Hudbay Minerals Inc.
&
Hudson Bay Exploration and Development Company Limited
(A wholly owned subsidiary of Hudbay)

2011 Summary Report

Diamond Drilling and Exploration at the Tom-Jason Property

Mayo and Watson Lake Mining Districts, Yukon Territory

Latitude: 63°10'N

Longitude: 130°09'W

NTS 105O-01

Mining Land Use Permit: LQ00325

GRANT NUMBER	Claim Name	Claim Number
60495	TOM	1
60497	TOM	3
60498	TOM	4

Kevin Wells, P.Geo.

Revelation Geoscience

February 23, 2012

Executive Summary

Hudson Bay Exploration and Development Company Limited, a 100% owned subsidiary company of Hudbay Minerals Inc. conducted an exploration program on the Tom-Jason Pb-Zn-Ag property in August and September, 2011. The project was directed by Kelly Gilmore, Chief Exploration Geologist, Hudbay Minerals Inc. who contracted Revelation Geoscience Ltd. of Vancouver, British Columbia to design, implement, and provide technical supervision of the field program.

The initiation of the 2011 work program, originally scheduled for late June was significantly delayed by delays in the Class 3 Mining Land Use permitting process. This delay resulted in a reduction of the planned two drill program to one drill as well as a subsequent reduction in the planned 5,000 metre program to less than 2,000 metres.

The work program comprised of the re-establishment of an exploration camp on the Tom Property, followed by diamond drilling and an orientation soil survey. Mercer Contracting Ltd. of Whitehorse, Yukon was contracted to re-establish the Tom exploration camp. This work commenced on August 10, 2011 with the setup of the camp on a pre-existing clearing north of the Tom waste rock pile. In total, seven modular trailers, one solid foundation structure (core cutting shed) and a generator shed were installed. An existing septic system was utilized, and a secondary septic system was installed to service the modular trailers. An incinerator was installed to burn camp waste. No new clearings, roads or trails were created during the installation of camp.

The drill program had two main objectives: 1) To obtain sample material for further metallurgical testing by twinning five previous mineralized intercepts determined to be representative of the known ore types; and 2) To complete infill drilling on the Tom West Zone to increase confidence and allow for conversion of Inferred classified resources to the Indicated Resource category. Rodren Drilling from Winnipeg, Manitoba was contracted to provide diamond drilling services.

The diamond drill program commencement was delayed until August 27, 2011 and concluded on September 24th, 2011 due to the onset of winter conditions. During this period a total of 1,823 metres of core was drilled in eleven drill holes. The eleven drill holes were all successful in intersecting the mineralized zones. A total of approximately 1,133 kilograms of

mineralized sample material was collected for metallurgical testing from drillholes TYK001 to TYK005. The infill drilling completed with drillholes TYK006 to TYK011 has resulted in approximately 50 metre drill intersection spacing over a strike length of approximately 250 metres in the core of the Tom West Zone.

The mineralization intersected at the Tom West Zone varies from sphalerite-rich laminated sulphides to galena, barite, and silver-rich semi-massive and massive sulphides. Holes TYK001 and TYK002 intersected the most significant mineralized intervals and returned weighted averages of 7.78% Zn, 4.47% Pb and 52.5 g/t Ag over 22.30 metres and 6.20% Zn, 6.95% Pb and 95.7g/t Ag over 41.37 metres respectively. These holes were interpreted to be proximal to vent structures.

Mineralization hosted within the structural hanging wall to the main mineralized zone was intersected by drillholes TYK010 and TYK011. The most significant mineralized intervals included 5.32% Zn, 1.15% Pb and 1.0 g/t Ag over 53.88 metres in drillhole TYK010 and 5.79% Zn, 0.32% Pb and 1.0 g/t Ag over 69.42 metres in drillhole TYK011.

In general, silver values returned were quite low, averaging less than the 2 g/t detection limit, except for samples from drillholes TYK001 and TYK002 where better grades were returned associated with high grade lead mineralization.

The soil orientation survey tested a number of different sample media and sample preparation types. Positive results were obtained from sample locations over both the Tom and Jason mineralized zones. The most positive results at Jason were obtained using the MMI and C-horizon aqua regia methods data. The best indicators of mineralization are the ore elements Pb, Zn, Ag and Ba for both digestion methods, with As, Sb, Cu, Hg, Y and the REE showing a positive response to blind mineralization in the MMI data.

The elements most closely correlated with the Tom West deposit (minus 80 mesh grain size fraction) are raw Pb, Ag, S and Ba, and the Zn, As, Sr and Tl residuals following regression against Fe in the samples. In clay separates (<2 micron) from the colluvial soils over Tom West similar results can be drawn from Pb, Ag, S and Ba. The clay separates have the advantage of containing higher metal values and showing greater anomaly to background contrast compared to the standard minus 80 mesh soil data.

A budget of $3.5 million has been proposed for the Tom - Jason project in 2012 by Revelation Geoscience in consultation with HudBay management. Highlights of the budget

proposal include: 1) a 2.5 month/ 2 diamond drill program totaling 8000 metres, 2) collection of approximately 2500 core samples for assay, 3) a 2 month Borehole EM (electromagnetics) geophysical program (of both downhole and ground work), 4) 240 hrs of helicopter support (Eurocopter AS350B2 or similar) and 5) Revelation Geoscience project management. Approval of the 2012 budget is pending approval from Hudbay Mineral Inc.'s Board of Directors. The 2012 program, as outlined, focuses on drilling additional holes in both the Tom and Jason deposits with the main purpose of **expanding** the known resource. in most cases this is best accomplished by drilling down-dip and along strike from current indicated and inferred resource shells.

Table of Contents

Executive Summary I
1.0 Property Location and Access 1
2.0 Property Status 1
3.0 Climate and Physiography 4
4.0 Infrastructure 4
5.0 History and Development 5
6.0 Geology 8
6.1 Regional Geology 8
6.2 Property Geology 9
7.0 2011 Drilling Program 12
7.1 2011 Overview 12
7.2 Environmental Compliance and Winterization of Camp 14
7.3 Summary Results: 2011 Drill Program 15
7.4 Analytical Data: QA/QC Program 24
8.0 Mining Land Use Inspection: Yukon Energy, Mines and Resources 25
9.0 Soil Orientation Survey 26
10.0 Tom Jason GIS & 3D Database Development. 30
10.1 Background 30
10.2 Digitization of Historical Data 31
10.3 DGPS Field Data Collection 32
10.4 GeoEye Imagery Data Extraction 32
10.5 ArcGIS Database 33
10.6 Geosoft 3D Drill Database 35
10.7 Jason Database 36
10.8 Data Integrity 37
10.9 Conclusions and Recommendations 37
11.0 2012 Work Program and Budget 39
12.0 Summary and Recommendations 42
13.0 References 46

List of Figures

Figure 1: General location map: Tom – Jason Property 2
Figure 2: Claim Map: MacMillan Pass Area: Tom and Jason claim groups …..... 3
Figure 3: Camp Location Map 5
Figure 4: Tom and Jason Project: Property Geology 11
Figure 5: 2011 Tom Project: Drill location map 16
Figure 6: Soil Orientation survey: Sample Locations, Tom West Zone 28
Figure 7: Soil Orientation survey: Sample Locations, Jason Main Zone 29

List of Tables

Table 1: Summary of Previous Work 6
Table 2: Summary: 2011 Program 13
Table 3: Assay Results for 2011 Drilling: Weighted Averages 15
Table 4: 2012 Budget Proposal: Tom – Jason Property 40
Table 5: Proposed 2012 Drill Program 41

List of Maps

Map 1: Tom and Jason Property Position: ..... Back Pocket

List of Appendices

APPENDIX 1: ..... List of Personnel
APPENDIX II: ..... Analytical Results, Procedures and List of Standards
APPENDIX III: ..... Drill Logs
APPENDIX IV: ..... Digital Strip logs and Drill Sections
APPENDIX V: ..... Field Gear Inventory: Tom Camp
APPENDIX VI: ..... 2011 QA/QC Program Results
APPENDIX VII: ..... 2011 Soil Orientation Survey: Results
APPENDIX VIII: ..... 2012 Budget and Drill Proposal
APPENDIX IX: ..... Statement of Qualifications, Expenditures Diamond Drill Report

1.0 Property Location and Access

The Tom-Jason Property is located at MacMillan Pass in the east-central Yukon, approximately 13 kilometres west of the Yukon-Northwest Territories border (Figure 1). The property lies within NTS sheet 105O-01 at latitude 63°10' North and longitude 130° 09' West.

The property is accessible via the North Canol Road, a single-lane gravel road open only during summer months and serviced by a seasonally operating ferry crossing at the Ross River. The village of Ross River, the nearest permanent community, is located on the North Canol Road, 226 kilometres to the Southwest of the Tom-Jason property. A 400 kilometre paved road connects Ross River to Whitehorse, the nearest major economic hub (630 road kilometres to the Southwest of the Project area).

A 550 metre gravel airstrip, seasonably maintained by the Yukon government is located approximately 2.7 kilometres to the west of the Tom deposits and provides aircraft access to the project area. The airstrip is a 90-minute flight time from Whitehorse by fixed wing turboprop aircraft.

2.0 Property Status

The Tom-Jason property comprises two adjoining claim blocks. The Tom claim group consists of 144 mining claims totaling 2,295 Hectares and the Jason claim group consists of 283 mining claims totaling 2,864 Hectares (Figure 2). The Tom Claims are held directly by Hudson Bay Exploration and Development Company Limited, a 100%-owned subsidiary company of Hudbay Minerals Inc. and the Jason property has a mixed ownership registration however all listed owners are 100%-owned subsidiary companies of Hudbay Minerals Inc. Map 1 located in the back pocket illustrates the claim groups.

The Tom claim group is located within the Watson Lake Mining district with the exception of 4 mining leases located in the northern portion of the claim group. The Jason claim group is split between the Mayo and Watson Lake Mining districts. The Canol Road defines the boundary with the claims east of the road being located in the Watson Lake District and the others in the Mayo district.

Figure 1: General location map: Tom - Jason Property

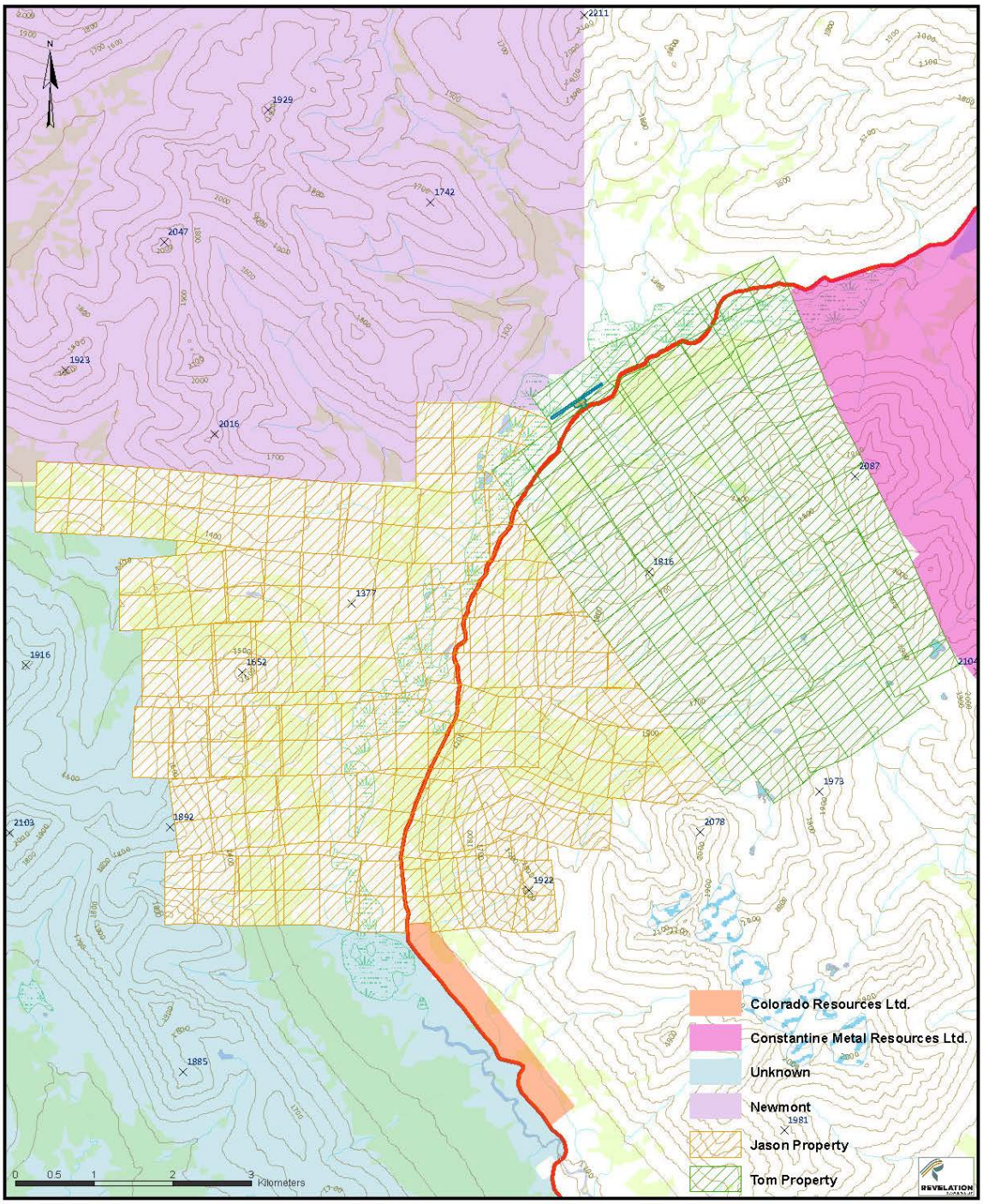


Figure 2: Claim Map: MacMillan Pass Area: Tom and Jason claim groups.

3.0 Climate and Physiography

The Property is located in a sub-arctic climate zone, with long cold winters and short mild summers. The mean annual temperature for the area is -7.7°C with seasonal variations ranging from -30°C in December to 4°C in July. Average annual precipitation is 49 centimetres, with a mean annual snowfall of 294 centimetres (Rennie, 2007).

The Hess Mountain region of the Selwyn Mountain range is an area of moderate relief that forms the surroundings to the project area. The Hess Mountain region is characterized by wide flat valley bottoms mostly comprised of low standing brush and wetlands and sharp alpine mountain peaks. Elevation varies from 1100 metres in the valley bottoms and quickly rising to 1900 metre peaks. The tree line sits at approximately 1350 metres, leaving upper mountain slopes bare and comprised of talus.

4.0 Infrastructure

During the 2011 season, the Tom Camp was re-established on a clearing north of the previous camp location (Figure 3). Mercer Contracting Ltd. of Whitehorse, Yukon was contracted to prepare the camp. Mobilization commenced on August 10, 2011. In total seven modular trailers, one solid foundation structure (core cutting shed) and a generator shed were installed. An existing septic system was utilized, and a secondary septic system was installed to accommodate the modular trailers. An incinerator was also installed to burn camp waste. No new clearings, roads or trails were created during the installation of camp.

Figure 3: Camp Location Map: Detailed 2011 camp location with GeoEye satellite image background. (September 2011 image).

5.0 History and Development

Exploration work on the project dates back to the 1950's following the discovery of surface mineralization at what is presently the Tom West Zone. Since that time a number of companies and exploration programs were completed, Table 1 summarizes this work.

Table 1: Summary of Previous Work

Year	Description of Work
1951	➢ Discovery showing found, L. Saville and A. Lindsay ➢ 56 Tom claims staked ➢ 5 shallow trenches were excavated and sampled, Tom West Zone ➢ Bedrock mapping ➢ Canol Road opened to vehicle traffic
1952	➢ 27 holes (EX) / 12,615 feet ➢ Additional 59 Tom claims staked ➢ Geological prospecting ➢ Short airstrip constructed at Mile 239 of the Canol Road
1953	➢ 12 (EX) / 5,217 feet. East Zone discovered ➢ Claims surveyed, additional 59 fractional claims staked ➢ Tom Camp was removed ➢ Regional prospecting west of Tom property
1955	➢ Geologic mapping / geochemical West Zone area ➢ Stream sediment sampling program ➢ Limited magnetometer surveys: main showing areas ➢ Tom claims (144) placed under a 21 year lease
1956-1966	➢ No work
1967	➢ 10 (BQ) holes / 5,320 feet ➢ Re-sampling program of mineralized sections of 1952 and 1953 holes. Geochemical sampling program ➢ Limited trenching ➢ 30 claims staked
1968	➢ 16 (BQ) holes / 10,606 feet ➢ Geological mapping and geochemical sampling ➢ Topographic survey ➢ 30 claims, staked in 1967, dropped ➢ 19 additional claims were staked.
1969	➢ Canol Road up-grade ➢ Tom camp established ➢ Airstrip upgraded ➢ The 4750’ level adit: collared and advanced 47.6 feet when the project was stopped due to winter conditions ➢ 19 claims staked in 1968 dropped.
1970	➢ 5,588 feet of lateral development (Canadian Mine Services) in the adit ➢ 58 underground diamond drill holes / 7,754 feet
1971	➢ Additional 300 feet of lateral development (Canadian Mine Services) ➢ 7 underground holes / 4,114 feet ➢ Bulk samples of East and West Zones
1972-1975	➢ No work
1976	➢ Limited geochemical check assay sampling ➢ Atco camp relocated and repaired following damage by snow slide

	➢ Application renewal of the 21 year lease on Tom claims submitted and approved December 1977.
1977	➢ New "A" grid established ➢ Detailed geologic mapping ➢ Geochemical sampling ➢ Five bulldozer trenches north of the west zone completed
1978	➢ Gravity survey ➢ Detailed remapping: at 1:5000 and 1:2500 using orthophoto ➢ Five bulldozer trenches ➢ 5 holes / 586.7 meters.
1979	➢ 15 surface drill holes / 2295.3 meters ➢ Resurvey surface drillholes ➢ Relogging program of surface drillcore ➢ Aerial photography ➢ West Zone extension discovery.
1980	➢ 12 surface (NQ) drillholes 4782 feet ➢ 7 (BQ) underground geotech drillholes ➢ New portal excavated
1981	➢ Spiral decline to 4250-foot level commenced April 1981 ➢ 8 geotech holes drilled ➢ Excessive water flows were encountered in chert-pebble conglomerate and extensive grouting was undertaken
1982	➢ Spiral decline completed January 19 ➢ Cross cut driven on 4250 foot level to establish drill stations. ➢ Water along with bad ground conditions halted the U/G development 350 feet short of its planned termination. Subsequently the U/G development was abandoned and allowed to flood to the 1440-foot level. ➢ 2 drillholes / 793 feet.
1983-1987	➢ No work
1986	➢ HBMS commenced a joint feasibility study with Abermin Resources. ➢ Work comprised of reserve estimation, engineering studies and environmental baseline study
1988	➢ Cominco Ltd optioned project ➢ Geochemical program: 647 soil samples ➢ Geologic mapping and re-logging program ➢ 4 holes / 2225.9m (test down-dip extension of the West Zone)
1989	➢ 6 holes / 3165.3m (Cominco Ltd.) ➢ Geochemical soil sampling (107 samples) ➢ Geological mapping
1990	➢ 5 holes / 3409.9m (Cominco Ltd.) ➢ Soil geochemical sampling (200 samples) ➢ Geological mapping and prospecting.
1991	➢ 8 holes / 2883.5m (Cominco Ltd.) ➢ Soil geochemical survey (51 samples)
1992-2011	➢ Cominco Ltd. Option dropped (1992)

	➢ No work
2006	➢ Site Visit by C. Taylor (HBMS) and D. Rennie (RPA) in preparation of the Tom Technical Report.
2007-2010	➢ Environmental remediation: plug placed 75m into the adit ➢ Water table raised 100m to limit oxidation of sulphides at depth thereby limiting pH of effluent draining out of the adit. ➢ waste rock surface pile covered to prevent acid run-off ➢ Environmental monitoring

6.0 Geology

6.1 Regional Geology

The following section is summarized from Goodfellow and Rhodes (1990) and from Rennie (2007).

The Tom-Jason property is located within a 30 by 60 kilometre belt of Late Proterozoic to Triassic strata trending west-northwest across the more northerly structural trend of the Selwyn Basin. This belt is referred to as the Macmillan Fold Belt (Goodfellow and Rhodes, 1990 after Abbot, 1982). Within the Macmillan Fold belt there are several northwest trending strips of Ordovician to Mississippian strata that can be distinguished and segregated into the North, Central, and South Blocks based on outcrop pattern, lithofacies, and structural style. The Central Block has been interpreted as a graben with a greater degree of structural complexity, characterized by tight upright folding and high angle reverse faults.

The Tom-Jason property, like all Macmillan Pass Pb-Zn-Ag deposits, is hosted in the Central Block consisting of Devonian aged strata of the Portrait Lake Formation. The Portrait Lake Formation sits stratigraphically within the Lower Earn Group (Goodfellow and Rhodes, 1990 after Abbot, 1982). The Portrait Lake Formation at Macmillan Pass consists of a coarse clastic package composed of siltstone, sandstone, and mudstones interpreted as a turbidite sequence (Rhodes, 1993). The turbidite package is separated into two horizons by a regionally extensive chert pebble conglomerate unit. This clastic package is limited to the Central block of the Macmillan Fold Belt and is defined as the Macmillan Pass Member of the Portrait Lake Formation. The Macmillan Pass Formation is interpreted forming from turbidity and debris flows deposited within the graben.

Succeeding the McMillan Pass Member is a succession of finer clastics with a much higher carbonaceous content. These rocks are more typical of the Portrait Lake Formation

regionally and have been informally grouped and labeled as the Tom Member. The Portrait Lake Formation is characterized by drastic changes in thickness and rock types in both the Macmillan Pass and the Tom Members. These abrupt changes in sedimentation are interpreted as a response to severe syndepositional tectonism.

The Tom member is unconformably overlain by micaceous silt, sand and mudstones of the Itzi Formations. These rocks are the only other outcropping member mapped in the region and are characterized by abundant ripple marks and cross-laminated textures.

All known mineralization in Macmillan Pass occurs in areas where facies and thickness changes are especially drastic. This observation suggests a relationship between mineralization occurrences and areas of maximum syndepositional tectonism.

6.2 Property Geology

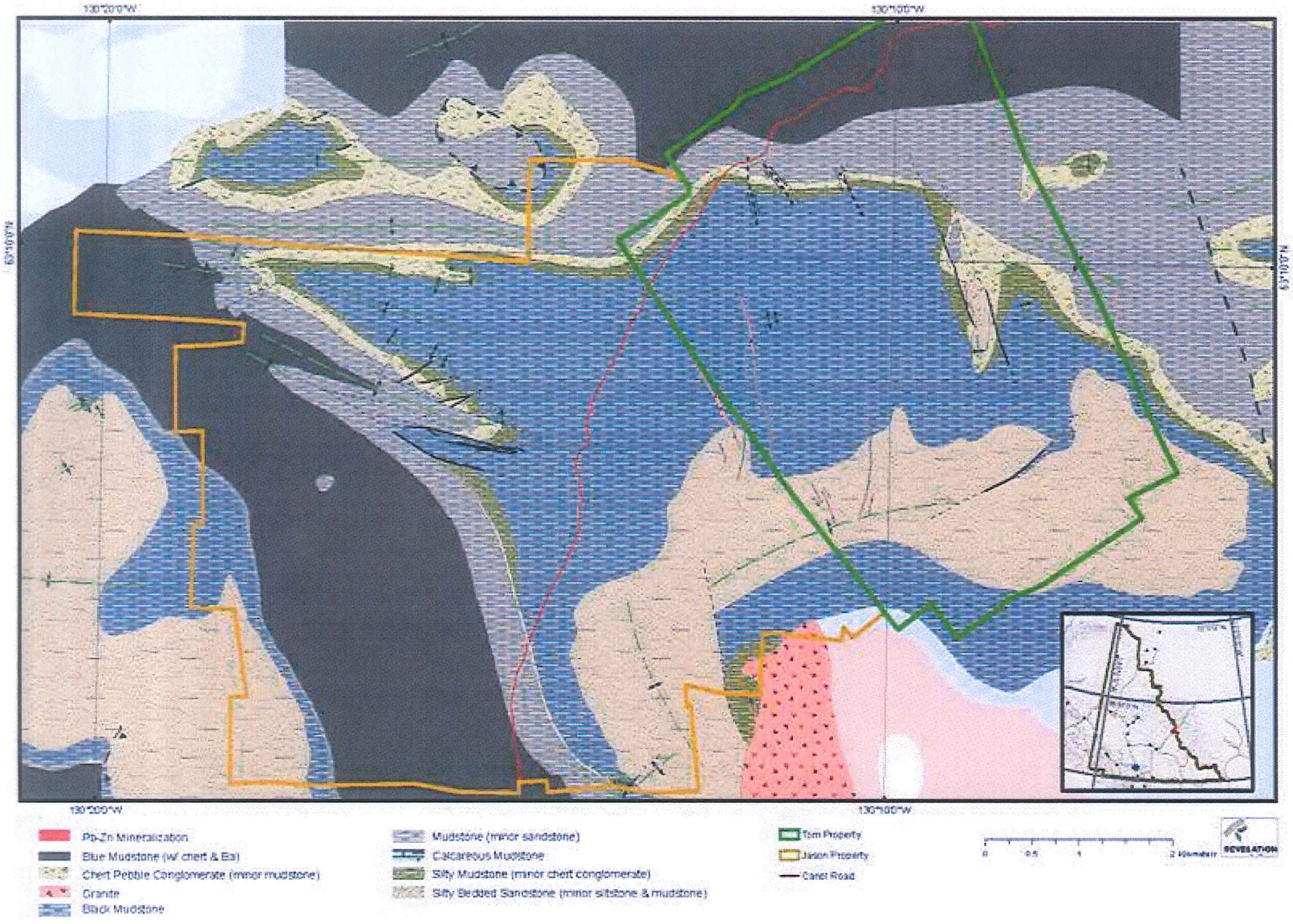
The Tom Deposit is a typical sediment-hosted exhalative (SEDEX) Pb-Zn, Ag-Ba type deposit that is interpreted to have formed on the northern margin of a small sub-basin within the lower Earn Group (Figure 4). The sub basin is delineated by the outcrop pattern of chert-pebble conglomerate of the Macmillan Pass Member and a drastic increase in the thickness of the mudstones of the Tom Member, which overlies both the conglomerate and the stratiform mineralization (Goodfellow and Rhodes, 1990).

Macmillan Pass and Tom Member sediments were deposited into the sub-basin from a flanking horst derived from tensional tectonism during the Mid to Late Devonian (Rennie, 2007). The horst was bounded by growth-faults serving as conduits for the mineralizing fluids (Rennie, 2007).

The stratigraphy of the Tom deposit is comprised Macmillan Pass chert-pebble conglomerate overlain by sandy banded siliceous pyritic mudstone, which is, in turn, overlain by cherty carbonaceous mudstone (Rennie, 2007) Barite and Pb,-Zn-Ag-bearing sulphides were deposited on the mudstone and are locally disrupted by syn- and post-ore conglomerate wedges (Rennie, 2007). The sedimentary horizon hosting mineralization comprises of two separate facies; the vent facies and the sedimentary facies. The vent facies consists of sulphide veins, breccias, and replacements, whereas the overlying sedimentary facies consists of interbedded barite, chert, pyrite, sphalerite, and galena. Chert and mudstones overlie the sedimentary facies, which is then overlain by the Itsi Formation.

The dominant structure within the Tom sub-basin is a north-south trending broad syncline with north-south re-entrants caused by faulting and folding patterns (Goodfellow and Rhodes, 1990). The basin margins are characterized by tight folding and thrust faulting (Goodfellow and Rhodes, 1990). The mineralization host rocks of the Tom Member are highly faulted and deformed, with mineralized horizons wrapped around a steeply south-plunging anticline. The anticline is also transected by secondary steep-dipping faults trending north-south and northwest-southeast.

Figure 4: Tom and Jason Project: Property Geology



7.0 2011 Drilling Program

7.1 2011 Overview

Hudson Bay Exploration and Development Company Limited initiated an exploration program on the Tom-Jason Pb-Zn-Ag property in August of 2011. Revelation Geoscience based in Vancouver, British Columbia was contracted to manage and implement 2011 work program. Rodren Drilling from Winnipeg, Manitoba was contracted on very short notice to complete this work after Kluane Drilling was unable to meet their commitment to supply drills for the project. Kluane Drilling based in Whitehorse appeared to be over extended during the 2011 summer drill season due to their lack of response to numerous contact attempts from both Revelation and Hudson Bay personnel. Rodren Drilling did an excellent job throughout the program, with an average production of 62.9 metres per day of operation.

The drill program had two main objectives: 1) To obtain sample material for further metallurgical testing by twinning five previous mineralized intercepts determined to be representative of the known ore types; and 2) To complete infill drilling on the Tom West Zone to increase confidence and allow for conversion of Inferred classified resources to the Indicated Resource category. Rodren Drilling began drilling on August 27, 2011 with Hudson Bay Exploration and Development Company Limited operating the program under the Class 1 Permit thresholds for mining leases. Hudson Bay Development Company Limited Limited is a 100% owned subsidiary company of Hudbay Minerals Inc. A total of 189 man days were completed under this classification prior to receiving the final Class 3 Mining Land Use Approval (LQ00325) on September 2nd, 2011. Drilling operations concluded on September 24, 2011 due to the onset of winter conditions. During this 29 day period a total of 1,823 metres of core was drilled in eleven drill holes using an EF-75-2 diamond drill (Table 2). The eleven drill holes were all successful in intersecting the known mineralized zones. A total of approximately 1,133 kilograms of mineralized sample material was collected for metallurgical testing from drillholes TYK001 to TYK005. The infill drilling completed with drillholes TYK006 to TYK011 has resulted in approximately 50 metre drill intersection spacing over a strike length of approximately 250 metres in the core of the Tom West Zone.

Drill holes that were completed for the sole purpose of collecting metallurgical sample material were sawn in half and then quartered, with the quarter core bagged in polypropylene bags and sent to the assay lab (ACME) and the half core bagged and sent for metallurgical testing. The remaining quarter core was retained in the core box for future reference.

All 41 bags of metallurgical samples and 2 pails of geotechnical samples were loaded into a crate built on site and sent to Flin Flon, Manitoba for testing. All samples collected for assay were delivered to ACME Labs preparation facility in Whitehorse for grinding and then pulps were dispatched to Vancouver for assaying. An error in loading samples by personnel on site resulted in a single bag of assay samples being loaded into the metallurgical sample crate. This bag of assay samples was returned to ACME labs for analysis.

Table 2: Summary: 2011 Program

Hole Number	Depth (m)	East (m)	North (m)	Elevation (m)	Collar Az.	Dip
TYK001	100.00	442053.7	7003743.5	1537.2	70	-65
TYK002	129.00	442053.5	7003743.4	1537.0	65	-85
TYK003	125.00	441916.1	7004015.9	1538.5	65	-80
TYK004	86.00	441973.0	7003907.8	1536.0	65	-78
TYK005	158.00	441804.8	7003964.2	1479.2	65	-45
TYK006	194.00	441803.6	7003963.5	1478.9	65	-65
TYK007	226.00	441803.1	7003963.4	1478.2	65	-80
TYK008	177.00	441825.6	7003908.6	1482.3	45	-50
TYK009	245.00	441825.2	7003908.3	1482.3	55	-80
TYK010	179.00	441866.8	7003866.2	1490.4	65	-55
TYK011	204.00	441866.7	7003866.5	1490.6	70	-78
Total:	**1823.00**					

7.2 Environmental Compliance and Winterization of Camp

Drilling operations ceased on September 24, 2011 with all camp personnel demobilized by October 7, 2011. Tom Camp was winterized with all trailers and structures boarded and braced for the upcoming winter. All fuel products were removed from site with the exception of six 205 L drums of diesel which remain locked and secured in a shipping container on site. A detailed list of the geological equipment and field supplies that were stored at the camp is included in Appendix V.

Five separate drill pads were used for the 2011 drill program with four of the five pads situated on pre-existing drill roads. Access to the four pads by existing drill roads required the road to be widened in two locations. The TYK008/TYK009 site and the TYK010/TYK011 site were widened by 2 metres for a 10 metre length (20 metres^2 for each site). A new drill pad for TYK005, TYK006 and TYK007 required clearing a 8 metre by 12 metre site (96 metres^2). In order to access this new drill site a 65m long by 5m wide access road was established to connect the new pad with an existing drill road. Approximately 870 metres of road upgrades were completed during the 2011 season. Existing drill roads were leveled and back bladed with a John Deere 700 crawler/dozer to improve access for trucks and all terrain vehicles. No new trail construction or off-road driving was completed during the 2011 program, as the existing drill road network on the property is extensive.

Preliminary reclamation was completed on the drill sites during the 2011 exploration program, this included removal of all garbage, timbers and drill equipment. A final environmental inspection of drill sites is planned upon completion of borehole geophysics and drill hole cementing. Drill Core boxes were cross-piled in a flat-lying clearing to the south of camp pending construction of a core storage facility .

7.3 Summary Results: 2011 Drill Program

The 2011 drill program targeted the mineralized long section plane of the West Zone at Tom (Figure 5). Table 3 summarizes the results of the calculated weighted averages for the mineralized intersections. The weighted average intervals are based on assay values and the interpreted geology from the core logging and are thus somewhat subjective. Actual and estimated metal prices for the economic minerals and Hudbay's long term price assumptions should be taken into account when calculating a grade and thickness interval for each zone. The averages may include samples within the structural hanging wall and footwall if mineralized. Generally a sample was included in the average if the contained metal value was equal to or greater than US $50 per tonne. Weighted averages were calculated for lead, zinc and silver, the metals that will ultimately determine the economic viability of the deposit.

A listing of the personnel involved in the program is given in Appendix I. Appendix II contains a complete set of Analytical Results, Procedures and List of Standards while Appendix III contains the drill logs. Digital Strip logs and Drill Sections are located in Appendix IV at the back of the report.

Detailed results are listed by hole in the following sections.

Table 3: Assay Results for 2011 Drilling: Weighted Averages

Hole Number	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Ag (ppm)
TYK001	10.00	32.30	**22.30**	**7.78**	**4.47**	**52.4**
TYK002	17.00	58.37	**41.37**	**6.20**	**6.95**	**95.7**
TYK003	59.50	99.30	**39.80**	**5.43**	**1.53**	**1.7**
TYK004	28.52	67.00	**38.48**	**5.48**	**2.45**	**5.1**
TYK005	101.00	131.11	**30.11**	**5.63**	**0.85**	**1.0**
TYK006	117.00	152.00	**35.00**	**4.51**	**0.75**	**1.1**
TYK007	149.00	184.00	**35.00**	**4.95**	**0.45**	**1.1**
TYK007	186.00	190.00	**4.00**	**3.91**	**0.42**	**1.5**
TYK008	96.00	140.00	**44.00**	**5.69**	**0.68**	**1.0**
TYK009	140.00	198.00	**58.00**	**4.94**	**0.12**	**1.0**
TYK010	99.00	152.88	**53.88**	**5.32**	**1.15**	**1.0**
TYK010	154.00	157.00	**3.00**	**1.45**	**3.62**	**8.0**
TYK011	115.18	184.60	**69.42**	**5.79**	**0.32**	**1.0**

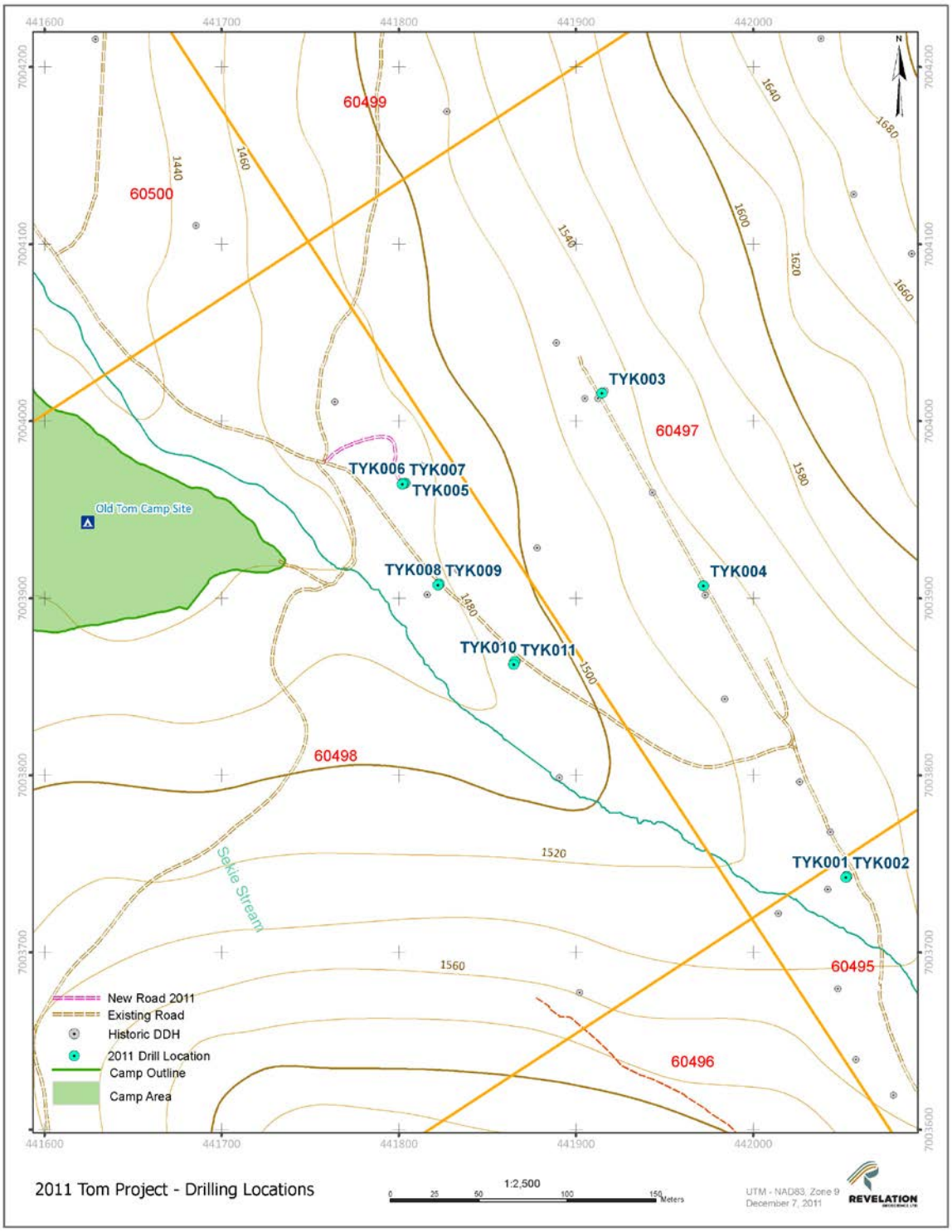


Figure 5: 2011 Tom Project: Drillhole location Map

TYK001 (*442053.7mE, 7003743.5mN, 1537.2m, AZ 070° Dip -65° Depth = 100m)*

TYK001 was designed to twin historical drillhole TS91-014 and obtain sample material for metallurgical testing.

The hole collared in mudstone to a depth of 10.0 metres. Below the mudstone, weakly to moderately mineralized laminated barite-carbonate-mudstone-sulphide was intersected to 29.4 metres, followed by an intersection of near solid sulphides to 32.2 metres. Footwall-style mineralization continued into the underlying mudstone as stringer-type mineralization to 36.75 metres downhole. Beneath the mineralized mudstone the drillhole intersected a chert-pebble conglomerate horizon from 42.75 metres to 79.98 metres downhole. The hole was terminated in a carbonaceous siltstone to laminated mudstone at a depth of 100.0 metres.

All analytical results have been received and the mineralized horizon returned a weighted average of 7.78% Zn, 4.47% Pb and 52.5 g/t Ag over 22.30 metres core length, from 10.00 to 32.30 metres. This mineralized interval is silver-rich and most likely represents a facies proximal to vent structures with the elevated silver value correlating with significant galena observed in the core.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK002 (*442053.5m E, 7003743.4m N, 1537.0m, AZ 065° Dip -85° Depth = 129.0m)*

TYK002 was drilled to intersect the West Zone between historic holes TS006 and TS017 and obtain ore samples of the West Zone for metallurgical analysis.

Hole TYK002 was collared into massive mudstone to a depth of 17.00 metres followed down hole by an interval of weakly mineralized laminated barite, mudstone, and carbonate, which increased gradually in sulphide content to a depth of 44.73 metres. The sedimentary facies quickly transitions to the near solid sulphides of the vent facies from 44.73 metres to 48.91 metres. TYK002 intersected two horizons of near solid sulphides separated by a narrow interval of laminated barite-chert-carbonate-sulphide from 48.91 metres to 53.56 metres. As TYK002 was collared in the central portion of the West Zone, the intersection of two distinct ore horizons is comparable to previous drill intersections. The second mineralized horizon, comprised of near

solid sulphides extends from 53.56 metres to 57.74 metres. Weak footwall mineralization extends into the underlying mudstone to 68.90 metres, below which lies medium grained sandstone with interbeds of pebble sized conglomerate from 68.90 metres to 80.35 metres. This unit transitions to a more typical chert-pebble conglomerate unit, which extends to 125.00 metres. Below the chert-pebble conglomerate lies the silt laminated mudstones of the Macmillan Pass Member, which were intersected to a final depth of 129.0 metres.

All analytical results have been received and high grade mineralization was intersected in the hole. A weighted average returned 6.20% Zn, 6.95% Pb and 95.7g/t Ag over 41.37 metres (17.00 to 58.37 metres). This average correlates well with the logged core with only 1 sample in the footwall being included in the average.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK003 (*441916.1mE, 7004015.9mN, 1538.5m, AZ 065° Dip -80° Depth = 125.0m)*

TYK003 was designed to twin historical drillhole TS088 and obtain material for metallurgical testing.

Below the collar, the hole intersected mudstone to a depth of 59.50 metres and then intersected an interval of mineralized laminated barite-chert-carbonate mudstone to 62.00 metres. From 62.00 to 95.00 metres the core is pitted and leeched with remaining beds consisting of galena and sphalerite. Mud-sized particle content increases from 95.00 metres to 99.30 metres. The mudstone is moderately mineralized adjacent to the footwall contact and this leached ore zone is underlain by the siltstone and mudstone of the Macmillan Pass Member to a depth of 125.00 metres.

All analytical results have been received. A weighted average for the main mineralized zone returned 5.43% Zn, 1.53% Pb and 1.7g/t Ag over 39.80 metres, from 59.50 to 99.30 metres. It should be noted that this drillhole and particularly the mineralized zone had very poor RQD values.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK004 (*441973.0mE, 7003907.8mN, 1536.0m, AZ 065° Dip -78° Depth = 86.0m*

TYK004 was drilled to twin historical drillhole TS086 and obtain core samples for metallurgical testing.

TYK004 cored 28.52 metres of overlying massive mudstone before intersecting weakly to moderately mineralized laminated barite-carbonate-chert-sulphide mudstone from 28.52 to 30.81 metres downhole. From 30.81 metres to 67.00 metres the hole intersected strongly bedded barite-sulphide laminated mineralization. From 67.00 to the end of the drillhole at 86.00 metres is a interval of mudstone, variably broken and weakly mineralized. An interval of lost core, near 0% recovery was intersected from 67.00 to 72.00 metres downhole.

All analytical results have been received, the ore zone returned a weighted average of 5.48% Zn, 2.45% Pb and 5.1g/t Ag over 38.48 metres, from 28.52 to 67.00 metres downhole). This ore interval correlated well with the geology intersected in the hole. The lower contact of the mineralization is defined by the 5 metres of lost core and extremely poor core recovery from 67 to 72m.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK005 (*441804.8mE, 7003964.2mN, 1479.2m, AZ 065° Dip -45° Depth = 158m*

TYK005 was drilled to twin historical drillhole TS019 and to obtain core samples for metallurgical testing.

TYK005 intersected massive mudstone to 100.4 metres of massive mudstone before transitioning to an interbedded barite-carbonate bearing mudstone zone characterized by decreasing mud content and increased barite-carbonate beds by 108.0 metres. Galena laminae develop in the hanging wall at 108.0 metres and extend to 111.0 metres where the hole intersects the sedimentary facies ore zone from 111.0 metres to 131.11 metres. Underlying the ore zone is a package of carbonaceous mudstones of the Macmillan Pass member. Hanging wall mineralization extends to a depth of 136.6 metres. Below the hanging wall mineralized mudstone the drillhole was terminated in mudstone at 158.0 metres.

All analytical results have been received and the ore zone returned a weighted average of 5.63% Zn, 0.85% Pb and 1.0g/t Ag over 30.11 metres, from 101.00 to 131.11 metres.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK006 (*441803.6mE, 7003963.5mN, 1478.9m, AZ 065° Dip -65° Depth = 194m*

TYK006 targeted the mineralized horizon at the edge of the present indicated resource with the goal of increasing the indicated resources down the dip plane.

The hole cored 119.5 metres of mudstones before intersecting hanging wall mineralization from 119.5 to 128.79 metres hosted in the overlying mudstone of the Tom Member. TYK006 then cored sedimentary facies ore zone mineralization from 128.79 metres to 151.21 metres. The lack of near solid sulphides and stockwork mineralization suggests a more distal position from the vent structures than previously described holes. In the underlying Macmillan Pass Member mudstone, hanging wall mineralization extends to 165.35 metres. The hole was terminated in Macmillan Pass mudstones at a depth of 194.00 metres.

All analytical results have been received and the ore zone returned a weighted average of 4.51% Zn, 0.75% Pb and 1.1g/t Ag over 35.00 metres from117.00 to 152.00 metres downhole. The logged geology in the hole correlates well with the weighted average zone with only 1 sample being included from the footwall mineralized mudstone.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK007 (*441803.1mE, 7003963.4mN, 1478.2m, AZ 065° Dip -80° Depth = 226m*

TYK007 targeted an untested zone approximately 50 metres down dip of the mineralization intersected in hole TKY006 and thereby increase the indicated resource on this section.

TYK007 cored 142.0 metres of Tom Member mudstones to a depth of 150.23 metres. From 150.23 metres barite-chert-carbonate interbeds begin to increase within the mudstone beds with the subsequent development of sulphide laminae increasing downhole. TYK007 intersected the sedimentary facies ore zone from 150.23 metres to 196.32 metres. No vent facies mineralization was logged in hole TYK007, but the core of the sedimentary facies ore zone

exhibited dense sulphide laminae. Hanging wall mineralization extends into the underlying Macmillan Pass member mudstones to a depth of 199.6 metres. The hole was terminated in barren mudstone at 226.00 metres.

All analytical results have been received and the mineralized ore zone was been extended down dip on this section. Based on the assay results two mineralized intervals were calculated for this hole. The first interval returned a weighted average of 4.95% Zn, 0.45% Pb and 1.1g/t Ag over 35.00 metres from 149.00 to 184.00 metres. A 2 metre gap exists between the first zone and a second interval that returned a weighted average of 3.91% Zn, 0.42% Pb and 1.5g/t Ag over 4.00 metres from186.00 to 190.00 metres.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK008 (*441825.6mE, 7003908.6mN, 1482.3m, AZ 045° Dip -50° Depth = 177m*

TYK008 was planned to drill down-dip of historical drillhole TS026 and up-dip of drillhole TS016 to infill a 100 metre gap on the section and allow for potential conversion from inferred to indicated categories. TS026 was incorrectly recorded in the HudBay drilling database as being drilled with collar coordinates located on the planned section. TYK008 was incorrectly spotted in the field using TS026 as guide to azimuth. The result was that TYK008 was drilled at an azimuth of 045 rather than the planned 065. Following discovery of the error the historic drill hole location was surveyed with a sub-meter GPS. This showed that the collar was located 10 metres further north than the drill database indicated.

The hole cored 98.00 metres of Devonian mudstone from the collar. Hanging wall stringer mineralization was intersected from 98.00 metres to the upper contact of the ore zone at 113.0 metres. The ore zone consists of sedimentary facies mineralization in a package of barite-chert-carbonate-sulphide laminae extending from 113.0 to 138.0 metres. The hole then cored footwall mineralization consisting of mudstone with quartz-sulphide veining to a depth of 146 metres. Macmillan Pass Member mudstones were intersected to the end of hole at 178 metres.

During the night shift of September 13th the rods sheared off just below the casing. The drillhole was at 86 metres depth. Attempts to retrieve the rods were unsuccessful with the equipment available. As a result, it was decided to start drilling hole TYK009 from the same

setup and to complete hole TYK008 once further equipment (special tab) arrived. The hole was continued on July 17th following the completion of hole TYK009.

All analytical results have been received and the ore horizon returned a weighted average of 5.69% Zn, 0.68% Pb and 1.0g/t Ag over 44.00 metres from 96.00 to 140.00 metres.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK009 (*441825.2mE, 7003908.3mN, 1482.3m, AZ 055° Dip -80° Depth = 245m*

Hole TYK009 was targeted to test 50 metres down-dip of the mineralized horizon intersected in historic drillhole TS026 with the goal of increasing the size of the indicated ore resource.

TYK009 collared in Tom Member mudstone to a depth of 141.00 metres. The hole then cored weak to moderately mineralized hanging wall stringers within the Tom Member mudstones from 141.0 metres to 167.0 metres. At 167.0 metres the drillhole intersected sedimentary facies mineralization across a highly variable mud-barite-carbonate-chert-sulphide laminae interval. The core of the zone, from 167.0 to 196.47 metres, hosts galena and sphalerite laminae, and lacks mudstone beds. Hanging wall mineralization was intersected in underlying mudstones from 196.47 to 203.0 metres. TYK009 cored underlying Macmillan Pass mudstones from 203.00 to a termination depth of 245.00 metres. Contacts within this hole were commonly gradational over 1 to 1.5 metres.

All analytical results have been received and the ore horizon returned a weighted average of 4.94% Zn, 0.12% Pb and 1.0g/t Ag over 58.00 meters from 140.00 to 198.00 metres.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK010 (*441866.8mE, 7003866.2mN, 1490.4m, AZ 065° Dip -55° Depth = 179m*

Hole TYK010 was targeted to intersect the mineralized horizon approximately 50 metres down-dip from underground holes TU020, TU067 and TU068 to convert resources from inferred to indicated category.

Below the casing the hole collared into Tom Member mudstones to 96.00 metres. Hanging wall stringer mineralization was noted from 96.00 to108.33, where the upper contact of the limestone horizon was intersected. The limestone hosted mineralized zone consists of sedimentary facies mineralization from 108.33 metres to 152.88 metres. Minor hanging wall mineralization was noted within the underlying mudstones, and a zone of visible galena and sphalerite (2%) content was noted between 154.00 and 157.00m. The underlying Macmillan Pass mudstones were cored to a final depth of 179.0m.

All analytical results have been received and the ore horizon returned a weighted average of 5.32% Zn, 1.15% Pb and 1.0g/t Ag over 53.88 metres (99.00 to 152.88 metres). A zone of galena-rich footwall mineralization was intersected from 154.00 to 157.00m and returned a weighted average of 1.45% Zn, 3.62% Pb and 8.0g/t Ag over 3.00 metres

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

TYK011 (*441866.7mE, 7003866.5mN, 1490.6m, AZ 070° Dip -78° Depth = 204m*

Following the success of hole TYK010, hole TYK011 was drilled to intersect the mineralized horizon approximately 50 metres down-dip from hole TYK010. The objective of drilling this hole was to further extend the mineralized zone on this section and to allow for conversion of inferred category resources to indicated.

Below the casing the hole collared into Tom Member mudstones to a depth of 115.18 metres. Hangingwall mineralization consisting of medium grained re-crystallized clusters of sphalerite within quartz and quartz-carbonate veinlets was noted from 115.18 to 146.20 metres. It should be noted that a narrow interval of mineralized limestone ore was intersected from 125.83 to 128.00 metres. The main limestone ore zone was intersected from 146.20 to 184.60 metres. The hole then intersected footwall Macmillan Pass mudstones to a final depth of 204 metres.

All analytical results have been received and the ore horizon returned a weighted average of 5.79% Zn, 0.32% Pb and 1.0g/t Ag over 69.42 metres from 115.18 to 184.60 metres.

No Borehole geophysical surveying was completed during the 2011 season. The hole was not cemented due to the prospect of conducting a downhole electromagnetic survey in 2013.

7.4 Analytical Data: QA/QC Program

Drill core samples from the 2011 drill program were shipped to Whitehorse by truck and prepared at the Acme Labs prep facility and then pulps were sent by truck to the Acme Labs facility in Vancouver, BC for analysis. The samples were crushed and pulverized so that >85% was less than 75 microns. The pulps were then analysed for a suite of 24 elements using ICP-OES, including base metals, following a hot aqua regia digestion (group 7AR). Samples with greater than 4% Pb or 20% Zn were re-digested using a dilution to obtain data within range for the ICP-OES. Two samples with greater than 300 ppm Ag were also re- analyzed by fire assay. Barium was determined by fused disc XRF (group 8X – Ba). Gold was determined by aqua regia digestion of a 15 g charge (group 3A01) as a preliminary check of Au levels, there being few previous analyses.

A number of certified reference materials (CRM's) supplied by HudBay Minerals Inc.. were inserted to assess the assay data accuracy. Additional commercially available CRM's appropriate for sediment hosted Pb-Zn-Ag deposits were obtained from Ore Research & Exploration in Australia. The precision of the data was assessed using pulp duplicate analyses provided by the primary laboratory (Acme Labs) and pulp duplicates analysed at a check assay laboratory (ALS Minerals).

Overall, the quality of the Pb and Zn data appears to be fair. There were numerous quality assurance failures and distinct biases exist within the data. Some of the higher grade CRMs initially analysed by a dilution method for over-range samples (Pb > 4%) show erratic results. Both Pb and Zn from Acme Labs also show slight positive biases compared to the check assay results. Aqua regia Ag data for all CRMs show a positive bias on the order of +5 to +10% and this conclusion is supported by the check assays. None of the CRMs available for this project were suitable for the high Ba values encountered in the Tom drill core, but the check Ba assays are virtually identical to the primary Ba assays, indicating very reproducible data. The Au values in the Tom samples are low, averaging about an order of magnitude above background, and are not considered to be economically significant. Fire assay data from the check assays are systematically higher than the aqua regia data obtained from the primary laboratory.

In summary, the quality of the Pb & Zn assay data from the 2011 Tom drill program appears to be fair. The quality of the Ag data is poor, and the quality of the Ba data appears to be

excellent, although poorly constrained. A memo in Appendix VI dated January 31, 2012 by Dennis Arne, Revelation Geoscience, outlines in more detail the results of the 2011 QA/QC program for the Tom drill program.

The development of a range of CRMs based on material from the Tom and Jason deposits is highly recommended for future evaluation of the deposits.

8.0 Mining Land Use Inspection: Yukon Energy, Mines and Resources

A Mining Land Use Inspection was conducted by Yukon Energy, Mines and Resources (YEMR) and the Yukon Workers Compensation Health & Safety Board (YWCHSB) on September 12, 2011 to determine the status of the Tom Camp installation under Class III Exploration Permit LQ00325 as well as to ensure reclamation of the camp and site occurred as a part of the previous work permit LQ00262. YEMR and YWCHSB inspectors traveled to site via helicopter from Whitehorse and were onsite for approximately 1 hour to inspect Tom Camp and one of the active drill sites.

The first portion of the inspection concentrated on the site reclamation work completed under the previous work permit LQ00262. The YEMR concluded that the Site was remediated and items were removed in an appropriate manner. Efforts by the site reclamation team to leave the site in a clean and organized manner were greatly appreciated by the YEMR. As a result of the reclamation efforts the YEMR will be recommending a Certificate of Completion and a Compliance Review Approval certificate be issued so that work permit LQ00262 can be closed off.

The second portion of the site examination related to an inspection of the new Tom Camp and drilling operation relating to the newly approved work permit LQ00325. No violations were documented and site inspectors were pleased with state of camp. YEMR and YWCHSB Inspectors concluded that the site was clean and organized with personnel on site being very safety conscious. The inspectors noted that only a small quantity of fuel was stored on site and it was accompanied by the appropriate spill kits and absorptive matting. These anticipatory efforts to mitigate potential fuel leaks were well received by the inspectors and appreciated by YEMR.

A drill site inspection was completed by both YWCHSB and YEMR. Rodren Drilling personnel were noted to be operating in compliance to the regulations, all appropriate safety equipment and documentation was presented upon request. It was concluded that the drill site and existing access roads were in compliance with YEMR regulations.

One area of concern was noted by YEMR inspectors. Water draining from the adit into Sekie creek had been partially diverted by vehicle traffic. This diversion caused draining adit effluent to travel down an existing access road for a distance of 10 meters before then draining into Sekie Creek. Camp Manager, Chris Cope and Field Geologist Andrew Ganton immediately addressed this concern by the reclamation of an existing drainage ditch across the access road thereby limiting the draining adit effluent to a single crossing point. YEMR inspectors were notified of the solution with no subsequent follow-up to date.

9.0 Soil Orientation Survey

Soil orientation surveys were completed over known mineralization at both the Tom West Zone and Jason Main Zone in early September 2011. Two memos detailing the methodology and results are enclosed in Appendix VII. Figures 6 and 7 illustrate the sample locations for the sampling at Tom and Jason respectively.

The purpose of the orientation survey was to assess the effectiveness of sampling different soil horizons, grain size fractions and partial digestion methods to detect the presence of overburden covered stratiform Pb-Zn-Ag-Ba deposits. Colluvial material was sampled at Tom because of the higher terrain, above the tree line. Sampling at the Jason Main Zone was in a much lower terrain, just below the tree line, and as a result the soil orientation line was completed over glacial +/- colluvial material.

At Tom, the West Zone outcrops along a steep slope that in places is lightly vegetated with poor soil development. The orientation sample line sampled one such slope, no attempt was made to sample different horizons however the bulk of the material sampled was believed to represent the C-horizon. In the lab, the samples were sieved to separate a -80 mesh (<180 micron) and clay fraction (<2 micron). Analysis was completed by modified aqua regia digestion of a 0.5 g sample, followed by multi-element ICP analysis.

Four types of material were collected over the Jason Main Zone, an A1-horizon, an O-horizon, a conventional C-horizon and black spruce twigs. The methodology and analytical procedure for each media type is outlined in the attached memo in Appendix VII dated September 5th, 2011 by Dennis Arne of Revelation Geoscience.

Results from the orientation survey over the Tom West Zone indicate clear responses for both Pb and Ag directly above and down slope from the sub-cropping deposit with minor responses from As, Ba as well as Zn, As, St and Tl residuals following regression against Fe. The clay (<2 micron) separates have the advantage of containing higher metal values and showing greater anomaly to background contrast compared to the standard -80 mesh soil data.

Results from sampling at Jason Main Zone indicate MMI and C-horizon aqua regia data give a positive response. The best indicators of mineralization are Pb, Zn, Ag and Ba for both digestion methods with As, Sb, Cu, Hg, Y and the REE showing a positive response to buried mineralization in the MMI data.

For a more detailed explanation of the results the reader is directed to the memo dated December 5th in appendix VII.

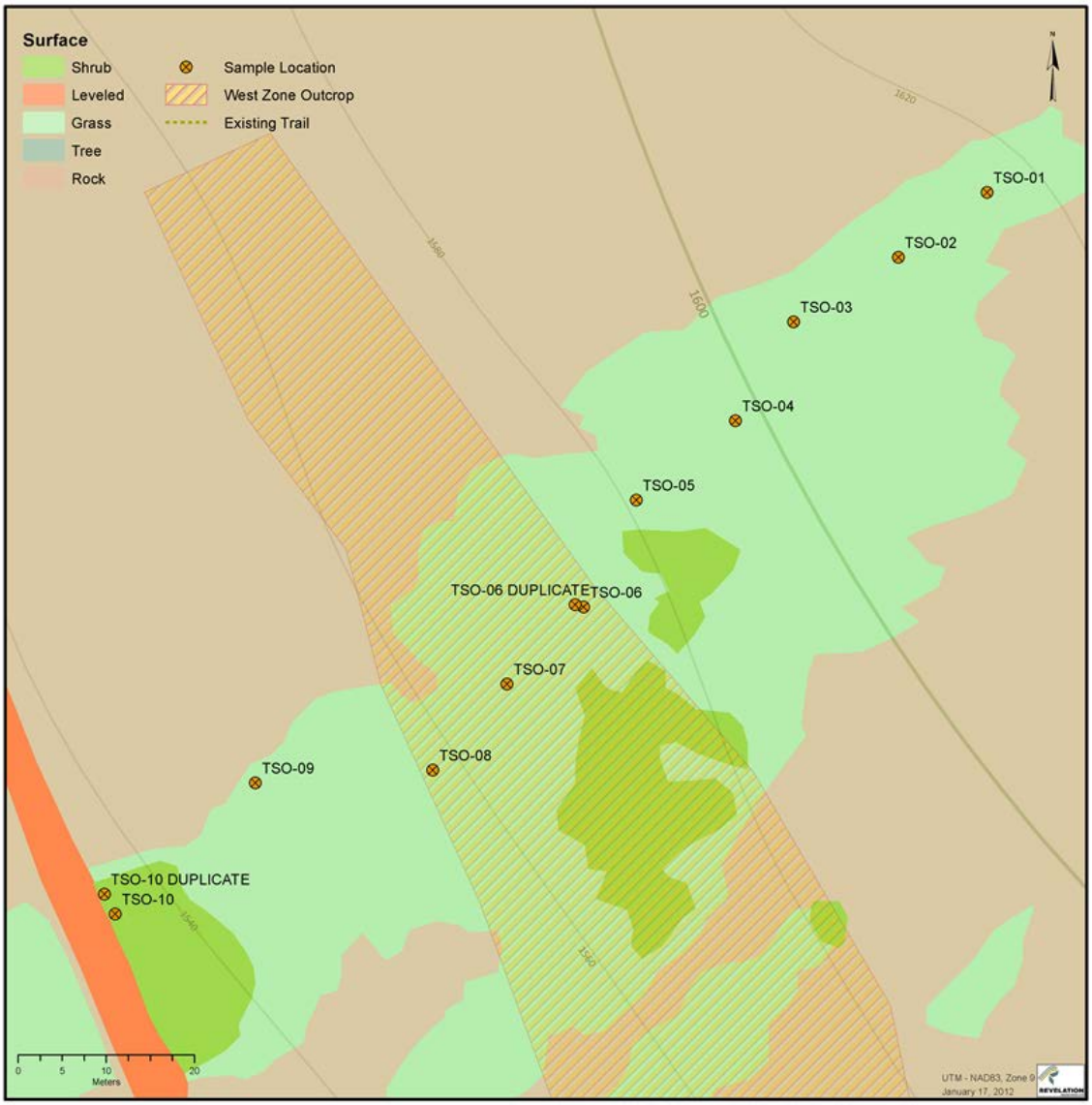


Figure 6: Soil Orientation survey: Sample Locations, Tom West Zone

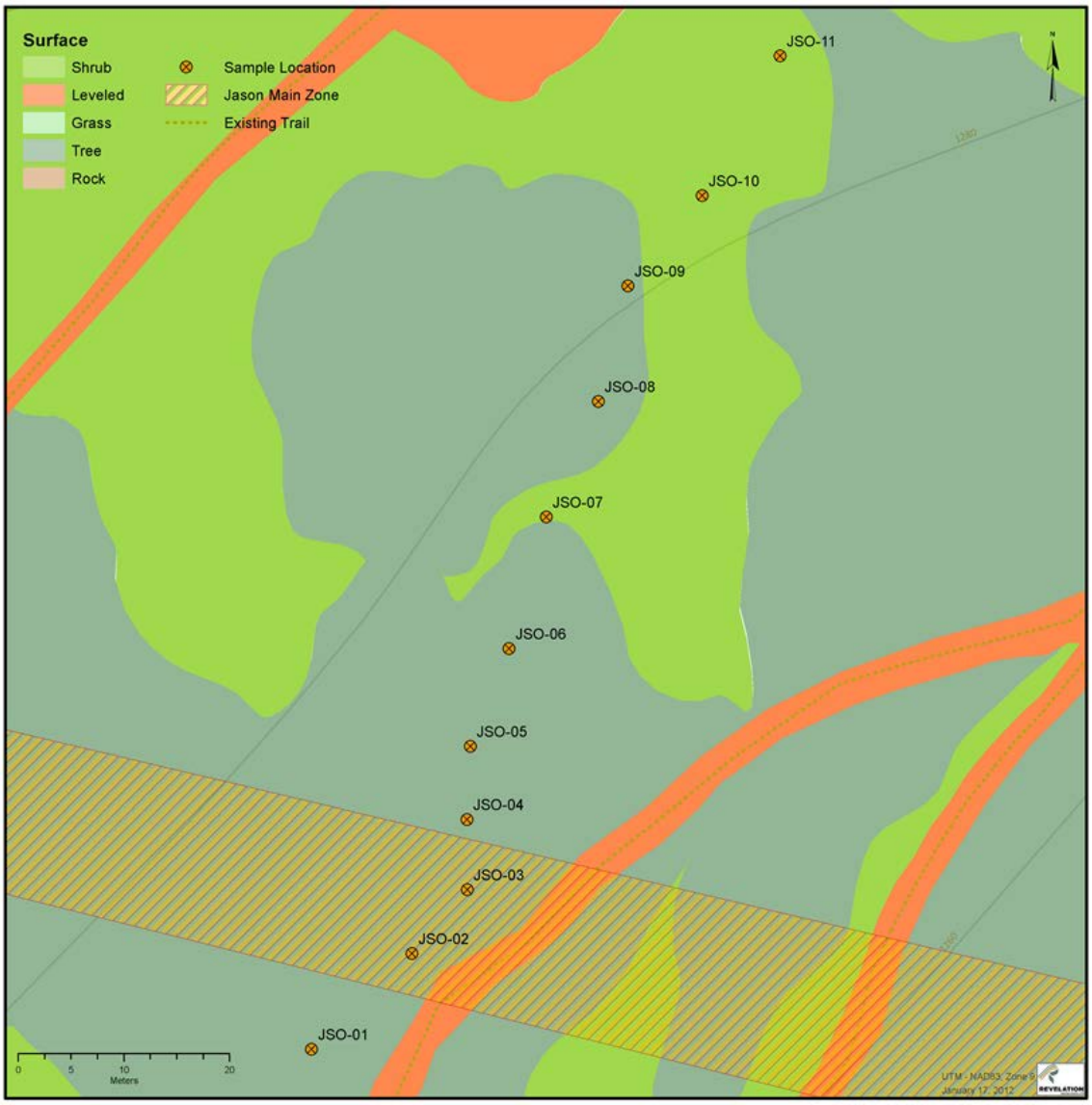


Figure 7: Soil Orientation survey: Sample Locations, Jason Main Zone

10.0 Tom Jason GIS & 3D Database Development.

10.1 Background

Prior to May 2011, only basic tables of critical borehole data were converted from hardcopy to digital data. This work was completed in 2006 for the preparation of a 43-101 technical report by Scott Wilson RPA for both the Tom and Jason deposits.

In 2006, archived hardcopy drill hole logs were reviewed by HBMS staff to extract basic data into spreadsheet form. This included lithologic units, survey data and assay data. From this data wireframes of deposits were constructed in the 3D environment along with a wireframe representation of the subsurface exploration adit. Completed in May 2007, the 43-101 technical report reviewed this information with authors making slight modifications of deposit dimensions to report the current resource.

In May 2011, Revelation Geoscience was contracted to prepare and deliver the technical services to resume definition drilling at the Tom deposit. This was the first diamond drilling completed on site (aside from reclamation work) since August 1991. Initial priority was given to the digitization of the historical drilling data into a comprehensive standalone database. This was to occur contemporaneously with the construction and development of a fully featured 2D and 3D geospatial digital platform.

Once hardcopy data was received from the HBMS office in Flin Flon, Manitoba, the team acquired an access based drill hole logging solution (X-Logger) to input all available drill hole data. This process continued throughout the season with all Tom drill holes being input by early 2012. For all supporting data, a GIS database representing all 2D plan view features was built in ArcGIS Desktop. To integrate geography with the drilling database, a 3D database was constructed using Geosoft's Target software.

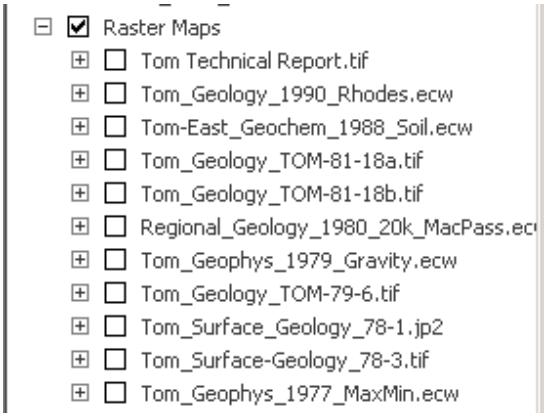
All drill hole collar coordinate information was supplied in North American Datum 1927 (NAD27). These coordinates had been converted from previous surveys that utilized a modified UTM coordinate system. The supplied coordinates were converted to NAD83 for the 2011 program and all subsequent geospatial data collection was completed in the NAD83 coordinate system.

This section summarizes each database in terms of structure and content. It should be noted that all location map views and PDF maps produced are in a UTM projection based on NAD83, Zone 09 North, unless stated otherwise. Due to priorities defined by Hudbay in 2011 a majority of the digital data compilation was applied to the Tom deposit area, with the Jason area to be compiled in 2012.

10.2 Digitization of Historical Data

Hardcopy files and maps representing exploration efforts from discovery through to early 1980's were assessed with select maps and reports being scanned. A selection of digital maps were then geo-referenced (best fit) to be incorporated in the GIS database.

Data digitized from scanned maps include general deposit geology, preliminary surface geochemistry outline areas and CSAMT geophysical coverage. Additional data can be extracted from these maps in the future should project priorities change. Attached below is a screen capture of the type of images that were scanned.



NOTE: Aside from internal annual reports and data published by Derek Rhodes of Cominco Ltd. from the 1990's work programs, there was no historical hardcopy maps or sections provided to Revelation Geosciences. This data represents the most recent comprehensive interpretation of the geology and mineralized systems of the Tom Pb-Zn-Ag sedex deposit and the culmination of an intensive 4-year exploration campaign. ***It is strongly recommended that more effort be put into sourcing original copies of this digital and hardcopy data in order to transfer the geologic mapping and soil sampling efforts into a geospatial context.***

10.3 DGPS Field Data Collection

GIS mapping and data collection was conducted during the 2011 field season. A Trimble GeoExplorer 6000 series, GeoXH model handheld field computer was rented for the duration of the program to collect geospatial data on the site. This handheld is capable of up to 10 cm accuracy and with a global navigation satellite system (GNSS) compatible receiver** able to generate positional data at nearly all times.

The objective of collecting this data was primarily to confirm the location of historic drill hole locations, however, at the time a lack of appropriate imagery warranted collection of all historical roads, trails, clearings and other relevant data.

Horizontal accuracy of the data in the field generally ranged from 0.1 to 1 m with vertical accuracy being slightly less. Nearly all data was then post-processed from reference station data obtained from Dugald Dunlop at Meridian Mapping. This reference data was collected in the MacMillan river valley roughly 8km south of the MacPass airstrip.

**GNSS receivers are able to track both GPS and GLONASS satellite systems increasing the number of available satellites at a given time.

10.4 GeoEye Imagery Data Extraction

Satellite imagery was collected in mid-August 2011. The imagery was of good quality with well below 10% cloud cover, however it was collected in the late afternoon with a noticeable portion of the surface covered in very dark shadow in rugged and treed areas. The imagery covers both the Tom and Jason project areas spanning across the MacMillan River valley.

The imagery provided an excellent base map for all subsequent 2D and 3D viewing. In addition to the high accuracy data collected in the field, the excellent resolution (0.5m) of the imagery allows the end user to collect much more relevant vector data than would be possible with a modest field crew over an entire field season.

Data that that may be digitized includes:

a) Visible roads or trails
b) Historical trenches, earth-movement and drill pad clearings
c) Historical cut lines and reference grid positioning markers

d) Surface conditions (rock, swamp, vegetation, talus)
e) Detailed drainage vectoring

All of the above data will allow the intelligent planning of an exploration program possible able to take into account ground and slope conditions.

If this imagery is draped over a comparable resolution elevation model, an outstanding 3D visual model will improve project planning in the office, minimizing costs from drill placement through to optimizing

10.5 ArcGIS Database

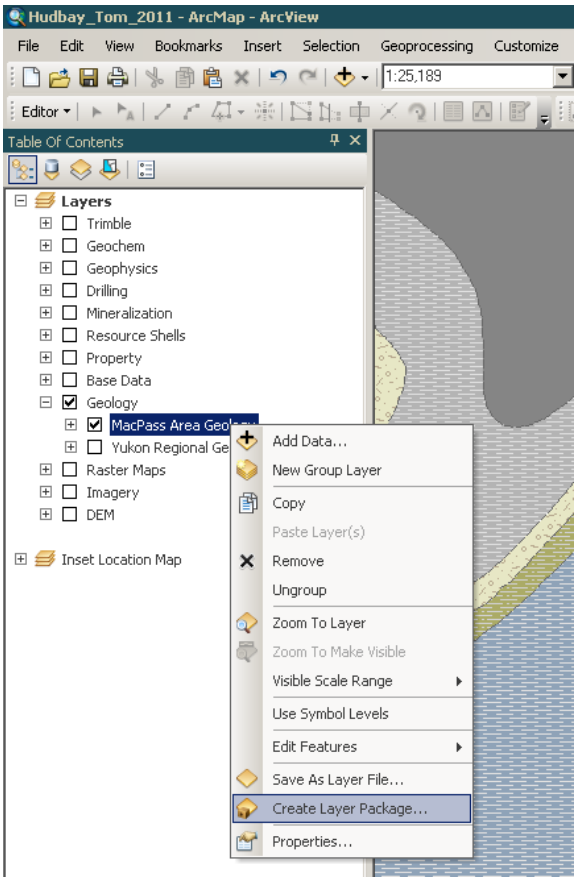
All 2D geospatial data was compiled in ArcGIS 10 using the shapefile format. The data frame and all files generated within this database are in the UTM NAD83 coordinate system unless otherwise stated. All data is organized into a series of folders, they include the following:

- Geochemistry
  - * Surface media sampling
  - * Bedrock lithochemistry
- Surface Geophysics
  - * Gridded products (EM, Mag, Gravity etc.)
  - * Survey parameters (cut-lines, station data etc.)
- Drilling
  - * DDH collar and trace location
  - * Historical location grid
- Mineralization
  - * Mineralized bedrock outlines
  - * Regional mineral occurrences
- Resource
  - * SW RPA (2007) deposit wireframes (projected to surface)
- Property
  - * Tom Property Quartz Leases and outline
  - * Yukon quartz claim database as of date indicated
- Geography

    * Base files including all topo. & NRCan reference data (50k)
    * Vector reference data generated from GeoEye 0.5m imagery

- Geology
    * 1:5000 MacPass regional geology (dig. from historical maps)
    * Yukon territorial geology
- Raster
    * Scanned and georeferenced historical maps, misc.
    * HBED compilations.
- Imagery
    * 2011 GeoEye raster, 0.5m
    * SPOT satellite imagery , 10-20m
    * Landsat imagery, 30m
- DEM
    * Digital Elevation Model, Shaded, 50k
    * Digital Elevation Model, 1M

All categories listed above have been archived in the database as an ArcGIS "Layer Pack" file. This packages all of the feature formatting and symbology into a single transferrable file. In order to import this file into an ArcGIS 10 .mxd project simply open ArcCatalog and drag the file into the table of contents in ArcMap.



10.6 Geosoft 3D Drill Database

All drill hole data has been imported into Geosoft's Target software. The final database includes all known drilling on the Tom deposit with a separate database for the Jason drillhole data.

The Tom deposit area has a very complete drill hole database. All historical hard copy drillhole logs have been imported into the database including basic lithology descriptions, survey data and assay results. For the purpose of the 2011 program all sections produced were named to match the 2007 technical report and may differ from the historically referenced grid.

Resource and underground infrastructure wireframes generated by the 2007 technical report were imported as .dxf files for display in sections and plan maps. Topographic surface data was publicly available 1:50,000 scale data from NRCan. The database was used to generate all sections and strip logs for project design and reporting requirements. A 3D map was also used to visualize the data within the Geosoft database.

10.7 Jason Database

The digital database regarding the Jason deposit area is at more preliminary stage of compilation than the Tom database. Ground-truthing and re-surveying of assets, infrastructure and features remains incomplete but was found to be critical to ensuring spatial and resource interpretations are correct. In general the drill hole coordinate data for the Jason property was found to be reasonably accurate relative to itself (+/- 9 m) however absolute location must be determined with a dedicated re-surveying campaign. Preliminary data collection with decimeter accuracy differential GPS indicated that original coordinates are up to 53m NW of actual location (38m E, 37m N).

An opportunity for this surveying may exist during the 2012 field season. Dugald Dunlop of Meridian Mapping (contracted by Colorado Resources in 2011) was working in the MacPass area with survey-grade GPS equipment that was capable of sub-decimeter accuracy. He may be working in the area again in 2012 allowing Hudbay to access his reference station data for a fee, or to complete the survey.

The original data supplied to Revelation included basic drill hole collars (N27), downhole lithology, survey and assay information. Prior to importing into the Geosoft Target software, coordinates were converted to UTM NAD83, Zone 09 North with the originally supplied elevation values being retained. Deposit wireframe CAD files were extracted from the 2007 RPA technical report; these were also converted / re-projected to the UTM NAD83, Zone 09 North coordinate system. These wireframes included the Jason Main Zone, Jason South Zone as well as grids used in the 43-101 technical report.

During the 2011 season, in order to assess data accuracy, a small percentage of the drill hole locations were relocated and re-surveyed in UTM NAD83, Zone 09 North coordinates using a Trimble 6000 GeoXH handheld GPS / data logger. This unit is capable of up to 10 centimetre accuracy but generally 50 centimetre or better was achieved. The locations and data collected may be viewed at "***HBMS TOM JASON 2011\2011 Rev Data\GIS\JASON ArcGIS \Jason DGNSS Field Data***". It was found that the drill hole coordinates were shifted roughly 53m NW from their actual true location on surface. It is believed that the database became shifted after multiple coordinate conversions from historical local to modified-local to regional-standard coordinate system were completed. The entire database was shifted exactly +38m easting and -

38m northing, only those drill hole locations re-located in the field were updated. Those locations that have been updated in 2011 are indicated in the collar database with a "YES" in the DGPS channel.

Geospatial data analysis was completed using ESRI's ArcGIS Desktop software. Topographic base data was downloaded from the Canadian government online source for reference features. These features included 1:50,000 scale topography, water bodies, drainage and roadways. These features were automatically re-projected to the map project's coordinate system. In September, 2011 GeoEye satellite imagery was collected over the project area at a resolution of 0.5 metres.

In addition to the field data collected in 2011, it is recommended that further data capture using handheld GPS and vector digitization of roads, trails, cut-lines, drill pads and trenching from the imagery be completed.

10.8 Data Integrity

The historical data was found to be fairly accurate relative to itself. Existing drill collar data and reference grid digital vector files (shape file, CAD) plotted reasonably well. Most of the features plotted within 10-15m of truth. Historical maps were geo-referenced (using topographic best-fit) and imported into the GIS database also were found to have 10-15m variability.

GeoEye imagery may display incorrectly when initially imported into ArcGIS 10 software. The image appeared to show a false colour palette. Within the display settings it was found that RGB settings were bands 1, 2 and 3 respectively where they should be set to 3, 2 and 1 for proper natural colour display of the image.

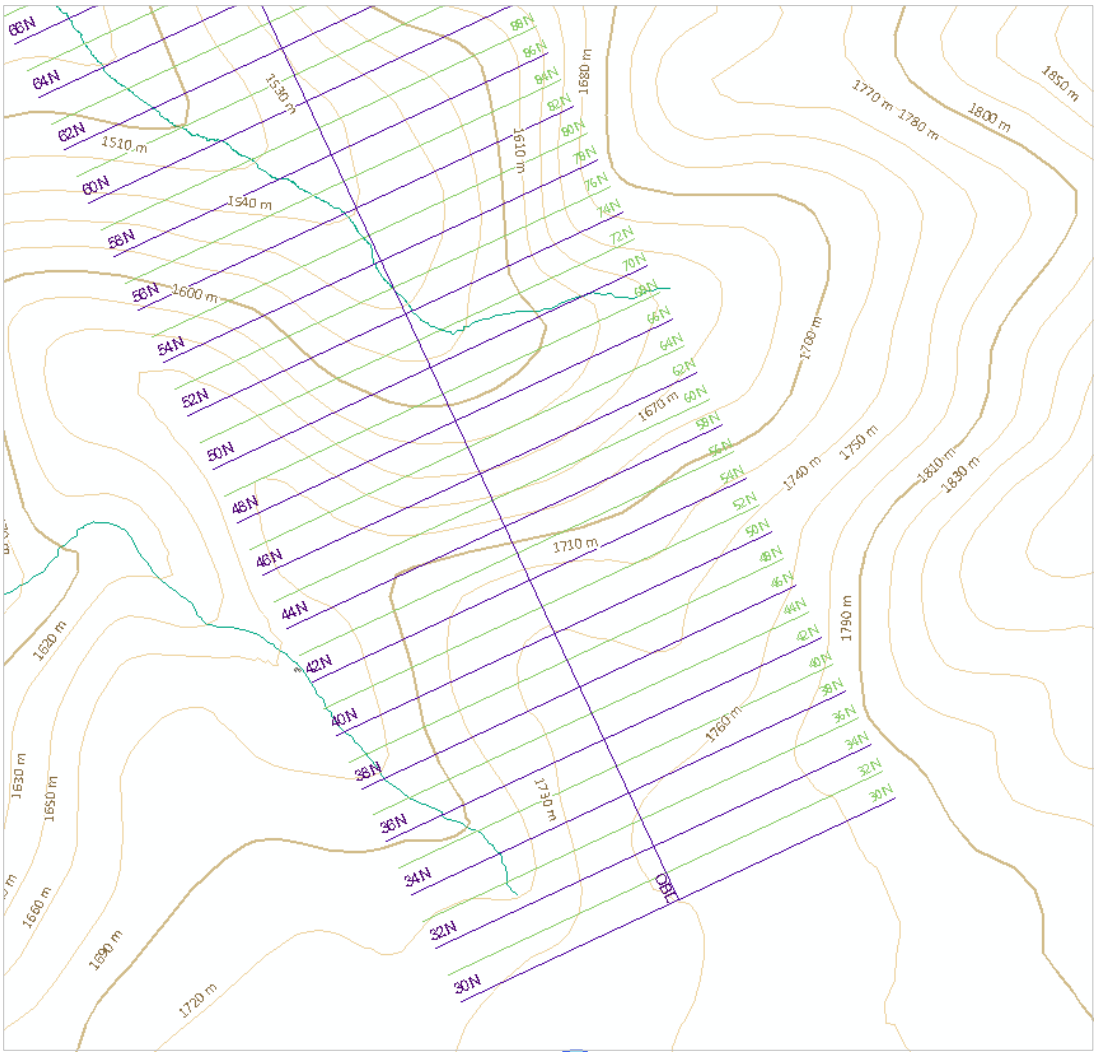
10.9 Conclusions and Recommendations

The following conclusions and recommendations for future / continued compilation of data are as follows:

- Modern topographic analysis to improve from 1:50,000 NRCan dataset or digitize previous survey to form better resolution for a elevation model.
- Re-survey as many remaining drill hole collars prior to modifying the deposit wireframe models. During the 2011 season most drill holes were found to be within 10metres of truth, however, there were a few in excess of 30m from truth.

The entire Jason database had to be shifted 53m to match ground truth from the field data and the satellite imagery.

- Resource models will likely require location shifts. Collar locations have been shifted to match.
- A standard local reference grid should be selected. The historical reference grid used 100 foot spacing between section lines whereas the grid implemented in the 2007 43-101 technical report utilized the same grid with section lines being 50 feet apart. See figure below for reference. The original HBMS grid is dark purple and the 2007 edition is light green. They share a similar base line and start line at 30N. This may result in confusion should more historical data be incorporated into the database.



- Most surface drill holes prior to 1988 were likely surveyed by acid test and therefore did not record horizontal deviation. Given the poor ground conditions, small diameter drilling and significant vertical deviation recorded on many drill holes, there in likely significant lateral error not captured in the current geologic model.

11.0 2012 Work Program and Budget

A budget of $3.5 million has been proposed for the Tom - Jason properties in 2012 (Table 4). Highlights of the budget proposal include:

* 2.5 month/ 2 diamond drill program totaling 8000 metres
* 2500 assay samples + standards
* 2 month borehole EM (geophysics) crew (for both borehole and ground work)
* 240 hrs helicopter support (ASTAR B2 support)
* Revelation Geoscience project management

This budget was presented to Hudbay Mineral Inc.'s "Board of Directors" in early December 2011. The project was placed on the "Contingent List" for approval pending completion of a Preliminary Economic Assessment (PEA) report in late March to early April 2012. Preparation work for the 2012 program is on "hold" until the budget is approved.

Table 4: 2012 Budget Proposal: Tom - Jason Property

2012 Budget: Tom-Jason Program	
Expense Category	**Contract Estimates**
Salaries, Benefits -HBED Employees	**$0**
Legal, Accounting & Tenure Maintenance	**$50,000**
Camp Management & Logistics	**$658,000**
Geoscience equipment / Supplies / Consumables	**$70,000**
General Transport & Shipping	**$130,000**
Diamond Drilling	**$1,190,000**
Geochemical Analyses	**$152,500**
Geophysics	**$212,000**
Contractor Support Services	**$620,000**
Project Air Support	**$416,000**
	$3,498,500
Contingency 10%	**$349,850**
Total	**$3,848,350**

The 2012 program, as contemplated, focuses on drilling additional holes in both the Tom and Jason deposits with the main purpose of **expanding** the known resource. This is best accomplished by drilling down-dip and along strike from current indicated and inferred resource shells. Table 5 summarizes the proposed holes for the 2012 program. A detailed review of these targets should be completed prior to the commencement of the 2012 program and reviewed regularly throughout the program.

Table 5: Proposed 2012 Drill Program

Target Name	*East (m)*	*North (M)*	*Elv. (m)*	*Depth (m)*	*Dip*	*Az.*
Tom West Zone						
P4	441686	7003852	1477	350	-65.0	65.0
P6	441739	7003808	1502	400	-65.0	65.0
P7	441739	7003808	1502	500	-75.0	65.0
P8	441793	7003766	1520	360	-60.0	65.0
P9	441793	7003766	1520	400	-75.0	65.0
P14	441624	7003561	1551	570	-60.0	65.0
P15	441640	7003476	1547	600	-60.0	65.0
P17	441665	7003412	1549	600	-60.0	65.0
				3780		
Tom South-East Zone						
SE-P-33	442600	7003540	1723	480	-85.0	315.0
SE-P-34	442829	7003228	1853	780	-75.0	315.0
				1260		
Tom East Zone						
No Drilling						
Jason Main Zone						
JP03	436115	7002746	1265	320	-60.0	16.0
JP05	436206	7002698	1269	350	-55.0	16.0
JP09	436292	7002639	1269	500	-60.0	16.0
JP11	436531	7002743	1294	115	-50.0	16.1
JP13	436497	7002627	1275	330	-55.0	16.0
JP15	436632	7002732	1277	100	-45.0	16.0
JP17	436601	7002623	1255	310	-53.0	16.0
JP19	436727	7002709	1247	90	-50.0	16.0
JP23	436899	7002577	1185	140	-50.0	16.0
JP24	436874	7002491	1184	280	-50.0	16.0
JP27	436976	7002482	1166	340	-55.0	16.0
				2875		
			Total Meters	**7915**		

Appendix VIII contains PDF sections with the proposed holes for the 2012 program along with excel spreadsheets detailing the budget and proposed holes.

An additional bank of drill holes have been designed to in-fill the current gaps in both the Tom and Jason deposits in-order to have a drill density that will allow inferred resources to be

converted to indicated resources as indicated by Rennie, 2007. The target bank is outlined in the excel spreadsheets in Appendix VIII.

12.0 Summary and Recommendations

General:

The exploration program completed on the Tom-Jason Pb-Zn-Ag property by Hudson Bay Development Company Limited Limited, a 100% owned subsidiary company of Hudbay Minerals Inc. in August and September 2011 began with the re-establishment of an exploration camp on the Tom Property, followed by diamond drilling and an orientation soil survey. The project was directed by Kelly Gilmore, Chief Exploration Geologist, Hudbay Minerals Inc. who contracted Revelation Geoscience Ltd. of Vancouver, British Columbia to design, implement, and provide technical supervision of the field program.

Mercer Contracting Ltd. of Whitehorse, Yukon was contracted to re-establish the Tom exploration camp. Rodren Drilling from Winnipeg, Manitoba was contracted to provide diamond drilling services.

Drilling Program Summary:

The diamond drill program commencement was delayed until August 27, 2011 due to work permit delays and concluded on September 24th, 2011 due to the onset of winter conditions. During this period a total of 1,823 metres of core was drilled in eleven drill holes. The eleven drill holes were all successful in intersecting the mineralized zones. A total of approximately 1,133 kilograms of mineralized sample material was collected for metallurgical testing from drillholes TYK001 to TYK005. The infill drilling completed with drillholes TYK006 to TYK011 has resulted in approximately 50 metre drill intersection spacing over a strike length of approximately 250 metres in the core of the Tom West Zone. All drillhole data collected during the 2011 Tom program was captured in X-Logger, an Access based software program designed for digital capture of drillhole data. Historical drilling data from the Tom claims was also digitally captured into this software.

The mineralization intersected at the Tom West Zone varies from sphalerite-rich laminated sulphides to galena, barite, and silver-rich semi-massive and massive sulphides. Holes TYK001 and TYK002 intersected the most significant mineralized intervals and returned

weighted averages of 7.78% Zn, 4.47% Pb and 52.5 g/t Ag over 22.30 metres and 6.20% Zn, 6.95% Pb and 95.7g/t Ag over 41.37 metres respectively. These holes were interpreted to be proximal to vent structures. Mineralization hosted within the structural hanging wall to the main mineralized zone was intersected by drillholes TYK010 and TYK011. The most significant mineralized intervals included 5.32% Zn, 1.15% Pb and 1.0 g/t Ag over 53.88 metres in drillhole TYK010 and 5.79% Zn, 0.32% Pb and 1.0 g/t Ag over 69.42 metres in drillhole TYK011.

Recommendations:

The 2012 program should focus on drilling additional holes in both the Tom and Jason deposits with the main purpose of **expanding** the known resource. This is best accomplished by drilling down-dip and along strike from current indicated and inferred resource shells. 1) a 2.5 month/ 2 diamond drill program totaling 8000 metres, 2) collection of approximately 2500 core samples for assay, 3) a 2 month Borehole EM (electromagnetics) geophysical program (of both downhole and ground work), 4) 240 hrs of helicopter support (Eurocopter AS350B2 or similar) and 5) Revelation Geoscience project management. Approval of the 2012 budget is pending approval from Hudbay Mineral Inc.'s Board of Directors.

Soil Sampling Program Summary:

A soil orientation survey was successful in testing a number of different sample media and sample preparation types. Positive results were obtained from sample locations over both the Tom and Jason mineralized zones. The most positive results at Jason were obtained using the MMI and C-horizon aqua regia methods data. In clay separates (<2 micron) from the colluvial soils over Tom West similar results can be drawn from Pb, Ag, S and Ba. The clay separates have the advantage of containing higher metal values and showing greater anomaly to background contrast compared to the standard minus 80 mesh soil data.

Recommendations:

A comprehensive evaluation of potential target areas on the property is recommended. Targeted ridge & spur soil and/or contour sampling is recommended as follow-up for areas dominated by colluvium. Grid soil sampling is recommended as follow-up for areas of subdued topography covered by glacial till.

GIS and 3D Database Development:

A GIS data compilation was completed for the Tom project during 2011. All 2D geospatial data was compiled in ArcGIS 10 using the shapefile format. The data frame and all files generated within this database are in the UTM NAD83 coordinate system and organized into a series of folders based of data type. The digital database regarding the Jason deposit area is at a more preliminary stage of compilation than the Tom database. Ground-truthing and re-surveying of assets, infrastructure and features remains incomplete but was found to be critical to ensuring spatial and resource interpretations are correct.

All drill hole data has been imported into Geosoft's Target software for 3D visualization. The final database includes all known drilling on the Tom deposit with a separate database for the Jason drillhole data.

The Tom deposit area has a complete drillhole database. All historical hard copy drillhole logs have been imported into the database. Resource and underground infrastructure wireframes generated by the 2007 technical report were imported as .dxf files for display in sections and plan maps. Topographic surface data was added from publicly available 1:50,000 scale NRCan data. This database was used to generate all sections and strip logs for project design and reporting requirements.

Recommendations:

The following recommendations for future and continued compilation of data are as follows:

- Complete a modern topographic analysis to improve from 1:50,000 NRCan dataset or digitize previous surveys to increase resolution for a elevation model. This would aid in drillhole planning in areas of steep topography.
- Re-survey as possible remaining historical drillhole collars prior to modifying the deposit wireframe models. During the 2011 season most drill holes were found to be within 10 metres of expected location, however, there were a few in excess of 30 metres from expected. The entire Jason database had to be shifted 53 metres to match ground–truthed locations from the field data and the satellite imagery.
- Resource models will likely require location significant shifts. Collar locations have been shifted to match.

- A standard local reference grid should be selected. The historical reference grid used 100 foot spacing between section lines whereas the grid implemented in the 2007 43-101 technical report utilized the same grid with section lines being 50 feet apart. This may result in confusion should more historical data be incorporated into the database.
- Most surface drill holes prior to 1988 were likely surveyed by acid test and therefore did not record horizontal deviation. Given the poor ground conditions, small diameter drilling, and significant vertical deviation recorded on many drill holes, there in likely significant lateral error not captured in the current geologic model.

13.0 References

1) Goodfellow, W.D., and Rhodes, D.: 1990: Geological Setting, Geochemistry and Origin of the Tom Stratiform Zn-Pb-Ag-Barite Deposits: in Abbott, J. G., and Turner , R.J. W., eds.: Mineral Deposits of the Northern Canadian Cordillera. Field Trip 14: Guidebook: Ottawa. International Association on Genesis of Ore deposits, Eighth Symposium. p. 177 - 244.

2) Rennie, David, W.: 2007: Technical Report on the Tom Deposit, Yukon Territory, Canada; Prepared for Hudbay Minerals Inc.

3) Rennie, David, W.: 2007: Technical Report on the Tom and Jason Deposits, Yukon Territory, Canada; Prepared for Hudbay Minerals Inc.

