.05	27.4	0.09	18.40	2.7	16	3.89	9.7	0.74
W232700		11.31	0.05	0.78	48.3	220	0.34	0.05	28.7	0.10	11.15	1.7	10	2.09	6.2	0.59
W232701		10.25	0.09	3.12	177.5	150	1.21	0.10	19.40	0.06	39.8	5.7	34	10.25	20.5	1.41
W232702		10.91	1.28	3.73	>10000	290	0.98	0.12	11.55	0.15	50.6	6.5	42	8.08	21.3	1.73
W232703		6.34	0.95	3.66	>10000	310	1.04	0.10	11.40	0.15	49.3	6.3	42	8.13	21.0	1.70
W232704		10.96	1.96	2.81	6980	190	0.72	0.08	16.80	0.14	36.7	4.9	31	5.82	13.9	1.25
W232705		4.27	7.46	1.84	>10000	350	0.52	0.07	11.90	1.65	31.1	3.4	23	3.55	12.5	1.31
W232706		5.02	0.03	0.06	103.5	20	0.06	0.02	20.4	0.05	1.38	0.7	1	0.14	2.1	0.46
W232707		7.11	1.13	4.92	2030	220	1.46	0.12	9.34	0.08	53.6	7.8	57	14.50	35.1	2.07
W232708		5.84	3.69	4.38	5480	290	1.21	0.11	9.93	0.17	52.1	6.7	46	10.65	23.7	1.95
W232709		7.91	1.23	4.73	1190	190	1.59	0.12	12.25	0.09	54.6	8.5	48	13.65	22.9	2.09
W232710		8.64	0.05	1.07	176.5	150	0.47	0.04	30.9	0.10	13.75	2.0	12	2.41	7.1	0.63
W232711		8.07	0.11	2.51	1290	240	0.80	0.07	23.7	0.05	27.1	5.0	27	6.18	15.7	0.96
W232712		0.26	0.18	3.81	6350	200	0.86	0.14	12.05	0.15	41.1	12.0	45	10.45	36.3	2.85
W232713		8.40	0.09	3.60	2840	380	0.99	0.10	16.85	0.08	38.6	6.5	38	13.45	22.8	1.39
W232714		7.59	0.07	4.03	9890	1240	1.18	0.10	5.47	0.18	49.9	6.4	42	12.05	21.3	1.52
W232715		7.96	0.11	3.96	9930	900	1.16	0.09	7.83	0.12	43.7	6.9	43	10.50	17.8	1.46
W232716		8.10	0.09	2.78	3810	140	1.01	0.08	12.80	0.13	34.8	5.1	30	8.42	12.6	1.20
W232717		8.09	0.07	2.84	98.4	200	1.17	0.07	14.05	0.05	34.3	4.7	28	16.90	13.4	1.05
W232718		7.53	0.08	0.78	5010	90	0.36	0.03	18.65	0.11	12.85	1.5	11	2.28	5.8	0.52
W232719		7.79	0.10	1.67	48.2	200	0.73	0.04	22.8	0.10	22.5	2.9	19	6.59	10.6	0.74

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Finalized Date: 1- NOV- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207397

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232684		9.26	0.06	2.2	0.155	0.032	2.28	21.7	42.7	5.89	215	1.07	0.05	6.1	17.0	510
W232685		4.73	<0.05	1.1	0.142	0.017	1.11	13.2	16.3	3.39	176	0.80	0.02	3.2	9.1	280
W232686		3.95	<0.05	0.8	0.108	0.010	0.95	10.7	13.7	2.33	149	0.67	0.02	2.7	6.3	240
W232687		10.15	0.06	1.9	28.3	0.042	1.82	23.4	13.6	0.37	796	3.71	0.02	5.6	25.6	550
W232688		3.44	0.12	0.7	0.168	0.013	0.79	10.7	12.0	1.98	121	0.67	0.02	2.5	6.5	200
W232689		4.99	0.12	1.4	0.341	0.014	1.19	14.2	16.8	2.65	145	0.94	0.02	3.7	8.4	320
W232690		2.58	<0.05	1.0	0.304	0.009	0.64	8.3	5.6	1.66	144	0.67	0.01	1.9	3.4	220
W232691		3.95	0.13	1.1	0.429	0.011	1.02	12.7	9.7	2.15	133	0.73	0.02	2.9	7.1	390
W232692		2.12	<0.05	1.1	0.893	0.006	0.65	9.5	6.0	5.50	280	0.33	0.02	1.7	2.9	580
W232693		2.14	<0.05	1.2	1.125	0.007	0.65	9.9	6.2	5.48	283	0.37	0.02	1.7	3.1	570
W232694		3.34	<0.05	1.9	0.778	0.011	0.93	10.9	8.5	5.11	372	0.43	0.02	2.6	3.6	590
W232695		0.16	0.05	<0.1	0.007	0.006	0.02	0.6	0.9	13.30	210	0.12	0.01	0.1	1.3	170
W232696		6.32	0.11	2.1	0.436	0.018	1.65	18.9	15.5	3.35	160	0.79	0.03	5.1	9.7	460
W232697		3.05	0.08	0.8	0.279	0.010	0.70	9.1	8.0	1.84	115	0.62	0.01	2.1	4.8	240
W232698		2.19	0.08	0.5	0.536	0.007	0.45	6.9	5.0	1.35	174	0.50	0.01	1.4	3.2	130
W232699		3.49	0.08	0.8	0.440	0.010	0.75	9.4	8.1	2.34	135	0.51	0.01	2.3	5.6	200
W232700		2.03	0.06	0.4	0.289	0.007	0.42	6.4	4.8	2.82	136	0.40	0.01	1.3	3.1	120
W232701		8.02	0.13	1.7	1.110	0.024	1.64	20.7	23.0	2.36	196	0.73	0.02	5.1	13.7	460
W232702		9.53	0.13	2.5	8.21	0.027	1.93	26.0	22.9	3.80	609	0.95	0.02	6.3	15.9	530
W232703		9.55	0.12	2.5	7.51	0.028	1.89	25.3	22.8	3.73	568	0.93	0.02	6.2	15.8	520
W232704		7.27	0.10	2.0	3.53	0.017	1.48	18.8	15.6	2.74	963	0.78	0.02	4.8	11.0	350
W232705		5.26	0.10	0.9	11.60	0.031	0.97	17.0	14.0	3.14	1880	0.69	0.01	3.0	7.2	300
W232706		0.20	0.07	<0.1	0.015	<0.005	0.03	0.7	1.0	12.75	204	0.05	<0.01	0.2	1.3	210
W232707		12.50	0.12	2.2	3.85	0.029	2.68	28.1	36.1	4.08	872	1.38	0.02	7.5	22.0	780
W232708		11.40	0.10	2.5	6.04	0.025	2.34	26.6	28.9	3.85	1660	1.01	0.02	7.0	16.7	540
W232709		12.05	0.13	2.3	2.91	0.032	2.57	28.8	31.3	3.37	764	0.96	0.02	7.3	19.9	570
W232710		2.66	0.07	0.5	0.936	0.009	0.58	7.5	4.7	0.93	199	0.42	0.01	1.5	4.1	160
W232711		6.33	0.10	1.0	11.55	0.022	1.34	14.4	11.5	1.51	367	0.64	0.01	3.3	12.8	490
W232712		9.93	0.10	2.0	15.80	0.037	1.81	21.7	11.8	2.54	1160	1.86	0.02	5.8	25.7	430
W232713		9.03	0.10	1.8	64.1	0.026	1.89	20.8	14.3	2.64	361	0.79	0.02	5.4	15.9	590
W232714		10.25	0.11	3.1	58.1	0.029	2.02	25.8	18.5	3.03	442	0.74	0.02	6.7	15.3	600
W232715		10.05	0.09	3.3	14.15	0.027	2.00	23.0	17.6	4.52	527	0.94	0.02	6.5	16.3	520
W232716		7.19	0.09	2.3	6.85	0.020	1.45	18.0	12.3	6.30	410	0.95	0.02	4.7	11.0	390
W232717		7.08	0.12	2.5	0.948	0.021	1.63	17.6	14.3	5.76	191	0.57	0.02	4.7	9.7	390
W232718		2.09	0.09	0.5	1.060	0.008	0.41	7.3	3.5	11.35	277	1.27	0.01	1.3	3.4	230
W232719		4.31	0.10	1.0	0.312	0.017	0.91	11.6	8.7	5.95	187	0.84	0.01	2.8	7.0	340

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 1- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207397

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232684		9.6	90.5	<0.002	0.50	0.39	5.7	2	1.4	317	0.47	<0.05	8.39	0.201	0.85	4.9
W232685		7.2	39.6	<0.002	0.25	0.28	2.9	1	0.8	1020	0.22	<0.05	4.17	0.099	0.42	11.0
W232686		6.8	33.7	<0.002	0.19	0.24	2.5	1	0.6	1295	0.19	<0.05	3.39	0.082	0.40	13.1
W232687		18.1	79.4	0.003	3.69	115.5	8.1	1	2.0	456	0.40	0.14	6.73	0.234	68.8	4.2
W232688		5.4	33.5	0.002	0.19	0.26	2.2	1	0.5	964	0.17	<0.05	2.86	0.069	0.33	14.8
W232689		7.2	51.3	<0.002	0.27	0.99	3.0	3	0.7	793	0.27	<0.05	4.46	0.101	0.79	9.7
W232690		6.8	23.2	<0.002	0.42	14.40	1.5	1	0.4	678	0.14	<0.05	2.38	0.054	0.92	9.6
W232691		6.5	39.8	<0.002	0.25	0.58	2.5	1	0.6	573	0.20	<0.05	3.52	0.079	0.89	12.5
W232692		5.9	21.5	<0.002	0.29	5.95	1.1	1	0.4	155.0	0.13	<0.05	2.17	0.045	1.83	2.9
W232693		6.1	22.1	<0.002	0.30	6.46	1.2	2	0.4	155.0	0.13	<0.05	2.22	0.046	1.92	2.9
W232694		8.0	31.6	<0.002	0.45	12.85	1.8	1	0.5	149.5	0.19	<0.05	3.43	0.074	1.98	3.6
W232695		1.7	0.7	<0.002	<0.01	0.16	0.1	<1	<0.2	52.3	<0.05	<0.05	0.08	<0.005	<0.02	0.6
W232696		11.2	63.6	<0.002	0.43	0.51	3.8	3	1.0	433	0.35	<0.05	6.24	0.130	0.88	6.0
W232697		6.9	28.2	<0.002	0.24	0.51	1.9	1	0.5	885	0.14	<0.05	2.72	0.058	0.62	10.3
W232698		5.9	16.8	<0.002	0.33	15.35	1.4	1	0.3	1085	0.10	<0.05	1.94	0.041	1.66	14.7
W232699		6.2	30.1	<0.002	0.24	1.29	2.2	1	0.5	860	0.17	<0.05	3.08	0.065	1.17	12.8
W232700		5.6	15.6	<0.002	0.14	0.49	1.3	1	0.3	1210	0.10	<0.05	1.79	0.037	0.71	14.0
W232701		7.5	69.4	<0.002	0.66	0.99	4.9	1	1.2	438	0.38	<0.05	7.10	0.147	2.42	9.0
W232702		11.4	79.4	<0.002	1.67	50.9	5.9	2	1.4	364	0.47	0.06	9.08	0.188	23.8	6.5
W232703		10.8	78.3	<0.002	1.70	58.6	5.8	3	1.4	351	0.49	<0.05	8.86	0.184	21.2	6.3
W232704		9.1	59.8	<0.002	1.12	30.9	4.3	2	1.0	574	0.38	<0.05	6.82	0.140	11.80	11.0
W232705		8.6	39.3	<0.002	4.72	324	2.5	5	0.8	136.0	0.23	0.14	4.11	0.087	32.1	12.3
W232706		1.4	1.1	<0.002	<0.01	0.42	0.2	<1	<0.2	47.7	<0.05	<0.05	0.10	<0.005	0.06	0.5
W232707		9.9	104.5	<0.002	1.02	17.00	7.5	2	1.6	189.5	0.56	<0.05	9.90	0.222	14.45	6.6
W232708		10.2	94.9	<0.002	1.31	39.1	6.8	2	1.4	186.0	0.53	<0.05	9.64	0.207	24.6	7.3
W232709		8.3	102.5	<0.002	0.86	13.25	7.3	1	1.5	227	0.56	<0.05	9.90	0.219	12.00	6.4
W232710		3.6	20.4	<0.002	0.18	0.46	1.7	1	0.4	804	0.12	<0.05	2.05	0.046	1.25	12.0
W232711		7.5	51.8	<0.002	0.43	1.17	4.1	1	0.8	373	0.25	<0.05	4.64	0.099	15.40	17.3
W232712		11.3	81.4	<0.002	2.56	21.3	9.8	1	1.6	312	0.43	<0.05	6.17	0.266	45.3	6.4
W232713		7.8	72.1	<0.002	0.75	0.70	5.2	1	1.1	237	0.40	<0.05	7.21	0.164	25.3	11.0
W232714		9.3	77.2	<0.002	1.36	12.65	5.5	2	1.5	120.0	0.53	<0.05	9.10	0.198	45.7	7.8
W232715		10.0	72.2	<0.002	1.40	6.03	5.6	2	1.4	110.0	0.50	<0.05	8.79	0.194	21.4	7.7
W232716		6.7	51.9	<0.002	0.61	4.62	4.3	2	1.0	169.5	0.35	<0.05	6.52	0.136	13.10	6.5
W232717		7.2	55.9	<0.002	0.41	0.30	4.3	1	0.9	186.0	0.34	<0.05	6.33	0.136	0.93	7.7
W232718		4.3	12.9	<0.002	0.39	5.50	1.3	1	0.3	79.5	0.10	<0.05	1.68	0.036	1.04	12.4
W232719		6.0	30.8	<0.002	0.29	0.24	2.7	1	0.6	395	0.20	<0.05	3.63	0.080	0.48	10.5

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Finalized Date: 1- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207397

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232684		66	0.8	12.4	55	73.8		0.02
W232685		34	0.4	7.4	36	34.7		<0.01
W232686		29	0.3	6.0	15	28.3		<0.01
W232687		66	8.6	21.3	140	61.8	3.42	7.91
W232688		26	0.3	5.7	13	28.9		<0.01
W232689		32	0.9	8.3	26	55.0		0.02
W232690		15	0.6	5.2	22	31.3		0.09
W232691		27	0.5	7.0	33	42.7		<0.01
W232692		11	0.4	6.3	5	35.5		0.12
W232693		11	0.5	6.5	5	37.4		0.13
W232694		18	0.7	8.0	5	60.7		0.33
W232695		2	0.1	0.8	17	0.5		<0.01
W232696		37	0.7	10.4	33	79.0		<0.01
W232697		22	0.6	5.4	27	27.9		<0.01
W232698		15	0.8	4.0	26	18.1		0.30
W232699		23	1.0	5.5	23	30.4		0.03
W232700		14	0.4	3.6	30	15.3		0.01
W232701		50	2.1	11.4	37	60.5		0.01
W232702		59	4.5	13.2	42	93.0	1.550	3.57
W232703		58	4.4	13.9	43	106.0	1.720	2.86
W232704		43	3.2	12.0	35	72.7		4.80
W232705		38	2.2	6.6	141	31.6	8.63	12.20
W232706		2	0.1	0.8	15	<0.5		0.01
W232707		89	3.7	15.3	27	80.0		1.99
W232708		76	4.2	13.2	22	92.7		9.22
W232709		85	3.5	16.0	29	91.5		2.40
W232710		21	0.9	4.4	29	18.8		0.03
W232711		45	3.0	10.1	35	34.7		0.07
W232712		83	8.2	19.2	48	70.5		2.59
W232713		59	4.3	12.1	25	69.1		0.01
W232714		59	5.0	11.0	41	110.0		0.11
W232715		60	5.3	12.0	28	117.5		0.06
W232716		46	3.1	10.2	26	86.6		0.05
W232717		46	1.0	10.4	17	94.7		0.01
W232718		18	0.6	4.6	15	16.3		0.02
W232719		31	0.6	7.3	25	39.7		<0.01

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To: **ATAC RESOURCES LTD.**
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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 1- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207397

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 5- NOV- 2017
Account: RCM

CERTIFICATE WH17207398

Project: Nadaleen

P.O. No.: N17- 108

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

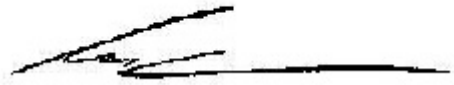
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17207398

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231126		2.52	0.10	2.99	117.0	140	0.75	0.14	12.50	0.23	31.5	10.4	23	6.42	29.0	3.46
W231127		8.16	0.13	7.34	253	290	2.47	0.30	3.55	0.41	62.8	41.2	70	22.9	124.0	5.22
W231128		9.44	0.27	7.62	157.0	330	2.28	0.29	3.91	0.24	71.4	28.7	62	24.7	100.5	4.91
W231129		9.41	0.07	3.65	53.5	150	1.17	0.14	16.25	0.08	39.4	13.6	35	13.55	36.5	2.86
W231130		0.26	0.68	4.61	9330	250	0.79	0.21	3.61	0.52	52.0	13.9	59	13.35	59.3	4.35
W231131		8.09	0.04	2.31	42.1	100	0.55	0.08	24.3	0.05	29.4	5.6	19	6.42	9.8	1.42
W231132		7.72	0.07	6.06	73.2	370	1.80	0.21	10.70	0.03	65.4	13.1	48	25.5	20.5	3.33
W231133		6.50	0.11	7.39	222	440	2.08	0.24	2.60	0.17	68.0	24.3	61	29.8	82.9	5.87
W231134		5.35	0.11	5.37	2840	330	1.86	0.19	7.45	0.39	54.4	16.3	50	38.6	61.2	4.42
W231135		7.45	0.11	8.65	572	480	2.67	0.32	3.46	0.17	92.8	16.6	61	35.2	42.4	4.48
W231136		5.84	0.12	9.11	1640	440	2.88	0.33	2.80	0.22	91.2	17.4	65	30.1	46.9	4.54
W231137		<0.02	0.11	8.80	1550	440	2.64	0.31	2.80	0.22	88.3	16.8	65	29.3	44.6	4.41
W231138		5.16	0.13	8.97	3350	270	2.98	0.28	2.09	0.29	100.0	16.8	73	44.5	51.2	4.79
W231139		7.02	0.01	0.06	5.7	30	0.05	0.02	20.8	0.06	1.25	0.7	1	0.21	1.5	0.48
W231140		4.78	0.12	8.65	>10000	330	2.73	0.32	2.30	0.27	90.3	17.5	66	50.7	45.3	4.18
W231141		2.21	0.12	8.63	>10000	350	2.47	0.30	2.74	0.27	86.7	18.0	63	44.4	44.9	4.31
W231142		5.24	0.12	6.57	>10000	230	1.58	0.23	3.94	0.30	60.5	17.8	64	27.8	56.0	5.50
W231143		5.34	0.15	6.38	3430	220	1.45	0.26	1.90	0.16	62.0	19.8	65	21.5	73.8	6.03
W231144		5.23	0.13	5.91	4670	190	1.44	0.26	2.76	0.33	57.9	13.6	59	20.4	54.5	4.96
W231145		5.03	0.19	7.96	2240	220	1.99	0.34	1.51	0.53	76.5	19.7	86	33.5	70.2	6.05
W231146		5.74	0.08	7.10	>10000	280	1.78	0.27	2.69	0.22	73.6	21.6	62	30.8	54.2	4.63
W231147		6.09	0.34	4.97	>10000	230	1.11	0.20	2.14	0.29	52.2	12.2	52	22.4	42.0	3.74
W231148		5.57	0.17	8.10	>10000	170	2.41	0.30	0.99	0.31	95.9	17.5	67	148.0	48.6	3.85
W231149		5.36	0.23	8.18	>10000	240	2.47	0.31	0.88	0.38	99.1	17.5	67	79.1	41.6	3.74
W231150		5.59	0.20	7.57	>10000	190	2.39	0.29	1.59	0.55	94.1	18.1	60	64.3	43.7	4.41
W231151		0.26	0.27	3.93	>10000	180	0.74	0.18	10.35	0.62	43.9	11.6	46	8.89	55.2	3.07
W231152		5.71	0.29	5.48	5480	290	1.26	0.21	4.97	0.21	54.6	12.8	50	16.40	36.5	4.80
W231153		6.11	0.31	5.66	>10000	180	1.24	0.22	1.47	0.20	55.9	14.1	59	15.60	41.8	4.98
W231154		4.41	0.29	5.95	>10000	170	1.13	0.23	0.31	0.27	59.4	15.2	69	17.75	42.3	4.99
W231155		5.65	0.15	6.51	>10000	250	1.38	0.26	0.23	0.25	66.1	16.3	73	23.1	45.6	4.30
W231156		6.99	<0.01	0.05	35.6	220	0.05	0.01	20.9	0.07	1.11	0.6	1	0.15	1.3	0.46
W231157		3.69	0.14	5.50	9920	250	1.35	0.22	3.45	0.22	54.4	13.2	56	30.3	37.4	3.81
W231158		4.87	0.16	6.54	3100	240	1.29	0.25	1.87	0.26	62.0	14.3	64	20.6	45.9	4.41
W231159		5.37	0.55	6.48	>10000	170	1.28	0.28	1.86	0.56	63.3	15.9	72	19.60	57.7	4.87
W231160		6.08	0.09	6.40	587	220	1.84	0.24	3.52	0.20	63.8	15.6	66	26.7	45.8	4.82
W231161		10.64	0.12	6.68	498	230	1.96	0.25	3.11	0.29	63.8	16.6	75	30.1	54.4	5.02

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Finalized Date: 5- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207398

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231126		7.55	0.07	1.3	1.290	0.037	1.47	14.9	5.4	6.69	1520	2.10	0.03	3.9	18.3	270
W231127		18.00	0.11	3.1	6.52	0.070	3.49	31.8	14.1	2.10	581	12.65	0.04	10.1	69.4	430
W231128		18.95	0.12	3.1	3.84	0.072	3.80	38.0	13.7	1.95	1040	8.15	0.05	10.5	56.3	480
W231129		8.96	0.07	1.5	1.185	0.032	1.73	19.9	9.7	2.63	938	0.69	0.03	4.8	27.5	480
W231130		12.20	0.10	2.1	24.0	0.025	2.08	28.5	16.9	0.32	589	5.58	0.02	6.6	35.8	460
W231131		5.53	0.05	0.8	0.348	0.015	1.13	15.1	4.4	0.84	334	0.41	0.02	2.9	12.3	440
W231132		14.35	0.10	2.0	0.586	0.045	2.85	34.4	26.6	1.58	674	0.44	0.05	7.7	28.5	740
W231133		18.90	0.11	2.4	0.697	0.075	3.14	34.5	140.5	1.90	799	0.36	0.04	11.2	46.5	580
W231134		13.55	0.08	1.9	3.71	0.053	1.96	26.6	93.4	3.69	947	1.81	0.03	7.9	33.9	520
W231135		21.1	0.12	2.8	2.16	0.063	3.34	46.8	42.5	1.66	693	2.12	0.04	11.1	37.4	830
W231136		23.2	0.14	2.9	2.47	0.069	3.58	45.9	35.6	1.49	603	2.72	0.04	11.4	41.4	890
W231137		22.4	0.14	2.9	2.32	0.067	3.42	44.3	35.4	1.48	597	2.55	0.04	11.0	39.7	870
W231138		23.2	0.13	3.2	5.91	0.067	3.49	48.6	47.3	1.16	817	2.69	0.03	12.8	44.7	510
W231139		0.20	<0.05	<0.1	<0.005	<0.005	0.03	0.6	0.6	13.00	207	0.22	0.01	0.1	1.8	180
W231140		22.9	0.12	3.0	7.75	0.067	2.90	46.0	69.6	1.15	1220	2.61	0.03	11.2	42.6	700
W231141		22.5	0.12	2.9	5.82	0.068	3.15	43.6	50.9	1.31	1410	2.53	0.03	10.9	43.2	730
W231142		16.65	0.10	2.7	6.29	0.050	2.61	29.2	31.9	2.05	1260	0.90	0.03	9.8	39.8	630
W231143		16.35	0.11	2.7	5.15	0.054	2.89	29.7	17.5	1.14	782	0.47	0.03	10.0	41.9	350
W231144		16.00	0.11	2.7	6.84	0.059	2.80	28.6	14.1	1.58	1070	1.51	0.02	9.0	37.3	250
W231145		21.0	0.16	3.7	9.37	0.079	3.64	37.2	14.5	1.03	349	3.17	0.03	12.2	60.7	420
W231146		18.90	0.13	2.8	6.39	0.057	2.92	35.6	33.2	1.37	834	0.70	0.03	10.9	43.1	470
W231147		13.25	0.10	2.0	10.55	0.034	2.15	25.9	20.2	0.94	1160	1.12	0.02	7.0	28.2	430
W231148		21.4	0.16	2.9	10.00	0.062	2.76	48.2	56.5	0.69	929	1.52	0.02	10.8	42.0	450
W231149		21.2	0.14	2.7	13.85	0.053	2.69	49.6	59.3	0.63	890	1.58	0.02	10.9	40.7	450
W231150		19.90	0.16	2.5	13.30	0.057	3.11	47.0	29.5	0.82	927	1.67	0.02	10.2	40.9	460
W231151		10.30	0.09	1.7	26.4	0.033	1.78	24.5	13.7	0.37	784	3.47	0.02	5.5	27.6	560
W231152		14.00	0.09	2.4	11.50	0.042	2.42	26.8	15.4	2.52	1720	0.70	0.03	8.4	28.8	560
W231153		14.25	0.10	2.3	12.20	0.038	2.46	27.1	16.2	0.82	953	0.48	0.02	8.4	30.7	470
W231154		15.40	0.12	2.6	9.60	0.042	2.59	29.1	18.7	0.41	184	0.53	0.02	8.9	33.2	460
W231155		16.85	0.11	2.9	7.91	0.041	2.73	32.3	25.6	0.40	97	0.55	0.02	10.1	34.4	480
W231156		0.15	<0.05	<0.1	0.007	<0.005	0.02	0.5	0.2	13.10	194	0.16	<0.01	0.1	1.6	180
W231157		13.90	0.09	2.4	11.40	0.049	1.81	26.3	43.6	1.02	957	0.75	0.02	8.4	29.9	510
W231158		17.55	0.11	3.0	10.55	0.046	2.63	29.8	25.8	0.92	837	0.56	0.03	10.3	28.4	400
W231159		17.50	0.11	2.9	16.85	0.051	2.22	29.5	44.5	0.61	892	1.17	0.02	9.7	39.0	970
W231160		16.80	0.11	2.8	6.06	0.061	2.83	30.6	18.5	1.53	597	1.17	0.03	9.9	37.8	440
W231161		17.30	0.11	3.0	6.22	0.068	2.95	30.8	31.8	1.51	399	1.38	0.03	10.3	42.2	480

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207398

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231126		12.5	56.8	0.006	1.08	1.90	6.9	1	1.1	136.5	0.27	<0.05	3.92	0.160	3.29	1.5
W231127		20.2	159.5	0.018	4.82	9.33	18.5	3	2.2	127.0	0.70	0.11	9.07	0.411	27.3	3.0
W231128		20.1	187.0	0.016	4.39	2.26	18.1	3	2.1	117.0	0.72	0.10	11.40	0.408	20.1	2.9
W231129		8.9	83.3	0.004	2.18	0.80	7.9	1	1.1	347	0.33	<0.05	5.02	0.189	5.35	1.5
W231130		15.0	98.3	0.003	4.23	102.5	7.4	1	2.2	242	0.48	0.16	6.76	0.293	96.2	4.0
W231131		5.9	56.9	0.002	1.07	0.38	4.1	1	0.6	597	0.23	<0.05	3.48	0.096	2.08	1.4
W231132		14.9	139.0	<0.002	2.19	0.46	9.9	1	1.6	355	0.55	<0.05	9.37	0.282	2.93	2.2
W231133		17.3	168.0	0.002	3.24	0.92	18.9	1	2.0	222	0.75	0.16	8.75	0.524	3.59	2.1
W231134		12.8	103.0	0.003	1.52	15.00	13.4	1	1.6	218	0.55	0.09	6.94	0.366	7.12	6.5
W231135		16.1	151.5	0.006	3.83	6.21	15.0	1	3.0	238	0.80	0.06	15.15	0.381	7.49	3.6
W231136		16.8	161.5	0.008	4.24	9.12	16.2	1	3.2	181.5	0.87	0.05	15.70	0.370	7.69	4.0
W231137		16.2	154.0	0.008	4.08	8.76	16.0	1	3.2	178.5	0.82	0.06	14.95	0.358	7.61	3.8
W231138		17.3	160.5	0.010	4.63	11.95	19.3	1	2.8	134.5	0.87	0.06	17.25	0.442	17.40	3.8
W231139		1.2	1.1	<0.002	0.01	0.16	0.2	<1	<0.2	49.9	<0.05	<0.05	0.08	<0.005	0.09	0.8
W231140		16.3	146.5	0.006	4.22	43.2	18.0	2	2.9	151.0	0.86	0.08	15.35	0.375	29.1	3.9
W231141		15.6	151.0	0.007	4.00	32.6	18.8	1	3.2	152.5	0.84	0.06	14.90	0.376	24.5	3.9
W231142		17.9	125.5	0.003	5.75	38.6	22.1	1	1.9	129.5	0.68	0.06	8.72	0.490	29.4	2.0
W231143		19.7	132.5	0.002	6.30	14.10	18.7	<1	1.9	97.3	0.68	0.05	8.69	0.510	18.25	1.8
W231144		19.5	133.0	0.005	4.98	19.20	23.7	1	1.8	70.0	0.62	0.07	8.40	0.429	19.70	2.3
W231145		27.8	183.5	0.011	6.25	17.00	19.4	3	2.3	87.9	0.84	0.07	12.65	0.557	26.0	3.8
W231146		16.4	143.0	0.002	4.87	40.7	21.7	1	1.9	126.5	0.76	0.07	11.70	0.478	20.9	2.1
W231147		15.5	101.0	0.004	4.84	100.5	14.3	1	1.5	105.5	0.49	0.09	7.48	0.332	50.8	1.9
W231148		18.5	163.5	0.009	7.29	125.0	18.5	2	2.1	128.0	0.79	0.11	15.80	0.386	34.1	2.9
W231149		18.2	142.0	0.011	5.22	87.5	18.2	1	2.1	161.0	0.78	0.09	16.40	0.385	51.7	2.8
W231150		17.1	151.5	0.003	7.10	135.0	17.0	2	2.0	130.5	0.73	0.09	15.05	0.350	32.4	2.1
W231151		16.0	83.3	0.003	3.62	107.5	8.5	1	1.8	448	0.39	0.12	6.51	0.221	67.8	4.0
W231152		14.9	119.0	0.003	4.38	32.6	23.7	<1	1.6	124.5	0.58	0.08	7.64	0.391	42.8	1.7
W231153		17.9	120.0	<0.002	5.22	54.2	14.8	1	2.4	89.5	0.58	0.10	7.75	0.397	53.2	1.8
W231154		17.6	125.5	<0.002	5.94	60.9	9.3	1	2.1	77.5	0.62	0.11	8.31	0.426	34.9	1.9
W231155		17.0	132.5	0.002	5.02	37.5	10.3	1	2.6	89.4	0.72	0.08	9.47	0.468	20.2	2.1
W231156		1.1	0.9	<0.002	0.01	0.19	0.1	<1	<0.2	51.6	<0.05	<0.05	0.06	<0.005	0.11	0.5
W231157		15.3	94.6	0.002	3.91	30.3	15.7	1	1.7	150.5	0.58	0.07	7.61	0.401	26.2	1.8
W231158		14.4	133.5	0.002	4.31	31.2	18.8	1	2.1	94.8	0.71	0.06	9.31	0.478	43.6	2.0
W231159		18.5	113.0	0.005	5.66	65.7	19.0	1	1.9	126.0	0.67	0.13	8.83	0.457	55.4	2.2
W231160		19.3	140.5	0.004	4.12	5.84	16.9	1	2.0	91.0	0.67	0.05	8.95	0.463	17.55	2.2
W231161		18.3	142.5	0.006	4.55	2.81	18.5	2	2.1	107.0	0.70	0.08	9.17	0.515	20.1	2.5

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W231126		52	1.9	14.9	74	46.0		0.02
W231127		234	4.5	20.7	106	117.0		0.03
W231128		160	3.4	21.0	102	113.5		0.03
W231129		59	1.4	10.5	58	55.1		<0.01
W231130		85	5.5	20.1	76	76.5		12.85
W231131		24	0.6	7.7	31	29.6		<0.01
W231132		60	1.4	15.2	73	74.0		<0.01
W231133		147	3.5	19.0	95	91.9		0.01
W231134		127	2.1	17.7	96	70.6		<0.01
W231135		138	10.7	24.4	87	102.0		0.01
W231136		167	11.9	24.6	102	105.5		0.04
W231137		162	11.7	24.0	101	101.5		0.02
W231138		175	11.9	24.2	123	115.5		0.54
W231139		2	0.1	0.8	17	0.5		<0.01
W231140		157	14.3	24.5	80	104.0	1.685	3.21
W231141		157	12.9	24.1	106	108.0	1.075	3.31
W231142		149	11.4	21.2	126	96.4	1.140	2.27
W231143		146	9.2	20.8	84	98.3		1.21
W231144		134	8.6	18.9	97	96.2		2.04
W231145		184	14.4	24.9	160	131.5		0.67
W231146		140	11.8	23.0	93	105.5	1.475	1.79
W231147		103	7.9	16.9	69	72.7	3.28	11.45
W231148		139	11.2	24.7	98	102.5	7.90	4.79
W231149		135	12.7	24.0	102	97.0	3.59	11.75
W231150		106	10.2	22.7	157	91.9	6.42	5.74
W231151		65	7.7	22.2	139	63.7	3.31	7.82
W231152		111	10.6	17.2	68	87.9		7.10
W231153		107	11.3	18.0	55	85.2	1.100	13.20
W231154		115	10.6	19.1	84	92.7	1.965	6.25
W231155		128	10.8	20.6	102	104.0	1.325	2.79
W231156		2	0.1	0.7	18	<0.5		0.01
W231157		108	11.1	19.4	78	89.0		3.06
W231158		127	11.7	20.1	87	102.0		8.39
W231159		140	12.3	28.6	133	102.0	1.470	6.87
W231160		133	7.6	19.8	108	102.5		0.11
W231161		152	4.5	21.3	147	109.0		0.04

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VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 5- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207398

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

2103 Dollarton Hwy
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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE WH17207400

Project: Nadaleen

P.O. No.: N17- 109

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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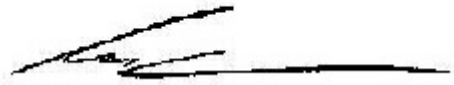
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17207400

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232720		7.71	0.07	1.72	41.8	110	0.85	0.04	26.6	0.13	22.2	3.0	19	7.16	9.8	0.66
W232721		8.19	0.06	1.19	3140	80	0.59	0.03	23.6	0.04	16.35	1.9	12	3.98	6.4	0.59
W232722		7.77	0.08	1.06	320	50	0.45	0.03	17.35	0.02	14.45	1.8	11	3.54	6.3	0.54
W232723		7.06	0.13	0.94	446	40	0.39	0.03	17.95	0.03	12.65	1.4	9	2.57	5.7	0.49
W232724		0.26	1.65	1.81	>10000	100	0.28	0.46	7.03	0.83	27.9	6.2	44	3.09	26.9	2.48
W232725		7.36	0.21	0.40	705	20	0.26	0.01	20.1	0.04	5.60	1.0	5	1.07	5.2	0.32
W232726		7.48	0.13	0.75	1190	30	0.37	0.03	19.90	0.09	8.61	2.7	8	1.94	9.9	1.48
W232727		7.77	0.14	0.92	756	50	0.33	0.03	17.25	0.04	9.29	4.7	10	2.35	11.4	5.77
W232728		4.93	<0.01	0.13	5.0	30	0.13	0.03	21.1	0.07	1.47	0.8	3	0.35	1.5	0.47
W232729		7.86	0.15	0.66	1090	40	0.25	0.03	18.00	0.08	9.15	4.3	7	1.33	13.8	5.75
W232730		5.13	0.31	0.74	1310	40	0.35	0.04	15.15	0.08	7.72	6.4	8	1.86	20.8	11.40
W232731		2.84	0.29	0.71	1180	40	0.39	0.04	15.45	0.07	7.58	6.4	8	1.82	20.2	10.85
W232732		5.41	0.23	0.63	2470	40	0.24	0.03	16.30	0.13	8.29	5.9	7	1.36	24.1	8.53
W232733		4.43	0.14	0.57	7570	30	0.22	0.02	17.85	0.05	8.48	3.3	7	1.22	16.7	4.04
W232734		6.13	0.08	0.59	1540	40	0.28	0.02	18.95	0.05	8.73	2.0	6	1.25	8.5	3.23
W232735		<0.02	0.08	0.59	1585	40	0.27	0.02	19.70	0.05	8.64	1.9	6	1.21	8.7	3.34
W232736		3.27	0.07	0.76	4140	80	0.35	0.03	20.0	0.11	11.40	2.1	7	1.62	8.3	2.14
W232737		7.57	0.02	0.54	1315	50	0.32	0.03	20.1	0.04	8.77	1.2	4	1.38	3.8	0.79
W232738		7.59	0.06	0.39	2750	60	0.25	0.02	20.6	0.37	8.14	1.3	3	0.96	7.2	1.38
W232739		5.22	0.01	0.05	7.0	40	0.08	0.02	21.8	0.07	1.13	0.6	1	0.10	1.4	0.49
W232740		7.44	0.16	1.12	1190	380	0.45	0.05	19.10	0.51	15.25	4.1	8	3.31	14.0	2.19
W232741		9.15	0.69	0.67	1565	100	0.41	0.03	19.35	0.16	12.05	5.8	6	1.60	26.8	2.32
W232742		3.59	0.03	0.63	1110	100	0.40	0.03	19.75	0.05	12.45	2.0	5	1.94	7.5	1.18
W232743		4.40	0.08	7.93	379	260	3.33	0.33	3.43	0.16	74.3	12.5	57	72.0	31.8	5.53
W232744		0.26	0.66	1.87	>10000	140	0.49	2.48	25.6	0.15	26.9	4.6	27	5.85	15.4	1.39
W232745		7.33	0.03	4.27	181.0	720	1.45	0.15	12.60	0.38	43.4	6.2	38	18.30	22.5	2.23
W232746		7.31	0.02	4.02	104.0	310	1.48	0.14	13.45	0.36	40.6	5.9	31	18.70	11.5	1.74
W232747		6.86	0.10	3.97	79.3	200	1.31	0.14	17.70	0.17	40.7	8.3	29	18.60	30.5	1.30
W232748		7.48	0.06	3.60	57.1	200	1.14	0.13	18.10	0.07	36.9	5.5	26	13.85	9.9	1.58
W232749		8.00	0.07	3.68	70.6	190	1.29	0.13	17.40	0.06	36.8	6.4	27	13.60	25.7	1.86
W232750		8.37	0.07	4.05	68.2	200	1.12	0.13	15.95	0.06	40.0	6.1	30	15.60	14.1	1.95
W232751		8.55	0.08	3.89	32.2	260	1.11	0.14	16.60	0.05	40.6	8.0	31	12.35	16.6	2.01
W232752		8.73	0.08	4.43	80.4	290	1.22	0.17	15.45	0.05	48.2	6.8	34	16.10	18.2	2.25
W232753		6.25	0.07	7.40	208	530	2.24	0.35	4.37	<0.02	67.1	16.0	66	28.4	29.0	2.47
W232754		5.35	0.06	7.16	3540	520	2.27	0.26	5.52	0.04	71.4	10.4	59	24.5	31.6	2.97
W232755		4.31	0.02	8.76	813	460	2.47	0.41	1.63	0.02	93.5	12.7	67	32.8	24.6	3.17

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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207400

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232720		4.49	0.05	1.3	0.217	0.006	0.96	12.1	9.7	1.91	119	1.04	0.02	2.9	8.0	350
W232721		3.03	<0.05	1.1	0.436	0.005	0.63	8.2	6.5	5.37	168	1.16	0.01	1.9	4.6	240
W232722		2.71	0.05	0.8	0.485	<0.005	0.52	7.2	6.3	10.75	293	0.54	0.01	1.6	4.6	210
W232723		2.48	0.06	0.6	0.412	<0.005	0.48	6.3	6.1	11.05	198	0.58	0.01	1.6	3.9	250
W232724		5.21	0.08	0.8	14.50	0.018	0.81	14.0	27.3	0.17	339	5.75	0.01	2.4	19.3	500
W232725		1.12	0.05	0.2	0.554	<0.005	0.19	3.4	2.9	12.55	182	0.76	0.01	0.7	2.8	210
W232726		1.92	<0.05	0.3	1.530	<0.005	0.36	5.1	5.1	11.70	585	0.56	0.01	1.2	8.2	360
W232727		2.20	0.05	0.4	2.59	<0.005	0.44	5.1	5.7	10.25	882	0.53	0.01	1.4	14.0	280
W232728		0.35	<0.05	<0.1	0.011	<0.005	0.05	0.7	1.9	13.25	198	0.45	0.01	0.2	2.4	230
W232729		1.56	<0.05	0.4	2.44	<0.005	0.31	5.1	4.2	10.35	908	0.79	0.01	1.1	16.8	140
W232730		1.69	0.05	0.4	3.99	<0.005	0.37	4.7	4.1	8.36	687	1.58	0.01	1.1	28.9	270
W232731		1.63	0.05	0.4	4.04	<0.005	0.35	4.4	3.9	8.57	704	1.55	0.01	1.1	28.4	260
W232732		1.48	0.06	0.3	5.40	<0.005	0.30	5.0	3.6	9.11	704	1.69	0.01	1.0	27.6	230
W232733		1.34	<0.05	0.3	3.56	<0.005	0.27	5.1	3.4	10.15	669	0.95	0.01	0.9	14.9	220
W232734		1.42	<0.05	0.4	2.47	<0.005	0.26	5.2	4.0	10.65	689	0.37	0.01	1.0	9.1	90
W232735		1.36	<0.05	0.4	2.31	<0.005	0.27	5.2	4.2	11.30	723	0.36	0.01	1.0	8.7	100
W232736		1.88	<0.05	0.6	3.77	<0.005	0.28	6.1	6.1	11.25	744	0.29	0.02	1.3	6.2	200
W232737		1.51	<0.05	0.4	0.814	<0.005	0.25	4.5	3.5	12.35	707	0.12	0.01	0.9	3.0	330
W232738		1.13	<0.05	0.2	3.26	<0.005	0.17	4.1	2.1	12.50	879	0.12	0.01	0.6	4.7	410
W232739		0.19	<0.05	<0.1	<0.005	<0.005	0.02	0.5	1.1	13.70	216	0.14	0.01	0.1	1.6	190
W232740		3.18	<0.05	0.5	2.63	0.007	0.56	7.8	5.8	11.40	764	0.12	0.02	1.7	23.8	450
W232741		1.94	<0.05	0.4	13.25	<0.005	0.33	5.7	5.1	11.25	705	0.17	0.02	1.1	71.6	1410
W232742		1.74	0.05	0.4	0.722	<0.005	0.31	5.5	5.3	11.75	645	0.15	0.02	1.2	6.5	1010
W232743		20.2	0.12	3.0	1.810	0.062	4.10	40.2	43.5	2.52	111	0.44	0.05	10.9	44.7	600
W232744		4.90	0.06	0.8	6.54	0.017	0.93	13.8	9.4	0.91	2270	1.82	0.01	2.6	13.6	340
W232745		10.60	0.06	1.8	1.410	0.036	2.19	23.1	17.6	6.78	359	0.35	0.03	5.9	17.2	710
W232746		10.35	0.07	2.0	0.486	0.027	2.06	22.0	16.3	6.60	342	0.41	0.03	6.0	15.0	700
W232747		9.69	0.08	1.8	0.386	0.027	2.01	22.2	14.8	4.51	305	0.89	0.03	5.6	16.6	720
W232748		8.84	0.07	1.7	0.116	0.026	1.91	20.0	12.3	4.55	341	0.69	0.03	5.2	11.8	600
W232749		9.10	0.07	1.7	0.113	0.024	1.92	20.0	11.5	4.03	336	0.64	0.03	5.2	14.4	530
W232750		9.93	0.07	1.8	0.138	0.032	2.13	21.8	11.7	3.19	318	0.55	0.03	5.7	14.8	560
W232751		9.44	0.07	1.8	0.123	0.033	2.08	22.1	7.9	3.50	346	0.68	0.03	5.6	18.6	550
W232752		11.10	0.09	1.9	0.119	0.043	2.38	25.5	9.1	3.18	430	0.56	0.03	6.4	16.5	550
W232753		20.8	0.10	3.3	0.417	0.071	4.29	34.2	15.5	1.55	258	0.52	0.05	12.4	32.3	580
W232754		19.00	0.11	2.9	1.000	0.062	3.99	37.3	14.9	1.99	406	0.22	0.04	10.7	24.7	690
W232755		23.0	0.15	2.9	0.254	0.076	4.81	49.3	13.9	1.11	525	0.17	0.04	12.7	34.6	490

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CERTIFICATE OF ANALYSIS WH17207400

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232720		6.4	34.9	<0.002	0.30	0.31	2.8	1	0.6	680	0.21	<0.05	3.69	0.084	0.37	11.3
W232721		4.9	20.3	<0.002	0.45	3.94	1.9	1	0.4	381	0.14	<0.05	2.46	0.057	0.44	13.1
W232722		5.0	16.6	0.002	0.38	0.83	1.7	1	0.4	80.2	0.14	<0.05	2.14	0.049	0.75	13.9
W232723		5.5	15.1	<0.002	0.33	1.71	1.6	1	0.4	77.2	0.11	<0.05	1.87	0.045	0.65	13.0
W232724		9.3	40.8	0.003	4.54	156.5	2.9	2	1.1	344	0.17	0.11	2.83	0.096	41.0	4.2
W232725		6.5	6.1	<0.002	0.28	2.31	0.7	1	0.2	70.0	0.05	<0.05	0.80	0.020	0.68	14.9
W232726		26.6	11.5	<0.002	1.45	5.49	1.3	1	0.3	100.0	0.09	<0.05	1.40	0.034	2.69	20.5
W232727		56.4	13.6	<0.002	6.17	2.84	1.4	1	0.4	79.0	0.10	<0.05	1.72	0.042	8.42	24.8
W232728		1.1	2.1	<0.002	0.01	0.11	0.2	<1	<0.2	50.4	<0.05	<0.05	0.10	0.006	0.02	0.7
W232729		48.6	9.3	<0.002	5.95	3.03	1.1	1	0.7	83.3	0.07	<0.05	1.26	0.030	14.40	18.7
W232730		88.6	11.8	<0.002	>10.0	7.16	1.1	1	0.3	71.3	0.08	<0.05	1.43	0.034	36.3	26.2
W232731		89.0	11.4	<0.002	>10.0	6.86	1.1	1	0.3	71.1	0.08	<0.05	1.36	0.033	32.7	25.4
W232732		88.5	9.7	<0.002	9.38	11.55	1.0	1	1.0	78.9	0.07	<0.05	1.23	0.028	30.3	26.7
W232733		43.0	8.9	<0.002	4.47	19.55	0.9	1	0.9	86.9	0.06	<0.05	1.06	0.025	12.80	18.7
W232734		26.4	8.5	<0.002	3.17	4.40	0.9	<1	0.4	97.2	0.07	<0.05	1.15	0.028	7.32	15.0
W232735		25.1	8.3	<0.002	3.20	4.26	1.0	1	0.5	97.2	0.07	<0.05	1.15	0.029	7.07	14.8
W232736		14.7	9.3	<0.002	1.96	10.40	1.2	1	0.5	129.5	0.09	<0.05	1.58	0.039	8.88	11.9
W232737		2.9	8.6	<0.002	0.31	2.75	1.0	<1	0.3	98.9	0.05	<0.05	1.04	0.026	1.44	3.4
W232738		7.0	5.9	<0.002	0.85	6.84	0.9	<1	0.4	100.0	<0.05	<0.05	0.62	0.018	5.78	2.9
W232739		1.1	0.8	<0.002	<0.01	0.11	0.2	<1	<0.2	50.2	<0.05	<0.05	0.08	<0.005	0.03	0.8
W232740		24.1	19.9	<0.002	1.69	5.95	2.1	1	0.4	97.1	0.10	<0.05	1.81	0.052	6.57	2.5
W232741		61.8	11.5	<0.002	1.90	7.61	1.5	<1	0.3	99.9	0.07	<0.05	1.22	0.031	12.70	4.4
W232742		9.1	10.5	<0.002	0.56	3.03	1.4	1	0.2	99.7	0.07	<0.05	1.29	0.032	1.19	4.7
W232743		33.1	173.0	<0.002	5.64	1.65	14.0	<1	2.3	58.0	0.75	0.09	13.85	0.363	3.06	2.3
W232744		6.9	40.4	0.002	1.42	44.9	5.5	1	0.7	1030	0.19	<0.05	3.10	0.087	21.3	5.9
W232745		16.4	84.0	<0.002	1.52	0.74	7.4	<1	1.3	126.5	0.41	0.05	6.70	0.197	1.43	4.1
W232746		12.4	79.4	<0.002	0.91	0.53	6.8	<1	1.3	147.5	0.43	0.05	6.51	0.194	0.82	5.0
W232747		15.7	78.6	<0.002	0.51	0.40	6.8	1	1.2	437	0.40	0.05	6.52	0.181	0.76	9.9
W232748		11.8	69.3	<0.002	0.56	0.38	6.2	1	1.1	515	0.37	<0.05	5.79	0.171	0.60	8.3
W232749		9.7	71.7	<0.002	0.67	0.45	6.1	1	1.1	561	0.37	<0.05	5.99	0.168	0.58	9.2
W232750		8.5	82.0	<0.002	0.79	0.35	6.8	<1	1.2	482	0.40	<0.05	6.39	0.188	0.54	6.8
W232751		9.6	75.9	0.002	0.65	0.39	6.5	<1	1.2	476	0.42	0.06	6.17	0.182	0.52	6.4
W232752		7.2	89.7	0.002	0.21	0.37	7.8	<1	1.4	494	0.46	<0.05	7.08	0.214	0.55	6.9
W232753		9.8	125.5	<0.002	0.87	0.76	13.1	1	2.6	166.0	0.83	0.12	11.30	0.386	1.51	4.1
W232754		8.0	139.5	<0.002	1.32	8.31	12.5	<1	2.3	188.0	0.75	0.06	11.45	0.351	2.76	3.4
W232755		11.8	163.5	<0.002	1.79	1.27	14.7	<1	2.5	85.2	0.85	0.10	15.20	0.397	1.71	2.9

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207400

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W232720		34	0.6	7.2	14	51.7		0.01
W232721		25	0.7	5.4	11	38.7		0.01
W232722		26	1.0	5.1	6	31.0		0.01
W232723		24	0.8	4.2	5	23.1		0.01
W232724		36	6.2	15.8	66	30.1	7.01	8.25
W232725		14	0.5	2.7	5	7.3		0.01
W232726		13	1.2	4.0	5	12.0		0.02
W232727		15	1.3	3.6	6	15.1		0.03
W232728		3	0.1	0.9	16	<0.5		<0.01
W232729		16	1.0	3.4	19	12.1		0.01
W232730		22	1.0	3.0	12	12.6		0.05
W232731		22	1.0	3.0	7	12.1		0.04
W232732		16	1.2	3.3	24	10.9		0.08
W232733		11	0.8	3.2	5	10.1		0.07
W232734		10	0.9	3.1	7	15.3		0.03
W232735		11	0.9	3.1	7	15.5		0.02
W232736		15	1.6	4.1	19	27.2		0.08
W232737		9	0.6	3.8	7	12.8		0.02
W232738		5	0.5	4.3	108	6.2		0.05
W232739		2	0.1	0.8	17	<0.5		<0.01
W232740		14	1.1	5.5	113	17.2		0.04
W232741		11	0.7	6.6	30	13.6		0.06
W232742		11	0.6	7.3	8	14.8		0.01
W232743		103	2.3	18.6	81	109.5		<0.01
W232744		33	17.0	15.4	25	31.8	1.385	2.67
W232745		56	1.1	14.9	223	66.5		0.01
W232746		57	1.2	13.8	222	69.9		<0.01
W232747		57	0.8	12.8	108	66.5		<0.01
W232748		58	0.8	11.6	46	61.3		<0.01
W232749		55	0.8	11.4	69	64.7		<0.01
W232750		57	0.8	11.8	56	66.3		<0.01
W232751		56	0.7	13.0	37	65.7		<0.01
W232752		64	0.9	16.0	18	72.8		<0.01
W232753		117	2.5	20.2	25	120.5		<0.01
W232754		106	4.4	20.9	29	107.5		0.02
W232755		105	3.6	23.0	39	107.0		0.04

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207400

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

Applies to Method:				
	BAG- 06	CRU- 31	CRU- QC	LOG- 21
	LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
	PUL- QC	SPL- 21	SPL- 21d	WEI- 21
	WSH- 21	WSH- 22		

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:				
	As- OG62	Au- AA25	Hg- MS42	ME- MS61
	ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

CERTIFICATE WH17207402

Project: Nadaleen

P.O. No.: N17- 110

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

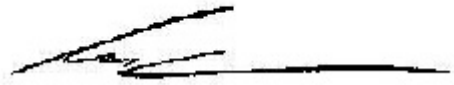
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207402

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231162		11.58	0.14	7.45	410	290	2.57	0.31	2.72	0.26	69.8	20.2	84	31.3	65.6	5.42
W231163		9.36	0.14	7.66	411	260	2.26	0.32	2.02	0.17	71.7	20.0	86	32.4	63.4	5.49
W231164		12.11	0.16	6.03	639	250	1.51	0.24	2.37	0.09	57.1	20.9	65	16.95	53.7	4.82
W231165		5.21	0.11	5.90	1800	160	1.57	0.21	2.18	0.06	54.9	19.9	64	18.05	53.7	5.07
W231166		6.07	0.36	4.90	>10000	250	1.15	0.22	0.76	0.17	44.6	17.4	64	12.60	54.3	5.96
W231167		7.53	<0.01	0.06	10.5	50	0.05	0.02	19.95	0.06	1.16	0.6	1	0.17	1.7	0.46
W231168		11.09	0.09	5.60	1330	290	1.47	0.21	2.78	0.08	59.1	16.8	64	15.80	40.6	4.74
W231169		6.96	0.06	6.16	232	260	1.84	0.23	2.75	0.03	59.6	18.3	68	22.3	51.1	4.67
W231170		8.19	0.07	6.02	97.9	220	1.81	0.23	2.61	<0.02	57.7	18.8	69	28.3	51.0	4.44
W231171		7.48	0.10	6.27	174.5	250	1.99	0.25	4.87	0.13	61.2	16.4	64	20.6	51.2	5.24
W231172		7.17	0.08	5.66	111.0	230	1.67	0.21	5.87	0.22	54.6	16.4	59	20.0	46.2	4.69
W231173		7.34	0.06	5.79	133.5	190	1.68	0.21	2.85	<0.02	57.3	18.7	64	21.2	48.3	4.63
W231174		7.20	0.07	4.76	2280	170	1.12	0.19	2.15	0.13	48.1	15.3	58	11.60	41.3	3.98
W231175		7.97	0.10	5.95	969	210	1.60	0.25	2.00	0.19	55.6	17.8	75	16.60	65.2	5.12
W231176		7.49	0.07	6.18	256	190	1.67	0.23	2.36	0.14	54.5	19.0	77	17.50	56.7	5.03
W231177		7.48	0.06	4.21	134.5	140	1.13	0.17	3.11	0.09	41.1	12.8	60	11.60	34.0	3.67
W231178		7.35	0.07	6.35	441	210	1.60	0.24	2.71	0.20	62.3	20.3	78	15.55	57.9	5.23
W231179		7.19	0.07	5.91	89.5	260	1.84	0.22	1.94	0.13	58.4	17.9	71	18.75	50.6	4.74
W231180		8.40	0.08	6.14	86.2	220	1.89	0.24	2.09	0.04	59.5	18.9	77	25.3	52.1	4.80
W231181		8.73	0.08	6.82	139.0	220	2.33	0.27	2.05	<0.02	69.1	21.2	81	36.6	59.3	5.02
W231182		8.35	0.09	6.07	159.5	230	1.94	0.24	2.12	0.04	60.8	19.4	66	23.9	53.3	4.89
W231183		0.26	1.54	3.14	>10000	130	0.59	0.33	7.88	0.72	41.7	11.1	47	8.32	32.2	3.08
W231184		8.05	0.06	4.82	230	140	1.16	0.17	2.16	0.09	47.5	15.6	70	18.65	42.2	4.01
W231185		8.34	0.05	4.68	1400	350	1.32	0.18	1.67	0.08	44.8	11.5	54	12.15	35.2	3.40
W231186		8.26	0.16	7.10	>10000	280	1.77	0.28	2.99	0.16	66.4	18.2	68	17.20	51.5	5.10
W231187		8.48	0.06	6.53	235	290	1.80	0.25	2.55	0.08	60.9	22.5	70	20.9	58.3	5.54
W231188		7.72	0.05	6.57	83.2	220	1.91	0.26	2.05	0.14	62.6	20.5	80	30.3	58.8	5.34
W231189		0.26	1.66	1.91	>10000	100	0.29	0.46	7.04	0.82	27.2	6.8	47	3.15	27.8	2.56
W231190		7.60	0.07	6.03	78.3	210	1.44	0.22	1.82	0.04	60.1	21.6	74	30.5	55.2	5.13
W231191		7.21	0.06	6.13	469	190	1.72	0.23	2.43	0.06	57.8	17.7	70	18.15	54.3	5.07
W231192		7.47	0.08	7.65	918	190	1.95	0.28	2.08	0.18	67.3	21.3	83	23.8	64.9	5.79
W231193		7.85	0.37	6.59	>10000	170	1.71	0.27	0.76	0.45	59.6	19.5	79	15.65	56.0	5.21
W231194		<0.02	0.35	6.67	>10000	170	1.48	0.27	0.76	0.44	58.5	18.2	82	15.55	54.1	5.22
W231195		7.49	0.19	6.01	>10000	170	1.49	0.22	2.58	0.12	52.1	19.0	76	14.55	48.3	4.92
W231196		4.58	0.16	6.04	>10000	180	1.52	0.22	2.60	0.10	54.2	17.2	75	14.90	49.1	4.92
W231197		5.08	<0.01	0.06	36.0	40	0.06	0.02	21.0	0.07	1.10	0.7	1	0.14	1.3	0.47

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Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207402

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231162		20.3	0.10	3.8	10.90	0.085	3.34	33.5	38.6	1.47	351	1.52	0.03	11.4	47.8	500
W231163		20.8	0.13	3.7	13.05	0.085	3.63	33.8	20.9	1.27	365	1.39	0.03	11.5	48.0	490
W231164		16.30	0.10	2.9	5.72	0.054	2.82	26.4	14.3	1.27	866	0.69	0.02	9.8	38.4	480
W231165		15.90	0.08	2.9	5.87	0.052	2.69	25.7	20.5	1.15	653	0.62	0.02	9.7	36.0	440
W231166		13.15	0.07	2.4	28.7	0.058	2.13	20.2	17.0	0.55	436	0.56	0.01	8.0	31.0	370
W231167		0.20	0.10	<0.1	0.040	<0.005	0.02	0.6	0.8	12.55	197	0.13	0.01	0.2	1.6	190
W231168		14.35	0.06	2.8	2.93	0.054	2.67	28.0	13.6	1.37	997	0.62	0.02	9.2	31.6	980
W231169		16.10	0.08	3.3	1.770	0.057	2.97	27.7	21.1	1.45	622	0.62	0.02	10.1	34.7	480
W231170		15.95	0.08	2.9	0.868	0.059	2.87	27.5	43.5	1.72	485	0.65	0.03	10.0	34.0	500
W231171		16.40	0.09	3.5	6.24	0.070	3.04	29.8	16.9	2.43	569	1.24	0.03	9.7	36.5	660
W231172		14.35	0.07	2.8	2.02	0.061	2.74	25.8	19.0	2.96	664	0.70	0.03	9.2	31.8	630
W231173		15.20	0.11	2.8	1.840	0.065	2.81	27.0	25.7	1.48	565	0.57	0.02	9.6	33.3	650
W231174		12.60	0.06	2.3	5.00	0.045	2.28	21.2	14.0	1.09	653	0.91	0.02	7.8	28.5	430
W231175		15.60	0.09	2.8	7.06	0.058	2.84	26.0	16.8	1.12	620	1.28	0.02	9.2	38.3	440
W231176		16.15	0.08	2.9	3.62	0.059	2.96	25.4	20.5	1.26	552	1.15	0.02	9.5	39.8	480
W231177		10.70	0.07	2.1	1.715	0.033	1.98	20.4	20.8	1.42	745	1.77	0.02	6.8	23.9	370
W231178		16.85	0.07	3.2	2.25	0.064	3.05	29.7	25.8	1.44	720	0.84	0.02	10.6	38.5	570
W231179		15.55	0.09	3.0	0.659	0.062	2.69	27.3	47.7	1.12	523	1.06	0.02	9.8	33.1	480
W231180		16.00	0.08	2.9	0.212	0.058	2.91	28.8	45.8	1.97	507	0.72	0.02	9.8	35.1	620
W231181		18.35	0.09	3.2	0.160	0.068	3.31	32.4	54.2	2.28	482	0.64	0.03	11.4	39.6	550
W231182		16.40	0.10	3.0	0.431	0.068	2.91	28.2	25.4	1.55	499	0.54	0.02	9.9	34.7	510
W231183		8.51	0.07	1.8	26.9	0.041	1.44	21.8	16.9	1.97	1120	4.30	0.02	4.6	24.4	350
W231184		11.95	0.13	2.4	1.405	0.049	2.24	23.1	12.5	1.16	585	1.03	0.02	7.9	31.4	390
W231185		12.05	0.06	2.2	2.57	0.036	2.26	21.0	12.5	0.97	589	1.13	0.02	6.9	22.5	390
W231186		18.30	0.09	3.1	3.69	0.064	3.47	32.4	15.1	1.88	1200	0.78	0.03	10.4	37.2	560
W231187		16.90	0.09	3.1	0.771	0.056	3.08	29.5	28.2	1.57	757	0.55	0.02	10.6	39.7	540
W231188		16.85	0.09	3.3	0.109	0.069	3.11	30.2	59.5	2.28	699	0.70	0.04	10.8	38.2	520
W231189		5.34	0.07	0.9	17.60	0.020	0.85	13.7	28.4	0.17	343	6.23	0.01	2.6	19.9	520
W231190		15.20	0.15	2.8	0.283	0.066	2.72	29.1	56.9	1.79	581	0.52	0.04	11.2	38.9	480
W231191		15.65	0.07	2.9	0.694	0.061	2.86	27.1	29.9	1.43	897	0.83	0.02	10.1	33.9	470
W231192		20.3	0.15	3.5	1.720	0.063	3.62	32.4	14.4	1.36	935	0.64	0.03	12.6	43.3	630
W231193		17.80	0.16	3.1	13.35	0.042	3.11	28.1	14.5	0.62	424	0.86	0.02	10.7	38.9	560
W231194		17.65	0.14	3.0	13.55	0.045	3.17	28.0	14.9	0.63	420	0.98	0.02	10.5	37.3	570
W231195		15.55	0.15	2.7	4.18	0.051	2.83	25.0	15.4	1.30	1020	0.88	0.02	9.7	35.9	530
W231196		16.00	0.16	2.9	3.79	0.053	2.81	26.1	15.6	1.29	1020	0.85	0.02	9.9	36.2	520
W231197		0.21	0.09	<0.1	0.008	<0.005	0.03	0.5	1.2	13.20	208	0.10	0.01	0.2	1.6	190