APPENDIX I

List of Personnel

PERSONNEL

The following personnel / contractors participated in the 2011 work program:

Name	Occupation	Residence
Hudbay Minerals Inc.		
Kelly Gilmour	Chief Exploration Geologist	Flin Flon, MB
Doug Hancock	SHE Coordinator	Flin Flon, MB
Christina Taylor	Project Geologist	Vancouver, BC
Revelation Geoscience Ltd		
Kevin Wells	Principal Geologist	Vancouver, BC
Matt Bodnar	Project Manager	Vancouver, BC
Dennis Arne	Principal Geochemist	Vancouver, BC
Andrew Ganton	Core logger	Vancouver, BC
Richard Elkington	Logistics Manager	Sudbury, ON
Contractors		
Mercer Contracting	Camp deployment/ expediting	Whitehorse, YK
Rodren Drilling Ltd.	Diamond Drilling	West St. Paul, MB
ACME Labs	Drill core analysis	Vancouver, BC
ALS Minerals	Drill core analysis	Vancouver, BC
CasCom	Internet / satellite communication	Yellowknife, NWT
Frontier Medex	Camp nurse	Calgary, AB

APPENDIX II:

Analytical Results, Procedures and List of Standards

List of Standards

Sample Number	Hole Number	Standard type	Comment	Sample Number	Hole Number	Standard type	Comment
N161940	TYK004	133a		N161710	TYK001	F6	Not A5 but F6
N162040	TYK006	133a		N161730	TYK001	133a	Mis-labelled 133a, blank F6
N162140	TYK007	133a		N161715	TYK001	F6	
N162240	TYK009	133a		N161735	TYK001	F6	
N162340	TYK010	133a		N161755	TYK002	F6	
N162540	TYK011	133a		N161775	TYK002	F6	
				N161795	TYK002	F6	
N161840	TYK003	133a	Mis-numbered 134a - original data match; over-range assays do not	N161810	TYK002	F6	
N161770	TYK002	134a		N161830	TYK003	F6	
N161880	TYK004	134a		N161850	TYK003	F6	
N161980	TYK005	134a		N161870	TYK003	F6	
N162080	TYK006	134a		N161890	TYK004	F6	
N162180	TYK009	134a		N161910	TYK004	F6	
N162280	TYK008	134a		N161930	TYK004	F6	
N162380	TYK010	134a		N161950	TYK005	F6	
N162580	TYK011	134a		N161970	TYK005	F6	
				N161990	TYK005	F6	
N161820	TYK003	A5		N162010	TYK005	F6	
N161920	TYK004	A5		N162030	TYK006	F6	
N162120	TYK007	A5		N162050	TYK006	F6	
N162220	TYK009	A5		N162070	TYK006	F6	
N162320	TYK010	A5		N162090	TYK006	F6	
N162410	TYK002	A5		N162110	TYK007	F6	
N162520	TYK011	A5		N162130	TYK007	F6	
				N162150	TYK007	F6	
N162261	TYK008		Not a core sample but CRM B5 (N162260) Interval 105 to 106m.	N162170	TYK007	F6	
N161750	TYK002	B5		N162190	TYK009	F6	
N161860	TYK003	B5		N162210	TYK009	F6	
N161960	TYK005	B5		N162230	TYK009	F6	
N162060	TYK006	B5		N162250	TYK008	F6	
N162160	TYK007	B5		N162270	TYK008	F6	
N162360	TYK010	B5		N162290	TYK008	F6	

N162560	TYK011	B5
N161790	TYK002	E5
N161900	TYK004	E5
N162000	TYK005	E5
N162100	TYK006	E5
N162200	TYK009	E5
N162300	TYK008	E5
N162400	TYK011	E5
N162310	TYK008	F6
N162330	TYK010	F6
N162350	TYK010	F6
N162370	TYK010	F6
N162390	TYK011	F6
N162510	TYK011	F6
N162530	TYK011	F6
N162550	TYK011	F6
N162570	TYK011	F6
N162590	TYK011	F6

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

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Client: Hudson Bay Mining and Smelting Co., Limit
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Vancouver
Received: October 18, 2011
Report Date: November 24, 2011
Page: 1 of 6

CERTIFICATE OF ANALYSIS WHI11001758.1

CLIENT JOB INFORMATION

Project: 13
Shipment ID: FLIN 287
P.O. Number
Number of Samples: 142

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	131	Crush, split and pulverize 250 g rock to 200 mesh			WHI
P200	7	Pulverize to 85% - 200 mesh			VAN
3A01	142	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	142	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	142	X-Ray fluorescence / Fusion		Completed	VAN
2A05	142	Loss on Ignition at 1000 C		Completed	VAN
7AR.1	41	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
RAYMOND CHAN
CHIEF ASSAYER

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001758.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161701	Rock	1.00	<0.5	0.002	0.005	<0.01	<0.01	<2	0.006	<0.001	<0.01	1.94	<0.01	0.003	<0.001	<0.001	<0.01	0.21	0.107	0.002	0.02
N161703	Rock	1.10	1.3	0.001	0.004	<0.01	<0.01	<2	0.006	<0.001	<0.01	1.73	<0.01	0.003	<0.001	0.001	<0.01	0.21	0.095	0.003	0.02
N161704	Rock	1.89	4.5	<0.001	0.005	0.01	<0.01	<2	0.006	<0.001	<0.01	2.35	<0.01	0.007	<0.001	<0.001	<0.01	0.54	0.106	0.002	0.18
N161705	Rock	1.73	12.5	0.001	0.005	0.06	0.05	<2	0.006	<0.001	0.01	1.58	<0.01	0.009	0.001	<0.001	<0.01	0.67	0.089	0.003	0.27
N161706	Rock	2.18	3.3	0.001	0.008	1.95	9.47	3	0.004	0.002	0.02	3.97	<0.01	0.007	0.051	0.004	<0.01	0.61	0.060	0.004	0.27
N161707	Rock	1.97	2.8	<0.001	0.006	>4	11.70	4	0.003	0.003	0.01	3.89	0.01	0.019	0.081	0.004	<0.01	0.64	0.034	0.005	0.34
N161708	Rock	1.37	4.1	<0.001	0.003	>4	11.76	3	0.002	0.002	0.01	1.79	<0.01	0.065	0.080	0.004	<0.01	1.70	0.023	0.004	0.05
N161709	Rock	1.44	4.2	<0.001	0.003	3.22	10.56	<2	0.003	0.002	<0.01	1.70	<0.01	0.064	0.068	0.003	<0.01	1.83	0.038	0.006	0.06
N161710	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	0.02	<2	0.013	0.003	0.05	4.22	<0.01	0.008	<0.001	<0.001	<0.01	1.10	0.114	0.003	2.24
N161711	Rock	1.69	2.6	<0.001	0.002	2.85	7.45	<2	0.002	<0.001	0.01	0.89	<0.01	0.721	0.049	0.003	<0.01	0.98	0.033	0.003	0.07
N161712	Rock	2.45	2.5	<0.001	0.002	1.89	7.12	<2	0.001	<0.001	<0.01	0.94	<0.01	0.221	0.042	0.002	<0.01	0.20	0.012	0.002	0.03
N161713	Rock	2.27	4.4	<0.001	0.004	2.10	6.03	2	0.003	0.002	<0.01	2.55	<0.01	0.088	0.030	0.003	<0.01	0.50	0.035	0.005	0.07
N161714	Rock	2.55	2.5	<0.001	0.002	1.98	6.12	<2	0.001	0.001	<0.01	1.13	<0.01	0.098	0.031	0.003	<0.01	0.16	0.018	0.003	0.03
N161715	Rock Chip	0.11	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.16	<0.01	0.007	<0.001	<0.001	<0.01	0.96	0.113	0.002	2.22
N161716	Rock	2.19	2.3	<0.001	0.002	1.19	4.54	3	0.002	0.002	<0.01	1.29	<0.01	0.082	0.022	0.002	<0.01	0.23	0.033	0.004	0.05
N161717	Rock	2.72	1.5	<0.001	0.002	1.29	5.82	3	0.001	<0.001	<0.01	0.88	<0.01	0.031	0.026	0.002	<0.01	0.23	0.017	0.002	0.01
N161718	Rock	2.41	1.2	<0.001	0.001	1.47	6.48	3	0.001	<0.001	<0.01	0.74	<0.01	0.028	0.029	0.002	<0.01	0.26	0.008	0.002	0.01
N161719	Rock	2.54	2.3	<0.001	0.002	1.61	4.67	4	0.002	0.002	<0.01	1.37	<0.01	0.022	0.019	0.002	<0.01	0.87	0.014	0.002	0.03
N161720	Rock	2.27	1.0	<0.001	0.001	1.79	4.06	11	0.001	0.001	<0.01	0.73	<0.01	0.013	0.017	0.003	<0.01	0.53	0.007	0.001	0.06
N161721	Rock	2.43	3.4	<0.001	0.003	2.27	5.42	28	0.003	0.002	0.01	1.65	<0.01	0.010	0.021	0.004	<0.01	0.92	0.019	0.003	0.01
N161722	Rock	2.90	0.8	<0.001	0.006	>4	9.25	118	<0.001	<0.001	0.03	0.88	<0.01	0.039	0.045	0.018	<0.01	7.66	0.004	<0.001	0.07
N161723	Rock	2.39	0.7	<0.001	0.008	>4	8.02	115	0.005	0.003	0.13	3.47	0.02	0.027	0.041	0.020	<0.01	4.36	0.004	<0.001	0.04
N161724	Rock	2.55	1.8	<0.001	0.003	>4	10.03	99	<0.001	0.001	0.06	1.60	<0.01	0.060	0.042	0.014	<0.01	9.37	0.006	<0.001	0.39
N161725	Rock	2.23	1.9	<0.001	0.013	2.31	8.07	73	0.002	0.003	0.05	2.69	0.02	0.073	0.032	0.012	<0.01	11.85	0.012	0.001	0.10
N161726	Rock	1.48	1.9	<0.001	0.020	>4	15.13	151	<0.001	0.003	0.06	1.78	0.01	0.098	0.067	0.019	<0.01	6.64	0.010	<0.001	0.45
N161728	Rock	2.81	9.8	<0.001	0.028	>4	15.45	>300	<0.001	0.003	0.10	2.10	0.01	0.065	0.071	0.040	<0.01	3.83	0.003	<0.001	0.74
N161729	Rock	1.69	35.9	<0.001	0.036	>4	18.93	169	<0.001	0.004	0.20	3.69	0.01	0.095	0.090	0.033	<0.01	4.77	0.005	<0.001	0.38
N161730	Rock	0.11	<0.5	<0.001	0.003	0.01	<0.01	<2	0.013	0.003	0.04	4.06	<0.01	0.007	<0.001	<0.001	<0.01	0.98	0.112	0.003	2.16
N161731	Rock	2.79	132.0	<0.001	0.051	>4	4.43	54	0.005	0.004	0.55	26.53	0.07	0.025	0.019	0.010	<0.01	3.02	0.007	0.001	1.79
N161732	Rock	2.76	76.9	<0.001	0.123	1.71	0.56	23	0.006	0.003	0.78	30.25	0.03	0.030	0.003	0.005	<0.01	3.77	0.003	<0.001	2.35

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001758.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N161701	Rock	2.31	<0.01	0.12	<0.001	<0.001	1.07	5.89	6.8		
N161703	Rock	2.42	<0.01	0.11	<0.001	<0.001	0.82	5.81	5.5		
N161704	Rock	2.63	<0.01	0.09	<0.001	<0.001	1.19	6.31	6.3		
N161705	Rock	2.81	<0.01	0.06	<0.001	<0.001	0.58	8.23	6.7		
N161706	Rock	1.87	<0.01	0.04	<0.001	0.003	8.50	4.49	9.1		
N161707	Rock	0.97	<0.01	0.01	<0.001	0.002	10.22	2.92	9.7	4.99	11.74
N161708	Rock	0.83	<0.01	0.01	<0.001	<0.001	6.93	7.11	9.3	4.53	11.67
N161709	Rock	1.19	<0.01	0.01	<0.001	<0.001	5.53	9.12	7.0		
N161710	Rock Chip	1.26	0.34	0.06	<0.001	<0.001	<0.05	0.05	1.5		
N161711	Rock	1.36	<0.01	0.01	<0.001	<0.001	0.30	31.54	1.2		
N161712	Rock	0.46	<0.01	<0.01	<0.001	<0.001	0.63	35.22	0.6		
N161713	Rock	1.15	<0.01	0.04	<0.001	<0.001	2.64	17.25	2.6		
N161714	Rock	0.51	<0.01	0.03	<0.001	<0.001	1.40	28.90	1.6		
N161715	Rock Chip	1.03	0.27	0.05	<0.001	<0.001	<0.05	0.08	1.4		
N161716	Rock	0.66	<0.01	0.05	<0.001	<0.001	1.09	26.75	0.9		
N161717	Rock	0.40	<0.01	0.04	<0.001	<0.001	2.99	32.26	2.5		
N161718	Rock	0.25	<0.01	0.03	<0.001	<0.001	3.39	30.24	2.9		
N161719	Rock	0.34	<0.01	0.05	<0.001	<0.001	3.04	26.52	3.0		
N161720	Rock	0.27	<0.01	0.04	<0.001	<0.001	2.58	28.92	3.5		
N161721	Rock	0.48	<0.01	0.06	<0.001	0.002	4.23	23.00	4.6		
N161722	Rock	0.05	<0.01	<0.01	<0.001	0.010	4.66	26.71	2.7	10.94	9.40
N161723	Rock	0.12	<0.01	<0.01	<0.001	0.010	4.84	30.40	3.9	10.75	8.04
N161724	Rock	0.10	<0.01	<0.01	<0.001	0.011	3.75	22.60	5.0	5.44	10.15
N161725	Rock	0.36	<0.01	0.03	<0.001	0.010	4.37	17.51	7.1		
N161726	Rock	0.16	<0.01	0.01	<0.001	0.023	4.77	24.58	2.6	8.47	15.57
N161728	Rock	0.07	<0.01	<0.01	<0.001	0.023	7.53	23.10	6.4	13.15	15.65
N161729	Rock	0.12	<0.01	<0.01	<0.001	0.022	12.39	18.63	5.2	9.39	19.44
N161730	Rock	1.06	0.27	0.05	<0.001	<0.001	<0.05	0.05	1.1		
N161731	Rock	0.44	<0.01	0.02	<0.001	<0.001	23.43	2.92	25.5	4.64	4.36
N161732	Rock	0.43	<0.01	0.02	<0.001	<0.001	14.24	1.20	26.0		

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001758.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161733	Rock	2.86	136.5	<0.001	0.051	>4	4.98	116	0.005	0.004	0.45	20.07	0.05	0.061	0.021	0.018	<0.01	5.28	0.010	0.002	1.74
N161734	Rock	1.77	56.2	<0.001	0.030	1.73	1.69	32	0.006	0.008	0.50	20.79	0.04	0.034	0.007	0.006	<0.01	3.61	0.012	0.001	1.47
N161735	Rock	0.12	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.04	4.11	<0.01	0.007	<0.001	<0.001	<0.01	0.96	0.115	0.002	2.17
N161736	Rock	2.25	15.9	<0.001	0.052	0.08	0.06	<2	0.003	0.001	0.91	31.90	0.03	0.010	<0.001	<0.001	<0.01	2.79	0.002	<0.001	2.03
N161737	Rock	2.35	5.7	<0.001	0.125	0.04	0.01	<2	0.004	0.002	0.70	25.70	0.01	0.004	<0.001	0.002	<0.01	1.39	0.008	0.002	1.29
N161738	Rock	2.49	7.8	<0.001	0.063	0.04	0.03	<2	0.004	0.002	0.74	26.08	0.03	0.011	<0.001	0.001	<0.01	1.84	0.009	0.002	1.42
N161739	Rock	1.86	1.6	<0.001	0.176	1.23	0.95	17	0.007	0.003	0.66	19.30	0.06	0.027	0.004	0.003	<0.01	2.69	0.060	0.003	1.41
N161740	Rock	1.60	<0.5	<0.001	0.024	0.91	0.32	10	0.011	0.005	0.20	7.64	0.14	0.013	0.001	0.002	<0.01	1.20	0.099	0.002	0.31
N161741	Rock	1.70	21.1	<0.001	0.389	0.41	0.09	7	0.005	0.001	0.49	16.35	0.02	0.009	<0.001	0.001	<0.01	1.32	0.040	<0.001	0.97
N161743	Rock	1.42	0.7	0.001	0.043	1.44	0.23	10	0.011	0.002	0.21	7.00	0.01	0.002	0.002	0.003	<0.01	0.27	0.093	0.002	0.12
N161744	Rock	1.92	<0.5	0.002	0.016	0.28	0.03	<2	0.009	0.002	0.20	7.19	<0.01	0.001	<0.001	0.001	<0.01	0.26	0.082	0.001	0.12
N161745	Rock	1.76	<0.5	0.002	0.011	0.10	0.02	<2	0.009	0.002	0.10	3.88	<0.01	0.002	<0.001	<0.001	<0.01	0.21	0.090	0.002	0.08
N161746	Rock	1.83	<0.5	0.002	0.005	<0.01	0.02	<2	0.008	<0.001	<0.01	2.49	<0.01	0.002	<0.001	<0.001	<0.01	0.22	0.097	0.002	0.02
N161747	Rock	1.99	1.6	0.002	0.005	<0.01	0.05	<2	0.006	<0.001	<0.01	1.75	<0.01	0.002	<0.001	0.001	<0.01	0.21	0.100	0.001	0.01
N161748	Rock	1.55	3.8	0.001	0.006	0.01	0.05	<2	0.008	<0.001	<0.01	2.97	0.01	0.003	<0.001	<0.001	<0.01	0.24	0.093	0.002	0.03
N161749	Rock	2.66	2.8	0.001	0.004	0.01	0.04	<2	0.006	<0.001	0.01	1.86	<0.01	0.004	<0.001	<0.001	<0.01	0.70	0.097	0.003	0.32
N161750	Rock	0.06	416.7	<0.001	1.304	<0.01	0.13	<2	0.001	0.011	0.11	10.87	<0.01	0.005	<0.001	<0.001	<0.01	2.83	0.039	0.003	1.80
N161751	Rock	2.18	3.4	0.001	0.005	0.04	0.08	<2	0.005	<0.001	0.01	1.74	<0.01	0.009	<0.001	<0.001	<0.01	0.78	0.105	0.002	0.36
N161752	Rock	1.84	3.3	<0.001	0.006	1.80	8.22	3	0.004	0.001	0.03	4.92	<0.01	0.014	0.034	0.002	<0.01	1.40	0.057	0.002	0.75
N161753	Rock	1.95	1.8	<0.001	0.010	>4	10.38	5	0.003	0.002	<0.01	3.25	<0.01	0.004	0.060	0.002	<0.01	0.24	0.033	0.003	0.10
N161754	Rock	2.13	3.2	0.001	0.006	3.90	12.77	2	0.003	0.002	0.01	3.30	<0.01	0.031	0.084	0.002	<0.01	1.02	0.046	0.006	0.86
N161755	Rock Chip	0.12	<0.5	<0.001	0.003	<0.01	0.02	<2	0.013	0.002	0.04	4.23	<0.01	0.007	<0.001	<0.001	<0.01	1.00	0.113	0.002	2.19
N161756	Rock	1.41	1.5	<0.001	0.002	2.86	9.51	<2	0.002	0.001	<0.01	1.53	<0.01	0.094	0.064	0.002	<0.01	2.91	0.022	0.003	0.07
N161757	Rock	1.08	2.5	0.001	0.003	3.56	12.05	<2	0.003	0.001	<0.01	1.54	<0.01	0.280	0.078	0.002	<0.01	1.24	0.036	0.006	0.06
N161758	Rock	2.06	1.5	<0.001	0.002	2.40	6.86	<2	0.001	<0.001	<0.01	0.55	<0.01	0.571	0.046	<0.001	<0.01	0.30	0.022	0.003	0.05
N161759	Rock	2.62	0.5	<0.001	0.002	2.47	6.31	<2	0.001	<0.001	<0.01	0.54	<0.01	0.172	0.040	0.002	<0.01	1.09	0.019	0.003	0.05
N161760	Rock	2.28	2.5	0.001	0.003	1.71	4.12	<2	0.003	0.003	<0.01	5.17	<0.01	0.038	0.022	0.001	<0.01	0.64	0.043	0.005	0.06
N161761	Rock	1.97	<0.5	<0.001	0.002	1.00	3.71	<2	0.002	0.002	<0.01	2.26	<0.01	0.112	0.019	<0.001	<0.01	4.44	0.021	0.003	0.04
N161762	Rock	2.35	1.2	<0.001	0.002	1.68	5.25	<2	0.002	0.001	<0.01	1.30	<0.01	0.093	0.029	<0.001	<0.01	0.35	0.027	0.003	0.02
N161763	Rock	2.49	0.9	<0.001	0.002	1.33	5.94	<2	0.002	0.001	<0.01	1.04	<0.01	0.046	0.028	0.002	<0.01	0.25	0.022	0.004	0.04

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Project: 13
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CERTIFICATE OF ANALYSIS WHI11001758.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N161733	Rock	0.35	<0.01	0.01	<0.001	<0.001	19.87	0.90	21.1	9.72	4.89
N161734	Rock	0.43	<0.01	0.01	<0.001	0.001	11.24	2.40	18.2		
N161735	Rock	1.00	0.26	0.05	<0.001	<0.001	<0.05	0.04	0.9		
N161736	Rock	0.65	<0.01	0.01	<0.001	<0.001	4.06	1.34	25.0		
N161737	Rock	0.78	<0.01	0.03	<0.001	<0.001	7.27	1.71	20.4		
N161738	Rock	0.45	<0.01	0.02	<0.001	<0.001	7.80	1.20	21.1		
N161739	Rock	0.69	<0.01	0.02	<0.001	<0.001	6.62	1.65	19.0		
N161740	Rock	0.80	<0.01	0.08	<0.001	<0.001	2.86	1.60	8.8		
N161741	Rock	0.15	<0.01	0.06	<0.001	<0.001	3.71	0.43	15.9		
N161743	Rock	0.69	<0.01	0.14	<0.001	<0.001	2.88	0.53	9.3		
N161744	Rock	0.34	<0.01	0.16	<0.001	<0.001	2.37	0.54	9.2		
N161745	Rock	0.63	<0.01	0.15	<0.001	<0.001	1.43	0.54	7.5		
N161746	Rock	2.42	<0.01	0.12	<0.001	<0.001	1.56	6.20	6.6		
N161747	Rock	2.30	<0.01	0.10	<0.001	<0.001	0.82	5.55	5.8		
N161748	Rock	2.17	<0.01	0.11	<0.001	<0.001	2.32	4.93	6.3		
N161749	Rock	2.63	<0.01	0.10	<0.001	<0.001	0.74	5.99	6.3		
N161750	Rock	3.34	0.14	0.24	<0.001	<0.001	4.65	0.02	5.0		
N161751	Rock	2.73	<0.01	0.07	<0.001	<0.001	0.57	6.59	6.1		
N161752	Rock	1.69	<0.01	0.04	<0.001	0.003	8.80	4.10	9.6		
N161753	Rock	1.28	<0.01	0.02	<0.001	0.002	8.82	3.01	7.3	4.19	10.72
N161754	Rock	1.16	<0.01	0.01	<0.001	0.001	8.78	7.96	12.4		
N161755	Rock Chip	1.14	0.27	0.05	<0.001	<0.001	<0.05	0.06	0.8		
N161756	Rock	0.72	<0.01	<0.01	<0.001	<0.001	4.28	11.03	4.4		
N161757	Rock	1.13	<0.01	0.01	<0.001	<0.001	6.57	7.52	6.4		
N161758	Rock	0.82	<0.01	<0.01	<0.001	<0.001	0.17	36.04	0.7		
N161759	Rock	0.59	<0.01	0.02	<0.001	<0.001	0.51	32.89	0.3		
N161760	Rock	1.31	<0.01	0.05	<0.001	<0.001	5.41	14.76	4.0		
N161761	Rock	0.52	<0.01	0.04	<0.001	<0.001	0.45	28.42	5.0		
N161762	Rock	0.70	<0.01	0.05	0.002	<0.001	1.38	30.98	1.8		
N161763	Rock	0.55	<0.01	0.04	0.002	<0.001	2.76	27.08	2.2		

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Box 1500
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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001758.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161764	Rock	2.57	<0.5	<0.001	0.002	1.47	6.76	<2	0.001	0.001	<0.01	1.05	<0.01	0.031	0.032	0.001	<0.01	0.21	0.015	0.002	0.02
N161765	Rock	2.17	1.5	<0.001	0.002	1.65	4.90	<2	0.002	0.002	<0.01	1.49	<0.01	0.048	0.021	<0.001	<0.01	0.40	0.020	0.004	0.04
N161766	Rock	2.74	<0.5	<0.001	0.001	1.80	4.64	3	0.001	0.001	<0.01	0.35	<0.01	0.037	0.020	0.001	<0.01	0.12	0.007	0.001	0.02
N161767	Rock	2.28	0.8	<0.001	0.002	3.32	4.37	18	0.002	0.002	<0.01	1.21	<0.01	0.033	0.017	0.002	<0.01	0.14	0.019	0.003	0.02
N161768	Rock	2.85	1.4	<0.001	0.002	>4	6.92	36	0.002	0.002	<0.01	1.57	<0.01	0.025	0.026	0.005	<0.01	0.25	0.011	0.003	0.03
N161769	Rock	2.97	<0.5	<0.001	0.005	>4	9.82	92	<0.001	0.001	<0.01	1.06	<0.01	0.017	0.045	0.010	<0.01	1.28	0.009	0.001	0.05
N161770	Rock Pulp	0.04	<0.5	<0.001	0.131	>4	16.87	206	0.002	0.011	0.36	11.93	0.02	0.002	0.058	0.013	<0.01	4.24	0.027	0.001	2.05
N161771	Rock	1.82	<0.5	<0.001	0.005	>4	8.45	76	<0.001	0.001	0.03	1.30	0.01	0.046	0.039	0.011	<0.01	8.15	0.005	<0.001	0.06
N161772	Rock	3.29	<0.5	<0.001	0.012	>4	8.32	107	0.001	0.002	0.05	0.96	0.02	0.051	0.035	0.013	<0.01	9.24	0.009	<0.001	0.07
N161773	Rock	2.35	<0.5	<0.001	0.008	2.22	13.82	81	<0.001	0.003	0.04	1.01	0.01	0.052	0.058	0.012	<0.01	9.72	0.005	<0.001	0.08
N161774	Rock	1.80	1.9	<0.001	0.008	2.82	11.68	96	<0.001	0.003	0.02	1.07	0.02	0.044	0.044	0.014	<0.01	8.26	0.008	0.001	0.04
N161775	Rock Chip	0.12	<0.5	<0.001	0.003	<0.01	0.02	<2	0.013	0.003	0.05	4.16	<0.01	0.008	<0.001	<0.001	<0.01	1.02	0.113	0.002	2.16
N161776	Rock	2.27	<0.5	<0.001	0.008	>4	12.04	169	<0.001	0.002	0.04	0.63	0.02	0.035	0.050	0.021	<0.01	7.33	<0.001	<0.001	0.08
N161777	Rock	2.71	<0.5	<0.001	0.009	>4	12.00	192	<0.001	0.003	0.02	1.74	0.02	0.020	0.056	0.022	<0.01	2.08	0.004	<0.001	0.05
N161778	Rock	2.34	<0.5	<0.001	0.004	>4	8.56	95	<0.001	0.002	0.06	0.90	0.01	0.058	0.034	0.015	<0.01	9.64	0.001	<0.001	0.08
N161779	Rock	2.35	0.6	<0.001	0.008	>4	9.77	133	<0.001	0.002	0.04	0.47	0.02	0.056	0.042	0.017	<0.01	9.67	0.001	<0.001	0.04
N161780	Rock	3.11	<0.5	<0.001	0.008	>4	9.68	213	<0.001	0.002	0.02	0.39	0.02	0.042	0.043	0.027	<0.01	5.50	0.004	<0.001	0.06
N161781	Rock	2.67	<0.5	<0.001	0.008	>4	8.53	227	0.002	0.002	0.08	2.11	0.02	0.057	0.041	0.041	<0.01	4.89	0.004	<0.001	0.06
N161782	Rock	3.09	0.8	<0.001	0.010	>4	1.83	>300	<0.001	<0.001	0.07	1.49	0.02	0.047	0.010	0.065	<0.01	3.79	0.002	<0.001	0.55
N161783	Rock	1.76	5.7	<0.001	0.018	>4	6.16	274	0.002	0.003	0.08	1.87	0.02	0.064	0.031	0.036	<0.01	4.55	0.023	0.002	0.25
N161784	Rock	1.68	31.5	<0.001	0.020	>4	7.96	285	0.005	0.006	0.41	12.96	0.07	0.013	0.039	0.037	<0.01	6.28	0.010	<0.001	0.68
N161785	Rock	1.96	18.0	<0.001	0.010	>4	1.12	124	0.004	0.003	0.85	24.71	0.04	0.019	0.007	0.016	<0.01	4.97	<0.001	<0.001	2.54
N161786	Rock	2.72	15.9	<0.001	0.017	>4	0.87	240	0.005	0.004	0.55	17.55	0.03	0.014	0.005	0.029	<0.01	3.80	<0.001	<0.001	1.72
N161787	Rock	3.09	47.1	<0.001	0.021	>4	1.56	173	0.008	0.006	0.44	22.49	0.08	0.028	0.008	0.024	<0.01	4.01	0.003	<0.001	1.22
N161788	Rock	2.18	54.7	<0.001	0.066	3.46	1.62	43	0.012	0.007	0.77	23.70	0.12	0.042	0.007	0.008	<0.01	8.44	0.002	<0.001	2.71
N161789	Rock	2.66	11.5	<0.001	0.026	>4	3.60	202	0.001	0.002	0.13	3.09	0.02	0.117	0.018	0.030	<0.01	6.56	0.006	<0.001	0.44
N161790	Rock Pulp	0.06	746.6	<0.001	0.400	0.83	>20	23	0.004	0.005	0.13	12.44	0.10	0.003	0.069	0.100	<0.01	1.60	0.021	0.002	0.95
N161791	Rock	2.53	14.6	<0.001	0.014	>4	3.48	150	0.002	0.002	0.28	6.89	0.02	0.089	0.018	0.019	<0.01	6.73	0.006	<0.001	1.45
N161792	Rock	2.95	11.4	<0.001	0.030	>4	0.06	133	<0.001	<0.001	0.20	5.58	<0.01	0.237	<0.001	0.014	<0.01	6.76	<0.001	<0.001	1.53
N161793	Rock	2.72	14.5	<0.001	0.055	>4	0.03	86	<0.001	<0.001	0.22	5.78	<0.01	0.474	<0.001	0.011	<0.01	8.47	0.001	<0.001	1.78

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS

WHI11001758.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N161764	Rock	0.40	<0.01	0.04	0.003	<0.001	3.76	32.38	2.4		
N161765	Rock	0.58	<0.01	0.05	<0.001	<0.001	2.63	26.28	2.8		
N161766	Rock	0.30	<0.01	0.03	0.002	<0.001	2.19	32.79	2.3		
N161767	Rock	0.55	<0.01	0.05	0.001	<0.001	3.08	28.09	3.0		
N161768	Rock	0.42	<0.01	0.05	<0.001	0.002	5.04	28.21	3.9	4.00	7.11
N161769	Rock	0.21	<0.01	0.03	<0.001	0.007	7.01	31.00	5.5	8.80	10.21
N161770	Rock Pulp	0.43	<0.01	0.16	<0.001	<0.001	19.07	0.14	14.9	12.08	18.03
N161771	Rock	0.06	<0.01	0.02	<0.001	0.009	4.21	26.78	4.0	4.21	9.06
N161772	Rock	0.11	<0.01	0.03	<0.001	0.009	3.73	22.97	5.6	5.90	8.65
N161773	Rock	0.13	<0.01	0.03	<0.001	0.013	5.03	20.52	4.2		
N161774	Rock	0.22	<0.01	0.06	<0.001	0.012	5.11	25.70	4.7		
N161775	Rock Chip	1.15	0.30	0.06	<0.001	<0.001	<0.05	0.07	1.2		
N161776	Rock	0.03	<0.01	<0.01	<0.001	0.014	5.92	28.92	4.0	7.18	12.92
N161777	Rock	0.10	<0.01	0.02	<0.001	0.013	7.94	31.74	6.2	8.90	12.70
N161778	Rock	0.03	<0.01	<0.01	<0.001	0.011	3.17	31.22	2.5	4.43	8.94
N161779	Rock	0.02	<0.01	<0.01	<0.001	0.014	4.15	28.89	1.2	6.66	9.92
N161780	Rock	0.03	<0.01	<0.01	<0.001	0.013	5.23	31.90	2.0	10.80	10.51
N161781	Rock	0.10	<0.01	<0.01	<0.001	0.014	4.36	32.18	2.2	10.13	9.11
N161782	Rock	0.04	<0.01	<0.01	<0.001	0.003	4.66	32.71	2.8	21.87	1.85
N161783	Rock	0.48	<0.01	0.02	<0.001	0.009	4.81	27.18	3.4	11.03	6.38
N161784	Rock	0.28	<0.01	0.01	<0.001	0.004	19.28	3.44	13.7	17.48	8.01
N161785	Rock	0.09	<0.01	<0.01	<0.001	<0.001	7.37	0.66	24.1	10.71	1.13
N161786	Rock	0.23	<0.01	<0.01	<0.001	<0.001	9.25	5.78	17.3	21.38	0.80
N161787	Rock	0.27	<0.01	0.01	<0.001	<0.001	25.15	4.23	20.9	14.49	1.56
N161788	Rock	0.31	<0.01	0.01	<0.001	<0.001	18.09	2.07	19.3		
N161789	Rock	0.11	<0.01	<0.01	<0.001	0.006	3.60	33.22	7.1	8.74	3.69
N161790	Rock Pulp	1.76	0.08	0.12	*	0.003	16.42	<0.01	11.2	0.72	24.54
N161791	Rock	0.10	<0.01	<0.01	<0.001	0.004	6.35	22.49	8.9	9.87	3.40
N161792	Rock	0.03	<0.01	<0.01	<0.001	<0.001	2.60	30.06	11.3	11.37	0.06
N161793	Rock	0.04	<0.01	<0.01	<0.001	<0.001	2.05	28.87	16.5	8.14	0.02

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Project: 13
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CERTIFICATE OF ANALYSIS WHI11001758.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161794	Rock	1.77	15.7	<0.001	0.034	>4	0.10	121	<0.001	<0.001	0.53	13.08	<0.01	0.349	0.001	0.014	<0.01	12.83	<0.001	<0.001	3.39
N161795	Rock Chip	0.11	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.05	4.49	<0.01	0.008	<0.001	<0.001	<0.01	1.04	0.117	0.002	2.26
N161796	Rock	0.93	12.2	<0.001	0.075	>4	0.07	68	<0.001	<0.001	0.61	15.15	<0.01	0.243	0.001	0.009	<0.01	13.13	0.003	<0.001	3.47
N161797	Rock	2.62	8.7	<0.001	0.171	>4	0.15	70	0.002	<0.001	0.80	23.87	0.02	0.112	0.002	0.010	<0.01	7.14	0.007	<0.001	3.22
N161798	Rock	2.47	23.1	<0.001	0.122	>4	0.93	54	0.002	0.001	0.69	22.14	0.01	0.135	0.005	0.008	<0.01	7.52	0.006	<0.001	2.86
N161799	Rock	2.85	54.7	<0.001	0.055	>4	8.11	236	0.003	0.002	0.40	12.85	<0.01	0.046	0.035	0.032	<0.01	5.65	0.026	0.002	1.90
N161800	Rock	1.78	27.7	<0.001	0.048	>4	1.46	116	0.004	0.002	0.64	22.58	0.02	0.030	0.007	0.016	<0.01	1.89	0.005	<0.001	0.97
N161801	Rock	1.02	22.3	<0.001	0.146	2.86	2.69	37	0.013	0.006	0.41	14.52	0.02	0.006	0.008	0.007	<0.01	0.52	0.035	0.002	0.57
N161802	Rock	1.63	8.7	<0.001	0.113	0.88	1.13	14	0.004	0.003	0.38	12.55	0.01	0.004	0.003	0.003	<0.01	0.48	0.029	0.003	0.54
N161803	Rock	2.56	8.2	<0.001	0.074	0.75	0.78	9	0.006	0.003	0.68	23.06	0.01	0.003	0.003	0.003	<0.01	0.38	0.026	<0.001	1.05
N161804	Rock	2.39	11.1	<0.001	0.108	2.58	0.25	18	0.016	0.005	0.53	19.31	0.02	0.003	0.002	0.006	<0.01	0.34	0.054	0.001	0.88
N161805	Rock	2.00	9.0	<0.001	0.023	1.93	0.66	14	0.009	0.004	0.20	7.35	<0.01	0.014	0.002	0.004	<0.01	1.32	0.107	0.001	0.35
N161806	Rock	1.90	12.2	0.002	0.033	0.32	0.30	6	0.014	0.005	0.13	7.15	0.01	0.004	0.002	0.003	<0.01	0.30	0.115	0.001	0.15
N161807	Rock	1.66	23.3	0.002	0.017	0.31	0.03	7	0.013	0.004	0.12	6.99	0.01	0.003	<0.001	0.003	<0.01	0.27	0.097	0.001	0.14
N161808	Rock	1.56	32.1	0.001	0.032	0.15	0.88	5	0.012	0.004	0.31	12.22	0.03	0.007	0.004	0.003	<0.01	0.60	0.093	0.002	0.25
N161809	Rock	1.59	69.8	0.002	0.012	0.04	0.01	2	0.010	0.002	0.04	5.35	0.03	0.002	0.001	0.002	<0.01	0.22	0.099	0.001	0.03
N161810	Rock Chip	0.12	0.9	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.05	4.25	<0.01	0.007	<0.001	<0.001	<0.01	0.97	0.117	0.002	2.24
N161811	Rock	2.13	2.2	0.002	0.028	0.05	0.02	4	0.014	0.003	0.12	7.68	0.10	0.009	0.002	0.002	<0.01	0.33	0.161	0.002	0.16
N161812	Rock	2.24	5.3	0.001	0.028	0.02	0.03	3	0.008	0.004	0.07	3.96	0.01	0.008	<0.001	0.002	<0.01	1.05	0.085	0.002	0.29
N161813	Rock	2.45	9.5	<0.001	0.013	0.01	0.06	3	0.009	0.003	0.07	5.38	0.01	0.009	<0.001	0.002	<0.01	1.40	0.084	0.002	0.35
N161814	Rock	1.31	4.8	<0.001	0.007	<0.01	0.10	<2	0.008	0.002	0.13	5.10	<0.01	0.010	<0.001	<0.001	<0.01	1.74	0.062	0.002	0.48
N161815	Rock	1.89	3.9	0.002	0.005	<0.01	<0.01	<2	0.006	<0.001	<0.01	2.18	<0.01	0.004	<0.001	0.002	<0.01	0.30	0.136	0.003	0.02
N161816	Rock	1.37	2.7	0.002	0.004	<0.01	0.02	<2	0.007	<0.001	<0.01	1.92	<0.01	0.005	<0.001	0.001	<0.01	0.34	0.143	0.003	0.03
N161817	Rock	1.92	0.8	0.002	0.004	<0.01	<0.01	<2	0.007	<0.001	0.01	2.48	<0.01	0.015	<0.001	0.001	<0.01	0.81	0.109	0.003	0.35
N161818	Rock	2.13	2.7	0.002	0.004	<0.01	0.05	<2	0.007	<0.001	0.01	2.37	<0.01	0.006	<0.001	0.001	<0.01	0.35	0.103	0.003	0.08
N161819	Rock	1.98	3.2	0.002	0.004	<0.01	0.07	<2	0.007	<0.001	<0.01	1.68	<0.01	0.003	<0.001	<0.001	<0.01	0.23	0.108	0.004	<0.01
N161820	Rock Pulp	0.06	122.6	<0.001	0.091	<0.01	0.53	2	0.002	0.004	0.12	8.10	<0.01	0.007	0.002	0.002	<0.01	3.65	0.052	0.002	2.12
N161821	Rock	1.69	4.5	0.001	0.004	<0.01	0.05	<2	0.006	<0.001	<0.01	1.88	<0.01	0.003	<0.001	0.001	<0.01	0.23	0.113	0.006	<0.01
N161823	Rock	1.24	4.4	0.001	0.005	0.08	0.03	<2	0.006	<0.001	<0.01	1.88	<0.01	0.007	<0.001	0.002	<0.01	0.34	0.129	0.008	0.04
N161824	Rock	1.68	3.4	<0.001	0.007	3.47	11.09	5	0.003	<0.001	<0.01	2.22	<0.01	0.003	0.069	0.006	<0.01	0.10	0.036	0.004	0.01

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS

WHI11001758.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N161794	Rock	0.05	<0.01	<0.01	<0.001	<0.001	8.12	3.92	20.0	12.06	0.09
N161795	Rock Chip	1.16	0.30	0.06	<0.001	<0.001	<0.05	0.05	1.3		
N161796	Rock	0.06	<0.01	<0.01	<0.001	<0.001	10.13	0.75	19.0	6.79	0.06
N161797	Rock	0.12	<0.01	<0.01	<0.001	<0.001	9.97	0.42	22.6	6.62	0.14
N161798	Rock	0.14	<0.01	<0.01	<0.001	<0.001	10.77	0.88	22.1	5.11	0.98
N161799	Rock	0.64	<0.01	0.01	<0.001	0.002	12.26	1.62	14.5	21.99	8.38
N161800	Rock	0.26	<0.01	<0.01	<0.001	<0.001	12.40	0.48	22.4	10.81	1.48
N161801	Rock	1.23	<0.01	0.05	<0.001	<0.001	3.33	2.62	13.4		
N161802	Rock	1.02	<0.01	0.03	<0.001	<0.001	1.62	2.29	10.9		
N161803	Rock	0.55	<0.01	0.02	<0.001	<0.001	2.09	1.21	20.1		
N161804	Rock	0.89	<0.01	0.06	<0.001	<0.001	4.33	1.66	18.0		
N161805	Rock	0.69	<0.01	0.07	<0.001	<0.001	1.98	1.21	10.1		
N161806	Rock	0.72	<0.01	0.09	<0.001	<0.001	3.12	1.14	10.2		
N161807	Rock	0.86	<0.01	0.12	<0.001	<0.001	3.02	1.69	10.3		
N161808	Rock	0.54	<0.01	0.09	<0.001	<0.001	6.17	0.50	12.2		
N161809	Rock	0.59	<0.01	0.12	<0.001	<0.001	4.35	0.65	8.0		
N161810	Rock Chip	1.02	0.27	0.05	<0.001	<0.001	<0.05	0.04	1.5		
N161811	Rock	0.64	<0.01	0.12	<0.001	<0.001	3.97	0.76	10.2		
N161812	Rock	0.34	<0.01	0.13	<0.001	<0.001	1.92	0.70	7.1		
N161813	Rock	0.51	<0.01	0.13	<0.001	<0.001	3.52	0.98	7.2		
N161814	Rock	0.56	<0.01	0.11	<0.001	<0.001	0.76	0.58	7.3		
N161815	Rock	2.93	<0.01	0.10	<0.001	<0.001	0.79	7.40	5.6		
N161816	Rock	3.16	<0.01	0.09	<0.001	<0.001	0.52	7.95	5.9		
N161817	Rock	2.66	<0.01	0.09	<0.001	<0.001	1.21	6.74	6.9		
N161818	Rock	2.81	<0.01	0.08	<0.001	<0.001	0.91	7.61	6.8		
N161819	Rock	3.01	<0.01	0.07	<0.001	<0.001	0.42	8.19	5.8		
N161820	Rock Pulp	3.48	0.17	0.20	<0.001	<0.001	1.57	0.03	5.7		
N161821	Rock	3.72	<0.01	0.07	<0.001	<0.001	0.32	9.57	5.8		
N161823	Rock	3.66	<0.01	0.07	<0.001	<0.001	0.36	9.27	5.2		
N161824	Rock	1.15	<0.01	0.04	<0.001	0.001	7.83	2.96	6.6		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001758.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161825	Rock	1.40	2.6	0.001	0.007	>4	11.01	7	0.004	0.001	<0.01	1.58	<0.01	0.005	0.079	0.006	<0.01	0.15	0.066	0.008	<0.01
N161826	Rock	2.11	2.8	0.001	0.006	3.95	10.40	4	0.006	0.001	0.01	1.84	<0.01	0.006	0.069	0.006	<0.01	0.27	0.099	0.009	0.03
N161827	Rock	1.22	2.7	0.002	0.005	1.65	12.52	<2	0.008	<0.001	0.02	1.56	<0.01	0.012	0.028	0.005	<0.01	0.21	0.104	0.007	<0.01
N161829	Rock	0.90	2.8	0.002	0.003	0.53	3.61	<2	0.011	0.001	0.02	2.57	<0.01	0.011	0.007	0.002	<0.01	0.34	0.157	0.012	<0.01
N161830	Rock Chip	0.11	<0.5	<0.001	0.003	<0.01	0.03	<2	0.013	0.003	0.05	4.19	<0.01	0.009	<0.001	<0.001	<0.01	1.05	0.116	0.003	2.19
N161831	Rock	0.80	1.8	0.002	0.003	0.52	10.18	<2	0.006	<0.001	0.02	3.98	0.01	0.003	0.015	0.004	<0.01	0.11	0.053	0.005	<0.01
N161833	Rock	1.83	0.9	<0.001	0.003	1.57	7.81	<2	0.002	<0.001	<0.01	0.49	<0.01	0.003	0.013	0.003	<0.01	0.06	0.033	0.003	<0.01
N161834	Rock	1.80	<0.5	<0.001	0.003	1.40	7.20	<2	0.002	<0.001	<0.01	0.46	<0.01	0.002	0.011	0.002	<0.01	0.05	0.029	0.003	<0.01
N161835	Rock	1.47	2.6	0.001	0.003	0.97	7.41	<2	0.007	<0.001	<0.01	2.44	<0.01	0.006	0.013	0.002	<0.01	0.11	0.065	0.005	<0.01
N161836	Rock	2.02	1.5	0.001	0.003	1.51	9.66	<2	0.003	<0.001	0.02	2.82	<0.01	0.004	0.013	0.004	<0.01	0.08	0.042	0.003	<0.01
N161837	Rock	1.76	2.5	0.001	0.003	0.47	4.28	<2	0.006	0.001	0.07	2.83	<0.01	0.012	0.004	0.002	<0.01	0.20	0.109	0.007	<0.01
N161838	Rock	2.06	2.0	0.001	0.003	2.17	8.06	<2	0.003	<0.001	0.02	1.35	<0.01	0.003	0.011	0.003	<0.01	0.04	0.025	0.003	<0.01
N161839	Rock	0.67	1.0	<0.001	0.003	1.62	8.41	<2	0.003	<0.001	<0.01	0.77	<0.01	0.004	0.015	0.003	<0.01	0.05	0.026	0.003	<0.01
N161840	Rock Pulp	0.04	4.6	<0.001	0.130	>4	16.91	202	0.002	0.010	0.36	11.97	0.02	0.003	0.058	0.016	<0.01	4.18	0.030	0.001	2.02
N161842	Rock	0.87	1.5	<0.001	0.002	0.32	8.20	<2	0.003	<0.001	0.02	0.83	<0.01	0.005	0.010	0.003	<0.01	0.07	0.038	0.004	<0.01
N161843	Rock	1.88	2.0	0.001	0.003	0.46	6.22	<2	0.008	<0.001	<0.01	2.43	<0.01	0.011	0.008	0.003	<0.01	0.16	0.091	0.007	<0.01
N161844	Rock	1.98	0.7	0.001	0.003	1.29	6.90	<2	0.004	<0.001	<0.01	0.88	<0.01	0.008	0.013	0.002	<0.01	0.08	0.054	0.004	<0.01
N161845	Rock	0.88	1.0	<0.001	0.003	1.44	6.43	<2	0.005	<0.001	<0.01	0.79	<0.01	0.008	0.012	0.003	<0.01	0.08	0.053	0.005	<0.01
N161846	Rock	0.78	1.8	0.001	0.003	1.71	5.81	<2	0.006	<0.001	<0.01	1.33	<0.01	0.002	0.011	0.002	<0.01	0.10	0.053	0.006	<0.01
N161847	Rock	0.86	0.7	<0.001	0.003	1.74	6.03	<2	0.003	<0.001	<0.01	0.86	<0.01	0.002	0.016	0.003	<0.01	0.05	0.029	0.005	<0.01
N161848	Rock	2.40	1.4	<0.001	0.002	1.46	5.65	<2	0.002	<0.001	<0.01	0.63	<0.01	0.003	0.019	0.002	<0.01	0.05	0.022	0.003	<0.01
N161849	Rock	2.42	0.7	<0.001	0.001	1.50	5.09	<2	<0.001	<0.001	<0.01	0.35	<0.01	0.003	0.019	0.002	<0.01	0.02	0.008	0.001	<0.01

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001758.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N161825	Rock	1.78	<0.01	0.07	<0.001	0.001	7.18	4.62	6.5	5.85	11.67
N161826	Rock	2.71	<0.01	0.06	<0.001	<0.001	6.27	7.36	7.2		
N161827	Rock	1.06	<0.01	0.03	<0.001	<0.001	8.02	8.26	7.2		
N161829	Rock	1.27	<0.01	0.03	<0.001	<0.001	3.74	7.16	6.7		
N161830	Rock Chip	1.13	0.30	0.06	<0.001	<0.001	<0.05	0.12	1.2		
N161831	Rock	0.55	<0.01	0.04	<0.001	<0.001	8.88	19.63	7.4		
N161833	Rock	0.27	<0.01	0.02	<0.001	<0.001	4.57	26.76	3.6		
N161834	Rock	0.20	<0.01	0.02	<0.001	<0.001	3.60	30.34	3.7		
N161835	Rock	0.58	<0.01	0.03	<0.001	<0.001	6.37	19.20	6.1		
N161836	Rock	0.42	<0.01	0.05	<0.001	<0.001	7.02	26.68	5.8		
N161837	Rock	1.99	<0.01	0.15	<0.001	<0.001	3.18	13.80	6.5		
N161838	Rock	0.19	<0.01	0.02	<0.001	<0.001	4.86	29.96	4.3		
N161839	Rock	0.23	<0.01	0.03	<0.001	<0.001	4.88	26.62	3.8		
N161840	Rock Pulp	0.38	<0.01	0.14	<0.001	<0.001	19.34	0.13	13.3	7.07	12.87
N161842	Rock	0.44	<0.01	0.06	<0.001	<0.001	4.68	28.62	3.2		
N161843	Rock	1.20	<0.01	0.15	<0.001	<0.001	5.50	16.88	5.9		
N161844	Rock	0.43	<0.01	0.05	<0.001	<0.001	4.51	25.86	5.1		
N161845	Rock	0.41	<0.01	0.03	<0.001	<0.001	4.21	22.96	4.8		
N161846	Rock	0.22	<0.01	<0.01	<0.001	<0.001	4.62	20.01	5.3		
N161847	Rock	0.15	<0.01	<0.01	<0.001	<0.001	4.23	24.30	4.5		
N161848	Rock	0.11	<0.01	<0.01	<0.001	<0.001	3.67	31.73	4.0		
N161849	Rock	0.06	<0.01	<0.01	<0.001	<0.001	3.12	37.57	3.4		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
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Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
N161708	Rock	1.37	4.1	<0.001	0.003	>4	11.76	3	0.002	0.002	0.01	1.79	<0.01	0.065	0.080	0.004	<0.01	1.70	0.023	0.004	0.05
REP N161708	QC			<0.001	0.003	>4	11.74	3	0.002	0.002	0.01	1.80	<0.01	0.068	0.080	0.004	<0.01	1.69	0.024	0.004	0.05
N161721	Rock	2.43	3.4	<0.001	0.003	2.27	5.42	28	0.003	0.002	0.01	1.65	<0.01	0.010	0.021	0.004	<0.01	0.92	0.019	0.003	0.01
REP N161721	QC		2.2																		
N161724	Rock	2.55	1.8	<0.001	0.003	>4	10.03	99	<0.001	0.001	0.06	1.60	<0.01	0.060	0.042	0.014	<0.01	9.37	0.006	<0.001	0.39
REP N161724	QC																				
N161734	Rock	1.77	56.2	<0.001	0.030	1.73	1.69	32	0.006	0.008	0.50	20.79	0.04	0.034	0.007	0.006	<0.01	3.61	0.012	0.001	1.47
REP N161734	QC																				
N161741	Rock	1.70	21.1	<0.001	0.389	0.41	0.09	7	0.005	0.001	0.49	16.35	0.02	0.009	<0.001	0.001	<0.01	1.32	0.040	<0.001	0.97
REP N161741	QC																				
N161757	Rock	1.08	2.5	0.001	0.003	3.56	12.05	<2	0.003	0.001	<0.01	1.54	<0.01	0.280	0.078	0.002	<0.01	1.24	0.036	0.006	0.06
REP N161757	QC																				
N161761	Rock	1.97	<0.5	<0.001	0.002	1.00	3.71	<2	0.002	0.002	<0.01	2.26	<0.01	0.112	0.019	<0.001	<0.01	4.44	0.021	0.003	0.04
REP N161761	QC			<0.001	0.002	1.01	3.78	<2	0.002	0.002	<0.01	2.28	<0.01	0.114	0.020	0.001	<0.01	4.60	0.021	0.003	0.04
N161768	Rock	2.85	1.4	<0.001	0.002	>4	6.92	36	0.002	0.002	<0.01	1.57	<0.01	0.025	0.026	0.005	<0.01	0.25	0.011	0.003	0.03
REP N161768	QC		1.7																		
N161774	Rock	1.80	1.9	<0.001	0.008	2.82	11.68	96	<0.001	0.003	0.02	1.07	0.02	0.044	0.044	0.014	<0.01	8.26	0.008	0.001	0.04
REP N161774	QC																				
N161784	Rock	1.68	31.5	<0.001	0.020	>4	7.96	285	0.005	0.006	0.41	12.96	0.07	0.013	0.039	0.037	<0.01	6.28	0.010	<0.001	0.68
REP N161784	QC																				
N161799	Rock	2.85	54.7	<0.001	0.055	>4	8.11	236	0.003	0.002	0.40	12.85	<0.01	0.046	0.035	0.032	<0.01	5.65	0.026	0.002	1.90
REP N161799	QC																				
N161805	Rock	2.00	9.0	<0.001	0.023	1.93	0.66	14	0.009	0.004	0.20	7.35	<0.01	0.014	0.002	0.004	<0.01	1.32	0.107	0.001	0.35
REP N161805	QC		7.6	0.001	0.023	1.90	0.65	13	0.009	0.003	0.19	7.29	<0.01	0.014	0.003	0.004	<0.01	1.29	0.107	<0.001	0.35
N161833	Rock	1.83	0.9	<0.001	0.003	1.57	7.81	<2	0.002	<0.001	<0.01	0.49	<0.01	0.003	0.013	0.003	<0.01	0.06	0.033	0.003	<0.01
REP N161833	QC																				
N161836	Rock	2.02	1.5	0.001	0.003	1.51	9.66	<2	0.003	<0.001	0.02	2.82	<0.01	0.004	0.013	0.004	<0.01	0.08	0.042	0.003	<0.01
REP N161836	QC																				

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Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
Pulp Duplicates											
N161708	Rock	0.83	<0.01	0.01	<0.001	<0.001	6.93	7.11	9.3	4.53	11.67
REP N161708	QC	0.82	<0.01	0.01	<0.001	<0.001	6.93				
N161721	Rock	0.48	<0.01	0.06	<0.001	0.002	4.23	23.00	4.6		
REP N161721	QC										
N161724	Rock	0.10	<0.01	<0.01	<0.001	0.011	3.75	22.60	5.0	5.44	10.15
REP N161724	QC									5.17	9.98
N161734	Rock	0.43	<0.01	0.01	<0.001	0.001	11.24	2.40	18.2		
REP N161734	QC							2.41			
N161741	Rock	0.15	<0.01	0.06	<0.001	<0.001	3.71	0.43	15.9		
REP N161741	QC								15.5		
N161757	Rock	1.13	<0.01	0.01	<0.001	<0.001	6.57	7.52	6.4		
REP N161757	QC							7.57			
N161761	Rock	0.52	<0.01	0.04	<0.001	<0.001	0.45	28.42	5.0		
REP N161761	QC	0.52	<0.01	0.04	<0.001	<0.001	0.45				
N161768	Rock	0.42	<0.01	0.05	<0.001	0.002	5.04	28.21	3.9	4.00	7.11
REP N161768	QC										
N161774	Rock	0.22	<0.01	0.06	<0.001	0.012	5.11	25.70	4.7		
REP N161774	QC								4.7		
N161784	Rock	0.28	<0.01	0.01	<0.001	0.004	19.28	3.44	13.7	17.48	8.01
REP N161784	QC									17.13	7.97
N161799	Rock	0.64	<0.01	0.01	<0.001	0.002	12.26	1.62	14.5	21.99	8.38
REP N161799	QC							1.63			
N161805	Rock	0.69	<0.01	0.07	<0.001	<0.001	1.98	1.21	10.1		
REP N161805	QC	0.69	<0.01	0.07	<0.001	<0.001	1.94				
N161833	Rock	0.27	<0.01	0.02	<0.001	<0.001	4.57	26.76	3.6		
REP N161833	QC								3.8		
N161836	Rock	0.42	<0.01	0.05	<0.001	<0.001	7.02	26.68	5.8		
REP N161836	QC							26.83			

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161838	Rock	2.06	2.0	0.001	0.003	2.17	8.06	<2	0.003	<0.001	0.02	1.35	<0.01	0.003	0.011	0.003	<0.01	0.04	0.025	0.003	<0.01
REP N161838	QC		0.9																		
N161846	Rock	0.78	1.8	0.001	0.003	1.71	5.81	<2	0.006	<0.001	<0.01	1.33	<0.01	0.002	0.011	0.002	<0.01	0.10	0.053	0.006	<0.01
REP N161846	QC			0.001	0.003	1.71	5.72	<2	0.006	<0.001	<0.01	1.30	<0.01	0.002	0.011	0.003	<0.01	0.10	0.052	0.006	<0.01
N161848	Rock	2.40	1.4	<0.001	0.002	1.46	5.65	<2	0.002	<0.001	<0.01	0.63	<0.01	0.003	0.019	0.002	<0.01	0.05	0.022	0.003	<0.01
REP N161848	QC																				
Reference Materials																					
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		205.9																		
STD CDN-PGMS-19	Standard		254.3																		
STD CDN-PGMS-19	Standard		197.4																		
STD CDN-PGMS-19	Standard		216.1																		
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
N161838	Rock	0.19	<0.01	0.02	<0.001	<0.001	4.86	29.96	4.3		
REP N161838	QC										
N161846	Rock	0.22	<0.01	<0.01	<0.001	<0.001	4.62	20.01	5.3		
REP N161846	QC	0.20	<0.01	<0.01	<0.001	<0.001	4.57				
N161848	Rock	0.11	<0.01	<0.01	<0.001	<0.001	3.67	31.73	4.0		
REP N161848	QC								3.8		
Reference Materials											
STD CCU-1C	Standard									0.34	3.97
STD CCU-1C	Standard									0.43	4.09
STD CCU-1C	Standard									0.36	4.13
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CZN-3	Standard									0.11	48.11
STD CZN-3	Standard									0.06	52.26
STD CZN-3	Standard									0.14	51.83
STD DOLOMITE-2	Standard								46.0		
STD DOLOMITE-2	Standard								44.7		
STD DOLOMITE-2	Standard								43.8		
STD DOLOMITE-2	Standard								43.8		
STD DOLOMITE-2	Standard								45.3		
STD GBM997-6	Standard									24.61	15.11
STD GBM997-6	Standard									22.15	15.97
STD GBM997-6	Standard									23.80	15.61
STD MICA-MG(D)	Standard							0.42			
STD MICA-MG(D)	Standard							0.42			
STD MICA-MG(D)	Standard							0.43			
STD MICA-MG(D)	Standard							0.43			

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Project: 13
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QUALITY CONTROL REPORT WHI11001758.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD OREAS153AR	Standard			0.018	0.703	<0.01	<0.01	2	<0.001	<0.001	0.02	3.22	<0.01	0.002	<0.001	<0.001	<0.01	0.96	0.047	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.021	1.80	2.95	36	0.002	0.002	0.18	5.50	<0.01	0.002	0.008	0.005	<0.01	5.32	0.051	0.001	2.84
STD OREAS153AR	Standard			0.018	0.715	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.22	<0.01	0.002	<0.001	0.001	<0.01	0.98	0.047	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.021	1.83	2.88	33	0.002	0.002	0.18	5.39	<0.01	0.002	0.009	0.005	<0.01	4.96	0.051	0.002	2.88
STD OREAS153AR	Standard			0.018	0.722	<0.01	0.01	<2	0.001	0.001	0.03	3.31	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.048	0.001	1.68
STD OREAS131B-A	Standard			<0.001	0.020	1.76	3.02	33	0.002	0.002	0.18	5.58	<0.01	0.002	0.009	0.005	<0.01	5.27	0.051	0.001	2.91
STD OREAS153AR	Standard			0.018	0.708	<0.01	<0.01	<2	0.001	<0.001	0.02	3.25	<0.01	0.002	<0.001	0.001	<0.01	0.97	0.048	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.021	1.80	3.01	33	0.002	0.002	0.18	5.63	<0.01	0.002	0.009	0.006	<0.01	5.39	0.050	0.001	2.89
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD DOLOMITE-2 Expected																					
STD CDN-PGMS-19			230																		
STD MICA-MG(D) Expected																					
STD SO-18 Expected																					
STD CZN-3 Expected																					
STD CCU-1C Expected																					
STD GBM997-6 Expected																					
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD OREAS153AR	Standard	2.74	0.21	0.65	<0.001	<0.001	1.23				
STD OREAS131B-A	Standard	1.05	0.01	0.74	<0.001	<0.001	5.03				
STD OREAS153AR	Standard	2.81	0.18	0.64	<0.001	<0.001	1.24				
STD OREAS131B-A	Standard	1.11	0.01	0.72	<0.001	<0.001	4.87				
STD OREAS153AR	Standard	2.80	0.23	0.67	<0.001	<0.001	1.26				
STD OREAS131B-A	Standard	1.02	0.01	0.73	<0.001	<0.001	5.05				
STD OREAS153AR	Standard	2.59	0.20	0.65	<0.001	<0.001	1.24				
STD OREAS131B-A	Standard	0.99	0.01	0.73	<0.001	<0.001	5.09				
STD PTC-1A	Standard									0.06	0.10
STD PTC-1A	Standard									0.08	0.09
STD PTC-1A	Standard									0.07	0.12
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.06			
STD SO-18	Standard							0.06			
STD OREAS153AR		2.425	0.142	0.6138			1.285				
STD OREAS131B-A		0.969	0.0112	0.7			5.01				
STD DOLOMITE-2 Expected									46		
STD CDN-PGMS-19											
STD MICA-MG(D) Expected								0.4			
STD SO-18 Expected								0.0515			
STD CZN-3 Expected										0.113	49.75
STD CCU-1C Expected										0.34	3.99
STD GBM997-6 Expected										23.75	15.83
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank		1.7	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.44	<0.01	0.008	<0.001	<0.001	<0.01	0.62	0.074	<0.001	0.55
G1	Prep Blank		0.8	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.05	<0.01	0.009	<0.001	<0.001	<0.01	0.64	0.074	0.001	0.56

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001758.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
BLK	Blank									<0.01	<0.01
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank									<0.01	<0.01
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank									<0.01	<0.01
Prep Wash											
G1	Prep Blank	1.20	0.17	0.56	<0.001	<0.001	0.07	0.11	1.2		
G1	Prep Blank	1.33	0.20	0.61	<0.001	<0.001	<0.05	0.10	1.1		

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1020 Cordova St. East Vancouver BC V6A 4A3 Canada

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Vancouver
Received: February 07, 2012
Report Date: February 13, 2012
Page: 1 of 3

CERTIFICATE OF ANALYSIS WHI11001758R.1

CLIENT JOB INFORMATION

Project: 13
Shipment ID: FLIN 287
P.O. Number
Number of Samples: 41

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
7AR.1	40	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Project: 13
Report Date: February 13, 2012

CERTIFICATE OF ANALYSIS WHI11001758R.1

		Method	7AR.1	7AR.1
		Analyte	Pb	Zn
		Unit	%	%
		MDL	0.01	0.01
N161707	Rock		4.55	12.70
N161708	Rock		4.13	12.42
N161722	Rock		10.44	9.92
N161723	Rock		9.98	8.34
N161724	Rock		4.95	10.69
N161726	Rock		8.17	16.55
N161728	Rock		12.54	16.83
N161729	Rock		8.47	19.73
N161731	Rock		4.27	4.69
N161733	Rock		9.64	5.23
N161753	Rock		4.32	10.98
N161768	Rock		4.05	7.41
N161769	Rock		8.40	9.89
N161770	Rock Pulp		13.10	18.55
N161771	Rock		4.10	9.25
N161772	Rock		5.74	8.85
N161776	Rock		6.82	12.50
N161777	Rock		8.77	12.35
N161778	Rock		4.35	8.80
N161779	Rock		7.18	10.25
N161780	Rock		11.08	10.14
N161781	Rock		11.14	9.28
N161782	Rock		22.43	1.80
N161783	Rock		11.86	6.49
N161784	Rock		18.75	8.35
N161785	Rock		12.11	1.18
N161786	Rock		23.24	0.91
N161787	Rock		16.08	1.61
N161789	Rock Pulp		9.90	3.84
N161790	Rock		0.77	25.69

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: February 13, 2012

CERTIFICATE OF ANALYSIS WHI11001758R.1

	Method	7AR.1	7AR.1
	Analyte	Pb	Zn
	Unit	%	%
	MDL	0.01	0.01
N161791	Rock	10.68	3.57
N161792	Rock	12.39	0.05
N161793	Rock	8.16	<0.01
N161794	Rock	12.54	0.08
N161796	Rock	7.40	0.08
N161797	Rock	7.27	0.17
N161798	Rock	5.63	0.99
N161799	Rock	23.10	8.32
N161800	Rock	11.94	1.44
N161825	Rock	6.64	11.55
N161840	Rock Pulp	I.S.	I.S.

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Project: 13
Report Date: February 13, 2012

QUALITY CONTROL REPORT WHI11001758R.1

		Method	7AR.1	7AR.1
		Analyte	Pb	Zn
		Unit	%	%
		MDL	0.01	0.01
Pulp Duplicates				
N161786	Rock		23.24	0.91
REP N161786	QC		22.95	0.89
N161797	Rock		7.27	0.17
REP N161797	QC		7.19	0.24
Reference Materials				
STD CCU-1C	Standard		0.35	4.24
STD CCU-1C	Standard		0.43	4.11
STD CZN-3	Standard		0.15	50.54
STD CZN-3	Standard		0.14	51.27
STD GBM997-6	Standard		22.87	16.08
STD GBM997-6	Standard		23.74	15.90
STD PTC-1A	Standard		0.07	0.12
STD PTC-1A	Standard		0.08	0.14
STD CZN-3 Expected			0.113	49.75
STD CCU-1C Expected			0.34	3.99
STD GBM997-6 Expected			23.75	15.83
BLK	Blank		<0.01	<0.01
BLK	Blank		<0.01	<0.01

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Vancouver
Received: October 18, 2011
Report Date: November 23, 2011
Page: 1 of 7

CERTIFICATE OF ANALYSIS WHI11001759.1

CLIENT JOB INFORMATION

Project:	13
Shipment ID:	FLIN 287
P.O. Number	
Number of Samples:	170

SAMPLE DISPOSAL

RTRN-PLP	Return
RTRN-RJT	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	152	Crush, split and pulverize 250 g rock to 200 mesh			WHI
P200	9	Pulverize to 85% - 200 mesh			VAN
3A01	169	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	170	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	170	X-Ray fluorescence / Fusion		Completed	VAN
2A05	170	Loss on Ignition at 1000 Deg. C.		Completed	VAN
2A05	1	Loss on Ignition @ 1000 Deg. C.		Completed	VAN
7AR.1	13	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161850	Rock Chip	0.14	0.9	<0.001	0.004	<0.01	<0.01	<2	0.014	0.003	0.05	4.54	<0.01	0.007	<0.001	<0.001	<0.01	0.99	0.116	0.003	2.46
N161851	Rock	1.83	1.2	<0.001	<0.001	1.51	5.22	<2	<0.001	<0.001	<0.01	0.33	<0.01	0.003	0.022	<0.001	<0.01	<0.01	0.003	0.002	<0.01
N161852	Rock	1.73	1.8	<0.001	0.001	1.59	5.30	<2	<0.001	<0.001	<0.01	0.32	<0.01	0.003	0.023	<0.001	<0.01	<0.01	0.002	0.002	<0.01
N161853	Rock	1.49	3.1	<0.001	0.001	1.24	4.90	<2	0.002	0.002	<0.01	0.68	<0.01	0.004	0.019	<0.001	<0.01	0.02	0.012	0.004	<0.01
N161854	Rock	1.29	2.1	<0.001	<0.001	1.16	5.70	<2	<0.001	<0.001	<0.01	0.76	<0.01	0.003	0.023	<0.001	<0.01	<0.01	<0.001	0.001	<0.01
N161855	Rock	0.99	1.9	<0.001	<0.001	1.28	5.68	<2	<0.001	<0.001	<0.01	0.15	<0.01	0.002	0.021	<0.001	<0.01	<0.01	0.001	0.001	<0.01
N161856	Rock	1.43	2.8	<0.001	0.002	1.68	5.52	<2	0.001	<0.001	<0.01	0.33	<0.01	0.003	0.021	<0.001	<0.01	<0.01	0.004	0.002	<0.01
N161857	Rock	1.05	1.1	<0.001	<0.001	2.19	4.90	<2	<0.001	<0.001	<0.01	0.11	<0.01	0.003	0.020	<0.001	<0.01	<0.01	<0.001	0.002	<0.01
N161858	Rock	1.64	1.3	<0.001	<0.001	1.81	4.88	<2	<0.001	<0.001	<0.01	0.14	<0.01	0.003	0.019	<0.001	<0.01	<0.01	<0.001	0.001	<0.01
N161859	Rock	1.85	1.3	<0.001	<0.001	2.02	5.12	<2	<0.001	<0.001	<0.01	0.21	<0.01	0.003	0.018	<0.001	<0.01	<0.01	0.001	0.002	<0.01
N161860	Rock Pulp	0.09	412.6	<0.001	1.315	<0.01	0.14	3	0.001	0.011	0.12	11.38	<0.01	0.005	<0.001	<0.001	<0.01	2.92	0.041	0.002	1.86
N161861	Rock	0.81	3.3	<0.001	<0.001	3.68	3.61	<2	0.002	0.002	<0.01	0.55	<0.01	0.004	0.014	<0.001	<0.01	0.02	0.011	0.004	<0.01
N161862	Rock	1.56	1.1	<0.001	<0.001	1.00	4.59	<2	<0.001	<0.001	<0.01	0.20	<0.01	0.003	0.016	<0.001	<0.01	0.01	0.005	0.002	<0.01
N161864	Rock	1.03	10.8	0.002	0.005	3.45	5.36	16	0.009	0.003	0.03	2.09	0.02	0.017	0.018	<0.001	<0.01	0.21	0.106	0.011	<0.01
N161865	Rock	0.90	17.8	0.002	0.010	>4	4.03	23	0.009	0.002	0.03	3.44	0.02	0.021	0.015	0.002	<0.01	0.21	0.108	0.013	<0.01
N161866	Rock	1.13	11.4	0.001	0.004	0.02	0.04	<2	0.004	<0.001	0.02	2.43	<0.01	0.011	<0.001	<0.001	<0.01	0.12	0.059	0.007	<0.01
N161867	Rock	1.47	14.5	0.002	0.004	0.08	0.08	<2	0.007	0.002	0.01	3.62	<0.01	0.016	<0.001	0.001	<0.01	0.26	0.119	0.008	<0.01
N161868	Rock	1.50	46.4	0.002	0.009	0.06	0.04	3	0.009	<0.001	0.01	6.18	0.01	0.015	<0.001	0.004	<0.01	0.24	0.109	0.007	0.01
N161870	Rock Chip	0.14	1.0	<0.001	0.003	<0.01	<0.01	<2	0.013	0.002	0.04	4.16	<0.01	0.006	<0.001	<0.001	<0.01	0.92	0.116	0.002	2.25
N161871	Rock	1.75	11.6	<0.001	0.003	<0.01	0.01	<2	0.003	0.001	0.07	4.90	<0.01	0.011	<0.001	0.002	<0.01	1.35	0.177	0.002	1.21
N161872	Rock	1.67	23.8	0.002	0.006	<0.01	0.01	<2	0.008	0.002	0.01	4.18	<0.01	0.015	<0.001	0.004	<0.01	0.29	0.131	0.004	0.01
N161873	Rock	2.00	15.6	0.001	0.013	<0.01	0.05	2	0.006	0.002	0.05	9.75	0.01	0.008	<0.001	0.006	<0.01	0.27	0.114	0.003	0.01
N161874	Rock	2.38	27.0	0.001	0.013	<0.01	0.14	2	0.009	0.003	0.14	8.61	0.01	0.009	<0.001	0.006	<0.01	0.29	0.111	0.003	0.02
N161875	Rock	1.80	11.0	0.001	0.004	<0.01	0.02	<2	0.006	<0.001	0.01	2.25	<0.01	0.007	<0.001	0.002	<0.01	0.99	0.091	0.002	0.42
N161876	Rock	1.61	9.8	0.002	0.004	<0.01	0.02	<2	0.007	<0.001	0.01	2.36	<0.01	0.007	<0.001	0.002	<0.01	0.85	0.112	0.002	0.32
N161877	Rock	2.15	10.1	0.002	0.004	<0.01	0.02	<2	0.007	<0.001	<0.01	2.08	<0.01	0.005	<0.001	0.002	<0.01	0.50	0.112	0.002	0.14
N161878	Rock	1.90	17.1	0.002	0.005	<0.01	0.06	<2	0.007	<0.001	<0.01	2.06	<0.01	0.004	<0.001	0.002	<0.01	0.41	0.113	0.003	0.11
N161880	Rock Pulp	0.07	I.S.	<0.001	0.129	>4	16.58	201	0.002	0.011	0.35	11.75	0.02	0.003	0.058	<0.001	<0.01	4.16	0.028	0.004	2.08
N161881	Rock	1.56	11.9	0.001	0.005	0.02	<0.01	<2	0.006	<0.001	<0.01	1.98	<0.01	0.004	<0.001	0.002	<0.01	0.33	0.152	0.002	<0.01
N161882	Rock	1.86	13.2	<0.001	0.005	<0.01	0.12	<2	0.006	<0.001	<0.01	1.92	<0.01	0.004	<0.001	0.002	<0.01	0.23	0.096	0.004	0.01

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
N161850	Rock Chip	0.99	0.25	0.05	<0.001	<0.001	<0.05	0.04	1.7	N.A.		
N161851	Rock	0.06	<0.01	<0.01	<0.001	<0.001	3.03	32.32	2.9	N.A.		
N161852	Rock	0.07	<0.01	<0.01	<0.001	<0.001	3.13	36.72	3.3	N.A.		
N161853	Rock	0.15	<0.01	<0.01	<0.001	<0.001	3.25	29.31	4.2	N.A.		
N161854	Rock	0.05	<0.01	<0.01	<0.001	<0.001	3.83	35.98	3.8	N.A.		
N161855	Rock	0.05	<0.01	<0.01	<0.001	<0.001	3.13	38.49	3.5	N.A.		
N161856	Rock	0.07	<0.01	<0.01	<0.001	<0.001	3.30	39.20	3.3	N.A.		
N161857	Rock	0.03	<0.01	<0.01	<0.001	<0.001	2.85	38.40	2.8	N.A.		
N161858	Rock	0.03	<0.01	<0.01	<0.001	<0.001	2.74	37.79	3.0	N.A.		
N161859	Rock	0.05	<0.01	<0.01	<0.001	<0.001	3.03	34.42	3.5	N.A.		
N161860	Rock Pulp	3.15	0.14	0.25	<0.001	<0.001	4.75	0.02	4.8	N.A.		
N161861	Rock	0.10	<0.01	<0.01	<0.001	<0.001	2.86	26.80	3.6	N.A.		
N161862	Rock	0.05	<0.01	<0.01	<0.001	0.001	2.54	35.09	2.6	N.A.		
N161864	Rock	0.81	<0.01	<0.01	<0.001	0.003	4.80	7.88	8.3	N.A.		
N161865	Rock	1.77	<0.01	0.03	<0.001	0.002	5.46	6.18	9.9	N.A.	5.05	4.12
N161866	Rock	1.45	<0.01	0.05	<0.001	<0.001	1.67	3.84	5.1	N.A.		
N161867	Rock	2.40	<0.01	0.11	<0.001	<0.001	2.72	6.78	7.9	N.A.		
N161868	Rock	2.84	<0.01	0.17	<0.001	<0.001	5.37	7.07	9.1	N.A.		
N161870	Rock Chip	0.87	0.21	0.04	<0.001	<0.001	<0.05	0.05	0.8	N.A.		
N161871	Rock	2.41	0.02	0.06	<0.001	<0.001	1.50	2.12	5.0	N.A.		
N161872	Rock	3.06	<0.01	0.11	<0.001	<0.001	2.87	7.63	8.3	N.A.		
N161873	Rock	1.78	<0.01	0.09	<0.001	<0.001	10.13	4.70	11.2	N.A.		
N161874	Rock	1.72	<0.01	0.07	<0.001	<0.001	7.77	4.25	10.9	N.A.		
N161875	Rock	2.08	<0.01	0.11	<0.001	<0.001	1.26	5.12	6.3	N.A.		
N161876	Rock	2.19	<0.01	0.11	<0.001	<0.001	1.42	5.54	6.8	N.A.		
N161877	Rock	2.60	<0.01	0.11	<0.001	<0.001	1.00	6.69	6.2	N.A.		
N161878	Rock	2.68	<0.01	0.11	<0.001	<0.001	0.92	6.76	6.1	N.A.		
N161880	Rock Pulp	0.41	<0.01	0.16	<0.001	<0.001	19.04	0.14	I.S.	13.71	12.46	18.33
N161881	Rock	3.26	<0.01	0.09	<0.001	<0.001	0.62	8.46	5.8	N.A.		
N161882	Rock	2.50	<0.01	0.08	<0.001	<0.001	0.82	6.62	5.6	N.A.		

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161883	Rock	1.18	15.7	0.001	0.005	0.02	0.06	<2	0.006	<0.001	<0.01	2.19	<0.01	0.003	<0.001	0.002	<0.01	0.27	0.118	0.003	0.02
N161884	Rock	1.17	15.5	<0.001	0.009	3.30	11.92	6	0.002	<0.001	<0.01	2.45	<0.01	0.003	0.074	<0.001	<0.01	0.08	0.033	0.004	<0.01
N161885	Rock	1.86	5.9	0.001	0.004	3.15	6.46	6	0.002	<0.001	0.06	1.43	<0.01	0.212	0.045	<0.001	<0.01	11.54	0.047	0.006	0.74
N161886	Rock	1.98	5.3	<0.001	0.004	2.57	8.90	3	0.003	0.001	0.03	1.40	<0.01	0.296	0.048	0.003	<0.01	2.90	0.041	0.004	0.04
N161887	Rock	1.36	2.7	<0.001	0.003	1.44	5.46	<2	0.002	<0.001	0.04	0.97	<0.01	0.272	0.022	<0.001	<0.01	6.83	0.019	0.002	0.10
N161888	Rock	1.22	1.9	<0.001	0.003	1.12	6.75	<2	0.003	<0.001	0.01	1.63	<0.01	0.055	0.017	0.002	<0.01	1.57	0.048	0.004	0.06
N161889	Rock	2.65	2.3	<0.001	0.003	1.42	6.98	<2	0.003	<0.001	<0.01	2.55	<0.01	0.032	0.016	0.001	<0.01	1.51	0.039	0.004	0.05
N161890	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.04	4.11	<0.01	0.007	<0.001	<0.001	<0.01	0.91	0.115	0.002	2.17
N161891	Rock	2.29	1.1	<0.001	0.002	1.77	6.65	<2	0.002	<0.001	<0.01	1.32	<0.01	0.058	0.032	0.001	<0.01	0.12	0.038	0.004	0.05
N161892	Rock	2.23	1.1	<0.001	0.001	2.45	5.09	<2	<0.001	<0.001	<0.01	0.27	<0.01	0.053	0.033	0.001	<0.01	0.33	0.007	0.002	0.02
N161893	Rock	2.38	0.7	<0.001	0.001	2.00	5.00	<2	<0.001	<0.001	<0.01	0.28	<0.01	0.051	0.031	<0.001	<0.01	0.89	0.010	0.002	0.02
N161894	Rock	2.57	2.1	<0.001	0.001	2.61	4.46	<2	<0.001	<0.001	<0.01	0.39	<0.01	0.035	0.028	<0.001	<0.01	0.13	0.015	0.003	0.02
N161895	Rock	2.62	2.4	<0.001	0.003	1.83	4.98	<2	0.002	<0.001	<0.01	0.90	<0.01	0.047	0.018	<0.001	<0.01	0.59	0.025	0.004	0.04
N161896	Rock	2.13	17.8	<0.001	0.003	1.35	5.14	<2	0.002	<0.001	<0.01	0.96	<0.01	0.022	0.018	0.001	<0.01	1.61	0.031	0.004	0.08
N161897	Rock	2.73	7.6	<0.001	0.003	1.40	4.61	<2	0.003	<0.001	0.01	1.59	<0.01	0.006	0.019	0.001	<0.01	1.34	0.045	0.007	0.06
N161898	Rock	2.44	4.0	<0.001	0.003	1.37	4.76	<2	0.003	<0.001	<0.01	1.27	<0.01	0.030	0.017	<0.001	<0.01	0.39	0.059	0.005	0.03
N161899	Rock	2.48	2.4	<0.001	0.002	1.33	4.69	<2	0.001	<0.001	<0.01	0.78	<0.01	0.050	0.013	<0.001	<0.01	0.05	0.021	0.003	0.02
N161900	Rock Pulp	0.07	689.6	0.001	0.396	0.81	>20	21	0.004	0.005	0.13	12.33	0.10	0.003	0.067	0.096	<0.01	1.58	0.021	0.002	0.94
N161901	Rock	2.34	4.3	<0.001	0.002	1.81	4.35	<2	0.002	0.001	<0.01	0.72	<0.01	0.047	0.015	<0.001	<0.01	0.06	0.027	0.004	0.03
N161902	Rock	2.51	2.2	<0.001	0.001	2.48	5.00	<2	0.001	0.001	<0.01	0.61	<0.01	0.030	0.019	0.001	<0.01	0.03	0.008	0.002	0.02
N161903	Rock	2.83	1.9	<0.001	0.001	2.36	4.63	<2	<0.001	0.001	<0.01	0.43	<0.01	0.029	0.018	0.001	<0.01	0.05	0.006	0.002	0.04
N161904	Rock	2.52	1.6	<0.001	0.001	1.84	4.69	<2	0.002	0.002	<0.01	0.61	<0.01	0.019	0.017	0.001	<0.01	0.06	0.022	0.003	0.01
N161905	Rock	2.60	1.5	<0.001	<0.001	1.10	4.62	<2	<0.001	<0.001	<0.01	0.27	<0.01	0.013	0.017	<0.001	<0.01	0.08	0.008	0.001	<0.01
N161906	Rock	1.70	2.6	<0.001	<0.001	2.03	3.32	<2	0.001	0.002	<0.01	0.59	<0.01	0.012	0.013	0.001	<0.01	0.20	0.014	0.002	0.02
N161907	Rock	2.51	2.3	<0.001	0.001	2.17	6.29	<2	0.001	0.002	<0.01	1.24	<0.01	0.008	0.025	0.002	<0.01	0.05	0.007	0.002	<0.01
N161908	Rock	2.24	0.9	<0.001	<0.001	1.82	6.04	<2	<0.001	<0.001	<0.01	0.40	<0.01	0.025	0.024	0.001	<0.01	0.02	<0.001	0.001	<0.01
N161909	Rock	2.36	1.3	<0.001	0.001	1.36	5.31	<2	0.002	0.001	<0.01	1.13	<0.01	0.017	0.020	0.002	<0.01	0.04	0.011	0.003	0.02
N161910	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.21	<0.01	0.006	<0.001	<0.001	<0.01	0.93	0.117	0.002	2.22
N161911	Rock	2.60	1.9	<0.001	<0.001	2.32	6.05	<2	<0.001	<0.001	<0.01	0.50	<0.01	0.019	0.025	0.001	<0.01	0.01	0.001	0.001	0.01
N161912	Rock	2.51	0.9	<0.001	<0.001	2.55	4.69	<2	<0.001	<0.001	<0.01	0.57	<0.01	0.025	0.018	0.001	<0.01	0.02	0.001	0.002	<0.01

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
N161883	Rock	3.28	<0.01	0.08	<0.001	<0.001	0.76	8.59	6.3	N.A.		
N161884	Rock	0.95	<0.01	0.05	<0.001	0.002	8.49	2.33	6.8	N.A.		
N161885	Rock	1.31	<0.01	0.03	<0.001	<0.001	4.30	3.72	7.3	N.A.		
N161886	Rock	1.05	<0.01	0.03	<0.001	<0.001	3.35	12.16	3.4	N.A.		
N161887	Rock	0.38	<0.01	0.02	<0.001	<0.001	0.45	34.63	6.2	N.A.		
N161888	Rock	0.92	<0.01	0.08	<0.001	<0.001	3.26	28.17	2.5	N.A.		
N161889	Rock	0.67	<0.01	0.08	<0.001	<0.001	4.94	25.61	2.8	N.A.		
N161890	Rock Chip	0.85	0.21	0.04	<0.001	<0.001	<0.05	0.14	1.0	N.A.		
N161891	Rock	0.99	<0.01	0.12	<0.001	<0.001	2.74	32.20	2.0	N.A.		
N161892	Rock	0.17	<0.01	0.03	<0.001	<0.001	1.92	33.97	1.1	N.A.		
N161893	Rock	0.18	<0.01	0.03	<0.001	<0.001	1.79	35.32	1.0	N.A.		
N161894	Rock	0.22	<0.01	0.03	<0.001	<0.001	2.14	40.63	1.2	N.A.		
N161895	Rock	0.32	<0.01	0.05	<0.001	<0.001	2.23	31.94	1.3	N.A.		
N161896	Rock	0.56	<0.01	0.09	<0.001	<0.001	2.77	27.35	2.0	N.A.		
N161897	Rock	0.84	<0.01	0.12	<0.001	<0.001	3.52	21.31	3.2	N.A.		
N161898	Rock	0.81	<0.01	0.11	<0.001	<0.001	2.23	28.04	1.8	N.A.		
N161899	Rock	0.36	<0.01	0.05	<0.001	<0.001	1.83	35.84	1.3	N.A.		
N161900	Rock Pulp	1.65	0.06	0.13	*	0.004	16.68	<0.01	10.1	N.A.	0.70	25.36
N161901	Rock	0.48	<0.01	0.06	<0.001	<0.001	1.73	34.66	1.0	N.A.		
N161902	Rock	0.15	<0.01	0.04	<0.001	<0.001	2.74	39.11	1.6	N.A.		
N161903	Rock	0.14	<0.01	0.04	<0.001	<0.001	2.37	38.12	1.0	N.A.		
N161904	Rock	0.28	<0.01	0.05	<0.001	<0.001	2.55	37.22	2.0	N.A.		
N161905	Rock	0.12	<0.01	0.03	<0.001	<0.001	2.41	31.95	1.7	N.A.		
N161906	Rock	0.20	<0.01	0.04	<0.001	<0.001	2.22	24.50	1.7	N.A.		
N161907	Rock	0.25	<0.01	0.04	<0.001	<0.001	4.40	29.64	2.5	N.A.		
N161908	Rock	0.07	<0.01	0.02	<0.001	<0.001	3.15	30.11	1.8	N.A.		
N161909	Rock	0.29	<0.01	0.06	<0.001	<0.001	3.44	29.18	2.2	N.A.		
N161910	Rock Chip	0.88	0.22	0.04	<0.001	<0.001	<0.05	0.14	1.3	N.A.		
N161911	Rock	0.10	<0.01	0.02	<0.001	<0.001	3.40	30.92	2.8	N.A.		
N161912	Rock	0.12	<0.01	0.02	<0.001	<0.001	2.65	25.74	2.8	N.A.		

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161913	Rock	2.46	2.4	<0.001	0.001	2.25	4.96	<2	0.002	0.002	<0.01	0.97	<0.01	0.024	0.020	0.002	<0.01	0.07	0.015	0.003	0.02
N161914	Rock	2.53	1.4	<0.001	<0.001	0.76	3.80	<2	<0.001	<0.001	<0.01	0.26	<0.01	0.021	0.015	<0.001	<0.01	0.06	0.008	0.002	0.01
N161915	Rock	2.48	1.7	<0.001	<0.001	1.24	5.49	<2	0.001	0.002	<0.01	0.78	<0.01	0.005	0.021	0.001	<0.01	0.21	0.007	0.002	0.01
N161917	Rock	2.41	1.9	<0.001	<0.001	2.51	5.23	<2	0.001	0.002	<0.01	0.45	<0.01	0.022	0.020	0.002	<0.01	0.01	0.004	0.002	<0.01
N161918	Rock	2.70	0.5	<0.001	<0.001	1.68	5.20	<2	<0.001	0.001	<0.01	0.35	<0.01	0.017	0.019	0.002	<0.01	0.05	0.001	0.002	<0.01
N161919	Rock	2.31	<0.5	<0.001	<0.001	1.59	3.51	3	<0.001	<0.001	<0.01	0.44	<0.01	0.005	0.012	0.002	<0.01	0.01	0.003	0.001	<0.01
N161920	Rock Pulp	0.09	107.3	<0.001	0.093	<0.01	0.55	<2	0.002	0.004	0.13	8.06	<0.01	0.007	0.001	<0.001	<0.01	3.77	0.056	0.002	2.12
N161921	Rock	2.41	0.9	<0.001	<0.001	>4	3.98	12	<0.001	<0.001	<0.01	0.19	<0.01	0.016	0.015	0.003	<0.01	0.03	0.001	0.002	<0.01
N161922	Rock	2.65	1.7	<0.001	<0.001	3.34	4.76	12	0.001	0.002	<0.01	0.46	<0.01	0.020	0.017	0.002	<0.01	0.10	0.010	0.002	0.02
N161923	Rock	2.57	1.0	<0.001	<0.001	>4	8.71	28	<0.001	0.001	<0.01	0.22	<0.01	0.010	0.035	0.004	<0.01	0.09	0.002	0.001	<0.01
N161924	Rock	2.94	1.4	<0.001	<0.001	>4	9.27	9	<0.001	<0.001	<0.01	0.26	<0.01	0.022	0.040	0.003	<0.01	0.87	0.002	0.001	0.01
N161925	Rock	0.58	0.7	<0.001	<0.001	>4	7.98	5	<0.001	<0.001	<0.01	0.24	<0.01	0.011	0.037	0.004	<0.01	0.51	<0.001	0.001	0.02
N161927	Rock	1.13	<0.5	<0.001	<0.001	>4	6.57	6	<0.001	<0.001	0.02	0.20	<0.01	0.042	0.029	0.003	<0.01	4.13	0.001	0.002	0.01
N161928	Rock	1.83	0.9	<0.001	0.001	3.01	7.26	28	0.007	0.004	0.22	5.61	<0.01	0.017	0.026	0.004	<0.01	1.04	0.015	0.001	0.02
N161929	Rock	0.79	2.4	<0.001	0.010	>4	7.01	61	0.002	0.002	<0.01	1.24	<0.01	0.005	0.031	0.007	<0.01	0.03	0.018	0.003	<0.01
N161930	Rock Chip	0.14	<0.5	<0.001	0.003	0.02	<0.01	<2	0.014	0.003	0.05	4.21	<0.01	0.006	<0.001	<0.001	<0.01	0.92	0.117	0.003	2.25
N161932	Rock	1.15	6.6	0.001	0.053	>4	>20	131	0.004	0.003	0.02	3.63	0.02	0.004	0.102	0.018	<0.01	0.07	0.030	0.004	0.01
N161933	Rock	0.35	8.9	0.001	0.005	1.80	0.10	24	0.006	0.002	<0.01	4.04	0.02	0.009	<0.001	0.004	<0.01	0.30	0.143	0.007	<0.01
N161934	Rock	1.22	9.8	<0.001	0.008	1.40	0.75	19	0.005	0.002	0.03	11.75	0.02	0.005	0.002	0.003	<0.01	0.10	0.048	0.005	0.01
N161935	Rock	1.83	17.6	<0.001	0.040	2.75	0.68	28	0.004	0.003	0.32	20.47	0.04	0.057	0.002	0.005	<0.01	1.01	0.049	0.004	0.39
N161936	Rock	1.90	28.9	<0.001	0.029	1.65	0.22	17	0.007	0.004	0.17	15.65	0.02	0.012	<0.001	0.005	<0.01	0.32	0.084	0.002	0.08
N161938	Rock	2.02	15.6	0.001	0.067	0.29	0.16	5	0.007	0.004	0.28	13.56	0.01	0.024	<0.001	0.004	<0.01	1.01	0.137	0.002	0.32
N161939	Rock	1.83	11.9	0.001	0.016	0.25	0.20	4	0.006	0.003	0.10	3.95	<0.01	0.015	<0.001	0.002	<0.01	0.47	0.103	0.001	0.12
N161940	Rock Pulp	0.07	5.6	<0.001	0.032	>4	10.81	102	0.002	0.002	0.13	7.95	0.01	0.002	0.031	0.017	<0.01	3.87	0.042	0.002	2.11
N161941	Rock	1.73	29.4	0.002	0.014	0.16	0.07	4	0.012	0.002	0.07	6.26	<0.01	0.008	<0.001	0.003	<0.01	0.32	0.106	0.001	0.07
N161942	Rock	2.10	16.0	0.002	0.016	0.12	0.07	3	0.011	0.002	0.06	5.33	<0.01	0.005	<0.001	0.003	<0.01	0.27	0.114	0.001	0.07
N161943	Rock	2.48	14.7	0.002	0.010	0.11	0.12	3	0.011	0.002	0.04	4.04	<0.01	0.007	<0.001	0.003	<0.01	0.33	0.140	0.001	0.03
N161944	Rock	1.91	3.9	0.001	0.005	<0.01	0.02	<2	0.006	<0.001	0.03	2.84	<0.01	0.016	<0.001	<0.001	<0.01	1.64	0.101	0.002	0.74
N161945	Rock	2.17	2.8	0.001	0.004	<0.01	0.02	<2	0.006	<0.001	0.01	2.19	<0.01	0.008	<0.001	<0.001	<0.01	0.87	0.112	0.001	0.34
N161946	Rock	1.92	0.9	0.002	0.005	0.01	0.06	<2	0.007	<0.001	0.01	3.31	<0.01	0.007	<0.001	0.002	<0.01	0.63	0.135	0.001	0.19

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	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
N161913	Rock	0.33	<0.01	0.05	<0.001	<0.001	2.94	23.61	2.7	N.A.		
N161914	Rock	0.17	<0.01	0.03	<0.001	<0.001	1.60	24.56	1.6	N.A.		
N161915	Rock	0.17	<0.01	0.03	<0.001	<0.001	3.33	26.12	2.5	N.A.		
N161917	Rock	0.19	<0.01	0.03	<0.001	<0.001	2.82	28.96	2.4	N.A.		
N161918	Rock	0.13	<0.01	0.03	<0.001	<0.001	2.64	27.41	2.5	N.A.		
N161919	Rock	0.13	<0.01	0.02	<0.001	<0.001	2.02	31.33	2.5	N.A.		
N161920	Rock Pulp	3.44	0.10	0.21	<0.001	<0.001	1.63	0.02	5.3	N.A.		
N161921	Rock	0.09	<0.01	0.02	<0.001	0.001	2.72	32.91	2.1	N.A.	5.33	3.86
N161922	Rock	0.18	<0.01	0.03	<0.001	0.002	2.88	31.07	2.7	N.A.		
N161923	Rock	0.10	<0.01	0.02	<0.001	0.005	4.26	31.11	3.2	N.A.	7.75	7.79
N161924	Rock	0.04	<0.01	0.01	<0.001	0.005	3.60	33.83	4.0	N.A.	4.31	8.55
N161925	Rock	0.02	<0.01	<0.01	<0.001	0.004	3.38	37.54	4.0	N.A.	6.79	7.30
N161927	Rock	0.02	<0.01	<0.01	<0.001	0.005	2.29	39.56	1.4	N.A.	5.85	6.01
N161928	Rock	0.18	<0.01	0.02	<0.001	0.007	3.25	24.36	7.3	N.A.		
N161929	Rock	0.31	<0.01	0.03	<0.001	0.005	5.08	20.55	4.6	N.A.	5.17	6.37
N161930	Rock Chip	0.89	0.21	0.04	<0.001	<0.001	<0.05	0.08	0.7	N.A.		
N161932	Rock	0.38	<0.01	<0.01	<0.001	0.012	15.70	2.56	12.9	N.A.	7.56	22.89
N161933	Rock	2.60	<0.01	0.05	<0.001	<0.001	3.29	6.27	7.1	N.A.		
N161934	Rock	0.82	0.01	0.02	<0.001	<0.001	13.11	1.54	11.7	N.A.		
N161935	Rock	0.40	<0.01	<0.01	<0.001	<0.001	22.44	0.42	19.5	N.A.		
N161936	Rock	0.99	<0.01	0.03	<0.001	<0.001	16.39	1.99	15.0	N.A.		
N161938	Rock	1.56	<0.01	0.08	<0.001	<0.001	13.76	3.51	14.3	N.A.		
N161939	Rock	1.87	<0.01	0.08	<0.001	<0.001	3.11	4.50	7.2	N.A.		
N161940	Rock Pulp	0.74	<0.01	0.48	<0.001	<0.001	11.23	0.07	14.2	N.A.	4.95	10.37
N161941	Rock	1.76	<0.01	0.11	<0.001	<0.001	5.53	4.21	10.0	N.A.		
N161942	Rock	1.91	<0.01	0.14	<0.001	<0.001	4.10	4.78	9.9	N.A.		
N161943	Rock	1.65	<0.01	0.15	<0.001	<0.001	3.10	4.09	8.9	N.A.		
N161944	Rock	1.20	<0.01	0.16	<0.001	<0.001	2.28	3.57	8.9	N.A.		
N161945	Rock	1.20	<0.01	0.14	<0.001	<0.001	1.79	3.11	7.7	N.A.		
N161946	Rock	0.83	<0.01	0.13	<0.001	<0.001	3.13	3.25	7.9	N.A.		

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161947	Rock	1.36	1.4	0.002	0.004	<0.01	0.02	<2	0.008	<0.001	0.01	2.30	<0.01	0.008	<0.001	0.002	<0.01	0.83	0.117	0.001	0.31
N161948	Rock	2.36	6.4	0.002	0.005	<0.01	0.02	<2	0.007	<0.001	0.01	3.09	<0.01	0.008	<0.001	0.002	<0.01	0.81	0.103	0.001	0.31
N161949	Rock	1.35	6.1	0.002	0.005	0.02	0.06	<2	0.007	<0.001	0.01	2.51	<0.01	0.006	<0.001	0.002	<0.01	0.50	0.116	0.001	0.15
N161950	Rock Chip	0.13	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.04	4.20	<0.01	0.006	<0.001	<0.001	<0.01	0.90	0.118	0.002	2.20
N161951	Rock	1.92	3.6	0.002	0.004	<0.01	0.13	<2	0.006	<0.001	0.01	1.63	<0.01	0.010	<0.001	0.002	<0.01	0.74	0.095	0.001	0.26
N161952	Rock	2.15	3.1	0.001	0.005	<0.01	0.03	<2	0.006	<0.001	<0.01	2.07	<0.01	0.008	<0.001	0.002	<0.01	0.75	0.120	0.002	0.27
N161953	Rock	1.92	2.4	<0.001	0.005	<0.01	0.01	<2	0.005	<0.001	0.01	2.30	<0.01	0.009	<0.001	0.001	<0.01	0.85	0.133	0.002	0.31
N161954	Rock	2.02	3.2	0.001	0.004	<0.01	0.02	<2	0.005	<0.001	0.02	2.38	<0.01	0.012	<0.001	0.001	<0.01	1.17	0.112	0.002	0.50
N161957	Rock	2.26	3.4	0.001	0.007	0.03	3.14	<2	0.005	<0.001	0.02	2.70	<0.01	0.015	0.002	<0.001	<0.01	1.41	0.105	0.002	0.57
N161958	Rock	2.11	5.3	0.001	0.006	0.13	6.17	<2	0.004	<0.001	0.02	2.08	<0.01	0.011	0.002	0.002	<0.01	0.76	0.093	0.001	0.29
N161959	Rock	2.18	5.7	0.001	0.007	0.16	8.58	<2	0.003	<0.001	0.04	1.76	<0.01	0.120	<0.001	0.002	<0.01	7.10	0.075	0.006	0.83
N161960	Rock Pulp	0.09	439.1	<0.001	1.309	<0.01	0.13	3	0.001	0.011	0.12	11.36	<0.01	0.005	<0.001	<0.001	<0.01	2.94	0.045	0.002	1.79
N161961	Rock	1.78	0.7	<0.001	<0.001	3.73	6.49	<2	<0.001	<0.001	<0.01	0.20	<0.01	0.004	0.025	0.001	<0.01	<0.01	0.001	0.001	<0.01
N161962	Rock	2.28	5.2	0.002	0.005	0.19	7.14	<2	0.006	<0.001	<0.01	2.43	<0.01	0.018	<0.001	0.002	<0.01	0.63	0.082	0.008	0.22
N161963	Rock	1.81	7.3	0.002	0.006	0.23	8.54	<2	0.006	<0.001	0.02	3.80	<0.01	0.040	<0.001	0.002	<0.01	1.65	0.062	0.008	0.29
N161964	Rock	2.23	5.4	0.002	0.005	0.18	5.91	<2	0.005	<0.001	<0.01	2.59	<0.01	0.042	<0.001	0.002	<0.01	0.75	0.085	0.009	0.12
N161965	Rock	2.07	5.6	0.002	0.005	0.22	7.92	<2	0.005	<0.001	<0.01	2.74	<0.01	0.159	<0.001	0.002	<0.01	1.33	0.080	0.008	0.11
N161966	Rock	2.50	2.3	0.001	0.004	0.78	7.86	<2	0.004	<0.001	0.01	1.55	<0.01	0.059	0.005	0.002	<0.01	3.67	0.059	0.007	0.14
N161967	Rock	2.28	2.6	0.001	0.004	0.26	7.87	<2	0.004	<0.001	0.03	1.90	<0.01	0.113	0.002	0.003	<0.01	2.89	0.046	0.007	0.24
N161968	Rock	2.31	1.4	0.001	0.004	0.19	7.38	<2	0.004	<0.001	0.02	2.26	<0.01	0.152	<0.001	0.002	<0.01	1.77	0.071	0.006	0.06
N161969	Rock	2.73	2.0	<0.001	0.003	1.08	6.70	<2	0.002	<0.001	<0.01	0.95	<0.01	0.305	0.006	0.001	<0.01	0.59	0.040	0.005	0.09
N161970	Rock Chip	0.14	<0.5	<0.001	0.004	<0.01	<0.01	<2	0.013	0.003	0.04	4.02	<0.01	0.006	<0.001	<0.001	<0.01	0.94	0.116	0.003	2.13
N161971	Rock	1.98	0.5	<0.001	0.003	0.69	5.87	<2	0.005	0.001	0.14	3.56	<0.01	0.009	0.004	0.002	<0.01	0.94	0.038	0.005	0.08
N161972	Rock	2.16	2.4	0.001	0.003	0.19	5.78	<2	0.005	<0.001	0.04	2.08	<0.01	0.028	0.001	0.002	<0.01	1.84	0.051	0.007	0.14
N161973	Rock	2.25	2.4	0.001	0.004	0.25	5.75	<2	0.003	<0.001	<0.01	1.00	<0.01	0.110	<0.001	0.001	<0.01	0.65	0.025	0.005	0.17
N161974	Rock	2.50	1.8	<0.001	0.002	0.25	5.92	<2	0.002	<0.001	<0.01	0.98	<0.01	0.088	<0.001	0.001	<0.01	0.31	0.037	0.005	0.07
N161976	Rock	2.14	2.9	<0.001	0.003	0.74	3.17	<2	0.003	<0.001	<0.01	2.33	0.03	0.042	0.001	0.001	<0.01	0.51	0.096	0.006	0.13
N161977	Rock	2.63	25.7	<0.001	0.003	1.00	4.84	<2	0.002	<0.001	<0.01	0.70	<0.01	0.067	0.004	0.001	<0.01	0.60	0.035	0.004	0.08
N161978	Rock	2.40	3.6	<0.001	0.002	1.73	5.57	<2	<0.001	<0.001	<0.01	0.36	<0.01	0.049	0.008	0.001	<0.01	0.16	0.014	0.002	0.02
N161979	Rock	2.81	3.6	<0.001	0.002	0.93	5.40	<2	0.001	<0.001	<0.01	0.67	<0.01	0.064	0.009	0.002	<0.01	0.28	0.033	0.004	0.06

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
N161947	Rock	1.52	<0.01	0.14	<0.001	<0.001	1.68	3.82	7.0	N.A.		
N161948	Rock	1.47	<0.01	0.13	<0.001	<0.001	2.62	3.72	7.6	N.A.		
N161949	Rock	1.63	<0.01	0.14	<0.001	<0.001	1.83	4.08	6.8	N.A.		
N161950	Rock Chip	0.87	0.21	0.04	<0.001	<0.001	<0.05	0.05	1.4	N.A.		
N161951	Rock	1.67	<0.01	0.12	<0.001	<0.001	0.93	4.22	6.3	N.A.		
N161952	Rock	1.95	<0.01	0.13	<0.001	<0.001	1.23	4.91	6.7	N.A.		
N161953	Rock	2.24	<0.01	0.13	<0.001	<0.001	1.27	5.48	6.7	N.A.		
N161954	Rock	2.24	<0.01	0.11	<0.001	<0.001	1.26	5.58	7.3	N.A.		
N161957	Rock	2.29	<0.01	0.10	<0.001	<0.001	3.07	5.64	8.0	N.A.		
N161958	Rock	2.31	<0.01	0.10	<0.001	<0.001	3.91	5.67	7.2	N.A.		
N161959	Rock	2.05	<0.01	0.08	<0.001	<0.001	4.94	5.13	7.0	N.A.		
N161960	Rock Pulp	3.14	0.12	0.24	<0.001	<0.001	4.67	0.02	5.7	N.A.		
N161961	Rock	0.03	<0.01	<0.01	<0.001	<0.001	3.23	38.18	3.9	N.A.		
N161962	Rock	2.75	<0.01	0.09	<0.001	<0.001	4.48	6.96	6.7	N.A.		
N161963	Rock	2.44	<0.01	0.09	<0.001	<0.001	6.81	6.24	9.1	N.A.		
N161964	Rock	2.86	<0.01	0.09	<0.001	<0.001	3.80	8.06	6.6	N.A.		
N161965	Rock	2.96	<0.01	0.07	<0.001	<0.001	4.29	11.06	6.8	N.A.		
N161966	Rock	1.78	<0.01	0.05	<0.001	<0.001	3.28	13.25	5.3	N.A.		
N161967	Rock	1.84	<0.01	0.08	<0.001	<0.001	3.17	14.97	5.2	N.A.		
N161968	Rock	2.23	<0.01	0.10	<0.001	<0.001	1.98	21.20	3.3	N.A.		
N161969	Rock	0.94	<0.01	0.06	<0.001	<0.001	0.19	33.43	1.4	N.A.		
N161970	Rock Chip	0.89	0.22	0.05	<0.001	<0.001	<0.05	0.06	1.3	N.A.		
N161971	Rock	1.01	<0.01	0.07	<0.001	<0.001	3.23	23.57	5.5	N.A.		
N161972	Rock	1.16	<0.01	0.16	<0.001	<0.001	3.34	17.15	3.9	N.A.		
N161973	Rock	0.95	<0.01	0.12	<0.001	<0.001	0.44	25.06	1.0	N.A.		
N161974	Rock	0.87	<0.01	0.13	<0.001	<0.001	0.92	28.03	0.8	N.A.		
N161976	Rock	1.51	<0.01	0.14	<0.001	<0.001	1.65	17.12	2.2	N.A.		
N161977	Rock	0.68	<0.01	0.09	<0.001	<0.001	1.02	33.65	1.6	N.A.		
N161978	Rock	0.16	<0.01	0.04	<0.001	<0.001	2.13	36.28	2.3	N.A.		
N161979	Rock	0.42	<0.01	0.07	<0.001	<0.001	1.71	35.71	1.7	N.A.		

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Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161980	Rock Pulp	0.07	3.5	<0.001	0.128	>4	16.18	207	0.002	0.011	0.35	11.48	0.02	0.002	0.056	0.014	<0.01	4.11	0.030	0.001	1.99
N161981	Rock	2.52	1.9	<0.001	0.002	1.12	5.57	<2	0.001	<0.001	<0.01	0.45	<0.01	0.057	0.015	0.001	<0.01	0.24	0.020	0.002	0.03
N161982	Rock	2.72	1.6	<0.001	0.002	1.32	5.03	<2	0.001	<0.001	<0.01	0.44	<0.01	0.051	0.012	0.001	<0.01	0.14	0.017	0.002	0.03
N161983	Rock	2.64	1.4	<0.001	<0.001	1.41	3.97	<2	<0.001	<0.001	<0.01	0.32	<0.01	0.053	0.010	<0.001	<0.01	0.08	0.009	0.001	<0.01
N161984	Rock	2.57	1.3	<0.001	0.001	1.42	5.35	<2	0.001	<0.001	<0.01	0.41	<0.01	0.044	0.011	0.001	<0.01	0.12	0.014	0.002	0.03
N161985	Rock	2.80	1.0	<0.001	<0.001	1.92	4.77	<2	<0.001	<0.001	<0.01	0.22	<0.01	0.040	0.013	0.001	<0.01	0.08	0.005	0.001	0.01
N161986	Rock	2.73	1.1	<0.001	<0.001	0.75	5.56	<2	<0.001	<0.001	<0.01	0.40	<0.01	0.029	0.012	<0.001	<0.01	0.08	0.014	0.002	0.04
N161987	Rock	2.71	0.8	<0.001	<0.001	1.72	3.78	<2	<0.001	<0.001	<0.01	0.17	<0.01	0.033	0.014	0.001	<0.01	0.09	<0.001	<0.001	<0.01
N161988	Rock	2.73	1.3	<0.001	<0.001	1.71	3.87	<2	<0.001	<0.001	<0.01	0.24	<0.01	0.089	0.013	<0.001	<0.01	0.07	0.006	<0.001	0.01
N161989	Rock	2.45	<0.5	<0.001	<0.001	1.67	4.49	<2	<0.001	<0.001	<0.01	0.17	<0.01	0.074	0.009	<0.001	<0.01	0.14	<0.001	<0.001	0.01
N161990	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.04	4.19	<0.01	0.006	<0.001	<0.001	<0.01	0.92	0.122	0.002	2.21
N161991	Rock	2.68	0.8	<0.001	<0.001	1.43	4.24	<2	0.001	<0.001	0.02	0.68	<0.01	0.025	0.010	<0.001	<0.01	0.26	0.005	0.001	0.02
N161992	Rock	2.52	1.1	<0.001	0.002	1.88	3.19	<2	0.002	<0.001	<0.01	0.81	<0.01	0.004	0.008	<0.001	<0.01	0.03	0.012	0.002	<0.01
N161993	Rock	0.25	1.0	<0.001	0.002	2.94	2.87	<2	0.001	<0.001	0.03	1.01	<0.01	0.002	0.005	<0.001	<0.01	0.01	0.005	0.001	<0.01
N161994	Rock	0.86	2.5	<0.001	0.003	3.27	3.60	<2	0.006	<0.001	0.02	1.65	<0.01	0.008	0.008	0.002	<0.01	0.07	0.039	0.006	<0.01
N161996	Rock	1.57	1.8	<0.001	0.002	2.22	2.35	<2	0.007	<0.001	0.02	1.33	<0.01	0.009	0.005	0.001	<0.01	0.12	0.064	0.005	<0.01
N161997	Rock	1.32	3.4	0.001	0.004	0.82	1.69	6	0.009	<0.001	<0.01	1.44	<0.01	0.017	0.003	0.002	<0.01	0.18	0.090	0.009	<0.01
N161998	Rock	1.59	6.3	0.002	0.004	0.64	1.64	4	0.006	<0.001	0.02	1.65	<0.01	0.016	0.003	0.002	<0.01	0.21	0.099	0.009	<0.01
N161999	Rock	2.08	10.4	0.002	0.006	0.14	2.87	<2	0.006	<0.001	0.05	2.41	<0.01	0.030	0.006	0.004	<0.01	0.77	0.120	0.010	0.03
N162000	Rock Pulp	0.09	757.2	0.001	0.381	0.74	>20	21	0.004	0.005	0.12	11.98	0.09	0.003	0.064	0.092	<0.01	1.51	0.021	0.002	0.94
N162001	Rock	1.35	5.8	0.002	0.004	0.46	0.51	4	0.006	<0.001	<0.01	1.85	<0.01	0.021	0.002	0.002	<0.01	0.26	0.121	0.010	<0.01
N162002	Rock	0.85	1.0	0.002	0.004	0.84	0.06	7	0.007	<0.001	0.02	1.81	<0.01	0.038	<0.001	0.002	<0.01	0.32	0.113	0.011	0.04
N162003	Rock	1.40	0.7	0.003	0.006	1.25	0.06	10	0.008	<0.001	0.03	2.20	<0.01	0.037	<0.001	0.003	<0.01	0.33	0.151	0.007	0.02
N162004	Rock	2.05	10.4	0.002	0.007	0.03	<0.01	2	0.006	<0.001	0.02	3.23	<0.01	0.030	<0.001	0.002	<0.01	0.31	0.115	0.003	0.06
N162005	Rock	1.82	12.8	0.002	0.008	0.06	<0.01	3	0.006	<0.001	0.01	3.51	<0.01	0.022	<0.001	0.002	<0.01	0.27	0.109	0.002	0.03
N162006	Rock	1.96	5.3	0.002	0.005	<0.01	<0.01	<2	0.007	<0.001	<0.01	2.93	<0.01	0.023	<0.001	0.002	<0.01	0.27	0.120	0.002	0.02
N162007	Rock	2.08	6.5	0.001	0.007	<0.01	<0.01	<2	0.006	<0.001	0.13	4.21	<0.01	0.045	<0.001	0.002	<0.01	0.88	0.118	0.001	0.29
N162008	Rock	2.24	9.6	0.002	0.006	<0.01	<0.01	<2	0.007	<0.001	0.02	3.74	<0.01	0.024	<0.001	0.001	<0.01	0.35	0.127	0.002	0.05
N162009	Rock	2.14	7.9	0.002	0.005	<0.01	<0.01	<2	0.007	<0.001	0.03	3.11	<0.01	0.031	<0.001	0.001	<0.01	0.42	0.130	0.002	0.07
N162010	Rock Chip	0.15	1.7	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.05	4.13	<0.01	0.006	<0.001	<0.001	<0.01	0.91	0.114	0.002	2.22

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
N161980	Rock Pulp	0.38	<0.01	0.16	<0.001	<0.001	18.71	0.15	18.7	N.A.	12.58	16.80
N161981	Rock	0.20	<0.01	0.05	<0.001	<0.001	2.09	37.49	1.8	N.A.		
N161982	Rock	0.29	<0.01	0.05	<0.001	<0.001	2.01	38.88	2.2	N.A.		
N161983	Rock	0.11	<0.01	0.03	<0.001	<0.001	1.77	40.63	2.8	N.A.		
N161984	Rock	0.22	<0.01	0.04	<0.001	<0.001	2.44	41.08	3.0	N.A.		
N161985	Rock	0.09	<0.01	0.03	<0.001	<0.001	2.33	43.38	2.8	N.A.		
N161986	Rock	0.23	<0.01	0.05	<0.001	<0.001	2.66	42.79	2.3	N.A.		
N161987	Rock	0.06	<0.01	0.02	<0.001	<0.001	1.87	40.62	1.7	N.A.		
N161988	Rock	0.13	<0.01	0.02	<0.001	<0.001	0.99	46.60	1.2	N.A.		
N161989	Rock	0.06	<0.01	0.01	<0.001	<0.001	1.50	46.57	1.1	N.A.		
N161990	Rock Chip	0.85	0.21	0.04	<0.001	<0.001	<0.05	0.18	1.3	N.A.		
N161991	Rock	0.25	<0.01	0.04	<0.001	<0.001	2.16	41.44	2.3	N.A.		
N161992	Rock	0.39	<0.01	0.03	<0.001	<0.001	2.16	36.69	3.7	N.A.		
N161993	Rock	0.07	<0.01	<0.01	<0.001	<0.001	2.11	40.23	3.5	N.A.		
N161994	Rock	0.78	<0.01	0.02	<0.001	<0.001	2.91	25.30	6.0	N.A.		
N161996	Rock	1.09	<0.01	0.03	<0.001	<0.001	1.82	25.10	4.4	N.A.		
N161997	Rock	2.20	<0.01	0.04	<0.001	<0.001	1.28	12.90	5.9	N.A.		
N161998	Rock	2.95	<0.01	0.05	<0.001	<0.001	0.72	12.37	5.5	N.A.		
N161999	Rock	2.80	<0.01	0.06	<0.001	<0.001	2.12	7.74	7.2	N.A.		
N162000	Rock Pulp	1.62	0.06	0.12	*	0.001	14.87	<0.01	10.9	N.A.	0.82	25.44
N162001	Rock	3.19	<0.01	0.08	<0.001	<0.001	0.49	8.37	6.8	N.A.		
N162002	Rock	2.50	<0.01	0.15	<0.001	<0.001	0.63	6.04	8.3	N.A.		
N162003	Rock	2.09	<0.01	0.09	<0.001	<0.001	1.19	4.77	9.8	N.A.		
N162004	Rock	2.64	<0.01	0.15	<0.001	<0.001	2.18	6.69	7.9	N.A.		
N162005	Rock	2.29	<0.01	0.13	<0.001	<0.001	2.74	5.75	7.8	N.A.		
N162006	Rock	2.57	<0.01	0.14	<0.001	<0.001	1.88	6.45	7.7	N.A.		
N162007	Rock	1.85	<0.01	0.12	<0.001	<0.001	3.71	4.48	9.4	N.A.		
N162008	Rock	2.31	<0.01	0.15	<0.001	<0.001	3.10	5.76	8.6	N.A.		
N162009	Rock	2.25	<0.01	0.14	<0.001	<0.001	2.37	5.76	8.1	N.A.		
N162010	Rock Chip	0.83	0.20	0.04	<0.001	<0.001	<0.05	0.06	1.4	N.A.		

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162011	Rock	1.92	7.9	0.002	0.006	<0.01	<0.01	<2	0.007	<0.001	0.06	2.96	<0.01	0.037	<0.001	0.002	<0.01	0.47	0.127	0.001	0.11
N162012	Rock	1.84	9.7	0.002	0.006	<0.01	<0.01	<2	0.007	<0.001	0.03	3.73	<0.01	0.030	<0.001	0.002	<0.01	0.33	0.114	0.002	0.06
N162013	Rock	1.89	8.1	0.002	0.007	<0.01	<0.01	<2	0.007	<0.001	0.10	4.05	<0.01	0.037	<0.001	0.002	<0.01	0.66	0.123	0.002	0.18
N162014	Rock	1.88	9.5	0.002	0.006	<0.01	<0.01	<2	0.007	<0.001	0.05	3.67	<0.01	0.033	<0.001	0.002	<0.01	0.50	0.126	0.001	0.11
N162016	Rock	2.22	10.4	0.002	0.006	<0.01	<0.01	<2	0.007	<0.001	0.05	3.35	<0.01	0.027	<0.001	0.002	<0.01	0.39	0.131	0.002	0.06
N162017	Rock	0.59	2.5	0.001	0.005	<0.01	0.02	<2	0.005	<0.001	0.04	2.94	<0.01	0.031	<0.001	<0.001	<0.01	2.83	0.105	0.002	1.24
N162401	Rock	2.20	4.6	<0.001	<0.001	<0.01	<0.01	<2	0.004	<0.001	0.16	3.75	<0.01	0.001	<0.001	<0.001	<0.01	0.06	0.025	<0.001	<0.01
N162402	Rock	2.02	5.9	<0.001	0.002	<0.01	<0.01	<2	0.004	0.001	0.15	3.50	<0.01	0.001	<0.001	<0.001	<0.01	0.07	0.024	<0.001	<0.01
N162403	Rock	2.33	9.4	<0.001	0.002	<0.01	<0.01	<2	0.006	0.002	0.07	2.16	0.02	0.001	<0.001	<0.001	<0.01	0.10	0.047	<0.001	<0.01
N162404	Rock	1.01	7.9	<0.001	<0.001	<0.01	<0.01	<2	0.004	0.001	0.02	0.97	<0.01	<0.001	<0.001	<0.001	<0.01	0.09	0.038	<0.001	<0.01
N162405	Rock	3.88	11.3	<0.001	0.002	<0.01	<0.01	<2	0.006	0.001	0.10	2.93	0.01	0.002	<0.001	<0.001	<0.01	0.06	0.027	<0.001	0.01
N162406	Rock	3.60	7.9	<0.001	<0.001	<0.01	<0.01	<2	0.005	0.001	0.04	1.52	<0.01	0.001	<0.001	<0.001	<0.01	0.05	0.023	<0.001	<0.01
N162407	Rock	2.13	9.1	<0.001	<0.001	<0.01	0.02	<2	0.008	0.001	<0.01	0.70	<0.01	0.002	0.001	<0.001	<0.01	0.03	0.033	<0.001	<0.01
N162408	Rock	2.91	4.0	<0.001	0.010	<0.01	<0.01	<2	0.004	0.001	0.02	0.89	<0.01	0.003	<0.001	<0.001	<0.01	0.36	0.029	<0.001	0.10
N162409	Rock	2.55	1.6	<0.001	0.003	<0.01	0.01	<2	0.002	<0.001	0.03	0.86	<0.01	0.004	<0.001	<0.001	<0.01	0.36	0.063	<0.001	0.08
N162410	Rock Pulp	0.09	131.7	<0.001	0.092	<0.01	0.53	<2	0.002	0.004	0.13	7.93	<0.01	0.007	0.001	<0.001	<0.01	3.66	0.053	0.002	2.07
N162411	Rock	2.24	4.2	<0.001	0.003	<0.01	<0.01	<2	0.003	<0.001	<0.01	0.72	<0.01	0.003	<0.001	<0.001	<0.01	0.18	0.059	<0.001	0.03
N162412	Rock	2.14	5.7	<0.001	0.012	<0.01	0.02	<2	0.005	0.001	0.02	1.42	<0.01	0.004	<0.001	<0.001	<0.01	0.45	0.059	<0.001	0.11
N161916	Rock	2.43	3.0	<0.001	0.001	1.02	3.51	<2	0.002	0.002	<0.01	0.55	<0.01	0.029	0.014	0.001	<0.01	0.03	0.009	0.001	0.01
N161956	Rock	1.38	3.7	0.001	0.005	<0.01	0.04	<2	0.005	<0.001	0.07	3.21	<0.01	0.043	<0.001	<0.001	<0.01	3.95	0.101	0.002	1.82

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Project: 13
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001759.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
N162011	Rock	2.19	<0.01	0.14	<0.001	<0.001	2.18	5.57	7.7	N.A.		
N162012	Rock	2.14	<0.01	0.16	<0.001	<0.001	3.14	5.45	8.3	N.A.		
N162013	Rock	2.06	<0.01	0.16	<0.001	<0.001	3.52	5.08	8.8	N.A.		
N162014	Rock	1.86	<0.01	0.18	<0.001	<0.001	3.28	4.62	8.5	N.A.		
N162016	Rock	1.12	<0.01	0.13	<0.001	<0.001	3.28	2.90	9.5	N.A.		
N162017	Rock	2.10	<0.01	0.11	<0.001	<0.001	1.77	5.15	8.8	N.A.		
N162401	Rock	0.28	<0.01	0.06	<0.001	<0.001	0.50	0.90	3.6	N.A.		
N162402	Rock	0.12	<0.01	0.05	<0.001	<0.001	0.71	0.37	3.4	N.A.		
N162403	Rock	0.36	<0.01	0.09	<0.001	<0.001	0.79	0.49	3.9	N.A.		
N162404	Rock	0.21	<0.01	0.09	<0.001	<0.001	0.39	0.23	2.2	N.A.		
N162405	Rock	0.34	<0.01	0.09	<0.001	<0.001	0.70	0.26	3.4	N.A.		
N162406	Rock	0.22	<0.01	0.09	<0.001	<0.001	0.52	0.25	2.2	N.A.		
N162407	Rock	0.47	<0.01	0.10	<0.001	<0.001	0.59	0.28	3.2	N.A.		
N162408	Rock	0.11	<0.01	0.07	<0.001	<0.001	0.33	0.19	1.9	N.A.		
N162409	Rock	0.12	<0.01	0.04	<0.001	<0.001	0.15	0.12	1.5	N.A.		
N162410	Rock Pulp	3.40	0.11	0.21	<0.001	<0.001	1.62	0.03	4.9	N.A.		
N162411	Rock	0.37	<0.01	0.04	<0.001	<0.001	0.47	0.10	1.8	N.A.		
N162412	Rock	0.26	<0.01	0.06	<0.001	<0.001	0.86	0.17	1.9	N.A.		
N161916	Rock	0.23	<0.01	0.04	<0.001	<0.001	1.63	21.08	2.8	N.A.		
N161956	Rock	2.02	<0.01	0.10	<0.001	<0.001	1.97	5.02	11.1	N.A.		

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QUALITY CONTROL REPORT WHI11001759.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
REP G1	QC																				
N161858	Rock	1.64	1.3	<0.001	<0.001	1.81	4.88	<2	<0.001	<0.001	<0.01	0.14	<0.01	0.003	0.019	<0.001	<0.01	<0.01	<0.001	0.001	<0.01
REP N161858	QC			<0.001	<0.001	1.71	4.79	<2	<0.001	<0.001	<0.01	0.14	<0.01	0.004	0.019	<0.001	<0.01	<0.01	<0.001	0.002	<0.01
N161880	Rock Pulp	0.07	I.S.	<0.001	0.129	>4	16.58	201	0.002	0.011	0.35	11.75	0.02	0.003	0.058	<0.001	<0.01	4.16	0.028	0.004	2.08
REP N161880	QC																				
N161882	Rock	1.86	13.2	<0.001	0.005	<0.01	0.12	<2	0.006	<0.001	<0.01	1.92	<0.01	0.004	<0.001	0.002	<0.01	0.23	0.096	0.004	0.01
REP N161882	QC		11.5																		
N161893	Rock	2.38	0.7	<0.001	0.001	2.00	5.00	<2	<0.001	<0.001	<0.01	0.28	<0.01	0.051	0.031	<0.001	<0.01	0.89	0.010	0.002	0.02
REP N161893	QC																				
N161898	Rock	2.44	4.0	<0.001	0.003	1.37	4.76	<2	0.003	<0.001	<0.01	1.27	<0.01	0.030	0.017	<0.001	<0.01	0.39	0.059	0.005	0.03
REP N161898	QC		1.7																		
N161902	Rock	2.51	2.2	<0.001	0.001	2.48	5.00	<2	0.001	0.001	<0.01	0.61	<0.01	0.030	0.019	0.001	<0.01	0.03	0.008	0.002	0.02
REP N161902	QC			<0.001	0.001	2.39	4.97	<2	<0.001	0.001	<0.01	0.60	<0.01	0.029	0.019	0.001	<0.01	0.03	0.008	0.002	0.02
N161911	Rock	2.60	1.9	<0.001	<0.001	2.32	6.05	<2	<0.001	<0.001	<0.01	0.50	<0.01	0.019	0.025	0.001	<0.01	0.01	0.001	0.001	0.01
REP N161911	QC		2.0																		
N161917	Rock	2.41	1.9	<0.001	<0.001	2.51	5.23	<2	0.001	0.002	<0.01	0.45	<0.01	0.022	0.020	0.002	<0.01	0.01	0.004	0.002	<0.01
REP N161917	QC																				
N161936	Rock	1.90	28.9	<0.001	0.029	1.65	0.22	17	0.007	0.004	0.17	15.65	0.02	0.012	<0.001	0.005	<0.01	0.32	0.084	0.002	0.08
REP N161936	QC																				
REP N161939	QC			0.001	0.016	0.25	0.20	4	0.006	0.003	0.10	3.92	<0.01	0.014	<0.001	0.002	<0.01	0.47	0.102	0.001	0.12
N161952	Rock	2.15	3.1	0.001	0.005	<0.01	0.03	<2	0.006	<0.001	<0.01	2.07	<0.01	0.008	<0.001	0.002	<0.01	0.75	0.120	0.002	0.27
REP N161952	QC		5.1																		
N161959	Rock	2.18	5.7	0.001	0.007	0.16	8.58	<2	0.003	<0.001	0.04	1.76	<0.01	0.120	<0.001	0.002	<0.01	7.10	0.075	0.006	0.83
REP N161959	QC																				
N161965	Rock	2.07	5.6	0.002	0.005	0.22	7.92	<2	0.005	<0.001	<0.01	2.74	<0.01	0.159	<0.001	0.002	<0.01	1.33	0.080	0.008	0.11
REP N161965	QC		5.1																		
N161972	Rock	2.16	2.4	0.001	0.003	0.19	5.78	<2	0.005	<0.001	0.04	2.08	<0.01	0.028	0.001	0.002	<0.01	1.84	0.051	0.007	0.14
REP N161972	QC																				

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QUALITY CONTROL REPORT WHI11001759.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	-5.11	0.01	0.01
Pulp Duplicates												
REP G1	QC							0.10				
N161858	Rock	0.03	<0.01	<0.01	<0.001	<0.001	2.74	37.79	3.0	N.A.		
REP N161858	QC	0.03	<0.01	<0.01	<0.001	<0.001	2.73					
N161880	Rock Pulp	0.41	<0.01	0.16	<0.001	<0.001	19.04	0.14	I.S.	13.71	12.46	18.33
REP N161880	QC									13.81		
N161882	Rock	2.50	<0.01	0.08	<0.001	<0.001	0.82	6.62	5.6	N.A.		
REP N161882	QC											
N161893	Rock	0.18	<0.01	0.03	<0.001	<0.001	1.79	35.32	1.0	N.A.		
REP N161893	QC								1.0			
N161898	Rock	0.81	<0.01	0.11	<0.001	<0.001	2.23	28.04	1.8	N.A.		
REP N161898	QC											
N161902	Rock	0.15	<0.01	0.04	<0.001	<0.001	2.74	39.11	1.6	N.A.		
REP N161902	QC	0.14	<0.01	0.04	<0.001	<0.001	2.72					
N161911	Rock	0.10	<0.01	0.02	<0.001	<0.001	3.40	30.92	2.8	N.A.		
REP N161911	QC											
N161917	Rock	0.19	<0.01	0.03	<0.001	<0.001	2.82	28.96	2.4	N.A.		
REP N161917	QC							29.00				
N161936	Rock	0.99	<0.01	0.03	<0.001	<0.001	16.39	1.99	15.0	N.A.		
REP N161936	QC								14.9			
REP N161939	QC	1.85	<0.01	0.08	<0.001	<0.001	3.12					
N161952	Rock	1.95	<0.01	0.13	<0.001	<0.001	1.23	4.91	6.7	N.A.		
REP N161952	QC											
N161959	Rock	2.05	<0.01	0.08	<0.001	<0.001	4.94	5.13	7.0	N.A.		
REP N161959	QC							5.08				
N161965	Rock	2.96	<0.01	0.07	<0.001	<0.001	4.29	11.06	6.8	N.A.		
REP N161965	QC											
N161972	Rock	1.16	<0.01	0.16	<0.001	<0.001	3.34	17.15	3.9	N.A.		
REP N161972	QC								4.5			

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001759.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161979	Rock	2.81	3.6	<0.001	0.002	0.93	5.40	<2	0.001	<0.001	<0.01	0.67	<0.01	0.064	0.009	0.002	<0.01	0.28	0.033	0.004	0.06
REP N161979	QC																				
N161993	Rock	0.25	1.0	<0.001	0.002	2.94	2.87	<2	0.001	<0.001	0.03	1.01	<0.01	0.002	0.005	<0.001	<0.01	0.01	0.005	0.001	<0.01
REP N161993	QC			<0.001	0.002	2.88	2.92	<2	0.001	<0.001	0.03	1.04	<0.01	0.002	0.005	0.001	<0.01	0.01	0.005	0.001	<0.01
N162001	Rock	1.35	5.8	0.002	0.004	0.46	0.51	4	0.006	<0.001	<0.01	1.85	<0.01	0.021	0.002	0.002	<0.01	0.26	0.121	0.010	<0.01
REP N162001	QC			0.002	0.004	0.45	0.55	3	0.006	<0.001	<0.01	1.86	<0.01	0.021	0.002	0.002	<0.01	0.26	0.120	0.010	<0.01
N162003	Rock	1.40	0.7	0.003	0.006	1.25	0.06	10	0.008	<0.001	0.03	2.20	<0.01	0.037	<0.001	0.003	<0.01	0.33	0.151	0.007	0.02
REP N162003	QC																				
N162004	Rock	2.05	10.4	0.002	0.007	0.03	<0.01	2	0.006	<0.001	0.02	3.23	<0.01	0.030	<0.001	0.002	<0.01	0.31	0.115	0.003	0.06
REP N162004	QC		14.9																		
N162014	Rock	1.88	9.5	0.002	0.006	<0.01	<0.01	<2	0.007	<0.001	0.05	3.67	<0.01	0.033	<0.001	0.002	<0.01	0.50	0.126	0.001	0.11
REP N162014	QC																				
Core Reject Duplicates																					
N161862	Rock	1.56	1.1	<0.001	<0.001	1.00	4.59	<2	<0.001	<0.001	<0.01	0.20	<0.01	0.003	0.016	<0.001	<0.01	0.01	0.005	0.002	<0.01
DUP N161862	QC		1.9	<0.001	<0.001	0.97	5.01	<2	<0.001	<0.001	<0.01	0.18	<0.01	0.003	0.017	<0.001	<0.01	<0.01	0.002	0.002	<0.01
N161939	Rock	1.83	11.9	0.001	0.016	0.25	0.20	4	0.006	0.003	0.10	3.95	<0.01	0.015	<0.001	0.002	<0.01	0.47	0.103	0.001	0.12
DUP N161939	QC		9.7	0.001	0.019	0.27	0.22	4	0.007	0.003	0.08	4.36	<0.01	0.012	<0.001	0.003	<0.01	0.42	0.104	0.001	0.10
N161977	Rock	2.63	25.7	<0.001	0.003	1.00	4.84	<2	0.002	<0.001	<0.01	0.70	<0.01	0.067	0.004	0.001	<0.01	0.60	0.035	0.004	0.08
DUP N161977	QC		5.2	<0.001	0.003	1.01	4.96	<2	0.002	<0.001	<0.01	0.70	<0.01	0.069	0.004	0.002	<0.01	0.64	0.035	0.004	0.08
N162013	Rock	1.89	8.1	0.002	0.007	<0.01	<0.01	<2	0.007	<0.001	0.10	4.05	<0.01	0.037	<0.001	0.002	<0.01	0.66	0.123	0.002	0.18
DUP N162013	QC		7.6	0.002	0.007	0.01	<0.01	<2	0.007	<0.001	0.10	4.19	<0.01	0.038	<0.001	0.002	<0.01	0.63	0.121	0.002	0.17
Reference Materials																					
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		191.9																		
STD CDN-PGMS-19	Standard		239.1																		
STD CDN-PGMS-19	Standard		191.3																		

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QUALITY CONTROL REPORT WHI11001759.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	LOI LOI % -5.11	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
N161979	Rock	0.42	<0.01	0.07	<0.001	<0.001	1.71	35.71	1.7	N.A.		
REP N161979	QC							35.82				
N161993	Rock	0.07	<0.01	<0.01	<0.001	<0.001	2.11	40.23	3.5	N.A.		
REP N161993	QC	0.07	<0.01	<0.01	<0.001	<0.001	2.09					
N162001	Rock	3.19	<0.01	0.08	<0.001	<0.001	0.49	8.37	6.8	N.A.		
REP N162001	QC	3.19	<0.01	0.08	<0.001	<0.001	0.49					
N162003	Rock	2.09	<0.01	0.09	<0.001	<0.001	1.19	4.77	9.8	N.A.		
REP N162003	QC							4.80				
N162004	Rock	2.64	<0.01	0.15	<0.001	<0.001	2.18	6.69	7.9	N.A.		
REP N162004	QC											
N162014	Rock	1.86	<0.01	0.18	<0.001	<0.001	3.28	4.62	8.5	N.A.		
REP N162014	QC								8.4			
Core Reject Duplicates												
N161862	Rock	0.05	<0.01	<0.01	<0.001	0.001	2.54	35.09	2.6	N.A.		
DUP N161862	QC	0.04	<0.01	<0.01	<0.001	0.001	2.70	34.63	2.8	N.A.		
N161939	Rock	1.87	<0.01	0.08	<0.001	<0.001	3.11	4.50	7.2	N.A.		
DUP N161939	QC	1.82	<0.01	0.09	<0.001	<0.001	3.64	4.35	7.5	N.A.		
N161977	Rock	0.68	<0.01	0.09	<0.001	<0.001	1.02	33.65	1.6	N.A.		
DUP N161977	QC	0.63	<0.01	0.08	<0.001	<0.001	1.04	33.96	1.1	N.A.		
N162013	Rock	2.06	<0.01	0.16	<0.001	<0.001	3.52	5.08	8.8	N.A.		
DUP N162013	QC	1.98	<0.01	0.15	<0.001	<0.001	3.75	4.94	8.5	N.A.		
Reference Materials												
STD CCU-1C	Standard										0.34	4.19
STD CCU-1C	Standard										0.38	4.31
STD CCU-1C	Standard										0.34	3.97
STD CCU-1C	Standard										0.43	4.09
STD CDN-PGMS-19	Standard											
STD CDN-PGMS-19	Standard											
STD CDN-PGMS-19	Standard											

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		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD CDN-PGMS-19	Standard		183.9																		
STD CDN-PGMS-19	Standard		301.1																		
STD CDN-PGMS-19	Standard		185.6																		
STD CDN-PGMS-19	Standard		272.2																		
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2-D	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD NILAT-N3	Standard																				
STD OREAS153AR	Standard			0.017	0.691	<0.01	<0.01	<2	<0.001	0.001	0.02	3.16	<0.01	0.002	<0.001	<0.001	<0.01	0.95	0.047	0.002	1.60
STD OREAS131B-A	Standard			<0.001	0.022	1.68	2.93	34	0.002	0.002	0.18	5.40	<0.01	0.002	0.009	0.005	<0.01	5.08	0.053	0.001	2.79
STD OREAS153AR	Standard			0.018	0.703	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.27	<0.01	0.002	<0.001	<0.001	<0.01	0.99	0.047	0.002	1.69
STD OREAS131B-A	Standard			<0.001	0.022	1.76	3.14	35	0.002	0.002	0.18	5.82	<0.01	0.002	0.009	0.003	<0.01	5.31	0.053	0.002	2.85

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		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	LOI LOI % -5.11	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD CDN-PGMS-19	Standard											
STD CDN-PGMS-19	Standard											
STD CDN-PGMS-19	Standard											
STD CDN-PGMS-19	Standard											
STD CZN-3	Standard										0.10	53.44
STD CZN-3	Standard										0.11	54.04
STD CZN-3	Standard										0.11	48.11
STD CZN-3	Standard										0.06	52.26
STD DOLOMITE-2	Standard								45.0			
STD DOLOMITE-2	Standard								44.2			
STD DOLOMITE-2	Standard								43.8			
STD DOLOMITE-2	Standard								44.6			
STD DOLOMITE-2	Standard								43.9			
STD DOLOMITE-2	Standard								43.9			
STD DOLOMITE-2-D	Standard									45.74		
STD GBM997-6	Standard										21.43	15.82
STD GBM997-6	Standard										22.93	16.78
STD GBM997-6	Standard										24.61	15.11
STD GBM997-6	Standard										22.15	15.97
STD MICA-MG(D)	Standard							0.43				
STD MICA-MG(D)	Standard							0.42				
STD MICA-MG(D)	Standard							0.42				
STD MICA-MG(D)	Standard							0.42				
STD MICA-MG(D)	Standard							0.43				
STD NILAT-N3	Standard									5.82		
STD OREAS153AR	Standard	2.39	0.13	0.61	<0.001	<0.001	1.24					
STD OREAS131B-A	Standard	0.97	0.01	0.72	<0.001	<0.001	4.94					
STD OREAS153AR	Standard	2.53	0.18	0.64	<0.001	<0.001	1.28					
STD OREAS131B-A	Standard	1.04	0.01	0.74	<0.001	<0.001	5.18					

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		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD OREAS153AR	Standard			0.017	0.691	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.21	<0.01	0.002	<0.001	<0.001	<0.01	0.95	0.047	0.002	1.60
STD OREAS131B-A	Standard			<0.001	0.022	1.79	2.94	35	0.002	0.002	0.18	5.51	<0.01	0.002	0.009	0.006	<0.01	5.17	0.054	0.001	2.87
STD OREAS153AR	Standard			0.018	0.714	<0.01	<0.01	<2	<0.001	0.001	0.02	3.31	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.050	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.021	1.77	3.06	34	0.003	0.002	0.18	5.59	<0.01	0.002	0.009	0.005	<0.01	5.31	0.055	0.002	2.89
STD OREAS153AR	Standard			0.018	0.716	<0.01	<0.01	<2	0.001	0.001	0.02	3.34	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.049	0.002	1.67
STD OREAS131B-A	Standard			<0.001	0.021	1.72	3.05	34	0.002	0.002	0.18	5.62	<0.01	0.002	0.009	0.005	<0.01	5.35	0.053	0.002	2.88
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD DOLOMITE-2 Expected																					
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD DOLOMITE-2-D																					
STD NILAT-N3 Expected																					
STD MICA-MG(D) Expected																					
STD SO-18 Expected																					
STD CZN-3 Expected																					
STD CCU-1C Expected																					
STD GBM997-6 Expected																					
STD CDN-PGMS-19			230																		
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01

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QUALITY CONTROL REPORT WHI11001759.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	LOI LOI % -5.11	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD OREAS153AR	Standard	2.55	0.19	0.65	<0.001	<0.001	1.22					
STD OREAS131B-A	Standard	0.99	0.01	0.75	<0.001	<0.001	5.05					
STD OREAS153AR	Standard	2.43	0.14	0.61	<0.001	<0.001	1.26					
STD OREAS131B-A	Standard	1.00	0.01	0.73	<0.001	<0.001	5.03					
STD OREAS153AR	Standard	2.43	0.13	0.61	<0.001	<0.001	1.28					
STD OREAS131B-A	Standard	0.95	0.01	0.69	<0.001	<0.001	5.05					
STD PTC-1A	Standard										0.04	0.10
STD PTC-1A	Standard										0.03	0.09
STD PTC-1A	Standard										0.06	0.10
STD PTC-1A	Standard										0.08	0.09
STD SO-18	Standard							0.05				
STD SO-18	Standard							0.05				
STD SO-18	Standard							0.06				
STD SO-18	Standard							0.05				
STD SO-18	Standard							0.05				
STD DOLOMITE-2 Expected									46			
STD OREAS153AR		2.425	0.142	0.6138			1.285					
STD OREAS131B-A		0.969	0.0112	0.7			5.01					
STD DOLOMITE-2-D										46		
STD NILAT-N3 Expected										5.86		
STD MICA-MG(D) Expected								0.4				
STD SO-18 Expected								0.0515				
STD CZN-3 Expected											0.113	49.75
STD CCU-1C Expected											0.34	3.99
STD GBM997-6 Expected											23.75	15.83
STD CDN-PGMS-19												
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05					
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05					
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05					

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001759.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank																				
BLK	Blank																				
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		3.2																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
Prep Wash																					
G1	Prep Blank		1.0	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.07	<0.01	0.007	<0.001	<0.001	<0.01	0.59	0.080	0.001	0.60

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Acme Analytical Laboratories (Vancouver) Ltd.
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Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001759.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	LOI LOI % -5.11	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
BLK	Blank										<0.01	<0.01
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05					
BLK	Blank											
BLK	Blank											
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05					
BLK	Blank										<0.01	<0.01
BLK	Blank										<0.01	<0.01
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank							<0.01				
BLK	Blank							<0.01				
BLK	Blank							<0.01				
BLK	Blank							<0.01				
BLK	Blank							<0.01				
BLK	Blank										<0.01	<0.01
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank											
BLK	Blank											
Prep Wash												
G1	Prep Blank	1.17	0.13	0.59	<0.001	<0.001	<0.05		1.2	N.A.		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001759.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
G1	Prep Blank		0.8	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.07	<0.01	0.008	<0.001	<0.001	<0.01	0.58	0.079	0.001	0.60
G1	Prep Blank																				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001759.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	LOI LOI % -5.11	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
G1	Prep Blank	1.13	0.13	0.56	<0.001	<0.001	<0.05	0.11	0.6	N.A.		
G1	Prep Blank							0.11				

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Vancouver
Received: February 02, 2012
Report Date: February 10, 2012
Page: 1 of 2

CERTIFICATE OF ANALYSIS WHI11001759R.1

CLIENT JOB INFORMATION

Project: 13
Shipment ID: FLIN 287
P.O. Number
Number of Samples: 13

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
7AR.1	13	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
RAYMOND CHAN
CHIEF ASSAYER

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: February 10, 2012

CERTIFICATE OF ANALYSIS WHI11001759R.1

	Method	7AR.1	7AR.1
	Analyte	Pb	Zn
	Unit	%	%
	MDL	0.01	0.01
N161865	Rock	5.08	4.24
N161880	Rock Pulp	12.05	18.35
N161900	Rock Pulp	0.76	25.01
N161921	Rock	5.41	3.81
N161923	Rock	7.08	8.29
N161924	Rock	3.75	8.98
N161925	Rock	6.11	7.76
N161927	Rock	5.09	6.45
N161929	Rock	4.51	6.77
N161932	Rock	6.77	24.12
N161940	Rock Pulp	4.46	11.16
N161980	Rock Pulp	11.76	17.88
N162000	Rock Pulp	0.75	25.42

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: February 10, 2012

QUALITY CONTROL REPORT WHI11001759R.1

		Method	7AR.1	7AR.1
		Analyte	Pb	Zn
		Unit	%	%
		MDL	0.01	0.01
Pulp Duplicates				
N161932	Rock		6.77	24.12
REP N161932	QC		6.84	24.65
Reference Materials				
STD CCU-1C	Standard		0.32	4.08
STD CZN-3	Standard		0.09	50.41
STD GBM997-6	Standard		21.95	15.79
STD PTC-1A	Standard		0.04	0.11
STD CZN-3 Expected			0.113	49.75
STD CCU-1C Expected			0.34	3.99
STD GBM997-6 Expected			23.75	15.83
BLK	Blank		<0.01	<0.01

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: October 03, 2011
Report Date: November 28, 2011
Page: 1 of 6

CERTIFICATE OF ANALYSIS WHI11001778.1

CLIENT JOB INFORMATION

Project: 13
Shipment ID: FLIN 288
P.O. Number
Number of Samples: 133

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	119	Crush, split and pulverize 250 g rock to 200 mesh			WHI
3A01	133	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	133	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	133	X-Ray fluorescence / Fusion		Completed	VAN
2A05	133	Loss on Ignition at 1000 C		Completed	VAN
7AR.1	4	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

DUP not match - Subject to recheck on Samples N162093, N162094, N162096, N162096 DUP, N162097 & N162098 from core reject.

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001778.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162022	Drill Core	5.01	8.2	0.001	0.004	<0.01	0.03	<2	0.006	<0.001	0.01	2.29	<0.01	0.007	<0.001	0.001	<0.01	0.83	0.145	0.002	0.26
N162023	Drill Core	4.07	9.7	<0.001	0.004	<0.01	0.02	<2	0.006	<0.001	0.02	2.59	<0.01	0.012	<0.001	0.001	<0.01	1.17	0.126	0.002	0.45
N162024	Drill Core	3.04	11.8	0.001	0.005	<0.01	0.01	<2	0.005	<0.001	0.02	2.00	<0.01	0.009	<0.001	0.002	<0.01	1.04	0.095	0.002	0.43
N162025	Drill Core	3.98	12.6	<0.001	0.006	<0.01	0.02	<2	0.006	<0.001	0.02	2.98	<0.01	0.011	<0.001	0.002	<0.01	1.02	0.112	0.002	0.41
N162026	Drill Core	3.59	9.6	0.001	0.004	<0.01	0.05	<2	0.006	<0.001	0.02	2.90	<0.01	0.009	<0.001	0.001	<0.01	0.82	0.118	0.002	0.28
N162027	Drill Core	4.44	12.1	0.001	0.005	<0.01	0.02	2	0.006	<0.001	0.01	2.41	<0.01	0.009	<0.001	0.002	<0.01	0.85	0.114	0.002	0.30
N162028	Drill Core	4.67	14.2	0.001	0.005	<0.01	0.01	<2	0.006	<0.001	0.04	2.96	<0.01	0.025	<0.001	0.002	<0.01	2.40	0.111	0.003	1.15
N162029	Drill Core	3.30	17.1	0.001	0.005	<0.01	1.12	<2	0.006	<0.001	0.04	3.28	<0.01	0.024	<0.001	0.002	<0.01	1.58	0.093	0.003	0.76
N162030	Rock Chip	0.17	<0.5	<0.001	0.004	<0.01	<0.01	<2	0.014	0.003	0.04	4.19	<0.01	0.007	<0.001	<0.001	<0.01	1.00	0.115	0.002	2.22
N162031	Drill Core	3.92	14.6	0.001	0.008	0.03	4.79	<2	0.006	<0.001	<0.01	2.73	<0.01	0.006	0.002	0.005	<0.01	0.29	0.119	0.004	0.02
N162032	Drill Core	4.24	17.6	0.001	0.006	0.03	2.64	<2	0.007	<0.001	<0.01	3.05	<0.01	0.004	0.001	0.004	<0.01	0.21	0.087	0.002	0.02
N162033	Drill Core	4.52	18.2	0.001	0.007	0.03	4.06	<2	0.006	<0.001	<0.01	2.23	<0.01	0.005	0.001	0.004	<0.01	0.23	0.098	0.003	0.01
N162034	Drill Core	4.87	17.7	0.002	0.007	0.18	8.57	2	0.005	<0.001	0.01	2.47	<0.01	0.014	0.001	0.005	<0.01	0.60	0.110	0.004	0.21
N162036	Drill Core	4.49	15.7	0.002	0.006	0.17	5.98	<2	0.007	<0.001	<0.01	3.07	<0.01	0.012	<0.001	0.004	<0.01	0.44	0.077	0.008	0.16
N162037	Drill Core	4.82	10.7	0.001	0.006	0.09	4.19	<2	0.005	<0.001	0.01	3.48	<0.01	0.014	<0.001	0.003	<0.01	0.49	0.132	0.009	0.12
N162038	Drill Core	4.59	13.6	0.002	0.006	0.30	9.11	<2	0.006	<0.001	<0.01	2.45	<0.01	0.015	0.001	0.005	<0.01	0.46	0.074	0.015	0.16
N162039	Drill Core	4.44	6.4	0.001	0.005	1.05	6.85	3	0.005	<0.001	0.01	2.75	<0.01	0.114	0.003	0.004	<0.01	1.90	0.071	0.010	0.29
N162040	Rock Pulp	0.10	6.2	<0.001	0.031	>4	10.83	101	0.002	0.002	0.13	7.97	0.01	0.001	0.030	0.019	<0.01	3.79	0.039	<0.001	2.15
N162041	Drill Core	4.97	4.6	0.001	0.005	0.15	4.68	<2	0.006	<0.001	<0.01	3.31	<0.01	0.150	<0.001	0.002	<0.01	0.29	0.088	0.012	0.11
N162042	Drill Core	4.64	5.6	0.001	0.004	0.15	5.89	<2	0.004	<0.001	<0.01	1.57	<0.01	0.485	<0.001	0.002	<0.01	0.20	0.061	0.008	0.11
N162043	Drill Core	5.10	2.2	<0.001	0.003	0.17	5.66	<2	0.003	<0.001	<0.01	1.03	<0.01	0.502	<0.001	0.002	<0.01	0.22	0.053	0.007	0.08
N162044	Drill Core	3.93	1.5	<0.001	0.003	0.10	3.27	<2	0.004	<0.001	<0.01	1.49	<0.01	0.246	<0.001	0.001	<0.01	0.75	0.123	0.009	0.17
N162045	Drill Core	1.05	1.4	<0.001	0.003	0.46	6.75	<2	0.001	<0.001	<0.01	0.50	<0.01	0.603	<0.001	0.002	<0.01	0.32	0.025	0.004	0.06
N162046	Drill Core	6.03	0.5	<0.001	0.003	0.82	5.41	<2	0.002	<0.001	<0.01	0.65	<0.01	0.286	<0.001	0.002	<0.01	0.17	0.040	0.005	0.05
N162047	Drill Core	5.45	<0.5	<0.001	0.002	0.89	5.01	<2	0.001	<0.001	<0.01	0.53	<0.01	0.094	0.004	0.002	<0.01	0.41	0.025	0.003	0.06
N162048	Drill Core	5.19	<0.5	<0.001	0.003	1.11	4.53	<2	0.002	<0.001	<0.01	0.78	<0.01	0.070	0.006	0.002	<0.01	0.39	0.041	0.006	0.06
N162049	Drill Core	5.60	<0.5	<0.001	<0.001	0.62	2.82	<2	<0.001	<0.001	0.04	0.60	<0.01	0.103	0.003	0.001	<0.01	10.54	0.012	<0.001	0.20
N162050	Rock Chip	0.17	5.8	<0.001	0.003	<0.01	0.02	<2	0.013	0.003	0.04	4.12	<0.01	0.007	<0.001	<0.001	<0.01	0.90	0.115	0.002	2.19
N162051	Drill Core	6.08	5.6	<0.001	0.001	0.59	5.18	<2	0.001	<0.001	<0.01	0.47	<0.01	0.014	0.003	0.002	<0.01	1.05	0.024	0.003	0.03
N162052	Drill Core	5.51	1.4	<0.001	0.001	0.97	3.99	<2	<0.001	<0.001	0.02	0.53	<0.01	0.046	0.009	0.001	<0.01	4.18	0.003	0.001	0.30

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001778.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162022	Drill Core	2.11	<0.01	0.12	<0.001	<0.001	1.21	5.37	6.8		
N162023	Drill Core	2.02	<0.01	0.12	<0.001	<0.001	1.46	5.67	7.6		
N162024	Drill Core	1.85	<0.01	0.11	<0.001	<0.001	1.02	4.78	6.6		
N162025	Drill Core	2.12	<0.01	0.12	<0.001	<0.001	1.82	5.56	7.3		
N162026	Drill Core	2.04	<0.01	0.11	<0.001	<0.001	1.63	6.45	8.2		
N162027	Drill Core	2.44	<0.01	0.12	<0.001	<0.001	1.21	6.11	6.9		
N162028	Drill Core	2.49	<0.01	0.11	<0.001	<0.001	1.60	6.12	9.5		
N162029	Drill Core	2.09	<0.01	0.09	<0.001	<0.001	2.62	5.69	9.4		
N162030	Rock Chip	1.04	0.26	0.04	0.001	<0.001	<0.05	0.05	1.4		
N162031	Drill Core	2.53	<0.01	0.11	<0.001	<0.001	3.89	6.11	7.2		
N162032	Drill Core	2.69	<0.01	0.09	<0.001	<0.001	3.07	6.68	6.8		
N162033	Drill Core	2.63	<0.01	0.11	<0.001	<0.001	2.93	6.37	6.5		
N162034	Drill Core	2.72	<0.01	0.17	<0.001	<0.001	5.54	6.31	8.1		
N162036	Drill Core	2.72	<0.01	0.14	<0.001	<0.001	4.89	6.49	8.2		
N162037	Drill Core	3.91	<0.01	0.12	<0.001	<0.001	3.63	9.49	7.7		
N162038	Drill Core	2.95	<0.01	0.08	<0.001	<0.001	5.50	7.15	7.0		
N162039	Drill Core	2.38	<0.01	0.05	<0.001	<0.001	3.90	11.89	7.2		
N162040	Rock Pulp	0.76	<0.01	0.50	<0.001	<0.001	11.36	0.08	15.7	4.62	10.78
N162041	Drill Core	2.86	<0.01	0.06	<0.001	<0.001	3.08	12.48	5.9		
N162042	Drill Core	2.32	<0.01	0.05	<0.001	<0.001	0.25	20.95	3.5		
N162043	Drill Core	1.86	<0.01	0.06	<0.001	<0.001	0.14	29.14	3.9		
N162044	Drill Core	2.02	<0.01	0.05	<0.001	<0.001	0.19	17.55	3.2		
N162045	Drill Core	0.96	<0.01	0.06	<0.001	<0.001	0.09	33.13	4.7		
N162046	Drill Core	1.19	<0.01	0.08	<0.001	<0.001	0.16	33.28	2.3		
N162047	Drill Core	0.47	<0.01	0.06	<0.001	<0.001	0.76	34.92	2.2		
N162048	Drill Core	0.86	<0.01	0.09	<0.001	<0.001	1.11	34.66	2.6		
N162049	Drill Core	0.09	<0.01	0.02	<0.001	<0.001	0.33	32.79	11.2		
N162050	Rock Chip	0.94	0.23	0.04	<0.001	<0.001	<0.05	0.23	1.4		
N162051	Drill Core	0.32	<0.01	0.07	<0.001	<0.001	2.56	39.17	2.4		
N162052	Drill Core	0.09	<0.01	0.03	<0.001	<0.001	1.10	38.66	3.3		

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Project: 13
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CERTIFICATE OF ANALYSIS WHI11001778.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162053	Drill Core	6.03	1.0	<0.001	0.001	1.80	3.96	<2	<0.001	<0.001	0.01	0.33	<0.01	0.074	0.006	0.001	<0.01	3.11	0.010	0.001	0.04
N162054	Drill Core	5.62	<0.5	<0.001	0.002	1.11	5.29	<2	0.002	<0.001	<0.01	0.62	<0.01	0.067	0.007	0.002	<0.01	0.35	0.039	0.004	0.06
N162056	Drill Core	5.81	<0.5	<0.001	<0.001	0.96	6.74	<2	<0.001	<0.001	<0.01	0.29	<0.01	0.025	0.011	0.002	<0.01	0.30	0.007	0.001	0.02
N162057	Drill Core	6.97	<0.5	<0.001	<0.001	0.94	3.69	<2	<0.001	<0.001	0.02	0.39	<0.01	0.034	0.009	<0.001	<0.01	2.86	0.004	0.001	0.19
N162058	Drill Core	5.26	0.7	<0.001	<0.001	0.53	2.72	<2	<0.001	<0.001	0.07	0.89	<0.01	0.096	0.007	<0.001	<0.01	12.14	0.005	<0.001	0.83
N162059	Drill Core	4.96	<0.5	<0.001	<0.001	0.48	2.22	<2	<0.001	<0.001	0.09	1.38	<0.01	0.079	0.005	<0.001	<0.01	12.13	0.014	<0.001	1.18
N162060	Rock Pulp	0.12	419.6	<0.001	1.285	<0.01	0.13	2	0.001	0.010	0.12	11.29	<0.01	0.005	<0.001	<0.001	<0.01	3.02	0.040	0.002	1.77
N162061	Drill Core	5.15	0.9	<0.001	<0.001	0.92	2.00	<2	<0.001	<0.001	0.06	0.82	<0.01	0.080	0.005	<0.001	<0.01	10.89	0.005	<0.001	0.65
N162062	Drill Core	5.47	<0.5	<0.001	<0.001	0.75	1.58	<2	<0.001	<0.001	0.09	0.93	<0.01	0.076	0.003	<0.001	<0.01	19.98	0.008	<0.001	0.76
N162063	Drill Core	6.08	2.5	<0.001	<0.001	1.14	3.69	<2	<0.001	<0.001	0.05	0.87	<0.01	0.081	0.004	<0.001	<0.01	10.62	0.016	0.002	0.31
N162064	Drill Core	5.50	<0.5	<0.001	0.001	1.00	5.82	<2	0.001	<0.001	0.01	0.45	<0.01	0.035	0.007	<0.001	<0.01	2.75	0.019	0.003	0.03
N162065	Drill Core	6.70	1.0	<0.001	0.001	2.06	5.56	<2	<0.001	<0.001	0.01	0.30	<0.01	0.037	0.011	<0.001	<0.01	2.99	0.006	0.001	0.04
N162066	Drill Core	5.56	0.8	<0.001	<0.001	0.72	2.70	<2	<0.001	<0.001	0.08	1.14	<0.01	0.078	0.007	<0.001	<0.01	10.60	0.003	<0.001	0.83
N162067	Drill Core	6.06	0.7	<0.001	0.001	1.32	3.52	<2	<0.001	<0.001	<0.01	0.29	<0.01	0.145	0.005	<0.001	<0.01	0.11	0.013	0.002	0.03
N162068	Drill Core	5.25	2.1	<0.001	0.002	1.43	4.30	<2	0.002	<0.001	<0.01	0.62	<0.01	0.166	0.007	<0.001	<0.01	0.26	0.019	0.004	0.06
N162069	Drill Core	6.62	1.8	<0.001	0.002	1.75	4.35	<2	<0.001	<0.001	<0.01	0.31	<0.01	0.318	0.006	<0.001	<0.01	0.15	0.008	0.002	0.04
N162070	Rock Chip	0.17	0.5	<0.001	0.003	<0.01	<0.01	<2	0.014	0.002	0.05	4.40	<0.01	0.007	<0.001	<0.001	<0.01	1.00	0.116	0.002	2.31
N162071	Drill Core	5.31	3.0	<0.001	0.004	1.02	4.07	<2	0.001	<0.001	<0.01	0.57	<0.01	0.650	0.005	<0.001	<0.01	0.19	0.031	0.004	0.06
N162072	Drill Core	2.85	2.9	<0.001	0.003	0.96	2.15	<2	0.001	<0.001	<0.01	0.39	<0.01	0.741	0.003	<0.001	<0.01	0.17	0.023	0.003	0.04
N162073	Drill Core	3.10	5.0	<0.001	0.004	0.77	2.20	<2	0.002	<0.001	<0.01	0.58	<0.01	0.439	0.003	<0.001	<0.01	0.32	0.049	0.005	0.04
N162074	Drill Core	3.56	5.1	0.001	0.004	0.94	1.24	2	0.004	<0.001	0.02	1.51	<0.01	0.059	0.002	<0.001	<0.01	1.20	0.108	0.010	0.17
N162076	Drill Core	5.09	6.2	0.001	0.003	2.59	1.25	9	0.004	<0.001	0.02	1.74	<0.01	0.024	0.002	0.004	<0.01	0.51	0.073	0.009	0.04
N162077	Drill Core	3.65	8.2	0.001	0.004	0.99	1.51	3	0.006	<0.001	0.02	2.09	<0.01	0.012	0.003	0.001	<0.01	0.22	0.094	0.011	0.01
N162078	Drill Core	4.42	11.2	0.002	0.004	0.83	2.49	2	0.005	<0.001	0.02	1.70	<0.01	0.034	0.004	<0.001	<0.01	0.58	0.094	0.011	0.11
N162079	Drill Core	4.07	7.3	0.001	0.004	0.10	1.13	<2	0.005	<0.001	0.02	1.63	<0.01	0.043	0.002	<0.001	<0.01	0.59	0.111	0.011	0.25
N162080	Rock Pulp	0.10	2.7	<0.001	0.130	>4	16.70	203	0.002	0.010	0.35	11.98	0.02	0.003	0.058	<0.001	<0.01	4.20	0.028	0.002	2.01
N162081	Drill Core	5.02	8.2	0.001	0.004	0.33	0.67	<2	0.006	<0.001	0.03	1.95	<0.01	0.043	0.001	<0.001	<0.01	0.59	0.124	0.012	0.37
N162082	Drill Core	4.24	7.2	0.001	0.005	0.14	1.66	<2	0.005	<0.001	0.06	2.22	<0.01	0.156	0.003	<0.001	<0.01	0.92	0.106	0.011	0.62
N162083	Drill Core	4.22	10.8	0.002	0.005	0.90	0.65	3	0.005	<0.001	0.07	3.51	<0.01	0.301	0.001	0.002	<0.01	0.78	0.099	0.012	0.59
N162084	Drill Core	4.83	9.7	0.001	0.005	0.49	0.80	<2	0.005	<0.001	0.08	3.42	<0.01	0.198	0.002	0.001	<0.01	0.77	0.111	0.012	0.73

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Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162053	Drill Core	0.10	<0.01	0.03	<0.001	<0.001	0.91	39.25	1.7		
N162054	Drill Core	0.62	<0.01	0.09	<0.001	<0.001	1.64	35.16	1.6		
N162056	Drill Core	0.11	<0.01	0.03	<0.001	<0.001	2.61	43.72	2.3		
N162057	Drill Core	0.07	<0.01	0.02	<0.001	<0.001	1.54	46.18	2.0		
N162058	Drill Core	0.03	<0.01	0.01	<0.001	<0.001	0.17	34.02	15.4		
N162059	Drill Core	0.07	<0.01	0.03	<0.001	<0.001	1.27	26.62	14.8		
N162060	Rock Pulp	3.13	0.11	0.24	<0.001	<0.001	4.55	0.02	5.8		
N162061	Drill Core	0.03	<0.01	0.01	<0.001	<0.001	0.94	35.18	12.6		
N162062	Drill Core	0.02	<0.01	<0.01	<0.001	<0.001	1.00	22.74	22.4		
N162063	Drill Core	0.11	<0.01	0.03	<0.001	<0.001	0.59	32.57	12.0		
N162064	Drill Core	0.26	<0.01	0.07	0.003	<0.001	2.09	39.86	1.8		
N162065	Drill Core	0.08	<0.01	0.03	0.003	<0.001	2.27	39.05	1.8		
N162066	Drill Core	0.03	<0.01	0.01	<0.001	<0.001	0.97	33.29	12.5		
N162067	Drill Core	0.31	<0.01	0.05	<0.001	<0.001	0.21	45.99	1.2		
N162068	Drill Core	0.67	<0.01	0.08	<0.001	<0.001	0.19	37.94	1.5		
N162069	Drill Core	0.30	<0.01	0.01	<0.001	<0.001	0.16	47.43	2.2		
N162070	Rock Chip	1.00	0.24	0.04	<0.001	<0.001	<0.05	0.09	1.8		
N162071	Drill Core	0.96	<0.01	0.02	<0.001	0.001	0.11	36.74	3.4		
N162072	Drill Core	0.77	<0.01	0.02	<0.001	<0.001	0.09	43.13	5.6		
N162073	Drill Core	1.32	<0.01	0.04	<0.001	<0.001	0.13	40.67	3.1		
N162074	Drill Core	2.93	<0.01	0.05	<0.001	<0.001	0.36	14.72	4.6		
N162076	Drill Core	2.53	<0.01	0.05	<0.001	<0.001	0.87	13.92	5.5		
N162077	Drill Core	2.95	<0.01	0.05	<0.001	<0.001	0.83	11.51	5.8		
N162078	Drill Core	2.95	<0.01	0.05	<0.001	<0.001	0.77	9.76	6.1		
N162079	Drill Core	3.12	<0.01	0.05	<0.001	<0.001	0.28	10.35	5.7		
N162080	Rock Pulp	0.43	0.01	0.16	*	<0.001	18.94	0.14	17.3	12.04	17.25
N162081	Drill Core	3.10	<0.01	0.05	<0.001	<0.001	0.32	10.66	6.4		
N162082	Drill Core	3.01	<0.01	0.05	<0.001	<0.001	0.50	12.40	6.8		
N162083	Drill Core	2.90	0.01	0.06	<0.001	<0.001	2.00	10.24	7.6		
N162084	Drill Core	2.78	<0.01	0.06	<0.001	<0.001	1.99	10.09	7.3		

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Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162085	Drill Core	4.64	10.5	0.001	0.007	0.24	2.62	<2	0.005	<0.001	0.10	1.81	<0.01	0.160	0.005	<0.001	<0.01	0.48	0.089	0.010	0.89
N162086	Drill Core	4.08	10.8	0.002	0.005	0.62	0.39	3	0.006	<0.001	0.04	3.19	<0.01	0.351	0.001	0.002	<0.01	0.62	0.111	0.011	0.33
N162087	Drill Core	4.23	9.4	0.002	0.005	0.93	0.67	4	0.006	<0.001	0.07	2.79	<0.01	0.134	0.002	0.002	<0.01	0.97	0.102	0.006	0.43
N162088	Drill Core	4.14	7.9	0.002	0.003	0.76	1.56	4	0.006	<0.001	0.12	2.78	<0.01	0.029	0.004	0.001	<0.01	0.41	0.109	0.003	0.10
N162089	Drill Core	1.48	7.6	0.002	0.005	0.31	1.34	2	0.005	<0.001	0.05	1.48	<0.01	0.040	0.004	0.002	<0.01	0.41	0.107	0.003	0.10
N162090	Rock Chip	0.17	1.2	<0.001	0.003	<0.01	<0.01	<2	0.013	0.002	0.05	4.33	<0.01	0.009	<0.001	<0.001	<0.01	1.17	0.113	0.003	2.29
N162091	Drill Core	2.00	43.4	0.002	0.010	0.07	1.50	2	0.008	<0.001	<0.01	6.28	0.01	0.019	0.004	0.003	<0.01	0.24	0.101	0.002	0.02
N162092	Drill Core	3.80	27.5	0.002	0.007	0.08	0.68	3	0.007	<0.001	0.02	3.80	<0.01	0.019	0.002	0.003	<0.01	0.38	0.129	0.003	0.06
N162093	Drill Core	4.09	15.1	0.002	0.007	0.10	0.07	3	0.006	<0.001	0.03	4.70	<0.01	0.015	<0.001	0.003	<0.01	0.41	0.130	0.003	0.08
N162094	Drill Core	4.62	9.9	0.002	0.004	0.01	<0.01	<2	0.006	<0.001	0.03	1.80	<0.01	0.014	<0.001	0.001	<0.01	0.44	0.131	0.003	0.08
N162096	Drill Core	4.69	9.7	0.001	0.006	0.01	<0.01	<2	0.005	<0.001	0.19	5.91	<0.01	0.050	<0.001	0.002	<0.01	1.34	0.113	0.002	0.53
N162097	Drill Core	4.39	15.4	0.002	0.007	0.01	0.02	2	0.007	<0.001	0.04	3.52	<0.01	0.019	<0.001	0.003	<0.01	0.49	0.150	0.002	0.09
N162098	Drill Core	4.39	9.5	0.002	0.004	<0.01	0.01	<2	0.008	<0.001	<0.01	2.11	<0.01	0.014	<0.001	0.001	<0.01	0.33	0.148	0.002	0.02
N162099	Drill Core	3.88	14.8	0.002	0.007	0.01	0.02	<2	0.008	<0.001	0.02	3.42	<0.01	0.019	<0.001	0.002	<0.01	0.33	0.142	0.002	0.02
N162100	Rock Pulp	0.12	805.9	<0.001	0.395	0.79	>20	21	0.004	0.005	0.13	12.17	0.10	0.003	0.066	0.096	<0.01	1.58	0.024	0.002	0.92
N162101	Drill Core	3.46	12.9	0.001	0.007	0.02	1.66	<2	0.006	<0.001	<0.01	2.67	<0.01	0.006	0.001	0.002	<0.01	0.45	0.190	0.002	0.04
N162102	Drill Core	4.42	21.8	0.001	0.008	0.02	1.68	<2	0.006	<0.001	0.02	3.37	<0.01	0.010	0.001	0.003	<0.01	0.87	0.119	0.002	0.31
N162103	Drill Core	4.68	8.4	0.001	0.006	0.01	2.06	<2	0.005	<0.001	0.01	2.33	<0.01	0.008	0.002	0.001	<0.01	0.85	0.097	0.002	0.31
N162104	Drill Core	4.37	6.0	0.002	0.004	<0.01	0.02	<2	0.006	<0.001	<0.01	1.89	<0.01	0.007	<0.001	0.001	<0.01	0.58	0.110	0.002	0.17
N162105	Drill Core	4.40	11.5	0.002	0.006	0.10	3.50	<2	0.006	<0.001	<0.01	3.35	<0.01	0.006	<0.001	0.003	<0.01	0.31	0.089	0.005	0.09
N162106	Drill Core	5.42	10.1	0.002	0.005	0.06	2.59	<2	0.006	<0.001	0.01	3.44	<0.01	0.015	<0.001	0.003	<0.01	0.67	0.114	0.007	0.24
N162107	Drill Core	4.79	7.6	0.001	0.005	0.05	2.07	<2	0.004	<0.001	0.01	3.26	<0.01	0.014	<0.001	0.002	<0.01	0.50	0.145	0.009	0.13
N162108	Drill Core	3.57	13.0	0.002	0.005	0.13	5.37	<2	0.005	<0.001	<0.01	2.92	<0.01	0.011	<0.001	0.003	<0.01	0.42	0.085	0.009	0.18
N162109	Drill Core	1.36	13.4	0.002	0.006	0.27	8.90	<2	0.005	<0.001	<0.01	2.56	<0.01	0.011	0.002	0.003	<0.01	0.45	0.100	0.008	0.16
N162110	Rock Chip	0.18	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.15	<0.01	0.007	<0.001	<0.001	<0.01	1.02	0.115	0.003	2.17
N162111	Drill Core	3.52	13.8	0.002	0.005	0.26	7.01	<2	0.006	<0.001	0.01	2.33	<0.01	0.015	0.002	0.002	<0.01	0.63	0.095	0.011	0.27
N162112	Drill Core	3.46	6.9	0.001	0.004	0.09	4.80	<2	0.005	<0.001	0.02	2.89	<0.01	0.015	<0.001	0.001	<0.01	0.72	0.090	0.008	0.29
N162113	Drill Core	4.59	9.8	0.002	0.005	0.07	3.34	<2	0.005	<0.001	<0.01	3.41	<0.01	0.008	<0.001	<0.001	<0.01	0.41	0.095	0.010	0.09
N162114	Drill Core	3.89	9.7	0.002	0.005	0.06	3.29	<2	0.004	<0.001	<0.01	3.13	<0.01	0.017	<0.001	<0.001	<0.01	0.45	0.095	0.009	0.13
N162116	Drill Core	4.15	12.6	0.002	0.005	0.12	7.90	<2	0.005	<0.001	<0.01	2.62	<0.01	0.092	0.001	0.002	<0.01	0.91	0.076	0.009	0.16

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001778.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162085	Drill Core	2.63	<0.01	0.08	<0.001	<0.001	0.74	11.25	7.1		
N162086	Drill Core	2.97	0.02	0.21	<0.001	<0.001	2.12	7.50	7.7		
N162087	Drill Core	2.33	<0.01	0.17	<0.001	<0.001	2.22	5.68	8.4		
N162088	Drill Core	2.32	<0.01	0.16	<0.001	<0.001	1.22	5.71	8.4		
N162089	Drill Core	1.88	<0.01	0.17	<0.001	<0.001	0.98	4.67	6.9		
N162090	Rock Chip	1.23	0.30	0.05	<0.001	<0.001	<0.05	0.05	1.1		
N162091	Drill Core	2.22	<0.01	0.18	<0.001	<0.001	6.67	5.41	9.5		
N162092	Drill Core	2.14	<0.01	0.16	<0.001	<0.001	3.45	5.67	8.8		
N162093	Drill Core	2.04	<0.01	0.14	<0.001	<0.001	4.37	5.03	9.7		
N162094	Drill Core	2.34	<0.01	0.13	<0.001	<0.001	0.94	5.74	7.4		
N162096	Drill Core	1.51	<0.01	0.11	<0.001	<0.001	5.88	3.68	11.3		
N162097	Drill Core	2.12	<0.01	0.14	<0.001	<0.001	2.79	5.33	8.4		
N162098	Drill Core	2.18	<0.01	0.18	<0.001	<0.001	1.33	5.35	8.3		
N162099	Drill Core	1.81	<0.01	0.17	<0.001	<0.001	2.80	4.50	8.5		
N162100	Rock Pulp	1.66	0.05	0.12	*	0.004	13.97	<0.01	10.8	0.75	24.93
N162101	Drill Core	2.12	<0.01	0.16	<0.001	<0.001	2.73	5.36	7.3		
N162102	Drill Core	1.56	<0.01	0.14	<0.001	<0.001	3.65	3.84	8.0		
N162103	Drill Core	1.57	<0.01	0.14	<0.001	<0.001	2.48	4.15	7.1		
N162104	Drill Core	1.90	<0.01	0.14	<0.001	<0.001	1.16	4.69	6.5		
N162105	Drill Core	2.61	<0.01	0.10	<0.001	<0.001	3.97	6.39	7.5		
N162106	Drill Core	3.00	<0.01	0.10	<0.001	<0.001	3.22	8.09	7.9		
N162107	Drill Core	4.31	<0.01	0.18	<0.001	<0.001	2.08	10.77	6.4		
N162108	Drill Core	2.61	<0.01	0.12	<0.001	<0.001	4.25	6.49	6.6		
N162109	Drill Core	2.48	<0.01	0.10	<0.001	<0.001	5.66	6.19	6.9		
N162110	Rock Chip	1.05	0.26	0.05	<0.001	<0.001	<0.05	0.05	1.2		
N162111	Drill Core	3.07	<0.01	0.12	<0.001	<0.001	4.08	7.76	7.0		
N162112	Drill Core	3.00	<0.01	0.07	<0.001	<0.001	3.21	8.54	6.5		
N162113	Drill Core	3.47	<0.01	0.07	<0.001	<0.001	3.12	10.17	5.9		
N162114	Drill Core	3.21	<0.01	0.06	<0.001	<0.001	2.94	9.54	5.9		
N162116	Drill Core	2.54	<0.01	0.06	<0.001	<0.001	4.56	9.23	6.6		

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001778.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162117	Drill Core	4.47	6.7	0.002	0.005	0.13	4.94	<2	0.006	<0.001	<0.01	2.51	<0.01	0.021	0.001	0.001	<0.01	0.50	0.078	0.011	0.05
N162118	Drill Core	4.22	12.7	0.001	0.006	0.88	11.34	3	0.005	<0.001	0.02	2.54	<0.01	0.059	0.005	0.002	<0.01	2.51	0.043	0.008	0.10
N162119	Drill Core	3.84	7.6	0.002	0.005	0.13	3.62	<2	0.006	<0.001	<0.01	2.96	<0.01	0.031	0.001	0.001	<0.01	1.02	0.125	0.012	0.11
N162120	Rock Pulp	0.13	135.8	<0.001	0.090	<0.01	0.52	<2	0.002	0.004	0.12	7.86	<0.01	0.006	0.002	<0.001	<0.01	3.63	0.056	0.002	2.07
N162121	Drill Core	4.35	9.4	0.002	0.006	0.11	4.29	<2	0.007	<0.001	<0.01	3.46	<0.01	0.023	0.001	0.002	<0.01	0.34	0.101	0.013	0.04
N162122	Drill Core	4.56	9.8	0.002	0.006	0.16	7.55	<2	0.005	<0.001	<0.01	2.47	<0.01	0.053	0.002	0.003	<0.01	0.78	0.052	0.008	0.32
N162123	Drill Core	4.39	6.3	0.002	0.005	0.14	5.05	<2	0.005	<0.001	<0.01	3.00	<0.01	0.046	<0.001	0.002	<0.01	0.47	0.097	0.010	0.14
N162124	Drill Core	4.31	7.4	0.002	0.005	0.08	4.04	<2	0.006	<0.001	<0.01	2.91	<0.01	0.017	<0.001	0.001	<0.01	0.33	0.093	0.010	0.12
N162125	Drill Core	5.24	7.1	0.001	0.004	0.13	4.85	<2	0.004	<0.001	<0.01	1.52	<0.01	0.350	<0.001	0.001	<0.01	0.28	0.080	0.009	0.10
N162126	Drill Core	4.51	5.6	0.001	0.003	0.25	3.63	<2	0.003	<0.001	0.01	1.25	<0.01	0.297	<0.001	<0.001	<0.01	1.27	0.076	0.008	0.28
N162127	Drill Core	4.06	7.4	0.002	0.005	0.14	5.07	<2	0.005	<0.001	<0.01	2.76	<0.01	0.011	<0.001	0.001	<0.01	0.62	0.075	0.009	0.09
N162128	Drill Core	4.05	7.6	0.002	0.005	0.12	3.15	<2	0.006	<0.001	<0.01	3.52	<0.01	0.007	<0.001	0.001	<0.01	0.30	0.130	0.012	0.08
N162129	Drill Core	3.80	7.3	0.002	0.006	0.15	8.44	<2	0.006	<0.001	<0.01	2.30	<0.01	0.005	<0.001	0.001	<0.01	0.20	0.081	0.010	0.18
N162130	Rock Chip	0.18	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.05	4.16	<0.01	0.006	<0.001	<0.001	<0.01	0.91	0.116	0.003	2.20
N162131	Drill Core	3.93	3.0	0.002	0.004	0.21	7.46	<2	0.004	<0.001	<0.01	1.35	<0.01	0.004	<0.001	0.002	<0.01	0.21	0.068	0.009	0.19
N162132	Drill Core	4.15	3.6	0.001	0.005	0.26	3.40	<2	0.005	<0.001	0.01	1.67	<0.01	0.007	<0.001	0.001	<0.01	0.37	0.122	0.010	0.15
N162133	Drill Core	1.48	2.3	<0.001	0.009	1.10	5.24	<2	0.007	<0.001	0.03	4.75	0.04	0.009	<0.001	0.001	<0.01	1.36	0.091	0.010	0.30
N162134	Drill Core	2.96	2.3	<0.001	0.003	0.12	6.56	<2	0.002	<0.001	0.02	0.75	<0.01	0.099	<0.001	0.001	<0.01	5.83	0.035	0.005	0.08
N162136	Drill Core	5.38	2.0	0.001	0.003	0.35	5.29	<2	0.003	<0.001	<0.01	0.85	<0.01	0.148	<0.001	0.001	<0.01	0.57	0.033	0.007	0.12
N162137	Drill Core	4.90	2.0	<0.001	0.006	0.40	4.84	<2	0.002	<0.001	<0.01	0.82	<0.01	0.135	<0.001	<0.001	<0.01	0.18	0.045	0.007	0.06
N162138	Drill Core	4.97	1.4	<0.001	0.002	1.00	5.73	<2	0.002	<0.001	<0.01	0.71	<0.01	0.101	<0.001	<0.001	<0.01	0.17	0.045	0.005	0.07
N162139	Drill Core	5.39	2.5	<0.001	0.002	0.77	5.65	<2	0.002	<0.001	<0.01	0.91	<0.01	0.077	<0.001	<0.001	<0.01	0.28	0.044	0.006	0.18
N162140	Rock Pulp	0.07	4.0	<0.001	0.032	>4	10.98	101	0.002	0.002	0.13	7.97	0.01	0.002	0.031	0.017	<0.01	3.84	0.041	0.001	2.13
N162141	Drill Core	4.85	1.8	<0.001	0.004	0.67	5.06	<2	0.002	<0.001	<0.01	0.66	<0.01	0.065	<0.001	<0.001	<0.01	1.46	0.034	0.005	0.06
N162142	Drill Core	4.84	2.3	<0.001	0.003	0.60	5.86	<2	0.001	<0.001	<0.01	0.55	<0.01	0.037	<0.001	0.001	<0.01	1.28	0.024	0.003	0.05
N162143	Drill Core	5.75	1.1	<0.001	0.002	0.85	5.18	<2	0.001	<0.001	0.02	0.59	<0.01	0.013	0.001	<0.001	<0.01	1.01	0.016	0.003	0.03
N162144	Drill Core	3.51	0.6	<0.001	0.002	0.78	5.74	<2	0.001	<0.001	0.01	0.58	<0.01	0.018	0.001	0.001	<0.01	0.98	0.011	0.002	0.02
N162145	Drill Core	4.33	0.9	<0.001	0.002	1.18	3.30	<2	0.004	0.002	0.09	2.51	<0.01	0.004	0.001	<0.001	<0.01	0.27	0.015	0.003	0.07
N162146	Drill Core	4.45	2.9	<0.001	0.001	1.27	2.54	<2	0.002	<0.001	0.02	0.77	<0.01	0.009	<0.001	<0.001	<0.01	2.63	0.021	0.003	0.03
N162147	Drill Core	5.30	<0.5	<0.001	0.001	1.17	2.46	<2	0.002	<0.001	0.02	0.75	<0.01	0.009	<0.001	<0.001	<0.01	2.70	0.021	0.004	0.04

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Project: 13
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	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162117	Drill Core	2.80	<0.01	0.07	<0.001	<0.001	3.30	9.04	6.5		
N162118	Drill Core	1.49	<0.01	0.04	<0.001	<0.001	6.54	12.63	6.4		
N162119	Drill Core	2.97	<0.01	0.06	<0.001	<0.001	2.79	9.89	6.3		
N162120	Rock Pulp	3.40	0.09	0.21	<0.001	<0.001	1.58	0.02	4.4		
N162121	Drill Core	3.42	<0.01	0.07	<0.001	<0.001	3.57	9.84	6.1		
N162122	Drill Core	2.31	<0.01	0.05	<0.001	<0.001	3.82	11.06	5.6		
N162123	Drill Core	2.64	<0.01	0.06	<0.001	<0.001	3.46	9.90	5.3		
N162124	Drill Core	3.05	<0.01	0.07	<0.001	<0.001	3.06	9.73	5.7		
N162125	Drill Core	2.48	<0.01	0.07	<0.001	<0.001	0.25	18.96	1.6		
N162126	Drill Core	2.01	<0.01	0.05	<0.001	<0.001	0.16	18.67	3.5		
N162127	Drill Core	2.61	<0.01	0.08	<0.001	<0.001	3.72	8.60	6.1		
N162128	Drill Core	2.58	<0.01	0.06	<0.001	<0.001	3.87	7.31	7.0		
N162129	Drill Core	0.82	<0.01	<0.01	<0.001	<0.001	6.26	2.70	7.8		
N162130	Rock Chip	0.86	0.21	0.04	<0.001	<0.001	<0.05	0.04	1.4		
N162131	Drill Core	0.70	<0.01	<0.01	<0.001	<0.001	4.61	4.58	6.2		
N162132	Drill Core	1.86	<0.01	0.04	<0.001	<0.001	2.27	7.53	4.5		
N162133	Drill Core	2.14	<0.01	0.06	<0.001	<0.001	6.66	7.83	7.3		
N162134	Drill Core	1.28	<0.01	0.10	<0.001	<0.001	1.18	19.70	3.1		
N162136	Drill Core	1.29	<0.01	0.12	<0.001	<0.001	0.19	27.73	0.9		
N162137	Drill Core	1.00	<0.01	0.13	<0.001	<0.001	0.18	31.66	0.9		
N162138	Drill Core	0.71	<0.01	0.11	<0.001	<0.001	0.68	33.10	0.8		
N162139	Drill Core	0.89	<0.01	0.10	<0.001	<0.001	0.80	30.16	1.4		
N162140	Rock Pulp	0.75	<0.01	0.50	<0.001	<0.001	11.23	0.08	15.0	4.53	10.67
N162141	Drill Core	0.84	<0.01	0.09	<0.001	<0.001	1.12	30.69	2.4		
N162142	Drill Core	0.42	<0.01	0.04	<0.001	<0.001	1.93	36.56	2.2		
N162143	Drill Core	0.31	<0.01	0.04	<0.001	<0.001	2.10	38.38	2.8		
N162144	Drill Core	0.23	<0.01	0.03	<0.001	<0.001	2.24	38.52	2.1		
N162145	Drill Core	0.11	<0.01	<0.01	<0.001	<0.001	1.94	35.05	4.6		
N162146	Drill Core	0.16	<0.01	<0.01	<0.001	<0.001	1.86	33.66	3.1		
N162147	Drill Core	0.17	<0.01	<0.01	<0.001	<0.001	1.85	33.54	2.9		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001778.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162148	Drill Core	2.85	1.4	<0.001	0.004	0.93	1.42	<2	0.002	<0.001	<0.01	0.74	<0.01	0.012	<0.001	<0.001	<0.01	1.12	0.050	0.006	0.01
N162149	Drill Core	3.09	5.3	0.001	0.003	0.69	1.86	<2	0.004	<0.001	<0.01	1.21	<0.01	0.009	<0.001	0.001	<0.01	0.20	0.078	0.009	0.01
N162150	Rock Chip	0.14	0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.28	<0.01	0.008	<0.001	<0.001	<0.01	1.09	0.116	0.003	2.22
N162151	Drill Core	3.89	6.1	0.002	0.004	1.13	3.12	<2	0.005	<0.001	0.02	1.66	<0.01	0.014	0.002	0.002	<0.01	0.23	0.079	0.011	0.01
N162152	Drill Core	3.31	9.1	0.002	0.007	0.12	0.14	<2	0.007	<0.001	<0.01	2.26	0.01	0.013	<0.001	0.003	<0.01	0.26	0.119	0.017	0.01
N162153	Drill Core	3.79	7.2	0.002	0.003	0.61	0.94	<2	0.005	<0.001	0.03	2.00	<0.01	0.009	<0.001	0.002	<0.01	0.21	0.084	0.013	0.01
N162154	Drill Core	4.31	7.7	0.002	0.004	0.52	2.97	<2	0.004	<0.001	0.01	1.49	<0.01	0.012	0.001	0.002	<0.01	0.30	0.094	0.011	0.02
N162156	Drill Core	4.18	13.0	0.002	0.004	0.72	4.96	3	0.004	<0.001	0.02	1.39	<0.01	0.014	0.002	0.002	<0.01	0.58	0.071	0.012	0.06
N162157	Drill Core	4.14	17.3	0.002	0.005	0.10	4.83	<2	0.006	<0.001	<0.01	1.96	<0.01	0.013	0.002	0.002	<0.01	0.56	0.105	0.014	0.04
N162158	Drill Core	4.31	14.4	0.001	0.005	0.33	2.87	<2	0.005	<0.001	0.02	1.99	0.01	0.013	0.002	0.002	<0.01	0.88	0.095	0.014	0.04
N162159	Drill Core	4.10	16.8	0.002	0.005	0.19	1.64	<2	0.007	<0.001	<0.01	2.43	0.01	0.012	0.001	0.003	<0.01	0.33	0.117	0.014	0.05
N162160	Rock Pulp	0.09	468.9	<0.001	1.335	<0.01	0.14	2	0.001	0.011	0.12	11.68	<0.01	0.005	<0.001	<0.001	<0.01	3.01	0.044	0.003	1.83
N162161	Drill Core	4.35	22.8	0.002	0.006	1.34	4.39	2	0.004	<0.001	0.03	2.10	<0.01	0.077	0.005	0.003	<0.01	1.28	0.082	0.013	0.19

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Box 1500
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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001778.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162148	Drill Core	0.21	<0.01	<0.01	<0.001	<0.001	1.61	24.56	3.5		
N162149	Drill Core	0.38	<0.01	<0.01	<0.001	<0.001	2.17	9.80	4.7		
N162150	Rock Chip	1.15	0.30	0.05	<0.001	<0.001	<0.05	0.13	1.2		
N162151	Drill Core	0.42	<0.01	<0.01	<0.001	<0.001	2.90	12.82	6.5		
N162152	Drill Core	0.84	<0.01	<0.01	<0.001	<0.001	2.26	1.11	7.0		
N162153	Drill Core	0.73	<0.01	0.01	<0.001	<0.001	1.76	4.23	6.2		
N162154	Drill Core	2.20	<0.01	0.04	<0.001	<0.001	1.62	11.62	5.2		
N162156	Drill Core	2.48	<0.01	0.05	<0.001	<0.001	2.14	9.59	6.1		
N162157	Drill Core	3.44	<0.01	0.05	<0.001	0.001	2.38	9.21	5.6		
N162158	Drill Core	2.90	<0.01	0.05	<0.001	<0.001	1.80	8.00	5.2		
N162159	Drill Core	3.29	<0.01	0.05	<0.001	<0.001	1.51	8.69	5.8		
N162160	Rock Pulp	3.18	0.11	0.25	0.001	<0.001	4.75	0.02	4.4		
N162161	Drill Core	2.66	<0.01	0.06	<0.001	0.001	2.86	7.82	6.4		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001778.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
N162024	Drill Core	3.04	11.8	0.001	0.005	<0.01	0.01	<2	0.005	<0.001	0.02	2.00	<0.01	0.009	<0.001	0.002	<0.01	1.04	0.095	0.002	0.43
REP N162024	QC		12.8																		
N162027	Drill Core	4.44	12.1	0.001	0.005	<0.01	0.02	2	0.006	<0.001	0.01	2.41	<0.01	0.009	<0.001	0.002	<0.01	0.85	0.114	0.002	0.30
REP N162027	QC																				
N162030	Rock Chip	0.17	<0.5	<0.001	0.004	<0.01	<0.01	<2	0.014	0.003	0.04	4.19	<0.01	0.007	<0.001	<0.001	<0.01	1.00	0.115	0.002	2.22
REP N162030	QC			<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.04	4.19	<0.01	0.007	<0.001	<0.001	<0.01	1.01	0.115	0.002	2.21
N162036	Drill Core	4.49	15.7	0.002	0.006	0.17	5.98	<2	0.007	<0.001	<0.01	3.07	<0.01	0.012	<0.001	0.004	<0.01	0.44	0.077	0.008	0.16
REP N162036	QC																				
N162064	Drill Core	5.50	<0.5	<0.001	0.001	1.00	5.82	<2	0.001	<0.001	0.01	0.45	<0.01	0.035	0.007	<0.001	<0.01	2.75	0.019	0.003	0.03
REP N162064	QC																				
N162072	Drill Core	2.85	2.9	<0.001	0.003	0.96	2.15	<2	0.001	<0.001	<0.01	0.39	<0.01	0.741	0.003	<0.001	<0.01	0.17	0.023	0.003	0.04
REP N162072	QC		3.2																		
N162085	Drill Core	4.64	10.5	0.001	0.007	0.24	2.62	<2	0.005	<0.001	0.10	1.81	<0.01	0.160	0.005	<0.001	<0.01	0.48	0.089	0.010	0.89
REP N162085	QC			0.001	0.007	0.24	2.66	<2	0.005	<0.001	0.10	1.84	<0.01	0.173	0.005	<0.001	<0.01	0.48	0.090	0.010	0.90
N162087	Drill Core	4.23	9.4	0.002	0.005	0.93	0.67	4	0.006	<0.001	0.07	2.79	<0.01	0.134	0.002	0.002	<0.01	0.97	0.102	0.006	0.43
REP N162087	QC																				
N162099	Drill Core	3.88	14.8	0.002	0.007	0.01	0.02	<2	0.008	<0.001	0.02	3.42	<0.01	0.019	<0.001	0.002	<0.01	0.33	0.142	0.002	0.02
REP N162099	QC			0.002	0.009	0.01	0.02	2	0.008	<0.001	0.02	3.43	<0.01	0.020	<0.001	0.002	<0.01	0.33	0.142	0.002	0.03
N162107	Drill Core	4.79	7.6	0.001	0.005	0.05	2.07	<2	0.004	<0.001	0.01	3.26	<0.01	0.014	<0.001	0.002	<0.01	0.50	0.145	0.009	0.13
REP N162107	QC																				
N162110	Rock Chip	0.18	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.15	<0.01	0.007	<0.001	<0.001	<0.01	1.02	0.115	0.003	2.17
REP N162110	QC																				
N162120	Rock Pulp	0.13	135.8	<0.001	0.090	<0.01	0.52	<2	0.002	0.004	0.12	7.86	<0.01	0.006	0.002	<0.001	<0.01	3.63	0.056	0.002	2.07
REP N162120	QC		145.4																		
N162137	Drill Core	4.90	2.0	<0.001	0.006	0.40	4.84	<2	0.002	<0.001	<0.01	0.82	<0.01	0.135	<0.001	<0.001	<0.01	0.18	0.045	0.007	0.06
REP N162137	QC			<0.001	0.006	0.40	4.83	<2	0.002	<0.001	<0.01	0.81	<0.01	0.138	<0.001	<0.001	<0.01	0.18	0.043	0.006	0.06
N162146	Drill Core	4.45	2.9	<0.001	0.001	1.27	2.54	<2	0.002	<0.001	0.02	0.77	<0.01	0.009	<0.001	<0.001	<0.01	2.63	0.021	0.003	0.03
REP N162146	QC																				

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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001778.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
Pulp Duplicates											
N162024	Drill Core	1.85	<0.01	0.11	<0.001	<0.001	1.02	4.78	6.6		
REP N162024	QC										
N162027	Drill Core	2.44	<0.01	0.12	<0.001	<0.001	1.21	6.11	6.9		
REP N162027	QC								7.1		
N162030	Rock Chip	1.04	0.26	0.04	0.001	<0.001	<0.05	0.05	1.4		
REP N162030	QC	1.07	0.27	0.04	<0.001	<0.001	<0.05				
N162036	Drill Core	2.72	<0.01	0.14	<0.001	<0.001	4.89	6.49	8.2		
REP N162036	QC							6.51			
N162064	Drill Core	0.26	<0.01	0.07	0.003	<0.001	2.09	39.86	1.8		
REP N162064	QC							40.07			
N162072	Drill Core	0.77	<0.01	0.02	<0.001	<0.001	0.09	43.13	5.6		
REP N162072	QC										
N162085	Drill Core	2.63	<0.01	0.08	<0.001	<0.001	0.74	11.25	7.1		
REP N162085	QC	2.65	<0.01	0.08	<0.001	<0.001	0.76				
N162087	Drill Core	2.33	<0.01	0.17	<0.001	<0.001	2.22	5.68	8.4		
REP N162087	QC								8.3		
N162099	Drill Core	1.81	<0.01	0.17	<0.001	<0.001	2.80	4.50	8.5		
REP N162099	QC	1.86	<0.01	0.18	<0.001	<0.001	2.81				
N162107	Drill Core	4.31	<0.01	0.18	<0.001	<0.001	2.08	10.77	6.4		
REP N162107	QC							10.72			
N162110	Rock Chip	1.05	0.26	0.05	<0.001	<0.001	<0.05	0.05	1.2		
REP N162110	QC								1.4		
N162120	Rock Pulp	3.40	0.09	0.21	<0.001	<0.001	1.58	0.02	4.4		
REP N162120	QC										
N162137	Drill Core	1.00	<0.01	0.13	<0.001	<0.001	0.18	31.66	0.9		
REP N162137	QC	0.99	<0.01	0.13	<0.001	<0.001	0.17				
N162146	Drill Core	0.16	<0.01	<0.01	<0.001	<0.001	1.86	33.66	3.1		
REP N162146	QC								3.5		

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QUALITY CONTROL REPORT WHI11001778.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162150	Rock Chip	0.14	0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.28	<0.01	0.008	<0.001	<0.001	<0.01	1.09	0.116	0.003	2.22
REP N162150	QC																				
N162152	Drill Core	3.31	9.1	0.002	0.007	0.12	0.14	<2	0.007	<0.001	<0.01	2.26	0.01	0.013	<0.001	0.003	<0.01	0.26	0.119	0.017	0.01
REP N162152	QC		8.6																		
N162158	Drill Core	4.31	14.4	0.001	0.005	0.33	2.87	<2	0.005	<0.001	0.02	1.99	0.01	0.013	0.002	0.002	<0.01	0.88	0.095	0.014	0.04
REP N162158	QC																				
Core Reject Duplicates																					
N162022	Drill Core	5.01	8.2	0.001	0.004	<0.01	0.03	<2	0.006	<0.001	0.01	2.29	<0.01	0.007	<0.001	0.001	<0.01	0.83	0.145	0.002	0.26
DUP N162022	QC		3.7	0.001	0.004	<0.01	0.03	<2	0.006	<0.001	0.02	2.39	<0.01	0.008	<0.001	<0.001	<0.01	0.86	0.141	0.003	0.28
N162059	Drill Core	4.96	<0.5	<0.001	<0.001	0.48	2.22	<2	<0.001	<0.001	0.09	1.38	<0.01	0.079	0.005	<0.001	<0.01	12.13	0.014	<0.001	1.18
DUP N162059	QC		0.8	<0.001	<0.001	0.45	2.50	<2	<0.001	<0.001	0.09	1.47	<0.01	0.075	0.006	<0.001	<0.01	11.79	0.014	0.001	1.25
N162096	Drill Core	4.69	9.7	0.001	0.006	0.01	<0.01	<2	0.005	<0.001	0.19	5.91	<0.01	0.050	<0.001	0.002	<0.01	1.34	0.113	0.002	0.53
DUP N162096	QC		7.8	<0.001	0.007	0.01	<0.01	<2	0.005	<0.001	0.31	7.90	<0.01	0.078	<0.001	0.002	<0.01	2.03	0.104	0.002	0.90
N162132	Drill Core	4.15	3.6	0.001	0.005	0.26	3.40	<2	0.005	<0.001	0.01	1.67	<0.01	0.007	<0.001	0.001	<0.01	0.37	0.122	0.010	0.15
DUP N162132	QC		<0.5	0.001	0.005	0.26	2.68	<2	0.005	<0.001	0.02	1.83	<0.01	0.008	<0.001	0.001	<0.01	0.45	0.137	0.010	0.16
Reference Materials																					
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		203.2																		
STD CDN-PGMS-19	Standard		233.2																		
STD CDN-PGMS-19	Standard		204.9																		
STD CDN-PGMS-19	Standard		185.1																		
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001778.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
N162150	Rock Chip	1.15	0.30	0.05	<0.001	<0.001	<0.05	0.13	1.2		
REP N162150	QC								1.2		
N162152	Drill Core	0.84	<0.01	<0.01	<0.001	<0.001	2.26	1.11	7.0		
REP N162152	QC										
N162158	Drill Core	2.90	<0.01	0.05	<0.001	<0.001	1.80	8.00	5.2		
REP N162158	QC							8.00			
Core Reject Duplicates											
N162022	Drill Core	2.11	<0.01	0.12	<0.001	<0.001	1.21	5.37	6.8		
DUP N162022	QC	2.09	<0.01	0.13	<0.001	<0.001	1.31	5.28	6.6		
N162059	Drill Core	0.07	<0.01	0.03	<0.001	<0.001	1.27	26.62	14.8		
DUP N162059	QC	0.07	<0.01	0.03	<0.001	<0.001	1.53	25.65	14.2		
N162096	Drill Core	1.51	<0.01	0.11	<0.001	<0.001	5.88	3.68	11.3		
DUP N162096	QC	1.28	<0.01	0.10	<0.001	<0.001	8.26	3.15	12.4		
N162132	Drill Core	1.86	<0.01	0.04	<0.001	<0.001	2.27	7.53	4.5		
DUP N162132	QC	1.88	<0.01	0.04	<0.001	<0.001	1.99	8.00	4.5		
Reference Materials											
STD CCU-1C	Standard									0.40	3.97
STD CCU-1C	Standard									0.37	4.07
STD CCU-1C	Standard									0.32	4.00
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CZN-3	Standard									0.11	52.67
STD CZN-3	Standard									0.08	51.91
STD CZN-3	Standard									0.12	52.66
STD DOLOMITE-2	Standard								44.1		
STD DOLOMITE-2	Standard								44.9		
STD DOLOMITE-2	Standard								45.5		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001778.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD OREAS153AR	Standard			0.018	0.713	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.22	<0.01	0.002	<0.001	<0.001	<0.01	0.95	0.048	0.002	1.69
STD OREAS131B-A	Standard			<0.001	0.021	1.76	3.02	34	0.002	0.002	0.18	5.53	<0.01	0.002	0.009	0.003	<0.01	5.27	0.051	0.001	2.88
STD OREAS153AR	Standard			0.018	0.715	<0.01	<0.01	<2	<0.001	0.001	0.02	3.26	<0.01	0.002	<0.001	<0.001	<0.01	0.96	0.047	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.022	1.83	3.05	34	0.003	0.002	0.18	5.67	<0.01	0.002	0.008	0.005	<0.01	5.22	0.052	0.001	2.96
STD OREAS153AR	Standard			0.018	0.716	0.02	<0.01	<2	<0.001	0.001	0.02	3.24	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.049	0.002	1.65
STD OREAS131B-A	Standard			<0.001	0.022	1.83	3.12	35	0.003	0.002	0.19	5.65	<0.01	0.002	0.009	0.005	<0.01	5.33	0.054	0.002	2.94
STD OREAS153AR	Standard			0.018	0.717	<0.01	<0.01	<2	<0.001	0.001	0.03	3.32	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.049	0.002	1.67
STD OREAS131B-A	Standard			<0.001	0.021	1.75	3.06	34	0.002	0.002	0.18	5.56	<0.01	0.002	0.009	0.005	<0.01	5.27	0.054	0.002	2.87
STD OREAS153AR	Standard			0.018	0.696	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.12	<0.01	0.002	<0.001	<0.001	<0.01	0.95	0.047	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.021	1.76	2.97	33	0.002	0.002	0.18	5.33	<0.01	0.002	0.008	0.006	<0.01	5.12	0.051	0.001	2.86
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD CDN-PGMS-19			230																		
STD DOLOMITE-2 Expected																					
STD MICA-MG(D) Expected																					

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Client: **Hudson Bay Mining and Smelting Co., Limit**
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Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011
Page: 3 of 4 Part 2

QUALITY CONTROL REPORT WHI11001778.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD DOLOMITE-2	Standard								45.9		
STD DOLOMITE-2	Standard								45.5		
STD GBM997-6	Standard									21.41	15.22
STD GBM997-6	Standard									22.57	16.07
STD GBM997-6	Standard									22.29	15.78
STD MICA-MG(D)	Standard							0.43			
STD MICA-MG(D)	Standard							0.42			
STD MICA-MG(D)	Standard							0.42			
STD MICA-MG(D)	Standard							0.43			
STD OREAS153AR	Standard	2.49	0.14	0.63	<0.001	<0.001	1.27				
STD OREAS131B-A	Standard	1.04	0.02	0.74	<0.001	<0.001	4.98				
STD OREAS153AR	Standard	2.49	0.14	0.63	<0.001	<0.001	1.24				
STD OREAS131B-A	Standard	1.03	0.01	0.75	<0.001	<0.001	5.15				
STD OREAS153AR	Standard	2.46	0.13	0.63	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	1.03	0.01	0.76	<0.001	<0.001	5.14				
STD OREAS153AR	Standard	2.41	0.12	0.60	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	0.99	0.01	0.72	<0.001	<0.001	5.02				
STD OREAS153AR	Standard	2.52	0.16	0.60	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	0.98	0.01	0.69	<0.001	<0.001	5.10				
STD PTC-1A	Standard									0.04	0.13
STD PTC-1A	Standard									0.04	0.12
STD PTC-1A	Standard									0.06	0.14
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.06			
STD SO-18	Standard							0.05			
STD CDN-PGMS-19											
STD DOLOMITE-2 Expected									46		
STD MICA-MG(D) Expected								0.4			

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001778.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD SO-18 Expected																					
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD CZN-3 Expected																					
STD CCU-1C Expected																					
STD GBM997-6 Expected																					
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank																				
Prep Wash																					
G1	Prep Blank		2.4	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.11	<0.01	0.007	<0.001	<0.001	<0.01	0.56	0.080	<0.001	0.59
G1	Prep Blank		1.8	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.12	<0.01	0.007	<0.001	<0.001	<0.01	0.56	0.079	<0.001	0.56

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011
Page: 4 of 4 Part 2

QUALITY CONTROL REPORT WHI11001778.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD SO-18 Expected								0.0515			
STD OREAS153AR		2.425	0.142	0.6138			1.285				
STD OREAS131B-A		0.969	0.0112	0.7			5.01				
STD CZN-3 Expected										0.113	49.75
STD CCU-1C Expected										0.34	3.99
STD GBM997-6 Expected										23.75	15.83
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank									<0.01	<0.01
BLK	Blank									<0.01	<0.01
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank									<0.01	<0.01
Prep Wash											
G1	Prep Blank	1.06	0.10	0.54	<0.001	<0.001	<0.05	0.10	0.9		
G1	Prep Blank	1.05	0.10	0.52	<0.001	<0.001	<0.05	0.11	1.3		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: October 03, 2011
Report Date: November 24, 2011
Page: 1 of 6

CERTIFICATE OF ANALYSIS WHI11001779.1

CLIENT JOB INFORMATION

Project:	13
Shipment ID:	FLIN 288
P.O. Number	
Number of Samples:	136

SAMPLE DISPOSAL

RTRN-PLP	Return
RTRN-RJT	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	123	Crush, split and pulverize 250 g rock to 200 mesh			WHI
3A01	136	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	136	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	136	X-Ray fluorescence / Fusion		Completed	VAN
2A05	136	Loss on Ignition at 1000 C		Completed	VAN
7AR.1	4	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162162	Drill Core	4.10	3.4	0.002	0.005	0.48	1.78	4	0.006	<0.001	0.01	1.88	<0.01	0.032	0.002	0.001	<0.01	0.55	0.119	0.009	0.19
N162163	Drill Core	3.90	4.6	0.002	0.004	0.86	1.68	3	0.006	<0.001	0.01	1.89	<0.01	0.029	0.003	0.002	<0.01	0.52	0.113	0.008	0.18
N162164	Drill Core	3.96	8.4	0.001	0.005	0.15	2.38	<2	0.005	<0.001	0.05	1.91	<0.01	0.045	0.003	0.001	<0.01	1.21	0.097	0.004	0.59
N162165	Drill Core	4.47	5.5	0.001	0.004	0.09	0.64	<2	0.006	<0.001	0.04	2.64	<0.01	0.030	<0.001	<0.001	<0.01	1.07	0.124	0.003	0.45
N162166	Drill Core	1.83	6.0	0.002	0.004	0.44	0.17	<2	0.005	<0.001	0.04	1.62	<0.01	0.041	<0.001	<0.001	<0.01	1.01	0.092	0.002	0.33
N162167	Drill Core	2.65	6.4	0.002	0.004	0.56	0.24	<2	0.005	<0.001	0.03	1.82	<0.01	0.025	<0.001	<0.001	<0.01	0.80	0.105	0.002	0.29
N162168	Drill Core	4.11	4.6	0.001	0.004	0.34	0.29	<2	0.005	<0.001	0.03	1.50	<0.01	0.026	<0.001	<0.001	<0.01	0.87	0.106	0.002	0.27
N162169	Drill Core	3.94	6.1	0.002	0.004	0.68	0.92	2	0.005	<0.001	0.03	1.79	<0.01	0.021	0.003	<0.001	<0.01	0.63	0.122	0.002	0.19
N162170	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.014	0.003	0.05	4.46	<0.01	0.008	<0.001	<0.001	<0.01	1.02	0.114	0.003	2.28
N162171	Drill Core	3.93	5.3	0.002	0.004	0.73	0.86	3	0.005	<0.001	0.03	1.52	<0.01	0.021	0.002	0.001	<0.01	0.65	0.108	0.001	0.21
N162172	Drill Core	3.71	6.6	0.001	0.006	0.04	3.03	<2	0.005	<0.001	0.01	2.31	<0.01	0.009	<0.001	0.003	<0.01	0.55	0.119	0.001	0.17
N162173	Drill Core	3.57	6.1	0.002	0.007	0.03	5.73	<2	0.006	<0.001	0.01	1.98	<0.01	0.011	0.001	0.004	<0.01	0.74	0.092	0.001	0.25
N162174	Drill Core	3.86	8.0	0.002	0.006	0.06	3.32	<2	0.006	<0.001	<0.01	3.13	<0.01	0.005	<0.001	0.004	<0.01	0.33	0.084	0.001	0.08
N162175	Drill Core	3.80	5.2	0.002	0.006	0.06	2.62	<2	0.006	<0.001	0.04	3.94	<0.01	0.021	<0.001	0.003	<0.01	2.48	0.108	0.001	1.13
N162176	Drill Core	4.53	5.0	0.001	0.008	0.05	2.03	<2	0.005	<0.001	0.07	4.86	<0.01	0.036	<0.001	0.004	<0.01	3.27	0.086	0.002	1.59
N162177	Drill Core	4.41	6.1	0.001	0.006	0.06	3.55	<2	0.005	<0.001	0.01	3.24	<0.01	0.006	<0.001	0.003	<0.01	0.37	0.098	0.001	0.10
N162178	Drill Core	3.44	6.9	0.002	0.007	0.06	4.68	<2	0.006	<0.001	<0.01	2.56	<0.01	0.006	<0.001	0.004	<0.01	0.38	0.102	0.002	0.10
N162179	Drill Core	4.30	5.7	0.001	0.007	0.10	4.70	<2	0.006	<0.001	0.01	2.95	<0.01	0.013	0.001	0.004	<0.01	0.69	0.114	0.002	0.25
N162180	Rock Pulp	0.07	2.5	<0.001	0.130	>4	16.72	203	0.002	0.011	0.36	11.79	0.02	0.002	0.058	0.015	<0.01	4.18	0.030	0.001	2.02
N162181	Drill Core	3.55	4.6	0.002	0.006	0.09	2.88	<2	0.006	<0.001	<0.01	2.98	<0.01	0.007	<0.001	0.002	<0.01	0.35	0.120	0.002	0.06
N162182	Drill Core	3.89	4.7	0.002	0.005	0.05	3.43	<2	0.007	<0.001	<0.01	2.50	<0.01	0.007	<0.001	0.003	<0.01	0.34	0.099	0.002	0.08
N162183	Drill Core	4.48	5.3	0.001	0.005	0.07	5.85	<2	0.005	<0.001	0.01	1.62	<0.01	0.014	<0.001	0.003	<0.01	0.54	0.076	0.002	0.20
N162184	Drill Core	4.21	3.5	0.001	0.005	0.05	5.68	<2	0.003	<0.001	0.02	1.09	<0.01	0.028	0.001	0.002	<0.01	1.01	0.062	0.003	0.49
N162185	Drill Core	4.01	3.8	0.001	0.006	0.03	3.69	<2	0.003	<0.001	<0.01	1.27	<0.01	0.016	0.001	0.001	<0.01	0.50	0.078	0.003	0.15
N162186	Drill Core	4.80	1.8	0.001	0.004	0.01	2.00	<2	0.005	<0.001	<0.01	1.93	<0.01	0.009	<0.001	<0.001	<0.01	0.45	0.110	0.005	0.10
N162187	Drill Core	4.00	3.6	0.002	0.005	0.02	3.88	<2	0.006	<0.001	<0.01	2.03	<0.01	0.007	0.001	0.002	<0.01	0.30	0.113	0.006	0.03
N162188	Drill Core	3.68	4.3	0.001	0.005	0.02	4.59	<2	0.005	<0.001	0.01	2.55	<0.01	0.034	0.001	0.002	<0.01	1.33	0.118	0.007	0.65
N162189	Drill Core	4.35	5.6	0.001	0.006	0.04	5.85	<2	0.004	<0.001	0.01	2.04	<0.01	0.020	0.001	0.002	<0.01	0.66	0.092	0.008	0.27
N162190	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.05	4.21	<0.01	0.007	<0.001	<0.001	<0.01	0.98	0.113	0.002	2.20
N162191	Drill Core	4.95	3.5	0.001	0.005	0.02	3.44	<2	0.005	<0.001	<0.01	2.53	<0.01	0.007	<0.001	0.001	<0.01	0.24	0.093	0.008	0.02

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162162	Drill Core	3.35	<0.01	0.12	<0.001	<0.001	0.98	8.95	6.4		
N162163	Drill Core	3.17	<0.01	0.16	<0.001	<0.001	1.20	7.82	6.5		
N162164	Drill Core	2.90	<0.01	0.11	<0.001	<0.001	1.55	7.17	7.3		
N162165	Drill Core	2.75	<0.01	0.10	<0.001	<0.001	1.58	7.01	8.7		
N162166	Drill Core	2.38	<0.01	0.11	<0.001	<0.001	0.63	5.99	6.8		
N162167	Drill Core	2.71	<0.01	0.09	<0.001	<0.001	0.65	7.03	7.1		
N162168	Drill Core	2.52	<0.01	0.10	<0.001	<0.001	0.48	6.33	7.0		
N162169	Drill Core	2.68	<0.01	0.11	<0.001	<0.001	0.84	6.94	7.8		
N162170	Rock Chip	1.08	0.28	0.06	<0.001	<0.001	<0.05	0.07	1.5		
N162171	Drill Core	2.34	<0.01	0.10	<0.001	<0.001	0.82	5.84	7.1		
N162172	Drill Core	1.93	<0.01	0.09	<0.001	<0.001	2.90	4.82	6.5		
N162173	Drill Core	1.82	<0.01	0.10	<0.001	<0.001	4.05	4.45	8.2		
N162174	Drill Core	2.06	<0.01	0.09	<0.001	<0.001	4.09	5.09	7.5		
N162175	Drill Core	1.93	<0.01	0.09	<0.001	<0.001	4.37	4.73	9.7		
N162176	Drill Core	2.43	<0.01	0.09	<0.001	<0.001	4.63	5.96	9.8		
N162177	Drill Core	2.81	<0.01	0.09	<0.001	<0.001	3.77	6.98	7.7		
N162178	Drill Core	2.09	<0.01	0.10	<0.001	<0.001	4.07	5.24	8.5		
N162179	Drill Core	2.03	<0.01	0.12	<0.001	<0.001	4.62	4.90	8.1		
N162180	Rock Pulp	0.40	<0.01	0.16	<0.001	<0.001	19.04	0.13	14.9	12.34	17.15
N162181	Drill Core	2.21	<0.01	0.10	<0.001	<0.001	3.52	5.44	7.4		
N162182	Drill Core	2.57	<0.01	0.13	<0.001	<0.001	3.02	6.46	7.7		
N162183	Drill Core	2.09	<0.01	0.19	<0.001	<0.001	3.48	5.00	6.9		
N162184	Drill Core	2.05	<0.01	0.19	<0.001	<0.001	2.84	5.04	6.5		
N162185	Drill Core	2.16	<0.01	0.12	<0.001	<0.001	1.92	5.53	5.7		
N162186	Drill Core	2.91	<0.01	0.06	<0.001	<0.001	1.35	7.47	6.0		
N162187	Drill Core	3.15	<0.01	0.06	<0.001	<0.001	2.26	7.96	6.1		
N162188	Drill Core	2.63	<0.01	0.09	<0.001	<0.001	3.56	6.61	7.6		
N162189	Drill Core	2.97	<0.01	0.13	<0.001	<0.001	3.30	7.30	6.5		
N162190	Rock Chip	0.98	0.26	0.05	<0.001	<0.001	<0.05	0.09	1.3		
N162191	Drill Core	3.56	<0.01	0.09	<0.001	<0.001	2.33	8.98	5.7		

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162192	Drill Core	3.87	2.8	0.002	0.004	0.03	3.02	<2	0.006	<0.001	<0.01	2.56	<0.01	0.008	<0.001	0.001	<0.01	0.26	0.098	0.009	0.04
N162193	Drill Core	4.80	1.9	0.002	0.005	0.03	5.65	<2	0.006	<0.001	<0.01	2.10	<0.01	0.008	0.001	0.002	<0.01	0.27	0.105	0.010	0.09
N162194	Drill Core	4.48	2.0	0.002	0.004	0.03	5.53	<2	0.005	<0.001	<0.01	2.04	<0.01	0.007	0.001	0.002	<0.01	0.15	0.055	0.007	0.12
N162195	Drill Core	4.43	0.8	0.002	0.005	0.04	4.26	<2	0.006	<0.001	0.01	2.70	<0.01	0.010	0.001	<0.001	<0.01	0.42	0.162	0.012	0.11
N162196	Drill Core	4.32	1.0	0.002	0.006	0.06	4.24	<2	0.006	<0.001	<0.01	3.59	<0.01	0.007	<0.001	<0.001	<0.01	0.19	0.073	0.009	0.10
N162197	Drill Core	4.55	<0.5	0.002	0.005	0.06	3.94	<2	0.006	<0.001	<0.01	3.30	<0.01	0.008	<0.001	<0.001	<0.01	0.22	0.084	0.011	0.08
N162198	Drill Core	4.03	<0.5	0.002	0.006	0.08	3.86	<2	0.007	<0.001	<0.01	3.65	<0.01	0.010	<0.001	<0.001	<0.01	0.28	0.095	0.011	0.15
N162199	Drill Core	5.03	2.1	0.002	0.005	0.05	2.32	<2	0.005	<0.001	<0.01	3.38	<0.01	0.010	<0.001	<0.001	<0.01	0.30	0.116	0.012	0.09
N162200	Rock Pulp	0.09	645.8	<0.001	0.390	0.82	>20	22	0.004	0.005	0.13	12.60	0.10	0.004	0.066	0.085	<0.01	1.58	0.021	0.002	0.95
N162201	Drill Core	4.11	<0.5	0.002	0.005	0.09	6.00	<2	0.006	<0.001	0.02	2.88	<0.01	0.007	<0.001	<0.001	<0.01	0.59	0.075	0.010	0.07
N162202	Drill Core	2.45	<0.5	0.002	0.005	0.08	5.80	<2	0.006	<0.001	<0.01	2.01	<0.01	0.010	<0.001	<0.001	<0.01	0.42	0.096	0.012	0.07
N162203	Drill Core	1.83	<0.5	0.001	0.005	0.17	6.93	<2	0.005	<0.001	0.02	3.15	<0.01	0.047	<0.001	<0.001	<0.01	4.56	0.051	0.008	0.22
N162204	Drill Core	4.15	2.0	0.002	0.005	0.13	3.95	<2	0.006	<0.001	<0.01	3.08	<0.01	0.018	<0.001	<0.001	<0.01	0.44	0.122	0.010	0.15
N162205	Drill Core	4.55	0.8	0.002	0.005	0.08	4.51	<2	0.007	<0.001	<0.01	2.45	<0.01	0.016	<0.001	<0.001	<0.01	0.39	0.107	0.010	0.14
N162206	Drill Core	4.10	2.5	0.002	0.005	0.08	5.64	<2	0.005	<0.001	<0.01	1.61	<0.01	0.076	<0.001	0.002	<0.01	0.43	0.080	0.009	0.18
N162207	Drill Core	3.90	1.6	0.001	0.004	0.07	3.84	<2	0.004	<0.001	<0.01	1.45	<0.01	0.370	<0.001	<0.001	<0.01	0.79	0.103	0.008	0.09
N162208	Drill Core	5.01	2.7	<0.001	0.003	0.07	2.85	<2	0.003	<0.001	0.02	2.39	<0.01	0.452	<0.001	<0.001	<0.01	1.17	0.088	0.006	0.84
N162209	Drill Core	5.04	2.8	0.001	0.003	0.10	5.17	<2	0.003	<0.001	<0.01	0.97	<0.01	0.837	<0.001	<0.001	<0.01	0.31	0.054	0.006	0.08
N162210	Rock Chip	0.14	<0.5	<0.001	0.004	<0.01	0.02	<2	0.014	0.002	0.05	4.41	<0.01	0.009	<0.001	<0.001	<0.01	1.07	0.119	0.003	2.32
N162211	Drill Core	4.37	3.5	0.002	0.004	0.12	4.89	<2	0.005	<0.001	<0.01	2.42	<0.01	0.389	<0.001	<0.001	<0.01	0.31	0.080	0.007	0.16
N162212	Drill Core	4.45	1.6	0.002	0.005	0.09	5.28	<2	0.005	<0.001	0.01	2.93	<0.01	0.091	<0.001	<0.001	<0.01	0.69	0.090	0.008	0.12
N162213	Drill Core	3.68	3.4	0.002	0.005	0.10	6.88	<2	0.006	<0.001	<0.01	1.69	<0.01	0.210	<0.001	<0.001	<0.01	0.33	0.103	0.009	0.11
N162214	Drill Core	4.63	3.4	0.002	0.005	0.15	5.83	<2	0.005	<0.001	<0.01	2.47	<0.01	0.285	<0.001	<0.001	<0.01	0.73	0.082	0.009	0.34
N162215	Drill Core	4.06	4.3	0.002	0.005	0.09	3.68	<2	0.006	<0.001	<0.01	3.20	<0.01	0.076	<0.001	<0.001	<0.01	0.39	0.125	0.010	0.12
N162216	Drill Core	2.86	2.5	0.002	0.004	0.10	5.49	<2	0.005	<0.001	<0.01	1.78	<0.01	0.038	<0.001	<0.001	<0.01	1.20	0.079	0.009	0.31
N162217	Drill Core	5.32	<0.5	0.002	0.004	0.10	6.04	<2	0.003	<0.001	<0.01	1.20	<0.01	0.335	<0.001	<0.001	<0.01	1.00	0.072	0.008	0.10
N162218	Drill Core	4.75	1.0	0.001	0.003	0.09	3.65	<2	0.003	<0.001	<0.01	1.13	<0.01	0.407	<0.001	<0.001	<0.01	0.83	0.083	0.007	0.12
N162219	Drill Core	3.72	<0.5	<0.001	0.003	0.09	3.33	<2	0.003	<0.001	<0.01	1.53	<0.01	0.434	<0.001	<0.001	<0.01	0.74	0.096	0.007	0.20
N162220	Rock Pulp	0.09	106.7	<0.001	0.091	<0.01	0.54	<2	0.002	0.003	0.13	8.08	<0.01	0.007	0.001	<0.001	<0.01	3.76	0.054	0.002	2.12
N162221	Drill Core	4.18	13.7	<0.001	0.003	0.12	5.80	<2	0.002	<0.001	<0.01	0.99	<0.01	0.658	<0.001	<0.001	<0.01	0.34	0.044	0.004	0.08

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162192	Drill Core	3.26	<0.01	0.06	<0.001	<0.001	2.34	8.42	6.0		
N162193	Drill Core	3.26	<0.01	0.06	<0.001	<0.001	2.98	8.95	6.1		
N162194	Drill Core	2.84	<0.01	0.05	<0.001	<0.001	3.06	7.88	6.2		
N162195	Drill Core	3.26	<0.01	0.10	0.005	<0.001	2.72	8.78	5.7		
N162196	Drill Core	2.91	<0.01	0.05	0.005	<0.001	4.20	8.30	6.6		
N162197	Drill Core	2.90	<0.01	0.04	0.004	<0.001	3.70	8.18	6.3		
N162198	Drill Core	3.12	<0.01	0.05	0.006	<0.001	3.92	9.06	6.5		
N162199	Drill Core	4.06	<0.01	0.06	0.003	<0.001	2.27	11.25	5.7		
N162200	Rock Pulp	1.66	0.07	0.12	*	0.004	15.07	<0.01	11.2	0.79	25.15
N162201	Drill Core	2.48	<0.01	0.04	0.006	<0.001	4.37	10.83	6.3		
N162202	Drill Core	2.93	<0.01	0.05	0.006	<0.001	3.05	10.67	6.2		
N162203	Drill Core	2.04	<0.01	0.04	0.007	<0.001	4.81	11.24	5.4		
N162204	Drill Core	3.20	<0.01	0.05	0.005	<0.001	3.05	9.61	6.2		
N162205	Drill Core	3.24	<0.01	0.05	0.005	<0.001	2.56	9.69	5.6		
N162206	Drill Core	3.03	<0.01	0.05	<0.001	<0.001	2.02	10.47	4.8		
N162207	Drill Core	2.64	<0.01	0.04	0.005	<0.001	0.33	14.50	2.8		
N162208	Drill Core	1.74	<0.01	0.03	0.004	<0.001	0.19	19.49	5.2		
N162209	Drill Core	1.96	<0.01	0.05	0.006	<0.001	0.11	27.48	3.1		
N162210	Rock Chip	1.17	0.28	0.05	<0.001	<0.001	<0.05	0.16	1.5		
N162211	Drill Core	2.70	<0.01	0.04	0.005	<0.001	0.84	17.89	2.9		
N162212	Drill Core	3.40	<0.01	0.05	0.005	<0.001	2.97	12.19	5.3		
N162213	Drill Core	2.82	<0.01	0.05	0.007	<0.001	1.79	13.54	3.8		
N162214	Drill Core	2.33	<0.01	0.04	0.006	<0.001	1.53	16.47	3.4		
N162215	Drill Core	3.02	<0.01	0.06	0.004	<0.001	2.88	10.53	5.0		
N162216	Drill Core	2.94	<0.01	0.06	0.006	<0.001	2.62	11.05	5.7		
N162217	Drill Core	2.49	<0.01	0.05	0.006	<0.001	0.64	16.79	2.7		
N162218	Drill Core	2.20	<0.01	0.05	0.005	<0.001	0.17	18.63	2.3		
N162219	Drill Core	1.91	<0.01	0.05	0.004	<0.001	0.16	21.33	3.4		
N162220	Rock Pulp	3.37	0.12	0.21	<0.001	<0.001	1.63	0.02	5.2		
N162221	Drill Core	1.56	<0.01	0.07	0.006	<0.001	0.11	32.80	3.9		

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162222	Drill Core	1.36	2.7	0.002	0.004	0.09	4.09	<2	0.005	<0.001	<0.01	1.87	<0.01	0.272	<0.001	<0.001	<0.01	0.24	0.101	0.011	0.05
N162223	Drill Core	3.58	3.3	<0.001	0.002	0.13	6.65	<2	0.002	<0.001	<0.01	0.66	<0.01	0.568	<0.001	<0.001	<0.01	0.24	0.033	0.003	0.07
N162224	Drill Core	6.26	3.0	<0.001	0.003	0.21	5.98	<2	0.002	<0.001	<0.01	0.83	<0.01	0.307	<0.001	<0.001	<0.01	0.21	0.054	0.005	0.08
N162225	Drill Core	5.39	3.0	<0.001	0.003	0.16	5.10	<2	0.002	<0.001	<0.01	0.91	<0.01	0.234	<0.001	<0.001	<0.01	0.23	0.048	0.005	0.12
N162226	Drill Core	5.36	21.7	<0.001	0.003	0.24	5.56	<2	0.003	<0.001	<0.01	1.14	<0.01	0.181	<0.001	<0.001	<0.01	0.16	0.024	0.005	0.10
N162227	Drill Core	4.77	5.1	<0.001	0.002	0.20	7.15	<2	0.002	<0.001	<0.01	0.76	<0.01	0.267	<0.001	<0.001	<0.01	0.11	0.027	0.004	0.13
N162228	Drill Core	2.42	2.4	<0.001	0.001	0.27	6.21	<2	0.002	<0.001	<0.01	0.55	<0.01	0.180	<0.001	<0.001	<0.01	0.35	0.025	0.004	0.22
N162229	Drill Core	3.23	2.9	<0.001	0.002	0.50	5.64	<2	0.001	<0.001	<0.01	0.55	<0.01	0.222	<0.001	<0.001	<0.01	0.62	0.025	0.004	0.22
N162230	Rock Chip	0.15	<0.5	<0.001	0.004	<0.01	0.02	<2	0.014	0.002	0.05	4.26	<0.01	0.009	<0.001	<0.001	<0.01	1.06	0.117	0.003	2.28
N162231	Drill Core	5.64	2.5	<0.001	0.002	0.48	7.00	<2	0.001	<0.001	<0.01	0.46	<0.01	0.263	<0.001	<0.001	<0.01	0.28	0.016	0.003	0.06
N162232	Drill Core	5.54	3.3	<0.001	0.002	0.29	7.43	<2	0.001	0.001	<0.01	0.43	<0.01	0.557	<0.001	<0.001	<0.01	0.28	0.024	0.003	0.03
N162233	Drill Core	5.48	1.9	<0.001	0.002	0.33	9.08	<2	0.001	0.001	0.01	0.47	<0.01	0.828	<0.001	<0.001	<0.01	0.23	0.031	0.004	0.05
N162234	Drill Core	4.92	1.9	<0.001	0.003	0.44	7.51	<2	0.002	<0.001	0.03	0.60	<0.01	0.658	0.001	<0.001	<0.01	1.61	0.027	0.004	0.13
N162235	Drill Core	4.67	2.9	0.002	0.006	0.26	10.76	<2	0.004	<0.001	0.02	1.18	<0.01	0.164	0.002	<0.001	<0.01	1.20	0.091	0.009	0.13
N162236	Drill Core	2.33	3.1	<0.001	0.005	0.44	13.22	<2	0.002	<0.001	0.03	0.75	<0.01	0.420	0.003	<0.001	<0.01	3.58	0.031	0.004	0.30
N162237	Drill Core	3.07	0.7	0.002	0.004	0.10	3.00	<2	0.007	<0.001	<0.01	2.34	<0.01	0.042	0.001	<0.001	<0.01	0.47	0.141	0.013	0.03
N162238	Drill Core	4.77	3.7	0.002	0.005	0.21	2.67	<2	0.006	<0.001	<0.01	2.22	<0.01	0.019	0.001	<0.001	<0.01	0.44	0.115	0.010	0.03
N162239	Drill Core	4.40	5.1	0.002	0.005	0.12	1.89	<2	0.006	<0.001	<0.01	2.03	<0.01	0.019	0.001	<0.001	<0.01	0.34	0.130	0.012	0.04
N162240	Rock Pulp	0.07	6.7	<0.001	0.032	>4	11.36	109	0.003	0.003	0.14	8.24	0.01	0.002	0.032	0.012	<0.01	3.99	0.041	0.002	2.21
N162241	Drill Core	4.66	16.3	0.002	0.006	0.08	1.99	<2	0.005	<0.001	<0.01	2.64	<0.01	0.022	0.002	<0.001	<0.01	0.40	0.114	0.010	0.12
N162242	Drill Core	3.85	7.1	0.002	0.006	0.09	1.12	<2	0.006	<0.001	0.01	2.88	<0.01	0.030	0.001	<0.001	<0.01	0.46	0.118	0.012	0.21
N162243	Drill Core	3.92	4.5	0.002	0.005	0.70	1.27	3	0.005	<0.001	0.01	1.51	<0.01	0.043	0.002	<0.001	<0.01	0.48	0.112	0.013	0.12
N162244	Drill Core	4.24	2.7	0.001	0.006	1.36	1.90	3	0.004	<0.001	0.06	2.17	<0.01	0.132	0.004	<0.001	<0.01	1.64	0.087	0.009	0.86
N162245	Drill Core	4.26	5.0	0.002	0.005	0.14	1.42	<2	0.007	<0.001	0.01	2.47	<0.01	0.045	0.003	<0.001	<0.01	0.51	0.130	0.009	0.14
N162246	Drill Core	4.31	3.8	0.002	0.004	0.75	0.82	2	0.005	<0.001	0.03	1.66	<0.01	0.050	0.002	<0.001	<0.01	0.82	0.119	0.005	0.32
N162247	Drill Core	4.67	3.5	0.002	0.004	0.98	1.09	3	0.006	<0.001	0.03	1.92	<0.01	0.041	0.003	<0.001	<0.01	0.85	0.124	0.004	0.32
N162248	Drill Core	4.84	3.3	0.002	0.004	0.98	1.33	4	0.005	<0.001	0.02	1.73	<0.01	0.029	0.003	<0.001	<0.01	0.47	0.106	0.004	0.14
N162249	Drill Core	4.04	3.8	0.002	0.008	0.06	2.28	<2	0.008	<0.001	0.09	3.95	<0.01	0.050	0.007	<0.001	<0.01	1.89	0.127	0.003	0.76
N162250	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.013	0.003	0.04	4.10	<0.01	0.006	<0.001	<0.001	<0.01	0.84	0.115	0.002	2.24
N162251	Drill Core	4.68	8.4	0.001	0.006	0.03	3.10	<2	0.005	<0.001	0.02	2.65	<0.01	0.013	0.002	<0.001	<0.01	1.06	0.114	0.003	0.45

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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162222	Drill Core	3.04	<0.01	0.11	0.005	<0.001	0.22	20.39	1.8		
N162223	Drill Core	0.82	<0.01	0.07	0.007	<0.001	0.13	37.54	3.0		
N162224	Drill Core	1.27	<0.01	0.12	0.006	<0.001	0.20	31.00	0.7		
N162225	Drill Core	1.12	<0.01	0.07	0.006	<0.001	0.25	30.86	0.2		
N162226	Drill Core	1.12	<0.01	0.06	0.006	<0.001	0.67	30.32	0.5		
N162227	Drill Core	0.74	<0.01	0.05	0.008	<0.001	0.14	35.70	1.4		
N162228	Drill Core	0.62	<0.01	0.04	0.008	<0.001	1.01	36.45	1.1		
N162229	Drill Core	0.48	<0.01	0.05	0.007	<0.001	0.72	36.07	0.9		
N162230	Rock Chip	1.18	0.29	0.06	<0.001	<0.001	<0.05	0.15	1.2		
N162231	Drill Core	0.47	<0.01	0.03	0.006	<0.001	0.10	39.80	1.5		
N162232	Drill Core	0.76	<0.01	0.04	0.007	<0.001	0.12	41.28	2.7		
N162233	Drill Core	0.95	<0.01	0.02	0.009	<0.001	0.12	36.80	2.4		
N162234	Drill Core	0.99	<0.01	0.01	0.007	0.002	0.23	36.01	2.6		
N162235	Drill Core	2.69	<0.01	0.04	*	0.005	3.92	11.45	5.6		
N162236	Drill Core	1.31	<0.01	0.02	*	0.006	3.54	13.60	4.4		
N162237	Drill Core	3.85	<0.01	0.05	0.005	0.001	1.43	10.37	6.0		
N162238	Drill Core	3.43	<0.01	0.04	0.004	0.001	1.47	9.96	6.2		
N162239	Drill Core	3.54	<0.01	0.05	0.003	0.001	0.91	9.91	6.1		
N162240	Rock Pulp	0.80	<0.01	0.48	*	<0.001	11.36	0.07	14.7	5.01	10.53
N162241	Drill Core	3.33	<0.01	0.05	0.003	<0.001	1.61	9.62	6.0		
N162242	Drill Core	3.55	<0.01	0.07	0.002	<0.001	1.42	9.61	6.6		
N162243	Drill Core	3.66	<0.01	0.12	0.002	<0.001	0.37	9.34	5.7		
N162244	Drill Core	2.55	<0.01	0.11	0.002	<0.001	1.98	6.47	8.3		
N162245	Drill Core	3.30	<0.01	0.17	0.002	<0.001	1.44	8.16	8.1		
N162246	Drill Core	2.91	<0.01	0.12	<0.001	<0.001	0.70	7.04	7.4		
N162247	Drill Core	2.74	<0.01	0.12	0.001	<0.001	1.07	7.08	8.3		
N162248	Drill Core	2.58	<0.01	0.11	0.002	<0.001	1.13	6.55	7.7		
N162249	Drill Core	2.20	<0.01	0.13	0.003	0.001	3.80	5.27	11.6		
N162250	Rock Chip	0.73	0.15	0.03	<0.001	<0.001	<0.05	0.05	1.5		
N162251	Drill Core	2.65	<0.01	0.11	0.004	<0.001	2.77	6.63	8.4		