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207402

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231162		22.1	154.0	0.005	4.94	1.48	21.8	2	2.5	108.5	0.81	0.07	10.85	0.555	31.2	2.8
W231163		22.0	165.0	0.006	5.07	3.76	22.5	1	2.5	94.8	0.82	0.09	11.10	0.561	30.3	2.8
W231164		18.3	127.5	<0.002	4.45	9.17	19.1	<1	2.3	117.5	0.68	<0.05	8.39	0.498	15.25	1.9
W231165		15.3	125.5	<0.002	4.86	13.40	18.1	<1	1.8	104.5	0.67	<0.05	8.12	0.508	12.70	1.6
W231166		17.1	98.9	<0.002	7.35	156.5	13.5	2	1.5	110.0	0.58	0.14	6.63	0.446	42.4	1.4
W231167		1.3	1.1	<0.002	0.01	0.15	0.2	<1	<0.2	49.2	<0.05	<0.05	0.08	<0.005	0.04	0.6
W231168		15.0	118.5	<0.002	4.32	7.76	16.6	<1	1.7	161.5	0.62	0.06	7.99	0.477	8.49	1.9
W231169		16.0	133.5	<0.002	4.14	2.04	16.8	<1	2.0	121.0	0.72	<0.05	8.84	0.511	4.38	1.8
W231170		16.5	132.5	<0.002	2.62	0.50	16.8	<1	1.9	112.5	0.69	0.05	8.31	0.506	2.97	1.7
W231171		19.9	126.0	0.003	4.08	7.47	17.2	1	2.1	195.0	0.69	<0.05	8.96	0.468	12.75	2.2
W231172		14.6	116.0	<0.002	3.48	2.13	15.4	<1	1.8	222	0.67	0.07	7.82	0.455	5.23	1.7
W231173		14.4	122.0	<0.002	4.06	0.53	16.4	<1	1.9	138.5	0.66	<0.05	8.15	0.501	3.91	1.7
W231174		22.4	93.5	<0.002	3.47	13.60	13.2	1	1.6	96.6	0.53	<0.05	6.79	0.429	12.05	1.4
W231175		23.2	116.5	0.004	4.84	10.45	17.2	1	4.9	108.0	0.64	0.07	8.44	0.524	16.25	1.8
W231176		28.0	123.5	0.002	4.48	3.20	17.8	<1	2.0	138.0	0.66	<0.05	8.25	0.556	6.93	1.7
W231177		14.2	87.1	<0.002	2.65	2.14	11.0	<1	1.3	173.0	0.48	0.05	6.35	0.386	3.97	1.3
W231178		18.5	132.0	<0.002	4.73	3.28	18.4	<1	2.0	137.5	0.71	0.06	8.96	0.596	5.82	1.8
W231179		14.5	125.0	<0.002	4.37	0.58	16.6	1	1.9	153.5	0.68	0.05	8.74	0.532	4.08	1.8
W231180		15.4	139.0	<0.002	0.98	0.53	16.6	<1	2.0	115.0	0.67	0.08	8.71	0.529	1.86	1.8
W231181		18.3	170.0	<0.002	0.34	0.49	19.0	<1	2.2	93.4	0.80	0.06	10.20	0.567	1.30	2.1
W231182		16.1	147.0	<0.002	3.32	0.64	16.8	<1	2.0	123.0	0.71	0.07	9.24	0.507	2.82	1.8
W231183		20.6	67.6	0.002	5.20	204	5.9	2	1.4	191.5	0.32	0.19	5.12	0.185	74.6	6.1
W231184		14.5	117.5	<0.002	3.84	3.14	12.6	<1	1.5	89.7	0.54	<0.05	7.06	0.449	5.02	1.5
W231185		11.3	102.0	<0.002	3.12	5.82	12.0	<1	1.8	75.3	0.50	<0.05	7.15	0.342	9.99	1.4
W231186		17.7	155.5	0.002	5.24	41.0	18.5	1	2.3	121.5	0.73	0.09	9.99	0.503	11.70	2.0
W231187		19.6	150.5	<0.002	5.11	2.98	18.3	<1	2.2	229	0.77	0.05	9.04	0.571	4.29	1.8
W231188		18.2	167.5	<0.002	0.22	0.45	18.4	<1	2.1	98.2	0.77	<0.05	9.12	0.586	1.34	1.9
W231189		11.1	39.2	0.003	4.74	161.5	3.2	1	1.2	357	0.17	0.12	3.04	0.104	42.6	4.4
W231190		15.4	169.5	<0.002	1.76	0.62	16.5	<1	1.9	131.0	0.69	0.05	8.40	0.535	2.06	1.8
W231191		15.7	152.0	<0.002	4.75	2.29	16.8	<1	1.9	137.0	0.70	0.07	8.71	0.542	3.45	1.8
W231192		18.9	180.0	<0.002	5.92	8.92	21.0	1	2.6	83.6	0.94	0.06	9.87	0.648	6.23	2.1
W231193		17.9	145.0	<0.002	6.04	119.5	16.0	1	2.2	51.3	0.82	0.21	8.81	0.550	78.6	1.9
W231194		17.0	144.0	<0.002	6.09	120.0	15.8	1	2.2	49.8	0.79	0.17	8.72	0.554	77.9	1.9
W231195		15.3	122.5	<0.002	5.54	68.8	15.9	1	2.0	79.8	0.72	0.07	7.89	0.532	16.85	1.6
W231196		14.5	124.5	<0.002	5.57	61.6	16.5	1	2.1	81.7	0.75	0.09	8.04	0.523	15.55	1.7
W231197		1.4	1.1	<0.002	<0.01	0.22	0.2	1	<0.2	51.5	<0.05	<0.05	0.10	0.005	0.04	0.8

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VANCOUVER BC V6B 1L8

Finalized Date: 31- OCT- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207402

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W231162		166	2.5	23.4	128	129.0		<0.01
W231163		170	3.8	23.0	95	130.0		0.20
W231164		137	8.6	19.8	60	104.5		0.40
W231165		135	10.7	20.8	59	102.5		0.36
W231166		116	13.4	15.7	52	84.9	6.21	3.67
W231167		2	0.1	0.8	18	0.8		<0.01
W231168		129	9.1	24.1	45	99.3		0.43
W231169		136	3.8	20.0	57	107.5		0.10
W231170		134	1.2	19.5	49	107.5		<0.01
W231171		136	3.4	20.5	88	106.0		<0.01
W231172		122	2.3	19.0	155	97.7		<0.01
W231173		133	2.4	20.6	54	101.0		<0.01
W231174		116	8.9	16.0	60	84.6		0.39
W231175		153	9.5	18.1	97	100.5		0.45
W231176		158	8.9	18.9	110	103.0		0.09
W231177		102	4.2	14.4	73	76.2		0.09
W231178		159	7.3	21.3	130	113.0		0.16
W231179		143	2.0	19.3	83	106.5		<0.01
W231180		140	1.3	21.0	60	105.0		<0.01
W231181		147	1.6	23.1	71	118.0		<0.01
W231182		136	1.8	20.4	66	112.5		<0.01
W231183		55	5.5	19.2	118	59.2	7.71	12.85
W231184		119	4.8	16.8	70	101.5		0.16
W231185		95	5.5	14.3	54	76.0		0.91
W231186		139	7.3	20.5	96	108.0	1.235	1.01
W231187		151	3.5	20.8	78	109.0		0.12
W231188		157	1.3	21.6	105	113.0		<0.01
W231189		38	6.7	15.9	67	30.9	7.01	8.30
W231190		141	1.1	21.3	62	106.5		0.02
W231191		143	4.3	20.0	76	104.5		0.16
W231192		168	12.4	25.0	121	128.0		0.55
W231193		143	12.5	21.7	82	111.5	1.095	19.55
W231194		146	12.3	21.1	83	110.0	1.085	19.65
W231195		139	9.8	18.4	74	98.4	1.730	2.58
W231196		138	10.0	19.3	70	101.5	1.590	2.05
W231197		2	0.1	0.8	18	0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 31- OCT- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207402

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 1- NOV- 2017
Account: RCM

CERTIFICATE WH17209282

Project: Nadaleen

P.O. No.: N17- 111

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 27- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

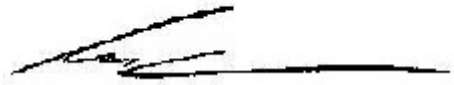
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17209282

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232756		8.89	0.04	9.18	112.0	360	2.61	0.44	1.05	0.02	78.3	15.4	72	30.0	44.9	3.67
W232757		4.82	0.06	9.62	40.1	570	2.51	0.44	0.77	<0.02	73.4	16.5	78	40.3	32.6	3.78
W232758		5.61	0.07	9.20	17.0	390	2.78	0.40	1.78	0.02	78.4	17.3	76	53.1	37.3	4.22
W232759		0.26	0.19	3.85	6320	200	0.91	0.13	11.85	0.16	42.8	12.3	46	10.85	37.2	2.88
W232760		8.11	0.07	7.78	23.1	310	1.95	0.31	8.03	0.02	85.5	15.2	59	38.2	36.2	3.88
W232761		6.30	0.05	6.83	9.2	250	1.67	0.28	13.20	0.03	75.9	10.9	43	32.0	28.4	3.15
W232762		8.23	0.04	6.45	6.9	240	1.52	0.25	14.75	0.02	74.6	10.2	40	30.2	21.3	2.85
W232763		8.77	0.04	7.04	8.9	290	1.69	0.27	11.25	0.02	79.6	10.5	44	28.1	29.8	3.31
W232764		8.87	0.04	9.00	5.0	320	2.52	0.39	1.42	0.02	71.3	15.0	74	37.0	39.0	3.81
W232765		8.43	0.06	5.43	16.0	210	1.33	0.22	14.75	0.02	63.2	10.3	39	22.4	20.2	2.78
W232766		8.21	0.08	4.33	12.1	210	1.07	0.18	17.30	0.11	59.2	8.9	34	12.95	17.8	2.59
W232767		7.04	0.12	2.01	933	170	0.62	0.06	17.70	0.13	27.4	2.8	18	6.32	8.9	1.06
W232768		8.32	0.09	1.99	1315	160	0.65	0.07	18.40	0.08	27.6	4.1	17	6.75	8.7	1.56
W232769		7.66	0.11	1.71	1080	120	0.62	0.05	17.15	0.09	24.0	2.9	15	4.99	8.1	1.03
W232770		5.55	0.12	2.47	1690	190	0.69	0.08	17.50	0.11	32.3	4.1	20	7.22	10.8	1.41
W232771		6.25	0.08	1.53	939	100	0.51	0.06	19.55	0.06	22.4	2.5	13	4.56	7.1	1.04
W232772		7.83	0.08	2.81	761	210	0.95	0.07	17.40	0.08	37.6	4.2	30	13.75	12.8	1.26
W232773		8.18	0.04	2.84	97.0	130	1.03	0.07	18.20	0.06	36.5	4.3	30	15.90	14.7	1.13
W232774		7.70	0.07	2.14	112.0	100	0.84	0.05	19.55	0.05	27.4	4.0	24	9.01	9.9	1.03
W232775		11.02	0.04	2.73	88.4	110	1.07	0.07	20.7	0.09	33.2	3.8	30	13.30	13.8	0.96
W232776		11.96	0.04	2.42	95.9	120	0.90	0.07	23.2	0.08	31.5	3.6	24	8.55	15.9	0.80
W232777		4.23	0.12	1.17	98.3	50	0.41	0.03	23.8	0.03	18.75	3.0	13	2.89	7.9	0.94
W232778		3.36	0.54	2.38	8230	90	0.62	0.06	14.35	0.08	29.2	4.1	30	5.60	13.3	1.12
W232779		3.74	0.52	1.67	>10000	60	0.49	0.04	15.15	0.06	23.1	2.8	21	3.82	8.5	0.76
W232780		7.17	<0.01	0.04	30.3	30	0.06	0.02	19.95	0.06	1.13	0.6	<1	0.12	1.4	0.42
W232781		6.14	0.67	0.82	>10000	50	0.29	0.04	16.70	0.40	18.80	1.8	11	1.49	6.2	0.61
W232782		<0.02	0.79	0.87	>10000	60	0.26	0.04	16.65	0.44	19.90	1.9	11	1.55	6.8	0.69
W232783		5.40	0.30	1.57	>10000	110	0.44	0.06	15.75	0.09	24.6	3.2	17	3.62	16.4	0.77
W232784		4.28	0.57	2.24	8300	90	0.62	0.07	14.40	0.18	32.5	3.6	24	5.00	13.8	1.15
W232785		6.42	0.24	4.51	3090	170	1.34	0.11	8.22	0.07	57.7	7.0	48	16.00	31.3	1.97
W232786		10.86	0.28	4.26	4490	180	1.39	0.10	8.20	0.05	52.3	7.0	44	13.25	21.4	2.08
W232787		5.71	0.31	4.29	4790	180	1.39	0.10	8.05	0.05	53.1	7.2	46	13.50	23.0	2.10
W232788		5.11	0.62	2.67	>10000	180	0.65	0.07	13.85	0.18	33.0	4.4	29	5.63	15.1	1.30
W232789		7.20	0.01	0.06	21.9	20	0.06	0.08	19.70	0.06	1.07	0.6	<1	0.14	2.3	0.42
W232790		0.26	0.26	3.70	>10000	170	0.68	0.17	9.59	0.64	44.3	11.1	47	8.78	53.7	2.84
W232791		12.38	0.08	3.46	54.4	210	1.35	0.08	14.90	0.10	43.9	6.0	38	14.55	16.8	1.49

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 1- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209282

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232756		24.6	0.11	2.8	0.088	0.072	4.75	39.1	14.2	0.94	440	0.32	0.04	13.1	39.8	340
W232757		25.5	0.11	2.7	0.089	0.071	5.15	36.3	18.4	0.91	387	0.47	0.04	13.4	40.4	480
W232758		25.1	0.14	2.8	0.077	0.076	5.22	39.3	21.4	1.27	583	0.36	0.05	13.1	40.7	530
W232759		10.40	0.08	2.0	15.80	0.033	1.87	22.3	11.7	2.56	1150	1.81	0.02	6.1	27.8	440
W232760		19.85	0.12	2.4	0.070	0.061	4.33	46.5	18.4	1.46	605	0.34	0.04	10.1	34.6	820
W232761		16.80	0.11	2.0	0.019	0.055	3.61	41.9	18.0	1.23	641	0.28	0.04	8.5	26.3	480
W232762		15.55	0.10	1.9	0.014	0.048	3.39	40.9	23.5	1.07	529	0.18	0.04	8.0	24.1	500
W232763		17.15	0.12	2.1	0.013	0.052	3.65	43.5	26.3	1.14	594	0.35	0.04	8.9	25.8	510
W232764		24.6	0.12	2.8	0.009	0.073	4.86	34.1	41.5	1.08	560	0.18	0.05	13.4	39.6	320
W232765		13.20	0.10	1.8	0.014	0.047	2.80	34.2	23.5	0.93	475	0.40	0.03	7.0	22.7	520
W232766		10.55	0.08	1.8	0.047	0.035	2.20	30.9	22.2	0.94	324	0.38	0.03	6.3	18.9	360
W232767		4.91	0.06	1.2	1.850	0.018	1.06	14.8	7.6	6.40	753	0.35	0.02	3.0	7.0	500
W232768		4.86	0.06	1.1	1.800	0.021	1.04	14.8	7.4	7.86	549	0.37	0.02	2.9	8.8	360
W232769		4.20	0.05	0.9	1.740	0.015	0.86	12.9	6.9	8.66	503	0.33	0.02	2.6	7.0	370
W232770		5.97	0.07	1.2	1.720	0.020	1.26	17.4	8.9	6.71	485	0.33	0.03	3.6	10.3	360
W232771		3.79	0.06	0.8	1.020	0.015	0.76	11.9	6.6	8.14	499	0.25	0.03	2.4	6.7	450
W232772		7.06	0.08	1.6	0.447	0.024	1.53	19.4	14.6	4.31	398	0.46	0.03	4.6	12.2	350
W232773		7.09	0.08	1.8	0.112	0.022	1.57	19.5	15.9	4.12	242	0.48	0.02	4.8	11.8	350
W232774		5.39	0.08	1.4	0.110	0.016	1.17	14.6	9.9	4.36	235	0.92	0.02	3.7	10.8	290
W232775		7.05	0.08	1.4	0.702	0.021	1.50	17.6	17.6	2.24	196	0.26	0.02	4.6	10.9	350
W232776		6.10	0.09	1.2	0.594	0.020	1.31	16.3	13.2	2.52	209	0.41	0.02	4.0	8.9	280
W232777		2.94	0.06	0.7	1.960	0.010	0.60	9.4	5.3	5.21	586	0.79	0.01	2.0	8.0	190
W232778		6.21	0.08	1.5	4.67	0.018	1.19	15.1	12.1	8.11	891	0.81	0.02	4.0	10.5	320
W232779		4.46	0.08	1.0	3.11	0.015	0.87	12.3	8.9	8.91	614	0.78	0.02	2.9	7.0	220
W232780		0.18	0.05	<0.1	0.008	<0.005	0.02	0.5	1.0	12.35	194	0.12	<0.01	0.1	1.4	190
W232781		2.19	0.07	0.4	11.85	0.016	0.40	9.2	5.0	9.77	873	0.30	0.01	1.3	4.5	200
W232782		2.35	0.07	0.4	13.15	0.017	0.42	9.7	5.2	9.74	902	0.32	0.01	1.4	4.8	220
W232783		4.12	0.07	0.7	9.60	0.014	0.80	12.6	8.3	9.40	579	0.91	0.01	2.3	10.7	370
W232784		5.61	0.07	1.3	12.20	0.019	1.14	15.6	9.7	8.62	541	0.52	0.02	3.6	9.6	310
W232785		11.45	0.10	2.4	8.04	0.031	2.46	27.4	27.8	4.93	287	1.26	0.02	7.1	21.7	670
W232786		10.75	0.09	2.5	7.83	0.027	2.32	24.9	27.1	4.27	374	1.25	0.02	6.6	20.5	520
W232787		11.10	0.10	2.4	8.30	0.030	2.32	25.2	26.9	4.29	392	1.20	0.02	6.7	21.1	520
W232788		6.80	0.08	1.6	15.25	0.023	1.45	16.7	12.3	3.33	799	0.98	0.01	4.3	12.6	370
W232789		0.19	0.05	<0.1	0.016	<0.005	0.02	0.5	1.0	12.00	187	0.09	<0.01	0.2	1.3	170
W232790		10.00	0.09	1.7	27.5	0.045	1.72	23.1	14.4	0.35	727	3.35	0.02	5.3	24.9	510
W232791		8.66	0.09	1.9	0.429	0.029	1.95	21.3	19.9	3.20	203	0.68	0.02	5.6	14.8	460

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 1- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209282

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232756		15.7	129.0	<0.002	2.01	0.61	15.2	<1	2.7	99.6	0.87	0.09	13.90	0.396	1.22	2.3
W232757		20.7	141.0	<0.002	1.29	0.59	15.1	<1	2.7	213	0.88	0.09	14.10	0.390	1.16	3.0
W232758		17.9	161.5	<0.002	0.51	0.48	15.2	<1	2.6	115.5	0.88	0.09	13.65	0.388	0.93	2.7
W232759		10.1	85.9	0.002	2.57	23.5	10.4	1	1.6	317	0.43	0.06	5.76	0.263	44.8	6.3
W232760		19.4	157.0	<0.002	0.60	0.52	12.5	<1	2.2	295	0.73	0.07	13.70	0.320	0.94	4.5
W232761		11.1	134.0	<0.002	0.22	0.37	10.3	<1	1.9	361	0.60	<0.05	11.70	0.264	0.67	3.0
W232762		10.3	129.5	<0.002	0.13	0.33	9.7	<1	1.8	418	0.58	0.07	11.15	0.253	0.59	3.0
W232763		11.4	139.5	<0.002	0.16	0.36	11.0	<1	1.9	335	0.62	0.08	12.00	0.291	0.62	2.9
W232764		13.9	127.5	<0.002	0.16	0.39	15.1	<1	2.6	106.5	0.87	0.10	13.20	0.391	0.77	2.2
W232765		14.0	112.0	<0.002	0.51	0.36	8.6	<1	1.5	477	0.51	0.06	8.69	0.231	0.49	3.2
W232766		27.8	89.5	<0.002	0.93	0.41	6.9	<1	1.2	513	0.46	<0.05	7.63	0.211	0.50	2.8
W232767		6.3	38.7	<0.002	0.05	2.80	3.2	<1	0.7	244	0.21	<0.05	3.73	0.091	3.66	5.0
W232768		7.3	38.2	<0.002	0.06	3.06	3.3	<1	0.6	239	0.21	<0.05	3.68	0.090	3.44	6.0
W232769		7.1	32.8	<0.002	0.05	2.71	2.8	<1	0.6	162.5	0.18	<0.05	3.13	0.077	3.05	5.3
W232770		9.6	48.1	<0.002	0.04	3.70	3.9	<1	0.7	259	0.26	<0.05	4.34	0.113	3.60	6.0
W232771		6.7	30.0	<0.002	0.06	2.18	2.5	<1	0.5	287	0.17	<0.05	2.81	0.073	1.70	4.7
W232772		6.0	57.3	<0.002	0.26	1.37	4.3	1	0.9	312	0.34	<0.05	5.88	0.137	1.12	5.5
W232773		5.0	57.5	<0.002	0.22	0.43	4.5	2	1.0	373	0.35	<0.05	6.09	0.138	0.40	8.2
W232774		5.2	41.8	<0.002	0.28	0.59	3.2	1	0.7	405	0.27	<0.05	4.51	0.106	0.40	10.0
W232775		5.2	57.3	<0.002	0.34	0.63	4.3	2	1.0	348	0.34	<0.05	5.42	0.131	1.32	7.4
W232776		4.9	47.6	<0.002	0.37	0.86	3.9	1	0.9	432	0.30	<0.05	4.73	0.113	1.12	8.9
W232777		7.3	19.3	<0.002	0.62	2.71	2.1	1	0.4	303	0.14	<0.05	2.37	0.054	4.06	13.5
W232778		10.0	43.5	<0.002	1.15	18.95	4.2	2	0.9	136.5	0.30	<0.05	4.99	0.115	11.30	14.4
W232779		8.9	31.8	<0.002	1.20	24.6	3.0	2	0.6	102.5	0.21	<0.05	3.49	0.082	7.31	15.1
W232780		0.8	0.8	<0.002	<0.01	0.14	0.1	<1	<0.2	48.1	<0.05	<0.05	0.07	<0.005	0.05	0.7
W232781		10.0	13.8	<0.002	1.54	45.8	1.9	1	0.5	108.0	0.09	<0.05	1.78	0.036	19.05	13.4
W232782		11.3	14.8	<0.002	1.60	47.6	2.0	2	0.5	111.5	0.10	<0.05	1.90	0.038	22.5	13.9
W232783		11.5	29.2	0.002	1.36	37.7	3.1	1	0.6	112.0	0.17	<0.05	2.94	0.065	21.4	14.2
W232784		9.3	39.7	<0.002	1.28	31.5	3.8	2	0.9	126.0	0.25	<0.05	4.45	0.099	24.9	13.6
W232785		12.7	84.6	0.002	1.49	12.15	6.9	2	1.5	127.5	0.52	<0.05	9.30	0.211	13.80	5.8
W232786		17.4	82.7	<0.002	1.46	18.25	6.5	2	1.4	170.5	0.50	<0.05	8.71	0.197	15.60	6.0
W232787		17.6	83.8	<0.002	1.51	19.15	6.7	2	1.4	161.0	0.48	<0.05	8.79	0.199	16.55	5.8
W232788		11.9	52.1	0.002	1.39	39.8	3.9	2	0.9	264	0.31	<0.05	5.47	0.124	21.2	12.2
W232789		1.1	1.0	<0.002	<0.01	0.15	0.1	<1	<0.2	46.3	<0.05	<0.05	0.07	<0.005	0.12	0.6
W232790		15.1	79.1	0.003	3.37	102.5	7.9	1	1.7	424	0.38	0.12	6.19	0.209	62.9	3.9
W232791		7.3	68.3	<0.002	0.56	0.35	5.3	1	1.1	287	0.41	<0.05	7.09	0.163	0.77	5.8

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Finalized Date: 1- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209282

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232756		107	2.1	19.1	40	102.5		<0.01
W232757		109	2.0	17.4	42	97.4		<0.01
W232758		110	1.6	21.5	53	102.0		<0.01
W232759		85	8.0	19.1	48	73.1		2.55
W232760		86	1.3	23.8	51	88.1		<0.01
W232761		69	1.1	20.4	47	73.3		<0.01
W232762		68	1.1	20.1	48	73.3		<0.01
W232763		78	1.1	21.4	55	80.5		<0.01
W232764		113	1.6	18.6	76	99.5		0.01
W232765		62	0.9	18.0	51	65.9		<0.01
W232766		53	0.8	15.2	137	66.8		<0.01
W232767		34	1.3	8.6	30	45.5		0.39
W232768		32	1.1	8.6	23	39.6		0.23
W232769		28	1.1	7.3	23	34.9		0.24
W232770		36	1.3	9.0	31	46.5		0.29
W232771		26	0.8	7.3	19	31.4		0.11
W232772		42	0.9	11.8	23	61.8		0.12
W232773		44	0.6	10.5	19	65.2		0.01
W232774		38	0.5	8.1	13	52.8		0.03
W232775		47	0.6	9.6	21	53.1		0.03
W232776		36	0.8	8.8	13	44.6		0.01
W232777		23	1.0	5.6	6	24.9		0.21
W232778		42	2.5	9.3	12	52.7		1.35
W232779		32	1.8	6.7	7	34.5	1.660	0.88
W232780		2	0.1	0.7	17	<0.5		0.01
W232781		18	1.3	4.4	84	13.5	2.29	1.30
W232782		18	1.4	4.6	86	14.4	2.17	1.39
W232783		31	1.9	6.2	10	24.3	1.505	1.31
W232784		39	2.4	8.4	35	48.5		1.23
W232785		77	4.0	17.0	18	91.0		1.31
W232786		75	3.1	15.1	19	92.4		2.12
W232787		76	3.1	15.0	19	91.2		2.23
W232788		50	2.0	9.9	31	61.2	1.480	3.76
W232789		3	0.1	0.7	15	<0.5		<0.01
W232790		62	7.5	21.1	128	60.8	3.25	8.07
W232791		62	0.8	13.2	29	78.6		0.01

***** See Appendix Page for comments regarding this certificate *****

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Project: Nadaleen

Finalized Date: 1- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17209282

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 4- NOV- 2017
Account: RCM

CERTIFICATE WH17207403

Project: Nadaleen

P.O. No.: N17- 112

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 26- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

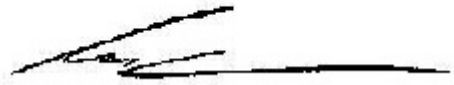
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207403

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231198		7.16	0.08	5.83	728	180	1.23	0.24	2.07	0.16	55.5	17.8	64	13.55	50.5	4.45
W231199		2.96	0.26	8.14	>10000	280	1.59	0.28	0.37	0.50	69.7	25.6	102	21.6	60.5	5.56
W231200		5.96	3.40	3.09	>10000	100	0.48	0.17	0.60	1.12	39.3	11.9	29	6.78	26.1	2.87
W231201		6.27	0.44	2.67	2680	130	0.32	0.05	24.8	0.15	48.1	9.3	9	5.66	8.0	1.69
W231202		5.06	11.55	3.12	>10000	150	0.31	0.10	0.89	0.89	66.1	14.1	12	7.61	12.0	3.83
W231203		6.59	2.53	0.94	>10000	70	0.13	0.06	2.78	0.88	11.35	3.0	13	1.52	9.4	0.79
W231204		4.86	3.59	1.52	>10000	70	0.24	0.09	5.57	4.42	25.5	4.7	22	2.19	16.1	1.27
W231205		<0.02	3.48	1.50	>10000	70	0.17	0.09	5.79	4.20	24.0	4.4	21	2.15	15.0	1.27
W231206		4.09	3.61	1.35	>10000	60	0.18	0.08	1.82	3.05	32.1	4.3	21	1.74	14.8	1.18
W231207		0.26	1.51	1.68	>10000	90	0.15	0.45	6.50	0.75	26.4	5.9	42	2.90	26.5	2.30
W231208		4.22	4.01	1.44	>10000	70	0.20	0.08	1.99	2.48	23.6	4.9	22	2.31	16.8	1.19
W231209		5.06	0.01	0.04	233	40	0.06	0.02	20.4	0.08	1.13	0.8	1	0.10	1.5	0.45
W231210		4.12	3.96	1.58	>10000	70	0.22	0.09	3.20	2.92	25.3	5.6	22	2.78	19.1	1.30
W231211		2.30	2.91	1.48	>10000	90	0.24	0.07	3.41	2.39	19.60	5.0	22	2.67	16.5	1.22
W231212		0.95	3.21	1.56	>10000	90	0.23	0.08	2.93	2.23	21.6	5.5	22	2.96	18.0	1.35
W231213		3.77	1.12	0.74	>10000	80	0.17	0.04	24.4	0.49	11.85	2.8	10	1.66	8.3	0.56
W231214		2.48	1.37	0.57	>10000	50	0.09	0.04	10.80	0.77	6.58	2.0	8	1.03	7.1	0.54
W231215		8.55	0.66	1.05	2870	100	0.25	0.05	31.0	0.08	12.75	3.8	11	3.27	11.9	0.96
W231216		8.11	0.13	3.31	382	200	0.71	0.17	24.6	0.21	43.9	11.3	35	9.96	34.5	1.99
W231217		5.67	0.01	0.05	41.1	50	0.05	0.03	21.0	0.07	1.13	0.7	1	0.15	2.1	0.43
W231218		8.56	0.16	1.23	120.0	130	0.35	0.06	31.8	0.14	16.95	4.6	13	3.97	13.3	0.91
W231219		9.10	0.06	0.51	79.9	110	0.25	0.03	34.8	0.06	8.38	2.0	5	1.43	5.6	0.39
W231220		8.36	0.04	0.77	61.5	130	0.30	0.05	35.4	0.09	15.00	2.9	7	2.45	8.2	0.54
W231221		8.42	0.07	1.78	119.0	150	0.48	0.10	30.0	0.17	27.7	6.4	16	5.76	16.7	1.04
W231222		8.62	0.03	0.44	235	80	0.22	0.03	31.5	0.04	8.87	1.8	5	1.30	4.8	0.54
W231223		3.57	2.52	1.24	>10000	60	0.25	0.08	20.1	0.13	19.25	4.6	14	2.92	13.3	1.03
W231224		5.40	0.93	1.85	8310	90	0.37	0.09	25.4	0.11	22.7	7.2	20	5.05	21.8	1.72
W231225		3.54	0.53	0.85	>10000	70	0.22	0.06	26.2	0.10	14.00	3.3	10	2.11	9.5	0.66
W231226		5.04	0.11	0.74	467	100	0.27	0.04	31.3	0.08	12.90	2.8	8	2.28	8.0	0.63
W231227		7.59	0.28	0.41	6750	80	0.16	0.03	33.3	0.05	8.54	1.7	5	0.91	5.0	0.39
W231228		0.26	0.27	3.80	>10000	180	0.65	0.18	10.20	0.65	43.9	12.2	45	9.15	55.6	2.96
W231229		8.71	0.14	0.81	182.5	90	0.25	0.04	32.5	0.07	13.50	3.0	9	1.75	8.6	0.60
W231230		8.31	0.22	0.50	841	90	0.17	0.02	33.1	0.06	8.54	1.9	6	1.08	5.6	0.39
W231231		9.36	0.04	0.37	49.4	70	0.17	0.02	34.1	0.02	7.14	1.5	4	0.88	4.4	0.40
W231232		8.61	0.01	0.37	45.9	80	0.18	0.02	34.1	0.04	7.68	1.6	4	0.88	4.2	0.37
W231233		8.06	0.12	0.63	120.0	210	0.24	0.03	34.3	0.06	10.40	2.3	7	1.36	7.1	0.54

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Finalized Date: 4- NOV- 2017
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CERTIFICATE OF ANALYSIS WH17207403

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231198		16.00	0.09	2.7	4.00	0.047	2.82	27.5	11.8	1.18	719	0.46	0.02	9.2	32.4	420
W231199		23.4	0.13	3.0	15.00	0.054	4.03	34.5	16.1	0.53	105	0.27	0.03	10.4	40.4	220
W231200		8.95	0.16	1.4	29.9	0.046	1.44	20.5	18.0	0.21	134	1.19	0.01	10.4	15.6	850
W231201		5.61	0.08	1.4	4.99	0.026	1.20	22.3	4.3	0.84	1220	0.78	0.01	19.2	4.8	1760
W231202		8.54	0.17	1.3	19.00	0.041	1.34	32.1	20.4	0.12	48	1.04	0.01	22.9	6.9	2190
W231203		2.63	0.11	0.5	5.16	0.044	0.42	5.8	18.1	0.07	43	0.48	<0.01	1.7	5.0	380
W231204		4.36	0.11	0.7	13.35	0.035	0.68	12.6	27.4	0.11	74	0.87	<0.01	2.0	9.1	290
W231205		3.99	0.10	0.7	13.35	0.035	0.67	12.0	24.9	0.11	75	0.79	<0.01	1.9	8.6	290
W231206		3.85	0.09	0.6	10.80	0.030	0.61	14.1	30.6	0.09	73	0.77	<0.01	1.7	8.2	610
W231207		4.75	0.07	0.8	15.95	0.019	0.75	12.8	24.6	0.15	309	5.42	0.01	2.4	17.7	460
W231208		4.57	0.09	0.8	8.91	0.024	0.65	11.5	34.8	0.11	167	0.91	0.01	2.0	9.2	570
W231209		0.19	0.17	<0.1	<0.005	<0.005	0.01	0.5	0.9	12.70	198	0.06	<0.01	0.1	1.5	170
W231210		4.96	0.12	0.8	10.80	0.028	0.72	12.4	33.6	0.14	101	0.90	0.01	2.3	10.2	560
W231211		4.54	0.08	0.7	8.55	0.023	0.66	9.8	33.9	0.13	791	0.71	0.01	2.1	9.3	480
W231212		4.78	0.08	0.8	10.10	0.022	0.70	11.4	32.6	0.13	471	0.75	0.01	2.4	10.1	460
W231213		2.24	0.07	0.4	3.22	0.018	0.33	5.7	9.7	0.15	3530	0.36	0.01	1.2	4.3	710
W231214		1.76	0.10	0.3	4.21	0.032	0.25	3.2	16.5	0.09	1770	0.32	<0.01	0.8	3.4	270
W231215		2.97	0.08	0.5	3.00	0.014	0.51	6.4	5.3	0.23	1310	0.33	0.01	1.6	6.3	180
W231216		9.05	0.12	1.6	8.85	0.029	1.59	23.5	11.4	0.78	747	1.81	0.02	4.9	19.6	330
W231217		0.19	0.15	<0.1	0.013	0.005	0.02	0.5	1.0	13.10	200	0.07	<0.01	0.2	1.3	220
W231218		3.34	0.10	0.6	2.51	0.011	0.60	8.5	5.1	0.38	455	0.48	0.01	1.8	7.3	160
W231219		1.41	0.07	0.2	0.790	0.005	0.25	4.2	2.7	0.29	395	0.16	0.01	0.8	2.5	90
W231220		2.16	0.10	0.4	1.440	0.010	0.37	7.4	3.7	0.33	382	0.29	0.01	1.1	3.9	110
W231221		4.91	0.10	0.9	2.49	0.017	0.85	14.0	7.3	0.62	284	0.82	0.01	2.6	9.1	100
W231222		1.29	0.07	0.2	0.813	0.007	0.21	4.2	2.1	2.76	376	0.16	0.01	0.7	2.1	110
W231223		3.67	0.09	0.7	6.28	0.034	0.58	10.1	6.2	2.95	8190	0.75	0.01	1.9	7.7	140
W231224		4.96	0.08	1.0	7.62	0.013	0.87	11.1	6.9	3.53	3050	0.86	0.01	3.0	11.8	220
W231225		2.45	0.10	0.5	4.80	0.030	0.40	7.2	3.8	0.88	2730	0.39	0.01	1.4	5.0	170
W231226		2.10	0.08	0.4	2.42	0.012	0.35	6.6	3.2	1.67	820	0.45	0.01	1.1	3.9	100
W231227		1.29	0.06	0.2	1.810	0.010	0.19	3.9	2.7	0.62	3740	0.16	0.01	0.6	2.0	390
W231228		10.90	0.10	1.9	30.8	0.038	1.77	24.8	14.7	0.36	773	3.65	0.02	5.7	26.6	540
W231229		2.35	0.07	0.4	2.35	0.009	0.39	6.8	2.5	0.35	422	0.43	0.01	1.2	4.4	150
W231230		1.48	0.06	0.3	1.445	0.006	0.24	4.3	2.1	0.41	1220	0.25	0.01	0.8	2.6	270
W231231		1.05	0.06	0.2	0.507	0.006	0.17	3.4	1.4	0.71	380	0.18	0.01	0.5	1.6	180
W231232		1.12	0.06	0.2	0.512	0.005	0.18	3.7	1.3	0.59	184	0.20	0.01	0.5	1.7	140
W231233		1.77	0.07	0.3	1.065	0.010	0.30	5.1	2.5	0.63	1460	0.35	0.01	0.9	3.3	490

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231198		13.7	129.5	<0.002	4.24	6.98	17.6	<1	1.7	73.4	0.69	<0.05	8.38	0.474	9.24	1.7
W231199		16.1	181.0	<0.002	6.33	50.3	21.7	1	2.1	47.1	0.80	0.05	10.40	0.487	32.2	1.7
W231200		12.9	73.1	0.003	>10.0	588	4.7	6	1.1	49.2	0.62	0.41	4.11	0.311	139.0	2.3
W231201		3.0	52.6	<0.002	1.11	19.90	6.0	1	0.5	1240	1.02	<0.05	2.44	0.505	24.8	2.0
W231202		10.0	66.7	0.002	>10.0	490	2.7	8	0.7	171.0	1.12	0.35	2.80	0.626	77.7	2.1
W231203		4.7	20.4	<0.002	>10.0	680	0.8	10	0.3	57.6	0.16	0.24	1.46	0.062	12.95	2.0
W231204		6.2	32.8	0.003	7.81	386	1.4	6	0.5	44.9	0.20	0.17	2.85	0.079	17.70	3.4
W231205		6.1	31.1	0.002	8.12	409	1.3	5	0.5	42.4	0.19	0.20	2.71	0.078	16.80	3.2
W231206		6.2	29.1	<0.002	7.39	327	1.1	5	0.5	45.5	0.18	0.17	2.47	0.066	18.35	4.1
W231207		9.7	38.0	0.003	4.29	143.0	2.7	1	1.1	316	0.21	0.11	2.80	0.092	39.9	4.0
W231208		7.0	30.9	0.002	5.29	245	1.6	4	0.5	38.1	0.15	0.17	2.47	0.075	18.00	4.0
W231209		1.5	0.7	<0.002	0.01	0.47	0.2	1	<0.2	50.5	<0.05	<0.05	0.05	<0.005	0.03	0.4
W231210		7.5	34.6	0.002	6.39	275	1.4	5	0.6	47.6	0.17	0.14	2.90	0.088	20.9	4.1
W231211		6.9	31.9	0.003	4.79	184.5	2.1	3	0.6	100.5	0.15	0.11	2.46	0.081	16.05	3.9
W231212		7.6	34.5	0.002	5.49	234	2.0	5	0.8	93.3	0.17	0.14	2.68	0.090	20.2	4.2
W231213		3.7	16.4	<0.002	2.20	75.3	7.4	2	0.3	831	0.08	0.07	1.31	0.042	7.36	3.2
W231214		3.1	12.0	<0.002	8.25	367	3.6	8	0.2	283	0.05	0.12	0.87	0.030	9.15	2.1
W231215		3.3	22.9	<0.002	1.15	11.70	5.8	1	0.3	1460	0.10	<0.05	1.44	0.074	9.64	1.7
W231216		11.6	71.7	0.005	2.18	11.05	7.6	1	1.3	1385	0.36	0.08	5.45	0.194	23.8	6.0
W231217		1.5	1.0	<0.002	0.01	0.19	0.2	<1	<0.2	48.8	<0.05	<0.05	0.10	<0.005	0.04	0.8
W231218		4.0	26.8	<0.002	0.95	2.49	3.8	1	0.4	1825	0.13	<0.05	1.90	0.079	7.44	2.2
W231219		1.9	11.1	<0.002	0.33	1.17	1.5	1	0.2	1815	0.05	<0.05	0.88	0.029	2.88	1.3
W231220		2.8	17.1	<0.002	0.52	0.74	2.3	1	0.3	2050	0.09	<0.05	1.35	0.042	4.38	2.1
W231221		6.1	40.0	0.003	1.09	0.86	4.2	1	0.6	1760	0.18	0.05	3.02	0.094	8.98	3.0
W231222		2.4	9.6	<0.002	0.31	1.28	1.5	1	0.2	1490	0.05	<0.05	0.82	0.025	3.84	1.6
W231223		6.4	27.7	0.002	5.45	220	6.5	6	0.5	342	0.13	0.20	2.19	0.072	22.6	2.8
W231224		10.2	40.3	0.002	2.07	31.4	6.2	1	1.0	846	0.20	0.08	2.87	0.128	26.7	3.4
W231225		4.1	20.1	<0.002	5.57	214	4.6	8	0.4	1110	0.10	0.16	1.58	0.049	17.35	2.5
W231226		3.2	16.0	<0.002	0.58	4.33	2.0	1	0.3	1520	0.08	<0.05	1.33	0.042	7.99	2.0
W231227		2.1	8.7	<0.002	0.64	15.25	4.3	1	0.2	1400	<0.05	<0.05	0.79	0.022	7.20	2.1
W231228		17.0	81.6	0.003	3.52	102.5	8.9	1	2.0	438	0.42	0.14	6.71	0.221	65.8	4.2
W231229		3.2	17.1	0.002	0.58	3.31	2.3	1	0.3	1740	0.08	0.05	1.41	0.044	6.77	2.2
W231230		2.0	10.5	<0.002	0.38	4.77	2.7	1	0.2	1675	0.05	<0.05	0.86	0.028	5.12	1.7
W231231		1.9	7.6	<0.002	0.33	0.56	1.2	<1	0.2	1525	<0.05	<0.05	0.68	0.020	2.47	1.6
W231232		1.8	7.8	<0.002	0.26	0.28	1.1	1	0.2	1735	<0.05	<0.05	0.67	0.020	2.09	1.4
W231233		2.7	12.7	<0.002	0.41	1.81	2.7	1	0.3	1550	0.06	<0.05	1.06	0.032	3.91	1.7

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 4- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17207403

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W231198		133	9.7	17.6	90	90.7		0.31
W231199		168	14.1	21.5	78	97.5	1.135	3.00
W231200		65	6.9	14.2	93	49.5	21.3	36.8
W231201		70	6.5	17.2	51	58.1		1.51
W231202		94	13.0	16.9	92	54.0	19.75	15.40
W231203		17	1.4	21.0	69	15.5	27.0	4.31
W231204		29	1.8	57.6	309	23.5	15.85	7.37
W231205		29	1.7	57.4	305	22.1	17.15	7.26
W231206		26	1.4	27.1	209	21.7	15.75	6.95
W231207		33	5.8	13.7	63	26.0	7.20	8.06
W231208		27	1.5	21.1	173	25.2	10.40	5.01
W231209		2	0.1	0.8	18	0.5		0.01
W231210		29	1.8	37.6	202	27.2	12.75	5.37
W231211		27	1.8	19.0	176	25.7	8.95	4.32
W231212		29	2.0	20.3	166	28.2	10.20	5.44
W231213		14	1.1	19.6	43	15.7	3.48	1.64
W231214		11	0.7	9.0	59	10.0	18.45	4.32
W231215		20	1.4	14.0	12	18.1		1.53
W231216		57	3.4	22.7	26	53.9		1.67
W231217		2	0.1	0.8	16	<0.5		0.01
W231218		21	1.5	13.3	21	21.1		0.32
W231219		9	0.5	8.7	8	9.4		0.09
W231220		13	0.9	13.5	12	13.5		<0.01
W231221		28	2.0	14.7	25	30.0		0.27
W231222		8	0.4	11.0	4	8.3		0.20
W231223		23	1.2	15.2	11	21.3	10.20	3.52
W231224		33	2.1	16.1	10	32.0		2.49
W231225		15	0.9	13.7	9	16.2	9.38	0.84
W231226		12	0.7	10.5	8	12.9		0.62
W231227		7	0.5	14.4	4	8.6		0.86
W231228		63	8.2	22.3	139	64.4	3.38	7.68
W231229		13	0.6	10.8	6	14.3		0.16
W231230		9	0.5	9.1	4	9.9		0.50
W231231		6	0.3	8.1	5	7.1		0.10
W231232		6	0.4	8.6	3	7.3		0.07
W231233		12	0.7	11.0	7	11.6		0.27

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 4- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17207403

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
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Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE WH17209289

Project: Nadaleen

P.O. No.: N17- 113

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 27- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

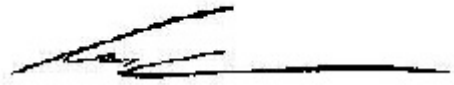
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 2- NOV- 2017
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Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209289

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231234		3.60	2.07	2.11	595	230	0.45	0.09	25.0	0.42	31.1	7.2	20	4.01	21.6	1.66
W231235		4.25	0.25	2.18	497	170	0.63	0.11	25.5	0.17	30.7	7.0	21	4.71	21.7	1.71
W231236		9.22	0.07	3.03	446	240	0.89	0.16	21.9	0.26	39.7	9.7	30	8.70	29.0	2.05
W231237		8.42	0.03	2.42	126.5	230	0.81	0.12	26.4	0.20	42.4	8.0	24	7.40	24.4	1.53
W231238		7.82	0.03	2.25	95.9	200	0.65	0.12	26.2	0.19	33.2	7.4	23	7.23	22.0	1.54
W231239		9.74	0.08	4.62	333	260	1.26	0.23	15.05	0.40	61.1	14.9	47	15.15	46.8	2.96
W231240		8.42	0.04	2.70	837	190	0.74	0.13	23.3	0.22	38.7	9.0	27	7.99	27.6	1.91
W231241		8.64	0.02	1.09	48.4	150	0.39	0.05	30.5	0.10	19.35	3.9	11	4.38	11.7	0.85
W231242		8.16	0.02	1.32	45.9	140	0.46	0.07	30.3	0.16	22.6	4.6	13	4.89	13.7	0.92
W231243		7.82	0.02	0.78	29.4	190	0.32	0.04	32.8	0.12	14.80	3.0	8	2.23	8.9	0.64
W231244		8.71	0.06	1.87	40.1	170	0.57	0.10	28.5	0.24	35.1	5.6	20	7.82	22.4	1.14
W231245		8.83	0.04	3.04	89.5	430	0.80	0.14	24.1	0.30	37.0	9.2	32	11.95	28.6	1.82
W231246		8.07	0.01	0.21	11.4	140	0.18	0.02	34.7	0.04	4.62	0.8	3	0.38	3.6	0.43
W231247		3.38	<0.01	0.20	11.7	130	0.16	0.02	33.3	0.05	4.69	0.8	3	0.34	3.2	0.45
W231248		8.65	0.01	0.22	11.8	140	0.16	0.02	34.1	0.04	4.70	0.8	3	0.37	4.0	0.38
W231249		8.51	0.01	0.28	10.4	110	0.21	0.02	33.6	0.05	5.19	1.1	4	0.57	3.7	0.42
W231250		5.13	0.01	0.04	0.3	20	<0.05	0.04	19.65	0.08	1.28	0.6	<1	0.12	3.9	0.43
W231251		7.86	0.01	0.34	16.9	130	0.18	0.02	33.1	0.05	6.21	1.3	4	0.66	5.4	0.47
W231252		7.40	0.01	0.29	36.5	100	0.17	0.02	33.6	0.08	5.47	1.1	4	0.52	4.5	0.42
W231253		7.63	0.02	0.89	164.5	80	0.31	0.05	32.8	0.08	13.65	2.9	10	2.33	10.5	0.69
W231254		6.94	0.03	1.79	110.0	130	0.53	0.09	30.0	0.13	26.7	5.6	19	7.06	18.3	1.17
W231255		0.26	0.18	3.94	6480	210	0.87	0.13	12.05	0.15	42.4	11.9	47	10.95	38.6	2.90
W231256		6.86	0.02	1.25	76.6	130	0.34	0.07	30.8	0.10	18.35	4.0	14	3.71	13.2	1.00
W231257		7.55	0.01	0.63	39.3	80	0.25	0.03	33.3	0.05	12.95	2.3	7	1.84	7.8	0.50
W231258		7.95	0.01	0.43	24.8	120	0.23	0.03	34.0	0.02	8.13	1.6	6	1.09	5.1	0.38
W231259		8.23	0.01	0.46	45.9	90	0.29	0.03	33.0	0.06	8.08	1.6	5	0.90	5.5	0.39
W231260		<0.02	0.01	0.46	46.4	90	0.27	0.03	35.0	0.05	8.45	1.7	6	0.91	6.1	0.40
W231261		9.16	0.01	0.74	38.0	120	0.39	0.05	32.6	0.08	11.65	2.4	8	2.24	8.2	0.57
W231262		8.80	0.35	1.57	382	120	0.36	0.08	28.2	0.15	23.9	4.8	18	3.52	15.7	1.09
W231263		0.26	1.61	1.85	>10000	100	0.22	0.45	6.89	0.89	28.0	6.3	46	3.15	28.3	2.44
W231264		8.50	0.04	1.17	100.5	120	0.32	0.06	32.2	0.12	19.90	4.1	12	2.44	12.8	0.84
W231265		9.16	0.09	0.40	61.0	100	0.20	0.03	33.8	0.04	7.47	1.4	5	0.72	4.6	0.42
W231266		8.65	0.05	0.65	83.2	120	0.23	0.04	33.8	0.09	10.85	2.1	7	1.42	7.2	0.53
W231267		8.81	0.02	0.94	126.0	110	0.31	0.05	32.3	0.10	14.05	3.2	10	2.04	10.6	0.72
W231268		4.85	0.01	0.04	2.0	20	0.05	0.02	19.65	0.05	1.00	0.5	1	0.09	2.7	0.43
W231297		8.59	0.02	1.15	70.9	110	0.32	0.07	31.0	0.11	18.45	3.9	13	3.21	12.7	0.83

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209289

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231234		6.16	0.09	1.1	5.37	0.025	1.00	15.7	6.6	0.41	3690	1.07	0.01	3.2	12.3	270
W231235		6.03	0.10	1.2	3.56	0.024	1.05	15.8	6.6	1.30	2080	0.97	0.02	3.2	12.6	190
W231236		8.12	0.09	1.6	2.86	0.035	1.44	20.6	9.2	1.24	449	1.38	0.02	4.5	17.2	210
W231237		6.51	0.13	1.3	1.585	0.027	1.15	23.9	8.7	0.75	253	1.31	0.02	3.6	13.8	170
W231238		6.24	0.10	1.2	1.090	0.027	1.07	17.2	8.4	0.88	317	0.81	0.02	3.5	13.1	190
W231239		12.80	0.16	2.3	2.64	0.051	2.22	32.0	13.9	1.69	494	2.02	0.03	6.9	27.6	250
W231240		7.53	0.10	1.4	1.650	0.028	1.26	18.9	8.6	1.04	570	1.23	0.02	4.1	15.9	190
W231241		2.95	0.08	0.6	0.418	0.013	0.52	9.5	4.3	0.57	233	0.55	0.01	1.6	6.2	150
W231242		3.62	0.09	0.7	0.588	0.015	0.62	11.2	4.7	0.55	192	0.65	0.01	2.0	7.3	160
W231243		2.14	0.06	0.4	0.285	0.011	0.37	7.5	3.6	0.57	101	0.64	0.01	1.2	4.8	190
W231244		4.59	0.05	0.9	0.414	0.024	0.88	17.4	6.6	0.65	133	1.41	0.02	2.7	12.9	190
W231245		7.24	0.06	1.4	1.410	0.032	1.42	18.3	10.2	0.93	238	2.09	0.02	4.3	16.1	980
W231246		0.54	0.05	0.1	0.052	0.005	0.10	2.1	0.8	0.75	182	0.27	0.01	0.3	1.4	760
W231247		0.51	<0.05	0.1	0.046	0.006	0.09	2.1	0.8	0.78	204	0.21	0.01	0.3	1.3	730
W231248		0.60	<0.05	0.1	0.079	<0.005	0.10	2.0	0.9	0.75	138	0.23	0.01	0.4	1.3	1380
W231249		0.72	<0.05	0.2	0.106	0.005	0.13	2.3	1.1	0.68	201	0.25	0.01	0.4	1.7	560
W231250		0.13	0.07	<0.1	<0.005	<0.005	0.02	0.6	0.9	12.35	191	0.14	<0.01	0.1	1.6	170
W231251		0.93	0.05	0.2	0.167	0.005	0.16	2.8	1.2	0.74	154	0.38	0.01	0.5	2.2	350
W231252		0.74	<0.05	0.2	0.352	0.005	0.13	2.5	1.0	0.64	241	0.25	0.01	0.5	1.8	520
W231253		2.35	0.05	0.4	2.11	0.008	0.40	6.9	2.9	0.52	351	0.44	0.01	1.2	5.1	190
W231254		4.68	0.06	0.9	2.38	0.022	0.84	13.8	6.7	0.77	157	0.86	0.02	2.6	10.5	190
W231255		10.15	0.07	2.1	15.50	0.037	1.85	21.2	12.3	2.59	1180	1.96	0.02	6.1	26.3	450
W231256		3.23	<0.05	0.6	1.300	0.012	0.58	9.5	4.0	0.82	424	0.93	0.01	1.8	7.1	210
W231257		1.69	<0.05	0.3	0.537	0.009	0.29	6.4	2.3	0.67	197	0.32	0.01	1.0	3.6	450
W231258		1.16	0.05	0.2	0.271	0.005	0.20	4.0	1.7	0.31	145	0.28	0.01	0.6	2.5	200
W231259		1.26	<0.05	0.2	0.599	<0.005	0.21	3.9	1.5	0.39	413	0.24	0.01	0.6	2.7	790
W231260		1.29	0.05	0.2	0.614	0.006	0.22	4.0	1.6	0.40	433	0.22	0.01	0.7	2.9	800
W231261		1.87	0.05	0.4	0.617	0.008	0.34	5.8	3.3	0.61	374	0.43	0.01	1.0	4.4	760
W231262		4.12	0.06	0.7	2.22	0.017	0.75	12.3	5.0	0.66	588	0.78	0.01	2.2	9.1	210
W231263		5.06	0.07	0.8	15.40	0.025	0.81	13.6	25.1	0.16	334	5.80	0.01	2.5	18.7	500
W231264		3.33	0.16	0.7	1.910	0.017	0.56	10.1	4.3	0.53	666	0.40	0.01	1.8	7.0	310
W231265		1.07	<0.05	0.2	0.744	0.005	0.19	3.6	1.6	0.40	1100	0.16	0.01	0.6	2.2	780
W231266		1.69	0.05	0.3	1.125	0.012	0.31	5.4	2.1	0.31	810	0.39	0.01	0.9	3.8	510
W231267		2.49	0.05	0.5	2.19	0.013	0.44	7.2	3.2	0.29	700	0.42	0.01	1.4	5.5	610
W231268		0.14	<0.05	<0.1	0.008	0.006	0.02	0.5	0.8	12.35	192	0.17	<0.01	0.1	1.5	180
W231297		3.10	0.07	0.6	1.240	0.014	0.54	9.5	3.7	0.65	152	0.80	0.01	1.7	7.5	430

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209289

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231234		79.4	46.1	0.004	1.80	14.25	6.5	1	0.9	1200	0.22	0.05	3.50	0.121	18.75	2.5
W231235		12.2	46.4	0.004	1.43	6.06	6.3	1	0.7	1120	0.22	0.06	3.60	0.124	10.45	2.1
W231236		10.5	62.2	0.004	1.82	2.45	7.8	1	1.0	1470	0.32	0.08	5.15	0.169	7.90	3.0
W231237		8.3	50.9	0.003	1.35	0.50	7.0	1	0.8	2080	0.26	<0.05	4.23	0.134	5.73	3.5
W231238		7.7	47.8	0.004	1.26	0.45	6.6	1	0.7	1895	0.25	0.05	3.83	0.130	4.01	2.6
W231239		15.4	99.3	0.007	2.74	1.56	11.5	1	1.5	871	0.50	0.08	7.83	0.269	8.20	4.1
W231240		9.7	56.7	0.004	1.72	2.24	7.2	1	0.9	1330	0.29	0.05	4.60	0.158	4.55	2.7
W231241		4.6	22.6	0.003	0.63	0.34	3.2	1	0.4	2090	0.11	<0.05	1.98	0.063	1.68	2.1
W231242		5.1	27.6	0.002	0.74	0.38	3.7	1	0.5	2040	0.13	<0.05	2.34	0.077	2.21	2.4
W231243		4.5	16.2	0.003	0.48	0.24	2.7	1	0.3	2700	0.08	<0.05	1.42	0.045	1.22	2.5
W231244		9.2	39.3	0.004	0.99	0.41	4.3	1	0.7	2280	0.20	<0.05	3.27	0.107	2.84	3.2
W231245		10.0	63.5	0.007	1.70	0.62	6.0	1	0.9	1815	0.30	0.06	4.61	0.187	3.75	3.2
W231246		1.8	3.9	<0.002	0.16	0.12	0.7	<1	<0.2	2450	<0.05	<0.05	0.39	0.014	0.23	1.5
W231247		1.4	3.9	<0.002	0.17	0.11	0.8	1	<0.2	2390	<0.05	<0.05	0.37	0.013	0.25	1.6
W231248		1.6	4.3	<0.002	0.17	0.14	0.7	1	<0.2	2480	<0.05	<0.05	0.42	0.014	0.26	1.7
W231249		2.7	5.4	<0.002	0.17	0.13	0.8	1	<0.2	2310	<0.05	<0.05	0.50	0.017	0.34	1.6
W231250		3.8	0.7	<0.002	<0.01	0.12	0.1	<1	<0.2	52.3	<0.05	<0.05	0.06	<0.005	<0.02	0.6
W231251		2.9	6.8	<0.002	0.24	0.15	1.1	1	0.2	2390	<0.05	<0.05	0.60	0.021	0.40	1.8
W231252		1.8	5.7	<0.002	0.22	0.19	1.1	1	0.2	2140	<0.05	<0.05	0.52	0.017	0.58	1.6
W231253		3.5	18.8	0.002	0.65	1.07	2.5	1	0.3	1525	0.08	<0.05	1.43	0.048	3.99	1.9
W231254		6.4	39.1	0.003	1.14	0.48	4.8	1	0.6	1995	0.18	<0.05	2.94	0.098	6.43	2.9
W231255		11.6	87.7	<0.002	2.64	23.4	10.1	1	1.7	327	0.43	<0.05	6.13	0.273	45.7	6.5
W231256		5.3	25.9	0.003	0.85	0.56	3.3	1	0.5	1715	0.12	<0.05	2.13	0.070	4.16	2.1
W231257		4.1	13.3	0.002	0.39	0.58	1.7	<1	0.2	1830	0.06	<0.05	1.15	0.037	2.10	2.3
W231258		2.4	8.9	<0.002	0.27	0.23	1.3	1	0.2	2270	0.05	<0.05	0.77	0.025	1.24	1.7
W231259		1.9	9.4	<0.002	0.33	0.56	1.3	1	0.2	1665	<0.05	<0.05	0.78	0.024	2.19	1.6
W231260		2.0	9.6	<0.002	0.33	0.63	1.4	1	0.2	1730	0.05	<0.05	0.79	0.025	2.29	1.7
W231261		2.8	15.2	<0.002	0.48	0.52	2.1	1	0.3	1675	0.07	<0.05	1.21	0.040	2.56	1.9
W231262		5.6	32.3	0.003	1.08	4.03	4.4	1	0.5	1585	0.15	<0.05	2.52	0.085	7.45	2.7
W231263		10.2	39.5	0.002	4.58	159.5	2.9	1	1.1	350	0.18	0.08	3.03	0.099	41.3	4.3
W231264		4.6	24.9	0.002	0.78	2.40	3.6	1	0.4	1655	0.12	<0.05	2.22	0.064	7.30	3.0
W231265		1.7	8.2	<0.002	0.30	1.99	1.6	1	0.2	1900	<0.05	<0.05	0.73	0.022	2.77	1.5
W231266		3.1	13.1	<0.002	0.45	1.68	2.0	1	0.2	1905	0.06	<0.05	1.07	0.036	4.47	1.8
W231267		5.1	19.5	0.002	0.73	2.54	2.9	1	0.3	1915	0.09	<0.05	1.47	0.057	6.35	2.6
W231268		1.4	0.8	<0.002	<0.01	0.12	0.1	<1	<0.2	47.6	<0.05	<0.05	0.12	<0.005	0.02	0.8
W231297		5.3	24.4	0.002	0.74	0.41	3.2	1	0.4	1910	0.12	<0.05	1.95	0.064	3.65	2.6

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Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209289

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W231234		38	3.3	17.1	66	38.9		5.69
W231235		40	3.1	17.8	38	40.6		1.09
W231236		52	3.6	19.3	49	52.4		0.11
W231237		41	1.7	22.3	37	41.9		0.02
W231238		39	1.6	21.3	39	40.8		0.01
W231239		83	4.5	25.6	79	77.7		0.05
W231240		48	3.0	20.2	48	49.0		0.20
W231241		20	0.6	13.5	15	19.4		<0.01
W231242		24	0.9	16.0	23	24.3		<0.01
W231243		15	0.7	14.6	14	15.0		<0.01
W231244		34	1.2	20.1	35	29.7		<0.01
W231245		53	2.8	15.7	49	51.3		0.16
W231246		5	0.2	5.1	3	7.8		<0.01
W231247		5	0.1	5.3	2	8.0		<0.01
W231248		5	0.2	5.2	2	11.3		<0.01
W231249		6	0.2	5.6	61	8.3		<0.01
W231250		2	0.1	0.7	16	<0.5		<0.01
W231251		7	0.3	7.2	11	8.4		<0.01
W231252		6	0.3	6.5	5	8.8		<0.01
W231253		16	1.2	11.5	16	14.8		0.02
W231254		30	1.7	16.2	27	29.1		<0.01
W231255		85	7.7	18.1	50	72.2		2.58
W231256		22	1.3	11.3	19	20.8		<0.01
W231257		11	0.7	11.8	4	12.2		<0.01
W231258		8	0.4	8.4	5	8.0		<0.01
W231259		9	0.5	7.6	6	9.4		0.02
W231260		9	0.5	7.8	6	9.8		0.02
W231261		14	0.7	9.4	9	13.3		0.02
W231262		27	1.6	16.0	24	25.0		0.30
W231263		36	7.2	14.9	66	28.0	7.10	8.29
W231264		20	1.1	16.3	20	21.6		0.16
W231265		8	0.3	8.5	8	9.4		0.30
W231266		12	0.8	11.2	9	12.2		0.10
W231267		17	1.1	13.1	14	17.2		0.13
W231268		2	0.1	0.7	14	<0.5		<0.01
W231297		20	1.4	14.5	14	19.8		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17209289

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

Applies to Method:

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE WH17209337

Project: Nadaleen

P.O. No.: N17- 114

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 27- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

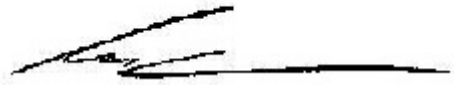
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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CERTIFICATE OF ANALYSIS WH17209337