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Project: 13
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	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162252	Drill Core	4.74	8.0	0.001	0.011	0.08	5.55	<2	0.004	<0.001	0.04	2.87	<0.01	0.086	0.002	<0.001	<0.01	3.41	0.062	0.003	1.85
N162253	Drill Core	4.36	10.9	0.002	0.007	0.33	8.27	<2	0.005	<0.001	0.02	2.37	<0.01	0.030	0.001	<0.001	<0.01	1.21	0.084	0.005	0.61
N162254	Drill Core	4.31	11.1	0.001	0.007	0.20	8.15	2	0.004	<0.001	<0.01	1.80	<0.01	0.013	0.002	<0.001	<0.01	0.41	0.076	0.007	0.14
N162255	Drill Core	4.57	7.6	0.001	0.006	0.03	5.86	<2	0.004	<0.001	<0.01	1.77	<0.01	0.006	0.003	<0.001	<0.01	0.22	0.096	0.006	0.01
N162256	Drill Core	3.51	9.0	0.001	0.006	0.05	5.12	<2	0.005	<0.001	<0.01	1.94	<0.01	0.007	0.003	<0.001	<0.01	0.26	0.112	0.009	0.02
N162257	Drill Core	4.98	11.0	0.001	0.004	0.28	8.62	<2	0.003	<0.001	0.04	1.93	<0.01	0.227	0.002	0.002	<0.01	4.45	0.057	0.008	1.14
N162258	Drill Core	4.96	12.9	0.002	0.005	0.26	9.55	<2	0.005	<0.001	<0.01	1.97	<0.01	0.106	<0.001	0.001	<0.01	0.69	0.079	0.009	0.13
N162259	Drill Core	4.09	13.3	0.002	0.005	0.32	8.93	<2	0.005	<0.001	<0.01	2.18	<0.01	0.101	<0.001	0.002	<0.01	0.78	0.074	0.010	0.10
N162260	Rock Pulp	0.09	7.7	0.002	0.004	0.17	5.79	<2	0.005	<0.001	0.02	2.52	<0.01	0.013	<0.001	0.003	<0.01	0.55	0.099	0.010	0.01
N162261	Drill Core	4.47	430.6	<0.001	1.299	<0.01	0.14	3	0.001	0.011	0.12	11.47	<0.01	0.005	<0.001	<0.001	<0.01	2.96	0.041	0.003	1.78
N162262	Drill Core	4.70	14.8	0.002	0.005	0.27	10.16	<2	0.005	<0.001	0.03	2.30	<0.01	0.011	<0.001	<0.001	<0.01	0.84	0.086	0.008	0.10
N162263	Drill Core	3.32	12.9	0.002	0.005	0.25	9.18	<2	0.005	<0.001	<0.01	2.20	<0.01	0.008	<0.001	<0.001	<0.01	0.78	0.029	0.009	0.02
N162264	Drill Core	3.21	8.8	0.002	0.004	0.19	7.45	<2	0.005	<0.001	0.02	2.19	<0.01	0.014	<0.001	<0.001	<0.01	1.34	0.062	0.009	0.03
N162265	Drill Core	1.98	8.2	0.001	0.004	0.17	8.05	<2	0.003	<0.001	0.01	1.11	<0.01	0.084	<0.001	<0.001	<0.01	5.21	0.054	0.007	0.07
N162266	Drill Core	3.80	6.8	0.001	0.005	0.23	7.40	<2	0.004	<0.001	0.01	2.34	<0.01	0.046	<0.001	<0.001	<0.01	3.16	0.065	0.007	0.06
N162267	Drill Core	4.61	2.6	0.001	0.004	0.37	6.43	<2	0.004	<0.001	<0.01	1.73	<0.01	0.289	0.002	<0.001	<0.01	2.07	0.059	0.007	0.09
N162268	Drill Core	4.99	2.7	0.001	0.003	0.25	5.49	<2	0.003	<0.001	<0.01	1.03	<0.01	0.334	0.001	<0.001	<0.01	0.30	0.055	0.006	0.12
N162269	Drill Core	4.88	2.4	0.001	0.004	0.15	5.53	<2	0.004	<0.001	<0.01	1.27	<0.01	0.085	0.001	<0.001	<0.01	1.26	0.079	0.009	0.09
N162270	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	<0.01	<2	0.014	0.002	0.05	4.17	<0.01	0.007	<0.001	<0.001	<0.01	0.99	0.117	0.003	2.28
N162271	Drill Core	5.12	1.0	<0.001	0.003	0.84	7.10	<2	0.003	<0.001	0.03	0.96	<0.01	0.018	0.002	<0.001	<0.01	5.69	0.066	0.007	0.10
N162272	Drill Core	4.57	<0.5	0.001	0.003	0.67	4.80	<2	0.003	<0.001	0.01	0.89	<0.01	0.054	0.002	<0.001	<0.01	4.13	0.052	0.006	0.12
N162273	Drill Core	5.09	4.8	<0.001	0.004	1.60	7.46	<2	0.002	<0.001	<0.01	0.66	<0.01	0.067	0.004	<0.001	<0.01	1.42	0.043	0.007	0.05
N162274	Drill Core	5.20	<0.5	<0.001	0.004	1.06	6.42	<2	0.002	<0.001	<0.01	0.69	<0.01	0.082	0.004	<0.001	<0.01	0.34	0.035	0.005	0.11
N162275	Drill Core	4.97	0.7	<0.001	0.004	1.31	6.45	<2	0.002	<0.001	<0.01	0.66	<0.01	0.092	0.005	<0.001	<0.01	0.26	0.030	0.004	0.12
N162276	Drill Core	5.46	1.0	<0.001	0.003	0.94	5.13	<2	0.002	<0.001	<0.01	0.76	<0.01	0.090	0.003	<0.001	<0.01	1.09	0.047	0.006	0.04
N162277	Drill Core	5.38	<0.5	<0.001	0.003	1.13	5.15	<2	0.002	<0.001	<0.01	0.78	<0.01	0.101	0.003	<0.001	<0.01	0.42	0.043	0.005	0.08
N162278	Drill Core	4.90	0.8	<0.001	0.003	0.54	2.84	<2	0.003	<0.001	<0.01	1.24	<0.01	0.057	0.003	<0.001	<0.01	0.43	0.105	0.008	0.11
N162279	Drill Core	4.38	0.9	<0.001	0.003	0.59	6.13	<2	0.001	<0.001	<0.01	0.57	<0.01	0.116	0.006	<0.001	<0.01	0.18	0.027	0.004	0.04
N162280	Rock Pulp	0.08	1.1	<0.001	0.135	>4	16.71	212	0.002	0.011	0.38	12.20	0.02	0.002	0.057	0.006	<0.01	4.31	0.029	0.003	2.08
N162281	Drill Core	5.95	<0.5	<0.001	0.002	0.90	5.69	<2	0.001	<0.001	<0.01	0.51	<0.01	0.068	0.004	<0.001	<0.01	0.10	0.030	0.003	0.05

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162252	Drill Core	1.84	<0.01	0.10	0.007	<0.001	4.82	4.47	10.3		
N162253	Drill Core	2.37	<0.01	0.17	0.007	<0.001	5.19	5.71	8.8		
N162254	Drill Core	2.27	<0.01	0.14	0.008	<0.001	4.52	5.80	8.2		
N162255	Drill Core	3.01	<0.01	0.08	0.007	<0.001	2.78	7.95	7.4		
N162256	Drill Core	3.01	<0.01	0.08	0.006	<0.001	2.72	7.66	6.9		
N162257	Drill Core	1.99	<0.01	0.06	0.008	<0.001	4.48	7.67	8.8		
N162258	Drill Core	2.63	<0.01	0.07	0.008	<0.001	4.65	8.73	7.0		
N162259	Drill Core	2.56	<0.01	0.06	0.008	<0.001	4.56	8.63	7.3		
N162260	Rock Pulp	3.05	<0.01	0.12	0.008	<0.001	3.43	8.71	6.4		
N162261	Drill Core	3.08	0.10	0.24	<0.001	<0.001	4.64	0.02	5.3		
N162262	Drill Core	1.74	<0.01	0.06	*	<0.001	5.80	6.66	8.8		
N162263	Drill Core	1.97	<0.01	0.06	0.008	<0.001	5.67	6.20	8.1		
N162264	Drill Core	2.25	<0.01	0.06	0.008	<0.001	4.16	7.28	7.5		
N162265	Drill Core	1.63	<0.01	0.05	0.008	<0.001	3.30	10.13	5.9		
N162266	Drill Core	2.62	<0.01	0.06	0.008	<0.001	3.97	11.90	4.7		
N162267	Drill Core	1.64	<0.01	0.08	0.008	<0.001	0.54	22.93	2.7		
N162268	Drill Core	1.58	<0.01	0.11	0.007	<0.001	0.17	27.29	2.9		
N162269	Drill Core	2.19	<0.01	0.13	0.007	<0.001	1.40	15.06	3.1		
N162270	Rock Chip	0.96	0.23	0.05	<0.001	<0.001	<0.05	0.05	1.4		
N162271	Drill Core	1.44	<0.01	0.15	0.008	<0.001	3.61	13.39	4.4		
N162272	Drill Core	1.23	<0.01	0.13	0.008	<0.001	1.28	17.35	4.1		
N162273	Drill Core	0.63	<0.01	0.09	0.006	<0.001	1.92	27.23	1.8		
N162274	Drill Core	0.66	<0.01	0.08	0.007	<0.001	0.84	29.97	1.1		
N162275	Drill Core	0.46	<0.01	0.06	0.006	<0.001	1.07	32.50	0.8		
N162276	Drill Core	0.98	<0.01	0.10	0.006	<0.001	0.67	26.22	1.1		
N162277	Drill Core	0.79	<0.01	0.09	0.006	<0.001	0.55	29.41	0.7		
N162278	Drill Core	1.53	<0.01	0.12	0.005	<0.001	0.57	18.36	1.0		
N162279	Drill Core	0.55	<0.01	0.07	0.005	<0.001	0.51	30.85	0.4		
N162280	Rock Pulp	0.42	<0.01	0.16	<0.001	<0.001	19.18	0.13	15.7	13.19	16.77
N162281	Drill Core	0.41	<0.01	0.06	0.006	<0.001	1.37	37.23	1.2		

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Box 1500
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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162282	Drill Core	6.06	<0.5	<0.001	0.002	0.89	5.44	<2	0.001	<0.001	<0.01	0.53	<0.01	0.061	0.006	<0.001	<0.01	0.17	0.025	0.003	0.04
N162283	Drill Core	5.65	<0.5	<0.001	0.002	0.93	5.35	<2	0.001	<0.001	<0.01	0.41	<0.01	0.037	0.007	<0.001	<0.01	0.35	0.020	0.003	0.03
N162284	Drill Core	5.61	<0.5	<0.001	<0.001	0.76	3.70	<2	<0.001	<0.001	0.03	0.54	<0.01	0.061	0.005	<0.001	<0.01	5.55	0.004	0.001	0.23
N162285	Drill Core	5.87	<0.5	<0.001	0.001	0.74	6.09	<2	<0.001	<0.001	<0.01	0.30	<0.01	0.014	0.006	<0.001	<0.01	0.82	0.008	0.002	0.02
N162286	Drill Core	5.81	0.8	<0.001	0.001	1.72	4.95	<2	<0.001	<0.001	<0.01	0.26	<0.01	0.036	0.013	<0.001	<0.01	0.15	0.006	0.002	0.01
N162287	Drill Core	5.29	<0.5	<0.001	<0.001	1.53	5.15	<2	<0.001	<0.001	<0.01	0.26	<0.01	0.020	0.016	<0.001	<0.01	0.48	0.006	0.002	0.01
N162288	Drill Core	6.05	<0.5	<0.001	<0.001	1.23	3.72	<2	<0.001	<0.001	0.01	0.36	<0.01	0.010	0.013	<0.001	<0.01	0.57	<0.001	<0.001	0.01
N162289	Drill Core	6.03	<0.5	<0.001	<0.001	1.02	3.90	<2	<0.001	<0.001	<0.01	0.20	<0.01	0.004	0.008	<0.001	<0.01	<0.01	0.001	<0.001	<0.01
N162290	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.002	0.04	4.14	<0.01	0.007	<0.001	<0.001	<0.01	0.98	0.118	0.003	2.23
N162291	Drill Core	4.46	<0.5	<0.001	0.001	1.19	3.79	<2	0.001	<0.001	<0.01	0.44	<0.01	0.005	0.009	<0.001	<0.01	0.05	0.022	0.003	<0.01
N162292	Drill Core	6.19	<0.5	<0.001	<0.001	1.48	4.12	<2	<0.001	<0.001	<0.01	0.25	<0.01	0.004	0.007	<0.001	<0.01	<0.01	0.003	0.001	<0.01
N162293	Drill Core	3.99	0.6	<0.001	0.001	1.56	4.58	<2	<0.001	<0.001	<0.01	0.21	<0.01	0.004	0.009	<0.001	<0.01	<0.01	0.004	0.002	<0.01
N162294	Drill Core	3.92	<0.5	<0.001	0.002	1.68	5.54	<2	0.001	<0.001	<0.01	0.49	<0.01	0.005	0.009	<0.001	<0.01	0.03	0.016	0.003	<0.01
N162295	Drill Core	3.78	1.2	<0.001	0.003	0.92	5.05	<2	0.002	<0.001	<0.01	0.85	<0.01	0.005	0.004	<0.001	<0.01	0.05	0.022	0.005	<0.01
N162296	Drill Core	4.60	<0.5	<0.001	0.002	0.28	4.52	<2	0.002	<0.001	0.01	1.08	<0.01	0.005	0.002	<0.001	<0.01	0.05	0.024	0.005	<0.01
N162297	Drill Core	3.20	<0.5	0.001	0.002	0.72	2.40	<2	0.004	<0.001	0.02	1.44	<0.01	0.007	0.001	<0.001	<0.01	0.13	0.066	0.010	<0.01

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
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Project: 13
Report Date: November 24, 2011

CERTIFICATE OF ANALYSIS WHI11001779.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162282	Drill Core	0.28	<0.01	0.05	0.007	<0.001	1.74	35.98	1.3		
N162283	Drill Core	0.28	<0.01	0.05	0.006	<0.001	2.17	38.07	1.5		
N162284	Drill Core	0.04	<0.01	0.02	0.006	<0.001	1.24	38.31	4.3		
N162285	Drill Core	0.12	<0.01	0.03	0.006	<0.001	2.97	41.66	2.1		
N162286	Drill Core	0.11	<0.01	0.03	0.006	<0.001	2.40	37.77	2.1		
N162287	Drill Core	0.11	<0.01	0.03	0.006	<0.001	2.68	41.99	1.8		
N162288	Drill Core	0.05	<0.01	0.01	0.006	<0.001	2.01	44.71	2.1		
N162289	Drill Core	0.04	<0.01	<0.01	0.005	<0.001	2.14	48.45	2.3		
N162290	Rock Chip	0.96	0.23	0.05	<0.001	<0.001	<0.05	0.06	1.3		
N162291	Drill Core	0.13	<0.01	<0.01	0.006	<0.001	2.43	42.77	2.8		
N162292	Drill Core	0.05	<0.01	<0.01	0.006	<0.001	2.42	47.19	2.1		
N162293	Drill Core	0.05	<0.01	<0.01	0.005	<0.001	2.61	45.38	2.1		
N162294	Drill Core	0.13	<0.01	<0.01	0.005	<0.001	3.31	38.84	3.4		
N162295	Drill Core	0.25	<0.01	<0.01	0.005	<0.001	3.31	31.83	4.1		
N162296	Drill Core	0.28	<0.01	<0.01	0.005	<0.001	3.05	30.82	4.0		
N162297	Drill Core	0.42	<0.01	<0.01	0.004	<0.001	2.36	18.06	5.3		

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Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
N162164	Drill Core	3.96	8.4	0.001	0.005	0.15	2.38	<2	0.005	<0.001	0.05	1.91	<0.01	0.045	0.003	0.001	<0.01	1.21	0.097	0.004	0.59
REP N162164	QC																				
N162167	Drill Core	2.65	6.4	0.002	0.004	0.56	0.24	<2	0.005	<0.001	0.03	1.82	<0.01	0.025	<0.001	<0.001	<0.01	0.80	0.105	0.002	0.29
REP N162167	QC			0.002	0.004	0.57	0.25	<2	0.005	<0.001	0.03	1.86	<0.01	0.024	<0.001	<0.001	<0.01	0.81	0.107	0.002	0.29
N162188	Drill Core	3.68	4.3	0.001	0.005	0.02	4.59	<2	0.005	<0.001	0.01	2.55	<0.01	0.034	0.001	0.002	<0.01	1.33	0.118	0.007	0.65
REP N162188	QC																				
N162189	Drill Core	4.35	5.6	0.001	0.006	0.04	5.85	<2	0.004	<0.001	0.01	2.04	<0.01	0.020	0.001	0.002	<0.01	0.66	0.092	0.008	0.27
REP N162189	QC		4.5																		
N162200	Rock Pulp	0.09	645.8	<0.001	0.390	0.82	>20	22	0.004	0.005	0.13	12.60	0.10	0.004	0.066	0.085	<0.01	1.58	0.021	0.002	0.95
REP N162200	QC																				
N162204	Drill Core	4.15	2.0	0.002	0.005	0.13	3.95	<2	0.006	<0.001	<0.01	3.08	<0.01	0.018	<0.001	<0.001	<0.01	0.44	0.122	0.010	0.15
REP N162204	QC		2.2																		
N162209	Drill Core	5.04	2.8	0.001	0.003	0.10	5.17	<2	0.003	<0.001	<0.01	0.97	<0.01	0.837	<0.001	<0.001	<0.01	0.31	0.054	0.006	0.08
REP N162209	QC																				
N162232	Drill Core	5.54	3.3	<0.001	0.002	0.29	7.43	<2	0.001	0.001	<0.01	0.43	<0.01	0.557	<0.001	<0.001	<0.01	0.28	0.024	0.003	0.03
REP N162232	QC		2.1																		
N162238	Drill Core	4.77	3.7	0.002	0.005	0.21	2.67	<2	0.006	<0.001	<0.01	2.22	<0.01	0.019	0.001	<0.001	<0.01	0.44	0.115	0.010	0.03
REP N162238	QC			0.002	0.005	0.21	2.67	<2	0.006	<0.001	<0.01	2.18	<0.01	0.018	0.001	<0.001	<0.01	0.44	0.112	0.010	0.03
N162240	Rock Pulp	0.07	6.7	<0.001	0.032	>4	11.36	109	0.003	0.003	0.14	8.24	0.01	0.002	0.032	0.012	<0.01	3.99	0.041	0.002	2.21
REP N162240	QC																				
N162258	Drill Core	4.96	12.9	0.002	0.005	0.26	9.55	<2	0.005	<0.001	<0.01	1.97	<0.01	0.106	<0.001	0.001	<0.01	0.69	0.079	0.009	0.13
REP N162258	QC																				
N162259	Drill Core	4.09	13.3	0.002	0.005	0.32	8.93	<2	0.005	<0.001	<0.01	2.18	<0.01	0.101	<0.001	0.002	<0.01	0.78	0.074	0.010	0.10
REP N162259	QC																				
N162272	Drill Core	4.57	<0.5	0.001	0.003	0.67	4.80	<2	0.003	<0.001	0.01	0.89	<0.01	0.054	0.002	<0.001	<0.01	4.13	0.052	0.006	0.12
REP N162272	QC		13.2																		
N162291	Drill Core	4.46	<0.5	<0.001	0.001	1.19	3.79	<2	0.001	<0.001	<0.01	0.44	<0.01	0.005	0.009	<0.001	<0.01	0.05	0.022	0.003	<0.01
REP N162291	QC			<0.001	0.001	1.19	3.85	<2	0.001	<0.001	<0.01	0.44	<0.01	0.005	0.009	<0.001	<0.01	0.05	0.022	0.003	<0.01

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QUALITY CONTROL REPORT WHI11001779.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
Pulp Duplicates											
N162164	Drill Core	2.90	<0.01	0.11	<0.001	<0.001	1.55	7.17	7.3		
REP N162164	QC								7.4		
N162167	Drill Core	2.71	<0.01	0.09	<0.001	<0.001	0.65	7.03	7.1		
REP N162167	QC	2.77	<0.01	0.10	<0.001	<0.001	0.66				
N162188	Drill Core	2.63	<0.01	0.09	<0.001	<0.001	3.56	6.61	7.6		
REP N162188	QC							6.57			
N162189	Drill Core	2.97	<0.01	0.13	<0.001	<0.001	3.30	7.30	6.5		
REP N162189	QC										
N162200	Rock Pulp	1.66	0.07	0.12	*	0.004	15.07	<0.01	11.2	0.79	25.15
REP N162200	QC								11.2		
N162204	Drill Core	3.20	<0.01	0.05	0.005	<0.001	3.05	9.61	6.2		
REP N162204	QC										
N162209	Drill Core	1.96	<0.01	0.05	0.006	<0.001	0.11	27.48	3.1		
REP N162209	QC							27.56			
N162232	Drill Core	0.76	<0.01	0.04	0.007	<0.001	0.12	41.28	2.7		
REP N162232	QC										
N162238	Drill Core	3.43	<0.01	0.04	0.004	0.001	1.47	9.96	6.2		
REP N162238	QC	3.44	<0.01	0.04	0.004	0.001	1.45				
N162240	Rock Pulp	0.80	<0.01	0.48	*	<0.001	11.36	0.07	14.7	5.01	10.53
REP N162240	QC									5.02	10.48
N162258	Drill Core	2.63	<0.01	0.07	0.008	<0.001	4.65	8.73	7.0		
REP N162258	QC							8.76			
N162259	Drill Core	2.56	<0.01	0.06	0.008	<0.001	4.56	8.63	7.3		
REP N162259	QC								7.6		
N162272	Drill Core	1.23	<0.01	0.13	0.008	<0.001	1.28	17.35	4.1		
REP N162272	QC										
N162291	Drill Core	0.13	<0.01	<0.01	0.006	<0.001	2.43	42.77	2.8		
REP N162291	QC	0.13	<0.01	<0.01	0.005	<0.001	2.44				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162294	Drill Core	3.92	<0.5	<0.001	0.002	1.68	5.54	<2	0.001	<0.001	<0.01	0.49	<0.01	0.005	0.009	<0.001	<0.01	0.03	0.016	0.003	<0.01
REP N162294	QC																				
N162297	Drill Core	3.20	<0.5	0.001	0.002	0.72	2.40	<2	0.004	<0.001	0.02	1.44	<0.01	0.007	0.001	<0.001	<0.01	0.13	0.066	0.010	<0.01
REP N162297	QC																				
Core Reject Duplicates																					
N162165	Drill Core	4.47	5.5	0.001	0.004	0.09	0.64	<2	0.006	<0.001	0.04	2.64	<0.01	0.030	<0.001	<0.001	<0.01	1.07	0.124	0.003	0.45
DUP N162165	QC		6.4	0.001	0.004	0.09	0.66	<2	0.006	<0.001	0.04	2.65	<0.01	0.030	0.001	<0.001	<0.01	1.09	0.126	0.003	0.46
N162235	Drill Core	4.67	2.9	0.002	0.006	0.26	10.76	<2	0.004	<0.001	0.02	1.18	<0.01	0.164	0.002	<0.001	<0.01	1.20	0.091	0.009	0.13
DUP N162235	QC		2.8	0.001	0.006	0.25	10.94	<2	0.004	<0.001	0.02	1.16	<0.01	0.174	0.002	<0.001	<0.01	1.25	0.090	0.009	0.14
Reference Materials																					
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		204.6																		
STD CDN-PGMS-19	Standard		241.2																		
STD CDN-PGMS-19	Standard		184.1																		
STD CDN-PGMS-19	Standard		167.1																		
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
N162294	Drill Core	0.13	<0.01	<0.01	0.005	<0.001	3.31	38.84	3.4		
REP N162294	QC								3.7		
N162297	Drill Core	0.42	<0.01	<0.01	0.004	<0.001	2.36	18.06	5.3		
REP N162297	QC							18.07			
Core Reject Duplicates											
N162165	Drill Core	2.75	<0.01	0.10	<0.001	<0.001	1.58	7.01	8.7		
DUP N162165	QC	2.79	<0.01	0.09	<0.001	<0.001	1.60	7.01	9.0		
N162235	Drill Core	2.69	<0.01	0.04	*	0.005	3.92	11.45	5.6		
DUP N162235	QC	2.69	<0.01	0.04	*	0.005	4.02	11.58	5.8		
Reference Materials											
STD CCU-1C	Standard									0.34	4.19
STD CCU-1C	Standard									0.34	3.97
STD CCU-1C	Standard									0.34	3.93
STD CCU-1C	Standard									0.40	3.97
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CZN-3	Standard									0.10	53.44
STD CZN-3	Standard									0.11	48.11
STD CZN-3	Standard									0.12	48.99
STD CZN-3	Standard									0.11	52.67
STD DOLOMITE-2	Standard								45.7		
STD DOLOMITE-2	Standard								45.8		
STD DOLOMITE-2	Standard								45.4		
STD DOLOMITE-2	Standard								44.8		
STD DOLOMITE-2	Standard								45.6		
STD GBM997-6	Standard									21.43	15.82
STD GBM997-6	Standard									24.61	15.11

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Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD OREAS153AR	Standard			0.018	0.719	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.26	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.048	0.002	1.70
STD OREAS131B-A	Standard			<0.001	0.021	1.83	3.16	37	0.002	0.002	0.19	5.73	<0.01	0.002	0.009	0.003	<0.01	5.45	0.055	0.002	3.01
STD OREAS153AR	Standard			0.018	0.728	<0.01	0.01	<2	0.001	0.001	0.03	3.34	<0.01	<0.001	<0.001	<0.001	<0.01	0.97	0.050	0.002	1.71
STD OREAS131B-A	Standard			<0.001	0.021	1.87	3.12	36	0.002	0.002	0.19	5.53	<0.01	0.002	0.009	0.003	<0.01	5.35	0.053	0.002	2.94
STD OREAS153AR	Standard			0.018	0.713	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.35	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.046	0.002	1.69
STD OREAS131B-A	Standard			<0.001	0.021	1.82	2.97	33	0.002	0.002	0.18	5.63	<0.01	0.002	0.009	0.005	<0.01	5.15	0.051	0.001	2.91
STD OREAS153AR	Standard			0.018	0.707	<0.01	<0.01	<2	0.001	<0.001	0.03	3.29	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.050	0.002	1.67
STD OREAS131B-A	Standard			<0.001	0.022	1.84	3.16	36	0.002	0.002	0.19	5.63	<0.01	0.002	0.009	0.004	<0.01	5.44	0.054	0.002	2.98
STD OREAS153AR	Standard			0.018	0.732	<0.01	<0.01	<2	<0.001	0.001	0.02	3.25	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.048	0.002	1.67
STD OREAS131B-A	Standard			<0.001	0.021	1.81	3.00	34	0.002	0.002	0.18	5.62	<0.01	0.002	0.008	0.006	<0.01	5.26	0.054	0.001	2.90
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD CDN-PGMS-19			230																		
STD DOLOMITE-2 Expected																					
STD MICA-MG(D) Expected																					

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD GBM997-6	Standard									23.98	15.36
STD GBM997-6	Standard									21.41	15.22
STD MICA-MG(D)	Standard							0.43			
STD MICA-MG(D)	Standard							0.43			
STD MICA-MG(D)	Standard							0.43			
STD MICA-MG(D)	Standard							0.43			
STD OREAS153AR	Standard	2.51	0.15	0.61	<0.001	<0.001	1.27				
STD OREAS131B-A	Standard	1.04	0.01	0.73	0.005	<0.001	5.28				
STD OREAS153AR	Standard	2.45	0.12	0.60	<0.001	<0.001	1.29				
STD OREAS131B-A	Standard	1.03	0.01	0.70	0.005	<0.001	5.13				
STD OREAS153AR	Standard	2.47	0.14	0.61	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	1.00	0.01	0.72	<0.001	<0.001	5.04				
STD OREAS153AR	Standard	2.57	0.19	0.62	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	1.06	0.01	0.72	0.005	<0.001	5.31				
STD OREAS153AR	Standard	2.56	0.18	0.64	<0.001	<0.001	1.23				
STD OREAS131B-A	Standard	1.02	0.01	0.75	<0.001	<0.001	5.09				
STD PTC-1A	Standard									0.04	0.10
STD PTC-1A	Standard									0.06	0.10
STD PTC-1A	Standard									0.06	0.11
STD PTC-1A	Standard									0.04	0.13
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.06			
STD SO-18	Standard							0.05			
STD OREAS153AR		2.425	0.142	0.6138			1.285				
STD OREAS131B-A		0.969	0.0112	0.7			5.01				
STD CDN-PGMS-19											
STD DOLOMITE-2 Expected									46		
STD MICA-MG(D) Expected								0.4			

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD SO-18 Expected																					
STD CZN-3 Expected																					
STD CCU-1C Expected																					
STD GBM997-6 Expected																					
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank		1.0	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.05	<0.01	0.007	<0.001	<0.001	<0.01	0.55	0.082	<0.001	0.53
G1	Prep Blank		1.1	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.08	<0.01	0.006	<0.001	<0.001	<0.01	0.53	0.081	<0.001	0.52

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Project: 13
Report Date: November 24, 2011

QUALITY CONTROL REPORT WHI11001779.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD SO-18 Expected								0.0515			
STD CZN-3 Expected										0.113	49.75
STD CCU-1C Expected										0.34	3.99
STD GBM997-6 Expected										23.75	15.83
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank									<0.01	<0.01
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank									<0.01	<0.01
BLK	Blank									<0.01	<0.01
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank									<0.01	<0.01
Prep Wash											
G1	Prep Blank	1.06	0.13	0.57	<0.001	<0.001	<0.05	0.12	0.9		
G1	Prep Blank	0.99	0.11	0.53	<0.001	<0.001	<0.05	0.12	0.5		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: October 03, 2011
Report Date: November 28, 2011
Page: 1 of 6

CERTIFICATE OF ANALYSIS WHI11001780.1

CLIENT JOB INFORMATION

Project: 13
Shipment ID: FLIN 288
P.O. Number
Number of Samples: 136

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	121	Crush, split and pulverize 250 g rock to 200 mesh			WHI
P200	7	Pulverize to 85% - 200 mesh			VAN
3A01	135	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	135	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	135	X-Ray fluorescence / Fusion		Completed	VAN
2A05	135	Loss on Ignition at 1000 C		Completed	VAN
7AR.1	6	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162299	Drill Core	2.93	1.6	0.001	0.003	0.32	4.15	2	0.005	<0.001	0.01	1.31	<0.01	0.009	0.003	0.002	<0.01	0.19	0.084	0.009	<0.01
N162300	Rock Pulp	0.09	731.6	0.001	0.387	0.80	>20	21	0.004	0.005	0.13	12.02	0.10	0.003	0.065	0.096	<0.01	1.59	0.023	0.002	0.94
N162301	Drill Core	4.24	4.9	0.002	0.004	0.23	1.18	<2	0.006	<0.001	0.03	1.91	<0.01	0.010	0.001	<0.001	<0.01	0.21	0.097	0.011	0.02
N162302	Drill Core	3.86	3.8	0.002	0.004	0.94	1.21	3	0.006	<0.001	0.01	1.65	<0.01	0.007	0.002	0.002	<0.01	0.22	0.104	0.012	0.01
N162303	Drill Core	4.32	5.3	0.002	0.006	0.15	2.52	<2	0.005	<0.001	0.03	1.47	<0.01	0.011	0.004	0.002	<0.01	0.79	0.103	0.012	0.02
N162304	Drill Core	3.80	4.3	0.002	0.004	0.34	0.16	<2	0.006	<0.001	0.02	1.65	<0.01	0.008	<0.001	0.001	<0.01	0.42	0.111	0.011	0.02
N162305	Drill Core	3.68	5.7	0.003	0.004	1.02	0.11	3	0.007	<0.001	<0.01	1.75	<0.01	0.015	<0.001	0.001	<0.01	0.29	0.126	0.014	<0.01
N162306	Drill Core	3.03	6.4	0.002	0.005	0.78	0.05	2	0.006	<0.001	0.04	1.86	<0.01	0.027	<0.001	0.001	<0.01	0.85	0.121	0.012	0.03
N162307	Drill Core	4.27	17.0	0.002	0.012	0.08	<0.01	<2	0.007	<0.001	0.04	7.98	0.01	0.021	<0.001	0.003	<0.01	1.18	0.132	0.010	0.07
N162308	Drill Core	4.43	17.9	0.002	0.013	0.03	<0.01	<2	0.008	<0.001	<0.01	5.02	<0.01	0.023	<0.001	0.002	<0.01	0.28	0.125	0.011	0.04
N162309	Drill Core	4.05	5.0	0.002	0.005	0.01	<0.01	<2	0.006	<0.001	<0.01	3.23	<0.01	0.018	<0.001	<0.001	<0.01	0.29	0.127	0.007	0.05
N162310	Rock Chip	0.17	0.6	<0.001	0.004	<0.01	0.04	<2	0.013	0.003	0.05	4.60	<0.01	0.010	<0.001	<0.001	<0.01	1.31	0.117	0.003	2.24
N162314	Drill Core	4.56	5.4	0.001	0.006	0.02	1.23	<2	0.005	<0.001	0.03	3.01	<0.01	0.028	0.002	0.001	<0.01	2.08	0.097	0.004	1.02
N162315	Drill Core	3.70	3.7	0.001	0.004	0.02	0.01	<2	0.006	<0.001	0.01	2.04	<0.01	0.005	<0.001	<0.001	<0.01	0.83	0.105	0.004	0.34
N162316	Drill Core	4.22	4.4	0.001	0.005	0.01	0.52	<2	0.006	<0.001	0.02	2.61	<0.01	0.012	<0.001	0.001	<0.01	1.28	0.107	0.005	0.61
N162317	Drill Core	5.00	3.9	0.001	0.007	0.03	4.65	<2	0.005	<0.001	<0.01	2.21	<0.01	0.005	0.005	0.002	<0.01	0.29	0.102	0.005	0.06
N162318	Drill Core	4.01	4.9	0.001	0.007	0.06	4.83	<2	0.005	<0.001	<0.01	2.32	<0.01	0.005	0.003	0.003	<0.01	0.23	0.083	0.006	0.04
N162319	Drill Core	4.48	3.1	0.001	0.005	0.31	7.60	<2	0.002	<0.001	0.05	1.73	<0.01	0.293	0.003	0.004	<0.01	9.30	0.050	0.006	1.51
N162320	Rock Pulp	0.09	124.6	<0.001	0.090	<0.01	0.53	<2	0.002	0.004	0.13	8.05	<0.01	0.007	0.001	<0.001	<0.01	3.79	0.056	0.002	2.09
N162321	Drill Core	3.99	3.6	0.001	0.005	0.31	9.38	<2	0.003	<0.001	0.02	1.45	<0.01	0.072	0.002	0.003	<0.01	2.04	0.054	0.007	0.57
N162322	Drill Core	4.80	4.5	0.002	0.006	0.41	12.18	<2	0.003	<0.001	0.03	1.36	<0.01	0.054	0.003	0.003	<0.01	1.94	0.055	0.009	0.77
N162323	Drill Core	3.88	3.3	0.001	0.005	0.31	11.81	<2	0.003	<0.001	0.03	1.23	<0.01	0.031	0.005	0.003	<0.01	1.47	0.060	0.007	0.81
N162324	Drill Core	4.35	<0.5	<0.001	0.002	0.39	5.82	<2	0.002	<0.001	0.07	1.53	<0.01	0.658	0.002	0.002	<0.01	9.41	0.037	0.004	2.18
N162325	Drill Core	4.59	4.8	0.002	0.006	0.39	10.76	<2	0.004	<0.001	0.02	2.01	<0.01	0.028	0.002	0.003	<0.01	0.90	0.083	0.008	0.37
N162326	Drill Core	4.69	2.3	0.002	0.005	0.75	9.94	<2	0.004	<0.001	<0.01	1.59	<0.01	0.131	0.002	0.003	<0.01	0.86	0.068	0.009	0.14
N162327	Drill Core	1.78	2.0	<0.001	0.003	0.60	4.43	<2	0.002	<0.001	0.01	1.52	<0.01	0.510	0.002	0.001	<0.01	0.23	0.066	0.006	0.07
N162328	Drill Core	3.12	2.8	<0.001	0.002	0.87	4.73	<2	0.001	<0.001	<0.01	0.28	<0.01	0.352	0.002	0.001	<0.01	0.29	0.016	0.003	0.04
N162330	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	0.02	<2	0.013	0.003	0.05	4.23	<0.01	0.008	<0.001	<0.001	<0.01	1.18	0.117	0.003	2.16
N162331	Drill Core	5.51	0.8	<0.001	0.002	1.14	5.71	<2	0.001	<0.001	<0.01	0.44	<0.01	0.084	0.006	0.001	<0.01	0.13	0.023	0.003	0.03
N162332	Drill Core	5.78	0.6	<0.001	0.002	1.16	4.15	<2	<0.001	<0.001	0.01	0.45	<0.01	0.073	0.014	0.001	<0.01	2.74	0.019	0.003	0.06

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162299	Drill Core	0.79	<0.01	0.01	<0.001	0.001	2.96	6.09	6.6		
N162300	Rock Pulp	1.64	0.07	0.13	<0.001	<0.001	17.04	<0.01	10.9	0.74	25.08
N162301	Drill Core	2.34	<0.01	0.03	<0.001	<0.001	0.81	6.27	5.3		
N162302	Drill Core	3.13	<0.01	0.04	<0.001	<0.001	0.50	8.10	6.1		
N162303	Drill Core	3.60	<0.01	0.04	<0.001	<0.001	0.67	9.48	5.9		
N162304	Drill Core	3.48	<0.01	0.05	<0.001	<0.001	0.31	9.00	5.6		
N162305	Drill Core	3.73	<0.01	0.12	<0.001	<0.001	0.35	9.71	7.2		
N162306	Drill Core	3.76	<0.01	0.18	<0.001	<0.001	0.37	9.71	6.5		
N162307	Drill Core	3.12	<0.01	0.20	<0.001	<0.001	7.37	7.73	10.9		
N162308	Drill Core	4.04	<0.01	0.19	<0.001	<0.001	3.39	10.05	9.0		
N162309	Drill Core	3.15	<0.01	0.14	<0.001	<0.001	1.76	7.80	7.2		
N162310	Rock Chip	1.54	0.41	0.07	<0.001	<0.001	<0.05	0.04	1.5		
N162314	Drill Core	2.78	<0.01	0.12	<0.001	<0.001	2.15	6.90	8.6		
N162315	Drill Core	3.19	<0.01	0.12	<0.001	<0.001	0.44	8.87	6.4		
N162316	Drill Core	3.21	<0.01	0.12	<0.001	<0.001	1.16	7.86	7.6		
N162317	Drill Core	2.87	<0.01	0.11	<0.001	<0.001	2.98	7.31	6.3		
N162318	Drill Core	2.90	<0.01	0.09	<0.001	<0.001	3.10	7.33	6.0		
N162319	Drill Core	1.48	<0.01	0.05	<0.001	<0.001	4.20	5.96	7.3		
N162320	Rock Pulp	3.52	0.11	0.22	<0.001	<0.001	1.60	0.02	4.7		
N162321	Drill Core	2.09	<0.01	0.05	<0.001	<0.001	4.23	7.53	5.9		
N162322	Drill Core	2.07	<0.01	0.04	<0.001	<0.001	5.63	7.19	6.9		
N162323	Drill Core	1.93	<0.01	0.04	<0.001	<0.001	5.68	5.58	7.4		
N162324	Drill Core	0.94	<0.01	0.01	<0.001	<0.001	1.21	14.18	12.8		
N162325	Drill Core	2.48	<0.01	0.05	<0.001	<0.001	5.21	9.08	6.9		
N162326	Drill Core	2.26	<0.01	0.04	<0.001	<0.001	3.63	12.40	5.5		
N162327	Drill Core	2.87	<0.01	0.04	<0.001	<0.001	0.11	27.05	1.8		
N162328	Drill Core	0.34	<0.01	0.03	<0.001	<0.001	0.11	37.90	0.6		
N162330	Rock Chip	1.32	0.35	0.06	<0.001	<0.001	<0.05	0.05	1.2		
N162331	Drill Core	0.40	<0.01	0.07	<0.001	<0.001	1.30	35.39	0.4		
N162332	Drill Core	0.29	<0.01	0.05	<0.001	<0.001	1.25	36.86	1.0		

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162333	Drill Core	4.61	0.5	<0.001	<0.001	1.52	2.47	<2	<0.001	<0.001	0.02	0.45	<0.01	0.078	0.017	<0.001	<0.01	4.30	0.007	0.001	0.22
N162334	Drill Core	5.88	0.6	<0.001	0.003	1.05	4.65	<2	0.002	<0.001	<0.01	0.84	<0.01	0.056	0.011	<0.001	<0.01	0.12	0.029	0.004	0.04
N162335	Drill Core	5.28	3.6	0.001	0.003	0.16	5.57	<2	0.003	<0.001	<0.01	1.39	<0.01	0.109	0.004	0.001	<0.01	0.17	0.064	0.007	0.09
N162336	Drill Core	6.31	5.2	<0.001	0.002	0.16	5.18	<2	0.002	<0.001	<0.01	0.78	<0.01	0.126	0.002	0.001	<0.01	0.14	0.050	0.006	0.11
N162337	Drill Core	4.50	3.8	<0.001	0.002	0.15	5.40	<2	0.002	<0.001	<0.01	0.76	<0.01	0.121	0.003	<0.001	<0.01	0.10	0.041	0.004	0.07
N162338	Drill Core	4.91	4.6	0.001	0.003	0.12	5.08	<2	0.003	<0.001	<0.01	0.96	<0.01	0.139	0.003	<0.001	<0.01	0.17	0.062	0.006	0.14
N162339	Drill Core	4.73	2.8	0.001	0.003	0.23	6.11	<2	0.003	<0.001	<0.01	3.21	0.02	0.057	0.004	<0.001	<0.01	0.19	0.048	0.005	0.12
N162340	Rock Pulp	0.07	6.6	<0.001	0.031	>4	10.73	101	0.002	0.002	0.13	8.04	0.02	0.002	0.031	0.018	<0.01	3.92	0.043	0.002	2.15
N162341	Drill Core	5.33	1.5	<0.001	0.003	0.79	6.66	<2	0.002	<0.001	<0.01	1.21	<0.01	0.052	0.007	0.001	<0.01	0.30	0.041	0.005	0.04
N162342	Drill Core	5.80	0.5	<0.001	<0.001	1.98	1.77	<2	<0.001	<0.001	0.04	0.38	<0.01	0.114	0.013	<0.001	<0.01	11.46	0.005	0.001	0.23
N162343	Drill Core	5.97	0.8	<0.001	<0.001	2.13	2.42	<2	<0.001	<0.001	<0.01	0.29	<0.01	0.049	0.021	<0.001	<0.01	3.27	0.004	0.002	0.02
N162344	Drill Core	4.80	<0.5	<0.001	0.001	1.83	2.28	<2	<0.001	<0.001	0.02	0.29	<0.01	0.105	0.018	<0.001	<0.01	8.10	0.008	0.001	0.06
N162345	Drill Core	5.81	0.7	<0.001	0.003	1.64	2.35	<2	<0.001	<0.001	0.02	0.37	<0.01	0.105	0.018	<0.001	<0.01	7.34	0.007	0.001	0.06
N162346	Drill Core	5.68	0.8	<0.001	0.001	1.41	3.35	<2	0.001	<0.001	0.01	0.58	<0.01	0.024	0.018	<0.001	<0.01	1.87	0.012	0.003	0.03
N162347	Drill Core	5.83	0.9	<0.001	0.002	1.07	5.63	<2	0.001	<0.001	<0.01	0.49	<0.01	0.083	0.017	<0.001	<0.01	0.32	0.017	0.003	0.03
N162348	Drill Core	5.50	1.5	<0.001	0.001	1.19	5.00	<2	<0.001	<0.001	<0.01	0.39	<0.01	0.084	0.017	<0.001	<0.01	0.30	0.011	0.002	0.03
N162349	Drill Core	5.39	0.5	<0.001	0.001	0.90	4.57	<2	<0.001	<0.001	<0.01	0.37	<0.01	0.069	0.013	<0.001	<0.01	0.21	0.010	0.002	0.02
N162350	Rock Chip	0.14	0.7	<0.001	0.004	<0.01	0.01	<2	0.013	0.003	0.05	4.69	<0.01	0.009	<0.001	<0.001	<0.01	1.15	0.124	0.003	2.38
N162351	Drill Core	4.36	<0.5	<0.001	0.001	0.73	4.48	<2	0.001	<0.001	0.02	0.76	<0.01	0.008	0.013	0.001	<0.01	0.48	0.013	0.002	0.02
N162352	Drill Core	5.39	17.2	<0.001	0.001	1.15	5.25	<2	<0.001	<0.001	<0.01	0.35	<0.01	0.021	0.018	<0.001	<0.01	0.46	0.012	0.002	0.02
N162353	Drill Core	5.72	7.9	<0.001	0.002	1.54	5.54	<2	0.001	<0.001	<0.01	0.46	<0.01	0.058	0.023	<0.001	<0.01	0.37	0.020	0.004	0.04
N162354	Drill Core	5.17	<0.5	<0.001	0.001	2.15	2.93	<2	<0.001	<0.001	<0.01	0.34	<0.01	0.032	0.021	0.001	<0.01	2.03	0.008	0.002	0.03
N162355	Drill Core	5.99	0.6	<0.001	0.001	2.14	3.77	<2	<0.001	<0.001	0.01	0.28	<0.01	0.056	0.033	<0.001	<0.01	4.07	0.004	0.002	0.02
N162356	Drill Core	5.30	2.4	<0.001	0.002	0.74	4.58	<2	0.002	<0.001	0.01	0.86	<0.01	0.076	0.010	0.001	<0.01	3.40	0.031	0.003	0.15
N162357	Drill Core	5.10	2.2	0.001	0.003	0.33	6.18	<2	0.003	<0.001	<0.01	1.19	<0.01	0.089	0.005	0.001	<0.01	0.12	0.051	0.006	0.08
N162358	Drill Core	5.41	2.1	<0.001	0.003	0.77	5.98	<2	0.002	<0.001	<0.01	0.83	<0.01	0.096	0.004	0.001	<0.01	0.09	0.036	0.005	0.06
N162359	Drill Core	5.10	1.5	<0.001	0.003	1.32	4.18	<2	0.003	<0.001	<0.01	1.24	<0.01	0.041	0.004	<0.001	<0.01	0.36	0.076	0.006	0.05
N162360	Rock Pulp	0.09	470.8	<0.001	1.296	<0.01	0.14	3	0.001	0.011	0.12	11.37	<0.01	0.005	<0.001	<0.001	<0.01	2.98	0.043	0.002	1.78
N162361	Drill Core	5.66	2.4	<0.001	0.002	1.11	6.11	<2	0.002	<0.001	0.01	0.95	<0.01	0.056	0.005	0.001	<0.01	0.22	0.034	0.005	0.05
N162362	Drill Core	5.88	<0.5	<0.001	0.002	1.46	5.18	<2	<0.001	<0.001	<0.01	0.43	<0.01	0.058	0.011	<0.001	<0.01	0.05	0.017	0.003	0.03

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162333	Drill Core	0.09	<0.01	0.03	<0.001	<0.001	0.43	39.64	2.5		
N162334	Drill Core	0.50	<0.01	0.10	<0.001	<0.001	1.57	37.07	1.1		
N162335	Drill Core	1.44	<0.01	0.22	<0.001	<0.001	0.69	24.47	0.3		
N162336	Drill Core	0.98	<0.01	0.14	<0.001	<0.001	0.36	28.98	<0.1		
N162337	Drill Core	0.83	<0.01	0.12	<0.001	<0.001	0.52	31.13	0.7		
N162338	Drill Core	1.42	<0.01	0.18	<0.001	<0.001	0.31	26.81	1.6		
N162339	Drill Core	0.88	<0.01	0.14	<0.001	<0.001	3.53	26.08	2.5		
N162340	Rock Pulp	0.81	0.01	0.53	<0.001	<0.001	11.54	0.08	14.5	4.64	10.91
N162341	Drill Core	0.55	<0.01	0.12	<0.001	<0.001	2.70	30.61	1.9		
N162342	Drill Core	0.02	<0.01	<0.01	<0.001	<0.001	0.31	33.11	13.0		
N162343	Drill Core	0.05	<0.01	0.02	<0.001	<0.001	1.13	43.07	1.9		
N162344	Drill Core	0.05	<0.01	0.02	<0.001	<0.001	0.33	36.85	7.9		
N162345	Drill Core	0.06	<0.01	0.02	<0.001	<0.001	0.22	35.74	8.5		
N162346	Drill Core	0.21	<0.01	0.04	<0.001	<0.001	1.73	38.05	1.5		
N162347	Drill Core	0.27	<0.01	0.05	<0.001	<0.001	1.42	38.60	1.0		
N162348	Drill Core	0.18	<0.01	0.03	<0.001	<0.001	1.17	38.19	1.4		
N162349	Drill Core	0.22	<0.01	0.04	<0.001	<0.001	1.15	35.90	1.2		
N162350	Rock Chip	1.28	0.34	0.07	<0.001	<0.001	<0.05	0.18	1.5		
N162351	Drill Core	0.24	<0.01	0.04	<0.001	<0.001	2.22	36.45	2.1		
N162352	Drill Core	0.20	<0.01	0.04	<0.001	<0.001	2.42	36.70	1.8		
N162353	Drill Core	0.32	<0.01	0.06	<0.001	<0.001	2.03	38.01	1.3		
N162354	Drill Core	0.12	<0.01	0.03	<0.001	<0.001	1.08	37.81	1.7		
N162355	Drill Core	0.05	<0.01	0.02	<0.001	<0.001	1.20	41.50	2.4		
N162356	Drill Core	0.36	<0.01	0.07	<0.001	<0.001	1.47	33.23	2.8		
N162357	Drill Core	1.14	<0.01	0.16	<0.001	<0.001	1.24	27.37	1.6		
N162358	Drill Core	0.71	<0.01	0.10	<0.001	<0.001	0.99	31.42	1.9		
N162359	Drill Core	1.19	<0.01	0.15	<0.001	<0.001	1.59	23.93	1.9		
N162360	Rock Pulp	3.20	0.14	0.24	<0.001	<0.001	4.67	0.02	5.3		
N162361	Drill Core	0.50	<0.01	0.08	<0.001	<0.001	1.94	32.28	1.7		
N162362	Drill Core	0.20	<0.01	0.06	<0.001	<0.001	1.74	38.04	1.4		

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162363	Drill Core	6.24	<0.5	<0.001	0.002	1.42	5.54	<2	0.001	<0.001	<0.01	0.56	<0.01	0.065	0.006	<0.001	<0.01	0.06	0.024	0.003	0.03
N162364	Drill Core	4.55	<0.5	<0.001	0.002	1.18	5.94	<2	0.001	<0.001	<0.01	0.54	<0.01	0.069	0.005	<0.001	<0.01	0.06	0.026	0.004	0.05
N162365	Drill Core	5.61	<0.5	<0.001	0.001	1.16	4.72	<2	0.001	<0.001	<0.01	0.39	<0.01	0.051	0.007	0.001	<0.01	0.07	0.015	0.002	0.02
N162366	Drill Core	6.35	<0.5	<0.001	<0.001	0.48	5.55	<2	<0.001	<0.001	<0.01	0.22	<0.01	0.041	0.005	<0.001	<0.01	0.06	0.004	0.001	0.01
N162367	Drill Core	5.43	<0.5	<0.001	0.001	1.26	5.74	<2	0.001	<0.001	<0.01	0.37	<0.01	0.052	0.010	0.001	<0.01	0.05	0.015	0.003	0.02
N162368	Drill Core	6.43	<0.5	<0.001	<0.001	1.63	5.08	<2	<0.001	<0.001	<0.01	0.28	<0.01	0.044	0.012	<0.001	<0.01	0.05	0.009	0.002	0.02
N162369	Drill Core	5.62	<0.5	<0.001	<0.001	2.05	4.43	<2	<0.001	<0.001	<0.01	0.20	<0.01	0.027	0.011	<0.001	<0.01	0.15	<0.001	0.001	<0.01
N162370	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.45	<0.01	0.007	<0.001	<0.001	<0.01	0.98	0.118	0.003	2.34
N162371	Drill Core	5.52	<0.5	<0.001	<0.001	1.57	4.18	<2	<0.001	<0.001	<0.01	0.27	<0.01	0.043	0.009	<0.001	<0.01	0.09	0.008	0.002	0.02
N162372	Drill Core	6.22	<0.5	0.001	<0.001	1.56	5.95	<2	<0.001	<0.001	<0.01	0.19	<0.01	0.037	0.008	0.001	<0.01	0.03	<0.001	<0.001	<0.01
N162373	Drill Core	5.11	<0.5	0.001	0.001	1.85	4.59	<2	<0.001	<0.001	<0.01	0.32	<0.01	0.051	0.008	0.001	<0.01	0.08	0.011	0.002	0.02
N162374	Drill Core	5.66	<0.5	0.001	0.001	1.61	4.50	<2	0.001	0.001	<0.01	0.82	<0.01	0.081	0.011	0.001	<0.01	0.17	0.012	0.003	0.04
N162375	Drill Core	4.79	0.5	0.001	0.002	2.08	4.96	<2	0.002	0.002	<0.01	0.93	<0.01	0.068	0.016	0.001	<0.01	0.14	0.017	0.003	0.03
N162376	Drill Core	5.05	<0.5	<0.001	<0.001	1.65	4.84	<2	<0.001	0.001	<0.01	0.50	<0.01	0.090	0.017	0.002	<0.01	0.08	0.004	0.002	0.01
N162377	Drill Core	5.57	<0.5	<0.001	<0.001	>4	5.36	<2	<0.001	<0.001	<0.01	0.30	<0.01	0.020	0.020	0.002	<0.01	0.28	0.006	0.001	<0.01
N162378	Drill Core	4.10	1.9	<0.001	0.001	2.43	1.37	<2	0.001	0.002	<0.01	0.44	<0.01	0.005	0.005	<0.001	<0.01	0.03	0.008	0.002	<0.01
N162379	Drill Core	0.77	2.5	<0.001	0.001	0.45	0.22	<2	0.003	<0.001	<0.01	0.72	<0.01	0.004	<0.001	<0.001	<0.01	0.09	0.038	0.005	<0.01
N162380	Rock Pulp	0.07	1.1	<0.001	0.135	>4	17.19	207	0.002	0.011	0.37	12.06	0.02	0.003	0.056	0.005	<0.01	4.32	0.027	0.003	2.06
N162382	Drill Core	1.05	1.8	<0.001	0.003	2.57	2.10	<2	0.004	0.001	<0.01	0.98	<0.01	0.005	0.008	0.001	<0.01	0.09	0.041	0.010	<0.01
N162383	Drill Core	1.38	3.6	<0.001	0.003	>4	1.55	12	0.003	0.002	<0.01	1.37	<0.01	0.008	0.006	0.002	<0.01	0.10	0.043	0.009	<0.01
N162384	Drill Core	2.41	4.4	0.001	0.006	2.70	0.88	11	0.006	<0.001	0.01	1.70	0.01	0.011	0.003	0.003	<0.01	0.24	0.110	0.014	<0.01
N162385	Drill Core	3.75	5.3	0.002	0.005	0.59	0.01	3	0.004	<0.001	0.16	2.10	<0.01	0.130	<0.001	0.002	<0.01	1.60	0.089	0.014	0.81
N162386	Drill Core	4.49	9.1	0.002	0.004	0.02	<0.01	<2	0.006	0.002	<0.01	2.97	0.01	0.023	<0.001	0.002	<0.01	0.31	0.124	0.006	0.04
N162387	Drill Core	3.82	8.0	0.002	0.005	0.02	<0.01	<2	0.006	<0.001	0.02	3.86	0.01	0.030	<0.001	0.002	<0.01	0.37	0.134	0.005	0.06
N162388	Drill Core	4.60	15.3	0.002	0.009	0.02	<0.01	2	0.006	<0.001	0.02	4.86	0.01	0.023	<0.001	0.003	<0.01	0.36	0.110	0.005	0.07
N162389	Drill Core	4.26	9.5	0.002	0.010	0.01	0.02	2	0.006	<0.001	0.16	4.04	<0.01	0.041	<0.001	0.004	<0.01	0.97	0.114	0.004	0.33
N162390	Rock Chip	0.14	1.3	<0.001	0.003	<0.01	<0.01	<2	0.013	0.002	0.05	4.21	<0.01	0.008	<0.001	<0.001	<0.01	1.05	0.117	0.003	2.24
N162391	Drill Core	4.65	3.6	<0.001	0.004	<0.01	<0.01	<2	0.005	<0.001	0.01	2.05	<0.01	0.008	<0.001	0.001	<0.01	0.80	0.097	0.005	0.31
N162392	Drill Core	2.38	3.3	0.001	0.004	0.01	<0.01	<2	0.005	<0.001	0.02	2.30	<0.01	0.014	<0.001	0.001	<0.01	1.24	0.105	0.005	0.57
N162393	Drill Core	2.23	3.7	0.001	0.005	0.01	<0.01	<2	0.004	<0.001	0.04	3.04	<0.01	0.034	<0.001	0.002	<0.01	2.56	0.099	0.004	1.25

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CERTIFICATE OF ANALYSIS

WHI11001780.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162363	Drill Core	0.30	<0.01	0.05	<0.001	<0.001	1.94	39.28	1.8		
N162364	Drill Core	0.26	<0.01	0.06	<0.001	<0.001	1.92	36.27	1.8		
N162365	Drill Core	0.19	<0.01	0.04	<0.001	<0.001	1.83	38.82	1.9		
N162366	Drill Core	0.08	<0.01	0.03	<0.001	<0.001	2.22	43.99	2.1		
N162367	Drill Core	0.23	<0.01	0.04	<0.001	<0.001	2.33	39.32	2.3		
N162368	Drill Core	0.15	<0.01	0.03	<0.001	<0.001	2.15	41.51	1.8		
N162369	Drill Core	0.08	<0.01	0.02	<0.001	<0.001	2.21	42.07	3.3		
N162370	Rock Chip	0.89	0.21	0.04	<0.001	<0.001	<0.05	0.05	1.0		
N162371	Drill Core	0.19	<0.01	0.03	<0.001	<0.001	1.76	45.31	1.4		
N162372	Drill Core	0.09	<0.01	0.02	<0.001	<0.001	2.68	44.20	1.8		
N162373	Drill Core	0.21	<0.01	0.03	<0.001	<0.001	1.82	42.35	1.2		
N162374	Drill Core	0.30	<0.01	0.05	<0.001	<0.001	1.42	33.68	1.5		
N162375	Drill Core	0.41	<0.01	0.06	<0.001	<0.001	1.97	27.57	1.6		
N162376	Drill Core	0.39	<0.01	0.05	<0.001	<0.001	1.05	28.22	1.2		
N162377	Drill Core	0.25	<0.01	0.03	<0.001	<0.001	2.58	34.44	2.8	4.66	5.24
N162378	Drill Core	0.18	<0.01	<0.01	<0.001	<0.001	0.81	37.25	2.0		
N162379	Drill Core	0.62	<0.01	<0.01	<0.001	<0.001	0.60	1.86	2.3		
N162380	Rock Pulp	0.42	<0.01	0.16	<0.001	0.001	18.95	0.14	14.3	12.33	17.16
N162382	Drill Core	0.61	<0.01	<0.01	<0.001	<0.001	1.87	4.68	4.5		
N162383	Drill Core	0.28	<0.01	<0.01	<0.001	<0.001	2.90	14.97	5.1	5.58	1.37
N162384	Drill Core	1.39	<0.01	0.02	<0.001	<0.001	1.68	3.97	7.6		
N162385	Drill Core	2.54	<0.01	0.10	<0.001	<0.001	0.84	6.53	7.7		
N162386	Drill Core	2.60	<0.01	0.11	<0.001	<0.001	1.83	6.71	7.2		
N162387	Drill Core	2.74	<0.01	0.13	<0.001	<0.001	2.88	7.17	7.8		
N162388	Drill Core	2.36	<0.01	0.15	<0.001	<0.001	4.29	5.82	8.6		
N162389	Drill Core	1.96	<0.01	0.14	<0.001	<0.001	3.42	4.89	9.7		
N162390	Rock Chip	1.17	0.29	0.05	<0.001	<0.001	<0.05	0.06	1.5		
N162391	Drill Core	2.78	<0.01	0.12	<0.001	<0.001	0.69	7.01	6.0		
N162392	Drill Core	2.99	<0.01	0.11	<0.001	<0.001	0.83	7.46	7.2		
N162393	Drill Core	2.79	<0.01	0.10	<0.001	<0.001	1.69	6.98	9.1		

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Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162394	Drill Core	4.22	7.7	0.001	0.008	0.03	3.35	<2	0.005	<0.001	<0.01	3.14	<0.01	0.006	0.002	<0.001	<0.01	0.42	0.104	0.005	0.11
N162395	Drill Core	3.70	3.6	0.002	0.005	0.03	2.65	<2	0.006	<0.001	<0.01	2.42	<0.01	0.006	0.001	<0.001	<0.01	0.28	0.095	0.007	0.05
N162396	Drill Core	3.71	4.6	0.002	0.005	0.04	5.87	<2	0.005	<0.001	<0.01	2.00	<0.01	0.007	0.002	<0.001	<0.01	0.27	0.073	0.009	0.07
N162397	Drill Core	4.09	6.8	0.002	0.007	0.07	8.44	<2	0.004	<0.001	0.01	2.05	<0.01	0.014	0.002	<0.001	<0.01	0.57	0.114	0.010	0.19
N162398	Drill Core	4.54	5.4	0.002	0.006	0.10	6.69	<2	0.006	<0.001	0.01	2.37	<0.01	0.012	0.001	<0.001	<0.01	0.40	0.067	0.011	0.15
N162399	Drill Core	4.15	5.2	0.002	0.006	0.11	6.69	<2	0.007	<0.001	0.01	3.51	<0.01	0.009	0.001	<0.001	<0.01	0.37	0.079	0.010	0.12
N162400	Rock Pulp	0.09	725.7	<0.001	0.385	0.80	>20	22	0.004	0.005	0.13	12.35	0.10	0.003	0.064	0.083	<0.01	1.56	0.019	0.002	0.93
N162501	Drill Core	2.68	5.7	0.002	0.005	0.11	3.99	<2	0.006	<0.001	<0.01	2.63	<0.01	0.012	<0.001	<0.001	<0.01	0.48	0.150	0.011	0.09
N162502	Drill Core	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
N162503	Drill Core	2.40	6.1	0.002	0.006	0.10	6.05	<2	0.006	<0.001	<0.01	3.38	<0.01	0.006	<0.001	<0.001	<0.01	0.20	0.081	0.010	0.02
N162504	Drill Core	2.18	3.8	0.001	0.004	0.11	3.26	<2	0.005	<0.001	0.02	3.94	<0.01	0.010	<0.001	<0.001	<0.01	0.47	0.190	0.013	0.04
N162505	Drill Core	3.95	3.7	0.002	0.006	0.10	9.42	<2	0.005	<0.001	0.01	1.73	<0.01	0.008	0.001	<0.001	<0.01	0.26	0.067	0.011	0.16
N162506	Drill Core	4.64	5.0	0.002	0.006	0.55	11.06	<2	0.003	<0.001	0.02	1.04	<0.01	0.022	0.003	<0.001	<0.01	0.67	0.069	0.011	0.25
N162507	Drill Core	4.02	3.1	0.002	0.005	1.07	10.15	2	0.003	<0.001	0.02	1.14	<0.01	0.142	0.005	<0.001	<0.01	2.76	0.057	0.009	0.46
N162508	Drill Core	3.46	0.7	<0.001	0.002	0.57	3.74	<2	<0.001	0.002	0.01	0.76	<0.01	0.640	0.003	<0.001	<0.01	7.49	0.014	0.002	0.95
N162509	Drill Core	2.56	<0.5	<0.001	0.001	0.67	2.16	<2	<0.001	0.002	0.01	0.56	<0.01	0.772	0.003	<0.001	<0.01	9.64	0.002	<0.001	0.35
N162510	Rock Chip	0.15	3.6	<0.001	0.003	<0.01	0.04	<2	0.013	0.003	0.04	4.15	<0.01	0.012	<0.001	<0.001	<0.01	0.95	0.116	0.002	2.22
N162511	Drill Core	5.44	4.7	<0.001	0.002	0.55	2.99	<2	<0.001	<0.001	0.03	0.59	<0.01	0.459	0.004	<0.001	<0.01	9.00	0.012	0.002	0.62
N162512	Drill Core	4.32	3.7	0.002	0.005	0.35	5.41	<2	0.005	<0.001	<0.01	1.83	<0.01	0.108	0.002	0.001	<0.01	0.83	0.106	0.012	0.14
N162513	Drill Core	4.41	2.6	0.002	0.004	0.12	7.50	<2	0.004	<0.001	<0.01	1.25	<0.01	0.167	0.002	<0.001	<0.01	0.82	0.070	0.011	0.14
N162514	Drill Core	4.50	1.4	0.002	0.004	0.13	7.95	<2	0.003	<0.001	<0.01	1.07	<0.01	0.319	<0.001	0.003	<0.01	0.74	0.056	0.009	0.14
N162515	Drill Core	4.34	1.4	0.002	0.004	0.09	3.21	<2	0.005	<0.001	<0.01	1.50	<0.01	0.282	<0.001	<0.001	<0.01	0.60	0.154	0.013	0.08
N162516	Drill Core	4.80	1.5	0.002	0.003	0.11	4.95	<2	0.002	<0.001	<0.01	0.80	<0.01	0.615	<0.001	<0.001	<0.01	0.28	0.051	0.007	0.07
N162517	Drill Core	3.90	1.8	<0.001	0.004	0.09	1.07	<2	0.005	<0.001	0.02	4.60	0.02	0.109	<0.001	0.001	<0.01	1.56	0.126	0.010	0.88
N162518	Drill Core	4.94	2.4	0.002	0.003	0.12	4.79	<2	0.003	<0.001	<0.01	1.24	<0.01	0.440	<0.001	<0.001	<0.01	0.56	0.077	0.008	0.26
N162519	Drill Core	4.98	1.8	0.002	0.003	0.13	6.55	<2	0.002	<0.001	<0.01	0.70	<0.01	0.508	<0.001	0.002	<0.01	0.30	0.049	0.006	0.10
N162520	Rock Pulp	0.09	132.9	<0.001	0.093	<0.01	0.55	<2	0.002	0.004	0.13	8.14	<0.01	0.006	0.001	<0.001	<0.01	3.63	0.052	0.002	2.18
N162521	Drill Core	4.88	3.2	0.002	0.004	0.11	6.34	<2	0.002	<0.001	<0.01	0.76	<0.01	0.495	<0.001	0.002	<0.01	0.24	0.049	0.006	0.08
N162522	Drill Core	4.78	1.9	0.002	0.003	0.12	5.86	<2	0.003	<0.001	<0.01	1.00	<0.01	0.513	0.001	0.002	<0.01	0.21	0.048	0.007	0.10
N162523	Drill Core	4.55	2.7	0.002	0.004	0.16	5.66	<2	0.004	<0.001	<0.01	1.58	<0.01	0.334	0.001	0.003	<0.01	0.19	0.062	0.008	0.08

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS

WHI11001780.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162394	Drill Core	3.01	<0.01	0.11	<0.001	<0.001	3.40	7.82	6.9		
N162395	Drill Core	3.08	<0.01	0.10	<0.001	<0.001	2.05	7.78	5.9		
N162396	Drill Core	2.67	<0.01	0.12	<0.001	<0.001	3.36	6.81	6.4		
N162397	Drill Core	2.65	<0.01	0.15	<0.001	<0.001	4.71	6.79	6.7		
N162398	Drill Core	2.78	<0.01	0.14	<0.001	<0.001	4.14	7.21	6.8		
N162399	Drill Core	2.80	<0.01	0.13	<0.001	<0.001	5.42	7.08	7.2		
N162400	Rock Pulp	1.64	0.06	0.12	*	0.006	16.36	<0.01	11.0	0.73	24.58
N162501	Drill Core	3.02	<0.01	0.14	<0.001	<0.001	2.91	7.64	6.3		
N162502	Drill Core	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.		
N162503	Drill Core	3.16	<0.01	0.11	<0.001	<0.001	4.66	8.04	6.5		
N162504	Drill Core	5.43	<0.01	0.14	<0.001	<0.001	2.72	13.57	6.0		
N162505	Drill Core	2.67	<0.01	0.09	<0.001	<0.001	4.67	7.38	6.7		
N162506	Drill Core	2.40	<0.01	0.09	<0.001	<0.001	4.85	7.34	7.2		
N162507	Drill Core	1.62	<0.01	0.06	<0.001	<0.001	3.20	12.88	5.6		
N162508	Drill Core	0.37	<0.01	0.01	<0.001	<0.001	0.13	31.10	15.6		
N162509	Drill Core	0.01	<0.01	<0.01	<0.001	<0.001	0.13	35.39	19.9		
N162510	Rock Chip	0.78	0.20	0.03	<0.001	<0.001	<0.05	0.31	1.4		
N162511	Drill Core	0.23	<0.01	<0.01	<0.001	<0.001	0.07	31.93	15.5		
N162512	Drill Core	2.76	<0.01	0.11	<0.001	<0.001	1.92	11.59	4.6		
N162513	Drill Core	2.63	<0.01	0.11	<0.001	<0.001	1.90	12.57	4.1		
N162514	Drill Core	2.13	<0.01	0.08	<0.001	<0.001	1.47	15.52	2.7		
N162515	Drill Core	2.68	<0.01	0.10	<0.001	<0.001	0.37	15.14	3.2		
N162516	Drill Core	1.99	<0.01	0.07	<0.001	<0.001	0.12	25.33	2.7		
N162517	Drill Core	2.17	<0.01	0.06	<0.001	<0.001	1.95	15.14	7.9		
N162518	Drill Core	1.91	<0.01	0.07	<0.001	<0.001	0.17	22.63	3.6		
N162519	Drill Core	1.85	<0.01	0.08	<0.001	<0.001	0.15	25.41	2.7		
N162520	Rock Pulp	3.45	0.12	0.21	<0.001	<0.001	1.60	0.02	5.7		
N162521	Drill Core	1.87	<0.01	0.09	<0.001	<0.001	0.12	26.43	2.8		
N162522	Drill Core	1.93	<0.01	0.09	<0.001	<0.001	0.14	25.50	2.9		
N162523	Drill Core	2.35	<0.01	0.11	<0.001	<0.001	0.43	19.96	2.4		

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Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162524	Drill Core	4.71	2.0	0.002	0.004	0.19	5.33	<2	0.004	<0.001	<0.01	1.48	<0.01	0.355	<0.001	<0.001	<0.01	0.20	0.065	0.009	0.07
N162525	Drill Core	4.80	1.9	0.002	0.003	0.16	5.93	<2	0.002	<0.001	<0.01	0.79	<0.01	0.474	<0.001	0.002	<0.01	0.26	0.043	0.005	0.08
N162526	Drill Core	4.69	2.7	0.001	0.003	0.17	5.30	<2	0.003	<0.001	<0.01	0.98	<0.01	0.356	<0.001	0.002	<0.01	0.31	0.059	0.007	0.07
N162527	Drill Core	4.99	3.1	0.002	0.003	0.18	5.72	<2	0.003	<0.001	<0.01	1.13	<0.01	0.358	<0.001	0.002	<0.01	0.22	0.065	0.008	0.06
N162528	Drill Core	4.75	6.2	0.002	0.004	0.15	4.85	<2	0.005	<0.001	<0.01	1.81	<0.01	0.222	0.001	0.002	<0.01	0.24	0.074	0.009	0.11
N162529	Drill Core	4.48	4.3	0.002	0.005	0.14	5.26	<2	0.005	<0.001	<0.01	1.63	<0.01	0.160	0.002	0.002	<0.01	0.28	0.115	0.010	0.04
N162530	Rock Chip	0.15	0.8	<0.001	0.004	<0.01	0.14	<2	0.013	0.003	0.05	4.33	<0.01	0.018	<0.001	<0.001	<0.01	1.07	0.115	0.003	2.22
N162531	Drill Core	2.38	2.8	0.002	0.003	0.11	5.12	<2	0.003	<0.001	<0.01	1.04	<0.01	0.315	0.001	0.002	<0.01	0.19	0.058	0.007	0.10
N162532	Drill Core	3.06	3.8	0.002	0.003	0.14	5.35	<2	0.003	<0.001	<0.01	1.08	<0.01	0.268	<0.001	0.002	<0.01	0.22	0.066	0.008	0.07
N162533	Drill Core	3.73	2.6	0.002	0.003	0.13	5.57	<2	0.002	<0.001	<0.01	0.79	<0.01	0.254	<0.001	0.002	<0.01	1.27	0.052	0.006	0.09
N162534	Drill Core	4.10	3.2	0.002	0.003	0.13	3.89	<2	0.003	<0.001	<0.01	0.91	<0.01	0.260	<0.001	0.002	<0.01	0.23	0.052	0.006	0.06
N162535	Drill Core	3.22	2.6	0.001	0.002	0.13	5.09	<2	0.002	<0.001	<0.01	0.73	<0.01	0.190	<0.001	0.002	<0.01	0.80	0.040	0.005	0.03
N162536	Drill Core	4.30	4.7	<0.001	0.004	0.08	1.20	<2	0.005	<0.001	<0.01	3.05	0.02	0.017	<0.001	0.002	<0.01	1.52	0.178	0.011	0.36
N162537	Drill Core	1.80	0.7	0.001	0.002	0.19	6.33	<2	0.001	<0.001	0.02	0.60	<0.01	0.010	<0.001	0.002	<0.01	2.52	0.028	0.003	0.04
N162538	Drill Core	3.46	0.8	0.002	0.002	0.25	8.08	<2	0.001	<0.001	<0.01	0.65	<0.01	0.004	<0.001	0.002	<0.01	0.08	0.028	0.003	<0.01
N162539	Drill Core	1.82	1.7	0.002	0.003	0.11	4.42	<2	0.004	<0.001	<0.01	1.23	<0.01	0.004	<0.001	0.001	<0.01	0.13	0.064	0.009	<0.01

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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001780.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
Unit		%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
N162524	Drill Core	2.26	<0.01	0.12	<0.001	<0.001	0.25	22.30	2.3		
N162525	Drill Core	1.54	<0.01	0.11	<0.001	<0.001	0.11	29.90	3.2		
N162526	Drill Core	1.89	<0.01	0.12	<0.001	<0.001	0.14	26.01	2.1		
N162527	Drill Core	2.02	<0.01	0.15	<0.001	<0.001	0.14	25.92	1.4		
N162528	Drill Core	2.35	<0.01	0.13	<0.001	<0.001	0.37	20.24	1.4		
N162529	Drill Core	2.79	<0.01	0.16	<0.001	<0.001	0.61	17.80	1.7		
N162530	Rock Chip	1.18	0.29	0.05	<0.001	<0.001	0.11	0.68	1.4		
N162531	Drill Core	1.89	<0.01	0.14	<0.001	<0.001	0.13	25.01	2.4		
N162532	Drill Core	1.96	<0.01	0.16	<0.001	<0.001	0.19	24.19	2.0		
N162533	Drill Core	1.41	<0.01	0.13	<0.001	<0.001	0.16	26.12	2.9		
N162534	Drill Core	1.54	<0.01	0.15	<0.001	<0.001	0.11	28.53	3.3		
N162535	Drill Core	1.08	<0.01	0.10	<0.001	<0.001	0.20	28.99	1.7		
N162536	Drill Core	2.45	<0.01	0.15	<0.001	<0.001	1.45	11.83	4.4		
N162537	Drill Core	0.57	<0.01	0.07	<0.001	<0.001	3.44	27.75	3.8		
N162538	Drill Core	0.63	<0.01	0.08	<0.001	<0.001	4.37	31.31	3.2		
N162539	Drill Core	1.65	<0.01	0.16	<0.001	<0.001	2.50	19.97	3.2		

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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
REP N162301	QC																				
N162318	Drill Core	4.01	4.9	0.001	0.007	0.06	4.83	<2	0.005	<0.001	<0.01	2.32	<0.01	0.005	0.003	0.003	<0.01	0.23	0.083	0.006	0.04
REP N162318	QC		5.2																		
N162323	Drill Core	3.88	3.3	0.001	0.005	0.31	11.81	<2	0.003	<0.001	0.03	1.23	<0.01	0.031	0.005	0.003	<0.01	1.47	0.060	0.007	0.81
REP N162323	QC			0.001	0.005	0.31	11.80	<2	0.003	<0.001	0.03	1.23	<0.01	0.032	0.005	0.003	<0.01	1.47	0.060	0.007	0.81
N162330	Rock Chip	0.14	<0.5	<0.001	0.003	<0.01	0.02	<2	0.013	0.003	0.05	4.23	<0.01	0.008	<0.001	<0.001	<0.01	1.18	0.117	0.003	2.16
REP N162330	QC																				
N162345	Drill Core	5.81	0.7	<0.001	0.003	1.64	2.35	<2	<0.001	<0.001	0.02	0.37	<0.01	0.105	0.018	<0.001	<0.01	7.34	0.007	0.001	0.06
REP N162345	QC																				
N162367	Drill Core	5.43	<0.5	<0.001	0.001	1.26	5.74	<2	0.001	<0.001	<0.01	0.37	<0.01	0.052	0.010	0.001	<0.01	0.05	0.015	0.003	0.02
REP N162367	QC																				
N162370	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.45	<0.01	0.007	<0.001	<0.001	<0.01	0.98	0.118	0.003	2.34
REP N162370	QC			<0.001	0.003	<0.01	0.01	<2	0.013	0.003	0.05	4.48	<0.01	0.007	<0.001	<0.001	<0.01	0.99	0.118	0.003	2.36
N162392	Drill Core	2.38	3.3	0.001	0.004	0.01	<0.01	<2	0.005	<0.001	0.02	2.30	<0.01	0.014	<0.001	0.001	<0.01	1.24	0.105	0.005	0.57
REP N162392	QC			0.001	0.004	0.01	<0.01	<2	0.006	<0.001	0.02	2.33	<0.01	0.013	<0.001	0.002	<0.01	1.24	0.105	0.005	0.58
N162398	Drill Core	4.54	5.4	0.002	0.006	0.10	6.69	<2	0.006	<0.001	0.01	2.37	<0.01	0.012	0.001	<0.001	<0.01	0.40	0.067	0.011	0.15
REP N162398	QC		5.4																		
N162400	Rock Pulp	0.09	725.7	<0.001	0.385	0.80	>20	22	0.004	0.005	0.13	12.35	0.10	0.003	0.064	0.083	<0.01	1.56	0.019	0.002	0.93
REP N162400	QC		719.8																		
N162507	Drill Core	4.02	3.1	0.002	0.005	1.07	10.15	2	0.003	<0.001	0.02	1.14	<0.01	0.142	0.005	<0.001	<0.01	2.76	0.057	0.009	0.46
REP N162507	QC																				
N162521	Drill Core	4.88	3.2	0.002	0.004	0.11	6.34	<2	0.002	<0.001	<0.01	0.76	<0.01	0.495	<0.001	0.002	<0.01	0.24	0.049	0.006	0.08
REP N162521	QC																				
N162528	Drill Core	4.75	6.2	0.002	0.004	0.15	4.85	<2	0.005	<0.001	<0.01	1.81	<0.01	0.222	0.001	0.002	<0.01	0.24	0.074	0.009	0.11
REP N162528	QC																				
N162534	Drill Core	4.10	3.2	0.002	0.003	0.13	3.89	<2	0.003	<0.001	<0.01	0.91	<0.01	0.260	<0.001	0.002	<0.01	0.23	0.052	0.006	0.06
REP N162534	QC			0.002	0.003	0.14	3.89	<2	0.003	<0.001	<0.01	0.91	<0.01	0.261	<0.001	<0.001	<0.01	0.23	0.053	0.006	0.06
N162539	Drill Core	1.82	1.7	0.002	0.003	0.11	4.42	<2	0.004	<0.001	<0.01	1.23	<0.01	0.004	<0.001	0.001	<0.01	0.13	0.064	0.009	<0.01

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Acme Analytical Laboratories (Vancouver) Ltd.
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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb	Zn
	Unit	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01	0.01
Pulp Duplicates											
REP N162301	QC								5.5		
N162318	Drill Core	2.90	<0.01	0.09	<0.001	<0.001	3.10	7.33	6.0		
REP N162318	QC										
N162323	Drill Core	1.93	<0.01	0.04	<0.001	<0.001	5.68	5.58	7.4		
REP N162323	QC	1.93	<0.01	0.04	<0.001	<0.001	5.67				
N162330	Rock Chip	1.32	0.35	0.06	<0.001	<0.001	<0.05	0.05	1.2		
REP N162330	QC							0.06			
N162345	Drill Core	0.06	<0.01	0.02	<0.001	<0.001	0.22	35.74	8.5		
REP N162345	QC								8.2		
N162367	Drill Core	0.23	<0.01	0.04	<0.001	<0.001	2.33	39.32	2.3		
REP N162367	QC							39.37			
N162370	Rock Chip	0.89	0.21	0.04	<0.001	<0.001	<0.05	0.05	1.0		
REP N162370	QC	0.90	0.21	0.04	<0.001	<0.001	<0.05				
N162392	Drill Core	2.99	<0.01	0.11	<0.001	<0.001	0.83	7.46	7.2		
REP N162392	QC	2.97	<0.01	0.11	<0.001	<0.001	0.84				
N162398	Drill Core	2.78	<0.01	0.14	<0.001	<0.001	4.14	7.21	6.8		
REP N162398	QC										
N162400	Rock Pulp	1.64	0.06	0.12	*	0.006	16.36	<0.01	11.0	0.73	24.58
REP N162400	QC									0.78	25.12
N162507	Drill Core	1.62	<0.01	0.06	<0.001	<0.001	3.20	12.88	5.6		
REP N162507	QC							13.02			
N162521	Drill Core	1.87	<0.01	0.09	<0.001	<0.001	0.12	26.43	2.8		
REP N162521	QC								2.6		
N162528	Drill Core	2.35	<0.01	0.13	<0.001	<0.001	0.37	20.24	1.4		
REP N162528	QC							20.43			
N162534	Drill Core	1.54	<0.01	0.15	<0.001	<0.001	0.11	28.53	3.3		
REP N162534	QC	1.54	<0.01	0.15	<0.001	<0.001	0.12				
N162539	Drill Core	1.65	<0.01	0.16	<0.001	<0.001	2.50	19.97	3.2		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
REP N162539	QC		1.6																		
Core Reject Duplicates																					
N162301	Drill Core	4.24	4.9	0.002	0.004	0.23	1.18	<2	0.006	<0.001	0.03	1.91	<0.01	0.010	0.001	<0.001	<0.01	0.21	0.097	0.011	0.02
DUP N162301	QC		4.3	0.002	0.004	0.25	1.30	<2	0.006	<0.001	0.03	1.93	<0.01	0.010	0.002	0.002	<0.01	0.21	0.097	0.011	0.02
N162375	Drill Core	4.79	0.5	0.001	0.002	2.08	4.96	<2	0.002	0.002	<0.01	0.93	<0.01	0.068	0.016	0.001	<0.01	0.14	0.017	0.003	0.03
DUP N162375	QC		1.2	<0.001	0.002	2.46	4.49	<2	0.002	0.002	<0.01	0.78	<0.01	0.067	0.015	0.001	<0.01	0.13	0.017	0.003	0.03
N162511	Drill Core	5.44	4.7	<0.001	0.002	0.55	2.99	<2	<0.001	<0.001	0.03	0.59	<0.01	0.459	0.004	<0.001	<0.01	9.00	0.012	0.002	0.62
DUP N162511	QC		3.6	<0.001	0.002	0.63	3.26	<2	<0.001	<0.001	0.03	0.69	<0.01	0.383	0.004	<0.001	<0.01	8.84	0.019	0.003	0.62
Reference Materials																					
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		171.9																		
STD CDN-PGMS-19	Standard		193.9																		
STD CDN-PGMS-19	Standard		185.6																		
STD CDN-PGMS-19	Standard		272.2																		
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
REP N162539	QC										
Core Reject Duplicates											
N162301	Drill Core	2.34	<0.01	0.03	<0.001	<0.001	0.81	6.27	5.3		
DUP N162301	QC	2.31	<0.01	0.03	<0.001	<0.001	0.87	6.18	5.2		
N162375	Drill Core	0.41	<0.01	0.06	<0.001	<0.001	1.97	27.57	1.6		
DUP N162375	QC	0.40	<0.01	0.06	<0.001	<0.001	1.68	29.46	1.0		
N162511	Drill Core	0.23	<0.01	<0.01	<0.001	<0.001	0.07	31.93	15.5		
DUP N162511	QC	0.42	<0.01	0.01	<0.001	<0.001	0.08	30.79	14.7		
Reference Materials											
STD CCU-1C	Standard									0.34	3.97
STD CCU-1C	Standard									0.40	3.97
STD CCU-1C	Standard									0.37	4.07
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CDN-PGMS-19	Standard										
STD CZN-3	Standard									0.11	48.11
STD CZN-3	Standard									0.11	52.67
STD CZN-3	Standard									0.08	51.91
STD DOLOMITE-2	Standard								45.1		
STD DOLOMITE-2	Standard								45.0		
STD DOLOMITE-2	Standard								45.9		
STD DOLOMITE-2	Standard								45.7		
STD GBM997-6	Standard									24.61	15.11
STD GBM997-6	Standard									21.41	15.22
STD GBM997-6	Standard									22.57	16.07
STD MICA-MG(D)	Standard							0.42			
STD MICA-MG(D)	Standard							0.42			
STD MICA-MG(D)	Standard							0.42			

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD MICA-MG(D)	Standard																				
STD OREAS153AR	Standard			0.018	0.713	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.35	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.046	0.002	1.69
STD OREAS131B-A	Standard			<0.001	0.021	1.82	2.97	33	0.002	0.002	0.18	5.63	<0.01	0.002	0.009	0.005	<0.01	5.15	0.051	0.001	2.91
STD OREAS153AR	Standard			0.018	0.703	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.28	<0.01	0.002	<0.001	<0.001	<0.01	0.95	0.046	0.002	1.65
STD OREAS131B-A	Standard			<0.001	0.021	1.82	3.13	36	0.002	0.002	0.19	5.72	<0.01	0.002	0.009	0.004	<0.01	5.44	0.052	0.002	2.98
STD OREAS153AR	Standard			0.017	0.703	<0.01	0.01	<2	<0.001	0.001	0.02	3.27	<0.01	0.002	<0.001	<0.001	<0.01	0.96	0.048	0.002	1.65
STD OREAS131B-A	Standard			<0.001	0.021	1.76	3.13	34	0.002	0.002	0.19	5.77	<0.01	0.002	0.009	0.005	<0.01	5.50	0.055	0.002	2.99
STD OREAS153AR	Standard			0.018	0.718	<0.01	<0.01	<2	0.001	0.001	0.02	3.29	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.050	0.002	1.66
STD OREAS131B-A	Standard			<0.001	0.021	1.81	3.04	34	0.002	0.002	0.18	5.55	<0.01	0.002	0.009	0.005	<0.01	5.25	0.055	0.002	2.89
STD OREAS153AR	Standard			0.018	0.720	<0.01	<0.01	<2	<0.001	0.001	0.02	3.27	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.048	0.002	1.67
STD OREAS131B-A	Standard			<0.001	0.020	1.78	3.01	33	0.002	0.002	0.18	5.44	<0.01	0.002	0.008	0.005	<0.01	5.17	0.053	0.002	2.81
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD CDN-PGMS-19			230																		
STD MICA-MG(D) Expected																					
STD SO-18 Expected																					
STD DOLOMITE-2 Expected																					
STD CZN-3 Expected																					
STD CCU-1C Expected																					
STD GBM997-6 Expected																					
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank																				

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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
STD MICA-MG(D)	Standard							0.42			
STD OREAS153AR	Standard	2.47	0.14	0.61	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	1.00	0.01	0.72	<0.001	<0.001	5.04				
STD OREAS153AR	Standard	2.45	0.13	0.60	<0.001	<0.001	1.25				
STD OREAS131B-A	Standard	1.07	0.01	0.73	<0.001	<0.001	5.24				
STD OREAS153AR	Standard	2.45	0.14	0.60	<0.001	<0.001	1.22				
STD OREAS131B-A	Standard	1.05	0.01	0.76	<0.001	<0.001	5.26				
STD OREAS153AR	Standard	2.56	0.14	0.66	<0.001	<0.001	1.26				
STD OREAS131B-A	Standard	1.12	0.01	0.82	<0.001	<0.001	5.03				
STD OREAS153AR	Standard	2.43	0.13	0.60	<0.001	<0.001	1.23				
STD OREAS131B-A	Standard	0.95	0.01	0.69	<0.001	<0.001	4.93				
STD PTC-1A	Standard									0.06	0.10
STD PTC-1A	Standard									0.04	0.13
STD PTC-1A	Standard									0.04	0.12
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.05			
STD SO-18	Standard							0.05			
STD OREAS153AR		2.425	0.142	0.6138			1.285				
STD OREAS131B-A		0.969	0.0112	0.7			5.01				
STD CDN-PGMS-19											
STD MICA-MG(D) Expected								0.4			
STD SO-18 Expected								0.0515			
STD DOLOMITE-2 Expected									46		
STD CZN-3 Expected										0.113	49.75
STD CCU-1C Expected										0.34	3.99
STD GBM997-6 Expected										23.75	15.83
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank									<0.01	<0.01

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QUALITY CONTROL REPORT WHI11001780.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		3.2																		
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank		1.7	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	1.98	<0.01	0.007	<0.001	<0.001	<0.01	0.63	0.077	<0.001	0.55
G1	Prep Blank		1.3	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.07	<0.01	0.007	<0.001	<0.001	<0.01	0.60	0.082	<0.001	0.55

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001780.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01	7AR.1 Zn % 0.01
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank										
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05				
BLK	Blank										
BLK	Blank										
BLK	Blank							<0.01			
BLK	Blank									<0.01	<0.01
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank							<0.01			
BLK	Blank									<0.01	<0.01
Prep Wash											
G1	Prep Blank	1.08	0.13	0.56	<0.001	<0.001	<0.05	0.13	0.7		
G1	Prep Blank	1.04	0.12	0.55	<0.001	<0.001	<0.05	0.10	0.6		

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: October 03, 2011
Report Date: November 28, 2011
Page: 1 of 3

CERTIFICATE OF ANALYSIS WHI11001781.1

CLIENT JOB INFORMATION

Project:	13
Shipment ID:	FLIN 288
P.O. Number	
Number of Samples:	54

SAMPLE DISPOSAL

RTRN-PLP	Return
RTRN-RJT	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	47	Crush, split and pulverize 250 g rock to 200 mesh			WHI
P200	1	Pulverize to 85% - 200 mesh			VAN
3A01	52	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	52	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	53	X-Ray fluorescence / Fusion		Completed	VAN
2A05	52	Loss on Ignition at 1000 C		Completed	VAN
7AR.1	2	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001781.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162540	Rock Pulp	0.08	<0.5	<0.001	0.031	>4	10.57	98	0.002	0.002	0.13	7.83	0.01	0.002	0.030	0.009	<0.01	3.74	0.038	0.003	2.13
N162541	Drill Core	3.50	1.2	0.001	0.003	0.23	8.09	<2	0.002	<0.001	<0.01	0.50	<0.01	0.004	<0.001	<0.001	<0.01	0.09	0.038	0.004	<0.01
N162542	Drill Core	4.05	<0.5	0.001	0.003	0.15	6.54	<2	0.003	<0.001	<0.01	0.83	<0.01	0.003	<0.001	<0.001	<0.01	0.12	0.055	0.007	<0.01
N162543	Drill Core	3.35	2.3	0.001	0.003	0.20	8.69	<2	0.001	<0.001	<0.01	0.40	<0.01	0.003	<0.001	<0.001	<0.01	0.06	0.026	0.003	<0.01
N162544	Drill Core	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
N162545	Drill Core	3.66	1.9	<0.001	0.002	0.22	6.48	<2	0.001	<0.001	<0.01	0.44	<0.01	0.002	<0.001	<0.001	<0.01	0.59	0.020	0.003	0.03
N162546	Drill Core	3.14	1.6	<0.001	0.002	0.20	7.68	<2	0.001	<0.001	0.02	0.38	<0.01	0.003	<0.001	<0.001	<0.01	1.21	0.014	0.002	0.03
N162547	Drill Core	5.25	0.6	<0.001	0.002	0.20	5.63	<2	0.001	<0.001	0.01	0.41	<0.01	0.003	<0.001	<0.001	<0.01	0.22	0.028	0.003	0.01
N162548	Drill Core	5.75	1.3	<0.001	0.002	0.39	6.42	<2	0.001	<0.001	<0.01	0.33	<0.01	0.003	<0.001	<0.001	<0.01	0.04	0.019	0.003	<0.01
N162549	Drill Core	6.24	<0.5	0.001	0.002	0.47	7.85	<2	0.001	<0.001	<0.01	0.35	<0.01	0.002	<0.001	<0.001	<0.01	0.04	0.017	0.003	<0.01
N162550	Rock Chip	0.14	1.3	<0.001	0.003	<0.01	0.03	<2	0.013	0.002	0.05	4.13	<0.01	0.007	<0.001	<0.001	<0.01	0.97	0.112	0.002	2.27
N162551	Drill Core	2.22	2.1	0.001	0.002	0.16	8.19	<2	0.001	<0.001	<0.01	0.49	<0.01	0.002	<0.001	<0.001	<0.01	0.06	0.027	0.003	<0.01
N162553	Drill Core	5.34	<0.5	<0.001	0.002	0.17	6.89	<2	0.001	<0.001	<0.01	0.46	<0.01	0.005	<0.001	<0.001	<0.01	0.08	0.033	0.004	<0.01
N162554	Drill Core	5.28	1.2	<0.001	0.003	0.26	6.73	<2	<0.001	<0.001	<0.01	0.35	<0.01	0.003	<0.001	<0.001	<0.01	0.06	0.027	0.003	<0.01
N162555	Drill Core	2.77	<0.5	0.001	0.002	0.15	8.03	<2	0.002	<0.001	<0.01	0.59	<0.01	0.002	<0.001	<0.001	<0.01	0.06	0.031	0.004	<0.01
N162556	Drill Core	3.62	2.4	0.001	0.003	0.13	5.36	<2	0.004	<0.001	<0.01	1.23	<0.01	0.003	<0.001	<0.001	<0.01	0.09	0.056	0.011	<0.01
N162557	Drill Core	2.66	<0.5	<0.001	0.002	0.25	5.57	<2	0.002	<0.001	<0.01	0.81	<0.01	0.003	<0.001	<0.001	<0.01	0.13	0.059	0.006	<0.01
N162558	Drill Core	4.90	1.1	<0.001	0.002	0.22	5.98	<2	0.002	<0.001	<0.01	0.55	<0.01	0.016	<0.001	<0.001	<0.01	1.03	0.035	0.004	0.05
N162559	Drill Core	5.01	5.4	0.001	0.003	0.24	7.29	<2	0.002	<0.001	<0.01	0.66	<0.01	0.004	<0.001	<0.001	<0.01	0.46	0.043	0.005	0.02
N162560	Rock Pulp	0.09	476.9	<0.001	1.300	<0.01	0.14	3	0.001	0.011	0.12	11.53	<0.01	0.005	<0.001	<0.001	<0.01	3.00	0.041	0.002	1.84
N162561	Drill Core	5.03	2.8	<0.001	<0.001	0.52	6.79	<2	0.001	<0.001	0.01	0.69	<0.01	0.007	<0.001	<0.001	<0.01	0.27	0.026	0.003	<0.01
N162562	Drill Core	5.50	1.3	<0.001	0.001	0.26	5.98	<2	0.001	<0.001	<0.01	0.40	<0.01	0.055	<0.001	<0.001	<0.01	0.39	0.020	0.002	0.01
N162563	Drill Core	6.67	1.9	<0.001	0.001	0.11	6.60	<2	<0.001	<0.001	<0.01	0.30	<0.01	0.049	<0.001	<0.001	<0.01	0.25	0.018	0.002	0.02
N162564	Drill Core	5.64	1.0	<0.001	0.002	0.72	5.50	<2	0.001	<0.001	<0.01	0.43	<0.01	0.024	<0.001	<0.001	<0.01	0.74	0.024	0.004	0.02
N162565	Drill Core	5.09	2.4	<0.001	0.002	0.58	6.27	<2	0.001	<0.001	<0.01	0.49	<0.01	0.009	<0.001	<0.001	<0.01	0.87	0.019	0.003	0.02
N162566	Drill Core	5.34	1.7	<0.001	0.002	0.93	6.60	<2	0.001	<0.001	<0.01	0.48	<0.01	0.002	0.001	<0.001	<0.01	0.05	0.022	0.003	<0.01
N162567	Drill Core	4.45	<0.5	<0.001	0.002	1.75	5.79	<2	0.001	<0.001	<0.01	0.51	<0.01	0.002	0.002	<0.001	<0.01	0.02	0.008	0.002	<0.01
N162568	Drill Core	5.71	0.7	<0.001	0.002	0.52	6.15	<2	0.002	<0.001	<0.01	0.64	<0.01	0.003	<0.001	<0.001	<0.01	0.09	0.037	0.005	<0.01
N162569	Drill Core	5.25	<0.5	<0.001	0.002	0.90	5.92	<2	0.001	<0.001	<0.01	0.40	<0.01	0.003	<0.001	<0.001	<0.01	0.05	0.022	0.003	<0.01
N162570	Rock Chip	0.15	<0.5	<0.001	0.003	<0.01	0.02	<2	0.013	0.002	0.05	4.32	<0.01	0.007	<0.001	<0.001	<0.01	1.01	0.113	0.003	2.28

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001781.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb
	Unit	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01
N162540	Rock Pulp	0.79	<0.01	0.50	<0.001	<0.001	11.18	0.08	15.5	4.54
N162541	Drill Core	0.73	<0.01	0.09	<0.001	<0.001	3.90	34.08	3.1	
N162542	Drill Core	1.16	<0.01	0.11	0.003	<0.001	3.40	27.66	3.7	
N162543	Drill Core	0.49	<0.01	0.06	0.001	<0.001	4.36	37.26	3.2	
N162544	Drill Core	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	
N162545	Drill Core	0.33	<0.01	0.06	0.002	<0.001	3.34	38.79	2.8	
N162546	Drill Core	0.28	<0.01	0.05	<0.001	<0.001	3.90	36.68	3.4	
N162547	Drill Core	0.45	<0.01	0.07	<0.001	<0.001	2.90	39.41	2.7	
N162548	Drill Core	0.28	<0.01	0.05	<0.001	<0.001	3.38	40.02	2.6	
N162549	Drill Core	0.30	<0.01	0.05	<0.001	<0.001	4.05	35.56	3.8	
N162550	Rock Chip	0.97	0.24	0.05	<0.001	<0.001	0.09	0.32	1.5	
N162551	Drill Core	0.62	<0.01	0.09	<0.001	<0.001	4.03	29.46	3.9	
N162553	Drill Core	0.60	<0.01	0.08	0.004	<0.001	3.52	37.14	3.2	
N162554	Drill Core	0.35	<0.01	0.05	0.004	<0.001	3.48	42.85	3.4	
N162555	Drill Core	0.96	<0.01	0.11	0.003	<0.001	4.02	30.24	3.3	
N162556	Drill Core	1.79	<0.01	0.17	0.004	<0.001	2.97	14.92	3.8	
N162557	Drill Core	1.09	<0.01	0.13	0.002	<0.001	3.07	29.03	3.6	
N162558	Drill Core	0.71	<0.01	0.09	0.005	<0.001	2.72	34.25	2.8	
N162559	Drill Core	1.02	<0.01	0.12	<0.001	<0.001	3.67	30.27	3.6	
N162560	Rock Pulp	3.21	0.11	0.24	<0.001	<0.001	4.63	0.02	5.6	
N162561	Drill Core	0.44	<0.01	0.07	0.003	<0.001	3.24	35.83	4.1	
N162562	Drill Core	0.23	<0.01	0.05	0.006	<0.001	2.12	39.53	1.8	
N162563	Drill Core	0.24	<0.01	0.04	0.003	<0.001	2.37	43.10	1.8	
N162564	Drill Core	0.47	<0.01	0.06	0.003	<0.001	2.43	41.05	2.0	
N162565	Drill Core	0.33	<0.01	0.07	0.006	<0.001	3.30	33.95	2.9	
N162566	Drill Core	0.30	<0.01	0.06	0.003	<0.001	3.55	38.21	3.2	
N162567	Drill Core	0.14	<0.01	0.03	0.003	<0.001	3.56	38.65	2.7	
N162568	Drill Core	0.46	<0.01	0.07	0.002	<0.001	3.50	33.32	3.2	
N162569	Drill Core	0.24	<0.01	0.04	0.003	<0.001	3.32	40.32	3.0	
N162570	Rock Chip	0.98	0.23	0.04	<0.001	<0.001	0.05	0.18	1.4	

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
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Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001781.1

Method		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
Unit		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
MDL		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N162571	Drill Core	4.36	<0.5	<0.001	0.001	0.77	3.85	<2	0.001	<0.001	<0.01	0.44	<0.01	0.003	<0.001	<0.001	<0.01	0.05	0.022	0.003	<0.01
N162572	Drill Core	4.12	2.8	<0.001	0.002	0.57	5.44	<2	0.001	<0.001	0.04	1.29	<0.01	0.004	<0.001	<0.001	<0.01	0.06	0.019	0.003	<0.01
N162573	Drill Core	5.31	0.7	<0.001	<0.001	0.43	3.63	<2	<0.001	<0.001	<0.01	0.28	<0.01	0.003	<0.001	<0.001	<0.01	0.02	0.010	0.002	<0.01
N162574	Drill Core	4.27	4.5	<0.001	0.003	0.79	5.05	<2	0.002	<0.001	<0.01	0.71	<0.01	0.005	<0.001	<0.001	<0.01	0.10	0.046	0.005	<0.01
N162575	Drill Core	4.23	1.2	<0.001	0.001	0.91	5.14	<2	<0.001	<0.001	<0.01	0.29	<0.01	0.005	<0.001	<0.001	<0.01	0.02	0.011	0.001	<0.01
N162576	Drill Core	4.96	1.6	<0.001	<0.001	0.67	6.56	<2	<0.001	<0.001	<0.01	0.28	<0.01	0.004	<0.001	<0.001	<0.01	0.02	0.015	0.001	<0.01
N162577	Drill Core	4.85	2.2	<0.001	0.001	0.83	7.20	<2	<0.001	<0.001	<0.01	0.26	<0.01	0.005	<0.001	<0.001	<0.01	0.03	0.020	0.002	<0.01
N162578	Drill Core	4.42	16.9	<0.001	0.002	0.70	5.80	<2	0.002	<0.001	<0.01	0.75	<0.01	0.007	<0.001	<0.001	<0.01	0.08	0.039	0.006	<0.01
N162579	Drill Core	4.01	8.3	0.002	0.005	0.22	2.58	<2	0.006	<0.001	<0.01	1.64	<0.01	0.015	0.001	<0.001	<0.01	0.21	0.099	0.013	<0.01
N162580	Rock Pulp	0.08	3.9	<0.001	0.131	>4	16.77	203	0.002	0.011	0.36	12.04	0.02	0.002	0.056	0.006	<0.01	4.25	0.031	0.002	2.04
N162581	Drill Core	2.40	2.5	0.002	0.005	0.93	1.99	<2	0.004	<0.001	0.02	1.11	<0.01	0.065	0.001	0.002	<0.01	0.94	0.067	0.010	0.09
N162582	Drill Core	4.42	3.6	0.002	0.005	0.99	2.68	<2	0.005	<0.001	0.01	1.50	<0.01	0.041	0.003	0.001	<0.01	0.65	0.094	0.013	0.09
N162583	Drill Core	3.88	2.4	0.001	0.004	1.95	0.49	4	0.005	<0.001	0.02	1.44	<0.01	0.018	<0.001	0.001	<0.01	0.55	0.101	0.012	0.18
N162584	Drill Core	2.59	4.6	0.001	0.003	2.62	0.73	5	0.006	<0.001	<0.01	1.67	<0.01	0.012	0.001	0.002	<0.01	0.30	0.113	0.014	0.02
N162585	Drill Core		MISS	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
N162586	Drill Core	3.08	3.3	0.001	0.004	1.95	1.02	3	0.005	<0.001	0.04	1.88	<0.01	0.211	0.002	0.002	<0.01	1.20	0.095	0.012	0.33
N162587	Drill Core	2.37	2.1	0.001	0.004	0.20	1.12	<2	0.006	<0.001	0.03	2.00	<0.01	0.038	0.002	0.003	<0.01	0.63	0.110	0.013	0.31
N162588	Drill Core	4.27	3.9	0.002	0.005	0.58	1.87	<2	0.005	<0.001	0.07	1.77	<0.01	0.089	0.003	0.002	<0.01	1.27	0.097	0.011	0.62
N162589	Drill Core	4.04	4.4	0.002	0.004	0.94	1.09	2	0.006	<0.001	0.05	1.40	<0.01	0.044	0.003	0.003	<0.01	0.85	0.110	0.009	0.35
N162590	Rock Chip	0.14	<0.5	<0.001	0.004	<0.01	<0.01	<2	0.014	0.003	0.05	4.38	<0.01	0.009	<0.001	0.002	<0.01	1.25	0.117	0.003	2.31
N162591	Drill Core	4.24	3.3	0.001	0.004	1.18	1.34	4	0.005	<0.001	0.13	3.51	<0.01	0.043	0.003	<0.001	<0.01	1.69	0.102	0.005	0.77
N162592	Drill Core	3.53	11.7	0.002	0.008	0.09	1.77	<2	0.008	<0.001	0.02	4.36	0.01	0.019	0.004	<0.001	<0.01	0.52	0.120	0.005	0.13
N162593	Drill Core	3.69	5.8	0.002	0.004	0.03	0.61	<2	0.006	<0.001	0.02	2.08	<0.01	0.013	0.001	0.002	<0.01	0.48	0.128	0.005	0.12
N162594	Drill Core	3.71	6.7	0.002	0.004	0.05	0.31	<2	0.007	<0.001	0.03	2.19	<0.01	0.013	<0.001	0.001	<0.01	0.56	0.130	0.004	0.15

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Acme Analytical Laboratories (Vancouver) Ltd.
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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

CERTIFICATE OF ANALYSIS WHI11001781.1

Method		7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1
Analyte		Al	Na	K	W	Hg	S	Ba	LOI	Pb
Unit		%	%	%	%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01
N162571	Drill Core	0.30	<0.01	0.05	0.002	<0.001	2.30	41.24	2.3	
N162572	Drill Core	0.23	<0.01	0.03	0.005	<0.001	3.11	37.27	2.9	
N162573	Drill Core	0.15	<0.01	0.02	<0.001	<0.001	2.06	45.86	1.8	
N162574	Drill Core	0.74	<0.01	0.06	<0.001	<0.001	2.96	33.25	3.0	
N162575	Drill Core	0.11	<0.01	<0.01	0.097	<0.001	2.60	45.94	2.4	
N162576	Drill Core	0.14	<0.01	<0.01	0.127	<0.001	2.91	42.22	2.5	
N162577	Drill Core	0.20	<0.01	0.01	0.138	<0.001	2.93	42.08	2.9	
N162578	Drill Core	0.94	<0.01	0.02	0.109	<0.001	3.34	29.20	3.1	
N162579	Drill Core	2.63	<0.01	0.03	0.050	0.002	1.57	8.99	5.3	
N162580	Rock Pulp	0.42	0.01	0.16	0.318	<0.001	19.05	0.13	14.2	13.40
N162581	Drill Core	2.69	<0.01	0.03	0.036	0.001	0.43	8.69	4.2	
N162582	Drill Core	3.23	<0.01	0.03	0.052	0.002	0.93	9.30	5.3	
N162583	Drill Core	3.15	<0.01	0.03	0.009	<0.001	0.31	9.93	5.3	
N162584	Drill Core	3.42	<0.01	0.04	0.013	<0.001	0.55	9.35	4.8	
N162585	Drill Core	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	
N162586	Drill Core	2.60	<0.01	0.04	0.019	<0.001	0.84	8.27	6.0	
N162587	Drill Core	3.24	<0.01	0.05	0.020	<0.001	0.66	9.03	5.8	
N162588	Drill Core	3.16	<0.01	0.11	0.033	<0.001	0.98	7.91	6.8	
N162589	Drill Core	2.99	<0.01	0.11	0.019	<0.001	0.57	7.17	7.2	
N162590	Rock Chip	1.56	0.41	0.08	<0.001	<0.001	<0.05	0.04	1.7	
N162591	Drill Core	2.47	<0.01	0.10	0.024	<0.001	3.13	6.18	10.5	
N162592	Drill Core	2.83	<0.01	0.15	0.031	0.001	4.24	6.61	9.0	
N162593	Drill Core	2.80	<0.01	0.16	0.010	<0.001	1.12	6.56	7.0	
N162594	Drill Core	2.69	<0.01	0.15	0.006	<0.001	1.06	6.42	7.5	

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001781.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
REP G1	QC		1.2																		
N162560	Rock Pulp	0.09	476.9	<0.001	1.300	<0.01	0.14	3	0.001	0.011	0.12	11.53	<0.01	0.005	<0.001	<0.001	<0.01	3.00	0.041	0.002	1.84
REP N162560	QC																				
N162567	Drill Core	4.45	<0.5	<0.001	0.002	1.75	5.79	<2	0.001	<0.001	<0.01	0.51	<0.01	0.002	0.002	<0.001	<0.01	0.02	0.008	0.002	<0.01
REP N162567	QC																				
N162569	Drill Core	5.25	<0.5	<0.001	0.002	0.90	5.92	<2	0.001	<0.001	<0.01	0.40	<0.01	0.003	<0.001	<0.001	<0.01	0.05	0.022	0.003	<0.01
REP N162569	QC			<0.001	0.002	0.90	5.90	<2	<0.001	<0.001	<0.01	0.40	<0.01	0.002	<0.001	<0.001	<0.01	0.05	0.022	0.003	<0.01
N162575	Drill Core	4.23	1.2	<0.001	0.001	0.91	5.14	<2	<0.001	<0.001	<0.01	0.29	<0.01	0.005	<0.001	<0.001	<0.01	0.02	0.011	0.001	<0.01
REP N162575	QC		1.0																		
N162583	Drill Core	3.88	2.4	0.001	0.004	1.95	0.49	4	0.005	<0.001	0.02	1.44	<0.01	0.018	<0.001	0.001	<0.01	0.55	0.101	0.012	0.18
REP N162583	QC			0.002	0.004	1.96	0.49	3	0.005	<0.001	0.02	1.46	<0.01	0.018	<0.001	0.003	<0.01	0.55	0.106	0.012	0.18
REP N162592	QC																				
Core Reject Duplicates																					
N162557	Drill Core	2.66	<0.5	<0.001	0.002	0.25	5.57	<2	0.002	<0.001	<0.01	0.81	<0.01	0.003	<0.001	<0.001	<0.01	0.13	0.059	0.006	<0.01
DUP N162557	QC		<0.5	<0.001	0.002	0.26	5.61	<2	0.002	<0.001	<0.01	0.86	<0.01	0.003	<0.001	<0.001	<0.01	0.13	0.059	0.007	<0.01
N162592	Drill Core	3.53	11.7	0.002	0.008	0.09	1.77	<2	0.008	<0.001	0.02	4.36	0.01	0.019	0.004	<0.001	<0.01	0.52	0.120	0.005	0.13
DUP N162592	QC		11.2	0.002	0.007	0.08	1.49	<2	0.008	<0.001	0.03	4.40	0.01	0.017	0.003	0.002	<0.01	0.54	0.118	0.005	0.15
Reference Materials																					
STD CCU-1C	Standard																				
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		189.2																		
STD CDN-PGMS-19	Standard		185.6																		
STD CZN-3	Standard																				
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD DOLOMITE-2	Standard																				
STD GBM997-6	Standard																				
STD GBM997-6	Standard																				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001781.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb
	Unit	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01
Pulp Duplicates										
REP G1	QC									
N162560	Rock Pulp	3.21	0.11	0.24	<0.001	<0.001	4.63	0.02	5.6	
REP N162560	QC							0.02		
N162567	Drill Core	0.14	<0.01	0.03	0.003	<0.001	3.56	38.65	2.7	
REP N162567	QC								3.0	
N162569	Drill Core	0.24	<0.01	0.04	0.003	<0.001	3.32	40.32	3.0	
REP N162569	QC	0.24	<0.01	0.04	0.006	<0.001	3.29			
N162575	Drill Core	0.11	<0.01	<0.01	0.097	<0.001	2.60	45.94	2.4	
REP N162575	QC									
N162583	Drill Core	3.15	<0.01	0.03	0.009	<0.001	0.31	9.93	5.3	
REP N162583	QC	3.17	<0.01	0.03	0.009	<0.001	0.30			
REP N162592	QC							6.59		
Core Reject Duplicates										
N162557	Drill Core	1.09	<0.01	0.13	0.002	<0.001	3.07	29.03	3.6	
DUP N162557	QC	1.06	<0.01	0.13	0.003	<0.001	3.09	29.07	3.3	
N162592	Drill Core	2.83	<0.01	0.15	0.031	0.001	4.24	6.61	9.0	
DUP N162592	QC	2.80	<0.01	0.14	0.026	<0.001	4.12	6.62	8.6	
Reference Materials										
STD CCU-1C	Standard									0.35
STD CCU-1C	Standard									0.37
STD CDN-PGMS-19	Standard									
STD CDN-PGMS-19	Standard									
STD CZN-3	Standard									0.10
STD CZN-3	Standard									0.08
STD DOLOMITE-2	Standard								44.3	
STD DOLOMITE-2	Standard								44.0	
STD GBM997-6	Standard									24.14
STD GBM997-6	Standard									22.57

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Box 1500
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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001781.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
STD MICA-MG(D)	Standard																				
STD MICA-MG(D)	Standard																				
STD OREAS153AR	Standard			0.018	0.706	<0.01	<0.01	<2	<0.001	0.001	0.02	3.23	<0.01	0.002	<0.001	<0.001	<0.01	0.96	0.048	0.002	1.62
STD OREAS131B-A	Standard			<0.001	0.022	1.83	3.04	34	0.002	0.002	0.18	5.61	<0.01	0.002	0.009	0.005	<0.01	5.29	0.055	0.002	2.89
STD OREAS153AR	Standard			0.019	0.719	<0.01	<0.01	<2	0.001	0.001	0.02	3.23	<0.01	0.002	<0.001	<0.001	<0.01	0.98	0.049	0.002	1.71
STD OREAS131B-A	Standard			<0.001	0.021	1.82	3.05	33	0.002	0.002	0.18	5.40	<0.01	0.002	0.009	0.006	<0.01	5.18	0.053	0.002	2.88
STD OREAS153AR	Standard			0.018	0.706	<0.01	<0.01	<2	<0.001	<0.001	0.02	3.26	<0.01	0.002	<0.001	<0.001	<0.01	0.99	0.047	0.002	1.70
STD OREAS131B-A	Standard			<0.001	0.021	1.80	3.07	35	0.002	0.002	0.18	5.70	<0.01	0.002	0.009	0.003	<0.01	5.24	0.052	0.002	2.98
STD PTC-1A	Standard																				
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD SO-18	Standard																				
STD DOLOMITE-2 Expected																					
STD CDN-PGMS-19			230																		
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD MICA-MG(D) Expected																					
STD SO-18 Expected																					
STD CZN-3 Expected																					
STD CCU-1C Expected																					
STD GBM997-6 Expected																					
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank		<0.5																		
BLK	Blank		1.5																		
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01

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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001781.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01
STD MICA-MG(D)	Standard							0.42		
STD MICA-MG(D)	Standard							0.43		
STD OREAS153AR	Standard	2.40	0.12	0.63	<0.001	<0.001	1.24			
STD OREAS131B-A	Standard	0.99	0.01	0.73	0.001	<0.001	5.03			
STD OREAS153AR	Standard	2.81	0.22	0.67	<0.001	<0.001	1.24			
STD OREAS131B-A	Standard	1.11	0.02	0.79	0.056	<0.001	4.88			
STD OREAS153AR	Standard	2.71	0.20	0.64	<0.001	<0.001	1.29			
STD OREAS131B-A	Standard	1.08	0.01	0.75	0.002	<0.001	5.10			
STD PTC-1A	Standard									0.05
STD PTC-1A	Standard									0.04
STD SO-18	Standard							0.05		
STD SO-18	Standard							0.05		
STD DOLOMITE-2 Expected									46	
STD CDN-PGMS-19										
STD OREAS153AR		2.425	0.142	0.6138			1.285			
STD OREAS131B-A		0.969	0.0112	0.7			5.01			
STD MICA-MG(D) Expected								0.4		
STD SO-18 Expected								0.0515		
STD CZN-3 Expected										0.113
STD CCU-1C Expected										0.34
STD GBM997-6 Expected										23.75
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05			
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05			
BLK	Blank									
BLK	Blank									
BLK	Blank									
BLK	Blank									
BLK	Blank									<0.01
BLK	Blank	<0.01	<0.01	<0.01	<0.001	<0.001	<0.05			

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001781.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank		1.5	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.02	<0.01	0.009	<0.001	<0.001	<0.01	0.67	0.079	0.001	0.55
G1	Prep Blank			<0.001	<0.001	<0.01	0.01	<2	<0.001	<0.001	0.06	2.09	<0.01	0.009	<0.001	<0.001	<0.01	0.69	0.078	0.001	0.56
G1	Prep Blank		0.7																		

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Project: 13
Report Date: November 28, 2011

QUALITY CONTROL REPORT WHI11001781.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01
BLK	Blank							<0.01		
BLK	Blank							<0.01		
BLK	Blank									<0.01
Prep Wash										
G1	Prep Blank	1.19	0.16	0.59	<0.001	<0.001	<0.05	0.12	1.3	
G1	Prep Blank	1.28	0.19	0.60	<0.001	<0.001	<0.05	0.13	0.8	
G1	Prep Blank									

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Vancouver
Received: January 09, 2012
Report Date: February 01, 2012
Page: 1 of 2

CERTIFICATE OF ANALYSIS VAN12000057.1

CLIENT JOB INFORMATION

Project: FLIN 304
Shipment ID:
P.O. Number SRR31557
Number of Samples: 18

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	17	Crush, split and pulverize 250 g rock to 200 mesh			VAN
3A01	17	Ignite samples, acid digest, Au by ICP-MS	15	Completed	VAN
7AR2	17	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed	VAN
8X	17	X-Ray fluorescence / Fusion		Completed	VAN
2A05	17	Loss on Ignition at 1000 C		Completed	VAN
7AR.1	2	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 304
Report Date: February 01, 2012

CERTIFICATE OF ANALYSIS VAN12000057.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
N161702	Drill Core	0.74	4.5	0.001	0.007	<0.01	0.42	<2	0.005	<0.001	<0.01	1.92	<0.01	0.004	<0.001	<0.001	<0.01	0.21	0.096	0.003	0.02
N161727	Drill Core	0.86	3.6	<0.001	0.003	>4	11.09	207	<0.001	0.002	0.12	2.86	<0.01	0.064	0.047	0.023	<0.01	4.30	0.009	0.002	1.00
N161742	Drill Core	0.86	15.3	<0.001	0.030	0.68	0.06	9	0.007	0.002	0.26	7.22	<0.01	0.013	<0.001	<0.001	<0.01	1.65	0.027	0.001	0.33
N161822	Drill Core	0.69	2.6	<0.001	0.005	0.04	0.03	<2	0.006	<0.001	<0.01	1.78	<0.01	0.007	<0.001	0.001	<0.01	0.35	0.123	0.006	0.02
N161841	Drill Core	0.78	1.6	<0.001	0.003	1.26	6.28	<2	0.004	<0.001	<0.01	0.97	<0.01	0.007	0.010	<0.001	<0.01	0.09	0.055	0.006	<0.01
N161869	Drill Core	0.79	47.7	0.002	0.007	0.03	0.03	2	0.007	<0.001	0.01	4.94	<0.01	0.013	<0.001	0.003	<0.01	0.26	0.104	0.006	0.02
N161879	Drill Core	0.97	11.7	0.001	0.005	<0.01	0.02	<2	0.006	<0.001	<0.01	1.98	<0.01	0.005	<0.001	0.002	<0.01	0.29	0.135	0.004	0.02
N161926	Drill Core	1.18	<0.5	<0.001	<0.001	>4	6.91	5	<0.001	<0.001	<0.01	0.18	0.01	0.014	0.028	0.004	<0.01	0.23	<0.001	0.002	0.01
N161937	Drill Core	0.94	7.3	<0.001	0.017	0.71	1.34	9	0.005	0.003	0.08	3.23	<0.01	0.014	0.004	0.002	<0.01	0.40	0.094	0.003	0.08
N162018	Drill Core	1.21	2.3	0.001	0.003	0.01	0.03	<2	0.006	<0.001	<0.01	1.68	<0.01	0.008	<0.001	0.001	<0.01	0.54	0.100	0.002	0.18
N162019	Drill Core	1.04	<0.5	<0.001	<0.001	0.81	3.84	<2	<0.001	<0.001	<0.01	0.35	<0.01	0.096	0.010	<0.001	<0.01	1.53	0.005	0.001	0.04
N162021	Drill Core	0.65	3.0	<0.001	0.006	<0.01	0.02	<2	0.004	<0.001	0.02	3.31	<0.01	0.038	<0.001	0.001	<0.01	0.49	0.205	0.003	0.04
N162311	Drill Core	0.43	3.4	0.001	0.003	0.24	7.55	<2	0.003	<0.001	<0.01	1.05	<0.01	0.493	0.001	0.001	<0.01	0.35	0.052	0.006	0.10
N162312	Drill Core	1.07	1.4	<0.001	<0.001	1.23	3.07	<2	0.001	0.001	<0.01	0.38	<0.01	0.003	0.007	<0.001	<0.01	0.04	0.020	0.003	<0.01
N162313	Drill Core	1.19	12.9	0.002	0.005	0.06	0.04	2	0.007	<0.001	0.04	3.23	0.01	0.042	<0.001	0.002	<0.01	0.92	0.121	0.012	0.05
N162502	Drill Core	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
N162544	Drill Core	1.16	1.4	<0.001	0.002	0.21	6.97	<2	<0.001	<0.001	<0.01	0.30	<0.01	0.003	<0.001	<0.001	<0.01	0.04	0.017	0.002	<0.01
N162585	Drill Core	0.79	1.8	0.002	0.003	2.16	0.17	5	0.006	<0.001	0.01	1.36	<0.01	0.125	<0.001	0.001	<0.01	0.56	0.111	0.013	0.15

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www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 304
Report Date: February 01, 2012

CERTIFICATE OF ANALYSIS VAN12000057.1

	Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1
	Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb
	Unit	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01
N161702	Drill Core	2.05	<0.01	0.11	<0.001	<0.001	1.18	5.25	5.6	
N161727	Drill Core	0.06	<0.01	<0.01	<0.001	0.018	6.99	27.30	3.5	12.02
N161742	Drill Core	0.20	<0.01	0.11	<0.001	<0.001	1.00	0.34	8.1	
N161822	Drill Core	4.06	<0.01	0.06	<0.001	<0.001	0.32	10.48	5.2	
N161841	Drill Core	0.53	<0.01	0.09	<0.001	<0.001	3.78	19.80	3.8	
N161869	Drill Core	2.55	<0.01	0.09	<0.001	<0.001	3.94	6.15	8.8	
N161879	Drill Core	3.07	<0.01	0.11	<0.001	<0.001	0.71	7.70	5.5	
N161926	Drill Core	0.03	<0.01	<0.01	<0.001	0.004	3.22	41.81	2.4	7.40
N161937	Drill Core	2.14	<0.01	0.07	<0.001	<0.001	2.87	5.12	6.6	
N162018	Drill Core	1.99	<0.01	0.15	<0.001	<0.001	0.76	4.92	5.8	
N162019	Drill Core	0.11	<0.01	0.02	<0.001	<0.001	1.11	47.22	1.3	
N162021	Drill Core	2.28	<0.01	0.14	<0.001	<0.001	2.25	5.66	6.2	
N162311	Drill Core	1.67	<0.01	0.06	<0.001	<0.001	0.21	24.57	2.2	
N162312	Drill Core	0.07	<0.01	<0.01	<0.001	<0.001	1.96	45.22	2.1	
N162313	Drill Core	3.63	0.01	0.20	<0.001	<0.001	1.54	8.92	6.9	
N162502	Drill Core	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	
N162544	Drill Core	0.22	<0.01	0.03	<0.001	<0.001	3.32	42.90	1.9	
N162585	Drill Core	3.33	<0.01	0.05	<0.001	<0.001	0.31	9.59	5.8	

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 304
Report Date: February 01, 2012

QUALITY CONTROL REPORT VAN12000057.1

	Method	WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
	Unit	kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
Pulp Duplicates																					
N161702	Drill Core	0.74	4.5	0.001	0.007	<0.01	0.42	<2	0.005	<0.001	<0.01	1.92	<0.01	0.004	<0.001	<0.001	<0.01	0.21	0.096	0.003	0.02
REP N161702	QC																				
N161937	Drill Core	0.94	7.3	<0.001	0.017	0.71	1.34	9	0.005	0.003	0.08	3.23	<0.01	0.014	0.004	0.002	<0.01	0.40	0.094	0.003	0.08
REP N161937	QC																				
N162312	Drill Core	1.07	1.4	<0.001	<0.001	1.23	3.07	<2	0.001	0.001	<0.01	0.38	<0.01	0.003	0.007	<0.001	<0.01	0.04	0.020	0.003	<0.01
REP N162312	QC		18.1																		
Reference Materials																					
STD CCU-1C	Standard																				
STD CDN-PGMS-19	Standard		205.9																		
STD CZN-3	Standard																				
STD DOLOMITE-2	Standard																				
STD GBM997-6	Standard																				
STD MICA-MG(D)	Standard																				
STD OREAS153AR	Standard			0.017	0.703	<0.01	<0.01	<2	<0.001	0.001	0.02	3.10	<0.01	0.002	<0.001	<0.001	<0.01	0.97	0.047	0.002	1.56
STD OREAS131B-A	Standard			<0.001	0.019	1.62	3.02	30	0.002	0.002	0.18	5.53	<0.01	0.003	0.008	0.003	<0.01	5.19	0.051	0.002	2.90
STD PTC-1A	Standard																				
STD SO-18	Standard																				
STD DOLOMITE-2 Expected																					
STD OREAS153AR				0.0175	0.705		0.0051		0.001		0.024	3.28		0.0018				0.952	0.046	0.0016	1.65
STD OREAS131B-A				0.0003	0.0216	1.86	3.03	33.3	0.0025	0.00181	0.1771	5.59	0.0083	0.0022	0.0089	0.0042		5.28	0.0536	0.0016	2.94
STD CZN-3 Expected																					
STD GBM997-6 Expected																					
STD CCU-1C Expected																					
STD CDN-PGMS-19			230																		
STD MICA-MG(D) Expected																					
STD SO-18 Expected																					
BLK	Blank			<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01
BLK	Blank																				

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 304
Report Date: February 01, 2012

QUALITY CONTROL REPORT VAN12000057.1

		Method	7AR	7AR	7AR	7AR	7AR	7AR	8X	LOI	7AR.1
		Analyte	Al	Na	K	W	Hg	S	Ba	LOI	Pb
		Unit	%	%	%	%	%	%	%	%	%
		MDL	0.01	0.01	0.01	0.001	0.001	0.05	0.01	0.1	0.01
Pulp Duplicates											
N161702	Drill Core		2.05	<0.01	0.11	<0.001	<0.001	1.18	5.25	5.6	
REP N161702	QC									5.5	
N161937	Drill Core		2.14	<0.01	0.07	<0.001	<0.001	2.87	5.12	6.6	
REP N161937	QC								5.13		
N162312	Drill Core		0.07	<0.01	<0.01	<0.001	<0.001	1.96	45.22	2.1	
REP N162312	QC										
Reference Materials											
STD CCU-1C	Standard										0.39
STD CDN-PGMS-19	Standard										
STD CZN-3	Standard										0.16
STD DOLOMITE-2	Standard									45.0	
STD GBM997-6	Standard										22.91
STD MICA-MG(D)	Standard								0.42		
STD OREAS153AR	Standard		2.45	0.14	0.59	<0.001	<0.001	1.19			
STD OREAS131B-A	Standard		0.99	0.01	0.69	<0.001	<0.001	4.72			
STD PTC-1A	Standard										0.14
STD SO-18	Standard								0.05		
STD DOLOMITE-2 Expected										46	
STD OREAS153AR			2.425	0.142	0.6138			1.285			
STD OREAS131B-A			0.969	0.0112	0.7			5.01			
STD CZN-3 Expected											0.113
STD GBM997-6 Expected											23.75
STD CCU-1C Expected											0.34
STD CDN-PGMS-19											
STD MICA-MG(D) Expected									0.4		
STD SO-18 Expected									0.0515		
BLK	Blank		<0.01	<0.01	<0.01	<0.001	<0.001	<0.05			
BLK	Blank										<0.01

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 304
Report Date: February 01, 2012

QUALITY CONTROL REPORT VAN12000057.1

		WGHT	3A	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg
		kg	ppb	%	%	%	%	gm/t	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.5	0.001	0.001	0.01	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01
BLK	Blank		<0.5																		
BLK	Blank		<0.5																		
BLK	Blank																				
Prep Wash																					
G1	Prep Blank	<0.01	0.9	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	1.95	<0.01	0.009	<0.001	<0.001	<0.01	1.00	0.071	<0.001	0.66
G1	Prep Blank	<0.01	0.7	<0.001	<0.001	<0.01	<0.01	<2	<0.001	<0.001	0.06	2.01	<0.01	0.009	<0.001	<0.001	<0.01	1.04	0.073	<0.001	0.68

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Box 1500
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Project: FLIN 304
Report Date: February 01, 2012

QUALITY CONTROL REPORT VAN12000057.1

		7AR Al % 0.01	7AR Na % 0.01	7AR K % 0.01	7AR W % 0.001	7AR Hg % 0.001	7AR S % 0.05	8X Ba % 0.01	LOI LOI % 0.1	7AR.1 Pb % 0.01
BLK	Blank									
BLK	Blank									
BLK	Blank							<0.01		
Prep Wash										
G1	Prep Blank	1.05	0.12	0.47	<0.001	<0.001	<0.05	0.12	1.5	
G1	Prep Blank	1.06	0.12	0.46	<0.001	<0.001	<0.05	0.12	1.5	

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: Hudson Bay Mining and Smelting Co., Limit
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: September 25, 2011
Report Date: November 22, 2011
Page: 1 of 2

CERTIFICATE OF ANALYSIS WHI11001885.1

CLIENT JOB INFORMATION

Project: FLIN 283
Shipment ID: FLIN 283
P.O. Number
Number of Samples: 12

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Sort	12	Sorting of samples on arrival			VAN
Split Pulp	12	Analysis sample split/packet			VAN
Split Reject	12	Reject sample split/packet			VAN
CLSP	12	Clay separation and hand pulverizing with acetone wash in		Completed	VAN
Special Prep	12	Special Handling - see Job Notes			VAN
1F01	12	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 283
Report Date: November 22, 2011

CERTIFICATE OF ANALYSIS WHI11001885.1

	Method	CLSP	CLSP	CLSP	CLSP	WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Total Wt	Clay R-1	Clay R-2	total Clay	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd
	Unit	g	g	g	g	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm
	MDL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01
TSO01	Soil		1.82	<0.01	1.82	2.52	14.77	126.2	257.4	175.9	3060	47.9	20.6	2077	10.23	243.7	2.6	6.6	0.6	62.4	2.06
TSO02	Soil		1.76	<0.01	1.76	3.45	14.12	126.1	334.4	149.3	2534	37.0	9.6	600	7.33	249.2	2.1	5.3	0.2	61.5	0.62
TSO03	Soil		3.31	<0.01	3.31	2.75	19.99	144.9	409.7	139.4	4351	34.8	9.8	640	8.28	249.7	3.2	12.4	0.5	83.2	0.51
TSO04	Soil		1.15	<0.01	1.15	3.35	14.23	129.9	182.0	120.1	1512	28.2	8.7	809	5.77	106.7	2.6	4.4	0.7	41.5	0.43
TSO05	Soil		1.25	<0.01	1.25	3.19	11.38	73.48	151.2	85.6	2905	20.9	4.1	144	3.60	73.4	1.9	4.7	0.5	34.9	0.37
TSO06	Soil		2.95	<0.01	2.95	4.35	27.17	110.4	599.9	85.2	6185	22.9	4.6	225	8.06	256.1	3.2	23.4	5.3	64.6	0.34
TSO06DUP	Soil		3.07	<0.01	3.07	3.66	28.89	105.8	704.9	86.1	7701	21.4	4.2	155	7.22	291.0	3.2	22.2	2.7	79.7	0.22
TSO07	Soil		2.20	<0.01	2.20	4.68	27.14	88.62	372.7	124.7	2011	26.6	5.3	239	4.82	164.1	1.9	2.2	0.1	58.6	0.23
TSO08	Soil		1.99	<0.01	1.99	2.17	14.29	91.43	427.4	76.2	4801	18.3	3.4	93	3.37	123.8	2.3	13.7	0.3	77.1	0.39
TSO09	Soil		1.47	<0.01	1.47	3.00	24.98	112.0	2353	137.1	10091	18.7	5.7	498	5.41	195.2	2.4	9.1	0.8	85.6	0.34
TSO10	Soil		2.10	<0.01	2.10	3.14	25.74	109.4	1892	151.5	9892	24.0	5.2	337	6.21	141.9	2.8	10.5	0.9	56.7	0.32
TSO10DUP	Soil		1.61	<0.01	1.61	3.17	20.80	85.56	1424	98.3	4579	16.4	3.6	171	4.52	131.9	2.2	4.3	0.5	56.1	0.51

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Acme Analytical Laboratories (Vancouver) Ltd.
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www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 283
Report Date: November 22, 2011

CERTIFICATE OF ANALYSIS WHI11001885.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se
	Unit	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm
	MDL	0.02	0.02	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1
TSO01	Soil	8.07	0.83	126	0.05	0.206	19.5	28.9	0.08	803.4	0.012	<20	1.34	0.009	0.17	0.2	2.2	0.99	0.17	118	5.9
TSO02	Soil	10.11	0.77	113	0.02	0.205	18.7	22.7	0.05	586.7	0.008	<20	1.14	0.015	0.16	0.2	0.8	0.81	0.17	127	5.5
TSO03	Soil	7.75	0.97	124	0.02	0.242	24.9	28.6	0.06	800.5	0.010	<20	1.48	0.005	0.19	0.3	1.2	1.12	0.24	192	7.8
TSO04	Soil	6.24	0.58	93	0.04	0.218	20.0	18.3	0.04	400.4	0.015	<20	2.25	0.026	0.14	0.5	1.3	0.50	0.18	205	4.8
TSO05	Soil	4.95	0.43	69	0.03	0.129	16.2	13.0	0.04	337.9	0.017	<20	1.58	0.038	0.12	0.5	1.4	0.40	0.10	196	3.3
TSO06	Soil	7.66	0.79	110	0.02	0.148	26.0	28.2	0.04	739.5	0.009	<20	1.07	0.006	0.20	0.3	3.0	1.23	0.20	404	10.5
TSO06DUP	Soil	7.93	0.91	116	0.02	0.151	29.2	29.8	0.03	804.9	0.008	<20	1.05	0.005	0.20	0.3	2.2	1.36	0.22	558	10.8
TSO07	Soil	4.46	0.59	183	0.03	0.158	25.2	16.4	0.04	688.2	0.005	<20	0.71	0.008	0.19	0.5	0.6	0.57	0.13	113	5.3
TSO08	Soil	5.71	0.58	70	0.02	0.207	22.6	17.4	0.04	967.8	0.004	<20	0.86	0.004	0.17	0.2	0.6	1.25	0.25	336	6.1
TSO09	Soil	14.22	0.82	116	0.03	0.212	29.8	19.9	0.05	1452	0.014	<20	1.54	0.018	0.27	0.4	1.3	1.32	0.41	1583	6.9
TSO10	Soil	10.55	0.83	135	0.03	0.221	22.0	25.7	0.06	1056	0.017	<20	2.11	0.019	0.20	0.4	1.9	0.97	0.24	444	7.0
TSO10DUP	Soil	10.89	0.67	115	0.04	0.179	20.4	17.0	0.04	864.6	0.017	<20	2.34	0.028	0.15	0.5	1.1	0.70	0.20	297	5.1

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 283
Report Date: November 22, 2011

CERTIFICATE OF ANALYSIS WHI11001885.1

		Method	1F	1F
		Analyte	Te	Ga
		Unit	ppm	ppm
		MDL	0.02	0.1
TSO01	Soil		0.32	6.2
TSO02	Soil		0.18	6.5
TSO03	Soil		0.33	6.6
TSO04	Soil		0.23	8.1
TSO05	Soil		0.24	7.1
TSO06	Soil		0.52	5.3
TSO06DUP	Soil		0.44	6.1
TSO07	Soil		0.40	5.6
TSO08	Soil		0.23	3.9
TSO09	Soil		0.28	8.1
TSO10	Soil		0.30	9.9
TSO10DUP	Soil		0.17	9.8

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 283
Report Date: November 22, 2011

QUALITY CONTROL REPORT WHI11001885.1

		Method	CLSP	CLSP	CLSP	CLSP	WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
		Analyte	Total Wt	Clay R-1	Clay R-2	total Clay	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd
		Unit	g	g	g	g	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm
		MDL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01
Pulp Duplicates																						
TSO08	Soil			1.99	<0.01	1.99	2.17	14.29	91.43	427.4	76.2	4801	18.3	3.4	93	3.37	123.8	2.3	13.7	0.3	77.1	0.39
REP TSO08	QC							13.73	88.24	409.4	75.8	4752	16.6	3.5	92	3.32	118.9	2.2	12.9	0.4	74.0	0.45
Reference Materials																						
STD DS8	Standard							14.24	112.9	127.6	294.4	1956	38.0	7.7	589	2.46	23.9	2.7	96.8	7.0	64.8	2.07
STD OREAS45CA	Standard							0.87	539.4	21.87	56.8	275	269.4	86.3	821	15.34	3.4	1.4	45.8	8.0	13.5	0.08
STD DS8 Expected								13.44	110	123	312	1690	38.1	7.5	615	2.46	26	2.8	107	6.89	67.7	2.38
STD OREAS45CA Expected								1	494	20	60	275	240	92	943	15.69	3.8	1.2	43	7	15	0.1
BLK	Blank							<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 283
Report Date: November 22, 2011

QUALITY CONTROL REPORT WHI11001885.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se
	Unit	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm
	MDL	0.02	0.02	2	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1
Pulp Duplicates																					
TSO08	Soil	5.71	0.58	70	0.02	0.207	22.6	17.4	0.04	967.8	0.004	<20	0.86	0.004	0.17	0.2	0.6	1.25	0.25	336	6.1
REP TSO08	QC	5.61	0.55	69	0.02	0.194	21.8	17.4	0.04	961.3	0.004	<20	0.85	0.004	0.17	0.2	0.7	1.18	0.24	333	5.3
Reference Materials																					
STD DS8	Standard	4.39	6.29	40	0.71	0.071	16.3	118.0	0.61	282.2	0.122	<20	0.93	0.087	0.40	2.3	2.2	5.20	0.16	186	5.1
STD OREAS45CA	Standard	0.09	0.18	214	0.36	0.032	16.9	687.7	0.13	152.1	0.152	<20	4.15	0.009	0.08	<0.1	34.9	0.08	<0.02	39	0.4
STD DS8 Expected		4.8	6.67	41.1	0.7	0.08	14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	2.3	5.4	0.1679	192	5.23
STD OREAS45CA Expected		0.13	0.19	215	0.4265	0.0385	15.9	709	0.1358	164	0.128		3.592	0.0075	0.0717		39.7	0.07	0.021	30	0.5
BLK	Blank	<0.02	<0.02	<2	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 283
Report Date: November 22, 2011

QUALITY CONTROL REPORT WHI11001885.1

		Method	1F	1F
		Analyte	Te	Ga
		Unit	ppm	ppm
		MDL	0.02	0.1
Pulp Duplicates				
TSO08	Soil		0.23	3.9
REP TSO08	QC		0.22	3.8
Reference Materials				
STD DS8	Standard		4.61	4.2
STD OREAS45CA	Standard		0.04	16.3
STD DS8 Expected			5	4.7
STD OREAS45CA Expected			0.06	18.4
BLK	Blank		<0.02	<0.1

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www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: September 25, 2011
Report Date: November 22, 2011
Page: 1 of 2

CERTIFICATE OF ANALYSIS WHI11001887.1

CLIENT JOB INFORMATION

Project:	376
Shipment ID:	FLIN 284
P.O. Number	
Number of Samples:	13

SAMPLE DISPOSAL

STOR-PLP	Store After 90 days Invoice for Storage
STOR-RJT-SOIL	Store Soil Reject - RJSV Charges Apply

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	13	Dry at 60C			WHI
SS80	13	Dry at 60C sieve 100g to -80 mesh			WHI
RJSV	13	Saving all or part of Soil Reject			WHI
1F01	13	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 376
Report Date: November 22, 2011

CERTIFICATE OF ANALYSIS WHI11001887.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001
JSOC01	Soil	5.14	34.48	47.65	98.6	241	21.0	4.2	124	2.80	72.5	1.1	3.5	5.9	12.9	0.20	2.32	0.32	29	0.02	0.078
JSOC01DUP	Soil	4.87	35.71	50.98	109.1	290	21.0	4.5	164	2.67	64.4	1.3	5.7	4.0	15.4	0.26	2.39	0.27	29	0.04	0.086
JSOC02	Soil	5.63	36.71	40.68	88.8	665	20.7	3.9	107	2.62	61.6	1.1	3.4	3.7	14.5	0.20	2.05	0.26	30	0.02	0.076
JSOC03	Soil	5.79	43.62	41.02	111.0	545	26.2	5.2	139	3.04	71.8	1.5	5.4	4.8	17.0	0.29	2.46	0.28	30	0.04	0.092
JSOC04	Soil	5.93	42.92	40.14	112.1	424	26.7	6.3	219	3.12	75.0	1.4	3.5	5.1	19.0	0.33	2.43	0.25	32	0.06	0.102
JSOC05	Soil	5.99	31.55	35.15	83.7	416	19.4	3.4	104	2.56	59.8	0.8	9.3	3.1	13.8	0.17	2.42	0.23	29	0.02	0.079
JSOC06	Soil	5.40	30.55	37.96	80.6	443	18.6	3.6	127	2.61	62.6	0.8	3.6	4.6	11.8	0.17	2.31	0.22	28	0.02	0.070
JSOC06DUP	Soil	5.59	32.19	35.51	87.0	357	19.2	3.7	133	2.67	64.2	1.0	3.3	4.0	12.3	0.16	2.37	0.23	28	0.02	0.075
JSOC07	Soil	5.11	33.81	37.39	101.1	248	23.4	5.2	166	3.10	68.0	1.1	3.2	4.4	13.5	0.18	2.06	0.27	30	0.03	0.082
JSOC08	Soil	4.07	19.08	19.58	43.7	286	9.3	2.1	69	1.46	34.5	0.5	0.7	2.3	8.8	0.07	1.54	0.18	24	0.01	0.036
JSOC09	Soil	2.04	13.79	12.03	31.5	481	6.6	2.1	50	1.12	17.9	0.5	0.6	0.6	6.8	0.08	0.87	0.12	22	0.02	0.030
JSOC10	Soil	5.38	43.55	95.67	136.1	632	28.3	5.5	156	3.11	74.1	1.4	4.2	5.7	15.8	0.26	2.51	0.27	32	0.05	0.084
JSOC10DUP	Soil	5.90	32.05	39.94	118.2	295	22.2	4.1	120	2.75	58.7	1.0	2.7	2.3	12.3	0.23	2.61	0.24	33	0.03	0.080

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Acme Analytical Laboratories (Vancouver) Ltd.
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www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 376
Report Date: November 22, 2011

CERTIFICATE OF ANALYSIS WHI11001887.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
JSOC01	Soil	22.7	9.3	0.11	89.1	0.002	<20	0.61	0.003	0.05	0.1	1.2	0.14	0.02	68	1.5	0.05	1.9
JSOC01DUP	Soil	20.7	10.7	0.12	112.3	0.003	<20	0.68	0.005	0.06	0.1	1.2	0.14	0.02	90	1.6	0.08	2.0
JSOC02	Soil	21.9	9.4	0.10	111.9	0.002	<20	0.63	0.005	0.06	0.1	1.1	0.13	0.02	64	1.3	0.04	2.2
JSOC03	Soil	23.3	11.2	0.14	131.9	0.001	<20	0.74	0.003	0.07	0.1	1.4	0.14	0.03	119	1.7	0.05	2.2
JSOC04	Soil	23.1	12.0	0.15	128.4	0.001	<20	0.74	0.002	0.08	0.2	1.4	0.14	0.03	82	1.8	0.07	2.0
JSOC05	Soil	23.1	7.6	0.06	88.0	0.002	<20	0.45	0.003	0.05	0.1	0.9	0.12	0.03	62	1.6	0.05	1.7
JSOC06	Soil	23.7	7.7	0.08	71.4	0.002	<20	0.42	0.004	0.04	0.2	1.0	0.11	0.02	49	1.7	0.04	1.9
JSOC06DUP	Soil	25.4	8.3	0.08	70.6	0.002	<20	0.43	0.003	0.04	0.1	0.9	0.10	0.02	77	1.6	0.06	1.6
JSOC07	Soil	24.3	12.4	0.15	91.1	0.002	<20	0.75	0.003	0.05	0.1	1.1	0.12	0.02	45	1.7	0.05	2.2
JSOC08	Soil	24.2	4.0	0.02	49.9	0.004	<20	0.25	0.007	0.03	0.1	0.5	0.09	<0.02	23	1.0	0.03	1.8
JSOC09	Soil	12.3	4.3	0.04	50.6	0.012	<20	0.31	0.011	0.03	<0.1	0.4	0.08	<0.02	27	0.5	0.04	2.0
JSOC10	Soil	23.2	13.1	0.17	100.4	0.002	<20	0.84	0.002	0.05	0.1	1.2	0.15	<0.02	122	1.9	0.05	2.2
JSOC10DUP	Soil	18.7	10.3	0.10	77.3	0.004	<20	0.58	0.006	0.04	0.1	0.9	0.12	0.02	32	1.7	0.04	2.0

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 376
Report Date: November 22, 2011

QUALITY CONTROL REPORT WHI11001887.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001
Pulp Duplicates																					
JSOC06	Soil	5.40	30.55	37.96	80.6	443	18.6	3.6	127	2.61	62.6	0.8	3.6	4.6	11.8	0.17	2.31	0.22	28	0.02	0.070
REP JSOC06	QC	5.41	30.33	35.20	77.4	438	18.0	3.6	130	2.61	61.1	0.8	2.4	4.6	11.7	0.17	2.32	0.22	28	0.01	0.070
Reference Materials																					
STD DS8	Standard	13.16	108.0	130.5	316.8	1813	37.6	7.1	614	2.47	25.5	2.8	110.6	6.3	64.8	2.50	4.89	6.42	41	0.69	0.082
STD OREAS45CA	Standard	0.88	540.9	20.86	62.0	258	266.0	85.8	948	15.22	3.8	1.2	40.5	6.8	15.4	0.10	0.10	0.16	217	0.42	0.040
STD DS8 Expected		13.44	110	123	312	1690	38.1	7.5	615	2.46	26	2.8	107	6.89	67.7	2.38	4.8	6.67	41.1	0.7	0.08
STD OREAS45CA Expected		1	494	20	60	275	240	92	943	15.69	3.8	1.2	43	7	15	0.1	0.13	0.19	215	0.4265	0.0385
BLK	Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 376
Report Date: November 22, 2011

QUALITY CONTROL REPORT WHI11001887.1

		Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
		Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
		MDL	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
Pulp Duplicates																			
JSOC06	Soil		23.7	7.7	0.08	71.4	0.002	<20	0.42	0.004	0.04	0.2	1.0	0.11	0.02	49	1.7	0.04	1.9
REP JSOC06	QC		23.0	7.9	0.08	71.1	0.002	<20	0.44	0.004	0.04	0.1	1.0	0.10	0.02	52	1.6	0.06	1.8
Reference Materials																			
STD DS8	Standard		12.7	116.2	0.61	305.2	0.100	<20	0.91	0.087	0.41	2.6	1.8	5.68	0.17	186	5.3	4.92	4.6
STD OREAS45CA	Standard		15.6	734.1	0.15	168.6	0.126	<20	3.76	0.009	0.07	<0.1	35.4	0.12	<0.02	25	0.5	0.06	19.4
STD DS8 Expected			14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	2.3	5.4	0.1679	192	5.23	5	4.7
STD OREAS45CA Expected			15.9	709	0.1358	164	0.128		3.592	0.0075	0.0717		39.7	0.07	0.021	30	0.5	0.06	18.4
BLK	Blank		<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Whitehorse
Received: September 25, 2011
Report Date: November 23, 2011
Page: 1 of 2

CERTIFICATE OF ANALYSIS WHI11001888.1

CLIENT JOB INFORMATION

Project:	376
Shipment ID:	FLIN 285
P.O. Number	
Number of Samples:	13

SAMPLE DISPOSAL

STOR-PLP	Store After 90 days Invoice for Storage
STOR-RJT-SOIL	Store Soil Reject - RJSV Charges Apply

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	13	Dry at 60C			WHI
SS80	13	Dry at 60C sieve 100g to -80 mesh			WHI
RJSV	13	Saving all or part of Soil Reject			WHI
1F01	13	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
2A08	13	Total C Analysis by Leco	0.1	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Project: 376
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001888.1

		Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
		Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001
JSOA01	Soil		5.27	34.72	41.72	98.0	319	21.4	3.9	108	2.53	58.3	0.9	4.6	3.9	12.8	0.25	2.52	0.22	27	0.02	0.064
JSOA01DUP	Soil		5.10	35.17	41.66	91.3	790	22.3	4.1	110	2.45	53.9	1.1	2.6	1.3	13.7	0.35	2.51	0.27	26	0.03	0.100
JSOA02	Soil		5.40	26.82	34.01	74.9	892	19.3	3.2	96	2.02	44.6	0.8	2.3	1.0	13.5	0.19	1.78	0.21	27	0.03	0.078
JSOA03	Soil		5.42	37.26	35.67	92.3	709	21.8	4.1	125	2.69	58.5	1.0	3.6	0.6	13.2	0.27	2.47	0.24	29	0.02	0.101
JSOA04	Soil		4.29	18.81	29.07	53.1	666	10.9	2.2	59	1.43	36.2	0.5	1.4	0.3	10.1	0.14	1.36	0.19	24	0.01	0.056
JSOA05	Soil		1.05	3.28	4.88	10.8	1421	2.7	0.6	20	0.38	3.3	0.2	<0.2	<0.1	7.7	0.06	0.32	0.05	8	0.03	0.057
JSOA06	Soil		4.35	23.41	25.96	59.7	1168	14.7	2.9	85	1.85	37.0	0.6	1.6	2.9	10.3	0.13	1.88	0.17	21	0.01	0.058
JSOA06DUP	Soil		4.67	31.42	27.71	65.9	1654	19.0	3.0	91	2.00	38.5	0.9	2.4	0.7	12.1	0.23	2.09	0.18	23	0.02	0.109
JSOA07	Soil		2.04	16.24	13.14	37.9	4966	9.5	1.2	45	0.66	8.6	0.5	0.3	<0.1	13.7	0.39	0.68	0.09	9	0.06	0.124
JSOA08	Soil		0.54	4.60	5.90	8.8	1157	2.4	0.9	14	0.35	2.7	0.2	<0.2	<0.1	6.3	0.08	0.22	0.04	8	0.02	0.033
JSOA09	Soil		4.30	41.87	26.92	95.6	308	26.3	6.1	168	3.08	67.8	1.3	3.6	2.7	16.0	0.26	2.60	0.23	24	0.04	0.090
JSOA10	Soil		3.93	26.24	19.39	51.5	1467	13.4	2.3	131	1.18	17.8	0.8	0.2	<0.1	11.7	0.50	1.55	0.15	23	0.08	0.070
JSOA10DUP	Soil		1.60	10.86	12.29	26.6	3063	7.1	1.4	62	0.57	6.7	0.4	<0.2	<0.1	10.0	0.45	0.65	0.07	11	0.05	0.103

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: 376
Report Date: November 23, 2011

CERTIFICATE OF ANALYSIS WHI11001888.1

		Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	2A Leco
		Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	TOT/C
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	%
		MDL	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02
JSOA01	Soil		22.9	8.4	0.08	92.2	0.002	<20	0.42	0.004	0.06	0.1	1.0	0.12	0.03	77	1.6	0.07	1.6	3.16
JSOA01DUP	Soil		15.3	11.5	0.08	119.0	0.002	<20	0.47	0.006	0.07	0.1	0.7	0.11	0.04	110	1.5	0.04	1.7	7.40
JSOA02	Soil		17.8	10.8	0.07	97.9	0.002	<20	0.49	0.009	0.06	0.1	0.6	0.11	0.03	52	1.1	0.05	2.2	4.84
JSOA03	Soil		14.1	10.1	0.08	80.4	0.001	<20	0.46	0.004	0.05	0.1	0.4	0.11	0.03	85	1.8	0.05	1.6	3.84
JSOA04	Soil		17.8	6.3	0.03	81.1	0.002	<20	0.34	0.009	0.05	0.2	0.3	0.09	0.03	40	1.1	0.03	2.2	4.22
JSOA05	Soil		1.9	3.8	0.02	31.5	0.001	<20	0.14	0.020	0.03	<0.1	0.1	0.03	0.03	61	0.3	<0.02	0.6	8.12
JSOA06	Soil		17.7	7.1	0.07	66.6	0.003	<20	0.41	0.007	0.05	0.1	0.7	0.09	0.03	51	1.2	0.03	1.7	3.14
JSOA06DUP	Soil		12.5	10.7	0.06	88.1	0.002	<20	0.45	0.006	0.07	0.1	0.5	0.08	0.05	94	1.5	0.04	1.9	10.39
JSOA07	Soil		2.2	7.0	0.03	79.6	<0.001	<20	0.31	0.017	0.06	<0.1	0.1	0.04	0.05	132	0.6	0.02	0.8	20.21
JSOA08	Soil		3.5	3.0	0.02	38.7	0.002	<20	0.17	0.023	0.04	<0.1	<0.1	0.05	<0.02	39	0.3	<0.02	0.8	4.61
JSOA09	Soil		17.5	12.4	0.16	89.1	0.001	<20	0.64	0.004	0.05	0.1	1.1	0.09	0.03	68	1.8	0.05	1.9	4.10
JSOA10	Soil		9.0	7.6	0.02	112.3	0.002	<20	0.27	0.010	0.04	<0.1	0.2	0.05	0.04	100	1.0	0.04	1.7	13.87
JSOA10DUP	Soil		2.7	6.7	0.03	73.4	<0.001	<20	0.22	0.016	0.05	<0.1	0.2	0.06	0.05	134	0.7	0.03	1.0	16.88

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
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Project: 376
Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001888.1

		Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
		Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001
Pulp Duplicates																						
JSOA10DUP	Soil		1.60	10.86	12.29	26.6	3063	7.1	1.4	62	0.57	6.7	0.4	<0.2	<0.1	10.0	0.45	0.65	0.07	11	0.05	0.103
REP JSOA10DUP	QC																					
Reference Materials																						
STD CSC	Standard																					
STD DS8	Standard		13.16	108.0	130.5	316.8	1813	37.6	7.1	614	2.47	25.5	2.8	110.6	6.3	64.8	2.50	4.89	6.42	41	0.69	0.082
STD OREAS45CA	Standard		0.88	540.9	20.86	62.0	258	266.0	85.8	948	15.22	3.8	1.2	40.5	6.8	15.4	0.10	0.10	0.16	217	0.42	0.040
STD OREAS76A	Standard																					
STD CSC Expected																						
STD OREAS76A Expected																						
STD DS8 Expected			13.44	110	123	312	1690	38.1	7.5	615	2.46	26	2.8	107	6.89	67.7	2.38	4.8	6.67	41.1	0.7	0.08
STD OREAS45CA Expected			1	494	20	60	275	240	92	943	15.69	3.8	1.2	43	7	15	0.1	0.13	0.19	215	0.4265	0.0385
BLK	Blank																					
BLK	Blank		<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001

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Report Date: November 23, 2011

QUALITY CONTROL REPORT WHI11001888.1

		Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	2A Leco
		Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	TOT/C
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	%
		MDL	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02
Pulp Duplicates																				
JSOA10DUP	Soil		2.7	6.7	0.03	73.4	<0.001	<20	0.22	0.016	0.05	<0.1	0.2	0.06	0.05	134	0.7	0.03	1.0	16.88
REP JSOA10DUP	QC																			17.81
Reference Materials																				
STD CSC	Standard																			2.90
STD DS8	Standard		12.7	116.2	0.61	305.2	0.100	<20	0.91	0.087	0.41	2.6	1.8	5.68	0.17	186	5.3	4.92	4.6	
STD OREAS45CA	Standard		15.6	734.1	0.15	168.6	0.126	<20	3.76	0.009	0.07	<0.1	35.4	0.12	<0.02	25	0.5	0.06	19.4	
STD OREAS76A	Standard																			0.14
STD CSC Expected																				2.94
STD OREAS76A Expected																				0.16
STD DS8 Expected			14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	2.3	5.4	0.1679	192	5.23	5	4.7	
STD OREAS45CA Expected			15.9	709	0.1358	164	0.128		3.592	0.0075	0.0717		39.7	0.07	0.021	30	0.5	0.06	18.4	
BLK	Blank																			<0.02
BLK	Blank		<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Submitted By: Kelly Gilmore & Maggie Currie
Receiving Lab: Canada-Vancouver
Received: October 27, 2011
Report Date: November 30, 2011
Page: 1 of 2

CERTIFICATE OF ANALYSIS VAN11005821.1

CLIENT JOB INFORMATION

Project:	FLIN 286
Shipment ID:	
P.O. Number	SRR 29879
Number of Samples:	12

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PM1	10	Plant Maceration to 1mm			VAN
1VE1	12	Aqua Regia digestion ICP-MS analysis	1	Completed	VAN

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Hudson Bay Mining and Smelting Co., Limited
Box 1500
Flin Flon MB R8A 1N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

Acme Analytical Laboratories (Vancouver) Ltd.
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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 286
Report Date: November 30, 2011

CERTIFICATE OF ANALYSIS VAN11005821.1

Method		WGHT	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE
Analyte		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		0.01	0.01	0.01	0.01	0.1	2	0.1	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02	0.02	2	0.01
EMI-LKSD	Rock Pulp		1.66	27.66	81.28	169.9	146	29.8	9.08	390	2.344	12.3	27.47	2.0	2.04	40.0	1.90	0.81	0.61	31	0.77
JSOS01	Vegetation		0.06	3.20	0.42	52.5	20	2.4	0.38	423	0.004	<0.1	0.01	<0.2	<0.01	27.9	0.06	0.18	<0.02	<2	0.35
JSOS01 DUP	Vegetation		0.07	2.95	0.34	45.8	8	2.6	0.20	614	0.002	0.2	<0.01	<0.2	<0.01	17.9	0.04	0.07	<0.02	<2	0.26
JSOS02	Vegetation		0.05	3.68	0.66	46.6	7	1.8	0.29	575	0.005	<0.1	<0.01	0.3	<0.01	20.7	0.17	0.07	<0.02	<2	0.43
JSOS03	Vegetation		0.09	3.41	0.37	47.7	10	1.5	0.17	369	0.002	<0.1	<0.01	0.3	<0.01	28.9	0.08	0.05	<0.02	<2	0.30
JSOS04	Vegetation		0.07	3.52	0.50	30.2	6	1.2	0.08	374	0.003	<0.1	<0.01	<0.2	<0.01	20.6	0.02	0.05	<0.02	<2	0.28
JSOS05	Vegetation		0.06	3.03	0.28	37.8	22	1.1	0.12	409	0.002	<0.1	<0.01	<0.2	<0.01	21.6	0.04	0.03	<0.02	<2	0.36
JSOS06	Vegetation		0.03	3.24	0.38	43.5	7	1.3	0.22	538	0.003	<0.1	<0.01	<0.2	<0.01	20.9	0.12	0.05	<0.02	<2	0.27
JSOS06 DUP	Vegetation		0.05	4.28	0.32	53.3	17	2.4	0.16	563	0.003	<0.1	<0.01	<0.2	<0.01	24.0	0.05	0.04	<0.02	<2	0.30
JSOS08	Vegetation		0.04	3.90	0.20	45.3	6	1.0	0.16	379	0.002	<0.1	<0.01	<0.2	<0.01	18.1	0.05	0.03	<0.02	<2	0.29
JSO09	Vegetation		0.05	4.39	0.28	35.3	10	1.5	0.40	284	0.003	<0.1	<0.01	<0.2	<0.01	28.9	0.06	0.03	<0.02	<2	0.30
EMI-LKSD	Rock Pulp		1.68	28.93	85.54	169.9	146	30.2	9.04	392	2.344	12.6	27.31	1.4	2.25	43.1	1.86	0.78	0.64	33	0.79

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Client: **Hudson Bay Mining and Smelting Co., Limit**
Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 286
Report Date: November 30, 2011

CERTIFICATE OF ANALYSIS VAN11005821.1

	Method	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	%	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.001	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.01	1	0.1	0.02	0.1
EMI-LKSD	Rock Pulp	0.118	20.18	19.7	0.346	131.8	494	6	1.26	0.020	0.10	0.3	3.7	0.46	0.95	141	2.9	0.15	4.1
JSOS01	Vegetation	0.193	0.01	1.2	0.084	84.4	6	4	0.02	0.002	0.52	<0.1	0.1	0.06	0.03	19	0.3	<0.02	<0.1
JSOS01 DUP	Vegetation	0.208	0.02	1.2	0.076	41.7	6	5	0.01	0.001	0.64	<0.1	<0.1	0.08	0.03	10	0.3	0.04	<0.1
JSOS02	Vegetation	0.165	0.03	0.9	0.055	95.6	5	4	0.01	0.001	0.40	<0.1	<0.1	0.08	0.02	21	0.2	<0.02	<0.1
JSOS03	Vegetation	0.192	0.01	1.0	0.072	87.9	5	4	0.02	0.001	0.53	<0.1	<0.1	0.04	0.02	9	0.2	<0.02	<0.1
JSOS04	Vegetation	0.193	0.01	1.0	0.048	43.3	5	3	<0.01	0.002	0.52	<0.1	<0.1	0.11	0.02	10	0.2	<0.02	<0.1
JSOS05	Vegetation	0.169	0.01	1.1	0.073	61.7	5	5	0.01	0.002	0.55	<0.1	<0.1	0.05	0.02	11	0.2	<0.02	<0.1
JSOS06	Vegetation	0.151	0.01	1.0	0.062	83.4	4	4	0.01	0.002	0.43	<0.1	<0.1	0.05	0.02	12	0.2	<0.02	<0.1
JSOS06 DUP	Vegetation	0.233	0.02	1.0	0.090	67.0	6	4	0.01	0.002	0.56	<0.1	0.2	0.08	0.03	14	0.1	<0.02	<0.1
JSOS08	Vegetation	0.219	<0.01	0.9	0.059	37.0	6	2	<0.01	0.002	0.51	<0.1	0.1	0.08	0.02	6	0.3	<0.02	<0.1
JSO09	Vegetation	0.279	0.01	1.0	0.067	59.8	8	3	0.01	<0.001	0.52	<0.1	0.1	0.08	0.03	8	0.1	<0.02	<0.1
EMI-LKSD	Rock Pulp	0.121	21.02	20.3	0.358	133.2	505	5	1.28	0.020	0.11	0.3	3.9	0.46	1.01	153	2.9	0.11	4.3

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Box 1500
Flin Flon MB R8A 1N9 Canada

Project: FLIN 286
Report Date: November 30, 2011

QUALITY CONTROL REPORT VAN11005821.1

	Method	WGHT	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02	0.02	2	0.01
Pulp Duplicates																					
REP RICE	QC		0.42	1.78	0.15	14.5	<2	<0.1	0.01	10	<0.001	0.2	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01
EMI-LKSD	Rock Pulp		1.68	28.93	85.54	169.9	146	30.2	9.04	392	2.344	12.6	27.31	1.4	2.25	43.1	1.86	0.78	0.64	33	0.79
REP EMI-LKSD	QC		1.78	30.51	84.89	177.9	153	30.8	9.62	414	2.429	12.8	26.54	1.7	2.11	43.4	1.95	0.85	0.63	35	0.83
Reference Materials																					
STD V14	Standard		0.06	4.98	0.92	16.3	23	1.4	0.87	2157	0.016	12.7	<0.01	11.4	<0.01	7.3	0.22	0.07	0.10	<2	0.65
STD V14	Standard		0.07	4.45	0.83	13.6	17	1.3	0.77	1941	0.018	10.5	<0.01	12.1	<0.01	6.8	0.18	0.07	0.10	<2	0.59
STD V16	Standard		1.33	6.18	3.11	40.9	25	6.6	1.06	725	0.354	1.5	<0.01	<0.2	<0.01	12.2	0.09	0.09	<0.02	<2	0.31
STD V16	Standard		1.65	6.46	3.14	37.3	29	7.5	0.93	670	0.429	1.5	<0.01	3.9	<0.01	11.6	0.07	0.07	<0.02	2	0.29
STD V14 Expected			0.06	4.8	0.881	14.5	24	1.4	0.75	2094	0.016	11.038		8		6.668	0.21	0.06	0.089		0.6082
STD V16 Expected			1.6	6.92	3.11	39.2	32	7.8	1.17	732	0.4367	1.6		1.1		11.6	0.093	0.07			0.302
FLOUR	Blank		0.60	3.54	0.03	28.9	<2	<0.1	0.03	33	0.004	<0.1	<0.01	<0.2	0.03	1.4	0.03	<0.02	<0.02	<2	0.03
BLK	Blank		<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.01	<1	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01
FLOUR	Blank		0.53	3.27	0.04	24.9	<2	0.2	0.01	34	0.003	<0.1	<0.01	1.0	<0.01	1.1	0.02	<0.02	<0.02	<2	0.03
BLK	Blank		<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.01	<1	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01
Prep Wash																					
RICE	Prep Blank																				
RICE	Prep Blank		0.50	1.64	0.07	13.9	<2	<0.1	<0.01	6	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01
RICE	Prep Blank		0.45	1.68	0.60	13.6	<2	<0.1	0.01	10	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01

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Project: FLIN 286
Report Date: November 30, 2011

QUALITY CONTROL REPORT VAN11005821.1

	Method	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	%	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.001	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.01	1	0.1	0.02	0.1
Pulp Duplicates																			
REP RICE	QC	0.078	<0.01	1.0	0.016	0.2	2	<1	<0.01	<0.001	0.06	<0.1	0.1	<0.02	0.09	5	1.0	<0.02	<0.1
EMI-LKSD	Rock Pulp	0.121	21.02	20.3	0.358	133.2	505	5	1.28	0.020	0.11	0.3	3.9	0.46	1.01	153	2.9	0.11	4.3
REP EMI-LKSD	QC	0.129	20.87	21.6	0.379	137.7	536	5	1.36	0.022	0.11	0.2	4.1	0.46	1.05	159	3.2	0.11	4.3
Reference Materials																			
STD V14	Standard	0.084	0.04	1.1	0.083	1.7	6	9	0.15	<0.001	0.52	<0.1	<0.1	0.04	0.07	58	0.3	<0.02	0.2
STD V14	Standard	0.083	0.04	1.7	0.084	1.4	6	11	0.14	<0.001	0.47	<0.1	0.1	0.04	0.09	49	0.4	<0.02	<0.1
STD V16	Standard	0.049	0.05	285.3	0.056	2.4	11	4	0.05	0.002	0.23	<0.1	<0.1	<0.02	0.02	46	0.4	<0.02	0.1
STD V16	Standard	0.046	0.04	266.2	0.056	1.9	11	5	0.04	0.002	0.22	<0.1	0.1	<0.02	0.02	45	0.3	<0.02	0.1
STD V14 Expected		0.087	0.03	1.2	0.079	1.3	6.699	10.7	0.147		0.509		0.117	0.038	0.064	52	0.15		
STD V16 Expected		0.0498	0.05	345.2	0.0543	1.9	12	5	0.0498	0.0015	0.231				0.0174	41			0.2
FLOUR	Blank	0.368	<0.01	1.3	0.144	3.5	10	<1	<0.01	0.001	0.35	<0.1	0.2	<0.02	0.16	1	1.2	<0.02	<0.1
BLK	Blank	<0.001	<0.01	<0.1	<0.001	<0.1	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.01	<1	<0.1	<0.02	<0.1
FLOUR	Blank	0.323	0.01	1.8	0.132	2.5	11	<1	<0.01	<0.001	0.29	<0.1	0.2	<0.02	0.20	<1	1.1	<0.02	<0.1
BLK	Blank	<0.001	<0.01	<0.1	<0.001	<0.1	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.01	<1	<0.1	<0.02	<0.1
Prep Wash																			
RICE	Prep Blank																		
RICE	Prep Blank	0.074	<0.01	1.2	0.014	0.4	2	<1	<0.01	<0.001	0.06	<0.1	0.3	<0.02	0.09	3	0.8	<0.02	<0.1
RICE	Prep Blank	0.075	<0.01	1.1	0.014	0.4	2	<1	<0.01	<0.001	0.06	<0.1	0.2	<0.02	0.08	2	0.8	<0.02	<0.1

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APPENDIX III

Drill Logs

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	Co-ordinate System		Grid/Property		Hole Type	Length	Date Started
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	100.00	27/08/2011
District	**UTM North**	**UTM East**	**Local Grid E**	**Local Grid N**	**Collar Survey Method**		**Date Completed**
Watson Lake Mining District	7003743.53	442053.74			DGPS		28/08/2011
Project	**UTM Elevation**	**Azimuth Astro. (°)**	**Azimuth Grid (°)**	**Dip (°)**	**Drill Contractor**		**Date Logged**
013	1537.17	70.00		-65.00	Rodren Drilling Ltd		30/08/2011
Area	**Claim No.**	**NTS Sheet**	**Supervised By**		**Logged By**		**Verified**
MacMillan Pass	60495	105O/01	Matt Bodnar		Christina Taylor		☐

Zone/Prospect	Assessment Rpt. No.	Core Storage	Plug Depth	Makes Water	Capped	Environmental Inspection
Tom		On Site		☐	☑	☐

Core Size (1)	HQ	100	Casing Pulled	Casing (1)	12.00	HW	Plugged	Pulsed	Geophysics Contractor	Date Pulsed
(2)			☐	(2)			☐	☐		

Purpose	Results	Comments
Metallurgical twin hole - Target MET1 twinning TS91-014	mineralized horizon returned a weighted average of 7.78% Zn, 4.47% Pb and 52.5 g/t Ag over 22.30m (10.00 to 32.30m).	HW casing - Casing left in - Not cemented - Not Probed - Drill inspection Aug 28, 2011 - Estimates influenced by assay results of TS91-014 - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	Grid Azimuth (°)		Astro. Azimuth (°)		Dip (°)		Use Test	Survey Method	Mag. Field (nT)	Comments
	Original	Final	Original	Final	Original	Final				
0.00			46.4	70	-65		☐	Multi-shot Reflex		Collar
16.00			57	80.6	-61.9		☐	Multi-shot Reflex	56980	Good
28.00			57.1	80.7	-61.4		☐	Multi-shot Reflex	56815	Good
52.00			58	81.6	-61.4		☐	Multi-shot Reflex	56617	Good
76.00			58.9	82.5	-60.5		☐	Multi-shot Reflex	56696	Good
100.00			59.2	82.8	-60.1		☐	Multi-shot Reflex	56679	Good

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
0.00 -	5.50	**ovrbrdn overburden**							
5.50 -	10.00	**mdstn mudstone** Fairly massive though broken along bedding. Occasionally Pyrite defines bedding. Highly graphitic. Occasional fractures have silvery mica coating?	N161701	6.30	7.30	1.00	0.005	0.005	1
			N161702	7.30	7.46	0.16	0.42	0.005	1
			N161703	7.46	8.46	1.00	0.005	0.005	1
			N161704	8.46	9.00	0.54	0.005	0.01	1
			N161705	9.00	10.00	1.00	0.05	0.06	1
		Alteration:							
5.50 -	8.50	Weak weathering fractured.Fe staining on fractures							
		Structure:							
5.50 -	10.00	fracture highly fractured along bedding							
7.80 -		bedding 55° to c/a defined by pyrite							
8.70 -		bedding 60° to c/a							
		Veins:							
5.50 -	8.5	carbonate , 1%, 55°; 1mm, thin carbonate veins aligned with bedding							
8.50 -	10	carbonate ff, 3%; 3mm, carbonate veins along bedding and infilling fractures (appears brecciated)							
10.00 -	13.35	**lmmudstn lime mudstone - mineralized** Strongly bedded, bedding occasionally weakly disturbed. Fine beds of mudstone (~35%), limestone, barite ore, and Pyrite. Mudstone beds generally mm scale, up to 10cm. All other beds 1-2mm.	N161706	10.00	11.00	1.00	9.47	1.95	3
			N161707	11.00	12.00	1.00	11.74	4.99	4
			N161708	12.00	12.67	0.67	11.67	4.53	3
			N161709	12.67	13.35	0.68	10.56	3.22	1
		Structure:							

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
10.00	-	contact 40° to c/a sharp contact							
10.15	-	bedding 50° to c/a							
10.80	-	bedding 60° to c/a							
11.50	-	bedding 40° to c/a							
12.80	-	bedding 60° to c/a							
13.35	- 29.24	**lmst limestone - mineralized**							
		Finely bedded (laminated) pinkish grey. Beds mostly consist of Galena or Sphalerite mineralization, barite, or carbonate, which are mm scale. Occasional cherty beds (~5% overall), up to 20cm thick, decreasing downhole. Bedding is weakly disturbed, becomes increasingly irregular downhole.	N161711	13.35	14.00	0.65	7.45	2.85	1
			N161712	14.00	15.00	1.00	7.12	1.89	1
			N161713	15.00	16.00	1.00	6.03	2.1	2
			N161714	16.00	17.00	1.00	6.12	1.98	1
			N161716	17.00	18.00	1.00	4.54	1.19	3
			N161717	18.00	19.00	1.00	5.82	1.29	3
			N161718	19.00	20.00	1.00	6.48	1.47	3
			N161719	20.00	21.00	1.00	4.67	1.61	4
			N161720	21.00	22.00	1.00	4.06	1.79	11
			N161721	22.00	23.00	1.00	5.42	2.27	28
			N161722	23.00	24.00	1.00	9.4	10.94	118
			N161723	24.00	25.00	1.00	8.04	10.75	115
			N161724	25.00	26.00	1.00	10.15	5.44	99
			N161725	26.00	27.00	1.00	8.07	2.31	73
			N161726	27.00	27.50	0.50	15.57	8.47	151
			N161727	27.50	27.65	0.15	11.09	12.02	207
			N161728	27.65	28.62	0.97	15.65	13.15	301
			N161729	28.62	29.24	0.62	19.44	9.39	169
Structure:									
13.60	-	bedding 50° to c/a							
14.50	-	bedding 45° to c/a							
16.40	-	bedding 50° to c/a							
19.30	-	bedding 60° to c/a							
23.50	-	bedding 55° to c/a							

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
24.35	24.80	fault Vuggy, clayey, minor fault.							
24.90		bedding 35° to c/a							
27.50		bedding 40° to c/a							
Veins:									
13.50	29.24	quartz , 1%; 10mm, qtz/carbonate veins, generally isolated to cherty beds, but occasionally crosscutting or parallel to bedding.							
29.24	32.20	**nss near solid sulphide** Fairly massive, irregular bands of sulphides in silicified mudstone. Mineralization consists of Pyrite, Sphalerite, Galena, Pyrrhotite, Chalcopyrite. Generally weakly brecciated in appearance, especially due to broken carbonate veins. Likely proximal to vents.	N161731	29.24	30.20	0.96	4.36	4.64	54
			N161732	30.20	31.20	1.00	0.56	1.71	23
			N161733	31.20	32.20	1.00	4.89	9.72	116
Alteration:									
29.24	32.20	Weak silicification localized.silicified mudstone groundmass?							
Veins:									
29.24	32.2	carbonate irr, 5%; 10mm, Broken, irregular, buff coloured carbonate throughout.							
32.20	36.75	**mdstn mudstone - mineralized** Stringer mineralization in massive, silicified mudstone. Brecciated and infilled with quartz/carbonate veins. Lower contact gradational, defined where stringer mineralization dies out. Mudstone groundmass appears to be variably silicified, giving a mottled appearance. Feeder Zone?	N161734	32.20	33.00	0.80	1.69	1.73	32
			N161736	33.00	34.00	1.00	0.06	0.08	1
			N161737	34.00	35.00	1.00	0.01	0.04	1
			N161738	35.00	36.00	1.00	0.03	0.04	1
			N161739	36.00	36.75	0.75	0.95	1.23	17
Alteration:									
32.20	36.75	Moderate silicification other, Weak chloritization other.silicified mudstone groundmass? Rare blebs of chlorite, generally with qtz veins.							
Veins:									

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
32.20	- 36.75	carbonate irr, 5%; 10mm, Two generations of veins: Broken, irregular, buff coloured carbonate as previous unit, as well as straight white quartz veins with Pyrite associated.							
36.75	- 42.75	**mdstn mudstone** Graphitic mudstone with minor (1%) silty beds (irregularly distributed, generally 1-5cm thick.) Core is pitted in along otherwise not apparent beds. Clasts appear at ~91.75m, consistent with next unit (conglomerate), can be Pyrite rich.	N161740	36.75	37.75	1.00	0.32	0.91	10
			N161741	37.75	38.50	0.75	0.09	0.41	7
			N161742	38.50	38.75	0.25	0.06	0.68	9
			N161743	38.75	39.75	1.00	0.23	1.44	10
			N161744	39.75	40.75	1.00	0.03	0.28	1
			N161745	40.75	41.75	1.00	0.02	0.1	1
Structure:									
36.75	- 42.75	fault Rock quality is generally poor. Sections crumbly, gouge.							
37.20	-	bedding 60° to c/a							
37.75	-	bedding 55° to c/a							
38.50	-	bedding 40° to c/a							
40.40	-	bedding 50° to c/a							
41.60	-	bedding 55° to c/a							
42.30	-	bedding 45° to c/a weak, clast alignment							
42.75	- 79.98	**congl conglomerate** Polymict, clast supported. Clasts mainly consist of mudstone (black), chert (grey), and quartz (white). Generally subrounded, though small mudstone fragments can be angular to elongate. Fragment size generally ranges: 1-20mm, though in places up to 50mm. Somewhat zoned, as in there are sections with larger clasts, and sections which could be considered coarse sandstone, but with no regularity. Rare mudstone bands. Matrix is very fine, medium grey.	N162401	61.30	61.80	0.50	0.005	0.005	1
			N162402	61.80	62.42	0.62	0.005	0.005	1
			N162403	62.42	63.00	0.58	0.005	0.005	1
			N162404	64.75	65.10	0.35	0.005	0.005	1
			N162405	65.10	66.00	0.90	0.005	0.005	1
			N162406	66.00	66.90	0.90	0.005	0.005	1
			N162407	66.90	67.50	0.60	0.02	0.005	1
50.39	- 53.70	**mdstn mudstone** Graphitic. Sharp contacts, though upper contact is irregular, and there are conglomerate pebbles to 50.50m. Silty interbeds, generally cm scale, though up to 15cm. Bedding is irregular, folded in places.							

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm

Structure:

46.10	-		sheared 10° to c/a small shear plane
50.39	-		contact 20° to c/a irregular
50.60	-		bedding 50° to c/a
50.75	-		bedding 45° to c/a
50.80	-	51.15	fold nose S fold
50.85	-		bedding 0° to c/a
50.95	-		bedding 80° to c/a
51.05	-		bedding 0° to c/a
51.20	-		bedding 55° to c/a
52.10	-		bedding 65° to c/a
53.00	-		bedding 75° to c/a
53.55	-		bedding 80° to c/a
53.70	-		contact 90° to c/a sharp, weakly irregular
59.10	-	79.98	fault Fault? Generally highly fractured. Core is often pitted. Occasional graphitic fault surfaces. Frequent irregular quartz veins.

Veins:

42.75 - 50.39 quartz , 1%; 50mm, Occasional straight white quart veins, randomly oriented, but generally low angle.

53.70 - 79.98 quartz , 5%; 40mm, Frequent broken, somewhat irregular quartz veins. Occasionally with associated Pyrite. Sometimes with siderite associated.

79.98 - 100.00 **mdstn mudstone**

Dark grey mudstone with frequent light grey silty beds. Silty beds increase in intensity and in thickness downhole (mm scale and ~5% overall to 89.5m, up to 10cm and 15% overall to EOH). Occasional pitted bands. Bedding is generally regular, though weakly disturbed (faulted?) in places.

Structure:

79.98	-	83.85	fault Highly broken, common graphite. Ends abruptly.
84.50	-		bedding 70° to c/a

Lithology From	To			Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
88.85	- 89.00	fracture rubbly								
89.50	-	bedding 70° to c/a								
92.80	- 93.70	fault Highly broken, common graphite. Ends abruptly.								
94.50	-	bedding 50° to c/a								
96.17	- 97.00	fault Highly broken, common graphite. Ends abruptly.								
98.00	-	bedding 50° to c/a								
99.50	-	bedding 55° to c/a								
Veins:										
79.98	- 100	carbonate ff, 1%; 1mm, fracture controlled carbonate veins								

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	Co-ordinate System		Grid/Property		Hole Type	Length	Date Started
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	129.00	28/08/2011
District	**UTM North**	**UTM East**	**Local Grid E**	**Local Grid N**	**Collar Survey Method**		**Date Completed**
Watson Lake Mining District	7003743.36	442053.46			DGPS		30/08/2011
Project	**UTM Elevation**	**Azimuth Astro. (°)**	**Azimuth Grid (°)**	**Dip (°)**	**Drill Contractor**		**Date Logged**
013	1537.04	65.00		-85.00	Rodren Drilling Ltd		31/08/2011
Area	**Claim No.**	**NTS Sheet**	**Supervised By**		**Logged By**		**Verified**
MacMillan Pass	60495	105O/01	Matt Bodnar		Christina Taylor		☐

Zone/Prospect	Assessment Rpt. No.	Core Storage	Plug Depth	Makes Water	Capped	Environmental Inspection
Tom		On Site		☐	☑	☐

Core Size (1)	HQ	129	Casing Pulled	Casing (1)	9.00	HW	Plugged	Pulsed	Geophysics Contractor		Date Pulsed
(2)			☐	(2)			☐	☐			

Purpose	Results	Comments
Metallurgical hole - Target MET7, Replacing MET2 and MET4	High grade mineralization was intersected in the hole. The weighted average returned 6.20% Zn, 6.95% Pb and 95.7g/t Ag over 41.37 meters (17.00 to 58.37m).	Drilled from the same set up as TYK001 - Core stained purple in places to test for composition of carbonate veins - Mineral estimates based on TS91-014 assays - Not cemented - Not probed - Left open - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	Grid Azimuth (°)		Astro. Azimuth (°)		Dip (°)		Use Test	Survey Method	Mag. Field (nT)	Comments
	Original	Final	Original	Final	Original	Final				
0.00			41.4	65	-85		☐	Multi-shot Reflex		Collar
14.00			66	89.6	-83.9		☐	Multi-shot Reflex	57426	Bad
41.00			48.2	71.8	-83.7		☐	Multi-shot Reflex	93269	
65.00			49.5	73.1	-83.8		☐	Multi-shot Reflex	93328	
92.00			62	85.6	-83.5		☐	Multi-shot Reflex	58713	
119.00			47.3	70.9	-83.2		☐	Multi-shot Reflex	93378	

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
0.00	5.00	**ovrbrdn overburden** conglomerate boulders							
5.00	17.00	**mdstn mudstone** Fairly massive, though highly broken along bedding. Occasionally Pyrite defines bedding. Highly graphitic.	N161746	12.00	13.00	1.00	0.02	0.005	1
			N161747	13.00	14.00	1.00	0.05	0.005	1
			N161748	14.00	15.00	1.00	0.05	0.01	1
			N161749	15.00	16.00	1.00	0.04	0.01	1
			N161751	16.00	17.00	1.00	0.08	0.04	1
		Alteration:							
5.00	11.00	Weak weathering fracture controlled.rusty coatings on fractures							
		Structure:							
5.50		bedding 30° to c/a							
8.80		bedding 30° to c/a							
13.50		bedding 30° to c/a							
16.00		bedding 50° to c/a							
16.80		bedding 20° to c/a							
		Veins:							
8.50		- 17 carbonate , 1%; 3mm, Thin, 1-3mm carbonate veins, fracture filling or parallel with bedding.							
17.00	21.22	**lmmudstn lime mudstone - mineralized** Strongly bedded, bedding occasionally weakly disturbed. Fine beds of (dark grey) mudstone (~35%), limestone, barite ore, and Pyrite. Mudstone beds generally mm scale, up to 10cm. All other beds 1-2mm. First 1m is very broken up, contact difficult to place, though likely sharp.	N161752	17.00	18.00	1.00	8.22	1.8	3
			N161753	18.00	19.00	1.00	10.72	4.19	5
			N161754	19.00	20.00	1.00	12.77	3.9	2
			N161756	20.00	20.61	0.61	9.51	2.86	1
			N161757	20.61	21.22	0.61	12.05	3.56	1

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm

Structure:

18.00 - bedding 35° to c/a

19.70 - bedding 20° to c/a

20.20 - bedding 35° to c/a

20.70 - bedding 40° to c/a

Veins:

17.00 - 21.22 quartz , 1%; 5mm, rare quartz veins, generally parallel to bedding, occasionally cross cutting.

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
21.22	- 44.73	**lmst limestone - mineralized** Finely bedded (laminated) pinkish grey. Beds mostly consist of Galena or Sphalerite mineralization, barite, or carbonate, which are mm scale. Occasionally cherty beds (~5% overall), up to 20cm thick, ending at ~35.1m, rare silty/sandy beds (<1% overall.) Bedding is moderately disturbed, becomes increasingly irregular downhole (especially at 35.10m and 42.2m). Pb content appears to increase downhole.	N161758	21.22	22.00	0.78	6.86	2.4	1
			N161759	22.00	23.00	1.00	6.31	2.47	1
			N161760	23.00	24.00	1.00	4.12	1.71	1
			N161761	24.00	25.00	1.00	3.71	1	1
			N161762	25.00	26.00	1.00	5.25	1.68	1
			N161763	26.00	27.00	1.00	5.94	1.33	1
			N161764	27.00	28.00	1.00	6.76	1.47	1
			N161765	28.00	29.00	1.00	4.9	1.65	1
			N161766	29.00	30.00	1.00	4.64	1.8	3
			N161767	30.00	31.00	1.00	4.37	3.32	18
			N161768	31.00	32.00	1.00	7.11	4	36
			N161769	32.00	33.00	1.00	10.21	8.8	92
			N161771	33.00	34.00	1.00	9.06	4.21	76
			N161772	34.00	35.00	1.00	8.65	5.9	107
			N161773	35.00	36.00	1.00	13.82	2.22	81
			N161774	36.00	37.00	1.00	11.68	2.82	96
			N161776	37.00	38.00	1.00	12.92	7.18	169
			N161777	38.00	39.00	1.00	12.7	8.9	192
			N161778	39.00	40.00	1.00	8.94	4.43	95
			N161779	40.00	41.00	1.00	9.92	6.66	133
			N161780	41.00	42.00	1.00	10.51	10.8	213
			N161781	42.00	43.00	1.00	9.11	10.13	227
			N161782	43.00	44.00	1.00	1.85	21.87	340
			N161783	44.00	44.73	0.73	6.38	11.03	274

Structure:

22.20	-	bedding 40° to c/a
23.60	-	bedding 50° to c/a
24.20	-	bedding 30° to c/a
24.80	-	bedding 65° to c/a
25.70	-	bedding 35° to c/a
26.80	-	bedding 40° to c/a
27.70	-	bedding 30° to c/a

Lithology										
From	*To*			*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
29.80	-		bedding 50° to c/a							
32.40	-		bedding 35° to c/a							
35.10	-		bedding 40° to c/a							
36.00	-		bedding 20° to c/a							
36.75	-		bedding 30° to c/a							
37.90	-		bedding 10° to c/a							
39.00	-		bedding 30° to c/a							
40.00	-		bedding 35° to c/a							
42.40	-		bedding							
42.80	-	43.20	fault Highly broken, vuggy, clayey. Possibly some lost core here.							
44.70	-		bedding 60° to c/a							
Veins:										
21.22	-	35.1	carbonate , 2%; 5mm, carbonate veins generally constrained to cherty beds (perpendicular to bedding), occasionally cross cutting bedding.							
44.73	-	48.91	**nss near solid sulphide** Fairly massive, irregular bands of sulphides in quartz/carbonate rich groundmass (brownish in colour). Minor blebby earthy chlorite. Mineralization consists of Pyrite, Sphalerite, Galena, Pyrrhotite, Chalcopyrite. Strongly brecciated in appearance. Likely proximal to vent.	N161784	44.73	45.37	0.64	8.01	17.48	285
				N161785	45.37	46.00	0.63	1.13	10.71	124
				N161786	46.00	47.00	1.00	0.8	21.38	240
				N161787	47.00	48.00	1.00	1.56	14.49	173
				N161788	48.00	48.91	0.91	1.62	3.46	43
Alteration:										
44.73	-	48.91	Moderate silicification hydrothermal, Weak chloritization other.Silicification of groundmass. Blebby earthy carbonate.							
Structure:										
44.73	-	48.91	fracture Weakly blocky, brecciated-healed.							
45.20	-		other 20° to c/a sulphide banding							
47.70	-		other 30° to c/a sulphide banding							
Veins:										

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
44.73	- 48.91	carbonate oth, 10%; 10mm, brecciated off-white (ferroan) carbonate veins throughout. Highly irregular.							
48.91	- 53.56	**lmst limestone - mineralized** Moderately bedded, beds of 0.1-10cm. Generally silicified mudstone, barite, sphalerite, galena, pyrite, and likely carbonate beds. Bedding is generally irregular.	N161789	48.91	49.91	1.00	3.69	8.74	202
			N161791	49.91	50.91	1.00	3.4	9.87	150
			N161792	50.91	51.91	1.00	0.06	11.37	133
			N161793	51.91	52.91	1.00	0.02	8.14	86
			N161794	52.91	53.56	0.65	0.09	12.06	121
		Structure:							
49.80	-	bedding 30° to c/a							
51.10	-	bedding 30° to c/a							
		Veins:							
48.91	- 53.56	carbonate oth, 5%; 10mm, Veins similar to previous unit (ferroan carbonate), though less irregular and less abundant							
53.56	- 57.74	**nss near solid sulphide** Fairly massive, irregular bands of sulphides in quartz/carbonate rich groundmass (brownish in colour). Minor blebby earthy chlorite. Mineralization consists of Pyrite, Sphalerite, Galena, Pyrrhotite, Chalcopyrite. Strongly brecciated in appearance. Silicified mudstone clasts near lower contact. Likely proximal to vent. Similar to 49.73-48.91m. Lower contact weakly gradational.	N161796	53.56	54.00	0.44	0.06	6.79	68
			N161797	54.00	55.00	1.00	0.14	6.62	70
			N161798	55.00	56.00	1.00	0.98	5.11	54
			N161799	56.00	57.00	1.00	8.38	21.99	236
			N161800	57.00	57.74	0.74	1.48	10.81	116
		Alteration:							
53.56	- 57.74	Moderate silicification hydrothermal.Silicified groundmass, and silicified clasts at lower contact.							
		Structure:							
56.10	-	other 20° to c/a sulphide banding							
		Veins:							

Lithology										
From	*To*			*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
53.56	- 57.74	carbonate oth, 15%; 5mm, brecciated off-white (ferroan) carbonate veins throughout. Highly irregular. Also quartz veins in silicified mudstone.								
57.74	- 68.90	**mdstn mudstone - mineralized** Generally weakly mineralized, though mineralization varies throughout. Patches of silicification (noted in alteration). Sections appear to contain stringer mineralization (most notably 57.74-60.24m). Otherwise rock is graphitic mudstone, generally massive, but sections with silty beds and pitted beds. Sections appear weakly brecciated. Pebbly at lower contact, though moderately altered and difficult to make out nature of contact.		N161801	57.74	58.37	0.63	2.69	2.86	37
				N161802	58.37	59.00	0.63	1.13	0.88	14
				N161803	59.00	60.00	1.00	0.78	0.75	9
				N161804	60.00	61.00	1.00	0.25	2.58	18
				N161805	61.00	62.00	1.00	0.66	1.93	14
				N161806	62.00	63.00	1.00	0.3	0.32	6
				N161807	63.00	64.00	1.00	0.03	0.31	7
				N161808	64.00	65.00	1.00	0.88	0.15	5
				N161809	65.00	66.00	1.00	0.01	0.04	2
				N161811	66.00	67.00	1.00	0.02	0.05	4
				N161812	67.00	68.00	1.00	0.03	0.02	3
				N161813	68.00	68.90	0.90	0.06	0.01	3

Alteration:

57.74	- 60.24	Moderate silicification other.Weakly patchy, giving an overall mottled appearance. Also frequent light brown specks, concordant with bedding and fine, bladed carbonate?
60.24	- 67.41	Weak silicification localized.Silicified "stringers", generally with Pyrite associated
67.41	- 68.90	Moderate silicification other.Silicification of groundmass

Structure:

59.00	-	bedding 30° to c/a
60.80	-	bedding 40° to c/a
63.00	-	bedding 40° to c/a
63.50	- 64.30	fault highly broken up, fractures appear greasy, graphitic.
66.10	- 66.30	fault Broken up, graphitic gouge.
66.70	-	bedding 40° to c/a

Veins:

57.74 - 60.24 carbonate oth, 10%; 3mm, fine, irregular, off-white ferroan carbonate veins. Slightly

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
		thicker straight white quart veins.							
60.24	- 67.41	carbonate str, 2%; 10mm, Variable stringer off-white (ferroan) carbonate veins, with associated Pyrite.							
67.41	- 68.9	carbonate oth, 5%; 3mm, Brecciated off-white (ferroan) carbonate veins throughout.							
68.90 - 80.35		**sndstn sandstone** Medium grained sandstone with small pebbles in places. Interbedded with pebbly conglomerate. Often the contact between the two units is sharp, and appears dissolved (stylolitic), generally low angle. Conglomerate consistent with next unit. 70:30 sandstone:conglomerate.	N161814	68.90	69.90	1.00	0.1	0.005	1
			N162408	74.65	75.40	0.75	0.005	0.005	1
			N162409	75.40	76.05	0.65	0.01	0.005	1
			N162411	76.05	76.70	0.65	0.005	0.005	1
			N162412	76.70	77.35	0.65	0.02	0.005	1
		Alteration:							
68.90	- 70.90	Weak silicification localized.Groundmass is generally altered, mottled.							
		Structure:							
68.90	- 70.00	fracture generally blocky							
73.50	-	sheared 20° to c/a							
75.10	-	contact 15° to c/a contact between sandstone and conglomerate							
77.40	-	sheared 20° to c/a graphitic							
		Veins:							
68.90	- 80.35	quartz stk, 5%; 100mm, Several generations of veins. Thinner, straight veins, and coarser veins in which some material has been dissolved out, and euhedral quartz crystals have formed.							
80.35 - 125.00		**congl conglomerate** Clast supported, polymict conglomerate. Clasts are dominantly composed of white to light grey chert (~80%), but dark grey to black mudstone (5%), medium grey siltstone (10%), and white quartz (5%) clasts are also common. Clast size generally ranges from 0.1-2cm, though rarely clasts are up to 5cm in diameter. Clasts are subangular to subrounded. Mudstone clasts tend to be more angular, and occasionally distended/elongate. Clasts are weakly aligned. Rare mudstone beds. Matrix is very fine grained and grey. Blocky in places. Mud becomes more dominant and core becomes graphitic ~124.3m.							
112.00	- 112.30	**qtzvn qtz vein**							

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
		Massive white quartz vein, vuggy (likely some other material dissolved out) with euhedral quartz crystals growing into vugs.							
120.00	121.40	**mdstn mudstone** Dark grey mudstone with interbeds of siltstone, 1-8cm thick, 5% siltstone beds overall. Core is highly broken.							
Structure:									
86.80	88.10	fracture blocky							
89.00		other 40° to c/a clast alignment							
93.80	94.20	fracture blocky							
97.70		other 30° to c/a clast alignment							
110.10	114.40	fracture blocky, graphite on fractures							
114.40	120.00	fracture weakly fractured, but graphite on fractures.							
120.00		contact 15° to c/a sharp, slightly wavy							
120.01	122.20	fault graphitic gouge							
120.10		bedding 55° to c/a							
121.00		other 30° to c/a clast alignment							
124.30	125.00	fracture blocky							
Veins:									
80.35	120	quartz , 1%, 30°; 10mm, Straight white quartz veins, most low angle.							
120.00	121.4	quartz , 1%; 5mm, generally small quartz or carbonate veins cross cutting bedding, with one larger off white carbonate vein parallel to bedding.							
121.40	125	quartz , 2%, 50°; 25mm, Straight white quartz veins, generally ~50 degrees though rare smaller veins crosscutting.							
125.00	129.00	**mdstn mudstone** Fine grained dark grey mudstone interbedded with medium grey silty beds. ~5% silty beds, 0.5-5cm thick, increasing in abundance and thickness downhole. Bedding is fairly irregular, with microfractures and possible slumping. Broken and gouge at upper contact.							
Structure:									

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
125.00	-	contact 40° to c/a sharp, highly wavy							
125.01	- 127.30	fault blocky, graphitic gouge							
125.10	-	bedding 40° to c/a							
127.40	-	bedding 30° to c/a							
128.00	-	bedding 70° to c/a							
128.50	-	bedding 50° to c/a							
Veins:									
125.00	- 129	quartz , 2%; 10mm, Small boudinaged quartz veins, and off-white (ferroan)carbonate infilling breccia.							

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	*Co-ordinate System*		*Grid/Property*		*Hole Type*	*Length*	*Date Started*
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	125.00	30/08/2011
District	*UTM North*	*UTM East*	*Local Grid E*	*Local Grid N*	*Collar Survey Method*		*Date Completed*
Watson Lake Mining District	7004015.92	441916.09			DGPS		01/09/2011
Project	*UTM Elevation*	*Azimuth Astro. (°)*	*Azimuth Grid (°)*	*Dip (°)*	*Drill Contractor*		*Date Logged*
013	1538.50	65.00		-80.00	Rodren Drilling Ltd		03/09/2011
Area	*Claim No.*	*NTS Sheet*	*Supervised By*		*Logged By*		*Verified*
MacMillan Pass	60497	105O/01	Matt Bodnar		Christina Taylor		☐

Zone/Prospect	*Assessment Rpt. No.*	*Core Storage*	*Plug Depth*	*Makes Water*	*Capped*	*Environmental Inspection*
Tom		On Site		☐	☑	☐

Core Size (1)	HQ	125	*Casing Pulled*	*Casing (1)*	6.00	HW	*Plugged*	*Pulsed*	*Geophysics Contractor*		*Date Pulsed*
(2)			☐	*(2)*			☐	☐			

Purpose	*Results*	*Comments*
Metallurgical twin hole - Target MET5 twinning hole TS088	The mineralized horizon was intersected and a weighted average for the zone returned 5.43% Zn, 1.53% Pb and 1.7g/t Ag over 39.80 meters (59.50 to 99.30).	Core is highly broken up, possibly near underground workings, TS088 showed similar structural problems - 56 HQ boxes - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	*Grid Azimuth (°)*		*Astro. Azimuth (°)*		*Dip (°)*		*Use Test*	*Survey Method*	*Mag. Field (nT)*	*Comments*
	Original	*Final*	*Original*	*Final*	*Original*	*Final*				
0.00			41.4	65	-80		☐	Multi-shot Reflex		Collar
14.00			55.5	79.1	-82.1		☐	Multi-shot Reflex	57715	Poor Az
44.00			53.4	77	-82		☐	Multi-shot Reflex	56900	Poor Az
74.00			54.3	77.9	-81.7		☐	Multi-shot Reflex	57029	Poor Az
101.00			35.6	59.2	-81.9		☐	Multi-shot Reflex	93195	Poor Az
125.00			54.3	77.9	-81.7		☐	Multi-shot Reflex	57029	Poor Az

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
0.00 -	6.50	**ovrbrdn overburden**							
6.50 -	59.50	**mdstn mudstone** Massive graphitic mudstone. Occasional bedding, very weak. Generally highly broken up, fractures occasionally have hard, platy, clear mineral coating (less commonly graphite.) Detailed RQD. Becomes less graphitic, chertier around 52m.	N161815	53.00	54.00	1.00	0.005	0.005	1
			N161816	54.00	55.00	1.00	0.02	0.005	1
			N161817	55.00	56.00	1.00	0.005	0.005	1
			N161818	56.00	57.00	1.00	0.05	0.005	1
			N161819	57.00	58.00	1.00	0.07	0.005	1
			N161821	58.00	58.71	0.71	0.05	0.005	1
			N161822	58.71	58.89	0.18	0.03	0.04	1
			N161823	58.89	59.50	0.61	0.03	0.08	1

Alteration:

6.50 -	10.60	Weak weathering fracture controlled.rusty coating on fractures

Structure:

9.90 -		bedding 40° to c/a
17.00 -	24.00	brecciated Highly brecciated, infilled with carbonate.
25.10 -		bedding 25° to c/a
36.10 -		bedding 50° to c/a
36.30 -	38.10	brecciated Brecciated, infilled with carbonate.
38.10 -	38.80	fault
39.90 -		bedding 20° to c/a
46.70 -		bedding 45° to c/a
48.30 -	50.00	fault Graphitic gouge.
51.50 -	59.50	brecciated commonly brecciated, occasionally fractures are left open.
55.40 -		bedding 45° to c/a

Veins:

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
6.50	- 17	carbonate , 1%; 1mm, Rare thin, white carbonate veins, following bedding?							
17.00	- 24	carbonate oth, 5%; 2mm, Common carbonate infilling fractures (brecciated), 23.5-24m: brownish (ferroan?) carbonate. Rare thin white carbonate veins parallel to bedding.							
24.00	- 36.3	carbonate , 2%; 2mm, Occasional thin white carbonate veins, generally low angle (following bedding?) Small sections of carbonate infilling breccia.							
36.30	- 40	carbonate , 5%; 2mm, Carbonate infilling fractures, often irregular, folded.							
40.00	- 59.5	carbonate , 2%; 1mm, Fairly frequent thin white carbonate veins. Rare thicker, brownish (ferroan?) carbonate veins.							
59.50 - 62.00		**Immudstn lime mudstone - mineralized** Strongly bedded, bedding is moderately disturbed (folded). Fine beds of (dark grey) mudstone (~35%), limestone, barite ore, and Pyrite. Mudstone beds generally mm scale, up to 10cm. Lower contact somewhat arbitrary as RQD is so poor. Fairly in tact, compared to next unit.	N161824	59.50	60.25	0.75	11.09	3.47	5
			N161825	60.25	61.00	0.75	11.67	5.85	7
			N161826	61.00	62.00	1.00	10.4	3.95	4

Structure:

59.50	-	contact 35° to c/a sharp, distinct
59.70	-	bedding 20° to c/a
60.10	-	bedding 0° to c/a
60.70	-	bedding 25° to c/a

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
62.00	94.00	**lmst limestone - mineralized** Core is highly pitted, leached, appears carbonate beds are dissolved away due to acidic water from underground? Finely bedded (laminated) pinkish grey. Bedding is highly disturbed, often folded, beds truncated. Some S folds. Beds mostly consist of Galena or Sphalerite mineralization, barite, or carbonate, which are mm scale. Occasionally cherty beds (~5% overall), up to 20cm thick, and are often fractured and irregular (even where core is intact). Rust on fractures.	N161827	62.00	63.00	1.00	12.52	1.65	1
			N161828	63.00	65.00	2.00			
			N161829	65.00	66.00	1.00	3.61	0.53	1
			N161831	66.00	67.00	1.00	10.18	0.52	1
			N161832	67.00	68.00	1.00			
			N161833	68.00	69.00	1.00	7.81	1.57	1
			N161834	69.00	70.00	1.00	7.2	1.4	1
			N161835	70.00	71.00	1.00	7.41	0.97	1
			N161836	71.00	72.00	1.00	9.66	1.51	1
			N161837	72.00	73.00	1.00	4.28	0.47	1
			N161838	73.00	74.00	1.00	8.06	2.17	1
			N161839	74.00	74.40	0.40	8.41	1.62	1
			N161841	74.40	74.60	0.20	6.28	1.26	1
			N161842	74.60	75.00	0.40	8.2	0.32	1
			N161843	75.00	76.00	1.00	6.22	0.46	1
			N161844	76.00	77.00	1.00	6.9	1.29	1
			N161845	77.00	78.00	1.00	6.43	1.44	1
			N161846	78.00	79.00	1.00	5.81	1.71	1
			N161847	79.00	80.00	1.00	6.03	1.74	1
			N161848	80.00	81.00	1.00	5.65	1.46	1
			N161849	81.00	82.00	1.00	5.09	1.5	1
			N161851	82.00	83.00	1.00	5.22	1.51	1
			N161852	83.00	84.00	1.00	5.3	1.59	1
			N161853	84.00	85.00	1.00	4.9	1.24	1
			N161854	85.00	86.00	1.00	5.7	1.16	1
			N161855	86.00	87.00	1.00	5.68	1.28	1
			N161856	87.00	88.00	1.00	5.52	1.68	1
			N161857	88.00	89.00	1.00	4.9	2.19	1
			N161858	89.00	90.00	1.00	4.88	1.81	1
			N161859	90.00	91.00	1.00	5.12	2.02	1
			N161861	91.00	92.00	1.00	3.61	3.68	1
			N161961	92.00	93.00	1.00	6.49	3.73	1
			N161862	93.00	94.00	1.00	4.59	1	1
63.00	65.00	**lstcore lost core**							

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
67.00	68.00	**Istcore lost core**							
Structure:									
62.40		bedding 0° to c/a							
68.00		bedding 40° to c/a							
68.80		bedding 0° to c/a							
69.90		bedding 10° to c/a							
72.50		bedding 0° to c/a							
72.70		bedding 70° to c/a							
73.70		bedding 10° to c/a							
75.05		bedding 70° to c/a displaced bed							
77.15		bedding 65° to c/a							
80.20		bedding 50° to c/a							
89.70		bedding 55° to c/a							
93.00		bedding 70° to c/a							
Veins:									
62.00		- 94 quartz , 1%; 3mm, Quartz veins associated with cherty beds. Possible generations of carbonate veins dissolved away.							
94.00	98.00	**Istcore lost core** Possible lost core, very poor ground, though not marked, could be tag error.	N161863	94.00	98.00	4.00			
Structure:									
97.30		bedding 50° to c/a							
98.00	99.30	**Immudstn lime mudstone - mineralized** Similar to 59.50-62.00m (possibly a repetition? Folding/faulting?) Strongly bedded, bedding is moderately disturbed (folded, truncated). Fine beds of (dark grey) mudstone (~45%), limestone, barite ore, and Pyrite. Mudstone beds generally mm scale, up to 2cm.	N161864	98.00	98.65	0.65	5.36	3.45	16
			N161865	98.65	99.30	0.65	4.12	5.05	23

Lithology										
From	*To*			*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
		Veins:								
	98.00	- 99.3 carbonate , 2%; 2mm, Thin, erratic, broken carbonate veins, not associated with bedding.								
99.30	- 125.00	**mdstn mudstone**								
		Massive graphitic mudstone with occasional silty interbeds. Silty beds increase downhole, becoming more abundant at ~112m.		N161866	99.30	100.00	0.70	0.04	0.02	1
				N161867	100.00	101.00	1.00	0.08	0.08	1
				N161868	101.00	101.80	0.80	0.04	0.06	3
				N161869	101.80	102.00	0.20	0.03	0.03	2
				N161871	102.00	103.00	1.00	0.01	0.005	1
				N161872	103.00	104.00	1.00	0.01	0.005	1
				N161873	104.00	105.00	1.00	0.05	0.005	2
				N161874	105.00	106.00	1.00	0.14	0.005	2
		Structure:								
	99.30	-	contact 35° to c/a							
	101.80	-	bedding 35° to c/a							
	104.50	-	bedding 35° to c/a							
	107.80	- 111.60	fault Graphite gouge common. Highly fractured.							
	112.80	-	bedding 35° to c/a							
	115.80	-	bedding 40° to c/a							
	121.00	-	bedding 40° to c/a							
		Veins:								
	99.30	- 125 quartz , 1%; 5mm, Thin erratic carbonate veins throughout. Quartz veins throughout, up to 5mm thick, broken, but becoming more regular, parallel to bedding downhole (namely after fault, ~112m.)								

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	*Co-ordinate System*		*Grid/Property*		*Hole Type*	*Length*	*Date Started*
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	86.00	01/09/2011
District	*UTM North*	*UTM East*	*Local Grid E*	*Local Grid N*	*Collar Survey Method*		*Date Completed*
Watson Lake Mining District	7003907.78	441972.96			GPS		02/09/2011
Project	*UTM Elevation*	*Azimuth Astro. (°)*	*Azimuth Grid (°)*	*Dip (°)*	*Drill Contractor*		*Date Logged*
013	1535.98	65.00		-78.00	Rodren Drilling Ltd		05/09/2011
Area	*Claim No.*	*NTS Sheet*	*Supervised By*		*Logged By*		*Verified*
MacMillan Pass	60497	105O/01	Matt Bodnar		Christina Taylor		☐

Zone/Prospect	*Assessment Rpt. No.*	*Core Storage*	*Plug Depth*	*Makes Water*	*Capped*	*Environmental Inspection*
Tom		On Site		☑	☑	☐

Core Size (1)	HQ	86	*Casing Pulled*	*Casing (1)*	9.00	HW	*Plugged*	*Pulsed*	*Geophysics Contractor*		*Date Pulsed*
(2)			☐	*(2)*			☐	☐			

Purpose	*Results*	*Comments*
Metallurgical twin hole - Target MET3 twinning TS086	The mineralized zone returned a weighted average of 5.48% Zn, 2.45% Pb and 5.1g/t Ag over 38.48 meters (28.52 to 67.00m).	Shut down at 86m due to hitting steel in hole. Possibly too close to underground workings - Left open - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	*Grid Azimuth (°)*		*Astro. Azimuth (°)*		*Dip (°)*		*Use Test*	*Survey Method*	*Mag. Field (nT)*	*Comments*
	Original	*Final*	*Original*	*Final*	*Original*	*Final*				
0.00			41.4	65	-78		☐	Multi-shot Reflex		Collar
11.00			36.1	59.7	-76.4		☐	Multi-shot Reflex	58387	
38.00			36.1	59.7	-72.8		☐	Multi-shot Reflex	57137	
68.00			35.7	59.3	-79.9		☐	Multi-shot Reflex	56953	Dip?

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
0.00 -	4.50	**ovrbrdn overburden**							
4.50 -	28.52	**mdstn mudstone** Massive mudstone, very weak bedding, defined by fine grained Pyrite or fracturing. Rare cherty beds, nodules elongate with bedding.	N161875	22.00	23.00	1.00	0.02	0.005	1
			N161876	23.00	24.00	1.00	0.02	0.005	1
			N161877	24.00	25.00	1.00	0.02	0.005	1
			N161878	25.00	26.00	1.00	0.06	0.005	1
			N161879	26.00	26.20	0.20	0.02	0.005	1
			N161881	26.20	27.00	0.80	0.005	0.02	1
			N161882	27.00	28.00	1.00	0.12	0.005	1
			N161883	28.00	28.52	0.52	0.06	0.02	1

Alteration:

4.50 - 12.00 Moderate weathering fracture controlled.Rusty coatings on fractures

Structure:

7.70 - 28.52 brecciated sporadically weakly brecciated, infilled with white carbonate. Generally increases in intensity downhole.

10.50 - bedding 35° to c/a

14.70 - bedding 50° to c/a

18.50 - bedding 50° to c/a

25.90 - bedding 40° to c/a

28.40 - bedding 45° to c/a

Veins:

4.50 - 28.52 carbonate , 1%; 10mm, Most common are straight white carbonate veins, parallel to or crosscutting bedding. Otherwise off-white (Ferroan) carbonate is found in association with (healing) brecciation.

20.15 - 29.8 carbonate , 5%, 30°; 10mm, White and orange stained (mixture calcite and ferroan carbonate?) stained straight carbonate veins. Generally crosscutting bedding at ~30 degrees.

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
28.52 -	30.81	**Immudstn lime mudstone - mineralized** Strongly bedded, bedding occasionally weakly disturbed, some microfractures. Fine beds of (dark grey) mudstone (~35%), limestone, barite ore, and Pyrite. Mudstone beds generally mm scale, up to 10cm. All other beds 1-2mm. Rusty coatings on fractures is common throughout this unit. Core appears weakly leached within ~10cm of lower contact. Lower contact gradational.	N161884	28.52	29.00	0.48	11.92	3.3	6
			N161885	29.00	30.00	1.00	6.46	3.15	6
			N161886	30.00	30.81	0.81	8.9	2.57	3

Alteration:

28.52 - 30.81 Weak weathering fracture controlled.Rusty coatings on fractures, leached.

Structure:

29.00 - bedding 35° to c/a

30.00 - bedding 45° to c/a

30.65 - bedding 55° to c/a

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
30.81	67.00	**lmst limestone - mineralized** Finely bedded (laminated) pinkish grey. Beds mostly consist of Galena or Sphalerite mineralization, barite, or carbonate, which are mm scale. Occasionally cherty beds (5-10% overall), 1-5cm on average, but up to 50cm thick, rare mudstone or silty/sandy beds. Bedding is weakly to moderately disturbed, becomes increasingly irregular downhole (~42.8m), mm to cm scale folding of mineralized beds, fracturing and displacing of cherty beds. Pb content appears to increase significantly ~60m. Localized rusty fractures and pitting of core. Lower contact lost. Coarse, crystalline gypsum? Infilling fractures @ 54.8m and 59.4m, rusty coating in between gypsum and host rock.	N161887	30.81	31.40	0.59	5.46	1.44	1
			N161888	31.40	32.00	0.60	6.75	1.12	1
			N161889	32.00	33.00	1.00	6.98	1.42	1
			N161891	33.00	34.00	1.00	6.65	1.77	1
			N161892	34.00	35.00	1.00	5.09	2.45	1
			N161893	35.00	36.00	1.00	5	2	1
			N161894	36.00	37.00	1.00	4.46	2.61	1
			N161895	37.00	38.00	1.00	4.98	1.83	1
			N161896	38.00	39.00	1.00	5.14	1.35	1
			N161897	39.00	40.00	1.00	4.61	1.4	1
			N161898	40.00	41.00	1.00	4.76	1.37	1
			N161899	41.00	42.00	1.00	4.69	1.33	1
			N161901	42.00	43.00	1.00	4.35	1.81	1
			N161902	43.00	44.00	1.00	5	2.48	1
			N161903	44.00	45.00	1.00	4.63	2.36	1
			N161904	45.00	46.00	1.00	4.69	1.84	1
			N161905	46.00	47.00	1.00	4.62	1.1	1
			N161906	47.00	48.00	1.00	3.32	2.03	1
			N161907	48.00	49.00	1.00	6.29	2.17	1
			N161908	49.00	50.00	1.00	6.04	1.82	1
			N161909	50.00	51.00	1.00	5.31	1.36	1
			N161911	51.00	52.00	1.00	6.05	2.32	1
			N161912	52.00	53.00	1.00	4.69	2.55	1
			N161913	53.00	54.00	1.00	4.96	2.25	1
			N161914	54.00	55.00	1.00	3.8	0.76	1
			N161915	55.00	56.00	1.00	5.49	1.24	1
			N161916	56.00	57.00	1.00	3.51	1.02	1
			N161917	57.00	58.00	1.00	5.23	2.51	1
			N161918	58.00	59.00	1.00	5.2	1.68	1
			N161919	59.00	60.00	1.00	3.51	1.59	3
			N161921	60.00	61.00	1.00	3.86	5.33	12
			N161922	61.00	62.00	1.00	4.76	3.34	12
			N161923	62.00	63.00	1.00	7.79	7.75	28
			N161924	63.00	64.00	1.00	8.55	4.31	9
			N161925	64.00	64.35	0.35	7.3	6.79	5
			N161926	64.35	64.58	0.23	6.91	7.4	5

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
			N161927	64.58	65.00	0.42	6.01	5.85	6
			N161928	65.00	66.00	1.00	7.26	3.01	28
			N161929	66.00	67.00	1.00	6.37	5.17	61

Alteration:

30.81 - 65.10 Weak weathering localized.Sporadic rusty coatings on fractures.

65.10 - 66.00 Strong weathering pervasive.Very rusty, leached.

Structure:

35.40 - bedding 45° to c/a

40.50 - bedding 30° to c/a

41.80 - fold nose S-fold of bedding

43.20 - bedding 40° to c/a

44.60 - bedding 35° to c/a

45.50 - bedding 50° to c/a

46.75 - bedding 40° to c/a

48.90 - bedding 30° to c/a

52.80 - bedding 45° to c/a

54.70 - bedding 35° to c/a

57.00 - bedding 25° to c/a

58.40 - bedding 30° to c/a

60.10 - bedding 20° to c/a

61.30 - bedding 35° to c/a

61.40 - bedding 50° to c/a

61.60 - bedding 0° to c/a

61.70 - bedding 50° to c/a

62.40 - bedding 45° to c/a

62.75 - bedding 0° to c/a

63.00 - bedding 45° to c/a

64.00 - bedding 40° to c/a

65.00 - bedding 30° to c/a

Lithology From	To			Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
66.00	- 67.00	fracture Highly fractured.								
Veins:										
30.81	- 66	carbonate , 1%, 45°; 5mm, White, straight carbonate veins, perpendicular to bedding, associated with cherty beds.								
67.00	- 72.00	**lstcore lost core** Very little core recovered here. What little is present appears to be leached, mineralized barite ore, but contact with mudstone is lost.		N161931	67.00	72.00	5.00			
72.00	- 86.00	**mdstn mudstone** Sections extremely broken, but there appears to be a mineralized stringer section in the first ~1m of the recovered unit. Moderately graphitic with minor silty beds. Silty beds are very Pyrite rich.		N161932	72.00	73.00	1.00	22.89	7.56	131
				N161933	73.00	74.00	1.00	0.1	1.8	24
				N161934	74.00	75.00	1.00	0.75	1.4	19
				N161935	75.00	76.00	1.00	0.68	2.75	28
				N161936	76.00	76.80	0.80	0.22	1.65	17
				N161937	76.80	77.00	0.20	1.34	0.71	9
				N161938	77.00	78.00	1.00	0.16	0.29	5
				N161939	78.00	79.00	1.00	0.2	0.25	4
				N161941	79.00	80.00	1.00	0.07	0.16	4
				N161942	80.00	81.00	1.00	0.07	0.12	3
				N161943	81.00	82.00	1.00	0.12	0.11	3
Structure:										
72.00	- 76.80	fracture Highly fractured.								
74.30	-	bedding 45° to c/a								
79.00	-	bedding 50° to c/a								
80.90	-	bedding 40° to c/a								
83.70	- 86.00	fracture Highly fractured, rubble 84.2-86.0m								
84.60	-	bedding 40° to c/a								

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
Veins:									
72.00		- 86 carbonate , 1%; 1mm, Occasional white, straight to wispy carbonate veins. Crosscutting bedding.							

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	*Co-ordinate System*		*Grid/Property*		*Hole Type*	*Length*	*Date Started*
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	158.00	02/09/2011
District	*UTM North*	*UTM East*	*Local Grid E*	*Local Grid N*	*Collar Survey Method*		*Date Completed*
Watson Lake Mining District	7003964.2	441804.81			DGPS		05/09/2011
Project	*UTM Elevation*	*Azimuth Astro. (°)*	*Azimuth Grid (°)*	*Dip (°)*	*Drill Contractor*		*Date Logged*
013	1479.16	65.00		-45.00	Rodren Drilling Ltd		07/09/2011
Area	*Claim No.*	*NTS Sheet*	*Supervised By*		*Logged By*		*Verified*
MacMillan Pass	60498	105O/01	Christina Taylor		Andrew Ganton		☐

Zone/Prospect	*Assessment Rpt. No.*	*Core Storage*	*Plug Depth*	*Makes Water*	*Capped*	*Environmental Inspection*
Tom		On Site		☐	☑	☐

Core Size (1)	HQ	158	*Casing Pulled*	*Casing (1)*	9.00	HW	*Plugged*	*Pulsed*	*Geophysics Contractor*		*Date Pulsed*
(2)			☐	*(2)*			☐	☐			

Purpose	*Results*	*Comments*
Metallurgical twin hole - Target MET 7 twinning TS019	The mineralized zone returned a weighted average of 5.63% Zn, 0.85% Pb and 1.0g/t Ag over 30.11 meters (101.00 to 131.11m).	HW casing - Casing left in - Not cemented - Not Probed - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series Mineralized Ore zone hit at 104m - 137m.