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W231269		8.19	0.09	1.61	428	130	0.31	0.08	29.0	0.15	23.3	5.3	17	3.55	17.2	1.02
W231270		5.52	0.08	0.91	792	110	0.22	0.05	31.3	0.12	15.85	3.4	10	1.80	10.6	0.67
W231271		4.29	0.87	2.21	3830	190	0.39	0.13	19.65	0.32	37.7	7.6	25	4.02	24.7	1.87
W231272		0.28	1.51	3.03	>10000	120	0.53	0.34	7.67	0.93	44.4	10.5	47	8.71	32.4	2.92
W231273		3.35	0.20	0.87	>10000	110	0.14	0.05	31.4	0.12	13.40	2.8	10	1.43	8.4	0.68
W231274		5.59	0.36	1.65	>10000	200	0.19	0.09	20.4	0.41	23.2	5.1	19	4.11	16.1	1.22
W231275		<0.02	0.37	1.63	>10000	200	0.29	0.09	20.8	0.37	22.3	4.8	19	3.92	15.8	1.23
W231276		5.87	0.13	0.99	6660	150	0.17	0.06	27.9	0.31	17.45	3.3	13	1.73	10.4	0.77
W231277		5.21	<0.01	0.03	37.8	20	<0.05	0.04	19.35	0.07	0.69	0.6	1	0.13	2.0	0.46
W231278		9.00	0.06	0.69	425	110	0.19	0.04	30.8	0.08	11.60	2.3	8	1.34	7.3	0.53
W231279		8.32	0.05	1.82	386	150	0.46	0.08	28.0	0.12	20.5	8.3	24	4.69	25.6	1.54
W231280		2.72	0.03	1.34	170.0	140	0.44	0.06	31.9	0.08	19.10	5.5	15	3.38	17.0	1.13
W231281		5.17	0.05	2.90	292	170	0.76	0.11	24.1	0.21	32.2	12.7	37	7.81	34.2	2.16
W231282		7.57	0.03	1.84	118.5	150	0.61	0.08	28.3	0.16	26.1	6.5	19	6.91	18.5	1.39
W231283		7.95	0.02	1.31	58.2	120	0.55	0.07	30.3	0.11	19.95	4.7	13	5.43	13.7	0.97
W231284		7.18	0.02	1.13	64.2	140	0.46	0.06	31.4	0.07	17.25	4.3	12	3.62	12.6	0.93
W231285		7.26	0.03	1.88	848	150	0.57	0.09	28.7	0.17	25.1	6.5	20	5.16	19.0	1.30
W231286		7.50	0.02	0.96	41.4	150	0.44	0.05	32.5	0.12	15.55	3.4	11	3.28	9.6	0.79
W231287		8.01	0.03	1.49	26.7	440	0.57	0.08	29.1	0.15	23.9	5.5	16	6.87	16.5	1.13
W231288		7.48	0.04	1.77	17.5	180	0.57	0.09	29.5	0.08	26.8	6.4	19	8.57	18.2	1.34
W231289		8.47	0.03	2.02	30.6	170	0.68	0.08	27.2	0.17	25.7	8.0	27	8.04	23.5	1.61
W231290		6.69	0.03	3.03	40.1	230	0.96	0.11	22.5	0.24	34.7	11.2	36	16.00	33.3	3.39
W231291		8.33	0.04	3.29	27.8	250	1.03	0.13	22.3	0.24	35.7	12.0	38	19.10	34.2	2.35
W231292		8.34	0.04	3.04	41.0	210	0.94	0.13	23.6	0.21	37.1	10.3	32	12.00	28.9	1.99
W231293		7.00	0.03	1.96	26.8	650	0.60	0.09	29.4	0.17	27.4	6.6	21	6.96	19.0	1.30
W231294		7.27	0.02	1.04	18.5	220	0.40	0.05	33.3	0.08	14.60	3.9	12	3.29	11.7	0.88
W231295		7.99	0.02	1.57	26.9	160	0.51	0.07	30.4	0.15	20.6	5.0	17	5.40	15.5	1.06
W231296		0.26	0.18	3.80	6440	200	1.04	0.13	12.15	0.14	39.4	11.2	45	10.05	34.3	2.85
W231298		2.65	0.15	1.68	288	170	0.67	0.05	21.7	0.23	25.5	3.4	16	4.20	8.1	1.21
W231299		5.87	0.08	1.92	288	160	0.77	0.08	21.9	0.08	30.7	4.0	16	4.75	10.3	1.32
W231300		4.42	0.06	1.47	194.0	200	0.66	0.07	24.7	0.08	27.2	3.8	13	4.00	8.0	1.37
W231301		7.19	1.25	2.98	537	180	1.13	0.11	18.10	0.07	34.5	5.2	23	9.23	13.4	1.63
W231302		7.12	0.08	2.74	727	260	0.94	0.11	17.35	0.09	33.5	4.8	26	8.80	12.2	1.69
W231303		7.86	0.09	2.53	1100	170	0.95	0.09	16.20	0.09	30.0	4.5	20	8.43	11.1	1.48
W231304		5.02	0.12	2.88	1385	210	1.06	0.10	15.60	0.11	34.5	4.8	23	10.30	13.1	1.47
W231305		7.23	0.01	0.05	3.5	20	0.06	0.02	20.5	0.07	1.19	0.8	1	0.13	2.2	0.46

***** See Appendix Page for comments regarding this certificate *****

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CERTIFICATE OF ANALYSIS WH17209337

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W231269		4.44	0.06	0.8	4.13	0.019	0.75	12.2	4.6	0.49	708	1.16	0.01	2.4	9.7	140
W231270		2.51	0.06	0.5	4.32	0.013	0.42	7.9	2.7	0.26	453	0.52	0.01	1.4	5.7	310
W231271		6.09	0.07	1.1	27.1	0.023	0.99	18.5	12.4	0.20	826	1.11	0.01	3.2	13.4	510
W231272		8.19	0.08	1.7	22.6	0.035	1.37	23.0	14.8	1.89	1080	4.20	0.02	4.7	22.8	340
W231273		2.32	0.05	0.4	6.55	0.017	0.40	6.8	2.9	0.16	1010	0.42	0.01	1.2	4.7	370
W231274		4.05	0.07	0.8	14.80	0.032	0.62	11.9	8.9	0.15	834	1.00	0.01	2.3	9.2	1070
W231275		3.84	0.06	0.8	14.70	0.032	0.61	11.6	8.7	0.15	835	0.99	0.01	2.2	8.9	1050
W231276		2.44	0.06	0.5	7.22	0.019	0.42	8.5	5.9	0.15	1380	0.49	0.02	1.5	5.8	580
W231277		0.15	0.06	<0.1	0.017	0.005	0.02	<0.5	0.7	12.45	193	0.06	0.01	0.2	1.5	170
W231278		1.89	0.06	0.4	3.12	0.011	0.32	5.8	1.9	0.23	748	0.30	0.01	1.0	3.9	250
W231279		5.40	0.10	1.0	4.55	0.014	0.85	10.8	6.3	0.53	1130	0.96	0.01	2.9	13.6	240
W231280		3.79	0.09	0.7	2.65	0.019	0.62	8.5	4.8	0.52	586	0.48	0.01	2.1	6.3	1430
W231281		8.52	0.12	1.5	4.51	0.028	1.30	16.3	10.5	0.74	524	0.74	0.02	4.5	19.0	360
W231282		5.29	0.11	1.0	1.775	0.018	0.84	13.2	7.5	0.76	352	0.54	0.02	3.0	8.5	630
W231283		3.78	0.10	0.7	0.933	0.013	0.61	9.6	6.4	0.64	426	0.52	0.01	2.1	4.8	390
W231284		3.29	0.10	0.6	1.345	0.012	0.53	8.3	4.6	0.64	422	0.44	0.01	1.8	4.1	360
W231285		5.41	0.11	0.9	4.04	0.018	0.85	12.7	7.3	0.59	463	0.72	0.01	2.9	8.4	300
W231286		2.75	0.11	0.5	0.676	0.010	0.43	7.4	4.7	0.60	394	0.40	0.01	1.5	2.5	660
W231287		4.32	0.10	0.8	0.177	0.017	0.71	11.8	7.9	0.76	294	0.62	0.01	2.4	6.7	320
W231288		4.93	0.13	0.9	0.103	0.023	0.83	13.2	7.6	0.67	357	0.54	0.02	2.7	8.3	200
W231289		5.70	0.11	1.1	0.326	0.022	0.95	12.8	8.1	0.70	477	0.45	0.02	3.1	11.0	1060
W231290		8.55	0.12	1.5	0.446	0.032	1.43	17.3	13.8	0.90	361	0.78	0.02	4.7	18.3	380
W231291		8.96	0.12	1.7	0.241	0.030	1.55	18.0	15.8	1.13	461	1.14	0.03	4.9	19.1	250
W231292		8.33	0.12	1.6	0.235	0.030	1.43	19.0	12.5	1.02	311	1.01	0.02	4.6	15.6	230
W231293		5.40	0.12	1.0	0.203	0.017	0.93	13.7	8.7	0.62	214	0.64	0.02	3.0	8.7	220
W231294		2.77	0.11	0.6	0.211	0.012	0.49	6.8	4.6	0.46	254	0.34	0.01	1.6	3.3	410
W231295		4.31	0.11	0.9	0.898	0.018	0.74	10.0	6.6	0.56	302	0.42	0.02	2.5	6.0	1630
W231296		10.15	0.12	2.0	16.35	0.030	1.80	19.8	12.3	2.57	1180	1.86	0.02	6.0	23.3	450
W231298		4.46	0.10	1.2	1.005	0.018	0.90	12.5	8.2	4.02	446	0.39	0.02	2.9	4.8	450
W231299		5.09	0.11	1.2	0.484	0.020	1.01	15.2	7.7	3.32	411	0.34	0.02	3.3	7.2	320
W231300		3.93	0.11	0.8	0.627	0.017	0.75	12.9	6.6	3.19	481	0.20	0.02	2.5	5.5	430
W231301		7.91	0.12	1.4	1.095	0.024	1.54	18.2	9.7	4.69	522	0.39	0.02	4.5	10.4	480
W231302		7.18	0.11	1.4	1.545	0.022	1.41	17.6	9.4	5.46	538	0.30	0.02	4.3	9.0	570
W231303		6.70	0.12	1.3	1.760	0.021	1.29	16.0	8.7	7.84	545	0.34	0.02	3.9	8.5	480
W231304		7.92	0.13	1.5	2.34	0.024	1.45	18.6	10.4	7.45	537	0.45	0.02	4.5	9.7	500
W231305		0.23	0.19	<0.1	0.006	<0.005	0.02	0.5	1.1	12.90	198	0.10	<0.01	0.2	<0.2	180

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209337

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W231269		7.2	34.8	0.004	1.05	7.89	3.8	1	0.5	1485	0.17	0.05	2.54	0.086	13.20	3.1
W231270		4.7	19.4	0.003	0.73	10.35	3.3	1	0.3	1490	0.10	<0.05	1.60	0.053	14.10	3.2
W231271		11.4	47.5	0.003	2.30	88.0	5.9	2	0.9	880	0.22	0.17	3.74	0.122	103.0	5.4
W231272		26.7	69.9	0.003	5.01	196.0	5.5	3	1.4	189.0	0.34	0.14	5.23	0.177	73.6	6.2
W231273		3.4	18.3	0.002	1.18	34.5	5.3	1	0.3	1220	0.08	0.05	1.34	0.049	23.6	2.8
W231274		7.0	29.7	0.003	4.73	180.5	7.7	3	0.6	1320	0.15	0.15	2.60	0.088	46.7	4.6
W231275		6.8	28.8	0.004	4.70	178.0	7.5	3	0.5	1305	0.16	0.16	2.52	0.087	45.6	4.4
W231276		4.0	19.5	0.002	1.15	20.2	7.0	1	0.3	1450	0.10	0.05	1.75	0.057	19.20	3.8
W231277		1.5	0.9	<0.002	<0.01	0.21	0.1	<1	<0.2	47.6	<0.05	<0.05	0.01	0.005	0.08	0.6
W231278		2.8	14.2	<0.002	0.53	4.25	2.7	<1	0.3	1625	0.07	<0.05	1.18	0.039	9.05	2.0
W231279		7.7	39.7	0.002	1.53	4.86	5.7	1	0.5	1470	0.20	0.05	2.42	0.148	11.45	1.8
W231280		4.5	28.2	<0.002	1.08	0.43	4.2	1	0.4	1610	0.14	0.07	1.86	0.096	5.30	1.9
W231281		8.2	61.8	0.002	2.21	0.81	9.3	1	0.9	1260	0.30	0.05	3.70	0.243	8.15	2.0
W231282		5.6	39.0	<0.002	1.18	0.35	5.6	1	0.6	1595	0.21	0.06	2.71	0.120	3.71	2.0
W231283		4.3	29.7	0.002	0.83	0.29	3.9	1	0.4	1435	0.14	<0.05	2.04	0.079	2.11	1.9
W231284		3.8	25.3	0.002	0.75	0.39	3.7	1	0.4	1975	0.12	<0.05	1.82	0.067	1.87	1.9
W231285		6.0	39.1	0.003	1.21	2.17	5.5	1	0.6	1650	0.20	0.05	2.93	0.114	6.62	2.3
W231286		3.3	20.6	0.002	0.59	0.24	3.2	1	0.3	2100	0.11	<0.05	1.54	0.059	1.47	1.8
W231287		5.2	34.2	0.002	0.94	0.33	4.5	1	0.5	1790	0.17	0.06	2.50	0.092	1.35	2.4
W231288		5.6	40.1	0.002	1.10	0.35	5.6	1	0.5	1990	0.20	0.07	2.74	0.111	1.29	2.3
W231289		5.9	44.6	0.002	1.35	0.33	6.0	1	0.6	1520	0.22	0.05	2.82	0.159	1.29	2.1
W231290		8.7	68.6	0.003	3.31	0.44	8.3	1	0.9	1620	0.32	0.07	4.15	0.227	1.68	2.3
W231291		8.9	74.7	0.003	2.02	0.43	9.1	1	1.0	1620	0.35	0.06	4.45	0.247	2.22	2.4
W231292		8.7	66.7	0.005	1.57	0.42	7.9	1	0.9	1735	0.33	0.08	4.46	0.195	2.85	2.5
W231293		6.0	43.6	0.003	1.05	0.36	5.4	1	0.6	2060	0.22	0.05	3.04	0.124	1.82	2.6
W231294		3.2	23.2	0.002	0.67	0.25	3.3	1	0.3	2200	0.11	<0.05	1.56	0.070	0.75	1.8
W231295		4.7	35.5	<0.002	0.86	0.39	4.3	1	0.5	1790	0.17	0.06	2.39	0.100	1.05	2.3
W231296		10.3	81.5	<0.002	2.57	22.2	10.0	1	1.5	321	0.44	0.06	5.61	0.267	41.2	6.0
W231298		6.8	33.5	<0.002	0.13	1.54	3.4	1	0.6	483	0.21	<0.05	3.58	0.092	1.34	6.0
W231299		8.9	39.0	<0.002	0.11	1.22	3.8	1	0.6	534	0.24	<0.05	3.92	0.102	1.34	5.4
W231300		9.1	29.7	<0.002	0.18	1.07	3.3	1	0.5	601	0.17	0.05	3.02	0.076	1.20	4.2
W231301		8.0	58.6	<0.002	0.11	1.75	5.3	1	0.9	363	0.33	<0.05	5.21	0.138	2.32	4.9
W231302		8.2	54.9	<0.002	0.06	1.81	4.8	1	0.9	332	0.32	<0.05	4.96	0.131	3.24	4.7
W231303		8.9	49.7	<0.002	0.06	2.76	4.5	1	0.8	175.5	0.28	<0.05	4.45	0.117	4.61	5.1
W231304		10.0	57.5	<0.002	0.06	3.29	5.2	1	1.0	191.0	0.32	0.05	5.16	0.130	5.31	5.5
W231305		1.5	0.9	<0.002	<0.01	0.10	0.2	1	<0.2	49.8	<0.05	<0.05	0.08	<0.005	0.02	0.7

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VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209337

Sample Description	Method Analyte Units LOR	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	As- OG62 As % 0.001	Au- AA25 Au ppm 0.01
W231269		27	1.5	12.8	16	26.0		0.12
W231270		16	1.1	14.7	15	17.0		0.12
W231271		39	3.0	14.7	30	37.4		1.18
W231272		53	5.9	18.8	123	56.6	7.56	12.75
W231273		17	1.2	15.7	12	14.7	0.969	0.87
W231274		29	2.7	20.5	36	27.9	7.36	3.03
W231275		29	2.7	20.2	36	28.2	7.20	3.01
W231276		18	1.8	18.7	31	19.1		2.03
W231277		2	0.2	0.1	17	<0.5		<0.01
W231278		12	1.2	12.5	9	13.7		0.65
W231279		40	3.7	17.0	14	36.8		0.97
W231280		26	2.0	18.9	6	31.8		0.15
W231281		67	6.3	20.3	42	55.2		0.14
W231282		34	2.3	19.2	28	37.4		0.03
W231283		24	1.0	15.2	16	27.1		0.01
W231284		20	1.1	14.9	10	23.8		0.01
W231285		34	2.0	16.9	28	35.0		0.19
W231286		17	0.6	14.3	17	21.4		0.01
W231287		27	0.4	17.3	24	30.5		0.01
W231288		32	0.4	22.4	11	33.2		<0.01
W231289		42	1.2	18.2	31	45.0		<0.01
W231290		62	1.0	18.1	49	55.9		<0.01
W231291		69	0.6	18.4	52	59.4		<0.01
W231292		55	0.7	20.4	47	54.4		<0.01
W231293		35	0.5	18.5	33	36.8		<0.01
W231294		19	0.2	12.5	15	19.9		<0.01
W231295		28	0.8	14.7	26	34.4		0.01
W231296		84	7.5	17.8	50	69.8		2.55
W231298		27	1.0	9.7	59	45.6		0.08
W231299		28	0.8	10.4	24	44.6		0.07
W231300		22	0.6	10.1	36	31.8		0.09
W231301		40	6.7	11.5	33	52.8		0.26
W231302		37	1.3	10.6	32	51.4		0.20
W231303		38	1.4	9.6	30	47.1		0.28
W231304		42	1.8	10.8	51	56.0		0.32
W231305		2	0.1	0.8	16	<0.5		<0.01

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17209337

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 3- NOV- 2017
Account: RCM

CERTIFICATE WH17209350

Project: Nadaleen

P.O. No.: N17- 115

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 27- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

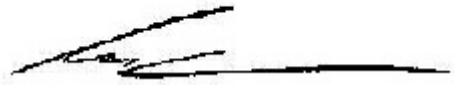
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
As- OG62	Ore Grade As - Four Acid	ICP- AES

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 3- NOV- 2017
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CERTIFICATE OF ANALYSIS WH17209350

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232792		12.40	0.07	1.45	2430	160	0.62	0.04	29.2	0.05	18.35	2.7	16	5.35	8.5	0.50
W232793		11.80	0.07	2.51	38.6	670	0.98	0.06	20.2	0.14	30.0	4.0	27	12.25	14.5	1.12
W232794		11.91	0.09	3.32	134.5	210	1.17	0.08	15.60	0.05	39.8	5.4	36	15.20	16.3	1.43
W232795		11.54	0.07	3.98	57.8	220	1.57	0.10	16.50	0.07	41.3	6.9	36	14.50	19.1	1.01
W232796		11.42	0.05	3.24	80.1	150	1.13	0.08	20.8	0.03	37.9	6.3	29	12.20	11.8	1.24
W232797		4.69	0.90	4.21	>10000	440	1.08	0.12	5.61	0.18	60.3	8.4	44	10.50	24.3	1.52
W232798		2.06	0.95	4.25	>10000	340	1.06	0.13	5.10	0.16	59.4	8.8	44	10.50	25.0	1.51
W232799		8.83	0.08	3.17	2350	150	0.96	0.08	10.25	0.08	43.1	3.5	36	10.65	14.8	0.99
W232800		0.25	0.27	3.75	>10000	180	0.63	0.18	10.00	0.67	42.0	11.4	47	8.75	52.5	2.95
W232801		6.95	0.09	3.11	989	130	0.90	0.08	12.70	0.06	32.0	4.2	33	9.55	12.9	0.99
W232802		7.15	0.15	1.55	>10000	70	0.50	0.05	14.85	0.04	20.4	2.7	20	3.57	8.3	0.78
W232803		<0.02	0.16	1.65	>10000	70	0.44	0.06	15.20	0.04	20.8	2.8	21	3.70	8.0	0.83
W232804		10.90	0.09	1.61	2410	60	0.64	0.04	14.20	0.05	22.7	3.0	20	4.72	7.4	1.00
W232805		12.79	0.13	1.25	>10000	60	0.53	0.05	17.10	0.04	17.20	2.4	15	4.00	9.2	0.75
W232806		13.08	0.08	1.32	2910	60	0.56	0.04	16.40	0.06	18.45	2.9	15	4.39	8.6	1.20
W232807		12.85	0.10	1.72	593	70	0.72	0.05	15.45	0.06	21.5	2.9	18	6.54	11.3	0.71
W232808		12.94	0.07	0.47	5320	20	0.27	0.02	19.35	0.07	7.88	1.3	6	1.37	5.6	0.39
W232809		7.07	0.02	0.05	21.6	70	0.08	0.03	19.40	0.07	1.05	0.7	1	0.33	2.8	0.42
W232810		12.67	0.06	0.68	2210	30	0.34	0.02	18.50	0.02	10.00	1.6	7	1.92	5.5	0.36
W232811		12.68	0.07	0.55	1950	30	0.31	0.03	19.15	<0.02	7.86	1.4	6	1.56	5.1	0.76
W232812		12.68	0.04	0.84	2280	40	0.41	0.03	18.75	0.04	11.15	1.6	10	2.43	7.1	0.60
W232813		7.30	0.05	0.64	6210	30	0.33	0.03	18.15	0.02	9.88	1.2	9	1.48	4.7	0.41
W232814		4.65	0.07	0.58	>10000	70	0.46	0.03	18.00	<0.02	9.31	1.3	8	1.11	4.3	0.52
W232815		0.26	1.55	1.76	>10000	90	0.25	0.44	6.84	0.79	27.9	6.2	45	3.11	26.6	2.39
W232816		5.37	0.07	0.74	1005	40	0.33	0.02	17.95	0.02	13.10	1.7	8	1.78	3.9	0.51
W232817		5.88	0.28	3.78	357	160	1.37	0.12	11.35	0.03	43.5	6.4	37	15.55	28.8	1.12
W232818		10.19	0.20	0.96	411	50	0.58	0.04	19.35	0.07	14.70	2.6	12	3.14	8.6	0.54
W232819		10.86	0.12	0.56	245	30	0.38	0.03	20.2	2.83	10.55	1.6	7	2.05	5.6	0.75
W232820		11.93	0.11	0.39	722	30	0.23	0.02	20.3	0.09	8.76	1.7	5	0.98	4.7	0.89
W232821		12.32	0.08	0.36	54.5	20	0.22	0.02	19.60	0.02	6.44	1.1	5	0.90	4.2	0.33
W232822		10.74	0.08	0.34	85.6	20	0.25	0.02	21.1	0.03	5.90	1.0	4	1.13	4.1	0.21
W232823		11.78	0.14	0.43	798	30	0.28	0.02	20.7	0.03	7.28	1.3	6	1.16	5.7	0.26
W232824		11.29	0.15	0.32	936	30	0.19	0.02	20.8	0.04	5.67	0.9	5	0.63	4.5	0.26
W232825		9.77	0.13	0.41	2730	40	0.25	0.02	19.95	0.04	6.02	1.2	6	0.78	5.3	0.30
W232826		7.19	0.01	0.04	10.2	30	0.05	0.02	20.8	0.06	1.14	0.8	1	0.13	2.2	0.46
W232827		11.99	0.07	0.58	>10000	40	0.35	0.02	20.4	0.03	6.69	1.6	7	1.52	6.0	0.39

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 3- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209350

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232792		4.09	0.12	0.7	0.183	0.011	0.80	10.1	6.9	0.89	145	0.46	0.01	2.3	3.5	230
W232793		6.88	0.14	1.5	0.349	0.017	1.42	15.6	11.6	3.56	195	0.79	0.01	4.0	8.8	500
W232794		8.86	0.13	2.1	0.308	0.023	1.93	20.7	15.5	3.36	201	0.70	0.02	5.7	12.4	440
W232795		10.85	0.13	1.9	0.411	0.023	2.24	21.8	15.4	3.16	211	0.64	0.01	6.0	11.7	540
W232796		8.69	0.13	1.5	1.395	0.023	1.78	20.0	14.8	1.88	251	0.49	0.01	4.7	12.9	420
W232797		11.55	0.18	1.8	26.0	0.036	2.25	32.2	17.1	2.99	522	1.22	0.01	6.2	16.9	670
W232798		11.70	0.16	1.8	27.3	0.037	2.26	32.0	17.6	2.77	493	1.15	0.01	6.2	17.2	640
W232799		8.63	0.16	3.2	12.95	0.019	1.70	21.6	14.3	4.83	374	0.41	0.02	6.3	6.7	610
W232800		10.60	0.14	1.8	29.2	0.038	1.75	24.8	13.4	0.36	771	3.53	0.02	5.7	24.3	530
W232801		8.01	0.14	2.2	1.590	0.022	1.66	17.2	11.4	3.49	249	0.71	0.01	5.3	8.7	550
W232802		4.33	0.12	1.4	2.34	0.021	0.80	11.3	6.0	8.35	1550	0.35	0.01	2.8	5.0	270
W232803		4.44	0.13	1.4	2.38	0.027	0.86	11.3	6.3	8.63	1600	0.33	0.01	3.0	4.8	290
W232804		4.17	0.14	1.9	1.350	0.012	0.84	11.4	8.2	8.52	419	0.51	0.01	3.0	5.0	410
W232805		3.44	0.13	1.1	0.748	0.014	0.65	9.4	7.2	10.40	433	0.74	0.02	2.2	4.2	230
W232806		3.58	0.13	1.0	1.335	0.013	0.68	9.7	8.1	9.94	339	0.47	0.01	2.3	5.5	290
W232807		4.71	0.14	1.3	0.643	0.014	0.91	11.5	10.6	9.60	226	0.68	0.02	3.1	5.9	400
W232808		1.28	0.19	0.3	0.749	0.005	0.23	4.6	3.3	11.70	205	0.40	0.01	0.8	1.4	250
W232809		0.22	0.23	<0.1	0.008	<0.005	0.02	0.5	1.0	12.15	186	0.14	0.01	0.2	<0.2	170
W232810		1.88	0.17	0.4	0.550	0.006	0.35	5.3	4.8	11.55	199	0.34	0.01	1.3	2.1	160
W232811		1.49	0.14	0.4	0.531	0.005	0.28	4.4	4.1	11.70	451	0.50	0.02	1.1	1.9	140
W232812		2.32	0.14	0.7	0.618	0.008	0.43	6.2	5.3	11.50	317	0.56	0.02	1.5	2.0	160
W232813		1.84	0.18	0.7	0.534	0.006	0.33	5.5	3.7	11.40	207	0.56	0.01	1.2	1.0	120
W232814		1.61	0.18	0.6	1.125	0.013	0.25	5.0	3.2	10.90	395	0.54	0.01	1.0	1.2	150
W232815		4.98	0.12	0.9	15.15	0.025	0.80	13.9	24.8	0.17	338	5.24	0.01	2.5	16.0	490
W232816		2.06	0.16	0.7	0.605	0.007	0.36	7.0	4.0	11.15	180	0.52	0.01	1.4	1.3	260
W232817		10.40	0.18	3.0	1.715	0.024	1.83	21.8	29.2	7.15	155	1.49	0.02	7.1	13.4	820
W232818		2.93	0.17	0.6	1.170	0.008	0.47	8.6	7.6	12.00	188	0.97	0.02	1.8	4.4	310
W232819		1.85	0.17	0.4	1.245	0.023	0.27	5.3	4.2	11.35	341	0.70	0.01	1.0	2.3	180
W232820		1.11	0.13	0.2	1.230	0.007	0.19	4.7	2.4	11.70	284	0.40	0.01	0.7	2.2	150
W232821		1.08	0.21	0.2	0.465	<0.005	0.18	3.7	2.6	12.25	195	0.39	0.01	0.7	0.7	150
W232822		1.00	0.26	0.2	0.319	0.005	0.17	3.5	2.8	13.05	109	0.37	0.01	0.6	0.3	140
W232823		1.24	0.24	0.2	0.651	<0.005	0.21	4.4	3.3	12.80	155	0.45	0.01	0.8	1.1	170
W232824		0.88	0.25	0.1	0.903	<0.005	0.15	3.6	2.1	12.80	213	0.31	0.02	0.5	0.3	160
W232825		1.20	0.22	0.2	0.748	0.005	0.20	3.8	2.5	12.25	229	0.42	0.01	0.7	1.2	240
W232826		0.22	0.24	<0.1	0.007	0.005	0.02	0.5	0.9	12.95	205	0.12	0.01	0.1	<0.2	200
W232827		1.65	0.19	0.3	0.423	0.006	0.29	3.9	4.2	12.50	241	0.44	0.01	1.0	2.0	160

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
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Finalized Date: 3- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209350

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232792		4.1	28.2	<0.002	0.26	7.98	2.5	1	0.5	729	0.16	<0.05	2.68	0.060	0.42	13.4
W232793		6.4	49.2	<0.002	0.27	0.31	4.1	1	0.8	550	0.30	<0.05	4.94	0.109	0.68	7.6
W232794		7.2	66.9	<0.002	0.38	1.05	5.4	2	1.2	342	0.42	<0.05	6.79	0.158	1.01	6.9
W232795		7.5	74.3	<0.002	0.40	0.67	6.4	1	1.2	373	0.44	<0.05	7.41	0.167	1.13	7.0
W232796		6.7	62.1	<0.002	0.65	1.21	5.3	1	0.9	449	0.34	<0.05	5.82	0.129	2.41	10.5
W232797		12.5	79.9	0.003	3.80	149.0	5.1	3	1.4	194.0	0.46	0.06	8.00	0.174	57.1	20.9
W232798		12.9	80.8	<0.002	3.50	139.5	5.0	3	1.4	174.0	0.47	0.07	8.04	0.174	62.1	20.9
W232799		6.7	59.4	<0.002	0.31	5.52	5.1	1	1.1	142.0	0.45	<0.05	7.74	0.173	8.60	5.1
W232800		15.8	80.6	0.002	3.48	104.5	8.2	1	1.9	434	0.40	0.14	6.32	0.220	63.2	3.9
W232801		10.2	54.4	<0.002	0.50	2.11	4.7	2	1.0	174.0	0.38	<0.05	6.17	0.147	3.37	11.4
W232802		6.5	28.2	<0.002	2.70	59.4	2.6	2	0.6	113.0	0.21	<0.05	3.53	0.075	5.28	5.8
W232803		9.2	29.5	<0.002	2.71	58.2	2.7	3	0.7	115.0	0.23	<0.05	3.67	0.081	5.32	5.9
W232804		9.6	28.9	<0.002	0.78	5.53	2.7	1	0.5	85.5	0.23	<0.05	3.75	0.080	2.42	7.5
W232805		9.0	22.7	0.002	1.01	11.40	2.1	2	0.4	95.7	0.17	<0.05	2.66	0.061	1.86	10.5
W232806		11.1	23.9	<0.002	1.26	3.95	2.2	1	0.5	92.5	0.17	<0.05	2.75	0.062	2.91	8.1
W232807		9.7	31.5	0.002	0.48	1.34	2.9	1	0.6	77.6	0.23	<0.05	3.58	0.083	1.21	10.9
W232808		6.4	7.6	<0.002	0.45	4.37	0.9	1	0.2	68.1	0.06	<0.05	0.97	0.022	0.80	9.1
W232809		7.5	2.0	<0.002	<0.01	0.18	0.1	1	<0.2	46.9	<0.05	<0.05	0.06	<0.005	0.02	0.7
W232810		7.8	11.5	<0.002	0.31	3.07	1.2	1	0.3	81.6	0.09	<0.05	1.37	0.033	0.75	12.4
W232811		8.7	9.3	<0.002	0.45	3.13	0.9	1	0.2	76.7	0.08	<0.05	1.20	0.027	1.15	12.7
W232812		7.4	14.1	<0.002	0.45	2.98	1.4	1	0.3	100.5	0.11	<0.05	1.86	0.041	1.48	13.2
W232813		4.9	10.6	<0.002	0.47	5.95	1.1	1	0.2	108.0	0.10	<0.05	1.50	0.032	0.81	12.3
W232814		6.5	8.4	<0.002	1.13	14.15	1.0	2	0.2	169.5	0.08	<0.05	1.24	0.026	1.83	13.8
W232815		9.9	38.6	0.002	4.48	154.0	2.9	1	1.2	334	0.18	0.11	2.87	0.098	38.7	4.2
W232816		5.5	11.7	<0.002	0.47	1.44	1.2	1	0.3	106.0	0.10	<0.05	1.64	0.038	1.13	9.7
W232817		17.8	67.0	0.003	0.96	1.48	6.1	2	1.5	109.0	0.53	<0.05	8.38	0.184	2.35	21.7
W232818		12.9	16.5	<0.002	0.41	1.07	1.8	1	0.4	115.0	0.14	<0.05	2.03	0.046	1.40	25.2
W232819		11.1	8.7	<0.002	0.55	0.85	1.0	1	0.3	94.9	0.08	<0.05	1.16	0.027	1.62	24.7
W232820		11.2	6.3	<0.002	0.63	1.52	0.7	1	0.2	101.5	0.05	<0.05	0.82	0.019	2.21	13.6
W232821		7.2	5.9	<0.002	0.16	0.56	0.7	1	0.2	74.5	0.05	<0.05	0.76	0.018	0.62	14.3
W232822		6.1	5.6	<0.002	0.16	0.31	0.7	1	0.2	76.4	<0.05	<0.05	0.71	0.016	0.48	16.2
W232823		7.4	7.0	<0.002	0.23	1.22	0.8	1	0.2	93.9	0.06	<0.05	0.92	0.020	0.79	18.6
W232824		5.6	4.7	<0.002	0.19	1.41	0.6	1	0.2	90.0	<0.05	<0.05	0.60	0.015	0.85	15.7
W232825		6.8	6.6	<0.002	0.35	3.46	0.7	1	0.2	113.0	0.05	<0.05	0.77	0.019	0.84	15.4
W232826		2.5	0.8	<0.002	<0.01	0.11	0.2	1	<0.2	51.0	<0.05	<0.05	0.06	<0.005	<0.02	0.6
W232827		7.0	9.5	<0.002	0.81	11.45	1.0	2	0.3	100.0	0.07	<0.05	1.07	0.027	0.76	14.2

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CERTIFICATE OF ANALYSIS WH17209350

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	As- OG62	Au- AA25
	Analyte	V	W	Y	Zn	Zr	As	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOR	1	0.1	0.1	2	0.5	0.001	0.01
W232792		28	0.4	5.4	28	25.0		0.02
W232793		42	0.5	9.6	32	57.5		<0.01
W232794		52	0.8	11.8	29	76.0		0.02
W232795		59	1.0	10.5	14	71.7		<0.01
W232796		48	1.1	10.7	15	54.1		0.01
W232797		75	2.9	7.5	31	64.1	7.03	5.03
W232798		75	2.9	7.3	32	63.5	6.26	5.27
W232799		50	1.6	14.4	12	119.0		0.24
W232800		63	8.0	21.0	136	64.4	3.49	7.87
W232801		51	1.5	10.4	15	80.9		0.04
W232802		26	1.5	6.7	6	50.2	5.37	0.30
W232803		28	1.6	6.9	7	51.2	4.96	0.30
W232804		29	1.5	8.4	7	69.3		0.14
W232805		28	1.5	6.1	7	41.9	0.985	0.44
W232806		25	1.6	6.4	6	40.1		0.03
W232807		35	1.6	7.4	6	46.0		0.01
W232808		9	0.6	3.5	5	10.6		0.01
W232809		2	0.1	0.7	17	<0.5		<0.01
W232810		11	0.8	3.2	2	15.0		0.02
W232811		12	0.8	2.6	3	13.5		0.02
W232812		15	1.1	3.9	7	27.9		0.02
W232813		14	0.8	3.6	3	25.0		0.01
W232814		16	0.9	3.8	4	19.7	1.985	0.04
W232815		35	6.2	15.6	64	28.9	7.31	8.23
W232816		20	0.7	4.5	6	27.7		0.01
W232817		68	2.8	12.8	7	106.5		0.02
W232818		22	1.1	4.6	8	21.4		0.01
W232819		13	0.7	4.8	1110	21.1		0.01
W232820		10	0.6	3.0	19	7.1		0.01
W232821		9	0.6	2.5	3	6.8		0.01
W232822		9	0.5	2.3	3	6.2		<0.01
W232823		14	0.7	2.7	3	7.9		0.01
W232824		15	0.5	2.2	5	5.2		0.01
W232825		12	0.6	2.7	11	7.1		0.01
W232826		2	0.1	0.8	19	<0.5		<0.01
W232827		11	0.7	2.6	4	11.4	1.015	0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: Nadaleen

Finalized Date: 3- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17209350

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

As- OG62	Au- AA25	Hg- MS42	ME- MS61
ME- OG62			

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE WH17209351

Project: Nadaleen

P.O. No.: N17- 116

This report is for 19 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 27- SEP- 2017.