Distance	*Grid Azimuth (°)*		*Astro. Azimuth (°)*		*Dip (°)*		*Use Test*	*Survey Method*	*Mag. Field (nT)*	*Comments*
	Original	*Final*	*Original*	*Final*	*Original*	*Final*				
0.00			41.4	65	-45		☐	Multi-shot Reflex		Collar
14.00			37.6	61.2	-43.8		☐	Multi-shot Reflex	57437	Good
35.00			40.1	63.7	-43.2		☐	Multi-shot Reflex	56970	Good
59.00			40.7	64.3	-42.1		☐	Multi-shot Reflex	57168	Good
95.00			41.3	64.9	-41.2		☐	Multi-shot Reflex	57139	Good
122.00			41.3	64.9	-39.8		☐	Multi-shot Reflex	57101	Good
146.00			42.5	66.1	-39.2		☐	Multi-shot Reflex	57050	Good

Lithology											
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
0.00 -	7.08	**cas casing** Casing							
7.08 -	100.40	**mdstn mudstone** Black fine grained massive mudstone unit. Unit contains numerous small intervals of increased graphite content (up to 30cm), where unit becomes highly fractured (at 8m, 46.1m, 56.7m and 58.8m, 63.7m, 66.5m, 86.2m, 86.6m, and 88.8m, 92.2m). Small regular pyrite bands (up to 1.5mm in width) and undulatory quartz pyrite stringers (up to 5mm in width) are common up to 52m, past which they decrease in occurrence. Scattered intervals of very fine grained disseminated pyrite are noted within the mudstone. Occurrence and width of pyrite bearing quartz veins increase towards lower contact of the unit.	N161944	90.00	91.00	1.00	0.02	0.005	1
			N161945	91.00	92.00	1.00	0.02	0.005	1
			N161946	92.00	93.00	1.00	0.06	0.01	1
			N161947	93.00	94.00	1.00	0.02	0.005	1
			N161948	94.00	95.00	1.00	0.02	0.005	1
			N161949	95.00	95.70	0.70	0.06	0.02	1
			N162018	95.70	96.00	0.30	0.03	0.01	1
			N161951	96.00	97.00	1.00	0.13	0.005	1
			N161952	97.00	98.00	1.00	0.03	0.005	1
			N161953	98.00	99.00	1.00	0.01	0.005	1
			N161954	99.00	100.00	1.00	0.02	0.005	1
			N162017	100.00	100.40	0.40	0.02	0.005	1

Structure:

23.40 -	lamination	70° to c/a	assume regular even pyrite lamination are parallel to bedding?
26.82 -	lamination	70° to c/a	py lam
28.40 -	lamination	70° to c/a	py lam
29.30 -	lamination	70° to c/a	py lam
33.80 -	lamination	70° to c/a	py lam
39.85 -	lamination	70° to c/a	py lam
40.60 -	lamination	70° to c/a	py lam
43.41 -	lamination	70° to c/a	py lam
46.75 -	lamination	70° to c/a	py lam
49.15 -	lamination	70° to c/a	py lam

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
52.70	-	vein 50° to c/a qtz veins							
61.77	-	cleavage 40° to c/a							
69.33	-	lamination 60° to c/a py lam							
79.28	-	vein 65° to c/a qtz pyrite stringer							
95.11	-	vein 40° to c/a regular thin (<0.5mm) qtz stringers							

Veins:

7.08 - 100.4 quartz str, 0.1%, occasion qtz stringers usually bedding parallel 70 degrees to CA, with minor amount cross cutting

100.40 - 108.00 **Immudstn lime mudstone - mineralized**

Dark grey fine grained limestone laminated mudstone. The overlying massive mudstone grades into a laminated mudstone (initially 90%) containing limestone laminae (~1mm in thickness)and pyrite laminae with minor galena laminae (~1mm in thickness). Unit is moderately mineralized with laminae of pyrite and slight galena over from 100.4m to 107.5m (75% mud). Laminae become highly contorted past 103.36m to 109.74m. First appearance of barite laminae ~1mm in width is at 105m and continues to increase in occurrence towards the lower contact. The lower contact is gradational as limestone laminae begin to dominate over mudstone laminae at 107.5m.

N161956	100.40	101.00	0.60	0.04	0.005	1
N161957	101.00	102.00	1.00	3.14	0.03	1
N161958	102.00	103.00	1.00	6.17	0.13	1
N161959	103.00	104.00	1.00	8.58	0.16	1
N161962	104.00	105.00	1.00	7.14	0.19	1
N161963	105.00	106.00	1.00	8.54	0.23	1
N161964	106.00	107.00	1.00	5.91	0.18	1
N161965	107.00	108.00	1.00	7.92	0.22	1

Structure:

101.70 - lamination 70° to c/a min carb laminae

101.75 - vein 75° to c/a qtz carb stringer set

103.08 - lamination 75° to c/a carb laminae; past which laminae highly contorted

Veins:

100.40 - 108 quartz str, 1%, increase in qtz-pyrite veining proximal to the ore zone

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
108.00	- 111.00	**lmst limestone - mineralized** Fine grained medium grey laminated mud-barite limestone in which past 107.5m unit becomes dominated by limestone (average 70%+) with minor laminae of mudstone with the occasional silty mud bed up to 2cm in width. Laminae become more regular past 109.74m with minor intervals displaying undulatory laminae as mud content decreases to less than 5%. Barite content increases gradually from 1% in the mudstone dominated part of the unit to 10% in the limestone dominated transitional zone. Barite occurs as concordant laminae, up to 5mm in thickness, and can display a minor boudinage texture. Unit is moderately mineralized with fine grained pyritic laminae and associated fine grained disseminated galena up to 5% total sulphides. Mineralization is constrained to laminae as well as rare cross cutting carbonate veins. This unit has a gradational lower contact and is defined by a decrease in the mud laminae and an increase in limestone and barite content.	N161966	108.00	109.00	1.00	7.86	0.78	1
			N161967	109.00	110.00	1.00	7.87	0.26	1
			N161968	110.00	111.00	1.00	7.38	0.19	1

Structure:

110.78 - lamination 75° to c/a barite laminae

Veins:

108.00 - 111 carbonate str, 1%, qtz-carb-py within ore zone containing fg diss galena /minor sphal

Lithology

From	*To*	
111.00	131.11	**lmst limestone - mineralized** Light grey fine grained barite-laminated limestone with minor chert beds up to 3.5cm in thickness. Barite content increases up to 40% locally. Unit contains 8-10% muddy chert (dirty chert) beds up to 3.5cm in thickness at scattered intervals throughout. Limestone barite laminated ore contains fine grained galena up to 5% and associated pyrite up to 5%. Total sulphide content can reach up to 10% (and even 15% over short intervals +/- visible sphalerite content). Mineralization is concordant with laminae and some irregular and rare irregular carbonate veins (up to 1.5cm in width) where it forms on the fringes in coarser disseminated grains. Some rose and honey coloured sphalerite is noted, but is very fine grained and disseminated within baritic/carb laminae? Some barite laminae contain small aligned square euhedral grains or clasts that line the margins of the laminae. The grains are unknown, but could be the remnant clasts of a mud layer which has been split apart evenly by the injection of baritic fluids? Syndeformational folding and micro faulting is noted at 50-60 degrees to CA (theta 1 = perp to CA). The lower contact of this unit is not sharp, as at 130.3m unit becomes heavily leached and contact with underlying mudstone is within 15cm of rubbly core.

Alteration:

130.00	131.11	Strong weathering pervasive.near lower contact, lam barite becomes very heavily leached.

Structure:

113.40	-	lamination 70° to c/a lim-barite laminae
115.72	-	lamination 55° to c/a lim-barite laminae
117.10	-	lamination 65° to c/a lim-barite laminae
122.27	-	lamination 70° to c/a lam undulate about 70 degrees
130.41	-	fracture 65° to c/a consistent stepped fracture around 65-70

Sample #	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
N161969	111.00	112.00	1.00	6.7	1.08	1
N161971	112.00	113.00	1.00	5.87	0.69	1
N161972	113.00	114.00	1.00	5.78	0.19	1
N161973	114.00	115.00	1.00	5.75	0.25	1
N161974	115.00	116.00	1.00	5.92	0.25	1
N161976	116.00	117.00	1.00	3.17	0.74	1
N161977	117.00	118.00	1.00	4.84	1	1
N161978	118.00	119.00	1.00	5.57	1.73	1
N161979	119.00	120.00	1.00	5.4	0.93	1
N161981	120.00	121.00	1.00	5.57	1.12	1
N161982	121.00	122.00	1.00	5.03	1.32	1
N161983	122.00	123.00	1.00	3.97	1.41	1
N161984	123.00	124.00	1.00	5.35	1.42	1
N161985	124.00	125.00	1.00	4.77	1.92	1
N161986	125.00	126.00	1.00	5.56	0.75	1
N161987	126.00	127.00	1.00	3.78	1.72	1
N161988	127.00	128.00	1.00	3.87	1.71	1
N162019	128.00	128.20	0.20	3.84	0.81	1
N161989	128.20	129.00	0.80	4.49	1.67	1
N161991	129.00	130.00	1.00	4.24	1.43	1
N161992	130.00	131.00	1.00	3.19	1.88	1
N161993	131.00	131.11	0.11	2.87	2.94	1

Lithology From	To	Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
Veins:								
111.00 - 131.11	carbonate cc, 2%, carb stringers containing minor fg diss galena							
131.11 - 158.00	**mdstn mudstone** Dark grey black fine grained massive mudstone, highly silicified near the upper contact with the overlying ore zone but becomes highly graphitic past 148.8m. The upper most section of this unit is highly baritic, with regular thin laminations as well as cross-cutting barite stringers (2 fluid injection events?) containing pyrite, galena, and occasional sphalerite mineralization. Ore zone continues into mudstone unit to 139m depth. Overall unit contains occasional parallel disseminated pyritic bands up to 1cm in thickness as well as quartz stringers which are also parallel to the pyritic bands. Could be a proxy for bedding. Core becomes highly fractured and crushed once graphite content increases. Intact core displays a regular fracture pattern parallel to pyritic bands and qtz stringer - difficult to tell if cleavage or bedding. Unit is only mineralized with minor amount of pyrite.	N161994	131.11	132.00	0.89	3.6	3.27	1
		N161996	132.00	133.00	1.00	2.35	2.22	1
		N161997	133.00	134.00	1.00	1.69	0.82	6
		N161998	134.00	135.00	1.00	1.64	0.64	4
		N161999	135.00	136.00	1.00	2.87	0.14	1
		N162001	136.00	136.66	0.66	0.51	0.46	4
		N162002	136.66	137.00	0.34	0.06	0.84	7
		N162003	137.00	138.00	1.00	0.06	1.25	10
		N162004	138.00	139.00	1.00	0.005	0.03	2
		N162005	139.00	140.00	1.00	0.005	0.06	3
		N162021	140.00	140.19	0.19	0.02	0.005	1
		N162006	140.19	141.00	0.81	0.005	0.005	1
		N162007	141.00	142.00	1.00	0.005	0.005	1
		N162008	142.00	143.00	1.00	0.005	0.005	1
		N162009	143.00	144.00	1.00	0.005	0.005	1
		N162011	144.00	145.00	1.00	0.005	0.005	1
		N162012	145.00	146.00	1.00	0.005	0.005	1
		N162013	146.00	147.00	1.00	0.005	0.005	1
		N162014	147.00	148.00	1.00	0.005	0.005	1
		N162016	148.00	149.00	1.00	0.005	0.005	1
131.11 - 136.66	**mdstn mudstone - mineralized** A laminated barite mudstone unit located below the ore zone. Unit contains regular thin laminae of barite up to 1.5mm in size as well as crosscutting barite and quartz stringers. Unit is highly silicified and contains scattered mineralized bands of solid pyrite up to 1mm in thickness as well as galena and rose coloured sphalerite up to 1% overall.							
Alteration:								
131.11 - 146.00	Moderate silicification pervasive.highly silicified mudstone over the upper 8m decreasing in intensity with depth.							
Structure:								

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
133.75	-	lamination 65° to c/a barite lam in mudstone							
148.21	-	vein 70° to c/a several regular thin qtz stringers							
154.28	-	fracture 65° to c/a several parallel fractures within 30cm, appear to be parallel to bedding							
Veins:									
131.11	- 149	barite str, 1.5%, barite stringers bedding parallel as well as later stage cross cutting veinlets - minor py min							
149.00	- 158	quartz str, 0.5%, qtz stringers - most bedding parallel - some cross cutting (minor)							

REVELATION
GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	Co-ordinate System		Grid/Property		Hole Type	Length	Date Started
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	194.00	05/09/2011
District	**UTM North**	**UTM East**	**Local Grid E**	**Local Grid N**	**Collar Survey Method**		**Date Completed**
Watson Lake Mining District	7003963.48	441803.6			DGPS		08/09/2011
Project	**UTM Elevation**	**Azimuth Astro. (°)**	**Azimuth Grid (°)**	**Dip (°)**	**Drill Contractor**		**Date Logged**
013	1478.94	65.00		-65.00	Rodren Drilling Ltd		08/09/2011
Area	**Claim No.**	**NTS Sheet**	**Supervised By**		**Logged By**		**Verified**
MacMillan Pass	60498	105O/01	Kevin Wells		Andrew Ganton		☐
Zone/Prospect	**Assessment Rpt. No.**	**Core Storage**		**Plug Depth**	**Makes Water**	**Capped**	**Environmental Inspection**
Tom		On Site			☐	☑	☐

Core Size (1)	HQ	194	Casing Pulled	Casing (1)	12.00	HW	Plugged	Pulsed	Geophysics Contractor	Date Pulsed
(2)			☐	(2)			☐	☐		

Purpose	Results	Comments
Infill target on West Zone - P1	The mineralized zone returned a weighted average of 4.51% Zn, 0.75% Pb and 1.1g/t Ag over 35.00 meters (117.00 to 152.00m).	HW casing - Casing left in - Not cemented - Not Probed - Drill inspection Sep 6, 2011 - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	Grid Azimuth (°)		Astro. Azimuth (°)		Dip (°)		Use Test	Survey Method	Mag. Field (nT)	Comments
	Original	Final	Original	Final	Original	Final				
0.00			41.4	65	-65		☐	Multi-shot Reflex		Collar
14.00			38.9	62.5	-64.5		☐	Multi-shot Reflex	58363	Good
47.00			35.3	58.9	-63.1		☐	Multi-shot Reflex	57446	Good
71.00			35.9	59.5	-61.7		☐	Multi-shot Reflex	57400	Good
98.00			35.7	59.3	-61.1		☐	Multi-shot Reflex	57379	Good
125.00			35.9	59.5	-60.7		☐	Multi-shot Reflex	57515	Good
149.00			36.6	60.2	-60.2		☐	Multi-shot Reflex	57510	Good
176.00			36.3	59.9	-59.6		☐	Multi-shot Reflex	57346	Good
197.00			36.5	60.1	-59.3		☐	Multi-shot Reflex	57279	Good

Lithology											
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
0.00 -	7.47	**cas casing** Casing							
7.47 -	119.05	**mdstn mudstone** Dark black fine grained massive mudstone with occasional pyritic bands, approximately 1-1.5% of total rock. Majority of bands are 1-2mm in thickness with very fine grain disseminated pyrite. Occasional large bands (0.1%) can be up to 2cm in thickness and contain coarse grain disseminated pyrite (cloudy texture - semi net textured). Unit also contains regular thin faint qtz stringers (<2% overall) - of which 75% contain up to 10% medium to coarse grained pyrite. Regular pyritic bands and parallel qtz strings are thought to follow concordantly with bedding at 50 degrees to CA over the unit, with little deviation (+/- 1-5 degrees). The preferred fracture plane also follows the same angle and usually occurs along pyritic stringers or bands. Some qtz veins are seen to be as thick as 1cm and contain very coarse euhedral cubic pyrite, but again are rare (<1%). 0.5m above lower contact at 119.05m, very fine grained sphalerite can be seen in qtz-py stringer (0.1% - trace.) Past 74.48m graphite content increases causing core to shear along graphite rich planes at multiple angles to CA. 86-109m: core is highly fractured and 85% of core is crumbles of mudstone (rubble) with only 15% intact core. Unit is mineralized with pyrite only up to a maximum of 1.5% total sulphide.	N162022	109.00	110.00	1.00	0.03	0.005	1
			N162023	110.00	111.00	1.00	0.02	0.005	1
			N162024	111.00	112.00	1.00	0.01	0.005	1
			N162025	112.00	113.00	1.00	0.02	0.005	1
			N162026	113.00	114.00	1.00	0.05	0.005	1
			N162027	114.00	115.00	1.00	0.02	0.005	2
			N162028	115.00	116.00	1.00	0.01	0.005	1
			N162029	116.00	117.00	1.00	1.12	0.005	1
			N162031	117.00	118.00	1.00	4.79	0.03	1
			N162032	118.00	119.05	1.05	2.64	0.03	1

Alteration:

7.47 -	8.00	Moderate oxidation pervasive.upper 0.53m of core is pervasively oxidized. Core is crumbled crush rock

Structure:

20.33 -		lamination 50° to c/a pyrite banding/laminae
23.30 -		vein 50° to c/a regular thin (<1mm) qtz pyrite stringers
30.73 -		vein 50° to c/a regular thin (<1mm) qtz pyrite stringer
31.15 -		fracture 50° to c/a preferred fracture plane
35.65 -		lamination 55° to c/a pyrite laminae
36.65 -		fracture 55° to c/a preferred fracturing along bedding?
43.46 -		lamination 50° to c/a pyritic banding
50.44 -		lamination 50° to c/a pyritic banding
60.00 -		other 50° to c/a 5cm band of fg diss pyrite - assume proxy for bedding unable to

Lithology											
From	*To*			*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
		be seen in massive mudstone - no grading								
68.18	-	vein 45° to c/a qtz stringer								
86.00	- 109.00	fracture ore is highly fractured and in most (85%) core is crumbles mudstone rubble, with only 15% intact core.								
118.45	-	lamination 55° to c/a pyrite banding								
Veins:										
7.84	- 77.2 quartz str, 1%, 50°, qtz-pyrite stringers, regular and thin, most (80%) are bedding parallel, while the rest are crosscutting									
77.20	- 79 quartz stk, 0.5%, qtz and qtz pyrite stockwork veining as well as anastomosing vns are predominant over this short interval									
79.00	- 114.75 quartz str, 0.5%									
114.75	- 117.4 quartz stk, 15%, interval of intense qtz-carb stockwork veining.									
117.40	- 119.05 quartz str									
119.05	- 128.79	**mdstn mudstone - laminated**								
		Dark grey fine grained barite-carbonate laminated mudstone. Thin regular, slightly contorted laminae of light bronze pyrite and buff grey barite up to 1mm in thickness comprise ~15-20% of the rock until 124.1m. After this the unit becomes laminated by thin regular limestone (carbonate)-barite laminae up to 25%, increasing in percentage towards the lower contact. Thicker units of massive mudstone and siltstone up to 8cm are common, with massive mud beds and minor laminae comprise ~65% of the overall rock. Banding becomes increasingly contorted and irregular past 125.26m. Barite veining and bands contain visible rose coloured very fine grained sphalerite up to 0.5% overall. Sphalerite content is most evident in larger (<3mm) veins and bands. Lower contact is sharp but gradational. The lower contact is defined by a thick, 32cm massive siltstone bed that grades into a massive limestone bed, which then grades sharply (<2cm) into the underlying laminated barite-limestone ore.		N162033	119.05	120.00	0.95	4.06	0.03	1
				N162034	120.00	121.00	1.00	8.57	0.18	2
				N162036	121.00	122.00	1.00	5.98	0.17	1
				N162037	122.00	123.00	1.00	4.19	0.09	1
				N162038	123.00	124.00	1.00	9.11	0.3	1
				N162039	124.00	125.00	1.00	6.85	1.05	3
				N162041	125.00	126.00	1.00	4.68	0.15	1
				N162042	126.00	127.00	1.00	5.89	0.15	1
				N162043	127.00	128.00	1.00	5.66	0.17	1
				N162044	128.00	128.79	0.79	3.27	0.1	1
Veins:										
119.05	- 128.79 quartz str, 1%, qtz and carb stringers containing visible sphalerite									

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
128.79 -	151.21	**lmst limestone - mineralized** Light grey fine grained barite-chert laminated limestone. Thin parallel variable contorted laminae of barite up to 5mm in thickness comprise up to 25% of the overall unit. Limestone (carbonate) laminae comprise up to 60% of the unit. Minor mud laminae are noted but comprise less than 5%. Some larger massive dirty chert beds up to 7cm in thickness comprise 10% of the rock. Laminae range from undulating and parallel to highly contorted in alternating intervals averaging 2m in width. Mineralization is constrained to barite-carbonate laminae and occurs as very fine grained disseminated grains of galena and sphalerite on the margins up to 5-6% total sulphide content. Coarser disseminations occur in larger (+0.5mm) cross cutting and parallel barite and carbonate veins and bands. Sphalerite tends to be associated with barite where as galena preferentially occurs in carbonate. Minor (0.5m) interval of stockwork barite veining is noted at 140.4m, although no increase in mineralization is seen. Lower contact is sharp with a baritic mudstone with mud beds up to 4cm thickness starting to 150.23m.	N162045	128.79	129.00	0.21	6.75	0.46	1
			N162046	129.00	130.00	1.00	5.41	0.82	1
			N162047	130.00	131.00	1.00	5.01	0.89	1
			N162048	131.00	132.00	1.00	4.53	1.11	1
			N162049	132.00	133.00	1.00	2.82	0.62	1
			N162051	133.00	134.00	1.00	5.18	0.59	1
			N162052	134.00	135.00	1.00	3.99	0.97	1
			N162053	135.00	136.00	1.00	3.96	1.8	1
			N162054	136.00	137.00	1.00	5.29	1.11	1
			N162056	137.00	138.00	1.00	6.74	0.96	1
			N162057	138.00	139.00	1.00	3.69	0.94	1
			N162058	139.00	140.00	1.00	2.72	0.53	1
			N162059	140.00	141.00	1.00	2.22	0.48	1
			N162061	141.00	142.00	1.00	2	0.92	1
			N162062	142.00	143.00	1.00	1.58	0.75	1
			N162063	143.00	144.00	1.00	3.69	1.14	1
			N162064	144.00	145.00	1.00	5.82	1	1
			N162065	145.00	146.00	1.00	5.56	2.06	1
			N162066	146.00	147.00	1.00	2.7	0.72	1
			N162067	147.00	148.00	1.00	3.52	1.32	1
			N162068	148.00	149.00	1.00	4.3	1.43	1
			N162069	149.00	150.00	1.00	4.35	1.75	1
			N162071	150.00	151.00	1.00	4.07	1.02	1
			N162072	151.00	151.21	0.21	2.15	0.96	1

Structure:

135.62 - lamination 45° to c/a

136.86 - lamination 35° to c/a

140.42 - lamination 60° to c/a

Veins:

128.79 - 140.4 carbonate str, 0.5%, cross-cutting barite-carbonate stringers - mineralized

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
140.40	140.9	barite stk, 25%, interval of intense barite stockwork							
140.90	151.21	carbonate str, 0.5%, cross-cutting barite-carb stringers							
151.21	165.35	**mdstn mudstone - mineralized** Dark grey-black semi-laminated baritic mudstone. Upper portion of this unit consists of highly irregular stockwork of barite and carbonate veining up to 30% from upper contact to 153.15m. In this interval veins contain: mud clasts, disseminated sphalerite (~1%) and galena (0.5%). Past 153.15m barite-pyrite and minor limestone laminae to 15% and occur in sporadic intervals no larger than 16cm and are separated by a massive mudstone interval. Laminated intervals are mineralized with disseminated sphalerite (<1%) and galena (<1%), while massive mudstone intervals only contain pyrite hosted in qtz stringers and stockwork (<2.5%). Laminated intervals are slightly contorted but average 55 degrees to CA. Lower contact with massive mudstone is gradational over 1.5m.	N162073	151.21	152.00	0.79	2.2	0.77	1
			N162074	152.00	153.00	1.00	1.24	0.94	2
			N162076	153.00	154.00	1.00	1.25	2.59	9
			N162077	154.00	155.00	1.00	1.51	0.99	3
			N162078	155.00	156.00	1.00	2.49	0.83	2
			N162079	156.00	157.00	1.00	1.13	0.1	1
			N162081	157.00	158.00	1.00	0.67	0.33	1
			N162082	158.00	159.00	1.00	1.66	0.14	1
			N162083	159.00	160.00	1.00	0.65	0.9	3
			N162084	160.00	161.00	1.00	0.8	0.49	1
			N162085	161.00	162.00	1.00	2.62	0.24	1
			N162086	162.00	163.00	1.00	0.39	0.62	3
			N162087	163.00	164.00	1.00	0.67	0.93	4
			N162088	164.00	165.00	1.00	1.56	0.76	4
			N162089	165.00	165.35	0.35	1.34	0.31	2
Veins:									
151.21	153.15	carbonate stk, 30%, carb and barite stkwrk							
153.15	165.35	quartz stk, 5%, qtz carb stkwrk							
165.35	194.00	**mdstn mudstone** Dark black fine grained massive mudstone with occasional pyritic bands, approximately 1-1.5% of total rock. Majority of bands are 1-2mm in thickness with very fine grained disseminated pyrite. Occasional large bands (0.1%) can be up to 8cm in thickness and contain coarse grained disseminated pyrite (cloudy texture - semi net textured). Unit also contains thin (~1mm) qtz stringers, which are slightly undulating and contorted. Consistent fracture angle throughout unit gives 50 degree angle to CA. Some intervals of increased graphite content up to 60% are seen to cause core to crumble - poor recovery over these intervals.	N162091	165.35	166.00	0.65	1.5	0.07	2
			N162092	166.00	167.00	1.00	0.68	0.08	3
			N162093	167.00	168.00	1.00	0.07	0.1	3
			N162094	168.00	169.00	1.00	0.005	0.01	1
			N162096	169.00	170.00	1.00	0.005	0.01	1
			N162097	170.00	171.00	1.00	0.02	0.01	2
			N162098	171.00	172.00	1.00	0.01	0.005	1
			N162099	172.00	173.00	1.00	0.02	0.01	1

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm

Structure:

167.70	-	fracture 50° to c/a consistent fracture angle over 70cm
169.33	-	lamination 60° to c/a pyritic band
175.38	-	lamination 70° to c/a pyritic band
178.26	-	vein 50° to c/a consistent qtz stringers
179.60	-	fracture 50° to c/a consistent fracture angle over 75cm.
193.00	-	fracture 50° to c/a consistent fracture angle over 3m (note: between rubble core)

Veins:

165.35 - 176.73 quartz str

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	*Co-ordinate System*		*Grid/Property*		*Hole Type*	*Length*	*Date Started*
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	226.00	08/09/2011
District	*UTM North*	*UTM East*	*Local Grid E*	*Local Grid N*	*Collar Survey Method*		*Date Completed*
Watson Lake Mining District	7003963.44	441803.09			DGPS		11/09/2011
Project	*UTM Elevation*	*Azimuth Astro. (°)*	*Azimuth Grid (°)*	*Dip (°)*	*Drill Contractor*		*Date Logged*
013	1478.24	65.00		-80.00	Rodren Drilling Ltd		10/09/2011
Area	*Claim No.*	*NTS Sheet*	*Supervised By*		*Logged By*		*Verified*
MacMillan Pass	60498	105O/01	Kevin Wells		Andrew Ganton		☐

Zone/Prospect	*Assessment Rpt. No.*	*Core Storage*	*Plug Depth*	*Makes Water*	*Capped*	*Environmental Inspection*
Tom		On Site		☐	☑	☐

Core Size (1)	HQ	226	*Casing Pulled*	*Casing (1)*	12.00	HW	*Plugged*	*Pulsed*	*Geophysics Contractor*	*Date Pulsed*
(2)			☐	*(2)*			☐	☐		

Purpose	*Results*	*Comments*
Infill target on West Zone - P2	Based on the assay results two mineralized intervals were calculated for this hole. The first interval returned a weighted average of 4.95% Zn, 0.45% Pb and 1.1g/t Ag over 35.00 meters (149.00 to 184.00m). The second interval began 2m down hole of the upper zone and returned a weighted average of 3.91% Zn, 0.42% Pb and 1.5g/t Ag over 4.00 meters (186.00 to 190.00m).	HW casing - Casing left in - Not cemented - Not Probed - Drill inspection Sep 10, 2011 - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	*Grid Azimuth (°)*		*Astro. Azimuth (°)*		*Dip (°)*		*Use Test*	*Survey Method*	*Mag. Field (nT)*	*Comments*
	Original	*Final*	*Original*	*Final*	*Original*	*Final*				
0.00			41.4	65	-80		☐	Multi-shot Reflex		Collar
23.00			40.7	64.3	-79.1		☐	Multi-shot Reflex	57935	Good
50.00			39.3	62.9	-78.4		☐	Multi-shot Reflex	57506	Good
77.00			38.5	62.1	-78.7		☐	Multi-shot Reflex	57612	Good
104.00			39.4	63	-78.5		☐	Multi-shot Reflex	57565	Good
125.00			37.5	61.1	-78.5		☐	Multi-shot Reflex	57780	Good
152.00			38.3	61.9	-78.3		☐	Multi-shot Reflex	57767	Good

Distance	Grid Azimuth (°)		Astro. Azimuth (°)		Dip (°)		Use Test	Survey Method	Mag. Field (nT)	Comments
	Original	Final	Original	Final	Original	Final				
179.00			36.1	59.7	-77.6		☐	Multi-shot Reflex	57496	Good
202.00			35	58.6	-77.1		☐	Multi-shot Reflex	57605	Good

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
0.00 -	13.07	**cas casing**							
13.07 -	142.00	**mdstn mudstone** Black fine grained massive mudstone unit. Minor intervals of increased graphite content up to 40% making core recovery extremely poor. Graphite intervals are less than 30cm in width and comprise <10% of the overall unit. Bedding concordant qtz stringers throughout at <1%. Most qtz stringers are linear (85%) and are thin and parallel (to bedding?). Most stringers are mineralized with fine grained disseminated pyrite on the margins. Some stringers are slightly contorted, but still occur preferentially along bedding (30-35 degrees to CA). Qtz stockwork veining develops at 131m containing visible sphalerite mineralization <1%. Unit is mineralized with bands of fine to medium grained pyrite. Rare (0.1%) thick (up to 3cm) pyrite bands are noted with coarse grained dissemination. Pyrite bands appear to be bedding concordant with angle of 35 degrees +/- 5 degrees. Unit has a gradational lower contact over 1m with a silt laminated mudstone.	N162101	129.00	130.00	1.00	1.66	0.02	1
			N162102	130.00	131.00	1.00	1.68	0.02	1
			N162103	131.00	132.00	1.00	2.06	0.01	1
			N162104	132.00	133.00	1.00	0.02	0.005	1
Alteration:									
13.07 -	14.00	Moderate weathering pervasive, Weak oxidation fracture controlled.oxidization and weathering over the first m of mudstone core							
Structure:									
19.70 -		vein 30° to c/a qtz stringer							
26.90 -		vein 35° to c/a qtz stringer							
29.20 -		lamination 35° to c/a diss pyrite band							
37.00 -		fracture 50° to c/a preferred fracture angle over 2m, cleavage?							
37.12 -		bedding 35° to c/a diss pyrite bed							
38.60 -		lamination 35° to c/a pyrite lamination							
41.50 -		vein 35° to c/a linear qtz-pyrite vn							
48.48 -		lamination 35° to c/a pyrite lamination							
52.22 -		lamination 35° to c/a pyrite lamination							
54.52 -		lamination 30° to c/a change in py lam angle (bedding change?)							
55.51 -		lamination 30° to c/a py lamination							
58.61 -		vein 40° to c/a change in py lam angle							

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
62.23	-	lamination 30° to c/a py lamination							
71.38	-	vein 35° to c/a concordant qtz stringer							
73.49	-	vein 35° to c/a qtz stringer							
79.21	-	lamination 30° to c/a pyrite lamination							
82.43	-	vein 30° to c/a qtz stringer							
87.72	-	vein 30° to c/a qtz stringer							
97.83	-	vein 35° to c/a qtz stringer							
115.45	-	vein 30° to c/a qtz stinger							
121.14	-	fracture 30° to c/a preferential fracture plane over 0.5m along qtz stringers (parallel to bedding)							
132.30	-	vein 25° to c/a qtz stringer							
135.31	-	vein 30° to c/a qtz stringer, py bands, and fracture all at same angle over 30cm							
Veins:									
13.07	-	129 quartz str, 0.5%, 35°; 1mm, qtz stringer prevalent throughout, with most (90%) bedding concordant.							
129.00	-	142 quartz stk, 2%; 5mm, qtz and qtz carbonate stockwork veining and associate fracture fills are prevalent over this transitional zone. Some mineralized with visible sphalerite, most mineralized with medium grain diss py.							
142.00	- 150.23	**mdstn mudstone** Fine grained finely laminated mudstone. Unit is laminated with fine (less than 1mm) silt laminations, up to 10% overall. Laminations are faint and regular at an average core angle of 30 degrees to CA. Some rare silt beds are noted up to 7cm thick. These comprise less than 3% of the overall interval. Qtz and qtz-carb stringers are prevalent throughout with minor qtz fracture fill between stringers. Unit is mineralized with bands of pyrite up to 2% overall. Pyrite bands consist of 1mm thick bands containing very densely packed medium grained disseminated py. Unit has a gradational lower contact, where limestone laminae and beds begin to develop over ~1m.	N162105	146.00	147.00	1.00	3.5	0.1	1
			N162106	147.00	148.00	1.00	2.59	0.06	1
			N162107	148.00	149.00	1.00	2.07	0.05	1
			N162108	149.00	150.00	1.00	5.37	0.13	1
			N162109	150.00	150.23	0.23	8.9	0.27	1
Structure:									
144.95	-	lamination 35° to c/a silt-pyrite lamination							
Veins:									
142.00	- 150.23	quartz str, 0.5%, 35°; 1mm, qtz stringers and minor (0.1%) qtz fracture fills							

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
150.23 -	169.28	**mdstn mudstone - mineralized**							
		Unit is a highly variable medium grey fine grained laminated barite-limestone interbedded with silt-pyrite laminated mudstone. Beds range in thickness from 10cm near the upper contact to 77cm within the unit. Mudstone beds dominate at 60-70% where the barite-limestone complex comprises the remaining 30-40%. Laminae and beds are highly contorted with core angles ranging from 5 to 45 degrees to CA. Some barite veins are also noted, but very minor (<0.5%) and are only up to 0.5mm thick. Qtz fracture fillings are prevalent (25%) within the mudstone beds up to 1mm thick. About 5% of these are mineralized with coarse grained visible sphalerite (up to 2% overall), while the barite-limestone beds are preferential to fine grained disseminated galena up to (1% overall). Near the lower contact, core becomes extremely broken up and weathered (leeched), although sphalerite grains grow in size (within qtz veins) up to 0.7mm. Lower contact is a gradational contact over 0.5m with the laminated barite-limestone ore complex.	N162111	150.23	151.00	0.77	7.01	0.26	1
			N162112	151.00	152.00	1.00	4.8	0.09	1
			N162113	152.00	153.00	1.00	3.34	0.07	1
			N162114	153.00	154.00	1.00	3.29	0.06	1
			N162116	154.00	155.00	1.00	7.9	0.12	1
			N162117	155.00	156.00	1.00	4.94	0.13	1
			N162118	156.00	157.00	1.00	11.34	0.88	3
			N162119	157.00	158.00	1.00	3.62	0.13	1
			N162121	158.00	159.00	1.00	4.29	0.11	1
			N162122	159.00	160.00	1.00	7.55	0.16	1
			N162123	160.00	161.00	1.00	5.05	0.14	1
			N162124	161.00	162.00	1.00	4.04	0.08	1
			N162125	162.00	163.00	1.00	4.85	0.13	1
			N162126	163.00	164.00	1.00	3.63	0.25	1
			N162127	164.00	165.00	1.00	5.07	0.14	1
			N162128	165.00	166.00	1.00	3.15	0.12	1
			N162129	166.00	167.00	1.00	8.44	0.15	1
			N162131	167.00	168.00	1.00	7.46	0.21	1
			N162132	168.00	169.00	1.00	3.4	0.26	1
			N162133	169.00	169.28	0.28	5.24	1.1	1

Structure:

150.32 - lamination 30° to c/a silt-pyrite lamination`

161.40 - lamination 35° to c/a silt-pyrite lamination

Veins:

152.23 - 169.28 quartz ff, 10%; 5mm, qtz fracture fills between qtz veins, very pervasive over this interval

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
169.28 -	182.00	**lmst limestone - mineralized** Light grey fine grained barite laminated limestone. Unit is laminated with barite laminations up to 1mm in thickness. Laminations vary from highly contorted over short intervals to regular and parallel ranging in angles from 10 to 40 degrees to CA. Average angle of the regularly laminated intervals is 35 degrees. Unit contains occasional massive medium grey chert beds up to 7cm in thickness. Chert beds comprise less than 5% of the overall composition. Unit is mineralized with bands of pyrite up to 1mm in thickness and up to 2% overall. Very fine grained disseminated galena is preferential to the barite-limestone ore and ranges in percentage up to 3% over some intervals. Minor sphalerite is visible, best estimates are that of 2% MAX overall, and occurs as very fine grained disseminated grains within barite laminae. Past 176m core becomes extremely broken and Ore zone looks to be leeched pervasively. Lower contact is extremely vague as unit grades sharply into a barite-limestone interbedded mudstone in an area of core than is extremely broken. Overall unit mineralization average is 2% py, 3% gal, and 1.5% sphal.	N162134	169.28	170.00	0.72	6.56	0.12	1
			N162136	170.00	171.00	1.00	5.29	0.35	1
			N162137	171.00	172.00	1.00	4.84	0.4	1
			N162138	172.00	173.00	1.00	5.73	1	1
			N162139	173.00	174.00	1.00	5.65	0.77	1
			N162141	174.00	175.00	1.00	5.06	0.67	1
			N162142	175.00	176.00	1.00	5.86	0.6	1
			N162143	176.00	177.00	1.00	5.18	0.85	1
			N162144	177.00	178.00	1.00	5.74	0.78	1
			N162145	178.00	179.00	1.00	3.3	1.18	1
			N162146	179.00	180.00	1.00	2.54	1.27	1
			N162147	180.00	181.00	1.00	2.46	1.17	1
			N162148	181.00	182.00	1.00	1.42	0.93	1

Structure:

176.48 - lamination 30° to c/a barite-limestone lamination

Veins:

169.28 - 182 barite vn, 0.5%; 5mm, barite veins disconcordant to bedding, predominantly constrained to chert beds

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
182.00 -	196.32	**mdstn mudstone - mineralized** Unit is a laminated barite-limestone interbedded with silt-pyrite laminated mudstone. Similar to the overlying interbedded mudstone, unit gradationally increases in mudstone content, with initially silty-pyrite laminated mudstone comprising 60% and increasing to 80% over 7m. Barite-limestone beds decrease in size with depth from 25cm to scattered 1cm intervals. Laminations in both lithologies are moderately contorted with an average bedding angle of 30 degrees to CA +/- 10% in contorted intervals. Qtz veining and minor fracture fills are extensive within mudstone beds up to 5%. Visible sphalerite is seen within qtz veins up to 1% mineralization. Galena seems to be constricted to margins of limestone laminae and is very fine dissemination up to 0.5% overall mineralization. Py bands and qtz vein controlled dissemination is also noted up to 2%. Unit has a gradational lower contact with the underlying massive mudstone as barite limestone laminae decrease in occurrence over 1.5m.	N162149	182.00	183.00	1.00	1.86	0.69	1
			N162151	183.00	184.00	1.00	3.12	1.13	1
			N162152	184.00	185.00	1.00	0.14	0.12	1
			N162153	185.00	186.00	1.00	0.94	0.61	1
			N162154	186.00	187.00	1.00	2.97	0.52	1
			N162156	187.00	188.00	1.00	4.96	0.72	3
			N162157	188.00	189.00	1.00	4.83	0.1	1
			N162158	189.00	190.00	1.00	2.87	0.33	1
			N162159	190.00	191.00	1.00	1.64	0.19	1
			N162161	191.00	192.00	1.00	4.39	1.34	2
			N162162	192.00	193.00	1.00	1.78	0.48	4
			N162163	193.00	194.00	1.00	1.68	0.86	3
			N162164	194.00	195.00	1.00	2.38	0.15	1
			N162165	195.00	196.00	1.00	0.64	0.09	1
			N162166	196.00	196.32	0.32	0.17	0.44	1
		Structure: 189.30 - vein 60° to c/a cluster of thick 4mm qtz veins, similar to cleavage angle 195.27 - lamination 30° to c/a limestone lamination							
		Veins: 182.00 - 196.32 quartz vn, 1%; 5mm, qtz and carbonate veins predominately disconcordant							
196.32 -	226.00	**mdstn mudstone - massive** Black fine grained massive mudstone. Bands of medium grained disseminated pyrite are seen up to 2cm in thickness and comprise up to 2% of the overall composition. Qtz stringers are common up to 5% overall and most (80%) are bedding concordant, while the rest (20%) are cross-cutting. Qtz stringers and veins range from <1mm to 1cm in thickness, with most thicker veins cross cutting at a later stage. Qtz stringers are mineralized with fine grained disseminated pyrite up to 1%. Unit has several minor graphitic intervals, in which core is extremely broken and incompetent. Visible sphalerite is only seen near the upper contact, and occurs as medium grained disseminations within qtz veins, up to 1% from 196.32 to 199.60m.	N162167	196.32	197.00	0.68	0.24	0.56	1
			N162168	197.00	198.00	1.00	0.29	0.34	1
			N162169	198.00	199.00	1.00	0.92	0.68	2
			N162171	199.00	200.00	1.00	0.86	0.73	3

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
Structure:									
199.50	-	vein 32° to c/a regular qtz vein							
213.90	-	lamination 35° to c/a pyrite bands							
223.36	-	lamination 40° to c/a pyrite lamination							
Veins:									
196.32	- 226	quartz str, 2%; 1mm, qtz stringers							

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	Co-ordinate System		Grid/Property		Hole Type	Length	Date Started
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	177.00	12/09/2011
District	**UTM North**	**UTM East**	**Local Grid E**	**Local Grid N**	**Collar Survey Method**		**Date Completed**
Watson Lake Mining District	7003908.56	441825.64			DGPS		18/09/2011
Project	**UTM Elevation**	**Azimuth Astro. (°)**	**Azimuth Grid (°)**	**Dip (°)**	**Drill Contractor**		**Date Logged**
013	1482.33	45.00		-50.00	Rodren Drilling Ltd		17/09/2011
Area	**Claim No.**	**NTS Sheet**	**Supervised By**		**Logged By**		**Verified**
MacMillan Pass	60498	105O/01	Kevin Wells		Andrew Ganton		☐
Zone/Prospect	**Assessment Rpt. No.**	**Core Storage**		**Plug Depth**	**Makes Water**	**Capped**	**Environmental Inspection**
Tom		On Site			☐	☑	☐

Core Size (1)	HQ	177	Casing Pulled	Casing (1)	9.00	HW	Plugged	Pulsed	Geophysics Contractor	Date Pulsed
(2)			☐	(2)			☐	☐		

Purpose	Results	Comments
Infill target on West Zone - P3	The mineralized horizon returned a weighted average of 5.69% Zn, 0.68% Pb and 1.0g/t Ag over 44.00 meters (96.00 to 140.00m).	Sep 13, 2011 - Rods sheared at 86m, Rods tapped on Sep 17, 2011 hole continued after drilling TYK009. HW casing - Casing left in - Not cemented - Not Probed - Drill inspection Sep 13, 2011 - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series

Distance	Grid Azimuth (°) Original	Grid Azimuth (°) Final	Astro. Azimuth (°) Original	Astro. Azimuth (°) Final	Dip (°) Original	Dip (°) Final	Use Test	Survey Method	Mag. Field (nT)	Comments
0.00			21.4	45	-50		☐	Multi-shot Reflex		Collar
17.00			22.7	46.3	-48.9		☐	Multi-shot Reflex	57986	Good
50.00			23.4	47	-47.7		☐	Multi-shot Reflex	57848	Good
77.00			24.1	47.7	-46.6		☐	Multi-shot Reflex	57916	Good
101.00			24.4	48	-46		☐	Multi-shot Reflex	57984	Good
125.00			25.4	49	-45		☐	Multi-shot Reflex	57947	Good
152.00			25.5	49.1	-44.7		☐	Multi-shot Reflex	57946	Good
177.00			25.5	49.1	-44.2		☐	Multi-shot Reflex	57907	Good

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
0.00 -	9.82	**cas casing**							
9.82 -	98.00	**mdstn mudstone** Black fine grained massive mudstone. Unit contains faint regular pyrite lamination about 0.5-1mm in thickness, <2.5% overall content. Some rare bands of medium grained disseminated pyrite are noted, but these comprise only 0.1-0.5% of the unit. Qtz stringers are prevalent throughout the unit. Most (75%) are bedding concordant and average 1mm in thickness. Qtz stringers are commonly mineralized with medium grained disseminated pyrite. Most of the recovered core is extremely blocky, with a low RQD %. Unit contains several graphitic intervals causing core to crumble. Graphitic intervals increase in width past 83m up to 2m thick; core competence is very low from 82 to 92m. These intervals are up to 1.5m in thickness, but average 30cm. Qtz stringers and Pyritic bands give a proxy for bedding, which varies about 60 degrees to CA, and is only minimally contorted in isolated intervals. Lower contact is gradational over 0.5m into a laminated mudstone.	N162251	96.00	97.00	1.00	3.1	0.03	1
			N162252	97.00	98.00	1.00	5.55	0.08	1
		Alteration:							
9.82 -	18.40	Weak oxidation fracture controlled.oxidation (tarnish) along fracture planes down to 18.4m							
		Structure:							
16.56 -		lamination 65° to c/a pyrite lamination							
23.16 -		lamination 65° to c/a pyrite lamination							
27.89 -		lamination 60° to c/a pyrite lamination							
46.73 -		vein 55° to c/a slightly contorted qtz stringer							
51.94 -		lamination 55° to c/a pyrite lamination							
57.94 -		lamination 55° to c/a pyrite lamination							
68.56 -		lamination 60° to c/a pyrite lamination							
78.57 -		fracture 40° to c/a well developed fracture pattern - cleavage?							
97.19 -		lamination 60° to c/a silt-py lamination							
		Veins:							

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
9.82	- 79	quartz str, 0.5%, 60°, qtz stringers throughout unit, most (75%) mineralized with medium grained disseminated pyrite							
79.00	- 80	quartz net, 30%, qtz network veining and associate fracture fills pervasive over this small interval							
80.00	- 98	quartz str, 0.5%, qtz stringers, with minor <1% qtz stockwork and ff							
98.00	- 113.00	**mdstn mudstone - mineralized** Dark grey fine grained silt-pyrite laminated mudstone. Unit contains ~1mm thick laminations of siltstone and pyrite, along with pervasive bedding concordant qtz stringers up to 30% content. Occasional rare massive mudstone beds are noted, <10% overall and up to 5cm thick. Laminations are variably contorted from regular parallel to moderately contorted over the entire unit. Core angle averages about 60 degrees and varies +/- 5 degrees to CA. Unit contains bedding concordant qtz stringers as well as larger 1cm thick qtz and qtz carbonate veins, ~2% composition. Unit is mineralized with pyrite laminations up to 2% as well a rose coloured sphalerite fine grained disseminated within qtz and qtz carb veins up to 1.5-2% over minor intervals, 1% overall. Unit increases in calcareousness with depth, developing interbeds of laminated mud-limestone within the laminated pyrite-siltstone mudstone. Lower contact is a gradational boundary with laminated limestone (+/- barite lams) increasing over a 5.28m transition zone to the laminated mud-barite limestone ore.	N162253	98.00	99.00	1.00	8.27	0.33	1
			N162254	99.00	100.00	1.00	8.15	0.2	2
			N162255	100.00	101.00	1.00	5.86	0.03	1
			N162256	101.00	102.00	1.00	5.12	0.05	1
			N162257	102.00	103.00	1.00	8.62	0.28	1
			N162258	103.00	104.00	1.00	9.55	0.26	1
			N162259	104.00	105.00	1.00	8.93	0.32	1
			N162261	105.00	106.00	1.00	5.79	0.17	1
			N162262	106.00	107.00	1.00	10.16	0.27	1
			N162263	107.00	107.72	0.72	9.18	0.25	1
			N162264	107.72	108.00	0.28	7.45	0.19	1
			N162265	108.00	109.00	1.00	8.05	0.17	1
			N162266	109.00	109.85	0.85	7.4	0.23	1
			N162311	109.85	110.00	0.15	7.55	0.24	1
			N162267	110.00	111.00	1.00	6.43	0.37	1
			N162268	111.00	112.00	1.00	5.49	0.25	1
			N162269	112.00	113.00	1.00	5.53	0.15	1
107.72	- 113.00	**mdstn mudstone - mineralized** Laminated silt-pyrite mudstone. Develops intervals of laminated mud-limestone beds, increasing from 20% to 50% at the lower contact with the laminated barite-limestone ore. Laminations are ~1mm in thickness and are slightly contorted, regular and parallel. Unit is mineralized with pyrite laminations ~2%, fine grained disseminated galena within limestone interbeds ~1%, and fine grained disseminated sphalerite within qtz veins and barite laminations up to 2%.							
Structure:									
102.83	-	lamination 55° to c/a							
104.59	-	lamination 65° to c/a							
110.82	-	lamination 70° to c/a slightly contorted lamination							

Lithology From	To	
Veins:		
98.00	- 103	quartz str, 0.5%, qtz stringers, with minor <1% qtz stockwork and ff
103.00	- 113	carbonate vn, 1%, qtz carb veining
113.00	- 138.00	**lmst limestone - mineralized** Light grey fine grained barite laminated limestone bearing occasional chert beds up to 45cm thick, <7.5% overall. Laminations of barite-limestone with minor mudstone (<5%) are thin, regular, ~1mm in width, and variably contorted. Intervals of 2m are highly contorted, alternating with 2m intervals of minimally contorted laminations. Unit increases in barite content from 121m to 128m, up to 65% making core extremely heavy. "Dirty" chert beds are noted to be up to 45cm thick and occur at random intervals, preferentially cross cut by sphalerite bearing barite veins up to 1.5cm thick. Rare mud beds are also noted up to 5cm thick and comprise less than 2.5% overall. Unit is freckled with mud rip up clasts from 115m to 120m, ~0.5 to 1mm in size, as this interval is highly contorted by micro faulting with offset of up to 1cm. Microfaulting occurs at a multitude of angles, with no apparent preferred orientation. Unit is mineralized with fine grained disseminated galena on the margins of laminations, up to 3% overall, as well as rose coloured sphalerite within barite laminations, and barite-carbonate veins up to 2% overall. Laminations are cross cut by qtz and qtz-carbonate stringers and veins up to 1cm thick. They preferentially cross cut massive beds and are bedding concordant within laminated intervals. Past 132.61m, the zone becomes pervasively leeched and core becomes extremely blocky, past 134m core is crushed rock. Lower contact is lost in a washed zone interval 3m wide. Lower contact is seen to occur at ~138m as laminated limestone crushed rock transitions to a more competent qtz altered mudstone.
Structure:		
123.56	-	lamination 60° to c/a lmstn-barite lamination

Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
N162271	113.00	114.00	1.00	7.1	0.84	1
N162272	114.00	115.00	1.00	4.8	0.67	1
N162273	115.00	116.00	1.00	7.46	1.6	1
N162274	116.00	117.00	1.00	6.42	1.06	1
N162275	117.00	118.00	1.00	6.45	1.31	1
N162276	118.00	119.00	1.00	5.13	0.94	1
N162277	119.00	120.00	1.00	5.15	1.13	1
N162278	120.00	121.00	1.00	2.84	0.54	1
N162279	121.00	122.00	1.00	6.13	0.59	1
N162281	122.00	123.00	1.00	5.69	0.9	1
N162282	123.00	124.00	1.00	5.44	0.89	1
N162283	124.00	125.00	1.00	5.35	0.93	1
N162284	125.00	126.00	1.00	3.7	0.76	1
N162285	126.00	127.00	1.00	6.09	0.74	1
N162286	127.00	128.00	1.00	4.95	1.72	1
N162287	128.00	129.00	1.00	5.15	1.53	1
N162288	129.00	130.00	1.00	3.72	1.23	1
N162289	130.00	131.00	1.00	3.9	1.02	1
N162312	131.00	131.17	0.17	3.07	1.23	1
N162291	131.17	132.00	0.83	3.79	1.19	1
N162292	132.00	133.00	1.00	4.12	1.48	1
N162293	133.00	134.00	1.00	4.58	1.56	1
N162294	134.00	135.00	1.00	5.54	1.68	1
N162295	135.00	136.00	1.00	5.05	0.92	1
N162296	136.00	137.00	1.00	4.52	0.28	1
N162297	137.00	138.00	1.00	2.4	0.72	1

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
126.10	-	lamination 65° to c/a							
128.80	-	lamination 55° to c/a slightly contorted lamination							
132.46	-	lamination 60° to c/a							
133.00	-	lamination 55° to c/a							
Veins:									
113.00	- 138	barite vn, 1%, barite and qtz-carb veining							
138.00	- 177.00	**mdstn mudstone - mineralized** Fine grained mudstone. Near the upper contact unit is highly altered by fluid migration. Unit is highly veined with qtz, qtz stringer, and minor barite veins ranging from 0.5mm to 1cm at 25% overall content. Veins are highly irregular, but somewhat parallel. Some veins (<5%) are mineralized with rose coloured sphalerite, less than 1% overall, and weak chlorite alteration is seen within qtz veins giving a light green hue. Minor stockwork veining is noted, with numerous qtz-fracture fills connection adjacent veins up to 1mm in width. Unit loses excessive veining past 146m and contains common qtz and qtz-pyrite stringers up to 2% overall. Mudstone is similar to overlying massive mudstone except there is an increase in the occurrence of massive pyrite bands up to 5cm thick. In some cases net textured to massive pyrite mineralization occurs and comprises up to 4% of the overall unit. Pyrite bands commonly have a core angle up to 70 degrees to CA over entire unit. EOH	N162298	138.00	139.00	1.00			
			N162299	139.00	140.00	1.00	4.15	0.32	2
			N162301	140.00	141.00	1.00	1.18	0.23	1
			N162302	141.00	142.00	1.00	1.21	0.94	3
			N162303	142.00	143.00	1.00	2.52	0.15	1
			N162304	143.00	144.00	1.00	0.16	0.34	1
			N162305	144.00	145.00	1.00	0.11	1.02	3
			N162306	145.00	145.76	0.76	0.05	0.78	2
			N162313	145.76	146.00	0.24	0.04	0.06	2
			N162307	146.00	147.00	1.00	0.005	0.08	1
			N162308	147.00	148.00	1.00	0.005	0.03	1
			N162309	148.00	149.00	1.00	0.005	0.01	1
Alteration:									
138.00	- 144.50	Weak chloritization vein controlled.chlorite within qtz veins							
Structure:									
149.41	-	lamination 45° to c/a pyrite lamination							
156.68	-	lamination 70° to c/a pyrite lamination							
165.51	-	lamination 70° to c/a pyrite lamination							
171.86	-	vein 70° to c/a qtz stringers							
174.64	-	lamination 70° to c/a pyrite lamination							
175.09	-	lamination 70° to c/a pyrite lamination							
176.74	-	lamination 70° to c/a pyrite lamination							

Lithology From	To	Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
Veins:								
138.00	- 146 quartz irr, 25%, pervasive qtz, qtz-carb veining, highly irregular, minor stockwork and ff as well.							
146.00	- 177 quartz str, 2%, qtz and qtz-pyrite stringers throughout							

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	*Co-ordinate System*		*Grid/Property*		*Hole Type*	*Length*	*Date Started*
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	245.00	14/09/2011
District	*UTM North*	*UTM East*	*Local Grid E*	*Local Grid N*	*Collar Survey Method*		*Date Completed*
Watson Lake Mining District	7003908.25	441825.16			DGPS		16/09/2011
Project	*UTM Elevation*	*Azimuth Astro. (°)*	*Azimuth Grid (°)*	*Dip (°)*	*Drill Contractor*		*Date Logged*
013	1482.26	55.00		-80.00	Rodren Drilling Ltd		15/09/2011
Area	*Claim No.*	*NTS Sheet*	*Supervised By*		*Logged By*		*Verified*
MacMillan Pass	60498	105O/01	Kevin Wells		Andrew Ganton		☐

Zone/Prospect	*Assessment Rpt. No.*	*Core Storage*	*Plug Depth*	*Makes Water*	*Capped*	*Environmental Inspection*
Tom		On Site		☐	☑	☐

Core Size (1)	HQ	245	*Casing Pulled*	*Casing (1)*	9.00	HW	*Plugged*	*Pulsed*	*Geophysics Contractor*	*Date Pulsed*
(2)			☐	*(2)*			☐	☐		

Purpose	*Results*	*Comments*
Infill target on West Zone - P22	The mineralized horizon returned a weighted average of 4.94% Zn, 0.12% Pb and 1.0g/t Ag over 58.00 meters (140.00 to 198.00m).	HW casing - Casing left in - Not cemented - Not Probed - Drill inspection Sep 16, 2011 - Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series - Originally planned at 65 azimuth, drill shifted after being lined up

Distance	*Grid Azimuth (°)*		*Astro. Azimuth (°)*		*Dip (°)*		*Use Test*	*Survey Method*	*Mag. Field (nT)*	*Comments*
	Original	*Final*	*Original*	*Final*	*Original*	*Final*				
0.00			31.4	55	-80		☐	Multi-shot Reflex		Collar
20.00			31.4	55	-79.7		☐	Multi-shot Reflex	57900	Good
44.00			31.4	55	-79.5		☐	Multi-shot Reflex	57654	Good
68.00			31.7	55.3	-79.4		☐	Multi-shot Reflex	57645	Good
95.00			12	35.6	-78.4		☐	Multi-shot Reflex	50018	BAD
125.00			34.2	57.8	-78.7		☐	Multi-shot Reflex	57791	Good
152.00			35.2	58.8	-77.9		☐	Multi-shot Reflex	57741	Good
175.00			35.4	59	-77.9		☐	Multi-shot Reflex	57809	Good
209.00			35.3	58.9	-77.2		☐	Multi-shot Reflex	57673	Good
245.00			36.1	59.7	-76.5		☐	Multi-shot Reflex	57798	Good

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
0.00	- 6.60	**cas casing** Casing							
6.60	- 141.00	**mdstn mudstone** Black fine grained massive mudstone unit. Unit contains disseminated pyrite bands (laminations) up to 1% overall. Bands are parallel and regular up to 4cm thick, but average at 1mm thickness. Bands contain fine to medium grained pyrite. Pyrite mineralization also occurs commonly in qtz stringers. Qtz stringers are prevalent throughout the unit up to 1% overall content. Qtz stringers are thin (~1mm), regular and 75% are bedding parallel, while the other 25% is later stage crosscutting veinlets. Some extremely rare siltstone beds are noted (0.01%) at an average thickness of 1cm. Several graphite intervals are seen, over which core recovery is extremely low. Unit has a gradational lower contact over 1.5m with the underlying laminated mudstone.	N162172	140.00	141.00	1.00	3.03	0.04	1

Alteration:

6.60	- 7.75	Moderate oxidation pervasive.moderate oxidization of core along fractures near the collar of the hole

Structure:

8.40	-	bedding 35° to c/a siltstone bed ~1cm thick
13.76	-	lamination 35° to c/a pyrite lamination
17.66	-	lamination 35° to c/a pyrite lamination
26.08	-	vein 30° to c/a bedding concordant pyritic qtz stringer
32.26	-	bedding 35° to c/a siltstone bed
41.20	-	vein 25° to c/a qtz vein
43.74	-	vein 25° to c/a qtz vein and pyrite lamination
49.26	-	lamination 30° to c/a pyrite lam and parallel qtz stringer
54.42	-	lamination 25° to c/a py lam and parallel qtz stringers
61.20	-	lamination 25° to c/a siltstone lam
71.38	-	lamination 25° to c/a pyrite lam
77.52	-	lamination 30° to c/a pyrite lam
80.46	-	lamination 25° to c/a pyrite lam

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
109.84	-	vein 30° to c/a pyrite bearing qtz vein							
118.80	-	vein 40° to c/a regular qtz vein bearing euhedral cubic pyrite							
130.54	-	lamination 30° to c/a pyrite lamination							
Veins:									
6.60	-	141 quartz str, 1%, 30°, qtz stringers with 75% mineralized with diss py and 75% bedding concordant, average of 1mm in thickness.							
141.00	- 167.60	**mdstn mudstone - mineralized**							
		Dark grey fine grained laminated mudstone. Mudstone unit has regular thin laminations of pyrite and siltstone up to 1mm in width. Laminations are regular and parallel with little variation in bedding angle. Rock is intensely laminated with minor massive mud beds only reaching up to 10cm and 30% overall. Some rare silt beds (0.25%) can be up to 1.5cm thick. From 151m to 157m laminations become contorted with highly variable angles from 25 to 50 degrees to CA. Unit is pervasively cross cut by qtz veining (up to 10%). Unit exhibits a texture of bedding concordant veins causing fracture fills perpendicularly between veins (almost anastomosing texture. Isolated qtz fracture fills are also common up to 1.5mm in width. Large irregular qtz veins are noted, but rare (<0.5%). Unit is mineralized with pyrite bands ~1mm in width up to 6% overall. Qtz veins are commonly mineralized with very fine grained disseminated sphalerite up to 1.5% overall as well as trace very fine grained galena disseminated within some qtz veins (0.1-0.25%). Barite stringers become apparent after 157.35m. Lower contact with underlying interbedded mudstone is gradational over 1m interval.	N162173	141.00	142.00	1.00	5.73	0.03	1
			N162174	142.00	143.00	1.00	3.32	0.06	1
			N162175	143.00	144.00	1.00	2.62	0.06	1
			N162176	144.00	145.00	1.00	2.03	0.05	1
			N162177	145.00	146.00	1.00	3.55	0.06	1
			N162178	146.00	147.00	1.00	4.68	0.06	1
			N162179	147.00	148.00	1.00	4.7	0.1	1
			N162181	148.00	149.00	1.00	2.88	0.09	1
			N162182	149.00	150.00	1.00	3.43	0.05	1
			N162183	150.00	151.00	1.00	5.85	0.07	1
			N162184	151.00	152.00	1.00	5.68	0.05	1
			N162185	152.00	153.00	1.00	3.69	0.03	1
			N162186	153.00	154.00	1.00	2	0.01	1
			N162187	154.00	155.00	1.00	3.88	0.02	1
			N162188	155.00	156.00	1.00	4.59	0.02	1
			N162189	156.00	157.00	1.00	5.85	0.04	1
			N162191	157.00	158.00	1.00	3.44	0.02	1
			N162192	158.00	159.00	1.00	3.02	0.03	1
			N162193	159.00	160.00	1.00	5.65	0.03	1
			N162194	160.00	161.00	1.00	5.53	0.03	1
			N162195	161.00	162.00	1.00	4.26	0.04	1
			N162196	162.00	163.00	1.00	4.24	0.06	1
			N162197	163.00	164.00	1.00	3.94	0.06	1
			N162198	164.00	165.00	1.00	3.86	0.08	1
			N162199	165.00	166.00	1.00	2.32	0.05	1
			N162201	166.00	167.00	1.00	6	0.09	1
			N162202	167.00	167.60	0.60	5.8	0.08	1

Lithology From	To			Sample #	From	To	Len.	Zn %	Pb %	Ag ppm

Structure:

144.10	-	lamination 30° to c/a	pyrite and siltstone laminations
147.18	-	lamination 30° to c/a	pyrite and siltstone laminations
150.00	-	lamination 30° to c/a	
156.13	-	lamination 35° to c/a	
156.65	-	lamination 50° to c/a	inflection in moderately contorted laminations causes an increase in angle
158.75	-	lamination 40° to c/a	
164.24	-	lamination 40° to c/a	py laminations
165.17	-	lamination 35° to c/a	
165.45	-	lamination 30° to c/a	py laminations

Veins:

141.00	-	144 quartz stk, 25%, pervasive qtz stockwork veining over this 3m interval. 5% of qtz veins are mineralized with sphalerite and pyrite.
144.00	-	167.6 quartz ff, 5%, pervasive qtz stringer-stkwrk and fracture fills over this interval

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
167.60 -	184.31	**mdstn mudstone - mineralized**							
		Dark grey interbedded laminated barite-limestone beds with silt-pyrite laminated mudstone. A highly variable unit in which beds of laminated barite limestone gradationally appear within the silt-pyrite laminated mudstone. Barite-limestone beds are laminated with parallel regular variably contorted laminae of limestone and barite ~1mm in thickness. Barite limestone beds range from 6 to 20cm in thickness and increase in compositional percentage with depth and the unit becomes increasingly calcareous, increasing from 10 to 40%. Mudstone interbeds ranging from 10 to 50cm with same composition as the overlying laminated mudstone. Siltstone-pyrite laminations are lost with 2m of lower contact and beds become massive mudstone. Unit is extensively cut with qtz, qtz-carb and barite stringers, fracture fills and veins up to 5% overall. Some intervals are pervasively fracture filled with qtz, with a similar texture as the overlying unit. Unit is mineralized with medium grained bands of pyrite disseminations throughout (up to 3%). Qtz and barite veins host rose coloured fine grained disseminated sphalerite up to 1.5% overall. Limestone-barite laminated beds host very fine grained galena, although tough to estimate, could be up to 0.5% overall. Lower contact is gradational contact over 1m and defined by mudstone beds being completely lost.	N162203	167.60	168.00	0.40	6.93	0.17	1
			N162204	168.00	169.00	1.00	3.95	0.13	1
			N162205	169.00	170.00	1.00	4.51	0.08	1
			N162206	170.00	171.00	1.00	5.64	0.08	1
			N162207	171.00	172.00	1.00	3.84	0.07	1
			N162208	172.00	173.00	1.00	2.85	0.07	1
			N162209	173.00	174.00	1.00	5.17	0.1	1
			N162211	174.00	175.00	1.00	4.89	0.12	1
			N162212	175.00	176.00	1.00	5.28	0.09	1
			N162213	176.00	177.00	1.00	6.88	0.1	1
			N162214	177.00	178.00	1.00	5.83	0.15	1
			N162215	178.00	179.00	1.00	3.68	0.09	1
			N162216	179.00	180.00	1.00	5.49	0.1	1
			N162217	180.00	181.00	1.00	6.04	0.1	1
			N162218	181.00	182.00	1.00	3.65	0.09	1
			N162219	182.00	183.00	1.00	3.33	0.09	1
			N162221	183.00	184.00	1.00	5.8	0.12	1
			N162222	184.00	184.31	0.31	4.09	0.09	1

Structure:

168.28 - lamination 30° to c/a

171.20 - lamination 30° to c/a

174.24 - lamination 40° to c/a

177.91 - lamination 40° to c/a

183.63 - lamination 30° to c/a limestone-mud-barite lam

Veins:

167.60 - 184.31 quartz ff, 5%, pervasive qtz stringer-stkwrk and fracture fills over this interval

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
184.31	- 196.47	**lmst limestone - mineralized** Light grey fine grained barite laminated limestone. Unit displays laminations of limestone and barite ~1mm thick, regular, parallel and variably contorted. Unit contains minor chert beds up to 3cm in thickness and <5% overall rock composition. Unit is also cross cut by large 1cm thick Barite veins (0.5%), most commonly within the chert beds, at a similar angle as the limestone laminations ~30 degrees to CA. Unit is mineralized with very fine grained rose coloured sphalerite within barite laminae up to 2% overall as well as very fine grained disseminated galena preferentially at the boundary of barite and limestone lams up to 1-2% overall. Unit displays to some extent leeching as core competence is much less than the overlying unit, although not shattered, core is noticeably broken. Past 188m unit becomes dominated by barite laminae, ~75%, with laminae increasing in thickness up to 1cm. Limestone beds increase in abundance past 194.76m where unit enters a lower contact transition zone, mud beds ~2cm thick begin to increase in abundance. Unit has a gradational lower contact over 1.5m, where both limestone and barite beds are quickly lost, and mudstone dominates past 196.47m.	N162223	184.31	185.00	0.69	6.65	0.13	1
			N162224	185.00	186.00	1.00	5.98	0.21	1
			N162225	186.00	187.00	1.00	5.1	0.16	1
			N162226	187.00	188.00	1.00	5.56	0.24	1
			N162227	188.00	189.00	1.00	7.15	0.2	1
			N162228	189.00	190.00	1.00	6.21	0.27	1
			N162229	190.00	191.00	1.00	5.64	0.5	1
			N162231	191.00	192.00	1.00	7	0.48	1
			N162232	192.00	193.00	1.00	7.43	0.29	1
			N162233	193.00	194.00	1.00	9.08	0.33	1
			N162234	194.00	195.00	1.00	7.51	0.44	1
			N162235	195.00	196.00	1.00	10.76	0.26	1
			N162236	196.00	196.47	0.47	13.22	0.44	1
Veins:									
184.31	- 196.47	barite vn, 3%, thick 1cm barite veining - variable angles, preferentially cross cutting chert beds							
196.47	- 206.00	**mdstn mudstone** Black fine grained massive mudstone. Similar to the overlying massive mudstone unit. Unit contains pervasive qtz stringers and fracture fills as well as pyrite laminations up to 30%, from the upper contact to 203m, past which qtz and pyrite laminations <5%. Unit contains qtz stringers throughout, up to 1mm in width, most of which (60%) are bedding concordant, while the rest (40%) are cross cutting and minor stockwork texture. Qtz stringers are mineralized with fine grained disseminated pyrite as well as rose coloured fine grained disseminated sphalerite to 206m up to 1%. Pyrite laminations and qtz stringer mineralization is throughout the unit, up to 2%. Unit contains several graphite intervals up to 1.5m in width and causes core competence to drastically decrease.	N162237	196.47	197.00	0.53	3	0.1	1
			N162238	197.00	198.00	1.00	2.67	0.21	1
			N162239	198.00	199.00	1.00	1.89	0.12	1
			N162241	199.00	200.00	1.00	1.99	0.08	1
			N162242	200.00	201.00	1.00	1.12	0.09	1
			N162243	201.00	202.00	1.00	1.27	0.7	3
			N162244	202.00	203.00	1.00	1.9	1.36	3
			N162245	203.00	204.00	1.00	1.42	0.14	1
			N162246	204.00	205.00	1.00	0.82	0.75	2
			N162247	205.00	206.00	1.00	1.09	0.98	3
Structure:									

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
196.80	-	lamination 30° to c/a							
199.88	-	fracture fill 25° to c/a							
		Veins:							
196.47	- 206	quartz str, 1%, qtz stringers prevalent throughout unit							
206.00	- 245.00	**mdstn mudstone** Black fine grained massive mudstone. Unit contains qtz stringers throughout, up to 1mm in width, most of which (60%) are bedding concordant, while the rest (40%) are cross cutting and minor stockwork texture. Pyrite laminations and qtz stringer mineralization is throughout the unit, up to 2%. Unit contains several graphite intervals up to 1.5m in width and causes core competence to drastically decrease. EOH	N162248	206.00	207.00	1.00	1.33	0.98	4
			N162249	207.00	208.00	1.00	2.28	0.06	1
		Structure:							
213.60	-	vein 30° to c/a qtz vn							
218.43	-	vein 35° to c/a qtz stringer							
219.71	-	lamination 30° to c/a pyrite lamination							
220.80	-	vein 40° to c/a grouping of qtz stringers							
222.89	-	vein 45° to c/a qtz stringers							
224.37	-	vein 50° to c/a grouping of qtz stringers							
		Veins:							
206.00	- 245	quartz str, 1%, qtz stringers prevalent throughout unit							

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	Co-ordinate System		Grid/Property		Hole Type	Length	Date Started
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	179.00	19/09/2011
District	**UTM North**	**UTM East**	**Local Grid E**	**Local Grid N**	**Collar Survey Method**		**Date Completed**
Watson Lake Mining District	7003866.18	441866.78			DGPS		20/09/2011
Project	**UTM Elevation**	**Azimuth Astro. (°)**	**Azimuth Grid (°)**	**Dip (°)**	**Drill Contractor**		**Date Logged**
013	1490.38	65.00		-55.00	Rodren Drilling Ltd		19/09/2011
Area	**Claim No.**	**NTS Sheet**	**Supervised By**		**Logged By**		**Verified**
MacMillan Pass	60498	105O/01	Matt Bodnar		Andrew Ganton		☐

Zone/Prospect	Assessment Rpt. No.	Core Storage	Plug Depth	Makes Water	Capped	Environmental Inspection
Tom		Tom Camp		☐	☑	☐

Core Size (1)	HQ	179	Casing Pulled	Casing (1)	6.00	HW	Plugged	Pulsed	Geophysics Contractor	Date Pulsed
(2)			☐	(2)			☐	☐		

Purpose	Results	Comments
Infill target on West Zone - P23	The mineralized horizon returned a weighted average of 5.32% Zn, 1.15% Pb and 1.0g/t Ag over 53.88 meters (99.00 to 152.88m). A zone of galena rich footwall mineralization was intersected from 154.00 to 157.00m and returned a weighted average of 1.45% Zn, 3.62% Pb and 8.0g/t Ag over 3.00 meters	HW casing - Casing left in - Not cemented - Not Probed - Drill inspection Sep 20, 2011- Surveyed with a Trimble GeoXH – Geoexplorer 6000 Series. Mineralized zone hit from 98.58m to 152.89m.

Distance	Grid Azimuth (°) Original	Grid Azimuth (°) Final	Astro. Azimuth (°) Original	Astro. Azimuth (°) Final	Dip (°) Original	Dip (°) Final	Use Test	Survey Method	Mag. Field (nT)	Comments
0.00			41.4	65	-55		☐	Multi-shot Reflex		Collar
11.00			38.7	62.3	-54		☐	Multi-shot Reflex	58752	Bad?
36.00			45.2	68.8	-52.4		☐	Multi-shot Reflex	57966	Good
62.00			46	69.6	-49.8		☐	Multi-shot Reflex	57914	Good
86.00			45.5	69.1	-48.4		☐	Multi-shot Reflex	58002	Good
110.00			46.1	69.7	-47.6		☐	Multi-shot Reflex	57922	Good
137.00			46.9	70.5	-46.9		☐	Multi-shot Reflex	57987	Good
162.00			47.6	71.2	-46		☐	Multi-shot Reflex	57782	Good

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
0.00 -	5.24	**cas casing**							
5.24 -	96.00	**mdstn mudstone** Black fine grained massive mudstone unit. Unit contains numerous qtz stringers up to 1mm thick up to 1% overall rock composition. Unit also contains rare undulating qtz and qtz-carbonate veins up to 0.5% overall. Tops indicators of rip up mud clasts and minor silt clasts (and related replacement pyrite) indicate that unit is orientated upright (@10.88m). Unit is mineralized throughout with disseminated pyrite bands. Pyrite mineralization predominately occurs in fine to coarse grained disseminated bands from 1mm to 6cm in thickness, but also occurs as fine grained disseminations throughout the mudstone. Some bands can occur as massive pyrite (3cm thick). Disseminated pyrite also occurs with in most (75%) of qtz veins and fine grained disseminations within qtz stringers. Pyrite mineralization comprises up to 5% overall rock composition. Most (95%) pyrite bands and the majority (60%) of qtz stringers are regular and parallel with a common core angle. This could be used as a proxy for bedding as a preferential permeability pathway for fluid mineralization. Core angle vary slightly over the unit from 55-70 degrees to Core Angle.							

Alteration:

5.24 - 6.45 Moderate oxidation fracture controlled.oxidization along fractures to 6.45

Structure:

12.84 - lamination 65° to c/a pyrite lam
15.25 - lamination 60° to c/a pyrite lam
20.70 - lamination 60° to c/a pyrite band
23.75 - lamination 60° to c/a pyrite lam
24.33 - lamination 55° to c/a pyrite lam
26.68 - bedding 50° to c/a pyrite bed
30.85 - lamination 70° to c/a pyrite lam
40.63 - lamination 70° to c/a pyrite lam
64.45 - lamination 75° to c/a pyrite lam
73.93 - lamination 65° to c/a pyrite lam
83.27 - vein 60° to c/a qtz stringers

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
93.00	-	fracture 65° to c/a preferential fracture angle							
95.70	-	lamination 70° to c/a pyrite laminations							
Veins:									
5.24	- 85.36	quartz str, 2%, qtz stringers with rare qtz and qtz-carb veins up to 1cm thick							
85.36	- 88.55	quartz stk, 10%, qtz stockwork							
96.00	- 108.33	**mdstn mudstone - mineralized**							
		Dark grey fine grained laminated mudstone. Unit grades from a massive to laminated texture over 0.5m. Unit develops thin (<1mm) faint regular laminations of pyrite and lighter grey silt, laminations occur in 15-20cm intervals (<30%) separated by a massive mudstone bed of 5-10cm in width. With depth, thickness of the massive mudstone beds decrease to <5cm. Past 101.48m, unit becomes interbedded with limestone laminations plus or minus barite-chert laminations. These beds increase in both thickness and occurrence with depth. Barite-chert-limestone laminated beds increase in proportionality from 20 to 50% to the lower contact. Laminations and beds are only slightly contorted, regular and parallel to 102.14m. Past 102.14m laminations and beds become highly contorted with multiple phases of syndepostional folds, faults and fold-fault structures with multiple directionalities of sigma-1. Massive beds are preferentially cross cut with qtz and minor qtz-carb veins. Unit is mineralized with ~2% pyrite laminations and bands. Qtz veins are mineralized with up to 2% mg disseminated rose coloured sphalerite and 0.5% fine grained disseminated galena. Lower contact is sharp over 20cm and defined by a decrease in mudstone beds.	N162314	96.00	97.00	1.00	1.23	0.02	1
			N162315	97.00	98.00	1.00	0.01	0.02	1
			N162316	98.00	99.00	1.00	0.52	0.01	1
			N162317	99.00	100.00	1.00	4.65	0.03	1
			N162318	100.00	101.00	1.00	4.83	0.06	1
			N162319	101.00	102.00	1.00	7.6	0.31	1
			N162321	102.00	103.00	1.00	9.38	0.31	1
			N162322	103.00	104.00	1.00	12.18	0.41	1
			N162323	104.00	105.00	1.00	11.81	0.31	1
			N162324	105.00	106.00	1.00	5.82	0.39	1
			N162325	106.00	107.00	1.00	10.76	0.39	1
			N162326	107.00	108.00	1.00	9.94	0.75	1
			N162327	108.00	108.33	0.33	4.43	0.6	1
Structure:									
99.05	-	lamination 60° to c/a py laminations							
100.88	-	lamination 50° to c/a py-silt laminations							
102.05	-	lamination 50° to c/a lim-bar-chert laminations							
107.63	-	lamination 70° to c/a							
107.95	-	lamination 75° to c/a							

Lithology From	To	
108.33	152.89	**lmst limestone - mineralized** Fine grained barite-chert laminated limestone (calcareous laminae). Upper contact of the unit is a sharp contact over 20cm, mudstone beds are lost. Unit contains variably contorted laminations of barite-chert and crystalline limestone up to 1mm in thickness. Laminations are thin, regular and parallel varying from slight to strong contortion. Unit varies in compositional percentage of laminations. 108.33m to 112.82m: barite-limestone laminations dominate with minor chert laminations <5%. This interval is moderately contorted with small clasts of chert ~0.5-1mm in diameter hosted in secondary carbonate veins crosscutting primary laminations. 112.82 to 119m: Unit becomes interbedded with chert beds up to 12cm in thickness (25%), laminations are almost lost and are highly contorted, dominated by crystalline limestone with minor barite laminations (<20%) 112.82 to 132.40m: laminations are almost equal in compositional proportion, laminations are slightly to strongly contorted with several small scale knapp-fold thrust structures noted. Secondary carbonate hosted chert clasts are again noted, and are seen to not only cross-cut laminations, but also cause local disturbance of laminations, syndeformational injection of fluids tearing clasts of chert along margins of chert beds (during dewatering?). Chert beds over 1cm are rare <1% overall. Laminations trend 60 degrees to Core Angle, conversely, cross-cutting carbonate-chert clast veins trend 5 degrees to Core Angle. Some chlorite talc alteration is noted in conjunction with the chert bearing veins. 132.40-152.89m: Chert dominated barite laminated limestone (limestone-barite laminated chert) interbedded with massive chert beds from 5 to 20cm in thickness (15%). Chert dominated laminations up to 50% with barite slightly dominating over limestone (carbonate laminations). Laminations over this interval are slightly contorted, regular and parallel. Massive chert beds are preferentially cross cut by abnormally large carbonate veins up to 2cm thick (brittle deformation). Unit is moderately to strongly mineralized with rose coloured sphalerite disseminations within carbonate and barite laminations and veins up to 3% overall. Some intervals contains up to 7% sphalerite, giving laminations a pinkish hue. Unit is also strongly mineralized with fine grained disseminated galena throughout forming as very fine bands on the margins of laminations of limestone and barite (up to 4%) overall. Smaller intervals can have up to 7% galena and 5% sphalerite. Near the lower contact mineralization increases with massive bands of galena up to 7mm thick. The greatest amount of mineralization is seen from 149 to 152.89m with up to 7% galena and 5-6% sphalerite, minor pyrite. Lower contact is lost due to rubble core. It is measure to 152.89 where clasts of laminated chert-barite limestone and chert is lost, replaced by massive mudstone clasts. Lower contact is approximate as large amount of core lost due to wash from 152 to 155m.

Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
N162328	108.33	109.00	0.67	4.73	0.87	1
N162331	109.00	110.00	1.00	5.71	1.14	1
N162332	110.00	111.00	1.00	4.15	1.16	1
N162333	111.00	112.00	1.00	2.47	1.52	1
N162334	112.00	113.00	1.00	4.65	1.05	1
N162335	113.00	114.00	1.00	5.57	0.16	1
N162336	114.00	115.00	1.00	5.18	0.16	1
N162337	115.00	116.00	1.00	5.4	0.15	1
N162338	116.00	117.00	1.00	5.08	0.12	1
N162339	117.00	118.00	1.00	6.11	0.23	1
N162341	118.00	119.00	1.00	6.66	0.79	1
N162342	119.00	120.00	1.00	1.77	1.98	1
N162343	120.00	121.00	1.00	2.42	2.13	1
N162344	121.00	122.00	1.00	2.28	1.83	1
N162345	122.00	123.00	1.00	2.35	1.64	1
N162346	123.00	124.00	1.00	3.35	1.41	1
N162347	124.00	125.00	1.00	5.63	1.07	1
N162348	125.00	126.00	1.00	5	1.19	1
N162349	126.00	127.00	1.00	4.57	0.9	1
N162351	127.00	128.00	1.00	4.48	0.73	1
N162352	128.00	129.00	1.00	5.25	1.15	1
N162353	129.00	130.00	1.00	5.54	1.54	1
N162354	130.00	131.00	1.00	2.93	2.15	1
N162355	131.00	132.00	1.00	3.77	2.14	1
N162356	132.00	133.00	1.00	4.58	0.74	1
N162357	133.00	134.00	1.00	6.18	0.33	1
N162358	134.00	135.00	1.00	5.98	0.77	1
N162359	135.00	136.00	1.00	4.18	1.32	1
N162361	136.00	137.00	1.00	6.11	1.11	1
N162362	137.00	138.00	1.00	5.18	1.46	1
N162363	138.00	139.00	1.00	5.54	1.42	1
N162364	139.00	140.00	1.00	5.94	1.18	1
N162365	140.00	141.00	1.00	4.72	1.16	1
N162366	141.00	142.00	1.00	5.55	0.48	1
N162367	142.00	143.00	1.00	5.74	1.26	1
N162368	143.00	144.00	1.00	5.08	1.63	1

Lithology From	To	
Alteration:		
126.90 -	127.80	Weak chloritization hydrothermal.weak chlorite alteration along permeable pathways cross cutting laminations during syndeformational transport of fluids (dewatering)
Structure:		
108.50 -		lamination 65° to c/a slight to moderately contorted beds
112.10 -		lamination 65° to c/a slightly contorted beds
123.97 -		lamination 30° to c/a
124.40 -		lamination 30° to c/a
128.22 -		lamination 60° to c/a
132.78 -		lamination 40° to c/a
134.00 -		lamination 65° to c/a
134.39 -		lamination 65° to c/a
138.75 -		lamination 60° to c/a
142.66 -		lamination 60° to c/a
143.39 -		lamination 60° to c/a
146.56 -		lamination 60° to c/a
148.13 -		lamination 70° to c/a
150.47 -		lamination 60° to c/a
Veins:		
112.50 -	152.89	carbonate cc, 2%, carb veins cross-cutting massive chert beds

Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
N162369	144.00	145.00	1.00	4.43	2.05	1
N162371	145.00	146.00	1.00	4.18	1.57	1
N162372	146.00	147.00	1.00	5.95	1.56	1
N162373	147.00	148.00	1.00	4.59	1.85	1
N162374	148.00	149.00	1.00	4.5	1.61	1
N162375	149.00	150.00	1.00	4.96	2.08	1
N162376	150.00	151.00	1.00	4.84	1.65	1
N162377	151.00	152.00	1.00	5.24	4.66	1
N162378	152.00	152.88	0.88	1.37	2.43	1
N162379	152.88	153.00	0.12	0.22	0.45	1

Lithology										
From	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
152.89 -	179.00	**mdstn mudstone** Black fine grained massive mudstone. Unit is strongly silicified near the upper contact with a regular fracture angle at 70 degrees to CA throughout. Unit contains bands of disseminated pyrite as well as pyrite laminations that follow the same angle as fractures up to 2% overall. Qtz stringers are prevalent throughout the unit, with the majority (75%) following a similar angle of orientation with little contortion and the minority (25%) cross cutting bedding. Minor carbonate veins (<1%). Minor graphitic interval <15cm in width. Some chlorite alteration is noted near the upper contact but does not occur past 157.20m.	N162381	153.00	154.00	1.00			
			N162382	154.00	155.00	1.00	2.1	2.57	1
			N162383	155.00	156.00	1.00	1.37	5.58	12
			N162384	156.00	157.00	1.00	0.88	2.7	11
			N162385	157.00	158.00	1.00	0.01	0.59	3
			N162386	158.00	159.00	1.00	0.005	0.02	1
			N162387	159.00	160.00	1.00	0.005	0.02	1
			N162388	160.00	161.00	1.00	0.005	0.02	2
			N162389	161.00	162.00	1.00	0.02	0.01	2
Alteration:									
156.64 -	157.20	Weak chloritization hydrothermal.							
Structure:									
159.44 -		fracture 70° to c/a							

REVELATION GEOSCIENCE LTD

Drillhole Log

Units **Meters**

HudBay Minerals

Province/State	Co-ordinate System		Grid/Property		Hole Type	Length	Date Started
Yukon	UTM NAD83 Canada Zone 9				Diamond Drillhole	204.00	21/09/2011
District	**UTM North**	**UTM East**	**Local Grid E**	**Local Grid N**	**Collar Survey Method**		**Date Completed**
Watson Lake Mining District	7003866.49	441866.66			DGPS		24/09/2011
Project	**UTM Elevation**	**Azimuth Astro. (°)**	**Azimuth Grid (°)**	**Dip (°)**	**Drill Contractor**		**Date Logged**
013	1490.62	70.00		-78.00	Rodren Drilling Ltd		26/09/2011
Area	**Claim No.**	**NTS Sheet**	**Supervised By**		**Logged By**		**Verified**
MacMillan Pass	60498	105O/01	Matt Bodnar		Matt Bodnar		☐
Zone/Prospect	**Assessment Rpt. No.**	**Core Storage**		**Plug Depth**	**Makes Water**	**Capped**	**Environmental Inspection**
TW		Tom Camp			☐	☑	☐

Core Size (1)	HQ	204	Casing Pulled	Casing (1)	6.00	HW	Plugged	Pulsed	Geophysics Contractor	Date Pulsed
(2)			☐	(2)			☐	☐		

Purpose	Results	Comments
Infill target on West Zone - P24	Black graphitic mudstone with intermittent silt and pyrite laminae overly baritic ore zone. The mineralized horizon returned a weighted average of 5.79% Zn, 0.32% Pb and 1.0g/t Ag over 69.42 meters (115.18 to 184.60m).	DDH started on September 21st, day shift not completed on the 22nd due to absent drillers. Snowfall was continuous throughout the 22nd. Designed to extend indicated resource down dip along section 98N when refering to 2007 NI 43-101. Designed to be 065 Az, drill moved to 070 Az. Dipping -78 degrees.

Distance	Grid Azimuth (°) Original	Grid Azimuth (°) Final	Astro. Azimuth (°) Original	Astro. Azimuth (°) Final	Dip (°) Original	Dip (°) Final	Use Test	Survey Method	Mag. Field (nT)	Comments
0.00			46.4	70	-78		☐	Multi-shot Reflex		Collar
14.00			50.9	74.5	-76.6		☐	Multi-shot Reflex	58757	Good
38.00			54	77.6	-75.6		☐	Multi-shot Reflex	58211	Good
65.00			56.1	79.7	-74		☐	Multi-shot Reflex	58040	Good
89.00			57.3	80.9	-72.5		☐	Multi-shot Reflex	58336	Good
113.00			55.6	79.2	-71.6		☐	Multi-shot Reflex	58059	Good
137.00			55.6	79.2	-70.1		☐	Multi-shot Reflex	58294	Good
161.00			55.3	78.9	-70.4		☐	Multi-shot Reflex	58202	Good
185.00			55.4	79	-70.1		☐	Multi-shot Reflex	58067	Good
204.00			54	77.6	-69.4		☐	Multi-shot Reflex	58064	Good

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
0.00	6.53	**ovrbrdn overburden**							
6.53	115.18	**mdstn mudstone - laminated** Black laminated graphitic mudstone. The unit is nearly completely comprised of a succession of graphitic mudstone beds and laminae. Narrow 1-10 cm scale beds of pyrite, silt and quartz are also noticed intermittently. Although the unit is very black in colour, fine laminae can be identified with little deformation through the unit. The lower contact is gradational and conformable to bedding. The lower contact is defined by both an increase in the chert content and the marked increase in pervasive quartz veining containing medium grained re-crystallized sphalerite. Structurally the entire unit shows the effects of brittle deformation including sharp normal and reverse microfaults in the bedding. On a larger scale, a zone from 30 to 38m shows more intense foliation and brecciation. Bedding angles are somewhat variable from 21 to 38 degrees, however bedding is generally at 31 to 34 degrees to core axis. Veining of quartz and pyrite is noted throughout the unit consistently but in low abundance, rarely thicker than 1 cm. In most circumstances the veining comprises of crystalline pyrite with quartz filling the lateral pressure shadows. There is a single vein of carbonate located at 41.46m otherwise carbonate is not observed. Crushed rock return and rock powder is located between 97.15 and 101 m and 72 - 75.50 m. Alteration in the unit is minimal, there are little to no oxidation coatings observed. In a few locations a pinkish-red coating is observed on fracture surfaces. At 74.70 m broken rock shows a purple-blue-green "peacock" like metallic coating on a fracture surface. Economic mineralization in the unit is not recognized. Pyrite is abundant in the unit occurring in quartz veining and as fine grained beds. Between 50.8 and 60.37 m a mudstone bed contains up to 10% cloudy disseminated pyrite. Also, 1-3cm thick patty-shaped pyrite blobs are noted intermittently throughout the unit, some examples are located at 38.50, 55.45, 62.55, 68.33 m. The unit is only sampled at its base as a representative bracket sample.	N162391	113.00	114.00	1.00	0.005	0.005	1
			N162392	114.00	114.50	0.50	0.005	0.01	1
			N162393	114.50	115.18	0.68	0.005	0.01	1

Alteration:

74.68	74.70	Weak oxidation fracture controlled.Purple-blue-green "peacock-like" metallic coating on fracture surfaces. Has an iridescent appearance.

Structure:

7.63	-	bedding 32° to c/a Fine laminae.
9.90	-	vein 32° to c/a Irregularly shaped quartz and subhedral pyrite.
13.20	-	bedding 32° to c/a Fine laminae
15.18	-	contact 36° to c/a Contact is concordant with bedding, it is somewhat gradational

Lithology From	To			Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
			being defined by the appearance of medium grained re-crystallized light brown sphalerite.							
16.24	-	16.29	flame structure 32° to c/a 5cm interval of disturbed and broken siltstone and mudstone. Evidence where larger cm-scale clasts fell into softer sediment. Top likely up hole.							
17.16	-		bedding 34° to c/a Fine laminae							
21.33	-		bedding 34° to c/a Fine laminae							
22.00	-		bedding 31° to c/a Fine laminae							
26.55	-		vein 32° to c/a very irregular and contorted veins comprised of quartz and subhedral fg pyrite.							
26.92	-		vein 36° to c/a 1 cm thick very irregular and contorted vein comprised of quartz and subhedral fg pyrite.							
30.00	-	33.64	brecciated Zone of brecciation from 30 to 33.64 m numerous fine quartz stringers throughout. Bedding angles very irregular and difficult to identify.							
35.40	-		bedding 21° to c/a Fine laminae							
36.87	-	38.12	brecciated Zone of brecciation from 36.87 to 38.12 m numerous fine quartz stringers throughout. Bedding angles very irregular and difficult to identify.							
41.30	-		vein 40° to c/a Irregular and contorted qtz-py veining 4 cm interval.							
41.46	-		vein 40° to c/a Irregular and contorted carbonate vein.							
45.90	-		vein 35° to c/a 1 cm porous qtz vein looked to have material leached away yielding a sponge-like appearance.							
50.49	-		bedding 35° to c/a fine laminae							
53.28	-		vein Irregular and contorted qtz-py stringers over 8 cm.							
53.70	-		vein 2cm thick pre-deformation qtz-py vein intensely folded.							
60.37	-		bedding 30° to c/a fine laminae							
64.39	-		bedding 40° to c/a fine laminae							
70.12	-		bedding 45° to c/a fine laminae							
70.80	-		vein Irregular and contorted qtz-py stringers over 10 cm.							
71.43	-		bedding 52° to c/a fine pyrite laminae in mudstone							
72.00	-	75.50	fault Extremely broken core return, numerous fracture surfaces and slickensides.							
76.06	-		bedding 38° to c/a Fine laminae							
76.18	-	78.62	brecciated 15° to c/a Zone of more pervasive and intense quartz-pyrite stockwork veinlets and shearing. Core angle is variable but generally very shallow. Rock is mostly broken between 77.5 and 78.62							
79.83	-		bedding 32° to c/a Fine laminae							

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
83.20	-	bedding 34° to c/a 1 mm quartz-silt bed in mudstone							
86.08	-	foliation 40° to c/a Foliation in massive mudstone							
87.65	-	bedding 30° to c/a Fine laminae							
89.62	-	bedding 30° to c/a 2mm quartz-pyrite laminae in massive mudstone.							
91.50	-	bedding 36° to c/a Fine laminae							
92.61	-	bedding 30° to c/a Lower contact of disseminated pyrite-rich bed in mudstone.							
93.33	-	vein 55° to c/a 1.5 cm thick quartz-pyrite vein cross cutting strat.							
94.80	-	bedding 40° to c/a fine laminae							
94.85	-	vein 25° to c/a 3mm qtz-py vein perpendicular to bedding. Vein stops abruptly at a specific bedding interface.							
97.15	- 101.00	fault 30° to c/a Pulverized and shattered rock with much quartz and pyrite intermixed in rubbly return.							
103.17	-	bedding 45° to c/a Fine laminae							
103.58	- 110.23	brecciated 26° to c/a Pervasive but relatively weak brecciation and deformation of the mudstone unit. Veinlets and stringers of quartz and pyrite are scattered throughout.							
113.25	-	bedding 34° to c/a Fine laminae							
115.07	-	bedding 36° to c/a Fine laminae just above lower contact of unit.							

Lithology From	To	
115.18 -	125.83	**mdstn mudstone - mineralized** Dark black Chert-rich weakly graphitic mudstone interbedded with finely laminated barite. The unit is comprised of alternating beds of chert-rich mudstone and intervals of mixed barite and chert laminae, pyrite is noted in low proportion throughout the mudstone beds and intermittently as concentrated beds or laminae. An interval of exclusively barite-laminated carbonate rock is located between 125.83 and 128 m. Structurally the unit is well preserved, there are no sections of crushed rock or poor return. Although the entire unit has undergone compressive stress, it appears to have been healed by a significant amount of qtz-sph ±carb ±galena veining. Bedding angles are variable, consistent with a hummocky or undulating sea bed. Core angles are measured at 40° at the top of the unit, gradually reducing down to 20° from 119 to 123 m and hovering between 25° and 35° for the remainder of the unit. Of note, the laminated barite subunit exhibits much shallower angles of 0° to 15°. The unit appears fresh and unaltered. Fractures are sharp and the core is very competent. The entire unit shows tensile stress as all chert-rich strata show a significant amount of sub-centimeter scale quartz-sphalerite veining. All barite laminae dominant intervals show much more ductile deformative behavior. Mineralization is pervasive, consisting of laminated barite intervals sandwiched between chert-rich mudstone beds. Sphalerite is visible throughout the unit occurring as medium grained re-crystallized clusters within quartz and quartz-carbonate veining stockwork. The sphalerite is typically a very pale brown, however at 134.29 m a 2 x 3 cm cluster has a red colouration. Galena is typically only visually confirmed locally within fresh broken faces and is typically contained within the quartz±carbonate veining. Fine laminae within the sequence are likely to contain very fine grained galena and sphalerite but this is not easily confirmed visually. Notably, all veining is exclusively qtz-sph bearing from the unit top to 124.77 m, or exactly 1.06 m above the barite laminated limestone subunit. From 124.77 m through to unit end all further veining is quartz-carbonate-sphalerite ± Galena.

Structure:

115.80 -	bedding	40° to c/a	Fine barite laminae
117.84 -	bedding	34° to c/a	Fine laminae
118.40 -	bedding	35° to c/a	Fine barite laminae
119.40 -	bedding	20° to c/a	Fine barite laminae
121.50 -	bedding	20° to c/a	Fine barite laminae
122.40 -	bedding	20° to c/a	Fine barite laminae
124.10 -	bedding	29° to c/a	Fine barite laminae
124.77 -	bedding	45° to c/a	Beginning of carbonate in veining.

Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
N162394	115.18	116.00	0.82	3.35	0.03	1
N162395	116.00	117.00	1.00	2.65	0.03	1
N162396	117.00	118.00	1.00	5.87	0.04	1
N162397	118.00	119.00	1.00	8.44	0.07	1
N162398	119.00	120.00	1.00	6.69	0.1	1
N162399	120.00	121.00	1.00	6.69	0.11	1
N162501	121.00	121.72	0.72	3.99	0.11	1
N162502	121.72	121.90	0.18			
N162503	121.90	122.50	0.60	6.05	0.1	1
N162504	122.50	123.00	0.50	3.26	0.11	1
N162505	123.00	124.00	1.00	9.42	0.1	1
N162506	124.00	125.00	1.00	11.06	0.55	1
N162507	125.00	125.83	0.83	10.15	1.07	2

Lithology *From*	*To*		*Sample #*	*From*	*To*	*Len.*	*Zn %*	*Pb %*	*Ag ppm*
125.83 -	128.00	**lmst limestone - mineralized** Baritic laminated carbonate rock. Unit reacts with 10% HCL vigorously except for minor chert laminae throughout.	N162508	125.83	126.50	0.67	3.74	0.57	1
			N162509	126.50	127.00	0.50	2.16	0.67	1
			N162511	127.00	128.00	1.00	2.99	0.55	1

Structure:

125.83 -	contact 35° to c/a	Upper contact of laminated barite carbonate.
126.45 -	bedding 15° to c/a	Fine barite laminae
126.80 -	bedding 0° to c/a	Fine barite laminae in contorted carbonate sub-unit
127.10 -	bedding 30° to c/a	Fine barite laminae in contorted carbonate sub-unit
127.50 -	bedding 25° to c/a	Fine barite laminae in contorted carbonate sub-unit
127.90 -	bedding 25° to c/a	Fine barite laminae in contorted carbonate sub-unit

Lithology From	To	
128.00 -	146.20	**mdstn mudstone - mineralized** As 115.18-125.83m, interval split upon editing to allow 125.83-128.00m as a major interval.

Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
N162512	128.00	129.00	1.00	5.41	0.35	1
N162513	129.00	130.00	1.00	7.5	0.12	1
N162514	130.00	131.00	1.00	7.95	0.13	1
N162515	131.00	132.00	1.00	3.21	0.09	1
N162516	132.00	133.00	1.00	4.95	0.11	1
N162517	133.00	134.00	1.00	1.07	0.09	1
N162518	134.00	135.00	1.00	4.79	0.12	1
N162519	135.00	136.00	1.00	6.55	0.13	1
N162521	136.00	137.00	1.00	6.34	0.11	1
N162522	137.00	138.00	1.00	5.86	0.12	1
N162523	138.00	139.00	1.00	5.66	0.16	1
N162524	139.00	140.00	1.00	5.33	0.19	1
N162525	140.00	141.00	1.00	5.93	0.16	1
N162526	141.00	142.00	1.00	5.3	0.17	1
N162527	142.00	143.00	1.00	5.72	0.18	1
N162528	143.00	144.00	1.00	4.85	0.15	1
N162529	144.00	145.00	1.00	5.26	0.14	1
N162531	145.00	145.50	0.50	5.12	0.11	1
N162532	145.50	146.20	0.70	5.35	0.14	1

Structure:

128.00 -	contact 0° to c/a	Lower contact of laminated barite carbonate
130.55 -	bedding 25° to c/a	Fine barite laminae in chert-rich mudstone
132.80 -	bedding 30° to c/a	Fine barite laminae in chert-rich mudstone
133.55 -	bedding 38° to c/a	Bottom of mudstone bed with 3-5% disseminated pyrite.
135.10 -	bedding 25° to c/a	Fine barite laminae in chert-rich mudstone
140.57 -	bedding 25° to c/a	Fine barite laminae in chert-rich mudstone
142.77 -	bedding 20° to c/a	Fine barite laminae in chert-rich mudstone
145.83 -	bedding 26° to c/a	Fine barite laminae in chert-rich mudstone

Lithology From	To	
146.20	184.60	**lmst limestone - mineralized** Laminated barite carbonate. The unit is generally buff grey to pale brown and is comprised of interbedded barite-sphalerite-galena carbonate and chert. Chert beds are generally between 3 to 7 cm thick and occur throughout the unit forming less than 10% of the unit. Chert laminae are generally less than 2 mm and are found throughout. The entire unit reacts vigorously with 10% HCL except for the pure chert beds. The unit takes on a much more of a pink hue from 183 to 184.5 m due to carbonate beds containing more sphalerite. Structurally the unit shows variable amounts of deformation. There are a few zones where the unit is intact with excellent recovery and little veining or alteration, such as between 146.2 to 150 m, 154.5 - 158 m, 166 - 167.45 m and, 168.50 - 177.50 m. The corresponding intervals are extensively broken, shattered and altered by groundwater. These zones have all the carbonate selectively removed and remaining rock is very soft and brittle. Bedding angles begin at 26° to 30°, and then decrease to less than 10° by 150 m depth. Most of the unit is less than 10° but core angles rise again to 30° at 167 m eventually reaching 45° at the lower contact with mineralized mudstone. The last 20 cm of the lower contact is significantly pulverized with only a handful of crushed rock being recovered. There is very little to no quartz or carbonate veining in the unit. The relative softness of the unit compared to the silicified mudstone surrounding allows it to deform in a very ductile manner. There are many examples on all scales of boudinaged chert beds and barite-carbonate being squeezed into the void with no break of laminae continuity. The unit is extensively mineralized however mineral estimates are very difficult due to the very fine grained nature of the laminated rock. Overall there is an estimated 2-3% sphalerite, 1-2% galena and at least 20% of the rock contains barite. There is little to no pyrite in this unit. The entire unit has been sampled for assay.

Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
N162533	146.20	147.00	0.80	5.57	0.13	1
N162534	147.00	148.00	1.00	3.89	0.13	1
N162535	148.00	148.65	0.65	5.09	0.13	1
N162536	148.65	149.60	0.95	1.2	0.08	1
N162537	149.60	150.00	0.40	6.33	0.19	1
N162538	150.00	151.00	1.00	8.08	0.25	1
N162539	151.00	152.00	1.00	4.42	0.11	1
N162541	152.00	153.00	1.00	8.09	0.23	1
N162542	153.00	154.00	1.00	6.54	0.15	1
N162543	154.00	154.60	0.60	8.69	0.2	1
N162544	154.60	154.80	0.20	6.97	0.21	1
N162545	154.80	155.48	0.68	6.48	0.22	1
N162546	155.48	156.00	0.52	7.68	0.2	1
N162547	156.00	157.00	1.00	5.63	0.2	1
N162548	157.00	158.00	1.00	6.42	0.39	1
N162549	158.00	159.00	1.00	7.85	0.47	1
N162551	159.00	160.00	1.00	8.19	0.16	1
N162552	160.00	161.00	1.00			
N162553	161.00	162.00	1.00	6.89	0.17	1
N162554	162.00	163.00	1.00	6.73	0.26	1
N162555	163.00	164.00	1.00	8.03	0.15	1
N162556	164.00	165.00	1.00	5.36	0.13	1
N162557	165.00	166.00	1.00	5.57	0.25	1
N162558	166.00	167.00	1.00	5.98	0.22	1
N162559	167.00	168.00	1.00	7.29	0.24	1
N162561	168.00	169.00	1.00	6.79	0.52	1
N162562	169.00	170.00	1.00	5.98	0.26	1
N162563	170.00	171.00	1.00	6.6	0.11	1
N162564	171.00	172.00	1.00	5.5	0.72	1
N162565	172.00	173.00	1.00	6.27	0.58	1
N162566	173.00	174.00	1.00	6.6	0.93	1
N162567	174.00	175.00	1.00	5.79	1.75	1
N162568	175.00	176.00	1.00	6.15	0.52	1
N162569	176.00	177.00	1.00	5.92	0.9	1
N162571	177.00	178.00	1.00	3.85	0.77	1
N162572	178.00	179.00	1.00	5.44	0.57	1

Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
			N162573	179.00	180.00	1.00	3.63	0.43	1
			N162574	180.00	181.00	1.00	5.05	0.79	1
			N162575	181.00	182.00	1.00	5.14	0.91	1
			N162576	182.00	183.00	1.00	6.56	0.67	1
			N162577	183.00	184.00	1.00	7.2	0.83	1
			N162578	184.00	184.60	0.60	5.8	0.7	1
148.65 -	149.60	**chrt chert - massive** Massive bed of chert within laminated barite ore. Does not react to 10% HCL. Conformable within sequence.							
Alteration:									
150.00 -	184.60	Moderate diagenetic altered.Laminated barite carbonate. Most of the unit has been leached extensively removing most if not all of the carbonate component. The most altered intervals are also the least competent.							
Structure:									
146.20 -		contact 20° to c/a Upper contact of laminated barite ore.							
146.83 -		bedding 30° to c/a chert bed							
148.90 -		bedding 15° to c/a chert bed							
149.60 -		bedding 26° to c/a Barite laminae							
152.15 -		bedding 0° to c/a Barite laminae							
154.55 -		bedding 10° to c/a Barite laminae							
155.40 -		bedding 5° to c/a Barite laminae							
155.75 -		bedding 0° to c/a Barite laminae							
157.60 -		bedding 5° to c/a Barite laminae							
164.30 -		bedding 20° to c/a chert bed							
165.50 -		bedding 30° to c/a Barite laminae							
167.15 -		bedding 35° to c/a Barite laminae							
167.80 -		bedding 28° to c/a Barite laminae							
168.90 -		bedding 35° to c/a Barite laminae							
170.80 -		bedding 35° to c/a Barite laminae							
171.90 -		bedding 35° to c/a Barite laminae							
175.70 -		bedding 30° to c/a Barite laminae							

Lithology From	To			Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
176.70	-	bedding 25° to c/a	Barite laminae							
179.70	-	bedding 20° to c/a	Barite laminae							
183.70	-	bedding 40° to c/a	Barite laminae							
184.20	-	bedding 28° to c/a	Barite laminae							
184.60	- 194.00	**mdstn mudstone - mineralized**		N162579	184.60	185.50	0.90	2.58	0.22	1
		Massive bedded graphitic mudstone and laminated barite. The unit is dark black consisting of alternating intervals of exclusively graphitic mudstone and intermittent sections of laminated barite-sphalerite-galena. The intervals of mineralized laminae decrease in thickness approaching the lower contact. Mm to cm-scale qtz-sph-gal veining is observed nearest the upper contact. The unit is relatively undeformed with no significant brecciation. Core angles are consistent at 45°. The lower contact is gradational and has been defined by the disappearance of mineralized laminae. The entire unit has been sampled for assay.		N162581	185.50	186.00	0.50	1.99	0.93	1
				N162582	186.00	187.00	1.00	2.68	0.99	1
				N162583	187.00	188.00	1.00	0.49	1.95	4
				N162584	188.00	188.60	0.60	0.73	2.62	5
				N162585	188.60	188.80	0.20	0.17	2.16	5
				N162586	188.80	189.50	0.70	1.02	1.95	3
				N162587	189.50	190.00	0.50	1.12	0.2	1
				N162588	190.00	191.00	1.00	1.87	0.58	1
				N162589	191.00	192.00	1.00	1.09	0.94	2
				N162591	192.00	193.00	1.00	1.34	1.18	4
				N162592	193.00	194.00	1.00	1.77	0.09	1
		Structure:								
184.80	-	bedding 45° to c/a	mudstone							
186.45	-	bedding 45° to c/a	fine laminae in mudstone							
188.40	-	bedding 45° to c/a	fine laminae in mudstone							
191.30	-	bedding 45° to c/a	fine laminae in mudstone							
193.85	-	bedding 45° to c/a	fine laminae in mudstone							

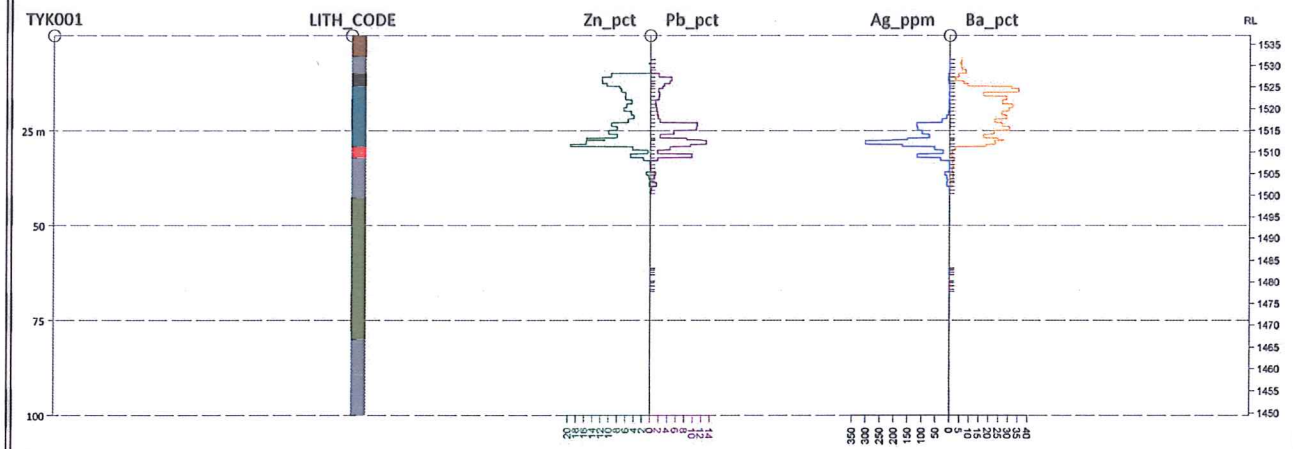
Lithology From	To		Sample #	From	To	Len.	Zn %	Pb %	Ag ppm
194.00 -	204.00	**mdstn mudstone - bedded** Black massively bedded graphitic mudstone. Silty qtz-py laminae are occasionally scattered throughout the unit. The unit is undeformed, bedding angles are consistently 45°, decreasing to 41° nearing the end of hole. Concentric pyrite concretions are noted in the unit between 200 and 203 m depth. A pair of examples range in diameter from 16 to 25 cm and both appear to showcase a series of rings of varying pyrite content. Pyrite is also noted in bedding and qtz veining. Measured EOH = 204.42m	N162593	194.00	195.00	1.00	0.61	0.03	1
			N162594	195.00	196.00	1.00	0.31	0.05	1

Structure:

196.60 -	bedding 45° to c/a	fine laminae in mudstone
198.80 -	bedding 45° to c/a	fine laminae in mudstone
200.20 -	bedding 45° to c/a	fine laminae in mudstone
203.20 -	bedding 41° to c/a	fine laminae in mudstone

APPENDIX IV

Digital Strip logs and Drill Sections



STRIP LOG: TYK001

Easting	Northing	RL	Azimuth	Dip	Depth
442053.7	7003743.5	1537.2	65.0	-65.0	100.0

Vertical scale 1:1250

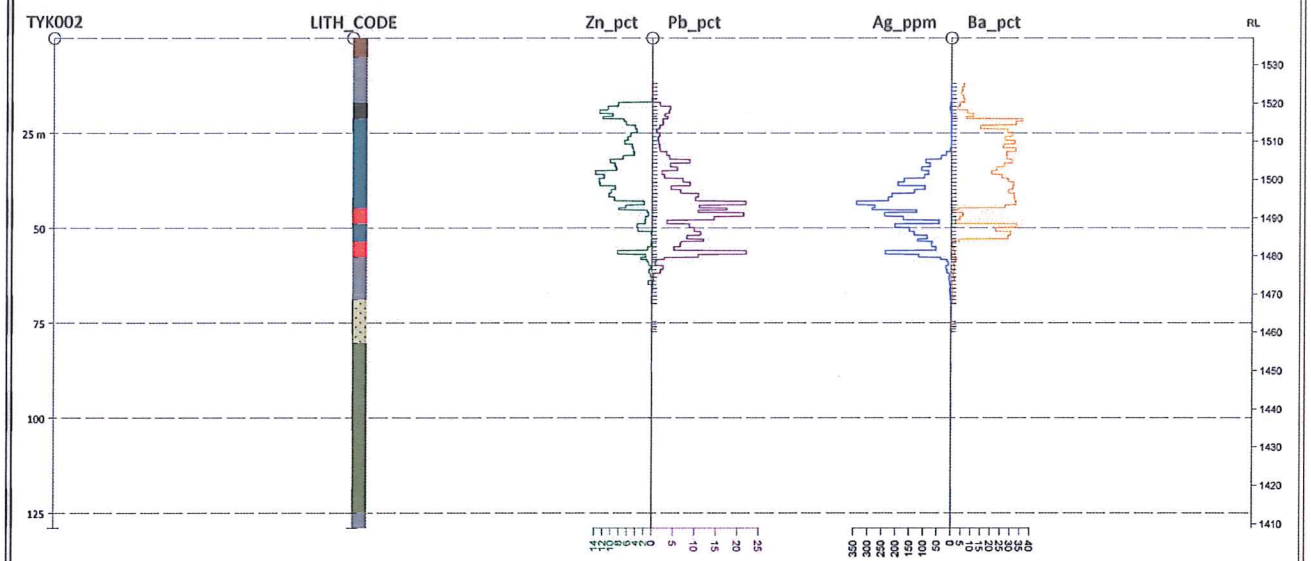
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		Conglomerate	Chert-pebble conglomerate
			Laminated mudstone	Graphitic laminated mudstone
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
			Near-solid Sulphide	Near-solid Sulphides
			Overburden	Mass wasting debris.
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK002

Easting	Northing	RL	Azimuth	Dip	Depth
442053.5	7003743.4	1537.0	65.0	-85.0	129.0

Vertical scale 1:1250

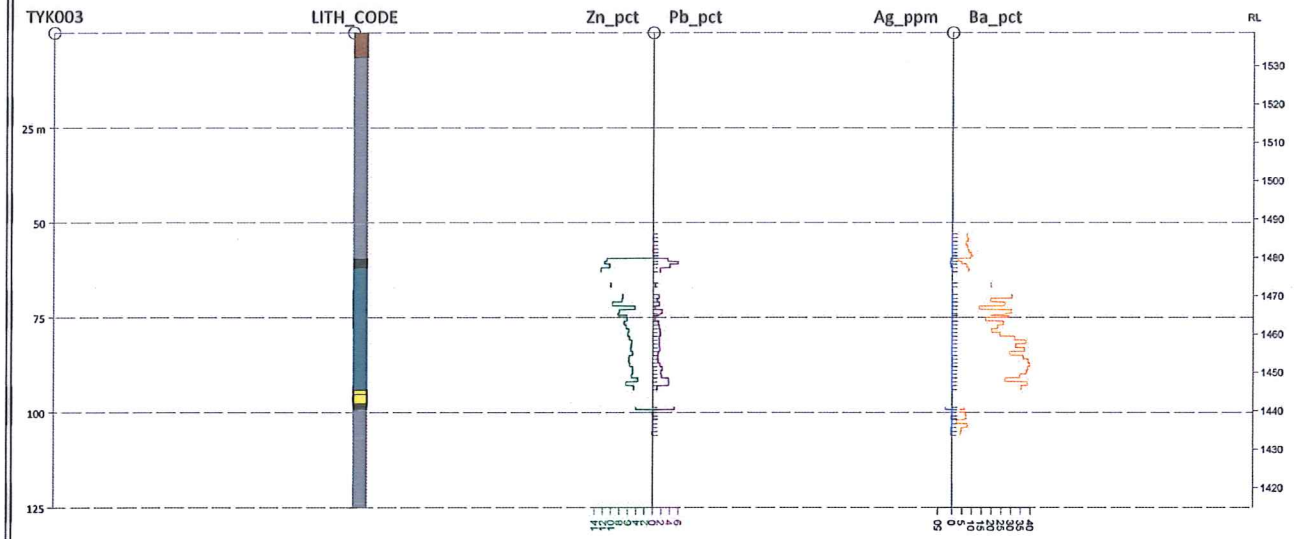
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		Conglomerate	Chert-pebble conglomerate
			Laminated mudstone	Graphitic laminated mudstone
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
			Near-solid Sulphide	Near-solid Sulphides
			Overburden	Mass wasting debris.
			Sandstone	Bedded quartz wacke
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK003

Easting	Northing	RL	Azimuth	Dip	Depth
441916.1	7004015.9	1538.5	65.0	-80.0	125.0

Vertical scale 1:1250

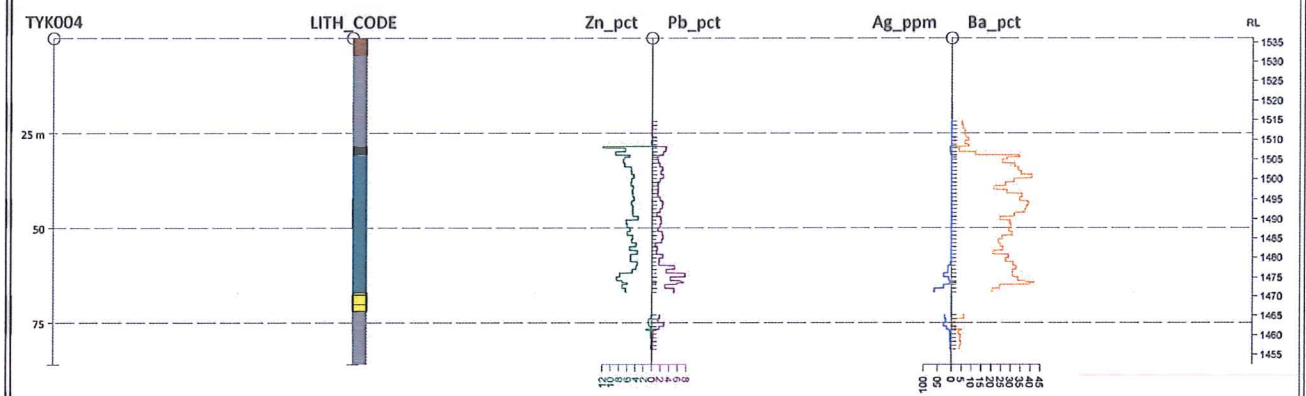
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		Laminated mudstone	Graphitic laminated mudstone
			Limestone	Interbedded carbonate and chert
			Lost Core	Core not recovered
			Mudstone	Graphitic Mudstone
			Overburden	Mass wasting debris.
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK004

Easting	Northing	RL	Azimuth	Dip	Depth
441973.0	7003907.8	1536.0	65.0	-78.0	86.0

Vertical scale 1:1250

STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		Laminated mudstone	Graphitic laminated mudstone
			Limestone	Interbedded carbonate and chert
			Lost Core	Core not recovered
			Mudstone	Graphitic Mudstone
			Overburden	Mass wasting debris.
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

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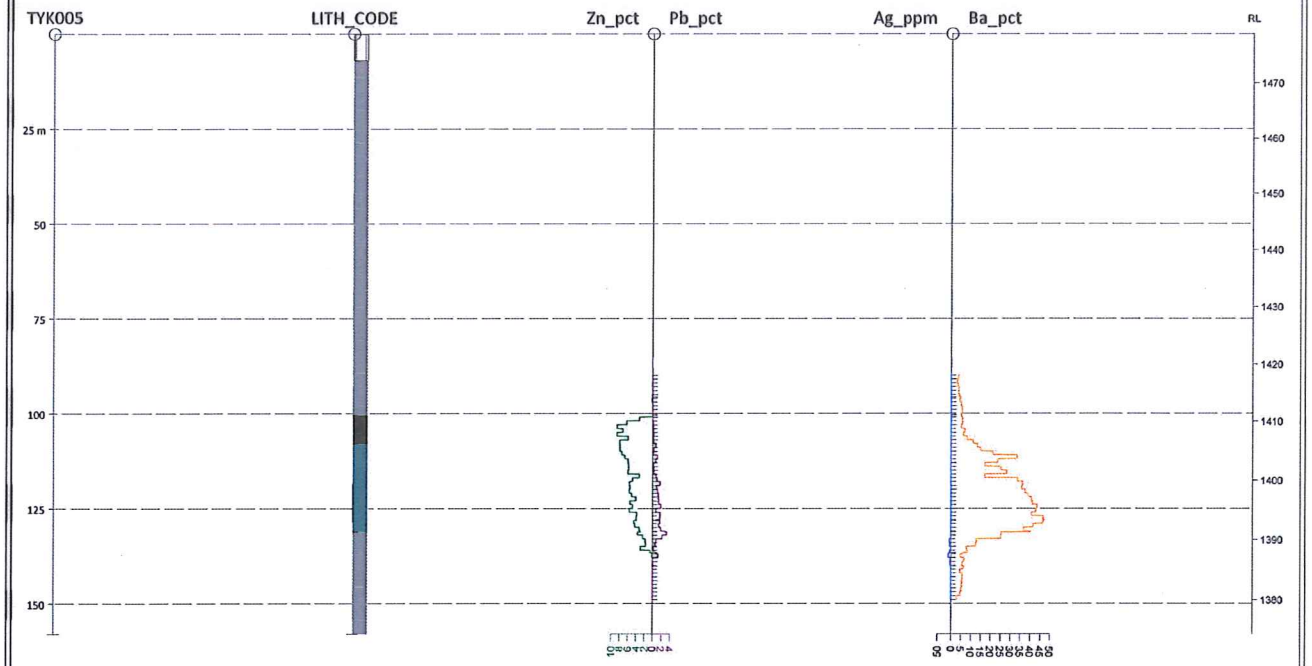
Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK005

Easting	Northing	RL	Azimuth	Dip	Depth
441804.8	7003964.2	1479.2	65.0	-45.0	158.0

Vertical scale 1:1250

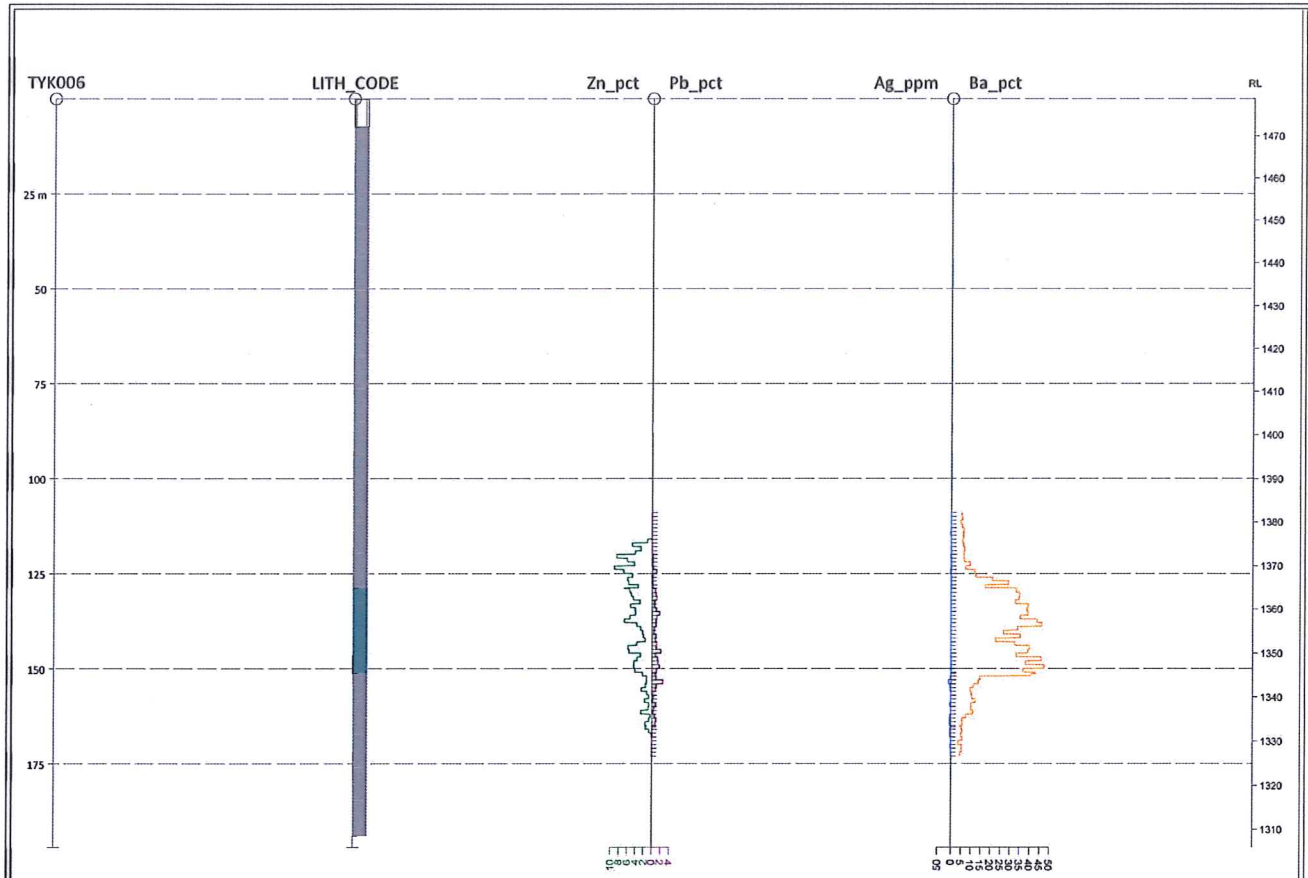
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE			
			cas	Casing
			Laminated mudstone	Graphitic laminated mudstone
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK006

Easting	Northing	RL	Azimuth	Dip	Depth
441803.6	7003963.5	1478.9	65.0	-65.0	197.0

Vertical scale 1:1250

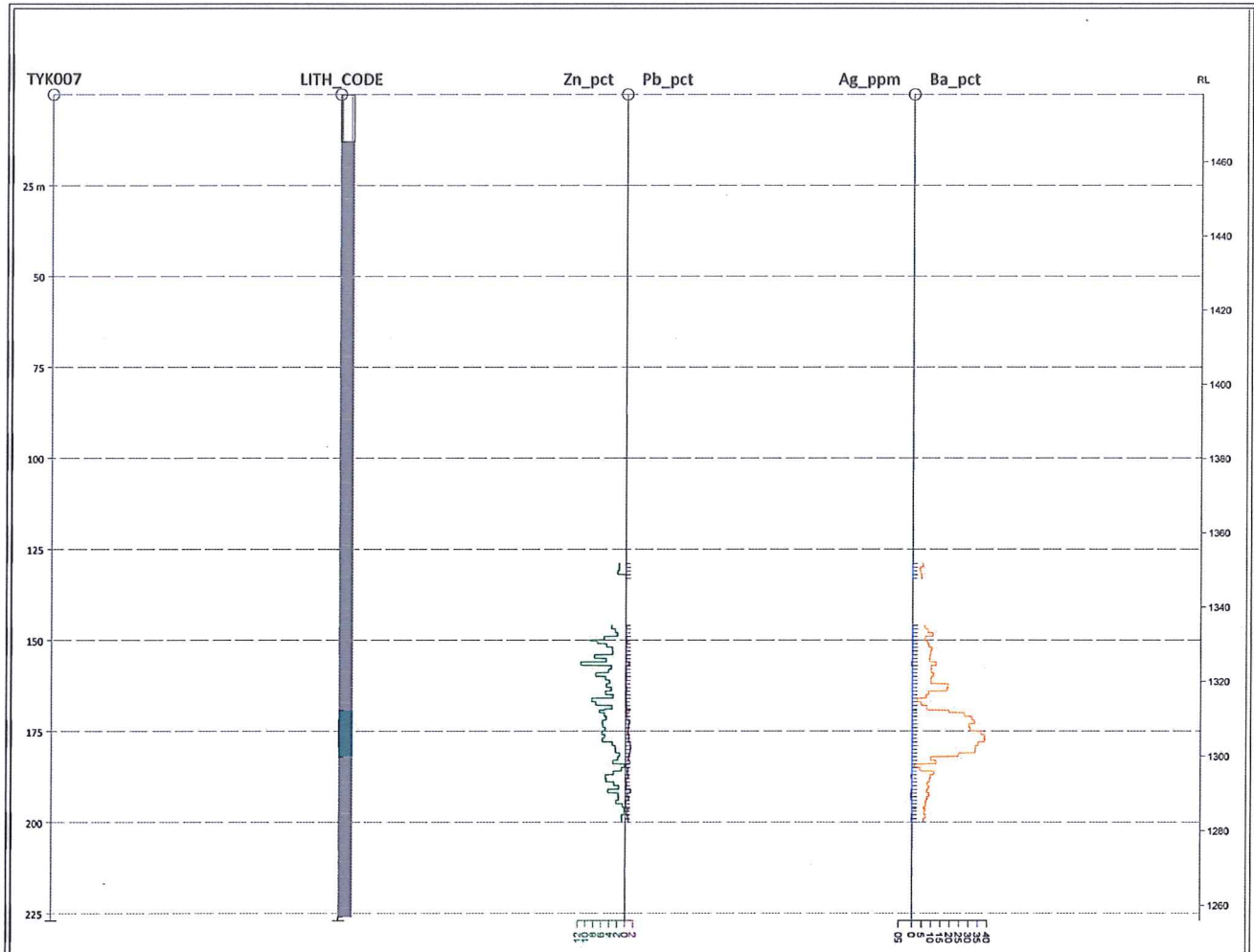
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		cas	Casing
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK007

Easting	Northing	RL	Azimuth	Dip	Depth
441803.1	7003963.4	1478.2	65.0	-80.0	227.0

Vertical scale 1:1250

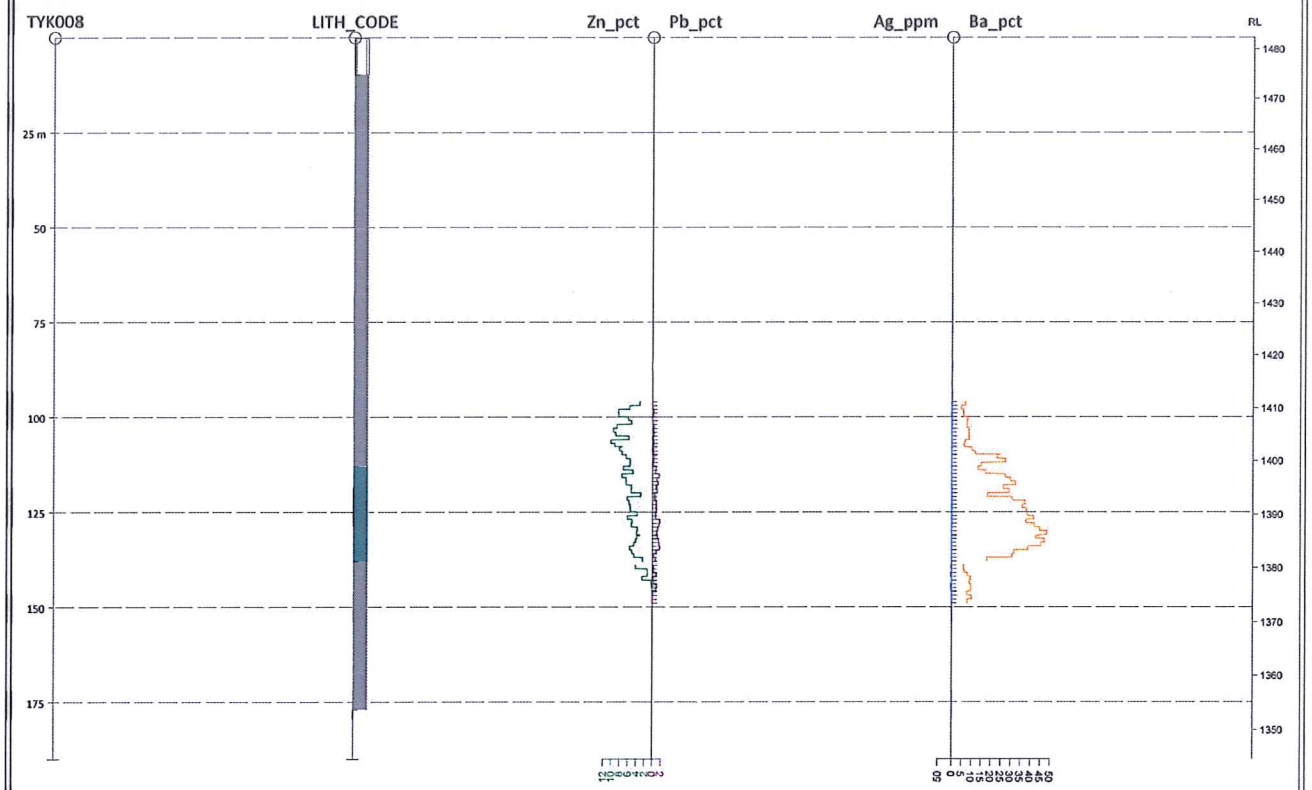
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		cas	Casing
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK008

Easting	Northing	RL	Azimuth	Dip	Depth
441825.6	7003908.6	1482.3	65.0	-50.0	190.0

Vertical scale 1:1250

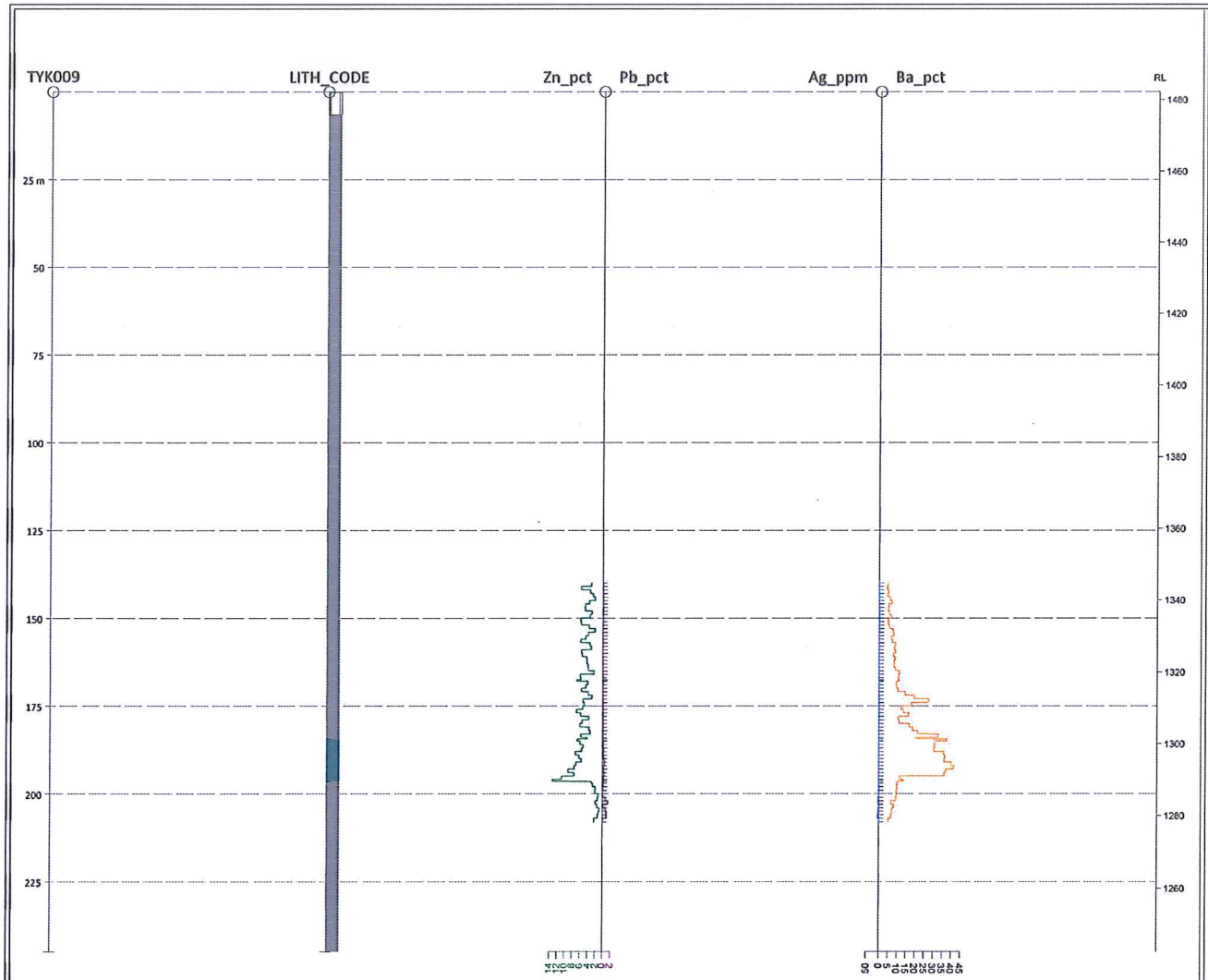
STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		cas	Casing
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK009

Easting	Northing	RL	Azimuth	Dip	Depth
441825.2	7003908.3	1482.3	65.0	-80.0	245.0

Vertical scale 1:1250

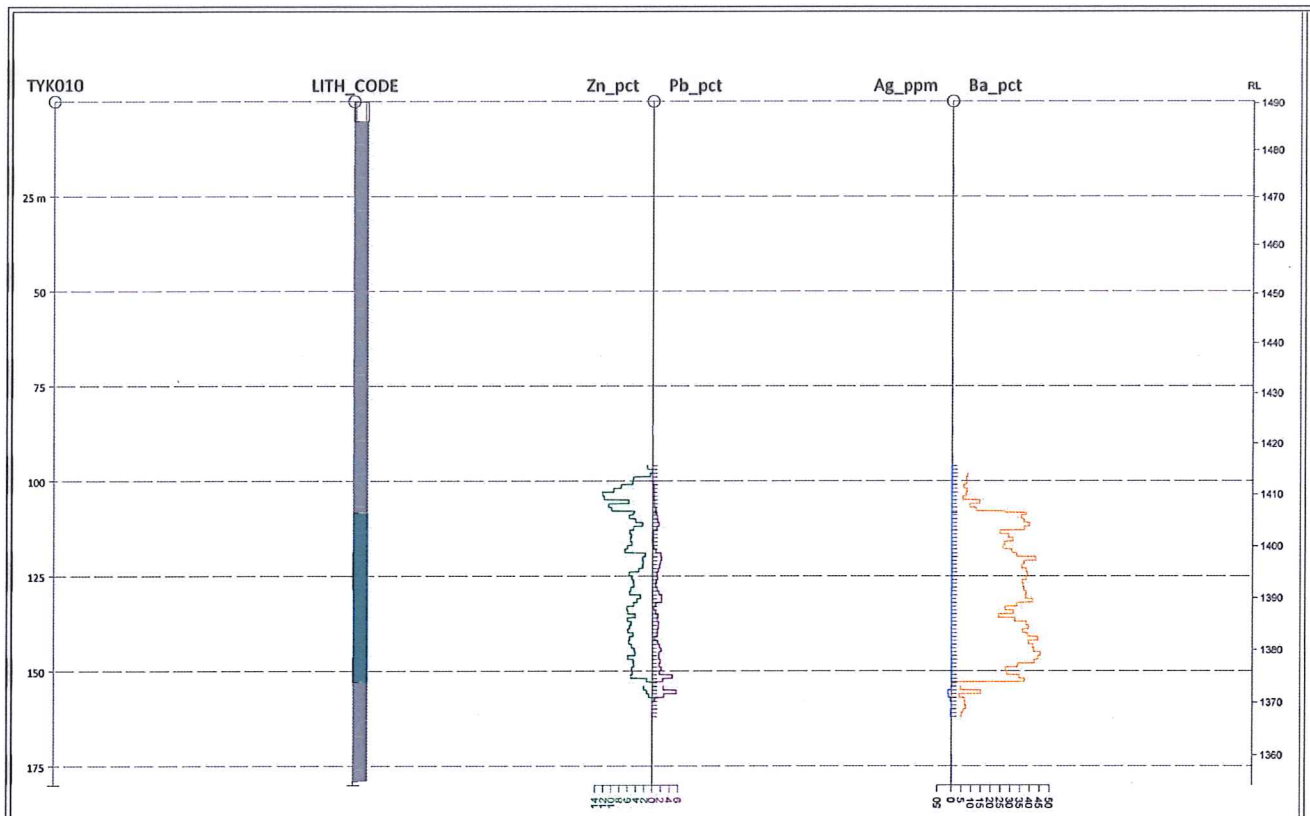
STRIP	LITH_CODE	PAT	LABEL	DESCRIPTION
1	LITH_CODE		cas	Casing
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK010

Easting	Northing	RL	Azimuth	Dip	Depth
441866.8	7003866.2	1490.4	65.0	-55.0	180.0

Vertical scale 1:1250

STRIP	LITH_CODE	PAT	LABEL	DESCRIPTION
1	LITH_CODE		cas	Casing
			Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone

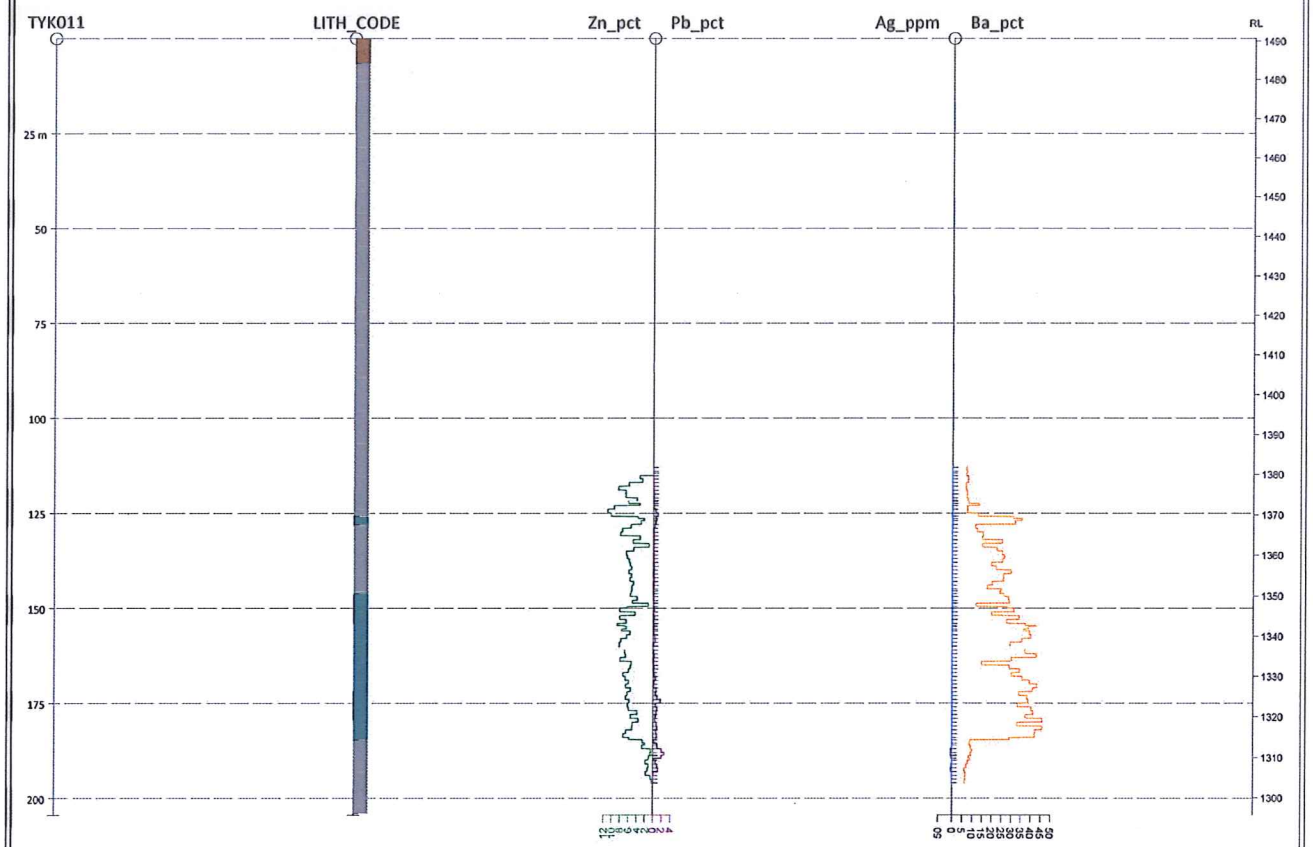
2	Zn_pct	LINE	
2	Pb_pct	LINE	
3	Ag_ppm	LINE	
3	Ba_pct	LINE	

Hudson Bay Mining & Smelting Ltd.

Tom Property

2011 EXPLORATION

REVELATION



STRIP LOG: TYK011

Easting	Northing	RL	Azimuth	Dip	Depth
441866.7	7003866.5	1490.6	65.0	-78.0	204.4

Vertical scale 1:1250

STRIP		PAT	LABEL	DESCRIPTION
1	LITH_CODE		Limestone	Interbedded carbonate and chert
			Mudstone	Graphitic Mudstone
			Overburden	Mass wasting debris.
2	Zn_pct	LINE		
2	Pb_pct	LINE		
3	Ag_ppm	LINE		
3	Ba_pct	LINE		

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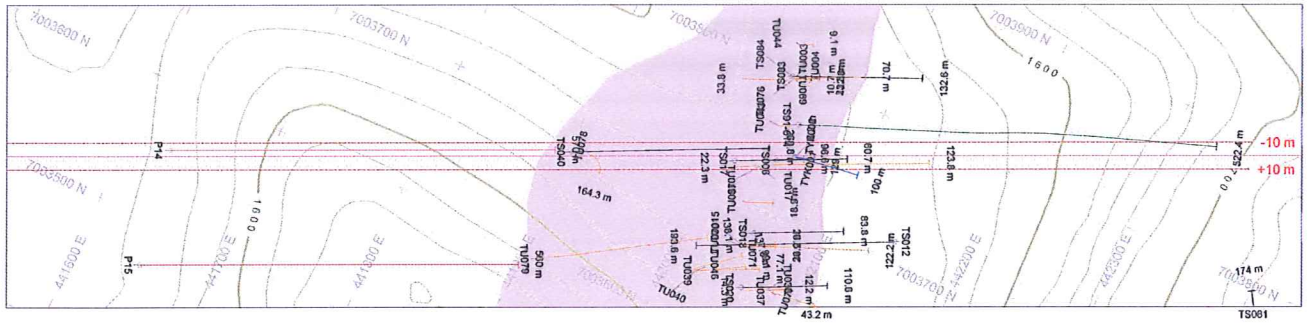
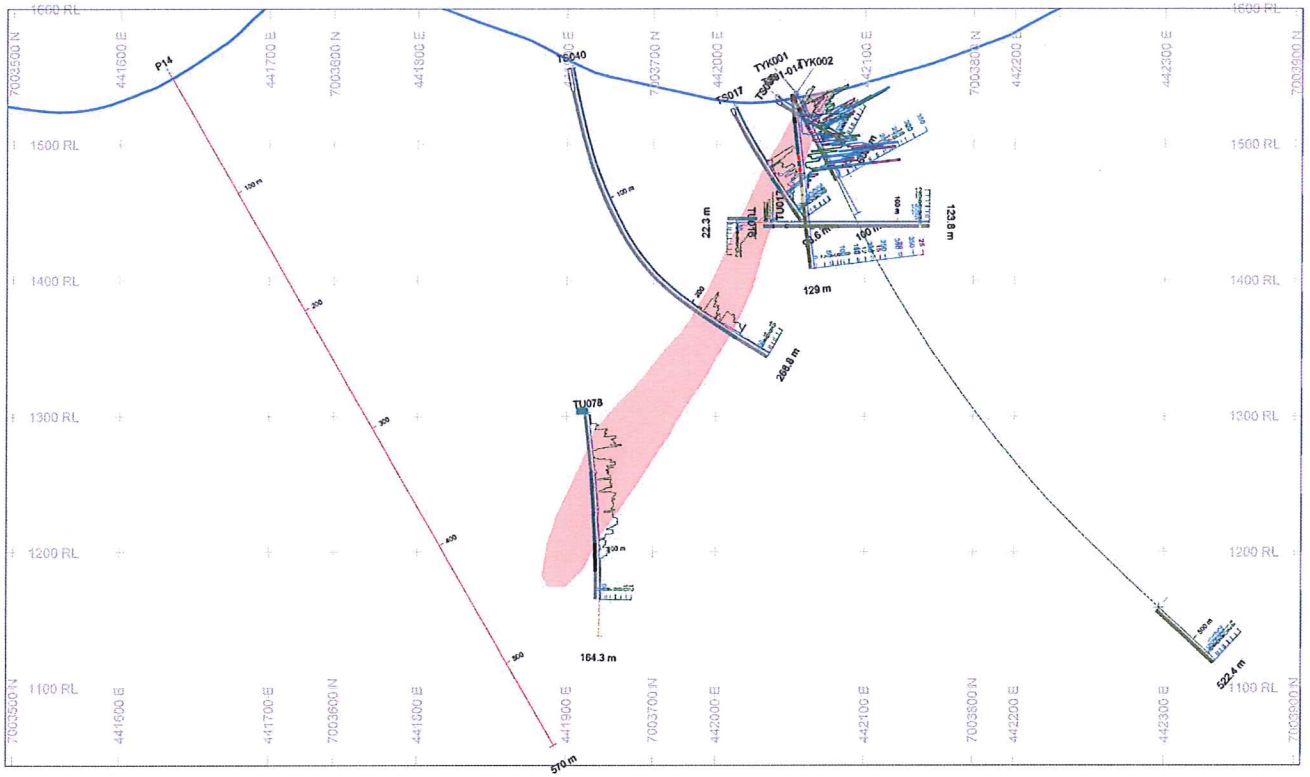
Tom Property

2011 EXPLORATION

REVELATION





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

HOLE TRACES	COLOUR	CODE	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
		Historical	HBMS Historical
		Proposed	2012 Proposed
		Underground	HBMS Underground

COLLARS	SYMB	LABEL	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
		Historical	HBMS Historical
		Proposed	2012 Proposed
		Underground	HBMS Underground

PROFILES	L/R	COL
Zn_pct	R	
PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

ROCK CODES LITH_CODE	PAT	LABEL	DESCRIPTION
		cas	Casing
		Conglomerate	Chert-pebble conglomerate
		Diamictite	Matrix-supported with subangular clasts
		Laminated mudstone	Graphitic laminated mudstone
		Limestone	Interbedded carbonate and chert
		Lost Core	Core not recovered
		Mudstone	Graphitic Mudstone
		Near-solid Sulphide	Near-solid Sulphides
		other	Unknown (historical)
		Overburden	Mass wasting debris.
		Sandstone	Bedded quartz wacke

SECTION SPECS:

REF. PT. E, N	441958 m	7003700 m
EXTENTS	956.2 m	557.3 m
SECTION TOP, BOT	1600 m	1043 m
TOLERANCE +/-	10 m	

SCALE 1 : 3500

(m)

-40 0 40 80 120

NAD83 / UTM zone 9N

AZIMUTH = 65°

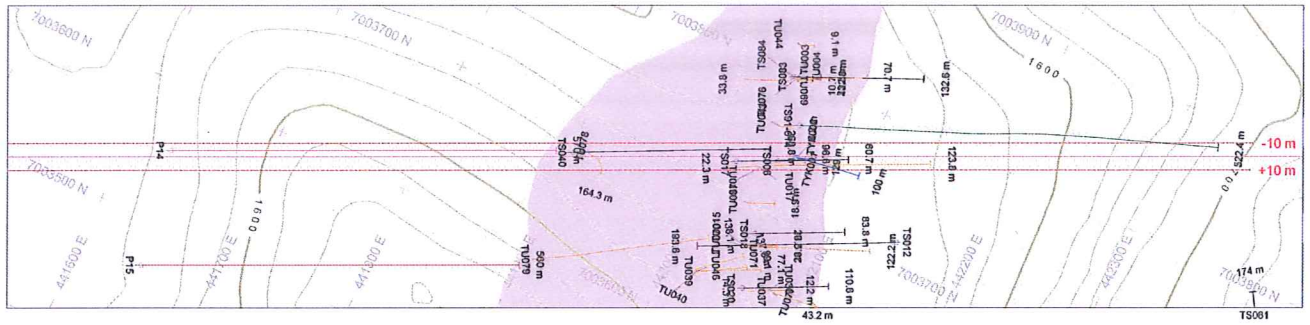
N W E S

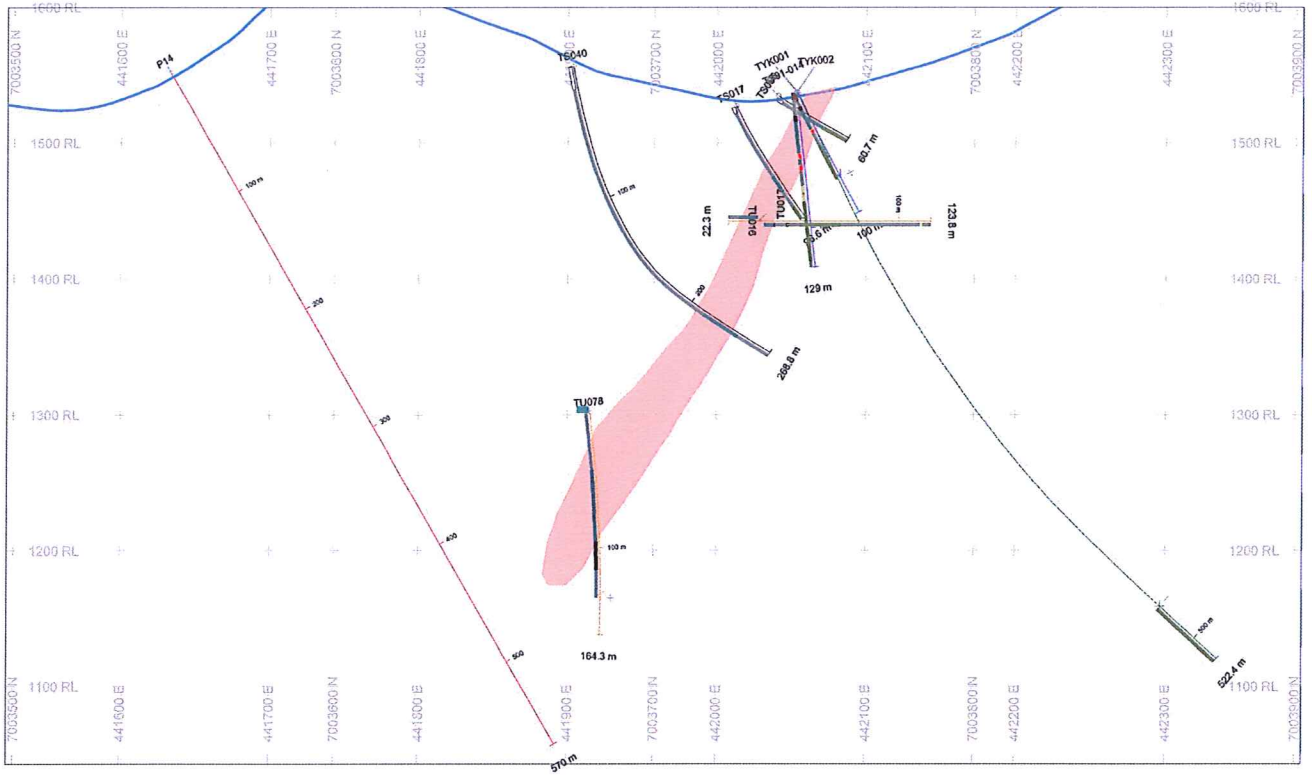
HudBay Minerals

Tom Property

West Zone

Section 86N





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

HOLE TRACES	COLOUR	CODE	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
		Historical	HBMS Historical
		Proposed	2012 Proposed
		Underground	HBMS Underground

COLLARS	SYMB	LABEL	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
		Historical	HBMS Historical
		Proposed	2012 Proposed
		Underground	HBMS Underground

PROFILES	L/R	COL
Zn_pct	R	
PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

ROCK CODES LITH_CODE	PAT	LABEL	DESCRIPTION
		cas	Casing
		Conglomerate	Chert-pebble conglomerate
		Diamictite	Matrix-supported with subangular clasts
		Laminated mudstone	Graphitic laminated mudstone
		Limestone	Interbedded carbonate and chert
		Lost Core	Core not recovered
		Mudstone	Graphitic Mudstone
		Near-solid Sulphide	Near-solid Sulphides
		other	Unknown (historical)
		Overburden	Mass wasting debris.
		Sandstone	Bedded quartz wacke

SECTION SPECS:

REF. PT. E, N	441958 m	7003700 m
EXTENTS	956.2 m	557.3 m
SECTION TOP, BOT	1600 m	1043 m
TOLERANCE +/-	10 m	

SCALE 1 : 3500

(m)

-40 0 40 80 120

NAD83 / UTM zone 9N

AZIMUTH = 65°

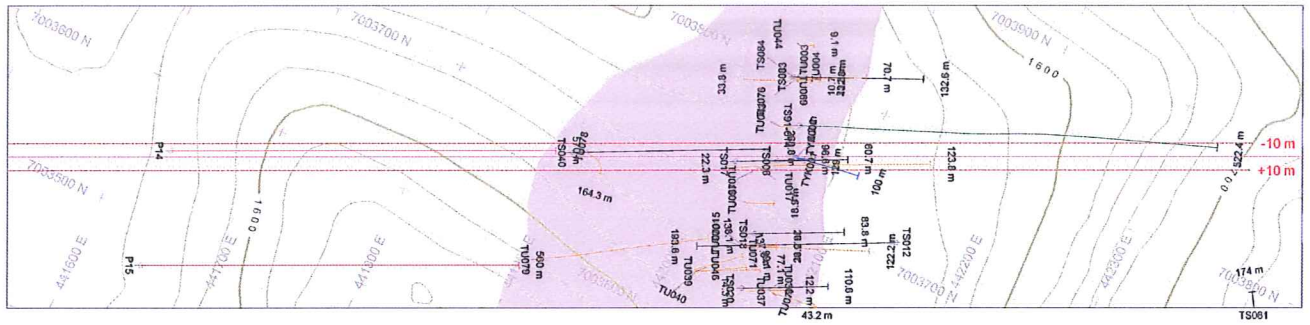
N W E S

HudBay Minerals

Tom Property

West Zone

Section 86N


P14
P15
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TS061
TU078
TU040
TS012
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TU039
TU037
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TU076
TU017
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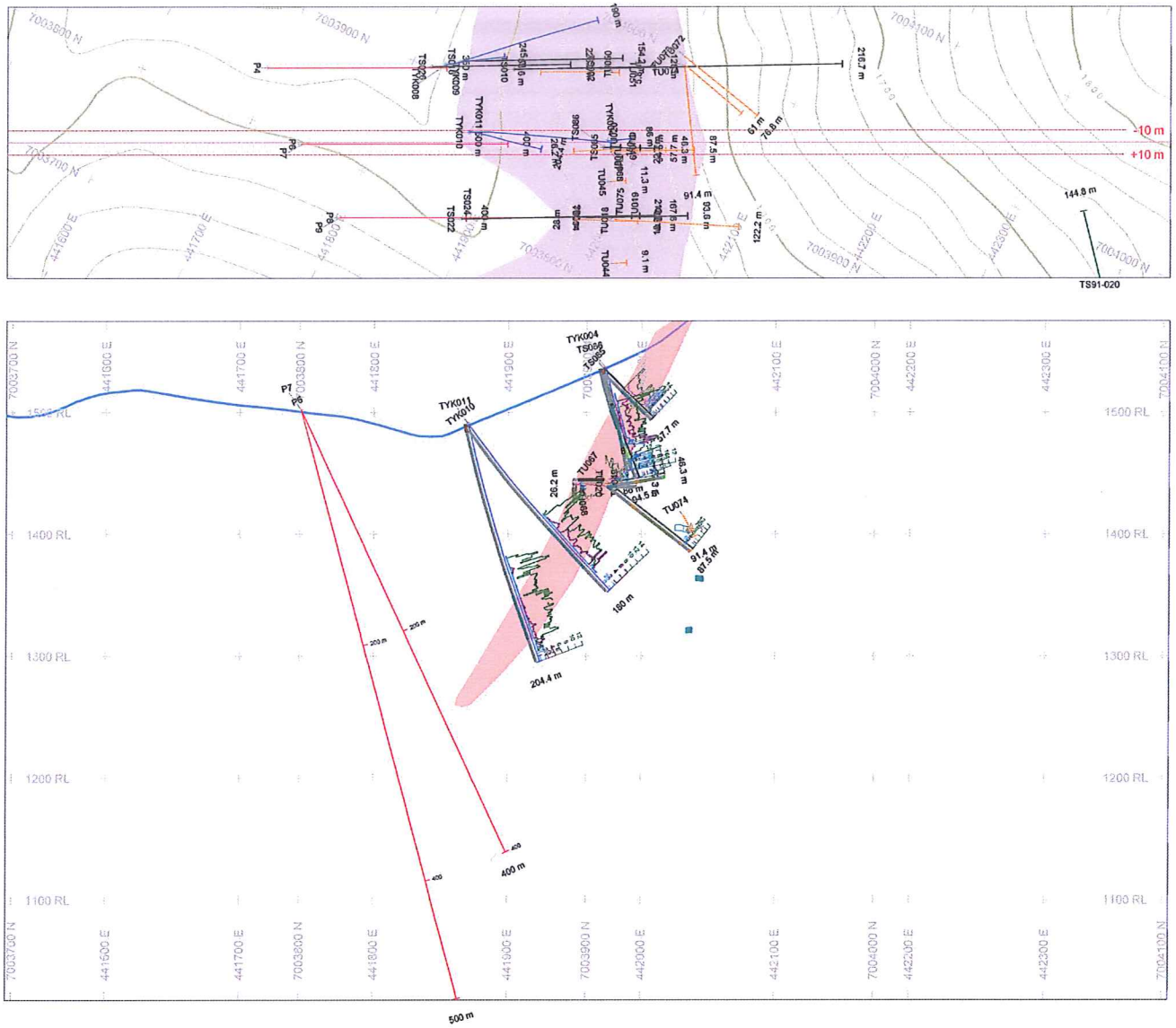


TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

HOLE TRACES	COLOUR	CODE	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
		Historical	HBMS Historical
		Proposed	2012 Proposed
		Underground	HBMS Underground

COLLARS	SYMB	LABEL	DESCRIPTION
Legend		2011	2011 Drilling
		Historical	HBMS Historical
		Proposed	2012 Proposed
		Underground	HBMS Underground

PROFILES	L/R	COL
Zn_pct	R	
PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

ROCK CODES LITH_CODE	PAT	LABEL	DESCRIPTION
		cas	Casing
		Conglomerate	Chert-pebble conglomerate
		Diamictite	Matrix-supported with subangular clasts
		Laminated mudstone	Graphitic laminated mudstone
		Limestone	Interbedded carbonate and chert
		Lost Core	Core not recovered
		Mudstone	Graphitic Mudstone
		other	Unknown (historical)
		Overburden	Mass wasting debris.
		Sandstone	Bedded quartz wacke

SECTION SPECS:

REF. PT. E, N	441959 m	7003900 m
EXTENTS	956.2 m	557.3 m
SECTION TOP, BOT	1575 m	1018 m
TOLERANCE +/-	10 m	

SCALE 1 : 3500

(m)

-40 0 40 80 120

NAD83 / UTM zone 9N

AZIMUTH = 65°

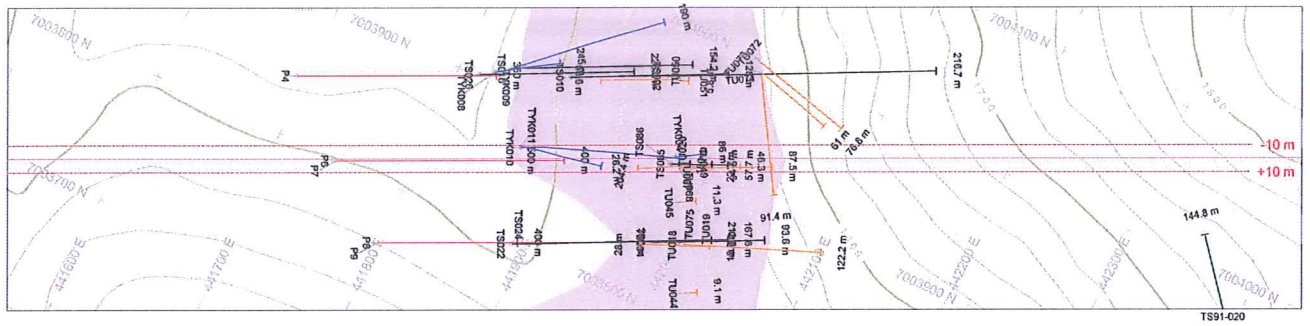
N W E S

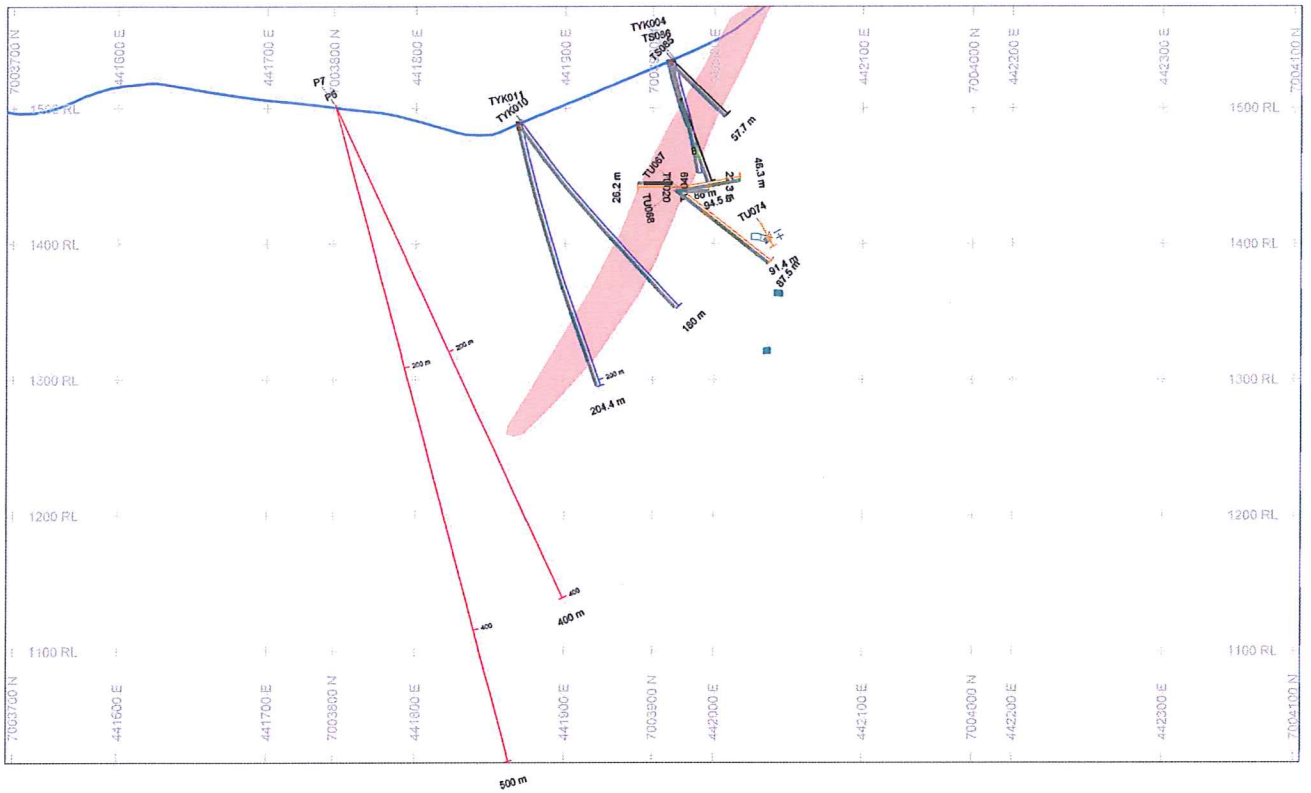
HudBay Minerals

Tom Property

West Zone

Section 098N





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION GEOSCIENCE LTD

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PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

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Tom Property

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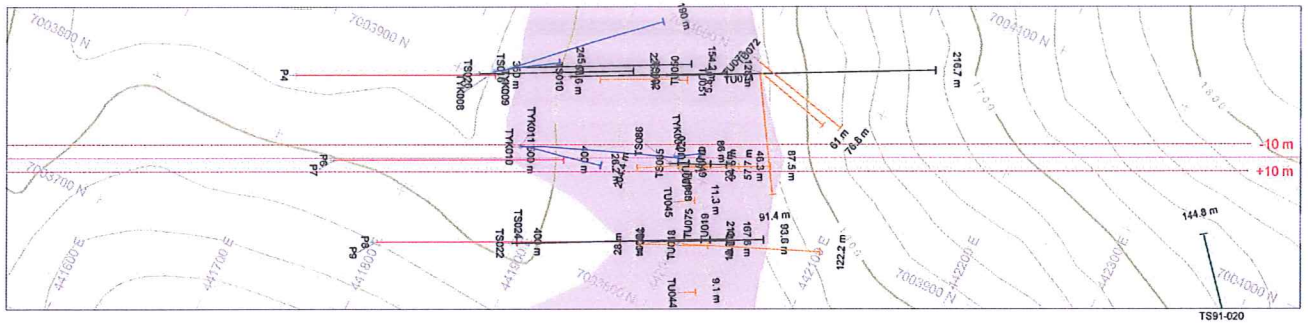
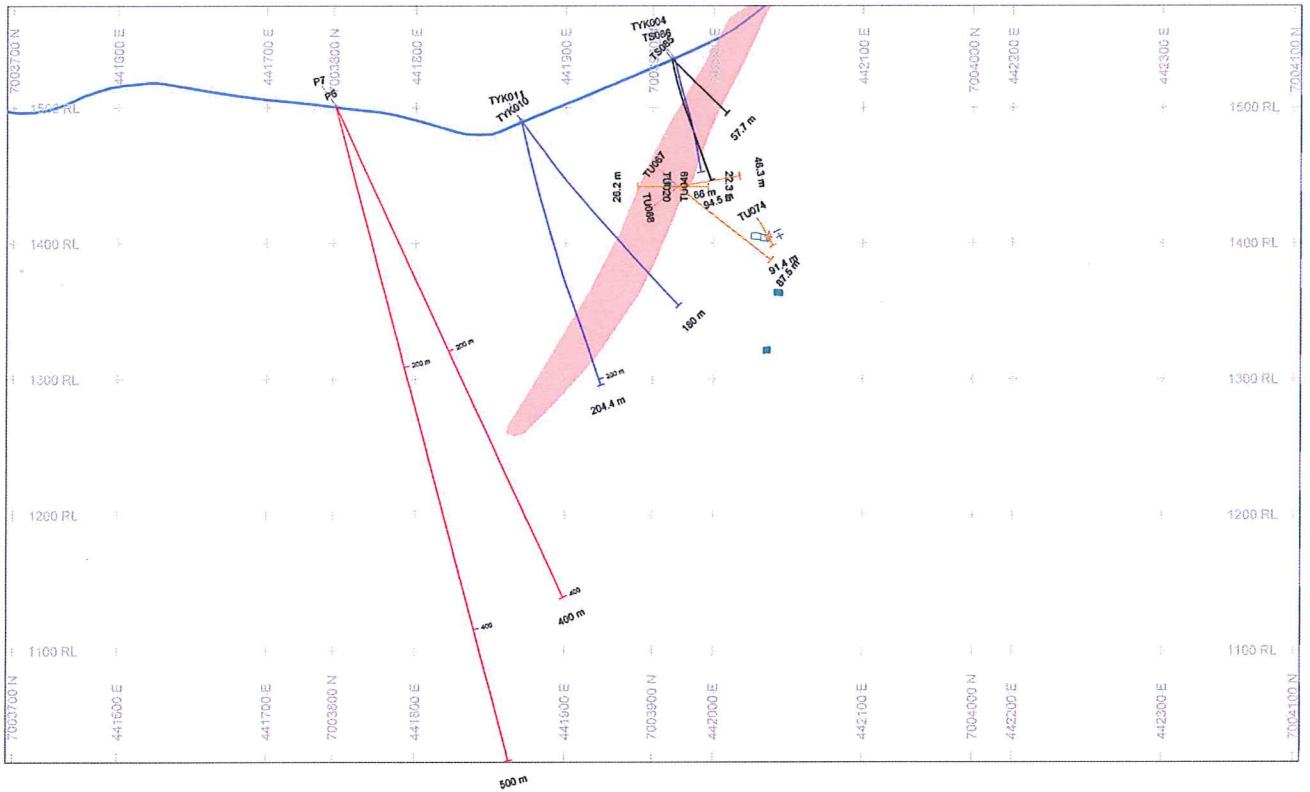
Section 098N





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

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Legend		2011	2011 Drilling
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PROFILES	L/R	COL
Zn_pct	R	
PB	R	
ZN	R	
AG	R	
Pb_pct	R	
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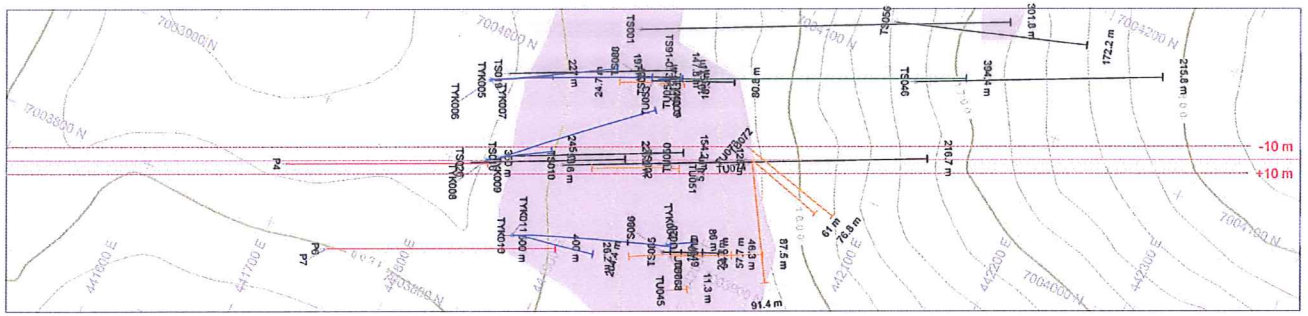
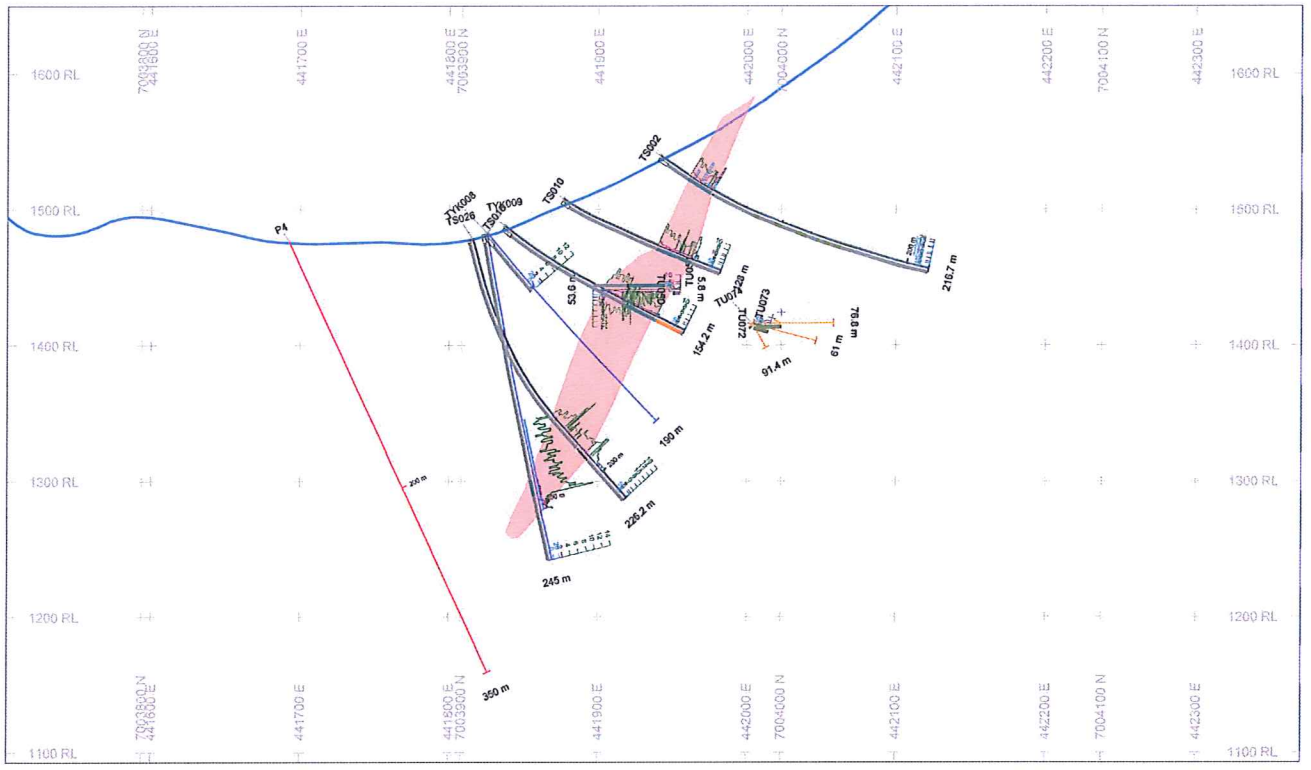
Section 098N





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

HOLE TRACES	COLOUR	LABEL	DESCRIPTION
Legend		2011	2011 Drilling
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PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

ROCK CODES LITH_CODE	PAT	LABEL	DESCRIPTION
		cas	Casing
		Conglomerate	Chert-pebble conglomerate
		Diamictite	Matrix-supported with subangular clasts
		hnfls	Hornfels
		lmsh	Laminated Shale
		Limestone	Interbedded carbonate and chert
		Lost Core	Core not recovered
		Mudstone	Graphitic Mudstone
		Overburden	Mass wasting debris.
		Sandstone	Bedded quartz wacke

SECTION SPECS:

REF. PT. E, N	441937 m	7003960 m
EXTENTS	956.2 m	557.3 m
SECTION TOP, BOT	1650 m	1093 m
TOLERANCE +/-	10 m	

SCALE 1 : 3500

(m)

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NAD83 / UTM zone 9N

AZIMUTH = 65°

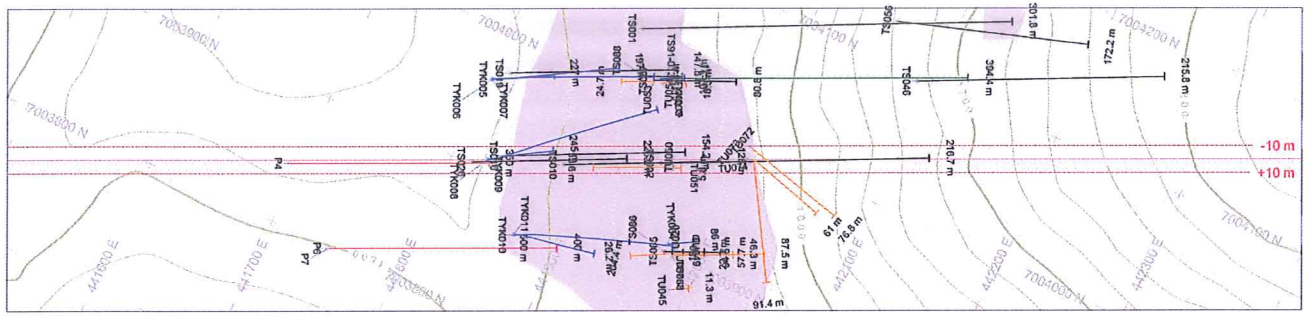
N W E S

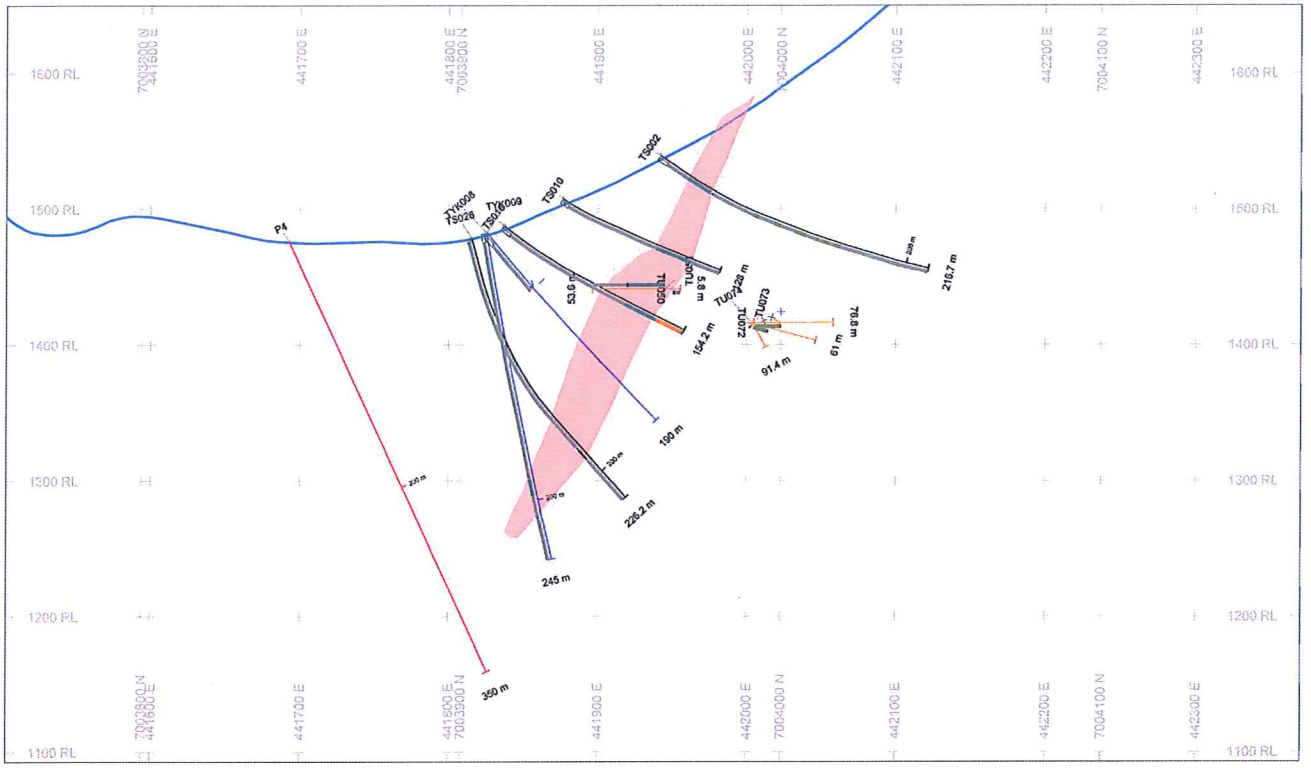
HudBay Minerals

Tom Property

West Zone

Section 102N





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

HOLE TRACES	COLOUR	LABEL	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
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		Underground	HBMS Underground

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PROFILES	L/R	COL
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PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

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LITH_CODE		cas	Casing
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NAD83 / UTM zone 9N

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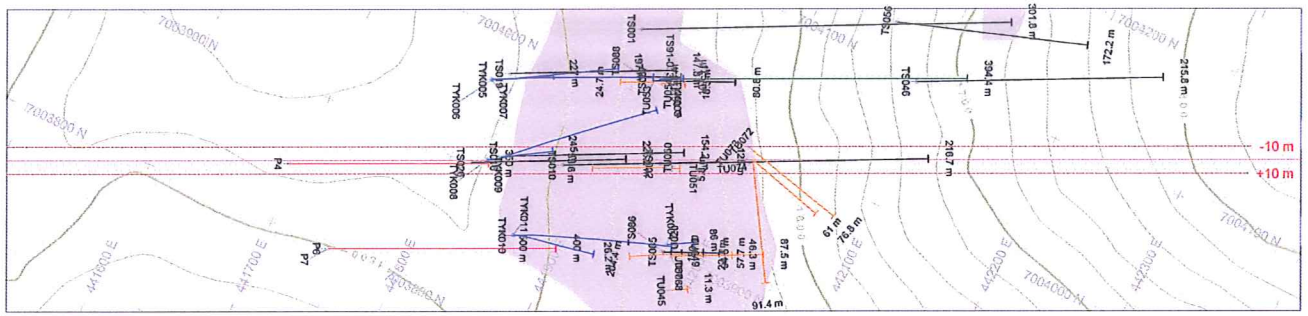
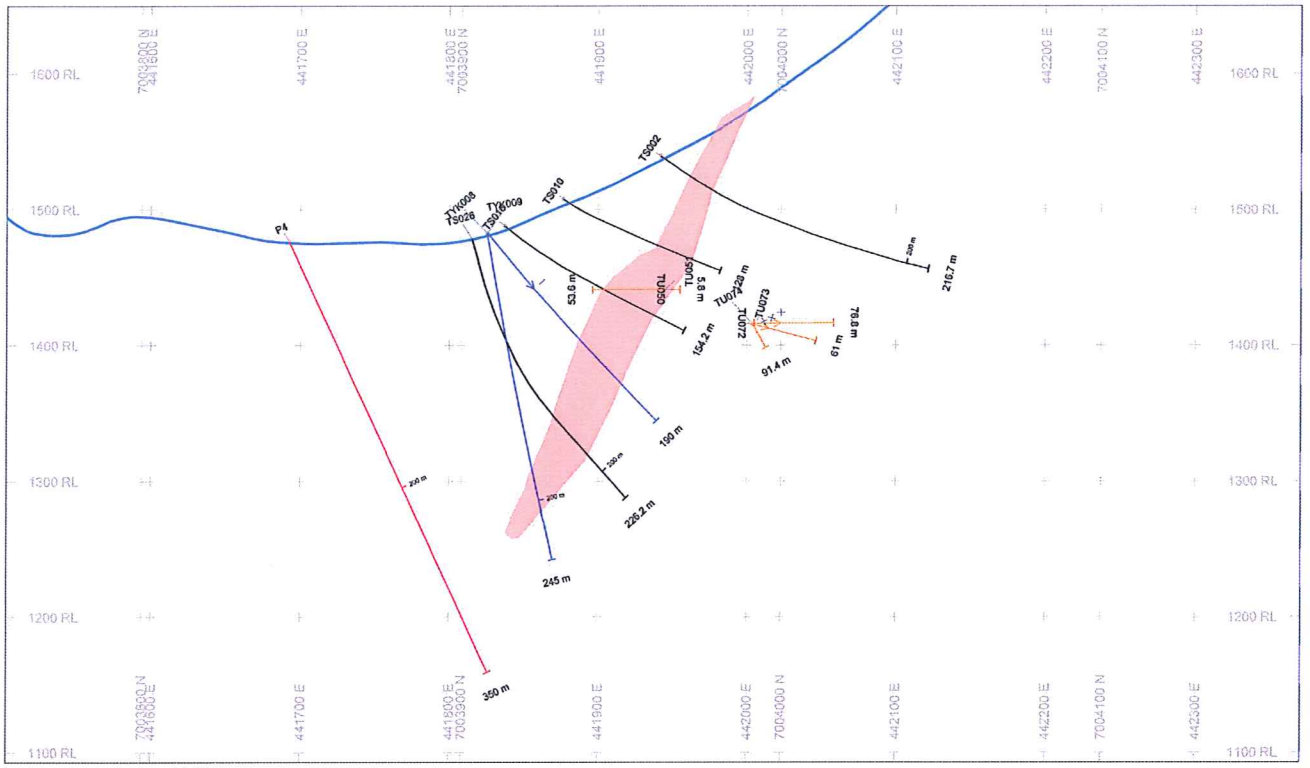
HudBay Minerals

Tom Property

West Zone

Section 102N





TOPOGRAPHY

Topography (Canvec 50k)

REVELATION

HOLE TRACES	COLOUR	LABEL	DESCRIPTION
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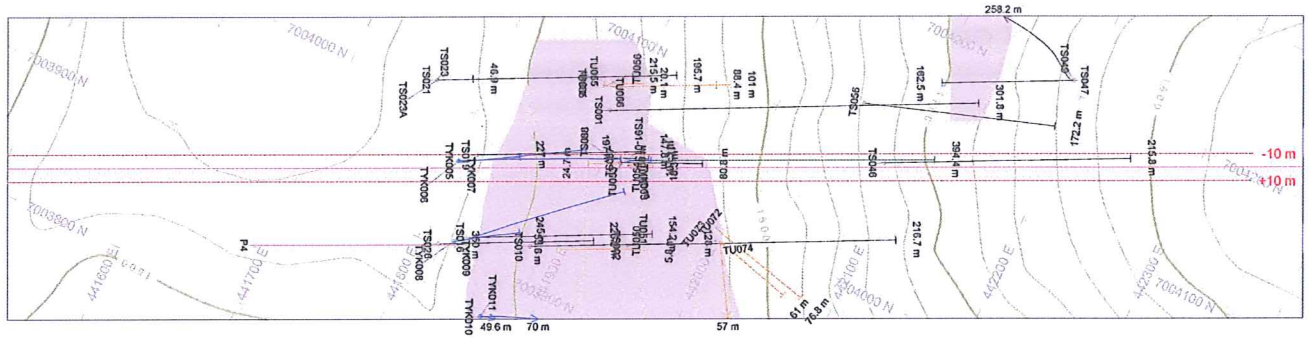
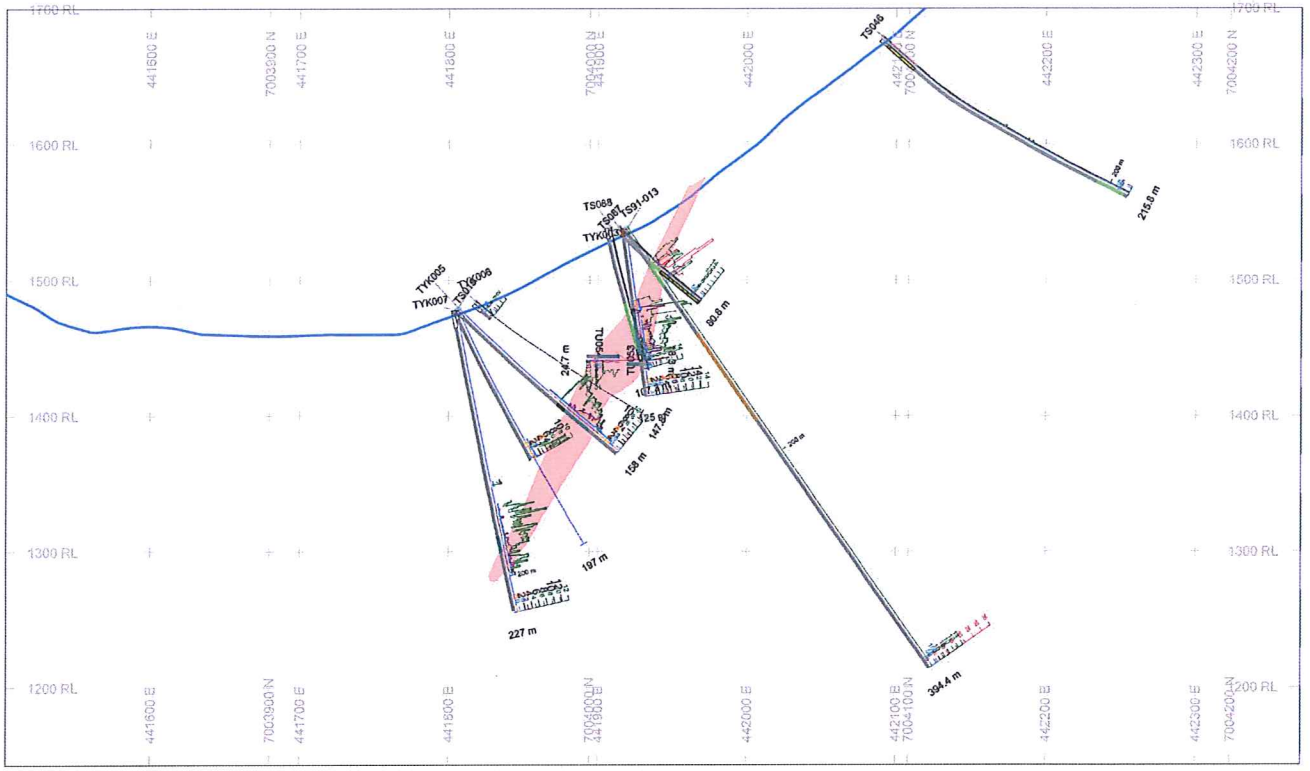
Tom Property

West Zone

Section 102N





TOPOGRAPHY

Topography (Canvec 50k)

HOLE TRACES	COLOUR	LABEL	DESCRIPTION
Legend		2011	2011 Drilling
		Cominco	Cominco Option
		Historical	HBMS Historical
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Legend		2011	2011 Drilling
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PROFILES	L/R	COL
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PB	R	
ZN	R	
AG	R	
Pb_pct	R	
Ag_ppm	R	

ROCK CODES LITH_CODE	PAT	LABEL	DESCRIPTION
		cas	Casing
		Diamictite	Matrix-supported with subangular clasts
		Laminated mudstone	Graphitic laminated mudstone
		Limestone	Interbedded carbonate and chert
		Lost Core	Core not recovered
		Mudstone	Graphitic Mudstone
		other	Unknown (historical)
		Overburden	Mass wasting debris.
		Siltstone	Bedded siltstone
		Sandy Mudstone	Minor sand in laminated mudstone

SECTION SPECS:

REF. PT. E, N	441937 m	7004020 m
EXTENTS	956.2 m	557.3 m
SECTION TOP, BOT	1700 m	1143 m
TOLERANCE +/-	10 m	

SCALE 1 : 3500

(m)

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NAD83 / UTM zone 9N

AZIMUTH = 65°

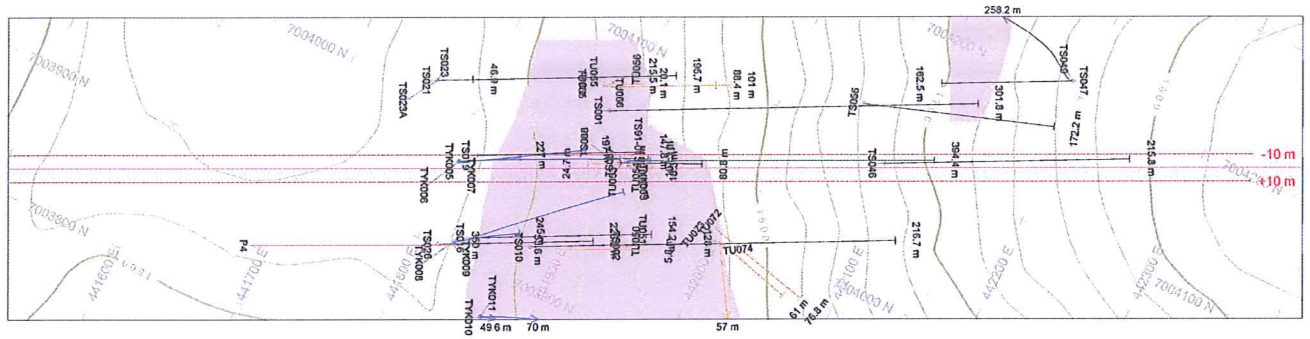
N W E S

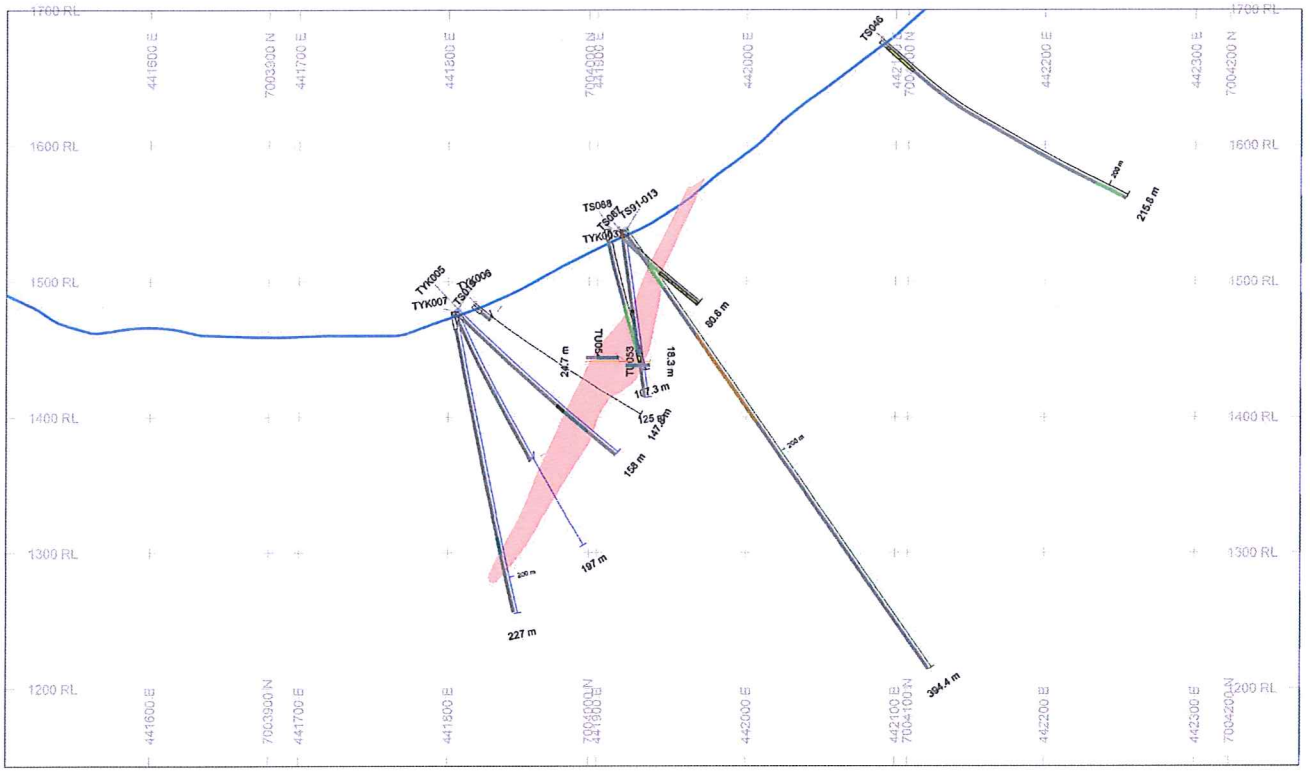
HudBay Minerals

Tom Property

West Zone

Section 106N





TOPOGRAPHY

Topography (Canvec 50k)

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HOLE TRACES	COLOUR	LABEL	DESCRIPTION
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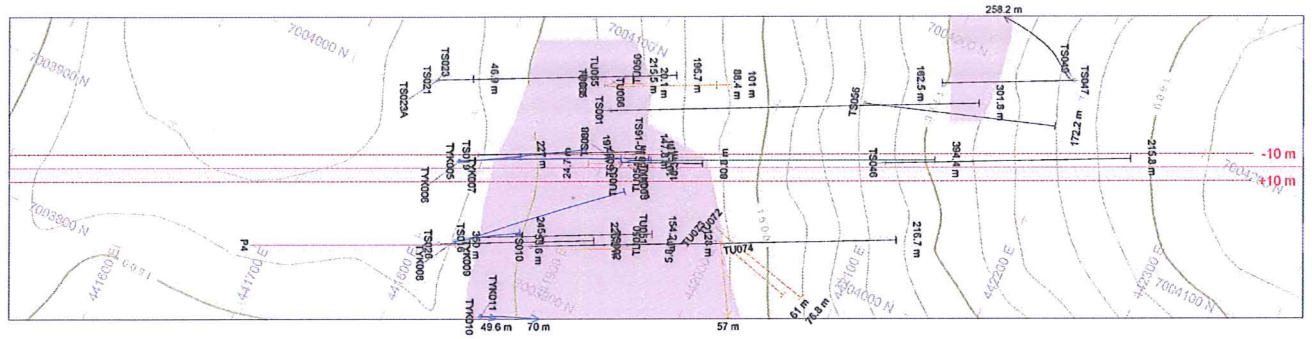
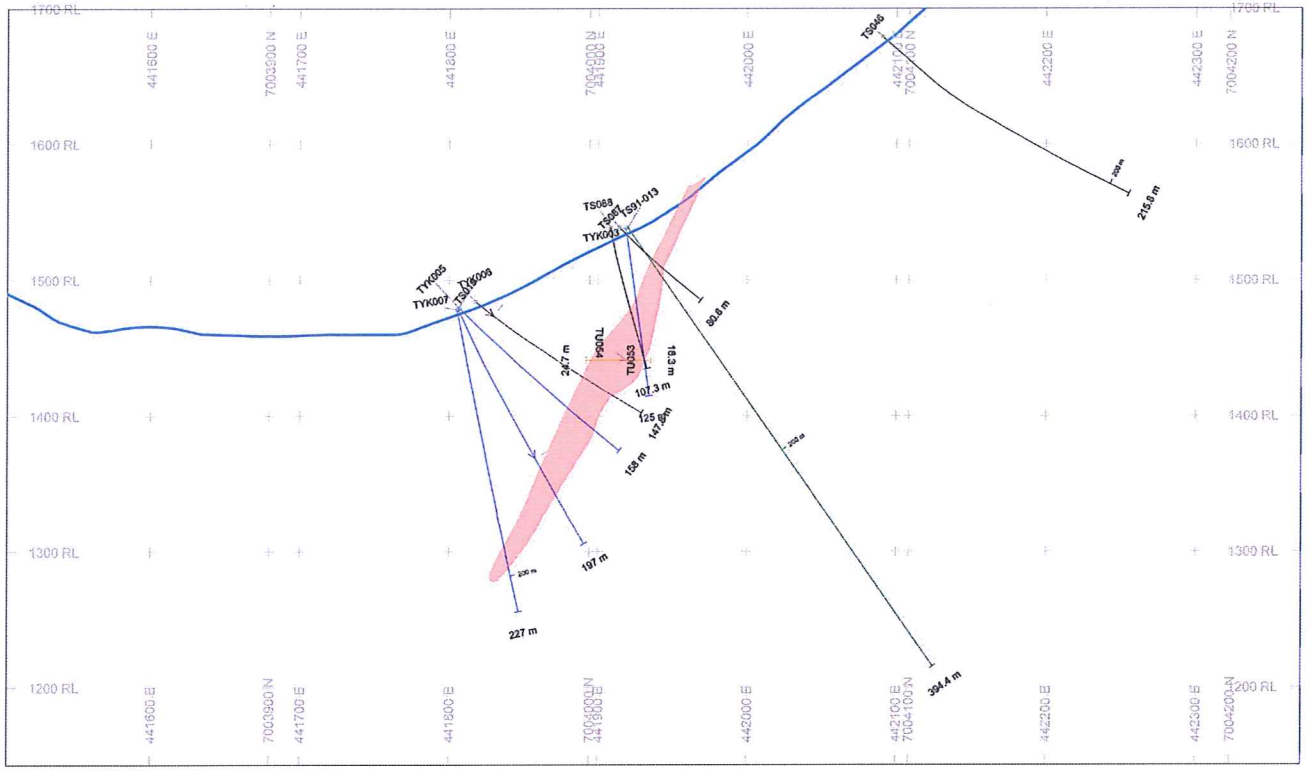
Tom Property

West Zone

Section 106N





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HudBay Minerals

Tom Property

West Zone

Section 106N

APPENDIX V

Field Gear Inventory: Tom Camp

Office Inventory 29-Sep-11

M. Bodnar

Item	Qty
Dry Erase Markers	10
White Board	1
Black Sharpies - Fine	22
Sharpies	4
Aligator Clips	60
Stapler - standard	1
Staples - 5000/box	1
Hanging Folders - 8 1/2 x 11	50
Postit note pads	5
Survival Pack	1
Scissors	3
Rolls of Sctoch tape	1.5
Network Cables EAT 5	3
Shipping Tags - cardstock	300
Mechanical Pencils	48
Douglas Navigational Protractor	3
Triangle scale Rulers	2
Thumb Tacks	100
Push Pins	70
Lead re-fills	12
Calculators	2
Pencil Crayons - set of 12	1
Duksbak coil bound notebooks	5
Right-in-the-rain coil bound notebooks #363	9
Ball Point Pens - blue	7
CD Case	1
Personal First Aid Kits	5
Box of Ear Plugs ~150 reminaing	1
Ruled Sheet Notepads	5
Printer Paper 11x17 (500 sheets)	2
Printer Paper 8 1/2 x 14 (500 sheets)	3
Printer Paper 8 1/2 x 11 (500 Sheets)	1.5
Fibre Tape (1cm width)	54
Duct Tape	2
pH test strips (Package)	1
Roll of String	1
ATV Helmets - Large	2

ATV Helmets - XL	1
HBMS First aid Kits	2
HBMS Burn Kits	4
Large Folding Tables	3
Small Folding Table	1

Metal Field Case #1

Flagging Tape - Blue	30
Flagging Tape - Pink	30
Flagging Tape - Orange	25
Flagging Tape - Yellow	30
Bags - Zip Lock (50/bag)	3
Repex bug Repellant (50mL bottle)	10
Survival Kit (Small)	1
Silva Orienteering Compass	3
Bear Spray Holsters (225g)	4
Bear Banger Kits	5
Ottause Scale (0-4kg) (Bottom Hook broken)	1

Metal Field Case #2

4lbs Crack Hammers	2
Field Backpacks	2
Sleeping Bags	2
30kg Scale	1

Survival Bag:

Survuval Blankets	2
Straps	2
Crappy First Aid Kit	1
Sam Splint	1
55L Dry Bag	1
2 Person Tent	1
Thermarests	2
Sleeping Bags	2

Core Shack Inventory 02-Oct-11

A. Ganton

Item	Qty
Kraft Brown Paper Sample Bags	50
Cloth Sample Bags	400 approx
12 x 20 Poly Ore Bags	3500 approx
18 x 24 Poly Ore Bags	100 approx
HBMS Standard - A5	70 approx
HBMS Standard - B5	70 approx
HBMS Standard - 134a	70 approx
HBMS Standard - 133a	70 approx
HBMS Standard - C5	100 approx
HBMS Standard - D5	100 approx
HBMS Standard - E5	80 approx
HBMS Standard - F6	60 approx
CDN-BC9 Reference Samples	48
5Ga Plastic Pales	3
Paint/Core Brushes	2
Rock Hammers	2
30" Geotuls - Hickory Handle	2
Blank Sample Books (#161001-161700)(#162601-163000)	11
White Boards w/ blk Marker	1
Water Cooler	1
Pump Weed Sprayer	1
Hand Spray Bottle	1
Hand Trowel (Fiskars)	1
Broom	1
DEAKIN Supply Bag (Under bench)	
Carmel Grease Pencils - Green	12
Carmel Grease Pencils - Yellow	36
Carmel Grease Pencils - Red	36
Carmel Grease Pencils - White	36
Black Sharpies - Fine	20
Black Sharpies - Fat	1
Fibre Tape	6
Acid Dropper Bottle	8
Ceramic Streak Plates	8
Folding Rulers	2
Pencil Scratchers	3
Pencil Magnets	4
Douglas Protractors	1
8m Measureing Tape	2
Aluminum Box Tags	520

APPENDIX VI

2011 QA/QC Program Results

Memorandum

To: Kelly Gilmore, Chief Exploration Geologist, Hudson Bay Mining & Smelting
Cc. Kevin Wells, Principal Consultant – Geology, Revelation Geoscience
Date: January 31, 2012

From: Dennis Arne, Principal Consultant – Geochemistry, Revelation Geoscience

Subject: Review of QAQC Assay Data from the 2011 Tom Drill Program

Executive Summary

Assay data accuracy for the 2011 drill program at the Tom Pb-Zn-Ag-Ba deposit in the Yukon Territories was assessed using a selection of certified reference materials (CRMs) supplied by Hudson Bay Mining & Smelting from the Flin Flon district, Manitoba. These CRMs were supplemented by commercially available, matrix-appropriate CRMs for sediment-hosted Pb-Zn-Ag deposits obtained from Ore Research & Exploration in Australia. The precision of the data was assessed using pulp duplicate analyses provided by the primary laboratory (AcmeLabs) and pulp duplicates analysed at a check assay laboratory (ALS Minerals).

Overall, the quality of the Pb and Zn data appears to be fair. There are numerous quality assurance failures and distinct biases exist within the data. Some of the higher grade CRMs initially analysed by a dilution method for over-range samples (Pb > 4%) show erratic results. Re-analyses of the affected batches is recommended. Both Pb and Zn from AcmeLabs also show slight positive biases compared to the check assay results. Aqua regia Ag data for all CRMs show a positive bias on the order of +5 to +10% and this conclusion is supported by the check assays. None of the CRMs available for this project were suitable for the high Ba values encountered in the Tom drill core, but the check Ba assays are virtually identical to the primary Ba assays, indicating very reproducible data. The development of a range of CRMs based on material from the Tom and Jason deposits is recommended for future evaluation of the deposits. The Au values in the Tom samples are low, averaging about an order of magnitude above background, and are not considered to be economically significant. Fire assay data from the check assays are systematically higher than the aqua regia data obtained from the primary laboratory.

In summary, the quality of the Pb & Zn assay data from the 2011 Tom drill program appears to be fair. The quality of the Ag data is poor, and the quality of the Ba data appears to be excellent, although poorly constrained.

Introduction

Drill core samples from the Tom Pb-Zn-Ba-Ag deposit were analysed by AcmeLabs following crushing and pulverization of the samples to >85 % less than 75 microns. The pulps were analysed for a suite of 24 elements using ICP-OES, including base metals, following a hot aqua regia digestion (group 7AR). Samples with greater than 4% Pb or 20% Zn were re-digested using a dilution to obtain data within range for the ICP-OES. Two samples with greater than 300 ppm Ag were also re-analyzed by fire assay. Barium was determined by fused disc XRF (group 8X – Ba). Gold was determined by aqua regia digestion

of a 15 g charge (group 3A01) as a preliminary check of Au levels, there being few previous analyses. It was not intended to provide rigorous assay data.

Assay Data Accuracy

A number of in-house certified reference materials (CRMs) manufactured from Flin Flon area base metal material and supplied by Hudson Bay Mining & Smelting (HBMS) were included with the core sample submissions. These were A5 (7 samples), B5 (7 samples), E5 (7 samples) and the base metal blank F6 (42 samples). Because these samples are not strictly matrix-matched to the sediment-hosted base metal deposit at Tom, two additional Pb-Zn-Ag CRMs manufactured from base metal material from the Mt. Isa district in Australia were purchased from Ore Research & Exploration and included in the sample submissions – Oreas 133a (6 samples) and 134a (9 samples). In addition, data for two AcmeLabs internal CRMs, Oreas 131b (27 analyses) and Geostats GBM997-6 (19 analyses) were also assessed. Oreas 131b is a low-grade Pb-Zn-Ag CRM made from the same material as Oreas 133a and 134a, and GBM997-6 is a high-grade Pb-Zn CRM. The results of an evaluation for these CRMs are summarized in Table 1.

Samples with a bias and no failures are considered to lie mainly within 2 standard deviations of the calculated mean for the CRM (i.e. the expected value). A failure is taken to be any analysis that lies more than 3 standard deviations away from the expected value, or two consecutive analyses with the same bias (i.e. positive or negative) more than 2 standard deviations from the expected value.

Table 1: Summary of CRM performance from the Tom drill core assays from AcmeLabs.

CRM	Pb	Zn	Cu	Ba	Ag
HBMS A5	n/a	Positive bias	Negative bias	n/a	n/a
HBMS B5	n/a	Positive bias	Negative bias	n/a	n/a
HBMS E5	Acceptable	Positive bias	Excellent	n/a	Positive bias
HBMS F6	No failures	1 failure	No failures	n/a	No failures
Oreas 133a	Negative bias	Acceptable	Negative bias	2 failures	6 failures; positive bias
Oreas 134a	1 failure	3 failures	2 failures; positive bias	3 failures	1 failure; positive bias
Oreas 131b	6 failures; negative bias	Acceptable but with drift	Not assessed	Not assessed	9 failures; positive bias
GBM997-6	1 failure; negative bias	Negative bias	n/a	n/a	n/a

In general, the data for the in-house HBMS CRMs were acceptable for Zn and Cu. The Pb and the Ag levels are too close to the lower limit of detection available for the Tom assays in many of the HBMS CRMs for a precise assessment of accuracy. There is a clear bias toward lower Au values from the aqua regia digestion of the HBMS CRMs that probably reflects incomplete digestion compared to the certified fire assay results. The poor performance of the Au assays at Tom is not considered to be relevant.

Of particular concern are the strong positive biases displayed by the aqua regia Ag data in the Oreas CRMs, including the AcmeLabs internal CRM Oreas 131b (Figure 1), and the HBMS CRM E5. Clearly, the Ag data for the samples is over-estimated by these assays, probably on the order of 5 to 10 %.

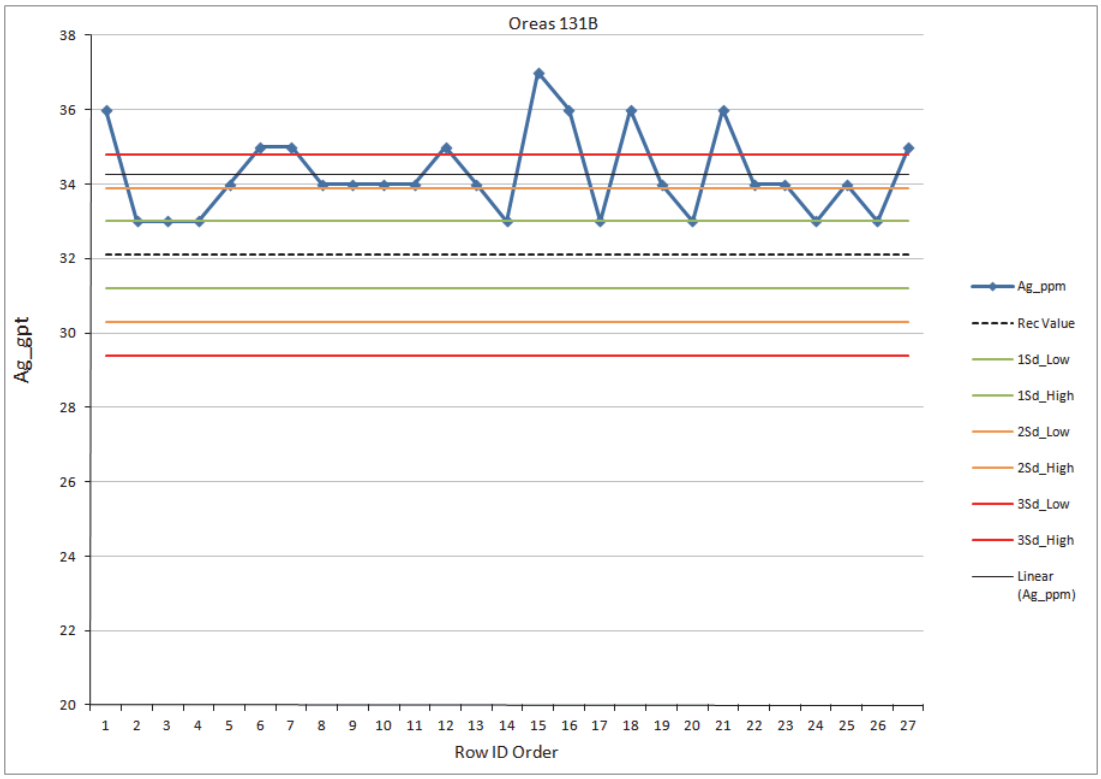

Figure 1: Summary chart for AcmeLabs internal CRM Oreas 131b showing a consistent positive bias in the Ag data.

In general, the Zn assays for the Oreas CRMs are acceptable, but there appears to have been a problem with the initial dilutions for the over-range samples. The original Zn analyses for Oreas 134a were generally acceptable, with the exception of one failure outside of 3 standard deviations below the expected value and a clear negative bias (Figure 2). However, the over-range re-assays show erratic results for several early analyses, before steadying at quite good results (Figure 3). The Zn data for Oreas 131b show a distinct drift through the sample sequence from a negative to positive bias (Figure 4). The Pb data for Oreas 131b also show a negative bias, with numerous analyses greater than 3 standard deviations below the expected value (Figure 5).

The HBMS CRM F6 is not an ideal blank material because the material is already pulverized and thus does not pass through the crushing and pulverizing stream at the laboratory. Therefore, the blank tests only for laboratory contamination during digestion and analysis. Aside from a single instance of probable Zn cross contamination, the results are acceptable when the data are filtered to remove all data within an order of magnitude of the lower limit of detection.

The Ba data for both Oreas 133a and 134a are erratic, with both positive and negative failures. Both CRMs have low Ba contents and the values are only an order of magnitude or so above the lower limit of detection. Imprecise data are expected at these levels.

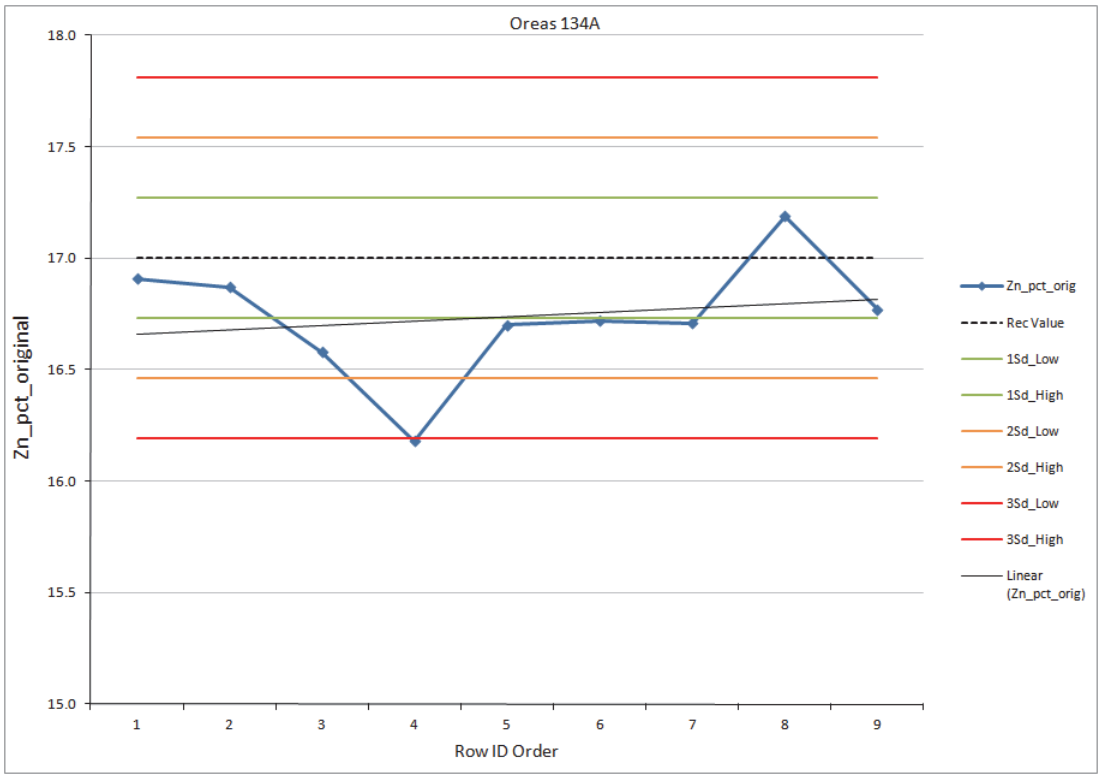

Figure 2: Original Zn assays for Oreas 134a demonstrating a negative bias and one clear failure.