The following have access to data associated with this certificate:

ANDREW CARNE	JULIA LANE	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
WSH- 21	"Wash" crushers
WSH- 22	"Wash" pulverizers
BAG- 06	Double Bagging Coarse Rejects
LOG- 21	Sample logging - ClientBarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
LOG- 23	Pulp Login - Rcvd with Barcode
LOG- 21d	Sample logging - ClientBarCode Dup
SPL- 21d	Split sample - duplicate
PUL- 31d	Pulverize Split - duplicate

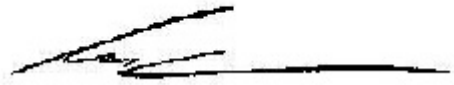
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA25	Ore Grade Au 30g FA AA finish	AAS
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

To: **ATAC RESOURCES LTD.**
ATTN: JULIA LANE
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209351

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
W232828		11.76	0.20	1.95	143.5	120	0.89	0.11	15.80	0.05	22.8	3.4	17	7.28	15.0	0.74
W232829		12.41	0.16	1.57	2670	100	0.71	0.05	17.00	0.05	21.0	3.4	15	5.72	11.3	0.67
W232830		12.10	0.34	0.70	2180	40	0.44	0.03	19.50	0.18	12.50	2.0	10	2.35	9.0	0.26
W232831		11.79	0.02	0.56	1275	30	0.37	0.02	19.35	0.08	9.77	1.1	5	1.41	4.2	0.30
W232832		12.35	0.01	0.60	5680	30	0.37	0.03	19.45	0.04	13.15	1.0	7	1.71	3.8	0.27
W232833		13.34	0.01	1.03	5380	50	0.56	0.04	18.05	0.06	18.15	1.6	8	2.50	4.9	0.56
W232834		<0.02	0.01	1.07	5500	50	0.52	0.05	18.20	0.07	18.40	1.6	9	2.54	5.1	0.59
W232835		13.16	0.01	0.89	2580	50	0.57	0.03	20.1	0.09	16.25	1.8	7	2.45	6.2	0.72
W232836		12.99	0.02	0.45	7240	30	0.25	0.03	18.95	0.21	8.74	1.2	4	0.94	4.3	0.56
W232837		6.81	0.02	0.04	24.5	20	0.06	0.02	20.7	0.08	1.16	0.8	1	0.12	1.9	0.45
W232838		14.06	0.02	0.76	1900	40	0.42	0.04	19.50	0.02	11.00	1.7	7	2.40	13.9	0.64
W232839		11.22	0.01	0.28	5320	30	0.19	0.03	18.85	0.28	6.38	0.9	4	0.73	7.1	0.78
W232840		12.05	0.02	0.61	801	410	0.40	0.03	20.0	0.07	10.55	2.2	6	1.37	9.7	0.81
W232841		5.74	0.02	0.63	875	670	0.39	0.02	19.65	0.07	10.90	2.4	6	1.43	8.3	0.85
W232842		11.30	0.05	4.82	604	250	1.85	0.20	10.40	0.28	49.6	8.3	37	30.4	22.6	2.68
W232843		11.65	0.01	0.96	28.1	220	0.51	0.04	20.2	0.08	11.40	2.6	8	3.01	11.4	1.12
W232844		0.27	0.17	3.76	6410	200	0.87	0.14	12.05	0.12	40.6	11.3	46	10.75	35.1	2.85
W232845		10.31	0.07	2.63	28.0	150	0.90	0.10	23.5	0.08	28.3	4.8	22	12.80	12.1	1.27
W232846		11.88	0.04	3.12	48.5	190	1.02	0.13	17.85	0.08	32.5	5.5	24	12.95	12.7	2.01

***** See Appendix Page for comments regarding this certificate *****

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209351

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
W232828		5.15	0.15	1.5	0.369	0.021	1.03	11.9	12.8	10.10	173	0.71	0.02	3.2	8.3	340
W232829		4.51	0.19	1.2	0.449	0.017	0.82	11.2	9.9	10.45	187	1.65	0.02	2.9	6.2	510
W232830		2.04	0.20	0.4	0.442	0.007	0.35	7.5	5.5	12.00	151	0.77	0.02	1.4	2.9	490
W232831		1.56	0.23	0.6	0.270	0.005	0.29	5.9	3.7	12.00	228	0.11	0.02	1.1	<0.2	560
W232832		1.72	0.19	0.5	0.232	0.008	0.30	7.1	4.2	12.10	248	0.17	0.02	1.2	<0.2	390
W232833		2.95	0.14	1.0	0.519	0.009	0.53	9.7	6.0	9.87	459	0.12	0.02	2.0	1.4	450
W232834		3.01	0.14	1.0	0.515	0.010	0.55	10.0	6.0	10.10	470	0.13	0.02	2.1	1.7	450
W232835		2.58	0.15	0.8	0.250	0.010	0.46	8.4	5.7	10.95	476	0.10	0.02	1.7	1.4	510
W232836		1.28	0.15	0.4	0.386	0.009	0.23	4.6	2.9	11.65	487	0.06	0.01	0.9	0.5	400
W232837		0.18	0.23	<0.1	0.010	0.005	0.02	0.6	0.9	12.65	208	0.06	0.01	0.1	<0.2	190
W232838		2.01	0.13	0.5	0.441	0.006	0.38	5.7	4.8	11.80	445	0.50	0.02	1.2	5.5	460
W232839		0.81	0.10	0.2	0.876	<0.005	0.13	3.3	1.8	11.30	670	0.15	0.01	0.4	2.7	440
W232840		1.75	0.10	0.4	0.809	<0.005	0.30	5.3	3.5	11.90	518	0.19	0.02	1.1	5.0	800
W232841		1.73	0.11	0.4	0.574	<0.005	0.31	5.5	3.9	11.70	519	0.13	0.01	1.1	5.3	820
W232842		12.50	0.13	2.3	0.537	0.041	2.55	26.7	22.9	5.71	214	0.83	0.04	7.1	22.2	870
W232843		2.35	0.10	0.5	0.615	0.007	0.50	6.0	4.6	10.15	432	0.27	0.02	1.4	5.0	340
W232844		10.05	0.12	2.0	14.65	0.033	1.79	20.7	12.1	2.57	1160	1.87	0.02	5.8	25.6	440
W232845		6.76	0.13	1.3	0.197	0.023	1.37	14.4	11.4	2.83	371	0.36	0.02	3.9	8.7	670
W232846		7.84	0.13	1.4	0.136	0.025	1.64	16.8	10.2	5.96	478	0.46	0.03	4.5	12.2	570

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209351

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
W232828		9.8	32.6	0.002	0.59	0.63	3.3	1	0.7	88.5	0.25	0.05	4.12	0.090	1.07	13.1
W232829		13.7	28.8	0.003	0.64	2.17	2.7	2	0.6	103.0	0.22	<0.05	3.53	0.077	1.48	14.9
W232830		7.3	12.3	0.002	0.30	2.09	1.3	2	0.3	93.3	0.10	<0.05	1.69	0.034	0.90	14.7
W232831		3.6	9.6	<0.002	0.22	1.36	1.0	<1	0.2	79.4	0.08	<0.05	1.34	0.029	0.47	9.1
W232832		3.7	10.8	<0.002	0.43	5.23	1.2	1	0.3	90.0	0.08	<0.05	1.41	0.030	0.52	9.1
W232833		5.4	19.4	<0.002	0.48	4.10	1.9	1	0.4	119.5	0.14	<0.05	2.50	0.054	1.39	8.1
W232834		5.5	19.7	<0.002	0.51	4.14	1.9	1	0.4	121.0	0.15	<0.05	2.60	0.056	1.43	8.4
W232835		5.2	16.6	<0.002	0.46	1.86	1.7	1	0.4	130.5	0.13	<0.05	2.15	0.045	0.86	8.7
W232836		3.3	8.1	<0.002	0.50	5.92	0.9	1	0.2	89.2	0.07	<0.05	1.11	0.024	0.72	5.0
W232837		1.5	0.8	<0.002	<0.01	0.10	0.2	1	<0.2	51.6	<0.05	<0.05	0.05	<0.005	<0.02	0.5
W232838		6.4	13.4	<0.002	0.35	2.05	1.5	1	0.3	86.1	0.09	<0.05	1.53	0.039	0.81	2.5
W232839		8.3	4.6	<0.002	0.48	4.95	0.6	1	0.2	67.6	<0.05	<0.05	0.49	0.013	0.74	1.7
W232840		4.4	10.6	<0.002	0.44	1.22	1.3	<1	0.3	92.2	0.07	<0.05	1.22	0.031	0.84	2.2
W232841		4.7	10.9	<0.002	0.46	1.20	1.3	1	0.2	94.4	0.07	<0.05	1.29	0.031	0.78	2.3
W232842		16.0	105.0	<0.002	2.32	1.57	8.4	<1	1.6	96.9	0.52	<0.05	8.20	0.241	1.60	3.5
W232843		1.7	17.8	<0.002	0.12	0.18	1.6	<1	0.4	124.5	0.11	<0.05	1.77	0.046	0.34	4.2
W232844		9.9	82.6	<0.002	2.60	23.6	9.7	1	1.6	319	0.42	0.06	6.09	0.268	45.5	6.6
W232845		6.9	54.2	<0.002	0.52	0.28	4.6	1	0.9	947	0.29	<0.05	4.62	0.129	0.55	11.0
W232846		6.6	63.6	<0.002	0.52	0.32	5.5	<1	1.0	375	0.32	<0.05	5.45	0.151	0.68	6.5

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: **ATAC RESOURCES LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized Date: 2- NOV- 2017
Account: RCM

Project: Nadaleen

CERTIFICATE OF ANALYSIS WH17209351

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Au- AA25
	Analyte	V	W	Y	Zn	Zr	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5	0.01
W232828		35	1.1	8.1	14	57.0	0.01
W232829		30	1.3	7.4	6	46.4	0.01
W232830		33	1.1	4.4	19	15.9	0.01
W232831		13	0.6	5.9	5	20.3	0.02
W232832		14	0.7	5.3	5	17.4	0.02
W232833		26	1.3	7.2	12	35.7	0.10
W232834		27	1.4	7.2	12	35.3	0.10
W232835		18	1.0	6.4	11	27.8	0.05
W232836		8	0.5	3.7	68	15.2	0.05
W232837		2	0.1	0.8	18	<0.5	<0.01
W232838		15	0.6	4.8	8	17.1	0.01
W232839		6	0.4	4.1	128	5.8	0.03
W232840		10	0.7	6.9	6	13.1	0.01
W232841		10	0.8	7.3	8	13.4	0.01
W232842		66	1.7	15.8	116	76.4	<0.01
W232843		20	0.6	4.5	24	17.6	<0.01
W232844		83	7.8	17.8	47	69.2	2.65
W232845		48	0.6	9.8	34	45.7	<0.01
W232846		47	0.9	11.1	44	52.8	<0.01

***** See Appendix Page for comments regarding this certificate *****

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Project: Nadaleen

Finalized Date: 2- NOV- 2017
Account: RCM

CERTIFICATE OF ANALYSIS WH17209351

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.

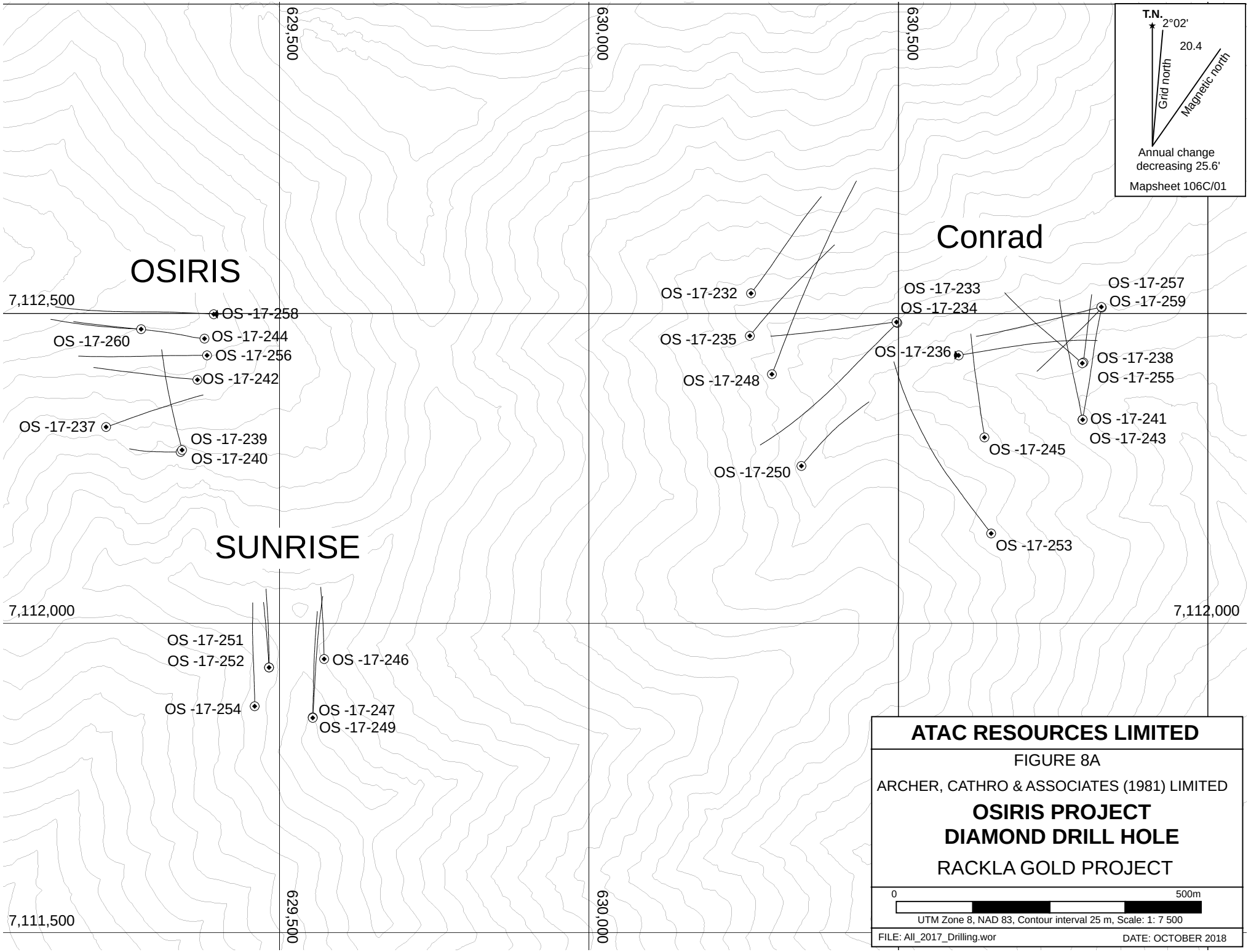
BAG- 06	CRU- 31	CRU- QC	LOG- 21
LOG- 21d	LOG- 23	PUL- 31	PUL- 31d
PUL- QC	SPL- 21	SPL- 21d	WEI- 21
WSH- 21	WSH- 22		

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- AA25	Hg- MS42	ME- MS61

APPENDIX VI

DIAMOND DRILLING - CROSS SECTIONS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Annual change
decreasing 25.6'
Mapsheet 106C/01
OSIRIS
Conrad
SUNRISE
7,112,500
7,112,000
7,111,500
OS -17-258
OS -17-260
OS -17-244
OS -17-256
OS -17-242
OS -17-237
OS -17-239
OS -17-240
OS -17-232
OS -17-233
OS -17-234
OS -17-257
OS -17-259
OS -17-235
OS -17-236
OS -17-238
OS -17-255
OS -17-248
OS -17-241
OS -17-243
OS -17-245
OS -17-250
OS -17-253
OS -17-251
OS -17-252
OS -17-246
OS -17-254
OS -17-247
OS -17-249
ATAC RESOURCES LIMITED
FIGURE 8A
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
OSIRIS PROJECT
DIAMOND DRILL HOLE
RACKLA GOLD PROJECT
0
500m
UTM Zone 8, NAD 83, Contour interval 25 m, Scale: 1: 7 500
FILE: All_2017_Drilling.wor
DATE: OCTOBER 2018

Section OS-17-232

Looking 125°

A

A’

1600 m

1500 m

1400 m

1300 m

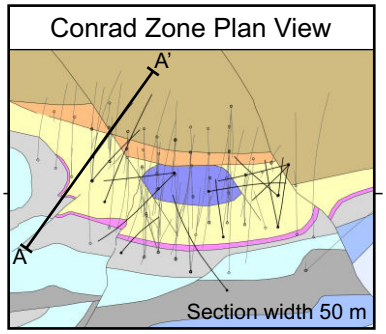
1200 m

1100 m

1000 m

900 m

OS-17-232



ATAC RESOURCES LIMITED

FIGURE 10

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-232

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F10_Section_232 DATE: APRIL 2018

Geology Legend

C-INT	C-DST
C-NFZ	C-SLC
C-LST2	C-LST1
C-SHL	NONAD

Gold Intervals (g/t Au)

> 1.0	> 5.0
> 2.0	> 10.0

x: 630078 mE
y: 7112269 mN

x: 630193 mE
y: 7112433 mN

x: 630307 mE
y: 7112597 mN

x: 630422 mE
y: 7112761 mN

Section OS-17-233

Looking 138°

A

A'

1500 m

1400 m

1300 m

1200 m

1100 m

1000 m

900 m

800 m

OS-17-233

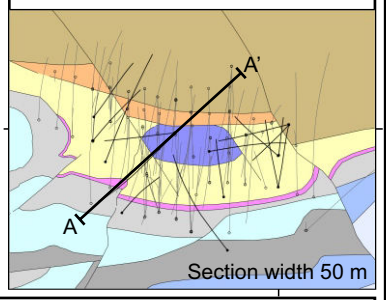
Geology Legend

- C-INT
- C-NFZ
- C-LST2
- C-SHL
- C-DST
- C-SLC
- C-LST1
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 2.0
- > 5.0
- > 10.0

Conrad Zone Plan View



ATAC RESOURCES LIMITED

FIGURE 11

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-233

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F11_Section_233 DATE: APRIL 2018

x: 630231 mE
y: 7112240 mN

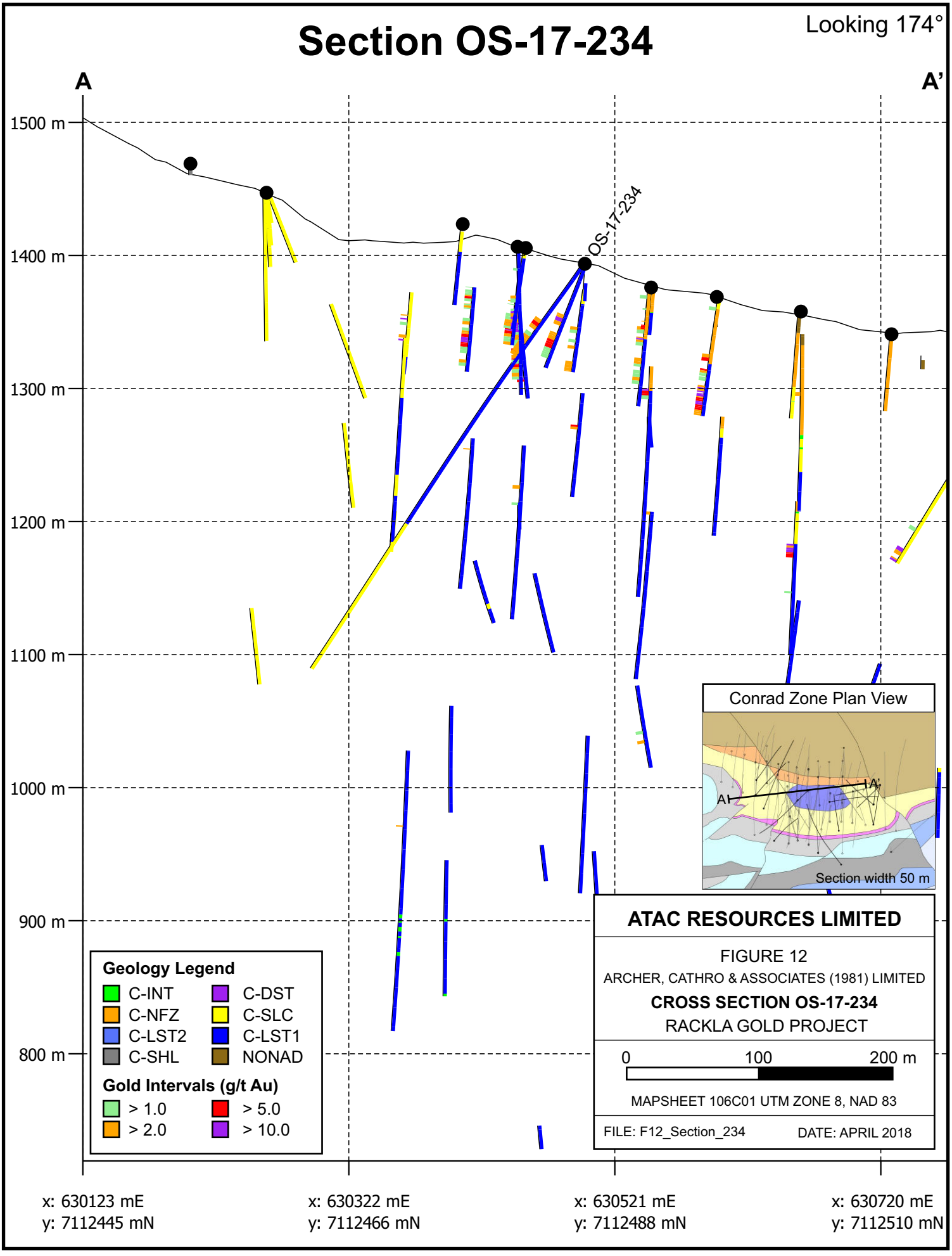
x: 630380 mE
y: 7112374 mN

x: 630529 mE
y: 7112508 mN

x: 630677 mE
y: 7112642 mN

Section OS-17-234

Looking 174°



Section OS-17-235

Looking 125°

A

A’

1600 m

1500 m

1400 m

1300 m

1200 m

1100 m

1000 m

900 m

OS-17-235

Geology Legend

C-INT	C-DST
C-NFZ	C-SLC
C-LST2	C-LST1
C-SHL	NONAD

Gold Intervals (g/t Au)

> 1.0	> 5.0
> 2.0	> 10.0

Conrad Zone Plan View

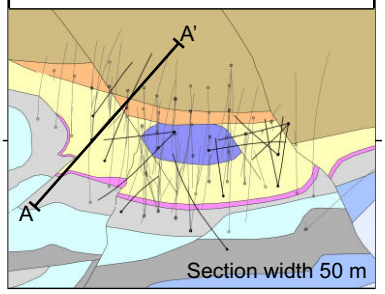


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FIGURE 13

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-235

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F13_Section_235 DATE: APRIL 2018

x: 630105 mE
y: 7112228 mN

x: 630220 mE
y: 7112392 mN

x: 630334 mE
y: 7112556 mN

x: 630449 mE
y: 7112720 mN

Section OS-17-236

Looking 174°

A

A'

1400 m

1300 m

1200 m

1100 m

1000 m

900 m

800 m

700 m

OS-17-236

Conrad Zone Plan View

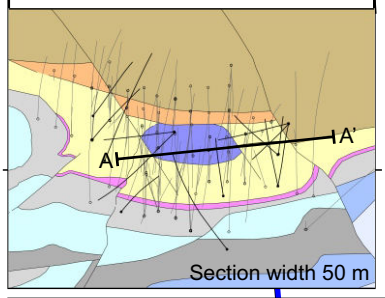

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FIGURE 14

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-236

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F14_Section_236 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630327 mE
y: 7112407 mN

x: 630526 mE
y: 7112428 mN

x: 630725 mE
y: 7112449 mN

x: 630924 mE
y: 7112469 mN

Section OS-17-237

Looking 342°

A

A’

OS-17-237

1600 m

1500 m

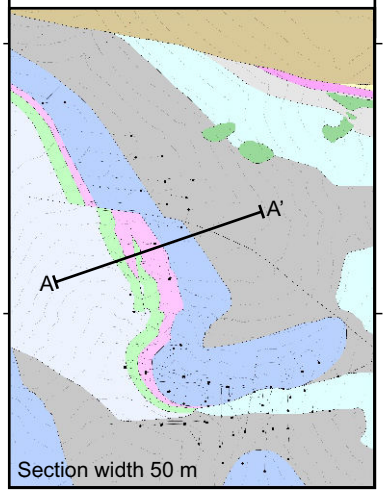
1400 m

1300 m

1200 m

1100 m

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 15

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-237

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F15_Section_237 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629051 mE
y: 7112262 mN

x: 629241 mE
y: 7112324 mN

x: 629431 mE
y: 7112386 mN

Section OS-17-238

Looking 098°

A

A’

1400 m

1300 m

1200 m

1100 m

1000 m

900 m

800 m

700 m

OS-17-238

Geology Legend

C-INT	C-DST
C-NFZ	C-SLC
C-LST2	C-LST1
C-SHL	NONAD

Gold Intervals (g/t Au)

> 1.0	> 5.0
> 2.0	> 10.0

Conrad Zone Plan View

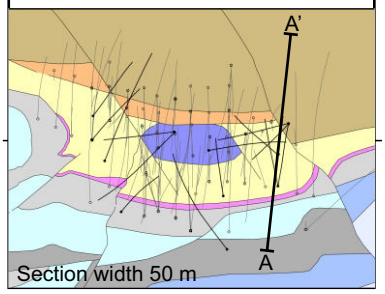


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FIGURE 16

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-238

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F16_Section_238 DATE: APRIL 2018

x: 630758 mE
y: 7112132 mN

x: 630786 mE
y: 7112330 mN

x: 630814 mE
y: 7112528 mN

x: 630842 mE
y: 7112727 mN

Section OS-17-239

Looking 005°

A

A’

1700 m

1600 m

1500 m

1400 m

1300 m

1200 m

OS-17-239

Osiris-Sunrise Zones Plan View

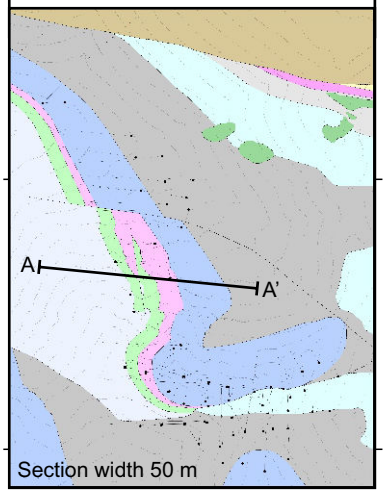

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FIGURE 17

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-239

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F17_Section_239 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629049 mE
y: 7112301 mN

x: 629249 mE
y: 7112283 mN

x: 629448 mE
y: 7112266 mN

Section OS-17-240

Looking 258°

A

A’

1700 m

1600 m

1500 m

1400 m

1300 m

1200 m

OS-17-240

Osiris-Sunrise Zones Plan View

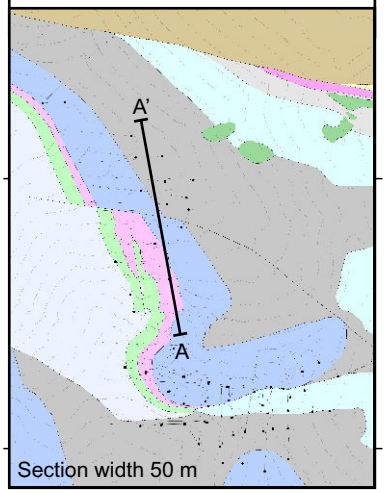

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FIGURE 18

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-240

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F18_Section_240 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629377 mE
y: 7112118 mN

x: 629336 mE
y: 7112314 mN

x: 629294 mE
y: 7112509 mN

Section OS-17-241

Looking 080°

A

A’

1400 m

1300 m

1200 m

1100 m

1000 m

900 m

800 m

700 m

OS-17-241

Conrad Zone Plan View

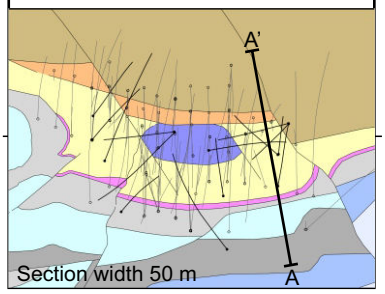

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FIGURE 19

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-241

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F19_Section_241 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630832 mE
y: 7112121 mN

x: 630797 mE
y: 7112318 mN

x: 630763 mE
y: 7112515 mN

x: 630728 mE
y: 7112712 mN

Section OS-17-242

Looking 006°

A

A’

1600 m

1500 m

1400 m

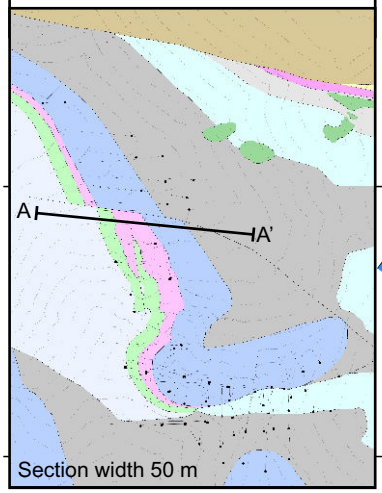
1300 m

1200 m

1100 m

OS-17-242

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 20

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-242

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F20_Section_242 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629031 mE
y: 7112429 mN

x: 629230 mE
y: 7112408 mN

x: 629429 mE
y: 7112387 mN

Section OS-17-243

Looking 100°

A

A’

OS-17-243

1300 m

1200 m

1100 m

1000 m

900 m

800 m

700 m

600 m

Conrad Zone Plan View

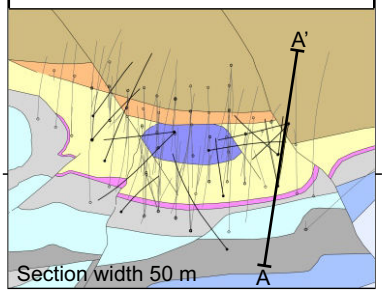


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FIGURE 21

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-243

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F21_Section_243 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630750 mE
y: 7112059 mN

x: 630784 mE
y: 7112256 mN

x: 630819 mE
y: 7112453 mN

x: 630854 mE
y: 7112650 mN

Section OS-17-244

Looking 007°

A

A’

OS-17-260

OS-17-244

1500 m

1400 m

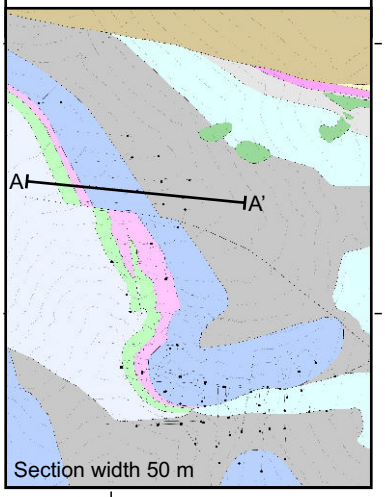
1300 m

1200 m

1100 m

1000 m

Osiris-Sunrise Zones Plan View



Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

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FIGURE 22

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-244

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F22_Section_244 DATE: APRIL 2018

x: 628996 mE
y: 7112507 mN

x: 629194 mE
y: 7112482 mN

x: 629393 mE
y: 7112458 mN

Section OS-17-245

Looking 083°

A

A’

1400 m

1300 m

1200 m

1100 m

1000 m

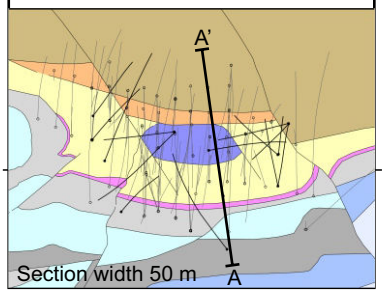
900 m

800 m

700 m

OS-17-245

Conrad Zone Plan View



ATAC RESOURCES LIMITED

FIGURE 23

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-245

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F23_Section_245 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630672 mE
y: 7112030 mN

x: 630648 mE
y: 7112229 mN

x: 630623 mE
y: 7112427 mN

x: 630599 mE
y: 7112626 mN

Section OS-17-246

Looking 271°

A

A’

1800 m

1700 m

1600 m

1500 m

1400 m

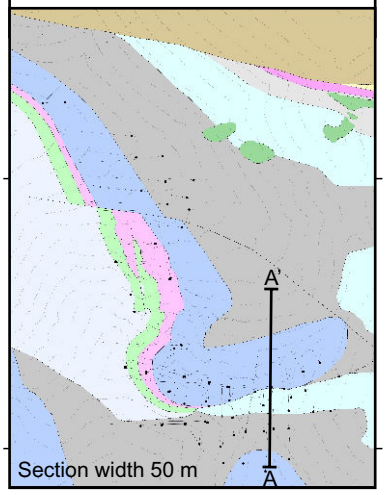
1300 m

OS-17-246

OS-17-247

OS-17-249

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 24

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-246

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F24_Section_246 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629560 mE
y: 7111758 mN

x: 629564 mE
y: 7111958 mN

x: 629567 mE
y: 7112157 mN

Section OS-17-247

Looking 271°

A

A’

1800 m

1700 m

1600 m

1500 m

1400 m

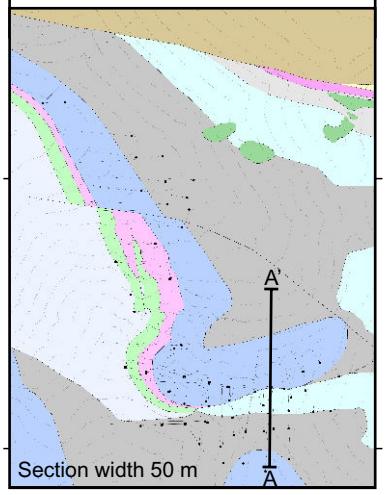
1300 m

OS-17-246

OS-17-247

OS-17-249

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 25

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-247

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F25_Section_247 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629560 mE
y: 7111758 mN

x: 629564 mE
y: 7111958 mN

x: 629567 mE
y: 7112157 mN

Section OS-17-248

Looking 113°

A

A’

OS-17-248

1500 m

1400 m

1300 m

1200 m

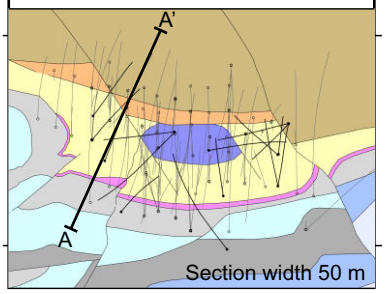
1100 m

1000 m

900 m

800 m

Conrad Zone Plan View



ATAC RESOURCES LIMITED

FIGURE 26

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-248

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F26_Section_248 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630197 mE
y: 7112172 mN

x: 630275 mE
y: 7112356 mN

x: 630353 mE
y: 7112540 mN

x: 630431 mE
y: 7112724 mN

Section OS-17-249

Looking 271°

A

A’

1800 m

1700 m

1600 m

1500 m

1400 m

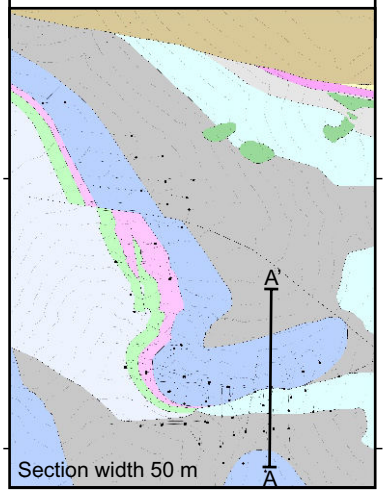
1300 m

OS-17-246

OS-17-247

OS-17-249

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 27

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-249

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F27_Section_249 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629560 mE
y: 7111758 mN

x: 629564 mE
y: 7111958 mN

x: 629567 mE
y: 7112157 mN

Section OS-17-250

Looking 137°

A

A’

OS-17-250

1400 m

1300 m

1200 m

1100 m

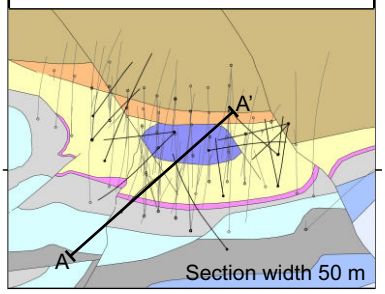
1000 m

900 m

800 m

700 m

Conrad Zone Plan View



ATAC RESOURCES LIMITED

FIGURE 28

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-250

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F28_Section_250 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630196 mE
y: 7112120 mN

x: 630343 mE
y: 7112257 mN

x: 630489 mE
y: 7112393 mN

x: 630635 mE
y: 7112529 mN

Section OS-17-251

Looking 270°

A

A’

1800 m

1700 m

1600 m

1500 m

1400 m

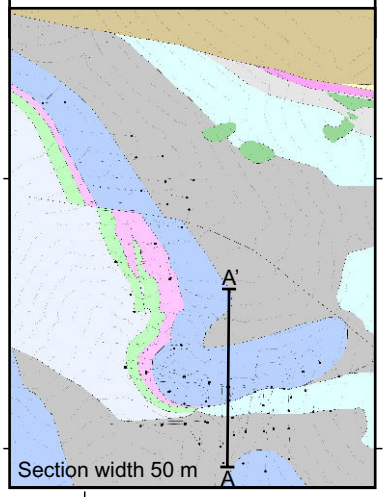
1300 m

OS-17-251

OS-17-252

OS-17-254

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 29

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-251

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F29_Section_251 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629469 mE
y: 7111800 mN

x: 629469 mE
y: 7112000 mN

x: 629469 mE
y: 7112200 mN

Section OS-17-252

Looking 270°

A

A’

1800 m

1700 m

1600 m

1500 m

1400 m

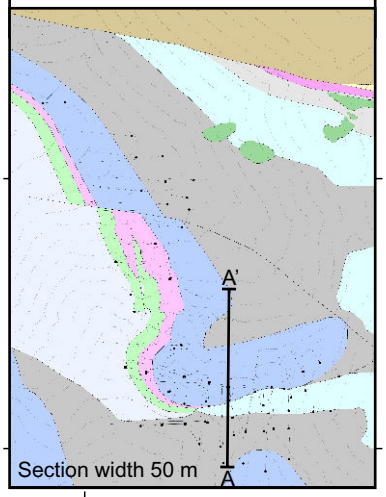
1300 m

OS-17-251

OS-17-252

OS-17-254

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 30

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-252

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F30_Section_252 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629469 mE
y: 7111800 mN

x: 629469 mE
y: 7112000 mN

x: 629469 mE
y: 7112200 mN

Section OS-17-253

Looking 060°

A

A’

OS-17-253

1400 m

1300 m

1200 m

1100 m

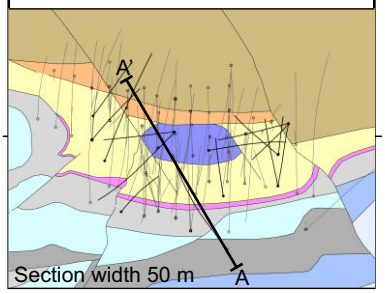
1000 m

900 m

800 m

700 m

Conrad Zone Plan View



ATAC RESOURCES LIMITED

FIGURE 31

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-253

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F31_Section_253 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630708 mE
y: 7112028 mN

x: 630608 mE
y: 7112201 mN

x: 630508 mE
y: 7112375 mN

x: 630408 mE
y: 7112548 mN

Section OS-17-254

Looking 270°

A

A’

1800 m

1700 m

1600 m

1500 m

1400 m

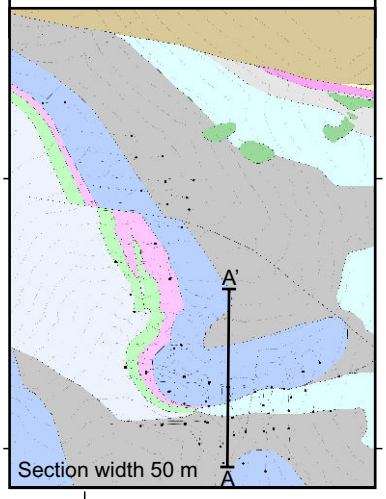
1300 m

OS-17-251

OS-17-252

OS-17-254

Osiris-Sunrise Zones Plan View



ATAC RESOURCES LIMITED

FIGURE 32

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-254

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F32_Section_254 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629469 mE
y: 7111800 mN

x: 629469 mE
y: 7112000 mN

x: 629469 mE
y: 7112200 mN

Section OS-17-255

Looking 042°

A

A’

1400 m

1300 m

1200 m

1100 m

1000 m

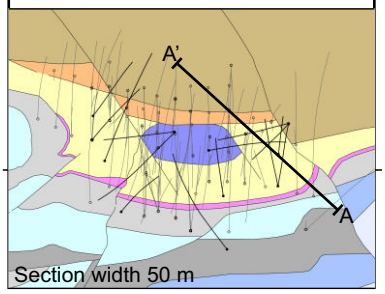
900 m

800 m

700 m

OS-17-255

Conrad Zone Plan View



ATAC RESOURCES LIMITED

FIGURE 33

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-255

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F33_Section_255 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630989 mE
y: 7112246 mN

x: 630840 mE
y: 7112380 mN

x: 630692 mE
y: 7112514 mN

x: 630543 mE
y: 7112648 mN

Section OS-17-256

Looking 000°

A

A’

1600 m

1500 m

1400 m

1300 m

1200 m

1100 m

OS-17-256

Osiris-Sunrise Zones Plan View

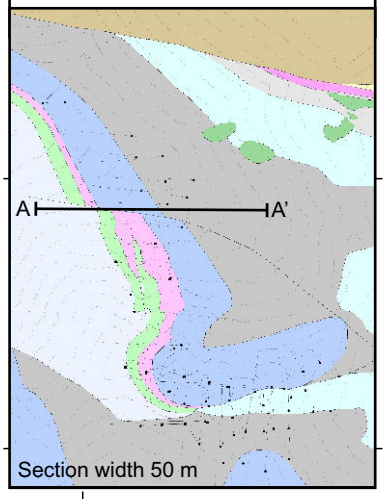


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FIGURE 34

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-256

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F34_Section_256 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629000 mE
y: 7112432 mN

x: 629200 mE
y: 7112432 mN

x: 629400 mE
y: 7112432 mN

Section OS-17-257

Looking 134°

A

A’

1400 m

1300 m

1200 m

1100 m

1000 m

900 m

800 m

700 m

OS-17-257

Conrad Zone Plan View

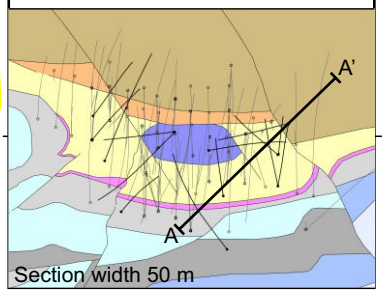

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FIGURE 35

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-257

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F35_Section_257 DATE: APRIL 2018

Geology Legend

- C-INT
- C-DST
- C-NFZ
- C-SLC
- C-LST2
- C-LST1
- C-SHL
- NONAD

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 630555 mE
y: 7112230 mN

x: 630694 mE
y: 7112374 mN

x: 630833 mE
y: 7112518 mN

x: 630972 mE
y: 7112661 mN

Section OS-17-258

Looking 000°

A

A’

1600 m

1500 m

1400 m

1300 m

1200 m

1100 m

OS-17-258

Osiris-Sunrise Zones Plan View

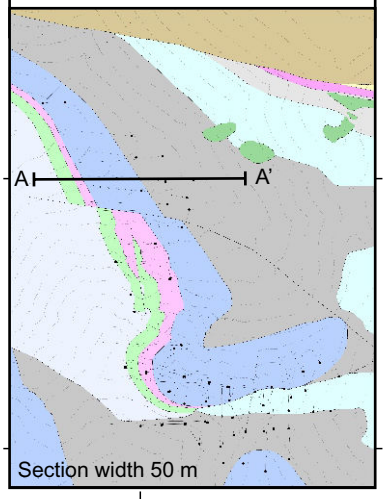

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FIGURE 36

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-258

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F36_Section_258 DATE: APRIL 2018

Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

x: 629000 mE
y: 7112508 mN

x: 629200 mE
y: 7112508 mN

x: 629400 mE
y: 7112508 mN

Section OS-17-259

Looking 167°

A

A’

1400 m

1300 m

1200 m

1100 m

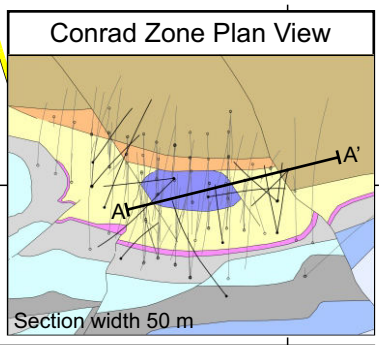
1000 m

900 m

800 m

700 m

OS-17-255



Geology Legend

C-INT	C-DST
C-NFZ	C-SLC
C-LST2	C-LST1
C-SHL	NONAD

Gold Intervals (g/t Au)

> 1.0	> 5.0
> 2.0	> 10.0

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FIGURE 37

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-259

RACKLA GOLD PROJECT

0 100 200 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F37_Section_259 DATE: APRIL 2018

x: 630452 mE
y: 7112423 mN

x: 630647 mE
y: 7112468 mN

x: 630842 mE
y: 7112513 mN

x: 631037 mE
y: 7112558 mN

Section OS-17-260

Looking 007°

A

A’

OS-17-260

OS-17-244

1500 m

1400 m

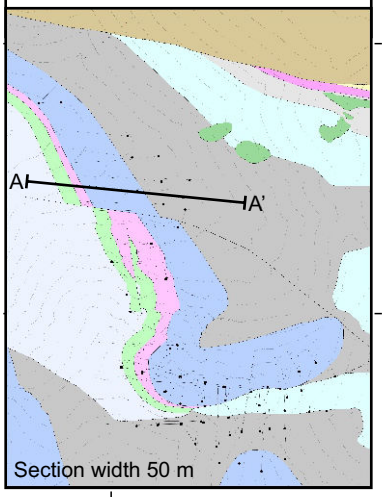
1300 m

1200 m

1100 m

1000 m

Osiris-Sunrise Zones Plan View



Geology Legend

- O-LST2
- O-LST1
- O-DMT
- O-MST
- O-DST
- C-LST2

Gold Intervals (g/t Au)

- > 1.0
- > 5.0
- > 2.0
- > 10.0

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FIGURE 38

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION OS-17-260

RACKLA GOLD PROJECT

0 100 200 m

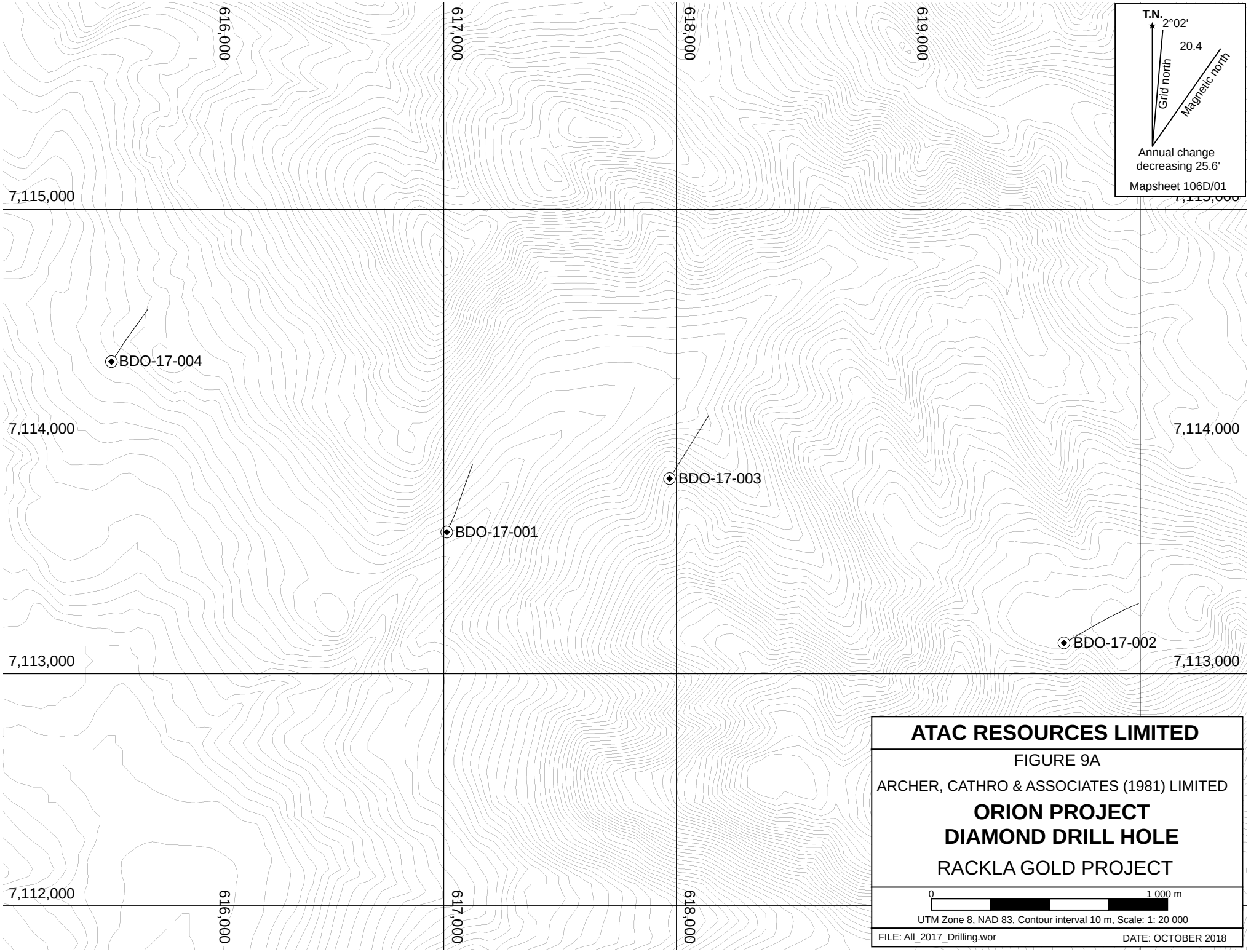
MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F38_Section_260 DATE: APRIL 2018

x: 628996 mE
y: 7112507 mN

x: 629194 mE
y: 7112482 mN

x: 629393 mE
y: 7112458 mN



ATAC RESOURCES LIMITED

FIGURE 9A

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

ORION PROJECT
DIAMOND DRILL HOLE

RACKLA GOLD PROJECT

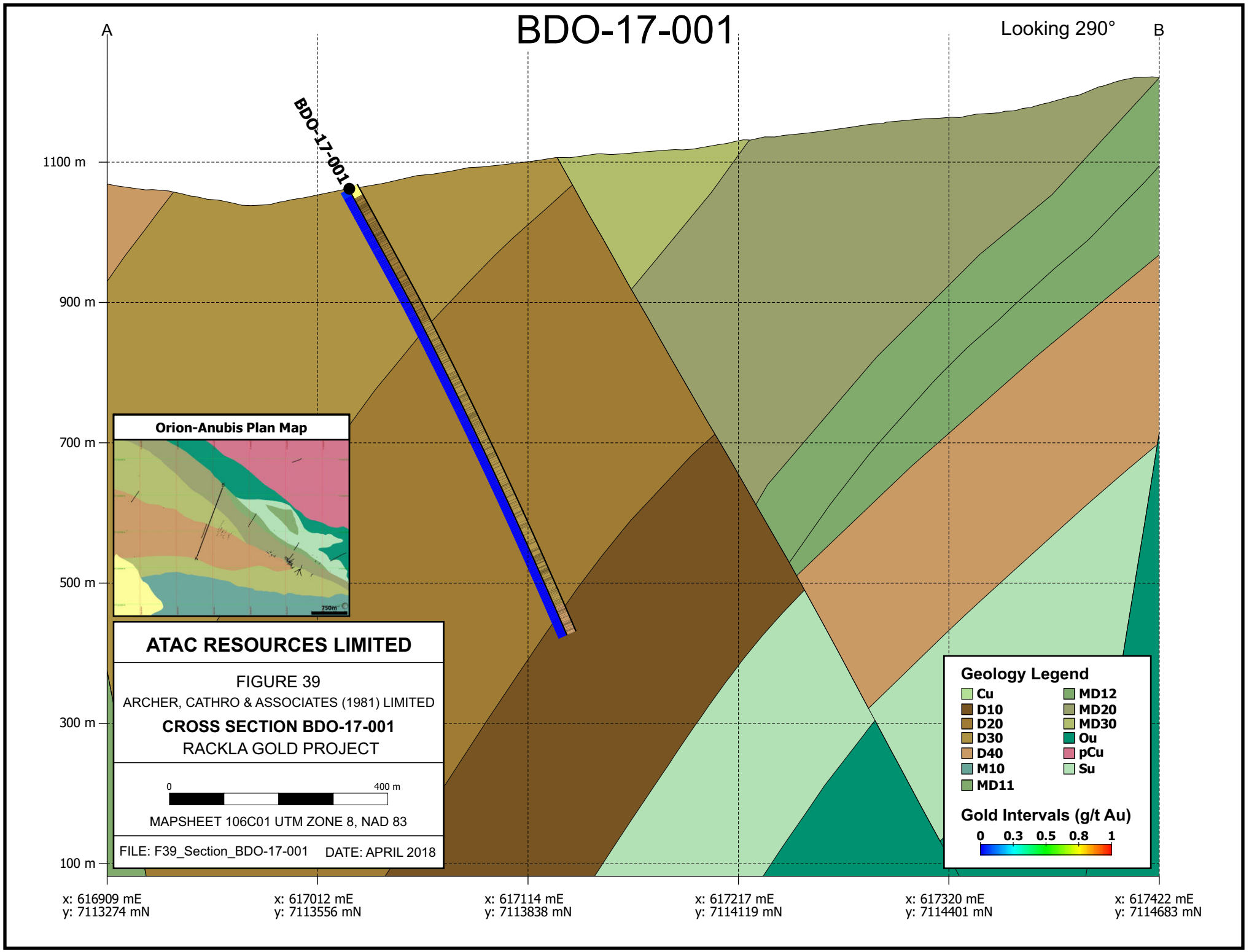
0 1 000 m

UTM Zone 8, NAD 83, Contour interval 10 m, Scale: 1: 20 000

FILE: All_2017_Drilling.wor

DATE: OCTOBER 2018

BDO-17-001


A
B
Looking 290°
BDO-17-001
1100 m
900 m
700 m
500 m
300 m
100 m
x: 616909 mE
y: 7113274 mN
x: 617012 mE
y: 7113556 mN
x: 617114 mE
y: 7113838 mN
x: 617217 mE
y: 7114119 mN
x: 617320 mE
y: 7114401 mN
x: 617422 mE
y: 7114683 mN
Orion-Anubis Plan Map
750m
ATAC RESOURCES LIMITED
FIGURE 39
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
CROSS SECTION BDO-17-001
RACKLA GOLD PROJECT
0
400 m
MAPSHEET 106C01 UTM ZONE 8, NAD 83
FILE: F39_Section_BDO-17-001
DATE: APRIL 2018
Geology Legend
Cu
D10
D20
D30
D40
M10
MD11
MD12
MD20
MD30
Ou
pCu
Su
Gold Intervals (g/t Au)
0 0.3 0.5 0.8 1

BDO-17-002

Looking 330°

A

B

BDO-17-002

1600 m

1400 m

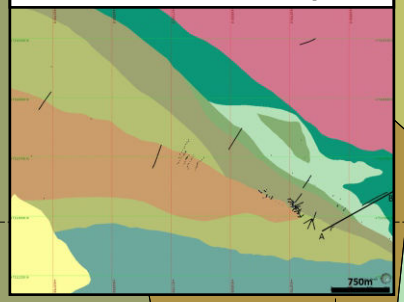
1200 m

1000 m

800 m

600 m

Orion-Anubis Plan Map



ATAC RESOURCES LIMITED

FIGURE 40

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION BDO-17-002

RACKLA GOLD PROJECT

0 400 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F40_Section_BDO-17-002 DATE: APRIL 2018

Geology Legend

Cu	MD12
D10	MD20
D20	MD30
D30	Ou
D40	pCu
M10	Su
MD11	

Gold Intervals (g/t Au)

0 0.3 0.5 0.8 1

x: 619154 mE
y: 7112826 mN

x: 619414 mE
y: 7112976 mN

x: 619674 mE
y: 7113126 mN

x: 619933 mE
y: 7113276 mN

x: 620193 mE
y: 7113426 mN

x: 620453 mE
y: 7113576 mN

BDO-17-003

Looking 303°

A

B

BDO-17-003

1300 m

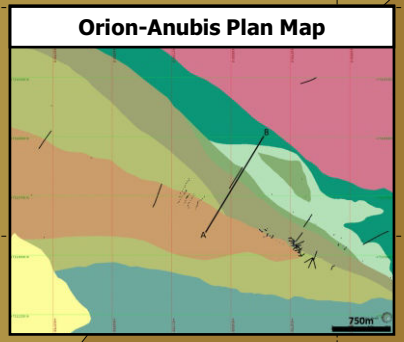
1100 m

900 m

700 m

500 m

300 m



ATAC RESOURCES LIMITED

FIGURE 41

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION BDO-17-003

RACKLA GOLD PROJECT

0 400 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F41_Section_BDO-17-003 DATE: APRIL 2018

Geology Legend

Cu	MD12
D10	MD20
D20	MD30
D30	Ou
D40	pCu
M10	Su
MD11	

Gold Intervals (g/t Au)

0 0.3 0.5 0.8 1

x: 617589 mE
y: 7113251 mN

x: 617752 mE
y: 7113503 mN

x: 617915 mE
y: 7113754 mN

x: 618079 mE
y: 7114006 mN

x: 618242 mE
y: 7114258 mN

x: 618406 mE
y: 7114509 mN

BDO-17-004

A

Looking 300°

B

1300 m

1100 m

900 m

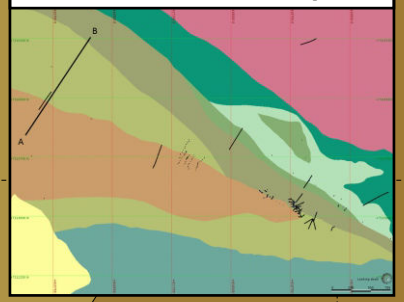
700 m

500 m

300 m

BDO-17-004

Orion-Anubis Plan Map



ATAC RESOURCES LIMITED

FIGURE 42

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CROSS SECTION BDO-17-004

RACKLA GOLD PROJECT

0 400 m

MAPSHEET 106C01 UTM ZONE 8, NAD 83

FILE: F42_Section_BDO-17-004 DATE: APRIL 2018

Geology Legend

- Cu
- D10
- D20
- D30
- D40
- M10
- MD11
- MD12
- MD20
- MD30
- Ou
- pCu
- Su

Gold Intervals (g/t Au)

0 0.3 0.5 0.8 1

x: 615374 mE
y: 7113953 mN

x: 615524 mE
y: 7114213 mN

x: 615674 mE
y: 7114473 mN

x: 615824 mE
y: 7114733 mN

x: 615974 mE
y: 7114993 mN

x: 616124 mE
y: 7115252 mN

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FIGURE 1
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

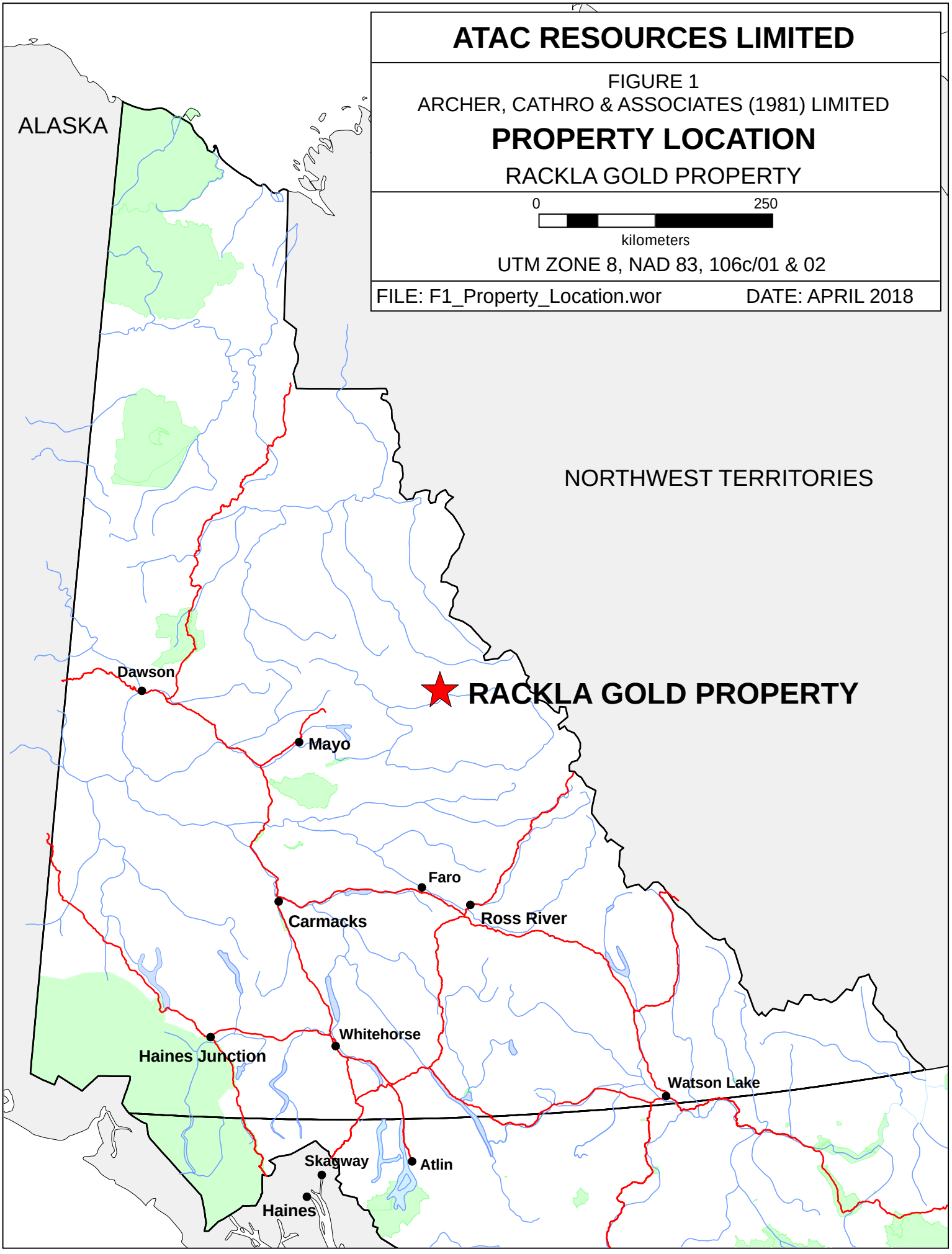
PROPERTY LOCATION

RACKLA GOLD PROPERTY

0 250
kilometers

UTM ZONE 8, NAD 83, 106c/01 & 02

FILE: F1_Property_Location.wor DATE: APRIL 2018



T.N.
2°02'
20.4
Grid north
Magnetic north
Annual change decreasing 25.6'
Mapsheet 106C/01

*Letter corresponds to assessment grouping

106D05 106D07 106D08 106C05 106C06 106C07 106C08 106B05
106D06
106D04 106D03 106D02 106D01 106C04 106C03 106C02 106C01 106B04
UTM Zone 8
UTM Zone 9
PROPERTY BOUNDARY
A B C D E F G H I L N

7,125,000 mN
7,120,000 mN
7,115,000 mN
7,110,000 mN

1,900
1,800
1,700
1,600
1,500
1,400
1,300
1,200

625,000 mE
630,000 mE
635,000 mE
640,000 mE
645,000 mE

PROPERTY BOUNDARY

ATAC RESOURCES LIMITED

FIGURE 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM LOCATIONS - GROUPS A & B

RACKLA GOLD PROJECT

0 1 2 3 4 km

UTM ZONE 8, NAD 83, 106C01, Contour line intervals 100 feet, Scale 1:50,000

FILE: F2_Claim_Locations_AB

DATE: APRIL 2018

T.N.
2°02'
20.4'
Grid north
Magnetic north
Annual change decreasing 25.6'
Mapsheet 106C/01

*Letter corresponds to assessment grouping

106D05 106D07 106D08 106C05 106C06 106C07 106C08 106B05
106D06
106D04 106D03 106D02 106D01 106C04 106C03 106C02 106C01 106B04
UTM Zone 8
UTM Zone 9
PROPERTY BOUNDARY
A B C E F G H I L N

PROPERTY BOUNDARY

7,125,000 mN
7,120,000 mN
7,115,000 mN
7,110,000 mN

1,900
1,800
1,700
1,600
1,500
1,400
1,300
1,200

625,000 mE
630,000 mE
635,000 mE
640,000 mE
645,000 mE

ATAC RESOURCES LIMITED

FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM LOCATIONS - GROUPS C - F

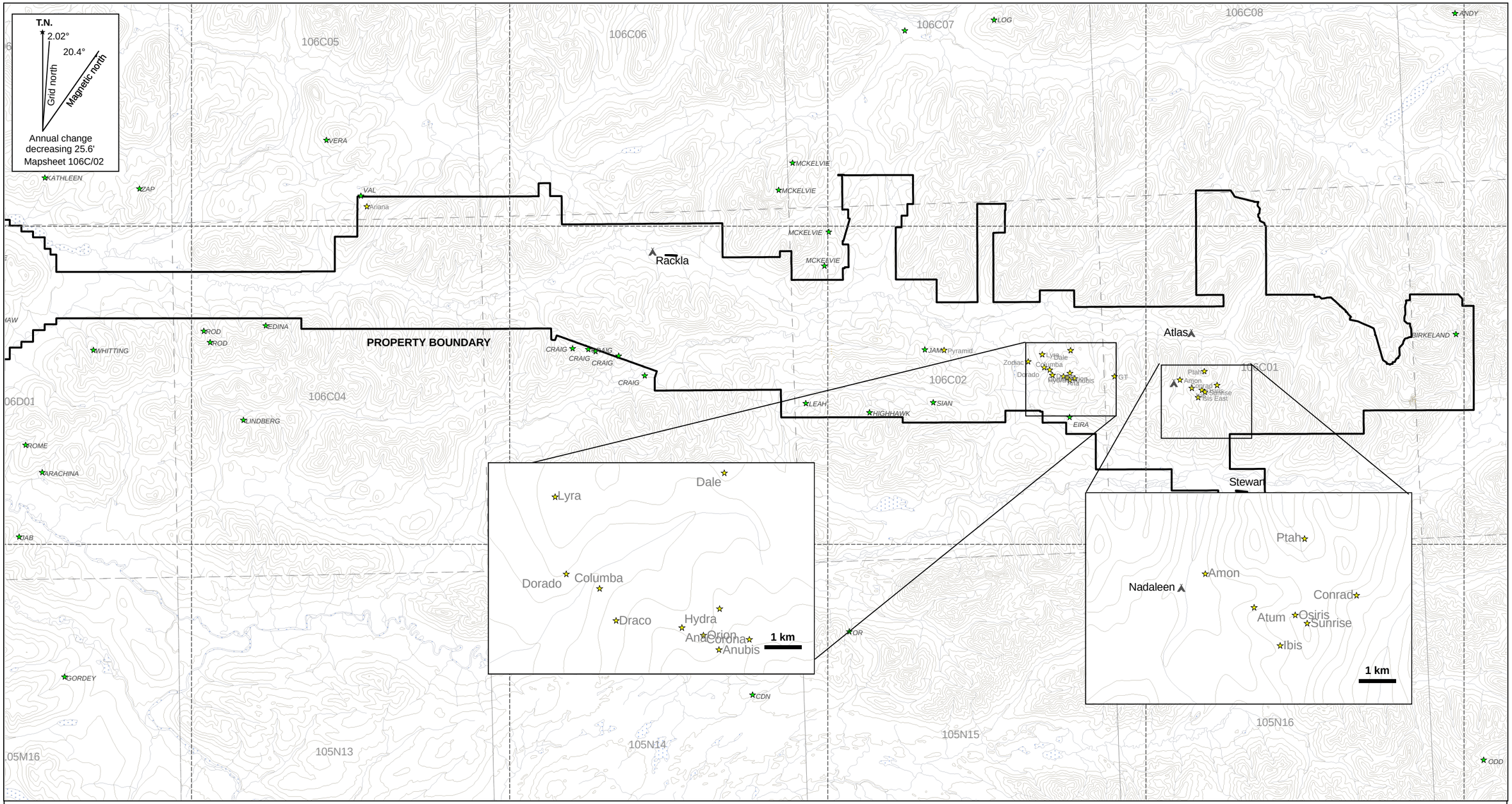
RACKLA GOLD PROJECT

0 1 2 3 4 km

UTM ZONE 8, NAD 83, 106C01, Contour line intervals 100 feet, Scale 1:50,000

FILE: F3_Claim_Locations_C-F

DATE: APRIL 2018



Mineralized Discovery

Historical Showing

Camp

Airstrip

ATAC RESOURCES LIMITED

FIGURE 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SHOWING, CAMP & AIRSTRIP LOCATIONS

RACKLA GOLD PROJECT

0 20 km

UTM Zone 8, NAD 83, Contour interval 100 m, Scale: 1: 300 000

FILE: F4_Showing,Camp&Airstrip_Locations.wor

DATE: APRIL 2018

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FIGURE 5

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

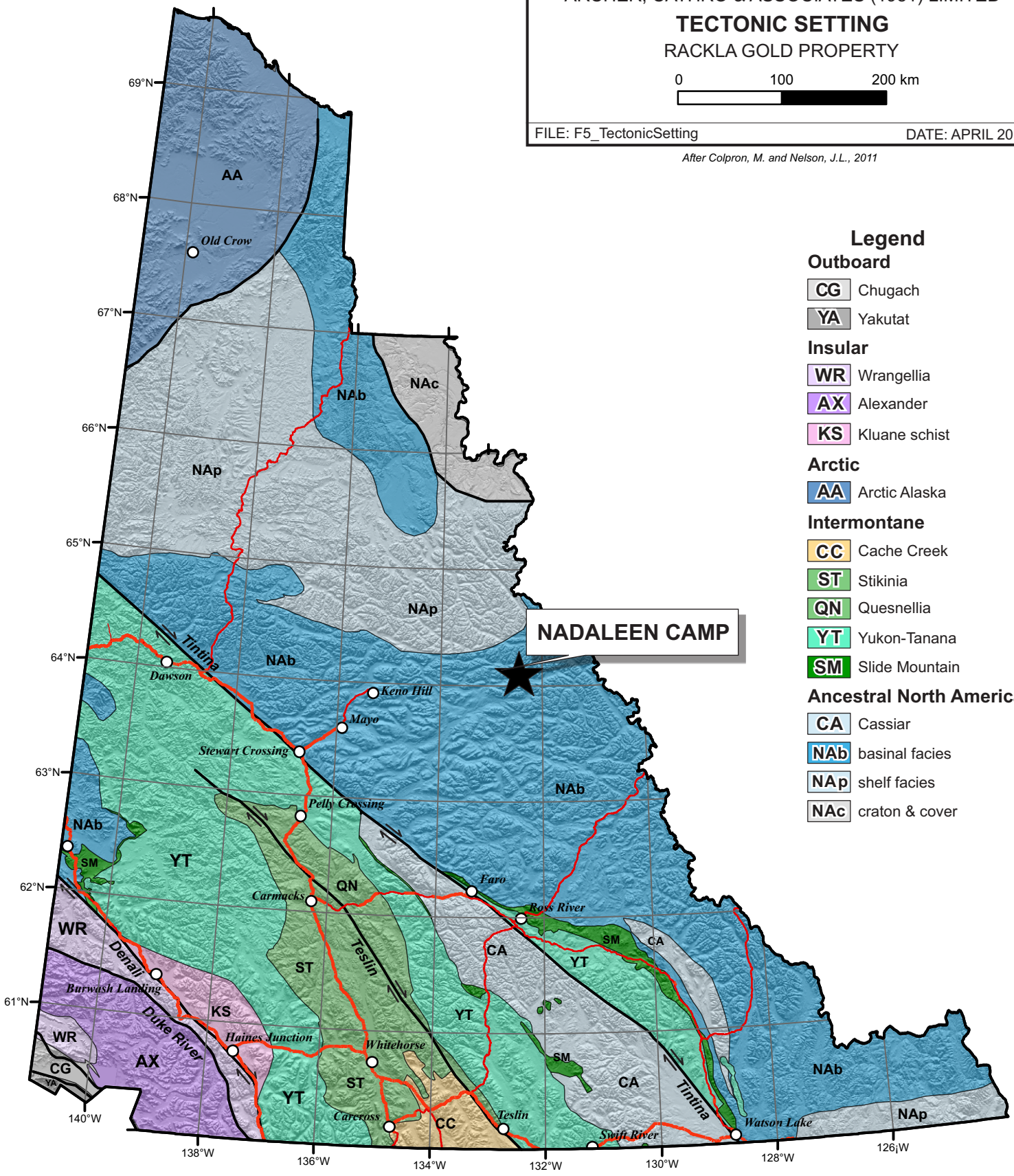
TECTONIC SETTING

RACKLA GOLD PROPERTY

0 100 200 km

FILE: F5_TectonicSetting DATE: APRIL 2018

After Colpron, M. and Nelson, J.L., 2011



Legend

Outboard

- CG Chugach
- YA Yakutat

Insular

- WR Wrangellia
- AX Alexander
- KS Kluane schist

Arctic

- AA Arctic Alaska

Intermontane

- CC Cache Creek
- ST Stikinia
- QN Quesnellia
- YT Yukon-Tanana
- SM Slide Mountain

Ancestral North America

- CA Cassiar
- NAb basinal facies
- NAp shelf facies
- NAc craton & cover

after Abbott (1997)

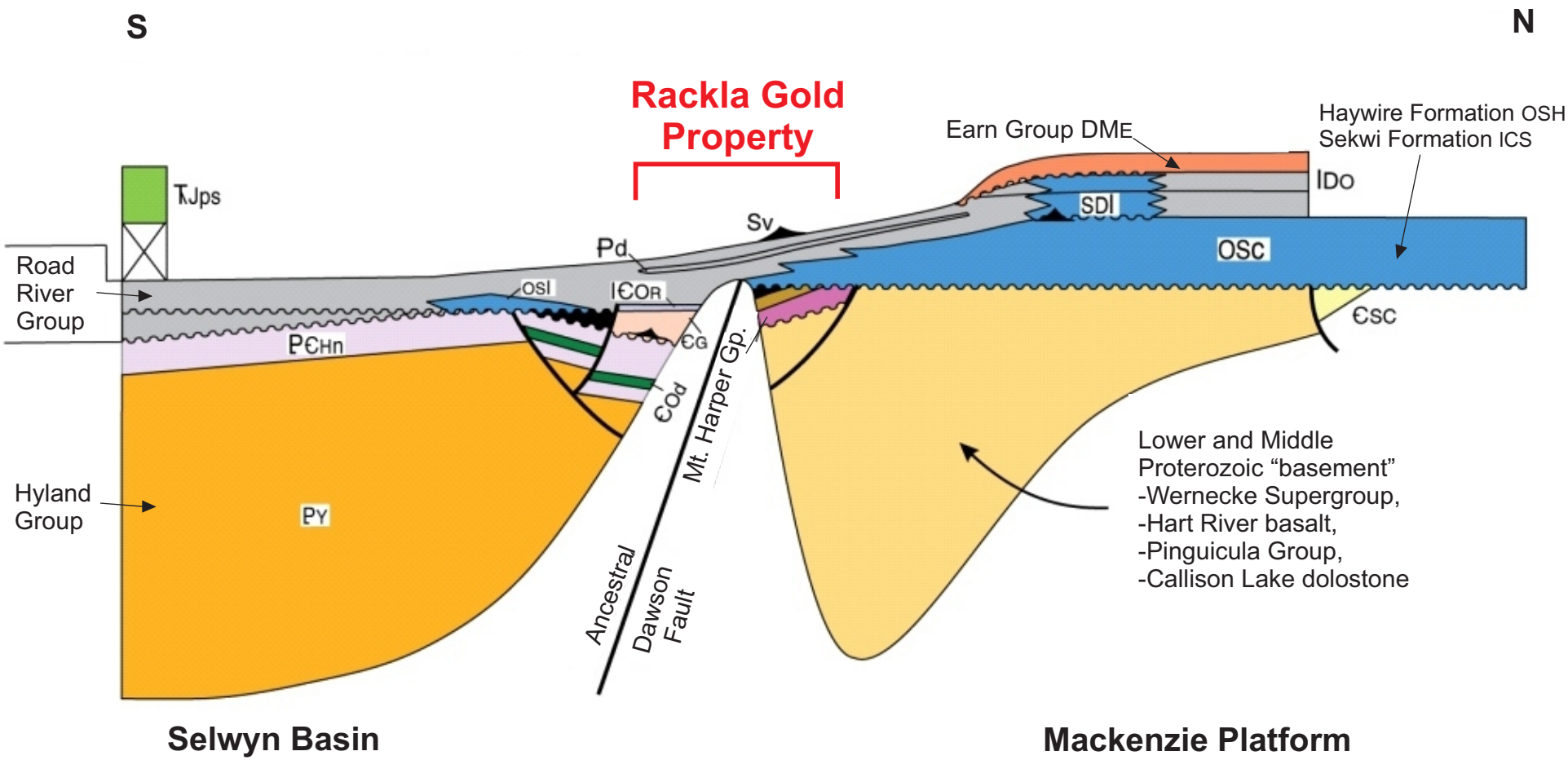


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FIGURE 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

REGIONAL STRATIGRAPHIC SECTION

RACKLA GOLD PROPERTY

FILE: F6_RegionalStratigraphicSection DATE: APRIL 2018

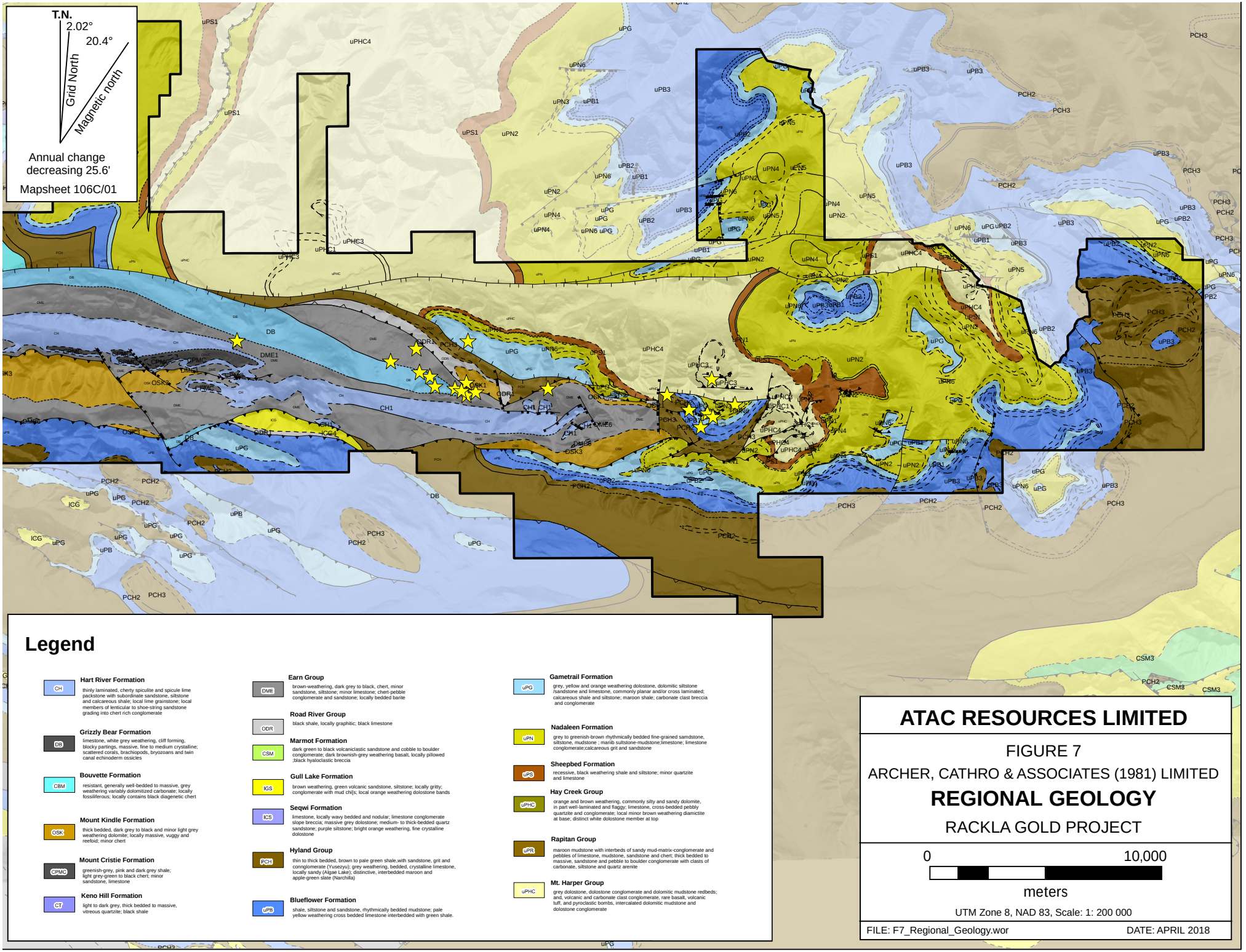
T.N.
2.02°
20.4°
Grid North
Magnetic north
Annual change
decreasing 25.6'
Mapsheet 106C/01
Legend
Hart River Formation
thinly laminated, cherty spiculite and spicule lime packstone with subordinate sandstone, siltstone and calcareous shale; local lime grainstone; local members of lenticular to shoe-string sandstone grading into chert rich conglomerate
Grizzly Bear Formation
limestone, white grey weathering, cliff forming, blocky partings, massive, fine to medium crystalline; scattered corals, brachiopods, bryozoans and twin canal echinoderm ossicles
Bouvette Formation
resistant, generally well-bedded to massive, grey weathering variably dolomitized carbonate; locally fossiliferous; locally contains black diagenetic chert
Mount Kindle Formation
thick bedded, dark grey to black and minor light grey weathering dolomite; locally massive, vuggy and reefoid; minor chert
Mount Cristie Formation
greenish-grey, pink and dark grey shale; light grey-green to black chert; minor sandstone, limestone
Keno Hill Formation
light to dark grey, thick bedded to massive, vitreous quartzite; black shale
Earn Group
brown-weathering, dark grey to black, chert, minor sandstone, siltstone; minor limestone; chert-pebble conglomerate and sandstone; locally bedded barite
Road River Group
black shale, locally graphitic; black limestone
Marmot Formation
dark green to black volcaniclastic sandstone and cobble to boulder conglomerate; dark brownish-grey weathering basalt, locally pillowed ;black hyaloclastic breccia
Gull Lake Formation
brown weathering, green volcanic sandstone, siltstone; locally gritty; conglomerate with mud chi[s; local orange weathering dolostone bands
Seqwi Formation
limestone, locally wavy bedded and nodular; limestone conglomerate slope breccia; massive grey dolostone; medium- to thick-bedded quartz sandstone; purple siltstone; bright orange weathering, fine crystalline dolostone
Hyland Group
thin to thick bedded, brown to pale green shale,with sandstone, grit and connglomerate (Yusezyu); grey weathering, bedded, crystalline limestone, locally sandy (Algae Lake); distinctive, interbedded maroon and apple-green slate (Narchilla)
Blueflower Formation
shale, siltstone and sandstone, rhythmically bedded mudstone; pale yellow weathering cross bedded limestone interbedded with green shale.
Gametrail Formation
grey, yellow and orange weathering dolostone, dolomitic siltstone /sandstone and limestone, commonly planar and/or cross laminated; calcareous shale and siltstone; maroon shale; carbonate clast breccia and conglomerate
Nadaleen Formation
grey to greenish-brown rhythmically bedded fine-grained samdstone, siltstone, mudstone ; marilb sultstone-mudstone;limestone; limestone conglomerate;calcareous grit and sandstone
Sheepbed Formation
recessive, black weathering shale and siltstone; minor quartzite and limestone
Hay Creek Group
orange and brown weathering, commonly silty and sandy dolomite, in part well-laminated and flaggy; limestone, cross-bedded pebbly quartzite and conglomerate; local minor brown weathering diamictite at base; distinct white dolostone member at top
Rapitan Group
maroon mudstone with interbeds of sandy mud-matrix-conglomerate and pebbles of limestone, mudstone, sandstone and chert; thick bedded to massive, sandstone and pebble to boulder conglomerate with clasts of carbonate, siltstone and quartz arenite
Mt. Harper Group
grey dolostone, dolostone conglomerate and dolomitic mudstone redbeds; and, volcanic and carbonate clast conglomerate, rare basalt, volcanic tuff, and pyroclastic bombs, intercalated dolomitic mudstone and dolostone conglomerate
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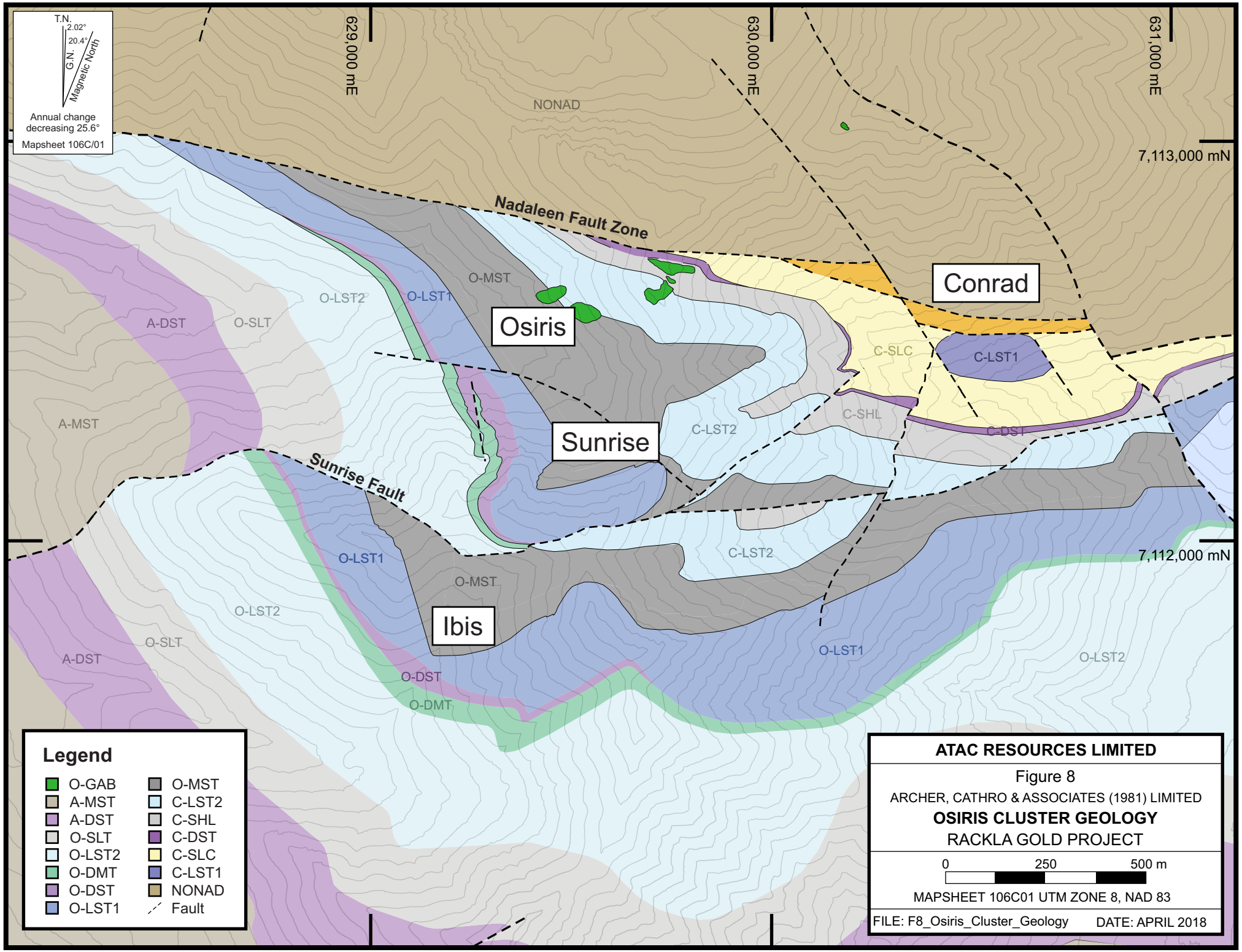
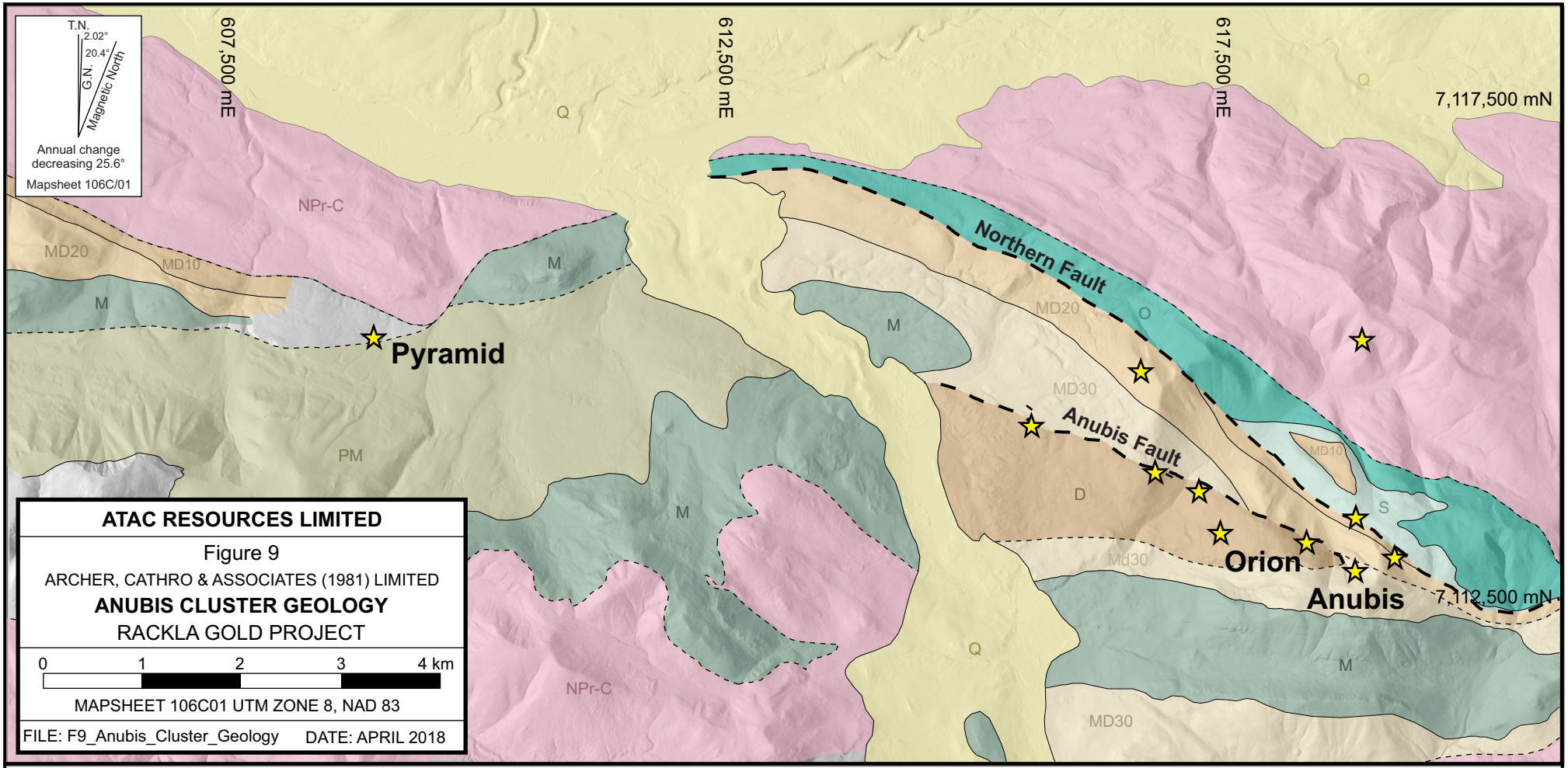
FIGURE 7
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
REGIONAL GEOLOGY
RACKLA GOLD PROJECT
0
10,000
meters
UTM Zone 8, NAD 83, Scale: 1: 200 000
FILE: F7_Regional_Geology.wor
DATE: APRIL 2018


T.N.
2.02°
20.4°
G.N.
Magnetic North
Annual change decreasing 25.6°
Mapsheet 106C/01
629,000 mE
630,000 mE
631,000 mE
7,113,000 mN
7,112,000 mN
NONAD
Nadaleen Fault Zone
Sunrise Fault
Conrad
Osiris
Sunrise
Ibis
O-MST
O-LST2
O-LST1
A-DST
O-SLT
A-MST
C-SLC
C-LST1
C-SHL
C-LST2
C-DST
O-DST
O-DMT
Legend
O-GAB
A-MST
A-DST
O-SLT
O-LST2
O-DMT
O-DST
O-LST1
O-MST
C-LST2
C-SHL
C-DST
C-SLC
C-LST1
NONAD
Fault
ATAC RESOURCES LIMITED
Figure 8
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
OSIRIS CLUSTER GEOLOGY
RACKLA GOLD PROJECT
0
250
500 m
MAPSHEET 106C01 UTM ZONE 8, NAD 83
FILE: F8_Osiris_Cluster_Geology
DATE: APRIL 2018



Legend

Quaternary

- Q — Quaternary cover

Mississippian

- PM — Shale-siltstone with interbeds of limestone and siliceous rocks
- M — Light grey, thick bedded bioclastic limestone with common karst features

Devonian-Mississippian

- MD30 — Steel grey-black, laminated non-calcareous shale, calcareous shale and shaly mud limestones with discontinuous interlayered bioclastic and lithic packstones
- MD20 — Grey-black, laminted shale with interlayered lithic arenite, gritstone and rare conglomerate

Middle Devonian

- MD10 — Carbonaceous, variably calcareous shales and siltstones with fossiliferous debris-flow beds
- D — Gray tan lime mudstone and dolostone; gray tan locally fossiliferous lime mudstone; black variably dolomitic fossiliferous limestone and gray tan dolostone

Silurian

- S — Light-medium gray, thick bedded bioclastic rudstone with local graded beds and coarse fossil debris

Ordovician

- O — Grey massive bedded rudstone-floatstone with local fine fossil fragments; black laminated carbonatceous graptolitic shale and siliceous mudstone; and grey brown calcareous siltstone to mudstone

NeoProterozoic-Cambrian

- NPr-C — Undifferentiated units which include: black carbonaceous shales to siltstones; dolostone; buff-brown, bedded quartz sandstone; maroon-green shale with interbedded sandstone; and limestone

Unclassified

- Unclassified units
- Fault
- Mineralized Showing