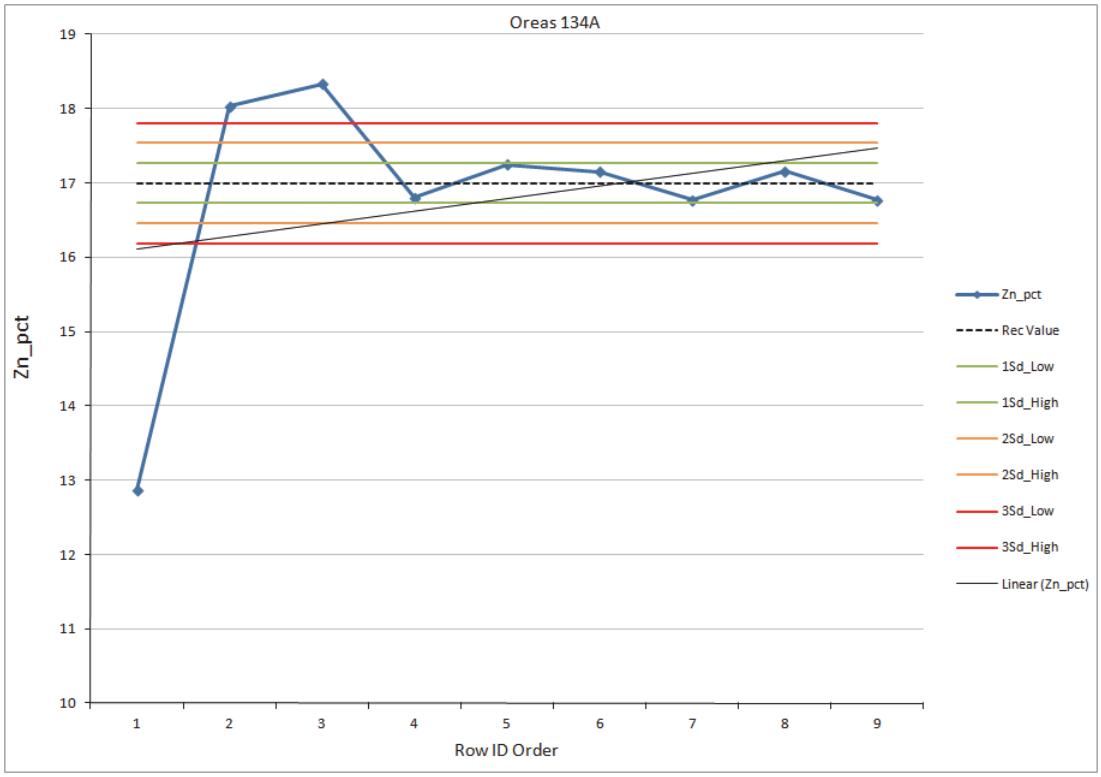

Figure 3: Over-range Zn assays for Oreas 134a following dilution showing erratic early data.

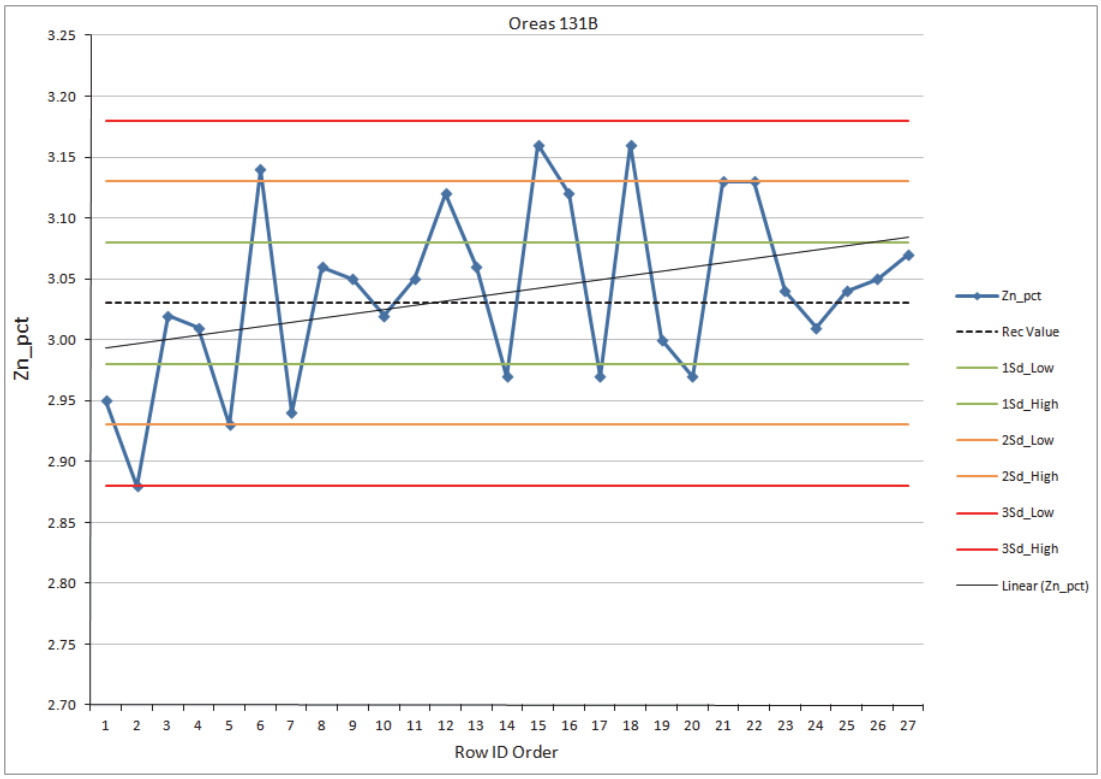

Figure 4: Zn data for Oreas 131b show a systematic drift.

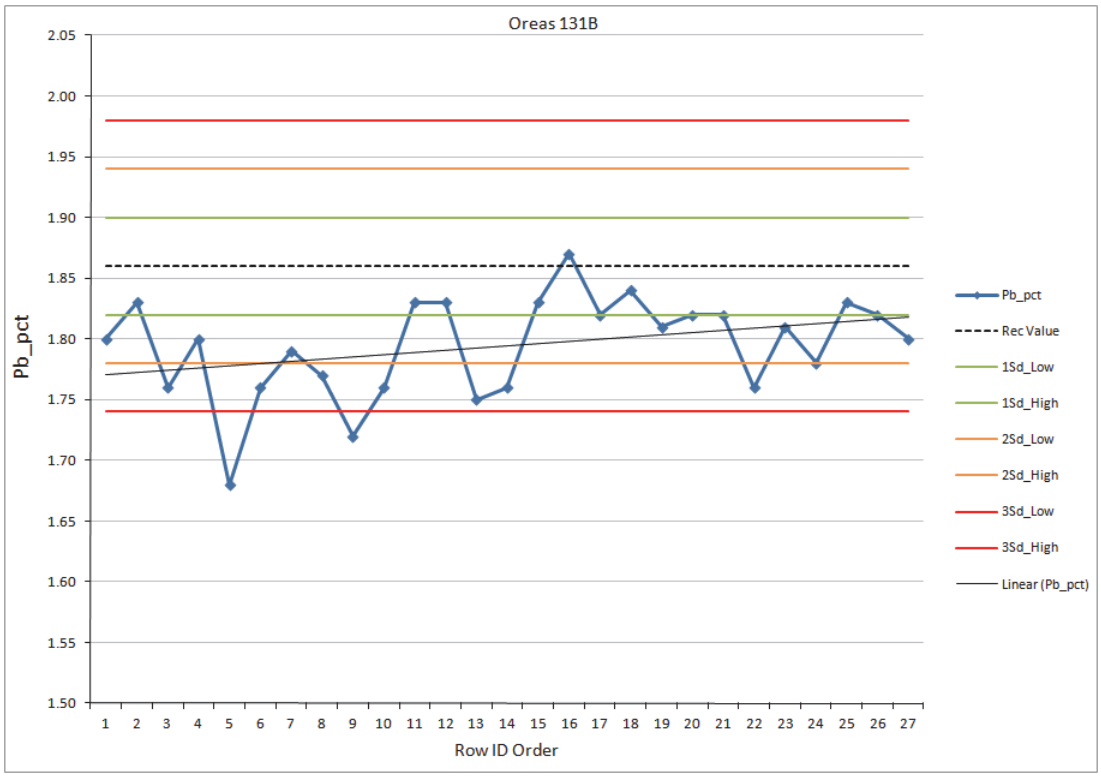

Figure 5: Pb data for Oreas 131b showing a systematic negative bias.

Laboratory Precision

Laboratory precision has been assessed through an assessment of pulp duplicate analyses provided by AcmeLabs. This estimate of laboratory precision does not include any variance introduced during the sample preparation stages, and assesses only the combined effects of sub-sampling the final pulp, sample digestion and instrumental uncertainties. The analysis used the square root of the average relative variances for individual duplicate pairs (relative standard deviation = RSD). The data were filtered to remove any values within an order of magnitude of the lower limit of detection, as these data are inherently imprecise. The result of this analysis for the main commodity elements is summarized in Table 2. There were insufficient Ag data for pulp duplicates greater than an order of magnitude above the detection limit to allow an assessment of laboratory precision. The results for Pb, Zn and Ba are all less than 5 % and considered to be acceptable. In general, the relative standard deviation for pulp duplicate pairs decreases with increasing grade.

Table 2: Summary of laboratory precision (AcmeLabs) and check assay bias.

Element	**Pb**	**Zn**	**Ba**	**Ag**
Precision (Average % RSD)	3.9	4.9	2.4	n/a
Bias (Average % relative difference)	-10	-5	1	-6

Check Assays

Pulp splits from 38 samples processed by AcmeLabs were obtained and submitted to ALS Minerals with samples of Oreas 133a and 134a for control. The analytical methods used were similar to those used by AcmeLabs: Pb, Zn, Ag, S and Fe were analysed by ICP-OES following an aqua regia digestion (method ME-OG46); Ba was analysed by fused disc XRF (method Ba-XRF15c); Au was analysed by 30 g fire assay to check the validity of the aqua regia Au data from AcmeLabs (method Au-ICP21). The data for the two CRMs submitted with the check assays are considered to be acceptable. While Au values by fire assay are systematically higher than those obtained by aqua regia, the values are all typically an order of magnitude above background levels and are not considered to be economically significant.

Aside from Ba, the other main commodity elements show a negative bias in the check assay results compared to the original assays, indicating that the original AcmeLab assays are slightly higher on average relative to the check assays from ALS. In the case of Zn, this bias occurs at all grades (Figure 6) and is consistent with the positive bias shown by some of the CRMs submitted to AcmeLabs (Table 1). By contrast, the negative bias is strongest at lower grades in the case of Pb, and may even give way to a positive bias at higher grades (Figure 7), consistent with the bias observed from the CRMs (Table 1). The negative bias in the Ag check assays is also supported by a positive bias in the AcmeLabs Ag data for the CRMs (Table 1).These biases appear to account for most of the variation in the two data sets.

Recommendations

The initial over-range assays done by dilution should be re-analyzed (batches WHI11001758 & WHI11001759). The data from CRMs included with these analyses show erratic results, presumably due to problems with the initial dilutions. As the samples affected are the higher grade results, the implications of poor quality data are significant for resource estimates. The development of a range of CRMs based on material from the Tom and Jason deposits is recommended for future evaluation of the deposits. In the interim, emphasis should be placed on the matrix-appropriate Oreas range of CRMs.

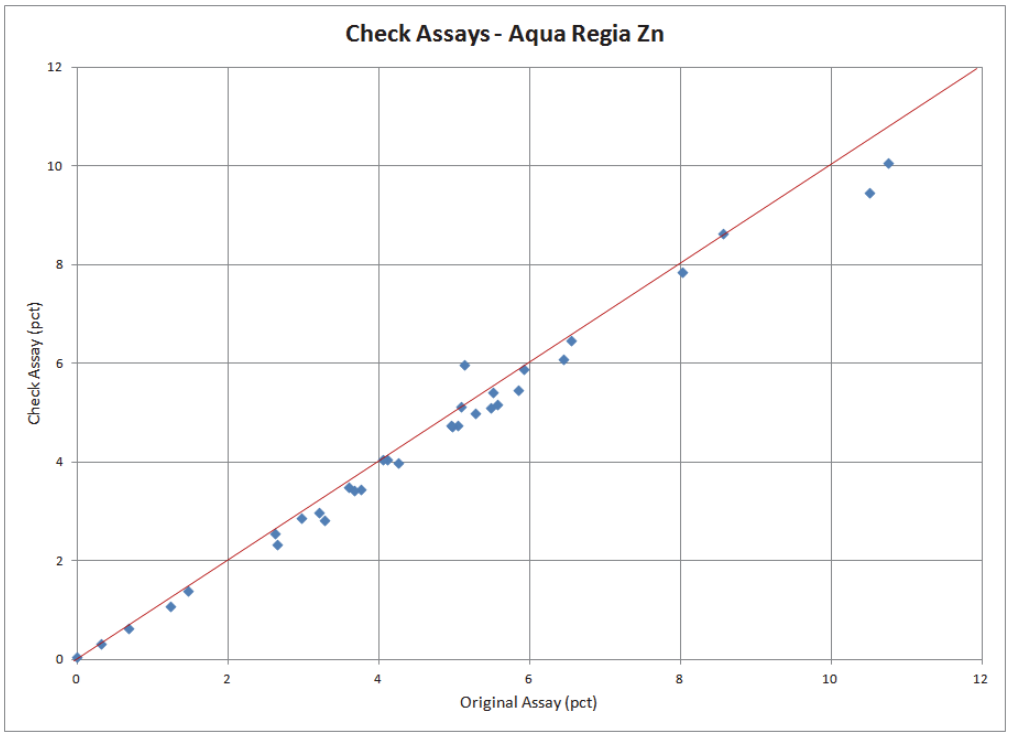

Figure 6: Comparison of original (AcmeLabs) and check (ALS Minerals) Zn assays for Tom drill core.

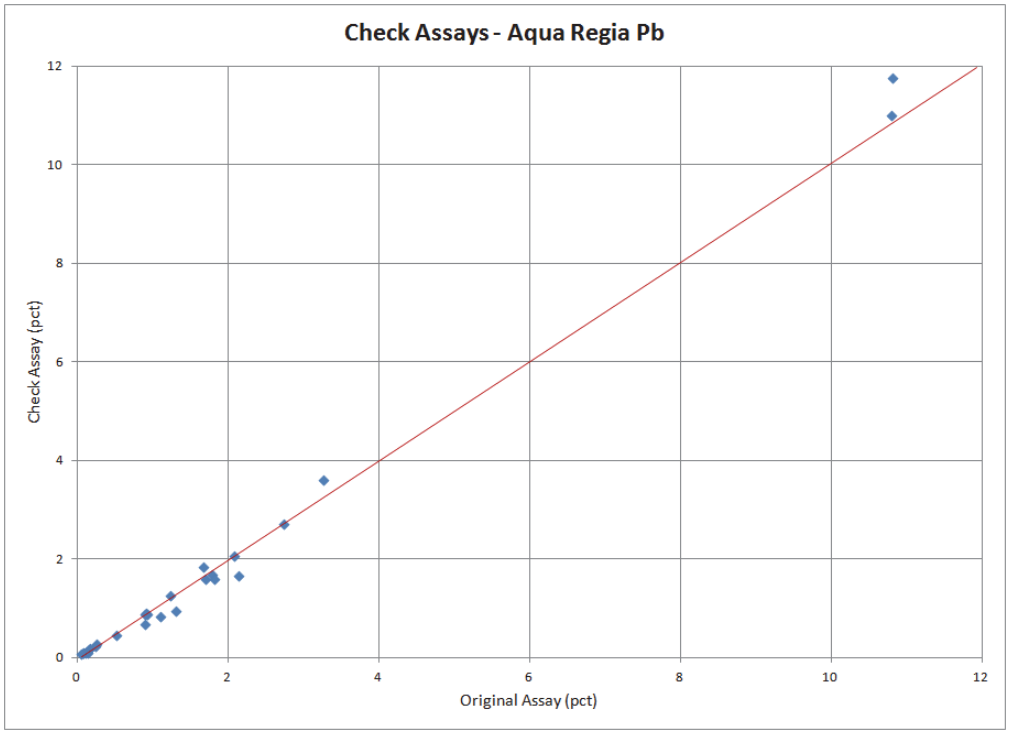

Figure 7: Comparison of original (AcmeLabs) and check (ALS Minerals) Pb assays for Tom drill core.

SAMPLEID	HOLEID	PROJECTCODE	SAMPFROM	SAMPTO	DUPLICATENO	Priority	SAMPLETYPE	PSAMPLEID	CHECKST	STANDARDID	Comment
N161940	TYK004	13			1		STD_LINK	TYK004		133a	
N162040	TYK006	13			1	1	STD_LINK	TYK006		133a	
N162140	TYK007	13			1		STD_LINK	TYK007		133a	
N162240	TYK009	13			1		STD_LINK	TYK009		133a	
N162340	TYK010	13			1		STD_LINK	TYK010		133a	
N162540	TYK011	13			1		STD_LINK	TYK011		133a	
N161840	TYK003	13			1		STD_LINK	TYK003		133a	Mis-numbered 134a - original data match; over-range assays do not
N161770	TYK002	13			1		STD_LINK	TYK002		134a	
N161880	TYK004	13			1		STD_LINK	TYK004		134a	
N161980	TYK005	13			1		STD_LINK	TYK005		134a	
N162080	TYK006	13			1		STD_LINK	TYK006		134a	
N162180	TYK009	13			1		STD_LINK	TYK009		134a	
N162280	TYK008	13			1		STD_LINK	TYK008		134a	
N162380	TYK010	13			1		STD_LINK	TYK010		134a	
N162580	TYK011	13			1		STD_LINK	TYK011		134a	
N161820	TYK003	13			1		STD_LINK	TYK003		A5	
N161920	TYK004	13			1		STD_LINK	TYK004		A5	
N162120	TYK007	13			1		STD_LINK	TYK007		A5	
N162220	TYK009	13			1		STD_LINK	TYK009		A5	
N162320	TYK010	13			1		STD_LINK	TYK010		A5	
N162410	TYK002	13			1		STD_LINK	TYK002		A5	
N162520	TYK011	13			1		STD_LINK	TYK011		A5	
N162261	TYK008	13	105	106	PRIMARY	1	ASSAY				Not a core sample but CRM B5 (N162260)
N161750	TYK002	13			1		STD_LINK	TYK002		B5	
N161860	TYK003	13			1		STD_LINK			B5	
N161960	TYK005	13			1		STD_LINK	TYK005		B5	
N162060	TYK006	13			1		STD_LINK	TYK006		B5	
N162160	TYK007	13			1		STD_LINK	TYK007		B5	
N162360	TYK010	13			1		STD_LINK	TYK010		B5	
N162560	TYK011	13			1		STD_LINK	TYK011		B5	
N161790	TYK002	13			1		STD_LINK	TYK002		E5	
N161900	TYK004	13			1		STD_LINK	TYK004		E5	
N162000	TYK005	13			1		STD_LINK	TYK005		E5	
N162100	TYK006	13			1		STD_LINK	TYK006		E5	
N162200	TYK009	13			1		STD_LINK	TYK009		E5	
N162300	TYK008	13			1		STD_LINK	TYK008		E5	
N162400	TYK011	13			1		STD_LINK	TYK011		E5	

SAMPLEID	HOLEID	PROJECTCODE	SAMPFROM	SAMPTO	DUPLICATENO	Priority	SAMPLETYPE	PSAMPLEID	CHECKST	STANDARDID	Comment
N161710	TYK001	13			1		STD_LINK	TYK001		A5	Not A5 but F6
N161730	TYK001	13			1		STD_LINK	TYK001		133a	Mis-labelled blank F6
N161715	TYK001	13			1		STD_LINK	TYK001		F6	
N161735	TYK001	13			1		STD_LINK	TYK001		F6	
N161755	TYK002	13			1		STD_LINK	TYK002		F6	
N161775	TYK002	13					STD_LINK	TYK002		F6	
N161795	TYK002	13			1		STD_LINK	TYK002		F6	
N161810	TYK002	13			1		STD_LINK	TYK002		F6	
N161830	TYK003	13			1		STD_LINK	TYK003		F6	
N161850	TYK003	13			1		STD_LINK	TYK003		F6	
N161870	TYK003	13			1		STD_LINK	TYK003		F6	
N161890	TYK004	13			1		STD_LINK	TYK004		F6	
N161910	TYK004	13			1		STD_LINK	TYK004		F6	
N161930	TYK004	13			1		STD_LINK	TYK004		F6	
N161950	TYK005	13			1		STD_LINK	TYK005		F6	
N161970	TYK005	13			1		STD_LINK	TYK005		F6	
N161990	TYK005	13			1		STD_LINK	TYK005		F6	
N162010	TYK005	13			1		STD_LINK	TYK005		F6	
N162030	TYK006	13			1		STD_LINK	TYK006		F6	
N162050	TYK006	13			1	1	STD_LINK	TYK006		F6	
N162070	TYK006	13			1		STD_LINK	TYK006		F6	
N162090	TYK006	13			1		STD_LINK	TYK006		F6	
N162110	TYK007	13			1		STD_LINK	TYK007		F6	
N162130	TYK007	13			1		STD_LINK	TYK007		F6	
N162150	TYK007	13			1		STD_LINK	TYK007		F6	
N162170	TYK007	13			1		STD_LINK	TYK007		F6	
N162190	TYK009	13			1		STD_LINK	TYK009		F6	
N162210	TYK009	13			1		STD_LINK	TYK009		F6	
N162230	TYK009	13			1		STD_LINK	TYK009		F6	
N162250	TYK008	13			1		STD_LINK	TYK008		F6	
N162270	TYK008	13			1		STD_LINK	TYK008		F6	
N162290	TYK008	13			1		STD_LINK	TYK008		F6	
N162310	TYK008	13			1		STD_LINK	TYK008		F6	
N162330	TYK010	13			1		STD_LINK	TYK010		F6	
N162350	TYK010	13			1		STD_LINK	TYK010		F6	
N162370	TYK010	13			1		STD_LINK	TYK010		F6	
N162390	TYK011	13			1		STD_LINK	TYK011		F6	
N162510	TYK011	13			1		STD_LINK	TYK011		F6	Sph & gn percentages entered
N162530	TYK011	13			1		STD_LINK	TYK011		F6	
N162550	TYK011	13			1		STD_LINK	TYK011		F6	
N162570	TYK011	13			1		STD_LINK	TYK011		F6	
N162590	TYK011	13			1		STD_LINK	TYK011		F6	

SAMPLEID	Batch					Mo_pct	Cu_pct	Pb_pct_orig	Pb_pct_reassay	Pb_pct_merged	Zn_pct_ori	Zn_pct_reassay	Zn_pct_merged	A_gpt	Ni_pct	Co_pct	Mn_pct	Fe_pct	As_pct
N161940	WHI11001759	N161940	WHI11001759	1.026	84	<0.001	0.032	>4.00	4.95	4.95	10.81	10.37	10.37	102	0.002	0.002	0.13	7.95	0.01
N162040	WHI11001778	N162040	WHI11001778	1.049	18	<0.001	0.031	>4.00	4.62	4.62	10.83	10.78	10.78	101	0.002	0.002	0.13	7.97	0.01
N162140	WHI11001778	N162140	WHI11001778	1	113	<0.001	0.032	>4.00	4.53	4.53	10.98	10.67	10.67	101	0.002	0.002	0.13	7.97	0.01
N162240	WHI11001779	N162240	WHI11001779	1.027	79	<0.001	0.032	>4.00	5.01	5.01	11.36	10.53	10.53	109	0.003	0.003	0.14	8.24	0.01
N162340	WHI11001780	N162340	WHI11001780	1.01	38	<0.001	0.031	>4.00	4.64	4.64	10.73	10.91	10.91	101	0.002	0.002	0.13	8.04	0.02
N162540	WHI11001781	N162540	WHI11001781	0.96	1	<0.001	0.031	>4.00	4.54	4.54	10.57		10.57	98	0.002	0.002	0.13	7.83	0.01
N161840	WHI11001758	N161840	WHI11001758	1.016	134	<0.001	0.13	>4.00	7.07	7.07	16.91	12.87	12.87	202	0.002	0.01	0.36	11.97	0.02
N161770	WHI11001758	N161770	WHI11001758	1.004	67	<0.001	0.131	>4.00	12.08	12.08	16.87	18.03	18.03	206	0.002	0.011	0.36	11.93	0.02
N161880	WHI11001759	N161880	WHI11001759	1.014	28	<0.001	0.129	>4.00	12.46	12.46	16.58	18.33	18.33	201	0.002	0.011	0.35	11.75	0.02
N161980	WHI11001759	N161980	WHI11001759	1.028	121	<0.001	0.128	>4.00	12.58	12.58	16.18	16.8	16.8	207	0.002	0.011	0.35	11.48	0.02
N162080	WHI11001778	N162080	WHI11001778	0.964	56	<0.001	0.13	>4.00	12.04	12.04	16.7	17.25	17.25	203	0.002	0.01	0.35	11.98	0.02
N162180	WHI11001779	N162180	WHI11001779	1.034	19	<0.001	0.13	>4.00	12.34	12.34	16.72	17.15	17.15	203	0.002	0.011	0.36	11.79	0.02
N162280	WHI11001779	N162280	WHI11001779	0.991	119	<0.001	0.135	>4.00	13.19	13.19	16.71	16.77	16.77	212	0.002	0.011	0.38	12.2	0.02
N162380	WHI11001780	N162380	WHI11001780	0.991	78	<0.001	0.135	>4.00	12.33	12.33	17.19	17.16	17.16	207	0.002	0.011	0.37	12.06	0.02
N162580	WHI11001781	N162580	WHI11001781	0.998	40	<0.001	0.131	>4.00	13.4	13.4	16.77		16.77	203	0.002	0.011	0.36	12.04	0.02
N161820	WHI11001758	N161820	WHI11001758	1.006	117	<0.001	0.091	<0.01		<0.01	0.53		0.53	2	0.002	0.004	0.12	8.1	<0.01
N161920	WHI11001759	N161920	WHI11001759	1.019	67	<0.001	0.093	<0.01		<0.01	0.55		0.55	<2	0.002	0.004	0.13	8.06	<0.01
N162120	WHI11001778	N162120	WHI11001778	1.009	94	<0.001	0.09	<0.01		<0.01	0.52		0.52	<2	0.002	0.004	0.12	7.86	<0.01
N162220	WHI11001779	N162220	WHI11001779	1.003	59	<0.001	0.091	<0.01		<0.01	0.54		0.54	<2	0.002	0.003	0.13	8.08	<0.01
N162320	WHI11001780	N162320	WHI11001780	1.002	19	<0.001	0.09	<0.01		<0.01	0.53		0.53	<2	0.002	0.004	0.13	8.05	<0.01
N162410	WHI11001759	N162410	WHI11001759	0.959	166	<0.001	0.092	<0.01		<0.01	0.53		0.53	<2	0.002	0.004	0.13	7.93	<0.01
N162520	WHI11001780	N162520	WHI11001780	0.996	117	<0.001	0.093	<0.01		<0.01	0.55		0.55	<2	0.002	0.004	0.13	8.14	<0.01
N162261	WHI11001779	N162261	WHI11001779	1.02	100	<0.001	1.299	<0.01		<0.01	0.14		0.14	3	0.001	0.011	0.12	11.47	<0.01
N161750	WHI11001758	N161750	WHI11001758	0.975	47	<0.001	1.304	<0.01		<0.01	0.13		0.13	<2	0.001	0.011	0.11	10.87	<0.01
N161860	WHI11001759	N161860	WHI11001759	1.003	11	<0.001	1.315	<0.01		<0.01	0.14		0.14	3	0.001	0.011	0.12	11.38	<0.01
N161960	WHI11001759	N161960	WHI11001759	1.021	102	<0.001	1.309	<0.01		<0.01	0.13		0.13	3	0.001	0.011	0.12	11.36	<0.01
N162060	WHI11001778	N162060	WHI11001778	1.006	37	<0.001	1.285	<0.01		<0.01	0.13		0.13	2	0.001	0.01	0.12	11.29	<0.01
N162160	WHI11001778	N162160	WHI11001778	1.008	132	<0.001	1.335	<0.01		<0.01	0.14		0.14	2	0.001	0.011	0.12	11.68	<0.01
N162360	WHI11001780	N162360	WHI11001780	0.99	58	<0.001	1.296	<0.01		<0.01	0.14		0.14	3	0.001	0.011	0.12	11.37	<0.01
N162560	WHI11001781	N162560	WHI11001781	0.988	20	<0.001	1.3	<0.01		<0.01	0.14		0.14	3	0.001	0.011	0.12	11.53	<0.01
N161790	WHI11001758	N161790	WHI11001758	1.004	87	<0.001	0.4	0.83	0.72	0.83	>20.00	24.54	24.54	23	0.004	0.005	0.13	12.44	0.1
N161900	WHI11001759	N161900	WHI11001759	0.999	48	0.001	0.396	0.81	0.7	0.7	>20.00	25.36	25.36	21	0.004	0.005	0.13	12.33	0.1
N162000	WHI11001759	N162000	WHI11001759	1.041	140	0.001	0.381	0.74	0.82	0.82	>20.00	25.44	25.44	21	0.004	0.005	0.12	11.98	0.09
N162100	WHI11001778	N162100	WHI11001778	1.005	75	<0.001	0.395	0.79	0.75	0.75	>20.00	24.93	24.93	21	0.004	0.005	0.13	12.17	0.1
N162200	WHI11001779	N162200	WHI11001779	1.007	39	<0.001	0.39	0.82	0.79	0.79	>20.00	25.15	25.15	22	0.004	0.005	0.13	12.6	0.1
N162300	WHI11001780	N162300	WHI11001780	1.039	2	0.001	0.387	0.8	0.74	0.74	>20.00	25.08	25.08	21	0.004	0.005	0.13	12.02	0.1
N162400	WHI11001780	N162400	WHI11001780	0.958	97	<0.001	0.385	0.8	0.73	0.73	>20.00	24.58	24.58	22	0.004	0.005	0.13	12.35	0.1

SAMPLEID	Batch					Mo_pct	Cu_pct	Pb_pct_orig	Pb_pct_reassay	Pb_pct_merged	Zn_pct_ori	Zn_pct_reassay	Zn_pct_merged	A_gpt	Ni_pct	Co_pct	Mn_pct	Fe_pct	As_pct
N161710	WHI11001758	N161710	WHI11001758	1.006	9	<0.001	0.003	<0.01		<0.01	0.02		0.02	<2	0.013	0.003	0.05	4.22	<0.01
N161730	WHI11001758	N161730	WHI11001758	1.021	28	<0.001	0.003	0.01		0.01	<0.01		<0.01	<2	0.013	0.003	0.04	4.06	<0.01
N161715	WHI11001758	N161715	WHI11001758	1.012	14	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.05	4.16	<0.01
N161735	WHI11001758	N161735	WHI11001758	0.997	33	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.04	4.11	<0.01
N161755	WHI11001758	N161755	WHI11001758	0.96	52	<0.001	0.003	<0.01		<0.01	0.02		0.02	<2	0.013	0.002	0.04	4.23	<0.01
N161775	WHI11001758	N161775	WHI11001758	0.988	72	<0.001	0.003	<0.01		<0.01	0.02		0.02	<2	0.013	0.003	0.05	4.16	<0.01
N161795	WHI11001758	N161795	WHI11001758	0.968	92	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.05	4.49	<0.01
N161810	WHI11001758	N161810	WHI11001758	0.987	107	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.05	4.25	<0.01
N161830	WHI11001758	N161830	WHI11001758	0.957	125	<0.001	0.003	<0.01		<0.01	0.03		0.03	<2	0.013	0.003	0.05	4.19	<0.01
N161850	WHI11001759	N161850	WHI11001759	1.002	1	<0.001	0.004	<0.01		<0.01	<0.01		<0.01	<2	0.014	0.003	0.05	4.54	<0.01
N161870	WHI11001759	N161870	WHI11001759	0.995	19	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.002	0.04	4.16	<0.01
N161890	WHI11001759	N161890	WHI11001759	1.008	38	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.04	4.11	<0.01
N161910	WHI11001759	N161910	WHI11001759	1.013	58	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.05	4.21	<0.01
N161930	WHI11001759	N161930	WHI11001759	1.003	76	<0.001	0.003	0.02		0.02	<0.01		<0.01	<2	0.014	0.003	0.05	4.21	<0.01
N161950	WHI11001759	N161950	WHI11001759	1.003	94	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.04	4.2	<0.01
N161970	WHI11001759	N161970	WHI11001759	1.032	112	<0.001	0.004	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.04	4.02	<0.01
N161990	WHI11001759	N161990	WHI11001759	1.016	131	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.04	4.19	<0.01
N162010	WHI11001759	N162010	WHI11001759	1.026	150	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.05	4.13	<0.01
N162030	WHI11001778	N162030	WHI11001778	0.998	9	<0.001	0.004	<0.01		<0.01	<0.01		<0.01	<2	0.014	0.003	0.04	4.19	<0.01
N162050	WHI11001778	N162050	WHI11001778	1.022	28	<0.001	0.003	<0.01		<0.01	0.02		0.02	<2	0.013	0.003	0.04	4.12	<0.01
N162070	WHI11001778	N162070	WHI11001778	0.97	47	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.014	0.002	0.05	4.4	<0.01
N162090	WHI11001778	N162090	WHI11001778	0.994	66	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.002	0.05	4.33	<0.01
N162110	WHI11001778	N162110	WHI11001778	0.99	85	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.05	4.15	<0.01
N162130	WHI11001778	N162130	WHI11001778	0.994	104	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.05	4.16	<0.01
N162150	WHI11001778	N162150	WHI11001778	1	123	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.05	4.28	<0.01
N162170	WHI11001779	N162170	WHI11001779	1.046	9	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.014	0.003	0.05	4.46	<0.01
N162190	WHI11001779	N162190	WHI11001779	0.971	29	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.05	4.21	<0.01
N162210	WHI11001779	N162210	WHI11001779	0.992	49	<0.001	0.004	<0.01		<0.01	0.02		0.02	<2	0.014	0.002	0.05	4.41	<0.01
N162230	WHI11001779	N162230	WHI11001779	1.023	69	<0.001	0.004	<0.01		<0.01	0.02		0.02	<2	0.014	0.002	0.05	4.26	<0.01
N162250	WHI11001779	N162250	WHI11001779	0.995	89	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.003	0.04	4.1	<0.01
N162270	WHI11001779	N162270	WHI11001779	1.04	109	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.014	0.002	0.05	4.17	<0.01
N162290	WHI11001779	N162290	WHI11001779	0.992	129	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.002	0.04	4.14	<0.01
N162310	WHI11001780	N162310	WHI11001780	0.966	12	<0.001	0.004	<0.01		<0.01	0.04		0.04	<2	0.013	0.003	0.05	4.6	<0.01
N162330	WHI11001780	N162330	WHI11001780	0.987	28	<0.001	0.003	<0.01		<0.01	0.02		0.02	<2	0.013	0.003	0.05	4.23	<0.01
N162350	WHI11001780	N162350	WHI11001780	1.025	48	<0.001	0.004	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.05	4.69	<0.01
N162370	WHI11001780	N162370	WHI11001780	1.004	68	<0.001	0.003	<0.01		<0.01	0.01		0.01	<2	0.013	0.003	0.05	4.45	<0.01
N162390	WHI11001780	N162390	WHI11001780	1.023	87	<0.001	0.003	<0.01		<0.01	<0.01		<0.01	<2	0.013	0.002	0.05	4.21	<0.01
N162510	WHI11001780	N162510	WHI11001780	1.005	107	<0.001	0.003	<0.01		<0.01	0.04		0.04	<2	0.013	0.003	0.04	4.15	<0.01
N162530	WHI11001780	N162530	WHI11001780	0.991	127	<0.001	0.004	<0.01		<0.01	0.14		0.14	<2	0.013	0.003	0.05	4.33	<0.01
N162550	WHI11001781	N162550	WHI11001781	1	11	<0.001	0.003	<0.01		<0.01	0.03		0.03	<2	0.013	0.002	0.05	4.13	<0.01
N162570	WHI11001781	N162570	WHI11001781	0.967	30	<0.001	0.003	<0.01		<0.01	0.02		0.02	<2	0.013	0.002	0.05	4.32	<0.01
N162590	WHI11001781	N162590	WHI11001781	0.993	50	<0.001	0.004	<0.01		<0.01	<0.01		<0.01	<2	0.014	0.003	0.05	4.38	<0.01

SAMPLEID	Sr_pct	Cd_pct	Sb_pct	Bi_pct	Ca_pct	P_pct	Cr_pct	Mg_pct	Al_pct	Na_pct	K_pct	W_pct	Hg_pct	S_pct	Ba_pct	LOI_pct	Au_ppb	LOI_pct
N161940	0.002	0.031	0.017	<0.01	3.87	0.042	0.002	2.11	0.74	<0.01	0.48	<0.001	<0.001	11.23	0.07	14.2	5.6	
N162040	0.001	0.03	0.019	<0.01	3.79	0.039	<0.001	2.15	0.76	<0.01	0.5	<0.001	<0.001	11.36	0.08	15.7	6.2	
N162140	0.002	0.031	0.017	<0.01	3.84	0.041	0.001	2.13	0.75	<0.01	0.5	<0.001	<0.001	11.23	0.08	15	4	
N162240	0.002	0.032	0.012	<0.01	3.99	0.041	0.002	2.21	0.8	<0.01	0.48	*	<0.001	11.36	0.07	14.7	6.7	
N162340	0.002	0.031	0.018	<0.01	3.92	0.043	0.002	2.15	0.81	0.01	0.53	<0.001	<0.001	11.54	0.08	14.5	6.6	
N162540	0.002	0.03	0.009	<0.01	3.74	0.038	0.003	2.13	0.79	<0.01	0.5	<0.001	<0.001	11.18	0.08	15.5	<0.5	
N161840	0.003	0.058	0.016	<0.01	4.18	0.03	0.001	2.02	0.38	<0.01	0.14	<0.001	<0.001	19.34	0.13	13.3	4.6	
N161770	0.002	0.058	0.013	<0.01	4.24	0.027	0.001	2.05	0.43	<0.01	0.16	<0.001	<0.001	19.07	0.14	14.9	<0.5	
N161880	0.003	0.058	<0.001	<0.01	4.16	0.028	0.004	2.08	0.41	<0.01	0.16	<0.001	<0.001	19.04	0.14	13.71	I.S.	13.71
N161980	0.002	0.056	0.014	<0.01	4.11	0.03	0.001	1.99	0.38	<0.01	0.16	<0.001	<0.001	18.71	0.15	18.7	3.5	
N162080	0.003	0.058	<0.001	<0.01	4.2	0.028	0.002	2.01	0.43	0.01	0.16	*	<0.001	18.94	0.14	17.3	2.7	
N162180	0.002	0.058	0.015	<0.01	4.18	0.03	0.001	2.02	0.4	<0.01	0.16	<0.001	<0.001	19.04	0.13	14.9	2.5	
N162280	0.002	0.057	0.006	<0.01	4.31	0.029	0.003	2.08	0.42	<0.01	0.16	<0.001	<0.001	19.18	0.13	15.7	1.1	
N162380	0.003	0.056	0.005	<0.01	4.32	0.027	0.003	2.06	0.42	<0.01	0.16	<0.001	0.001	18.95	0.14	14.3	1.1	
N162580	0.002	0.056	0.006	<0.01	4.25	0.031	0.002	2.04	0.42	0.01	0.16	0.318	<0.001	19.05	0.13	14.2	3.9	
N161820	0.007	0.002	0.002	<0.01	3.65	0.052	0.002	2.12	3.48	0.17	0.2	<0.001	<0.001	1.57	0.03	5.7	122.6	
N161920	0.007	0.001	<0.001	<0.01	3.77	0.056	0.002	2.12	3.44	0.1	0.21	<0.001	<0.001	1.63	0.02	5.3	107.3	
N162120	0.006	0.002	<0.001	<0.01	3.63	0.056	0.002	2.07	3.4	0.09	0.21	<0.001	<0.001	1.58	0.02	4.4	135.8	
N162220	0.007	0.001	<0.001	<0.01	3.76	0.054	0.002	2.12	3.37	0.12	0.21	<0.001	<0.001	1.63	0.02	5.2	106.7	
N162320	0.007	0.001	<0.001	<0.01	3.79	0.056	0.002	2.09	3.52	0.11	0.22	<0.001	<0.001	1.6	0.02	4.7	124.6	
N162410	0.007	0.001	<0.001	<0.01	3.66	0.053	0.002	2.07	3.4	0.11	0.21	<0.001	<0.001	1.62	0.03	4.9	131.7	
N162520	0.006	0.001	<0.001	<0.01	3.63	0.052	0.002	2.18	3.45	0.12	0.21	<0.001	<0.001	1.6	0.02	5.7	132.9	
N162261	0.005	<0.001	<0.001	<0.01	2.96	0.041	0.003	1.78	3.08	0.1	0.24	<0.001	<0.001	4.64	0.02	5.3	430.6	
N161750	0.005	<0.001	<0.001	<0.01	2.83	0.039	0.003	1.8	3.34	0.14	0.24	<0.001	<0.001	4.65	0.02	5	416.7	
N161860	0.005	<0.001	<0.001	<0.01	2.92	0.041	0.002	1.86	3.15	0.14	0.25	<0.001	<0.001	4.75	0.02	4.8	412.6	
N161960	0.005	<0.001	<0.001	<0.01	2.94	0.045	0.002	1.79	3.14	0.12	0.24	<0.001	<0.001	4.67	0.02	5.7	439.1	
N162060	0.005	<0.001	<0.001	<0.01	3.02	0.04	0.002	1.77	3.13	0.11	0.24	<0.001	<0.001	4.55	0.02	5.8	419.6	
N162160	0.005	<0.001	<0.001	<0.01	3.01	0.044	0.003	1.83	3.18	0.11	0.25	0.001	<0.001	4.75	0.02	4.4	468.9	
N162360	0.005	<0.001	<0.001	<0.01	2.98	0.043	0.002	1.78	3.2	0.14	0.24	<0.001	<0.001	4.67	0.02	5.3	470.8	
N162560	0.005	<0.001	<0.001	<0.01	3	0.041	0.002	1.84	3.21	0.11	0.24	<0.001	<0.001	4.63	0.02	5.6	476.9	
N161790	0.003	0.069	0.1	<0.01	1.6	0.021	0.002	0.95	1.76	0.08	0.12	*	0.003	16.42	<0.01	11.2	746.6	
N161900	0.003	0.067	0.096	<0.01	1.58	0.021	0.002	0.94	1.65	0.06	0.13	*	0.004	16.68	<0.01	10.1	689.6	
N162000	0.003	0.064	0.092	<0.01	1.51	0.021	0.002	0.94	1.62	0.06	0.12	*	0.001	14.87	<0.01	10.9	757.2	
N162100	0.003	0.066	0.096	<0.01	1.58	0.024	0.002	0.92	1.66	0.05	0.12	*	0.004	13.97	<0.01	10.8	805.9	
N162200	0.004	0.066	0.085	<0.01	1.58	0.021	0.002	0.95	1.66	0.07	0.12	*	0.004	15.07	<0.01	11.2	645.8	
N162300	0.003	0.065	0.096	<0.01	1.59	0.023	0.002	0.94	1.64	0.07	0.13	<0.001	<0.001	17.04	<0.01	10.9	731.6	
N162400	0.003	0.064	0.083	<0.01	1.56	0.019	0.002	0.93	1.64	0.06	0.12	*	0.006	16.36	<0.01	11	725.7	

SAMPLEID	Sr_pct	Cd_pct	Sb_pct	Bi_pct	Ca_pct	P_pct	Cr_pct	Mg_pct	Al_pct	Na_pct	K_pct	W_pct	Hg_pct	S_pct	Ba_pct	LOI_pct	Au_ppb	LOI_pct
N161710	0.008	<0.001	<0.001	<0.01	1.1	0.114	0.003	2.24	1.26	0.34	0.06	<0.001	<0.001	<0.05	0.05	1.5	<0.5	
N161730	0.007	<0.001	<0.001	<0.01	0.98	0.112	0.003	2.16	1.06	0.27	0.05	<0.001	<0.001	<0.05	0.05	1.1	<0.5	
N161715	0.007	<0.001	<0.001	<0.01	0.96	0.113	0.002	2.22	1.03	0.27	0.05	<0.001	<0.001	<0.05	0.08	1.4	<0.5	
N161735	0.007	<0.001	<0.001	<0.01	0.96	0.115	0.002	2.17	1	0.26	0.05	<0.001	<0.001	<0.05	0.04	0.9	<0.5	
N161755	0.007	<0.001	<0.001	<0.01	1	0.113	0.002	2.19	1.14	0.27	0.05	<0.001	<0.001	<0.05	0.06	0.8	<0.5	
N161775	0.008	<0.001	<0.001	<0.01	1.02	0.113	0.002	2.16	1.15	0.3	0.06	<0.001	<0.001	<0.05	0.07	1.2	<0.5	
N161795	0.008	<0.001	<0.001	<0.01	1.04	0.117	0.002	2.26	1.16	0.3	0.06	<0.001	<0.001	<0.05	0.05	1.3	<0.5	
N161810	0.007	<0.001	<0.001	<0.01	0.97	0.117	0.002	2.24	1.02	0.27	0.05	<0.001	<0.001	<0.05	0.04	1.5	0.9	
N161830	0.009	<0.001	<0.001	<0.01	1.05	0.116	0.003	2.19	1.13	0.3	0.06	<0.001	<0.001	<0.05	0.12	1.2	<0.5	
N161850	0.007	<0.001	<0.001	<0.01	0.99	0.116	0.003	2.46	0.99	0.25	0.05	<0.001	<0.001	<0.05	0.04	1.7	0.9	
N161870	0.006	<0.001	<0.001	<0.01	0.92	0.116	0.002	2.25	0.87	0.21	0.04	<0.001	<0.001	<0.05	0.05	0.8	1	
N161890	0.007	<0.001	<0.001	<0.01	0.91	0.115	0.002	2.17	0.85	0.21	0.04	<0.001	<0.001	<0.05	0.14	1	<0.5	
N161910	0.006	<0.001	<0.001	<0.01	0.93	0.117	0.002	2.22	0.88	0.22	0.04	<0.001	<0.001	<0.05	0.14	1.3	<0.5	
N161930	0.006	<0.001	<0.001	<0.01	0.92	0.117	0.003	2.25	0.89	0.21	0.04	<0.001	<0.001	<0.05	0.08	0.7	<0.5	
N161950	0.006	<0.001	<0.001	<0.01	0.9	0.118	0.002	2.2	0.87	0.21	0.04	<0.001	<0.001	<0.05	0.05	1.4	<0.5	
N161970	0.006	<0.001	<0.001	<0.01	0.94	0.116	0.003	2.13	0.89	0.22	0.05	<0.001	<0.001	<0.05	0.06	1.3	<0.5	
N161990	0.006	<0.001	<0.001	<0.01	0.92	0.122	0.002	2.21	0.85	0.21	0.04	<0.001	<0.001	<0.05	0.18	1.3	<0.5	
N162010	0.006	<0.001	<0.001	<0.01	0.91	0.114	0.002	2.22	0.83	0.2	0.04	<0.001	<0.001	<0.05	0.06	1.4	1.7	
N162030	0.007	<0.001	<0.001	<0.01	1	0.115	0.002	2.22	1.04	0.26	0.04	0.001	<0.001	<0.05	0.05	1.4	<0.5	
N162050	0.007	<0.001	<0.001	<0.01	0.9	0.115	0.002	2.19	0.94	0.23	0.04	<0.001	<0.001	<0.05	0.23	1.4	5.8	
N162070	0.007	<0.001	<0.001	<0.01	1	0.116	0.002	2.31	1	0.24	0.04	<0.001	<0.001	<0.05	0.09	1.8	0.5	
N162090	0.009	<0.001	<0.001	<0.01	1.17	0.113	0.003	2.29	1.23	0.3	0.05	<0.001	<0.001	<0.05	0.05	1.1	1.2	
N162110	0.007	<0.001	<0.001	<0.01	1.02	0.115	0.003	2.17	1.05	0.26	0.05	<0.001	<0.001	<0.05	0.05	1.2	<0.5	
N162130	0.006	<0.001	<0.001	<0.01	0.91	0.116	0.003	2.2	0.86	0.21	0.04	<0.001	<0.001	<0.05	0.04	1.4	<0.5	
N162150	0.008	<0.001	<0.001	<0.01	1.09	0.116	0.003	2.22	1.15	0.3	0.05	<0.001	<0.001	<0.05	0.13	1.2	0.5	
N162170	0.008	<0.001	<0.001	<0.01	1.02	0.114	0.003	2.28	1.08	0.28	0.06	<0.001	<0.001	<0.05	0.07	1.5	<0.5	
N162190	0.007	<0.001	<0.001	<0.01	0.98	0.113	0.002	2.2	0.98	0.26	0.05	<0.001	<0.001	<0.05	0.09	1.3	<0.5	
N162210	0.009	<0.001	<0.001	<0.01	1.07	0.119	0.003	2.32	1.17	0.28	0.05	<0.001	<0.001	<0.05	0.16	1.5	<0.5	
N162230	0.009	<0.001	<0.001	<0.01	1.06	0.117	0.003	2.28	1.18	0.29	0.06	<0.001	<0.001	<0.05	0.15	1.2	<0.5	
N162250	0.006	<0.001	<0.001	<0.01	0.84	0.115	0.002	2.24	0.73	0.15	0.03	<0.001	<0.001	<0.05	0.05	1.5	<0.5	
N162270	0.007	<0.001	<0.001	<0.01	0.99	0.117	0.003	2.28	0.96	0.23	0.05	<0.001	<0.001	<0.05	0.05	1.4	<0.5	
N162290	0.007	<0.001	<0.001	<0.01	0.98	0.118	0.003	2.23	0.96	0.23	0.05	<0.001	<0.001	<0.05	0.06	1.3	<0.5	
N162310	0.01	<0.001	<0.001	<0.01	1.31	0.117	0.003	2.24	1.54	0.41	0.07	<0.001	<0.001	<0.05	0.04	1.5	0.6	
N162330	0.008	<0.001	<0.001	<0.01	1.18	0.117	0.003	2.16	1.32	0.35	0.06	<0.001	<0.001	<0.05	0.05	1.2	<0.5	
N162350	0.009	<0.001	<0.001	<0.01	1.15	0.124	0.003	2.38	1.28	0.34	0.07	<0.001	<0.001	<0.05	0.18	1.5	0.7	
N162370	0.007	<0.001	<0.001	<0.01	0.98	0.118	0.003	2.34	0.89	0.21	0.04	<0.001	<0.001	<0.05	0.05	1	<0.5	
N162390	0.008	<0.001	<0.001	<0.01	1.05	0.117	0.003	2.24	1.17	0.29	0.05	<0.001	<0.001	<0.05	0.06	1.5	1.3	
N162510	0.012	<0.001	<0.001	<0.01	0.95	0.116	0.002	2.22	0.78	0.2	0.03	<0.001	<0.001	<0.05	0.31	1.4	3.6	
N162530	0.018	<0.001	<0.001	<0.01	1.07	0.115	0.003	2.22	1.18	0.29	0.05	<0.001	<0.001	0.11	0.68	1.4	0.8	
N162550	0.007	<0.001	<0.001	<0.01	0.97	0.112	0.002	2.27	0.97	0.24	0.05	<0.001	<0.001	0.09	0.32	1.5	1.3	
N162570	0.007	<0.001	<0.001	<0.01	1.01	0.113	0.003	2.28	0.98	0.23	0.04	<0.001	<0.001	0.05	0.18	1.4	<0.5	
N162590	0.009	<0.001	0.002	<0.01	1.25	0.117	0.003	2.31	1.56	0.41	0.08	<0.001	<0.001	<0.05	0.04	1.7	<0.5	

APPENDIX VII

2011 Soil Orientation Survey: Results

REVELATION
GEOSCIENCE LTD

Memorandum

To: Kelly Gilmore

Cc. Kevin Wells; Matt Bodnar

Date: September 5, 2011

From: Dennis Arne

Subject: Soil orientation surveys at Tom and Jason deposits

Introduction

No soil surveys have been conducted on the Tom property since the Cominco option agreement in 1989 to 1991. These surveys were conducted on the plateau toward Tom Southeast, to the north of Tom West near a location referred to as Cut-off Creek, and near the landing strip. These soil surveys follow on from surveys undertaken by Hudson Bay Mining & Smelting in 1975 and 1976 in areas covered by glacial overburden. Some anomalous areas were drilled by Cominco, mainly on the plateau, but the results were not encouraging. Many of the issues associated with the interpretation of the historical data had to do with the transported nature of the material sampled, and is not surprising that soil anomalies could not be related to bedrock sources. Conventional soil surveys involving analysis of B-horizon soils for Pb, Zn and Ba were carried out in 1975 and 1976 over the Jason Main Zone, although the results do not appear to have been encouraging. Field investigations indicate that much of the Jason property is covered by glacial till at lower elevations, including much of the area sampled in the soil survey.

It is sufficient to say that no soil surveys have been conducted since the development of numerous proprietary partial extractions in the last 10 years. For this reason, it was decided to undertake a series of soil orientation surveys over known base metal mineralization at Tom and Jason to assess the effectiveness of various soil horizons, grain size fractions and partial digestion methods.

Tom Deposit

The Tom area is dominated by exposed bedrock showing varying degrees of down-slope movement in scree material and talus. Material on the plateau area is frost-shattered but largely in place. Many of the ridges and spurs in the area have been stabilized with light vegetation which has allowed some minor soil development (Figure 1). Such slopes may be useful for reconnaissance-style soil sampling. A soil orientation survey was conducted over the northern extension of the Tom West deposit (Figure 2) on September 3. Approximately 2 kg of unsieved material was collected from soil developed on colluvium at each site. Soil horizons were poorly developed, although a definite B horizon was evident in some profiles. No attempt was made to sample different horizons, but where these are developed, the bulk of material sampled was C-horizon material. These samples will be sieved at ACME to separate a -80 mesh (<180 micron) and clay fraction (<2 micron), provided sufficient material is available. Analysis will be by modified aqua regia digestion of a 0.5 g sample, followed by multi-element ICP analysis.

Figure 1: Poorly developed lithosol on colluvium on spur near the Tom West deposit.

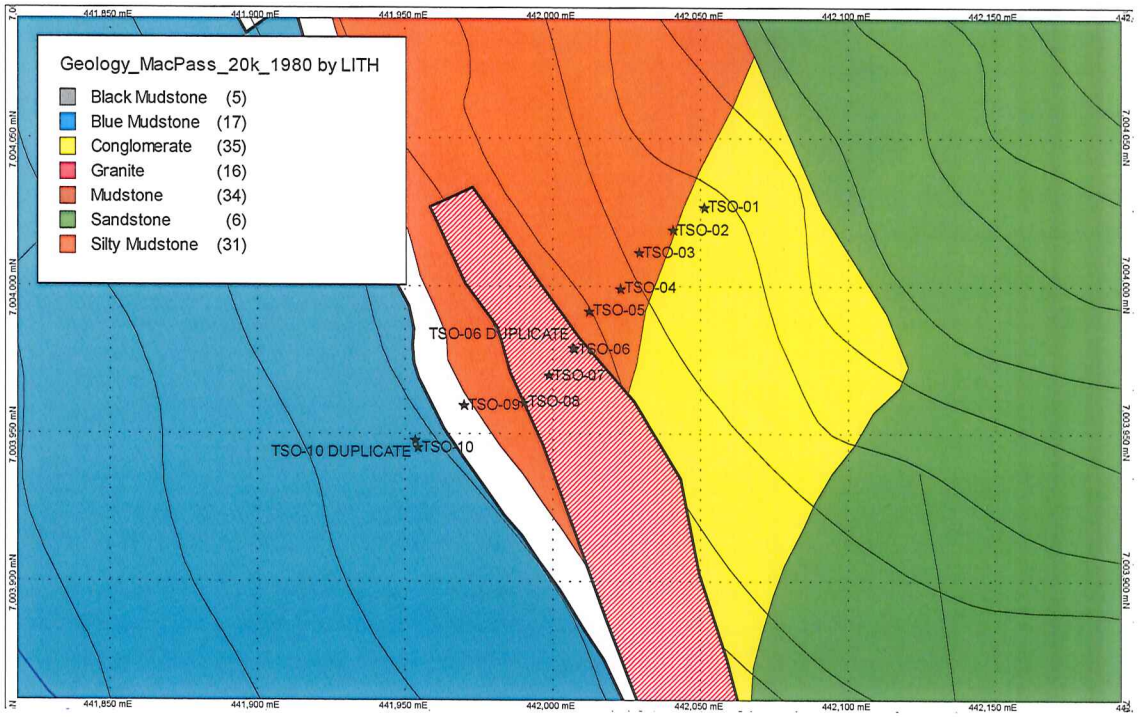

Figure 2: Locations of soil samples collected across the northern portion of the Tom West deposit (hatched area). Field duplicate samples were collected over the deposit and at the last sample station downhill from the deposit.

Jason Deposit

The Main Zone of the Jason Deposit appears to be mainly covered by glacial till below an elevation of approximately 1300 m, although it is generally reported to outcrop, or sub-crop in the area. Soil profiles are well developed in the vicinity of the mineralized horizon (Figure 3), and are complex in some areas where mass movement of material down slope has buried earlier A1 (Ah) horizon layers. An orientation soil line was completed across the Main Zone on September 2, and a further orientation line to the east of the Main Zone was left to be sampled later in the month (Figure 4). This second line crosses the buried extension to the Main Zone, as well as several faults that extend eastward from the Main Zone itself. Numerous field duplicate samples have also been collected from both background areas and from directly over mineralization.

Four types of samples were collected at Jason:

1) A1 (Ah) horizon material for sieving to -80 mesh followed by modified aqua regia digestion and analysis by ICP-MS at ACME Analytical laboratories in Vancouver.

2) A soil sampled collected approximately 20 cm below the base of the O-horizon for Mobile Metal Ion (MMI) analysis by SGS Laboratories in Toronto. Soil pH will also be determined for these samples.

3) A conventional C-horizon soil for sieving to -80 mesh followed by modified aqua regia digestion and analysis by ICP-MS at ACME Analytical laboratories in Vancouver.

4) Samples of recent twig growth from black spruce trees, which cover much of the Jason property below an elevation of approximately 1500 m. These samples will have the needles separated from the twigs, with the twigs dried, macerated and digested using nitric acid/aqua regia, and then analysed by ICP-MS by ACME Analytical laboratories in Vancouver.

Budget

A budget for the soil orientation program is summarized in Table 1. Total cost of the program, allowing for shipping and 10% contingency, is estimated to be $5000. Analytical costs include sample preparation.

Material	Method	No. of Samples	No. of Analyses	Cost per Analysis	Total cost
Soil	Aqua regia	75	90	$25	$2250
Soil	MMI + pH	30	30	$50	$1500
Vegetation	Acid digest	25	25	$30	$750
Totals		**130**	**145**		**$4500**

Figure 3: Well developed soil profile in till over the Jason Main Zone. O, A1 (Ah), A2 (Ae), B and C horizons appear to be present in this profile. The A2 may be loess rather than part of the soil profile.

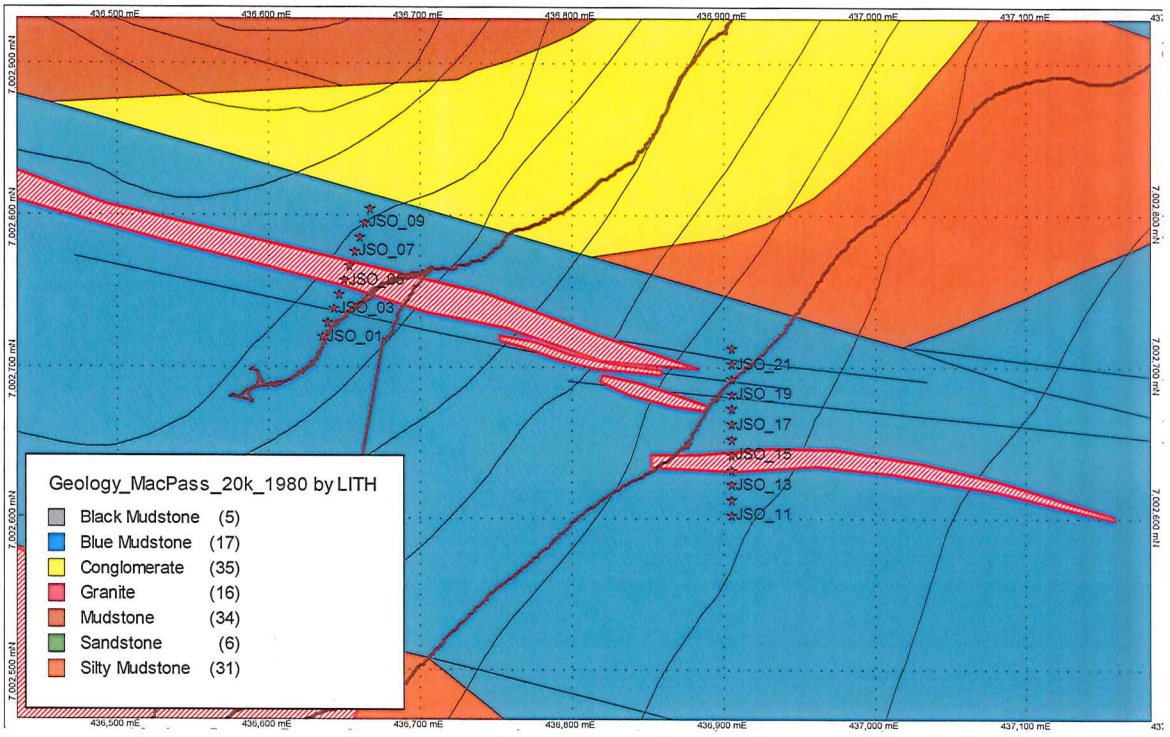

Figure 4: Location of planned soil orientation lines at Jason. The more westerly of the two lines has already been sampled.

Summary

Advances in both partial digestion and instrumental methods within the last decade have allowed detection of sulphide-bearing mineralization at depth below transported cover under some circumstances. The circumstances controlling whether various partial digestion methods work are poorly understood, so orientation work is required to establish applicability of a particular method to new areas. Historical soil geochemical surveys appear to have generally detected either transported metals in glacial till at Tom, or metals precipitated by aerated groundwater at Jason. The Tom and Jason deposits are largely undisturbed, making them ideal candidates for soil orientation studies. The soil orientation study at Tom will target grain size fraction in order to optimise anomaly to background contrast in sparse soil developed on colluvial material and scree. The orientation survey at Jason is designed to test several soil horizons and two of the most commonly used partial digestion methods (modified aqua regia and MMI), as well as biogeochemistry, to see if base metal mineralization can be detected through glacial overburden. The results of these orientation surveys, if successful, will be used to design a soil geochemistry program at both the Tom and Jason properties in 2012.

REVELATION
GEOSCIENCE LTD

Memorandum

To: Kelly Gilmore

Cc. Kevin Wells; Matt Bodnar; Christina Taylor

Date: December 8, 2011

From: Dennis Arne

Subject: Soil orientation survey results at Tom and Jason deposits

Executive Summary

Soil orientation lines were conducted in glacial +/- colluvial(?) material overlying the Jason Main Zone and in colluvial material overlying the Tom West deposit in September, 2011. The samples were analysed by several different methods to assess the viability of conducting soil surveys on Hudson Bay Mining & Smelting claim areas covered by glacial till and/or colluvium in order to detect the presence of concealed stratiform Pb-Zn-Ag-Ba mineralization.

The results of the soil orientation surveys are positive for both Jason and Tom. MMI and C-horizon aqua regia data give a positive response at Jason Main Zone. The best indicators of mineralization are Pb, Zn, Ag and Ba for both digestions, with As, Sb, Cu, Hg, Y and the REE showing a positive response to buried mineralization in the MMI data. The interpretation of conventional aqua regia soil data is complicated by the possibility of detecting trace metals scavenged onto secondary Fe oxides during this more aggressive digestion, particularly in the case of Zn, As, Sb and Tl. Correction for this effect, either through the use of data normalization or regression analysis is required for correct interpretation of the data. The results from an aqua regia digestion of Ah-horizon soils were generally negative once the potential effects of scavenging by secondary Fe oxides in the soil were considered. Black spruce twigs were also sampled at the soil stations at Jason and these provide limited support for the MMI and C-horizon soil results. Given the limited distribution of black spruce trees at elevation and more consistent results from the soil samples, the collection of soil samples is preferred for future exploration in the area.

Data from colluvial soils across the Tom West deposit indicate clear responses for Pb and Ag at and directly down-slope from the sub-cropping deposit. The best indications of the Tom West deposit in the -80 mesh grain size fraction are raw Pb, Ag, S and Ba, as well as Zn, As, Sr and Tl residuals following regression against Fe in the samples. A similar conclusion can be drawn for Pb, Ag, S and Ba in clay separates (<2 micron) from the colluvial soils over Tom West. The clay separates have the advantage of containing higher metal values and showing greater anomaly to background contrast compared to the standard -80 mesh soil data.

A comprehensive evaluation of potential target areas on the property is recommended. Targeted ridge & spur soil and/or contour sampling is recommended as follow-up for areas dominated by colluvium. Grid soil sampling is recommended as follow-up for areas of subdued topography covered by glacial till.

Introduction

Two soil orientation surveys were undertaken at the Tom and Jason deposits in early September, 2011. These are described in a previous Revelation Geoscience memo dated September 5, 2011. The sampling rationale and the analyses to be undertaken on the samples are described in that document.

Jason Deposit Soil Orientation

10 samples were collected from across the inferred position of the Jason Main Zone at approximately 10 m intervals (Figure 1). As the main Zone is orientated in a near vertical position, the sample spacing approximates true stratigraphic distance to the mineralized horizon (denoted DTM in all subsequent figures). These samples included 3 field duplicate samples at the beginning, middle and end of the sample traverse. A second orientation soil line planned at Jason could not be completed because of the amount of surface disturbance in the area.

Sample collection was based on the location of the Jason Main Zone as indicated by the digital files made available by Hudson Bay Mining & Smelting. Drill hole locations were originally located in NAD27. These locations were transformed to NAD83, but were found to be significantly different from a number of drill collars located on the ground in early September, 2011. A manual correction to the NAD83 locations (+30 m east & -33 m north) brings these drill holes into agreement with the drill holes which were located in NAD83 using a Trimble GeoXT handheld unit. Also shown on Figure 1 are the access tracks as traced using the Trimble compared to the locations of access tracks provided in the digital data files. This leads to the interpretation that the surface trace of the Main Zone is actually located south of where it was originally thought to occur during sampling. A new position of the Main Zone was determined by using the original drill collar positions and their located positions to translate the Main Zone to the position shown. The original position of the Main Zone outline is shown in yellow. It is therefore probable that the orientation soil traverse began over subcrop of the Main Zone and then traversed to the north away from it. The following discussion is based on the assumption that the revised Main Zone position is roughly correct (+/- 10 m). This interpretation will have to be validated next field season through the capture of all available drill collar locations using differential GPS.

The area traversed by the completed soil orientation line is near the upper margin of glacial cover deposited during the final Wisconsin McConnell Cordilleran glacial event. The area around Jason is described as having a veneer to blanket of moraine or colluvium over bedrock where bedrock is not exposed (Morison *et al.*, 1981). Ice flow is inferred to have been from the NNE during this glacial advance (i.e. down valley). The survey was also designed to stay within a stratigraphic package dominated by clay lithologies, although the geology shown in Figure 1 is a gross simplification of the geology of the Jason Main Zone sequence described by Turner (1991).

The soil profiles observed during sampling appear to be developed on a clay-rich till at the southern to mid section of the orientation line, but became progressively coarser-grained moving to the north, perhaps indicating the presence of colluvium. Complexities were observed in the soil profiles north at the northern extremity of the line as well. At station JSO-09, an inclined white clay layer initially thought to be loess is probably 1400 yr old White River ash, which is widely distributed across the southern half of the Yukon Territory. None of this material was sampled directly, but it may have contaminated the organic-rich sample collected from the base of the Ah (A1) horizon in this location. It was also noted at stations JSO-09 and JSO-10 duplicate that an earlier A-horizon was buried by approximately 10 cm of soil and a newer, less well developed A-horizon had developed. This suggests mass wasting of material down the slope in this area, which was also largely devoid of large trees. The presence of a partially

developed A-horizon soil at the top of these disturbed profiles indicates that the disturbances are not recent (i.e. not due to exploration and drilling activities in the area). Sampling of Ah-horizon material was from the upper A-horizon in both cases. Sampling for MMI was done 20 cm below this upper A-horizon. The C-horizon samples were collected below the lower A-horizon material, at a depth of approximately 20 cm.

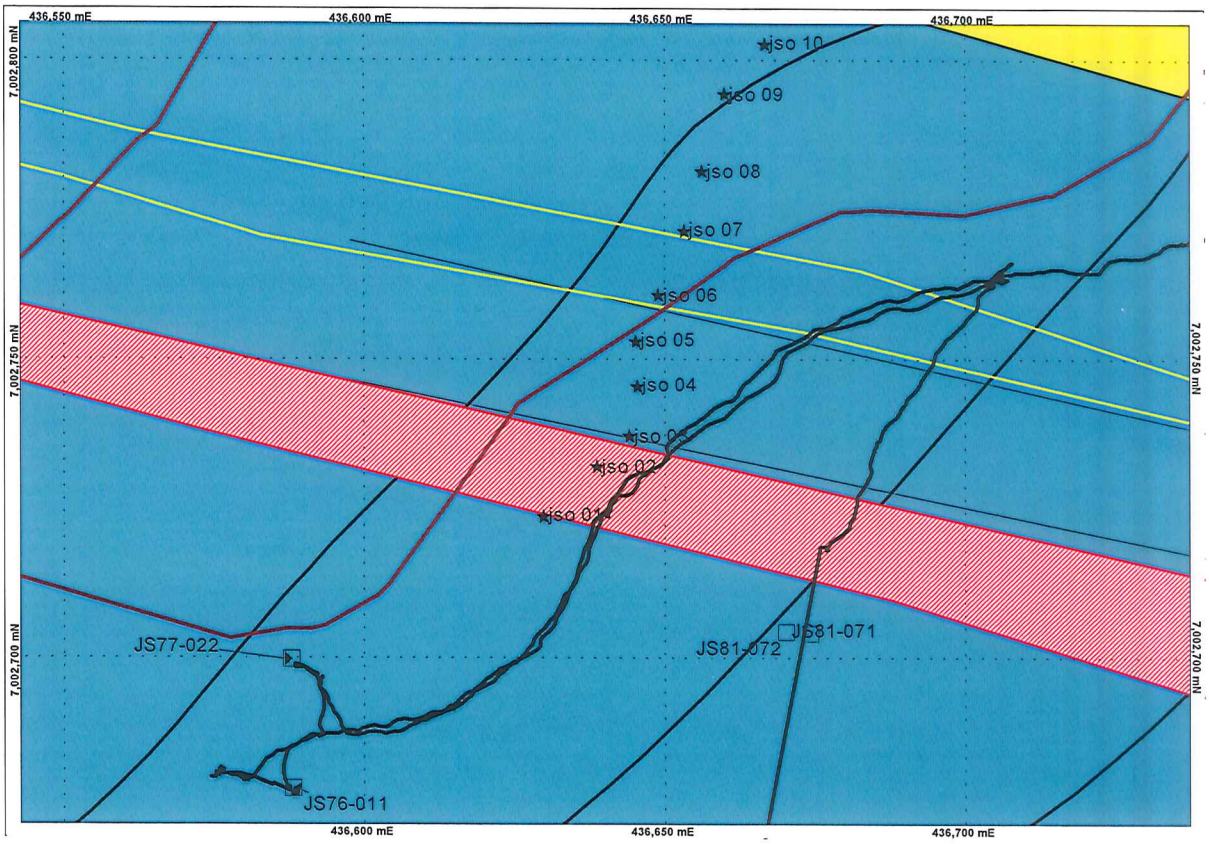

Figure 1: Location of soil samples developed on glacial till over the inferred position of the Jason Main Zone (shown in hatched red pattern). The initial position of the Main Zone is shown in yellow outline. Bedrock beneath all samples was a "blue" siliceous mudstone. The original location of the access track (red) and the measured position (black) is also shown. Only the corrected drill collar locations near the soil line are shown, and these are good agreement with the revised location of the access track.

MMI-M Results

MMI-M results for samples collected across the Jason Main Zone are summarized for selected elements and soil pH in Figure 2. The main commodity elements, those elements likely to be enriched in the massive sulphide zone and elements known to define "classic" MMI responses in soil surveys (pH, Ca, Sr) are also shown. In addition, it was noted that many of the rare earth elements (REE) of the lanthanide series (Dy, Er, Eu, Gd, Nd, Pr, Sm, Tb, Yb), Cu and Y show a sharp increase as the Main Zone is approached.

Overall, the observed soil pH is generally very low compared to soils developed on clay-dominant glacial till samples elsewhere in Canada (i.e. on luvisolic soils). Low pH soils are predicted directly over concealed sulphide-bearing mineralization due to the migration of H ions directly above an oxidizing body (Figure 3). Coincident with this zone of low pH, Ca and Sr are generally low as well (Figure 3), but elevated at the margins of the concealed mineralization where pH rises. In this case, all samples contain no detectable Ca, and the Sr levels are very low compared to those observed in other MMI surveys conducted by the author, and presumably reflect the low pH of the soils. Soil pH rises significantly in samples from the northern end of the traverse (i.e. an order of magnitude), although the significance of this with regard to mineralization is not clear.

Of the main commodity elements, Pb, Zn and Ag show an erratic distribution superimposed on a trend of generally increasing metal content to the south as the Main Zone is approached. The Pb trend is concealed by the high values in the extreme northern samples and so Pb is plotted using a Log scale. These trends coincide with a clear pattern of increasing Ba, As, Sb, Cu, Hg and the above mentioned REE and Y (not illustrated). It is not clear if the REE are elevated in the Jason Main Zone mineralization, but this would not be entirely unexpected by comparison with other stratiform and sediment-hosted base metal deposit types (e.g. Bau, 1991).

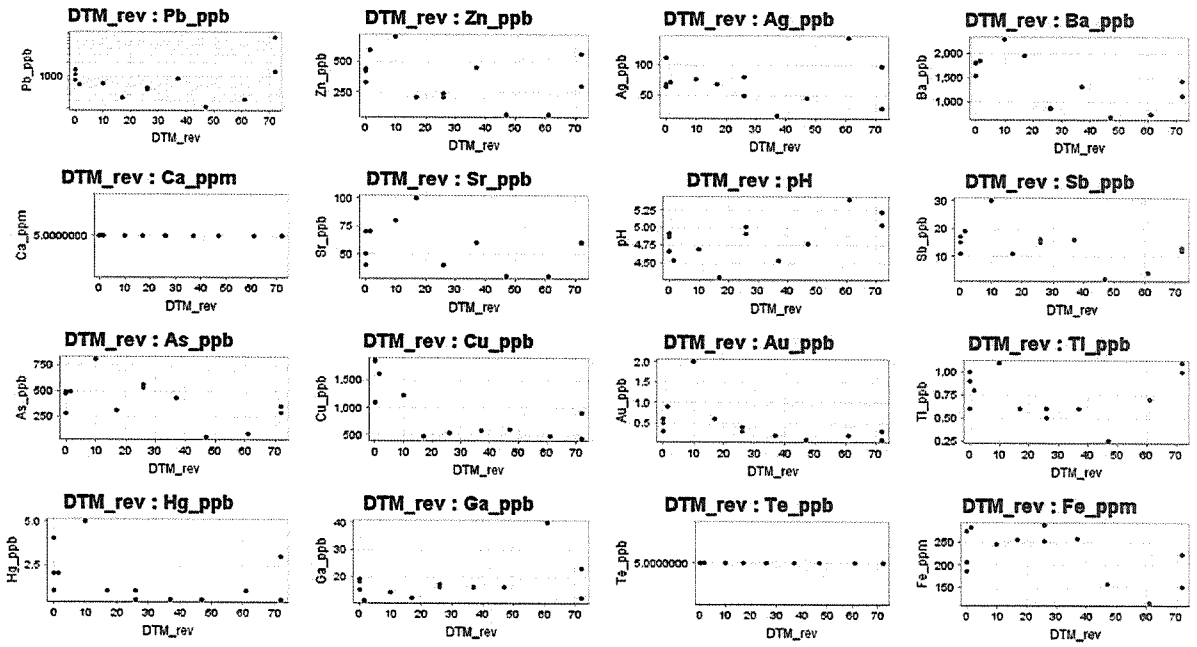

Figure 2: Summary of selected elements following a MMI-M digestion of soil samples across the Jason Main Zone, viewed looking west. DTM = distance to mineralization, in meters.

It should be borne in mind when reviewing these results that the MMI digestion is designed to extract loosely bound ions, the so-called mobile metal ions, from the soil with little or no digestion of the soil matrix itself. A variety of partial extractions are available that progressively digest various components of the soil matrix and thus introduce an increasing degree of transported material into the extract that will eventually conceal any ions that may have migrated through the soil from an underlying, oxidizing sulphide deposit. The mechanism(s) by which these ions move through the soil are poorly understood.

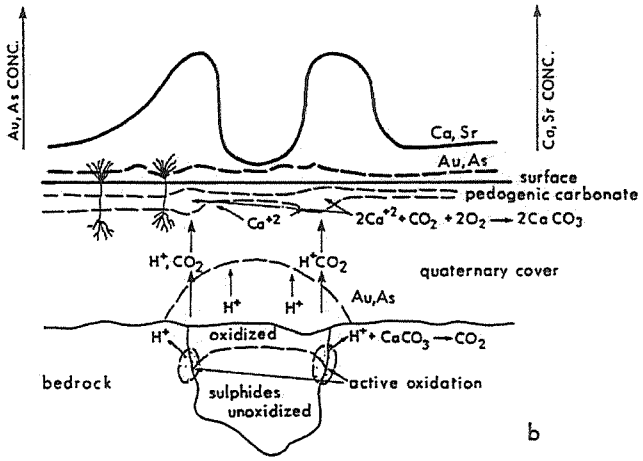

Figure 3: Theoretical pattern of key elements in cross section through a buried, oxidizing sulphide deposit in an arid environment (Smee, 1998). Not explicitly shown but implied by the diagram is a zone of lowered pH directly over mineralization.

C-horizon Results

The conventional analysis of a -80 mesh grain size fraction of C-horizon soil is discussed next because these samples were collected at or just below the same depth as the MMI samples. They therefore provide direct comparison of MMI partial extraction results compared to a modified aqua regia ($1HCl:1HNO_3:1H_2O$) digestion data. An aqua regia digestion will extract any loosely bound ions in the soil, as well as those elements bound onto organic material and secondary Fe and Mn oxides.

The elemental distributions from the aqua regia digestion along the orientation line are similar to those observed in the MMI data, although the magnitudes of the data are very different for some elements. Inclusion of the Fe distribution in the profiles suggests that the pattern may be controlled in part by the distribution of either Fe or Mn in the samples, and this is supported both visually through the use of scatter plots and statistically through the use of Spearman Rank correlation coefficients. This situation can be alleviated somewhat by normalizing the trace element data to the Fe content of the samples through the use of ratios, but the overall trends in the Pb, Zn and Ba data remain. The MMI data do not show the same positive associations with Fe displayed by some of the C-horizon aqua regia data.

Ah-horizon Results

The Ah -horizon aqua regia digestion soil results appear to provide the most compelling evidence for an increase in Pb as the Main Zone is approached (Figure 5), although the data are noisy. The elements As, Sb and Tl also show a general trend of increasing values as the Main Zone is approached, but the trend is disrupted by one sample containing elevated Fe. Again, the observed trend in many of these elements appears to reflect the distribution of Fe in the soil, as was the case with the C-horizon aqua regia analyses. The use of residuals following regression against Fe suggests that, with the possible exception of Tl, there is no coherent trend in the Ah-horizon samples as the Main Zone is approached. The use of residuals was used in preference to normalizing the data because the spread in Fe contents allowed for robust regression analysis.

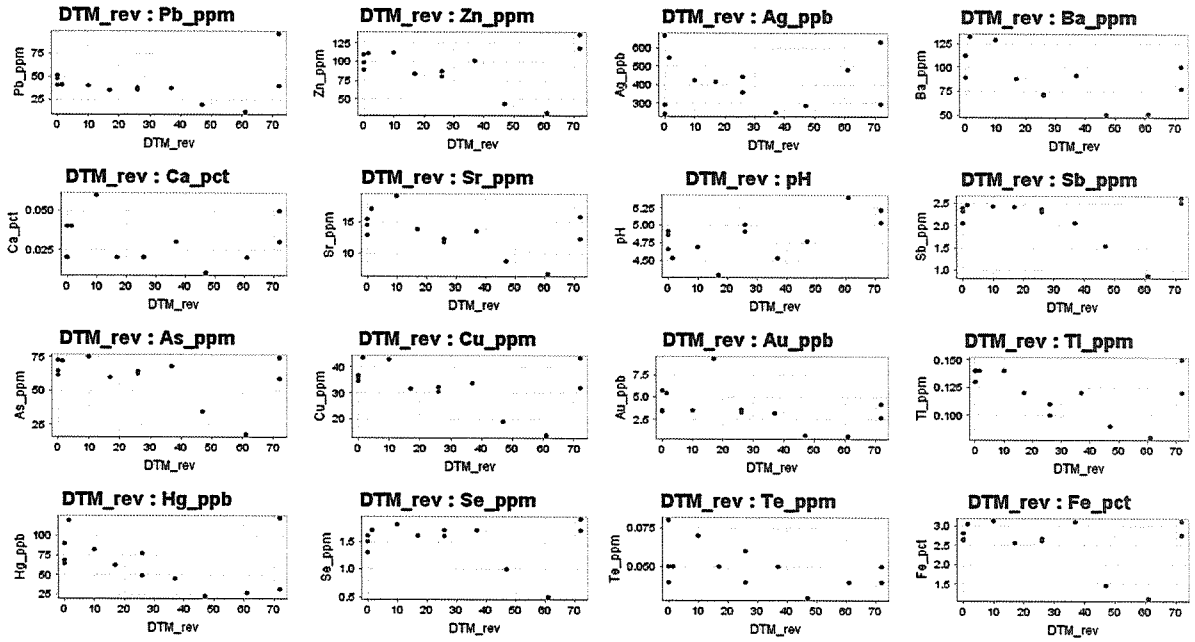

Figure 4: Summary of selected elements following an aqua regia digestion of C-horizon soil samples across the Jason Main Zone, viewed looking west. DTM = distance to mineralization, in meters.

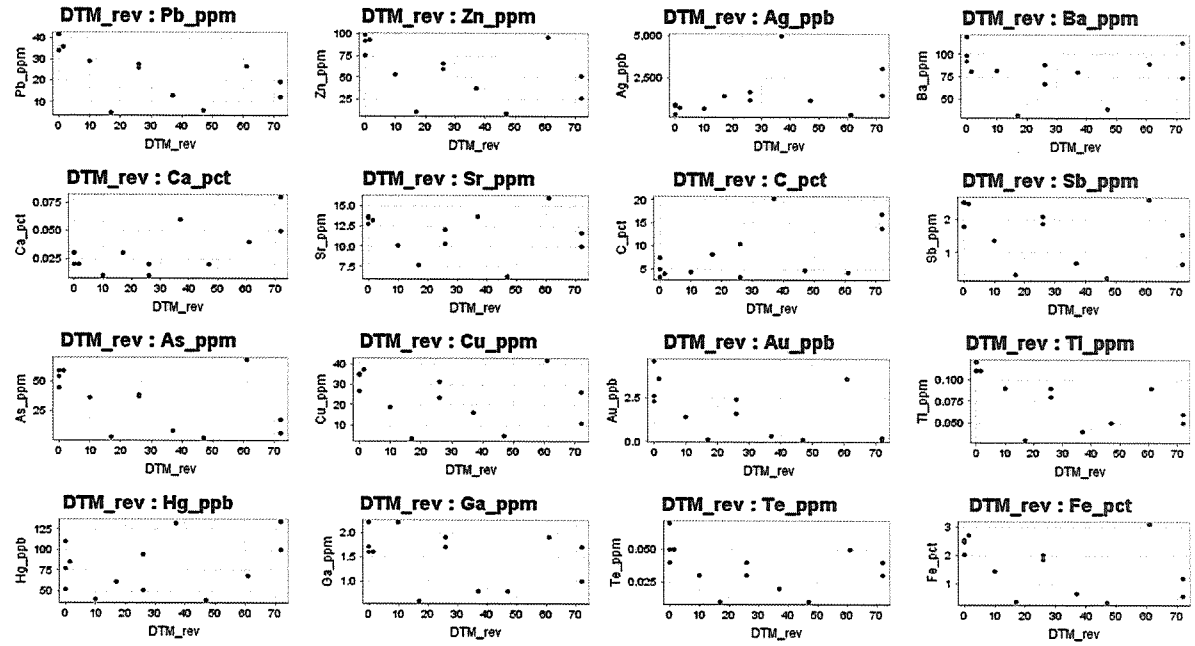

Figure 5: Summary of selected elements following an aqua regia digestion of Ah-horizon soil samples across the Jason Main Zone, viewed looking west. DTM = distance to mineralization, in meters.

Black Spruce Twigs

The last 7 years growth on black spruce trees was collected where available at soil sample stations along the orientation traverse. Black spruce twigs are a well established sampling media for a number of target commodity elements in Canada (Dunn, 1996). The branches were dried and the needles removed so that only the twigs were analysed. These were submitted to Acme Analytical Laboratories where they were pulverized and a 0.5 g sub sample digested in nitric acid followed by dilute aqua regia. The resulting solution was analysed by ICP-MS. The results are presented in Figure 6.

There is a general trend of increasing Pb in black spruce twigs as Main Zone at Jason is approached. Note that no twigs were collected at site 10, and therefore the elevated Pb shown by soil samples in this area cannot be confirmed. Ag, Zn and Ba show erratic profiles as the Main Zone is approached. Sb, As, Au, Te, Cd, Fe and Hg show one or two-point anomalies associated with the inferred position of the Main Zone. None of these apparent anomalies can be supported statistically (e.g. Stanley & Noble, 2007), but the coincidence of one or two point anomalies over the Main Zone from several elements that have shown a response in soil samples from the same sites implies that the observed effects are real.

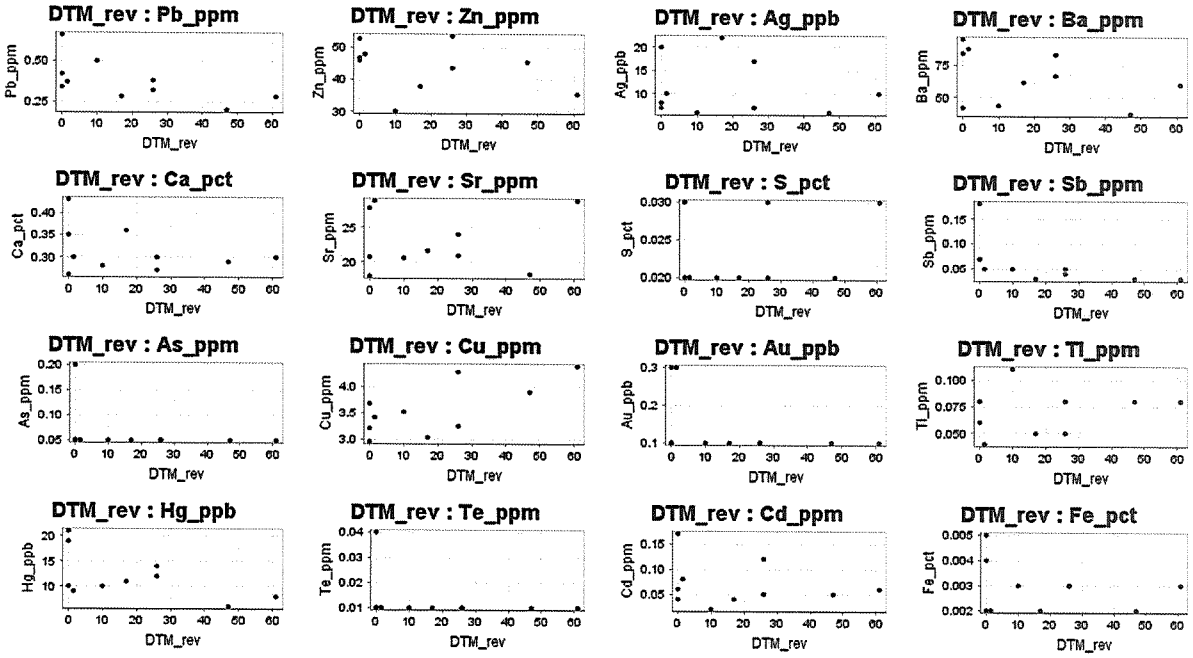

Figure 6: Summary of selected elements following an aqua regia digestion of black spruce twig samples across the Jason Main Zone, viewed looking west. DTM = distance to mineralization, in meters.

In summary, MMI and C-horizon aqua regia data indicate the presence of blind stratiform Pb-Zn-Ag-Ba mineralization in transported soils at Jason Main Zone. The best indicators of mineralization are Pb, Zn, Ag and Ba for both digestions, with As, Sb, Cu, Hg, Y and the REE elevated over buried mineralization in the MMI results. The interpretation of conventional aqua regia soil data is complicated by the possibility of scavenging of trace metals onto secondary Fe oxides, particularly in the case of Zn, As, Sb and Tl. Correction of this effect, either through the use of normalization or regression analysis is required for correct interpretation of the data.

Tom West Soils

A total of 10 soil samples plus 2 field duplicates were collected across the Tom West deposit in September, 2011 (Figure 7). These were collected from colluvial soils having poor profile development, but where evident, the bulk of the material came from the C-horizon. Between 2 and 3 kg of unsieved soil was collected at each station. The West Zone at Tom dips 60 degrees to the southwest, so distances to mineralization (DTM) are slightly greater than true stratigraphic distances.

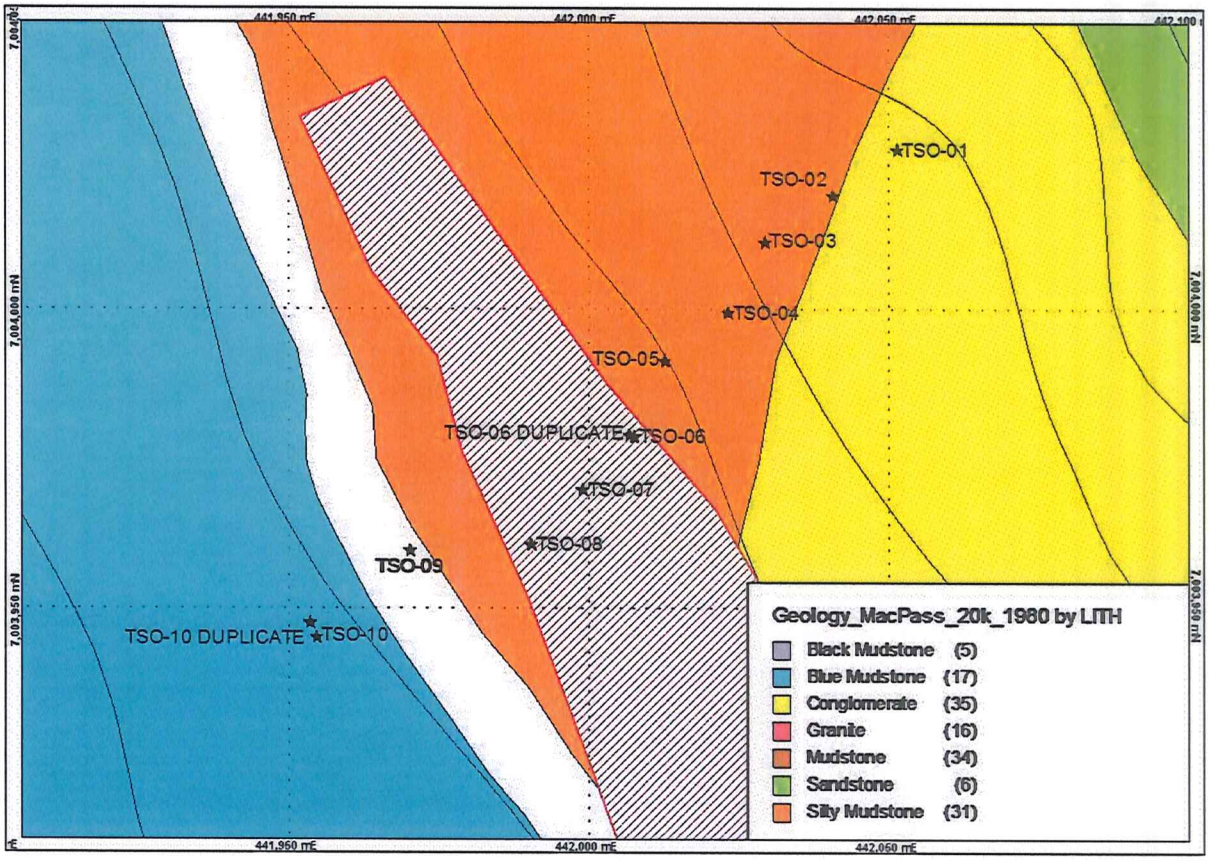

Figure 7: Location of soil orientation samples across the Tom West deposit.

The -80 mesh data are illustrated in Figure 8. There is a clear response for Pb and Ag and, to a lesser extent, for Ba and S in samples directly down slope from the Tom West deposit. Zinc, As, Cu and Tl show a positive association with Fe in the samples and this influences their distribution along the profile. Robust regression analysis and the use of residuals provide a clearer indication of anomalous Zn, As, Tl and Sr associated with the Tom West deposit (Figure 9). The best indications of the Tom West deposit in the -80 mesh grain size fraction are therefore raw Pb, Ag, S and Ba, as well as Zn, As, Sr and Tl residuals following regression against Fe in the samples.

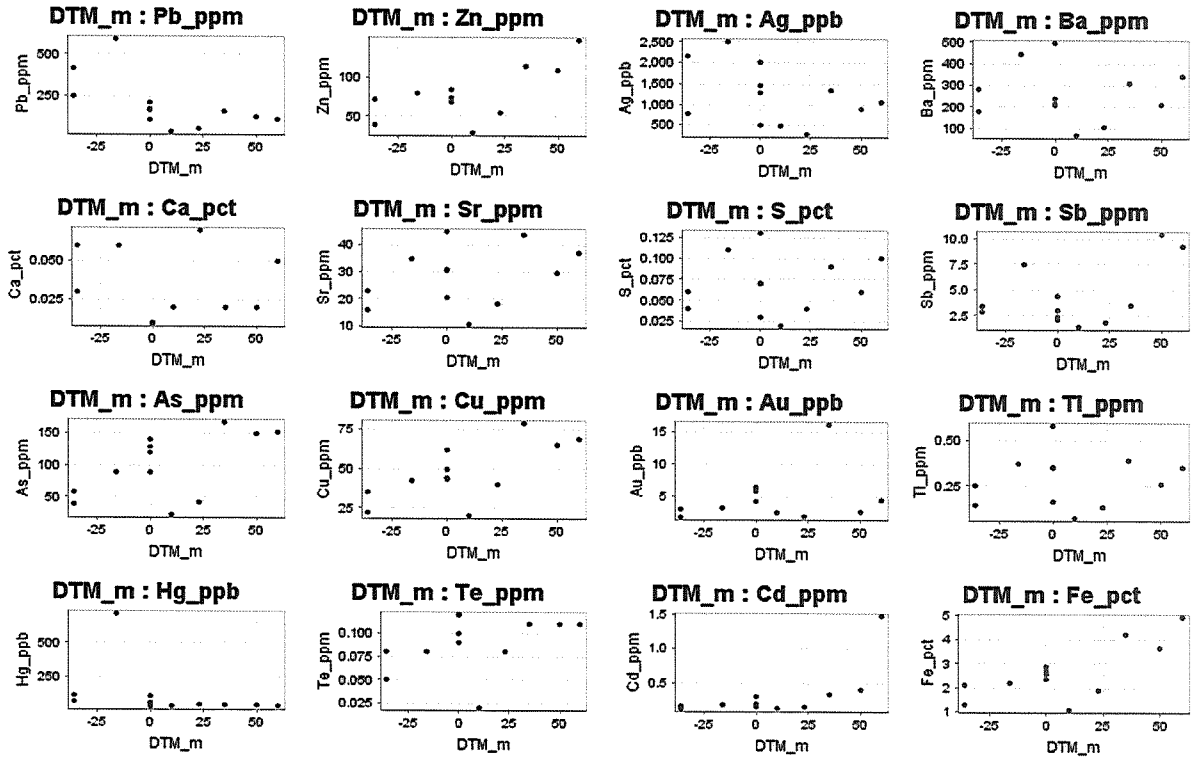

Figure 8: Summary of selected elements following an aqua regia digestion of -80 mesh colluvial soil samples across the Tom West Zone, viewed looking northwest. DTM = distance to mineralization, in meters.

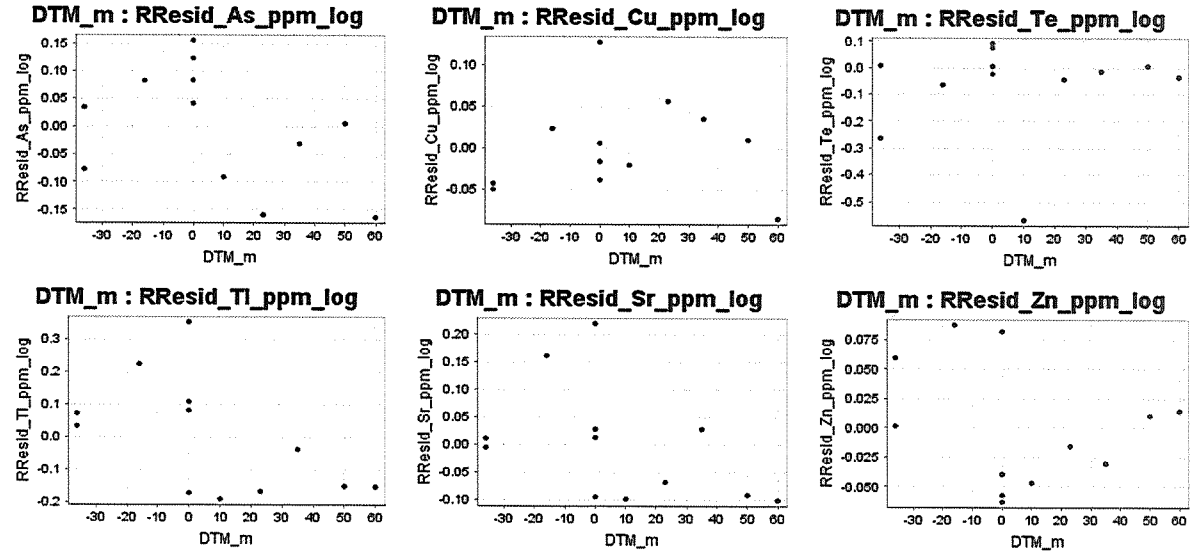

Figure 9: Summary of residuals following regression against Fe in colluvial soil samples across the Tom West Zone, viewed looking northwest. DTM = distance to mineralization, in meters.

The clay separate (<2 micron) results are illustrated in Figure 11. There is a clear response for Pb and Ag and, to a lesser extent, Ba and S in samples directly down slope of the Tom West deposit. The elements Zn, As, Cu and Tl also display a positive association with Fe in the clay fraction. However, neither normalizing the data for Fe content or regression analysis produces a clear anomaly over the Tom West Zone. Both Au and Te show multi-point anomalies directly over the Tom West Zone, but not in all samples. Reliance on these elements could lead to the generation of false negatives in some circumstances. Therefore, the best indicator of near-surface mineralization in the clay fraction of colluvial soils is obtained from elevated Pb and Ag directly down slope of sub-cropping mineralization.

The extent of this down slope dispersion cannot be assessed from the present orientation line, but is likely to be a function of slope angle and the presence of stabilizing vegetation.

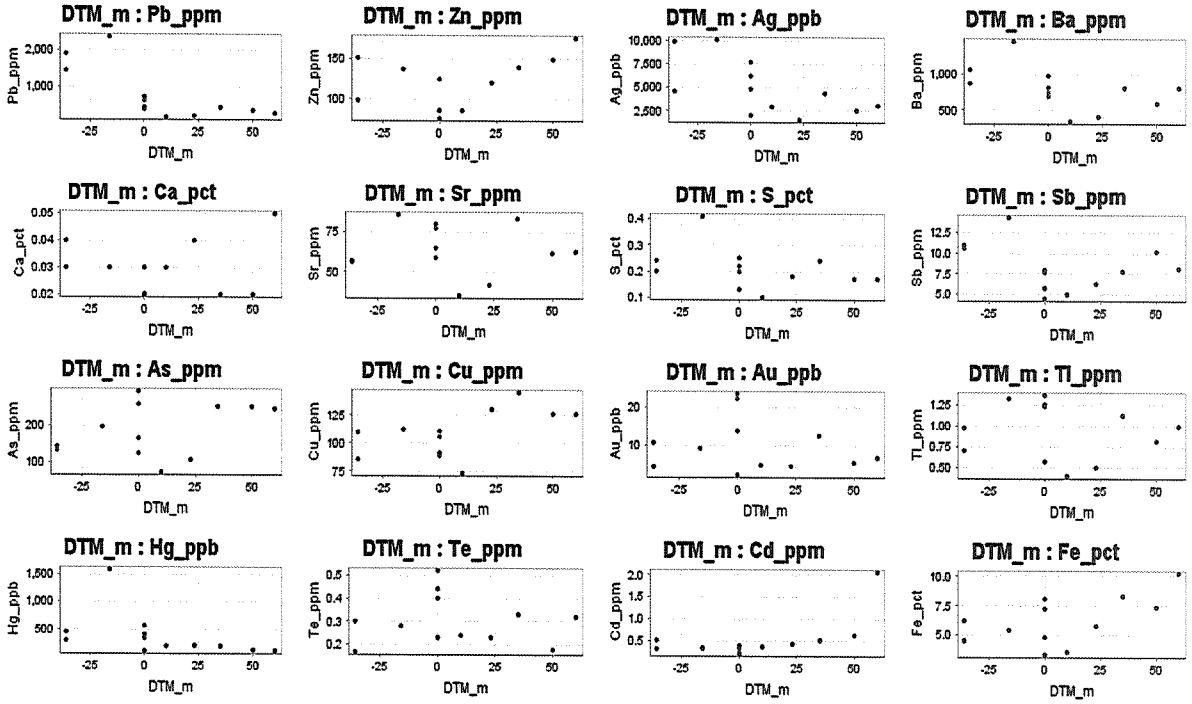

Figure 11: Summary of selected elements following an aqua regia digestion of clay separates from colluvial soil samples across the Tom West Zone, viewed looking northwest. DTM = distance to mineralization, in meters.

The use of clay separates rather than the standard -80 mesh grain size fraction results in higher metal concentrations in the samples, as well as a slightly greater anomaly to background contrast. For example the anomaly to background ratio for Pb is approximately 3 for the -80 mesh material, whereas it is nearly 10 in the clay separates.

Quality Assurance

The assessment of data quality is based largely on duplicate field and lab analyses to determine data reproducibility. Insufficient data are available from such small orientation data sets to undertake a rigorous assessment of field and analytical variance. However, the data are adequate to allow a qualitative impression of data reproducibility. Both laboratories (Acme and SGS) included reference materials with their analyses. In the case of Acme, one of these materials (Oreas 45c) is a certified reference material produced by Ore Research & Exploration Pty Ltd and is a suitable reference material for soil surveys. Analysis of both Acme reference materials (DS8 and 45c) indicate the data lie within acceptable tolerance limits for the elements of most interest (Pb, Zn, Ag, Ba). Analytical duplicate analyses provided by Acme are generally within 5% of the original analysis.

Discussion

The two samples on the northern edge of the Jason Main Zone soil line are problematical. They show levels of key elements similar to those observed directly over or within 40 m of the deposit. While these two samples, which represent a field duplicate pair, show a significant range in values for Pb, Ag and Hg, the other elements are generally comparable. While these samples occur in an area of visible slumping and ground disturbance, it is unlikely that any material has been derived from the Main Zone. It is also worth noting that the footwall of the Main Zone does not appear to have been sterilized by previous drilling. Multiple lenses occur within the South Zone, but thus far only a single lens has been identified in the Main Zone. This observation is consistent with the interpretation that the Main Zone is distal from an inferred vent (Turner, 1991). Regardless of current models, these high soil values on the northern end of the traverse warrant follow-up investigation given the possibility they may indicate the position of a previously unrecognized footwall lens to the Main Zone.

References

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APPENDIX VIII

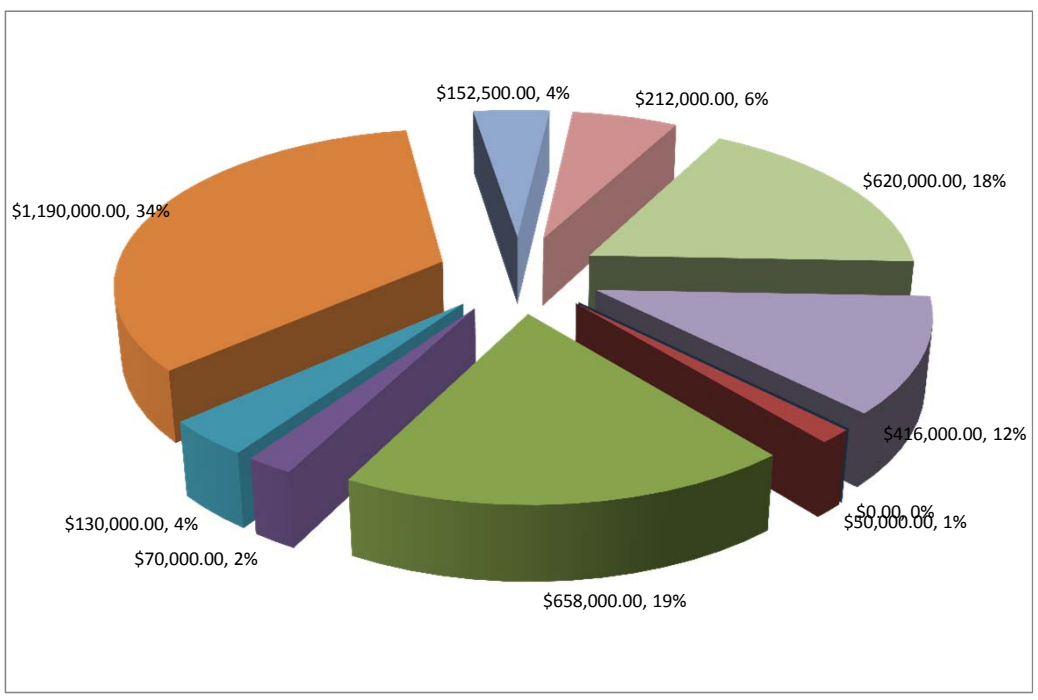
2012 Budget and Drill Proposal

2012 Tom-Jason Summer Drilling Project Budget - HBED

Category	Expenditure Type	Details of Services & Contract Estimates		units	cost per unit	Amount	Budget Totals	
INCOME ESTIMATES								
EXPENSE ESTIMATES								
Salaries, Benefits -HBED Employees								% subtotal
	Payroll & Benefits	*HBED management & technical staff for 5 months for preparation, execution and reporting*				**$0.00**		
							$0.00	**0.0%**
Legal, Accounting & Tenure Maintenance		*Various Contractors & Suppliers*						
	Professional Services & Fees	*legal, accounting, professional fees & services, licenses, permits, Claims Mgmt*				**$10,000.00**		
	Government Fees	*fixed claim tenure renewal filing fees, permits etc*				**$15,000.00**		
	Mgmt Expenses, travel & related	*Technical & Mgmt Committee related expenses; eg Property*				**$25,000.00**		
							$50,000.00	**1.4%**
Camp Management & Logistics								
	Tom Camp (Opened June 15, Occupied july 1- till Sept 1st.)							
	Camp Cost (R. Merrcer)	*camp/equip rental*	*1 more bunckhouse, 1 office trailer*			**$90,000.00**		
	Camp mgmt & maintenace personnel	*Camp mgmt personnel incl local hires*		150	$600.00	**$90,000.00**		
	Kitchen personnel	*Chef, helper, cleaner*		150	$600.00	**$90,000.00**		
	Personnel travel	*travel, accommodation and related*		40	$1,200.00	**$48,000.00**		
	Food and kitchen supplies	*25 people/ 75 day program*		1875	$80.00	**$150,000.00**		
	Gen'l camp supplies, minor equip etc					**$85,000.00**		
	First aid station & nurse	*Safety program, first aid station and 1 nurse*		75	$1,000.00	**$75,000.00**		
	Communications	*Satellite phones, Internet, FAX, and hand-held radios*		3	$10,000.00	**$30,000.00**		
							$658,000.00	**18.8%**
Geoscience equipment / Supplies / Consumables		*Various Contractors & Suppliers*						
	Geoscience	*field equipment & supplies*				**$15,000.00**		
	Equipment rental	*Gyro survey equip - 1 survey tool, truck*		5	$10,000.00	**$50,000.00**		
	Computing & Technical Support	*project computers, software, hardware and support*				**$5,000.00**		
							$70,000.00	**2.0%**
General Transport & Shipping		*Various Contractors & Suppliers*						
	Transport truck loads from Whitehorse			20	$5,500.00	**$110,000.00**		
	Ground mob of fuel from Whitehouse to upper storage area					**$20,000.00**		
							$130,000.00	**3.7%**
Diamond Drilling		***Company to be determined***						
	2drill / 8000 metres							
	Direct drilling	*cost per metre (all up incl standby charges etc)*	*metres*	8000	$140.00	**$1,120,000.00**		
	Drill mob/demob	*mob of drill equip / supplies*		7	$10,000.00	**$70,000.00**		
							$1,190,000.00	**34.0%**
Geochemical Analyses		***ACME***						
	Core Assaying	*Drillcore Assays - geochem*	*drill core*	2500	$50.00	**$125,000.00**		
	Quality control	*QAQC analyses, QC check assaying, commercial standards etc*	*10%*	250	$50.00	**$12,500.00**		
		reference standards	*units*	250	$10.00	**$2,500.00**		
	SG measurements	*checks on field based measurements*		125	$100.00	**$12,500.00**		
							$152,500.00	**4.4%**
Geophysics		***SPECIFIC CONTRACT COMMITTMENTS***						
	Downhole Geophysical surveys	*2 months, 4 days of crew plus $20,000 mob/demob*		60	$3,200.00	**$212,000.00**		
							$212,000.00	**6.1%**
Contractor Support Services		***SPECIFIC CONTRACT COMMITTMENTS***						
	Geoscience Consulting	Revelation				**$440,000.00**		
	Fuel	Jet and Deisel				**$180,000.00**		
							$620,000.00	**17.7%**
Project Air Support								
	Fixed Wing	***Alcan Aircraft Ltd.***		*40*	*$2,000.00*	$80,000.00		
	Helicopter support							
		ASTAR D2 - drill support	*hours x rate*	240	*$1,400.00*	**$336,000.00**		
	Dispatcher	*air dispatcher/ controller*	*days x rate*		*$600.00*	**$0.00**		
							$416,000.00	**11.9%**
						Subtotal	**$3,498,500.00**	**100.0%**
						Contingency 10%	**$349,850.00**	
						Total	**$3,848,350.00**	

NOTE: Specific contract commitments will appear as sub-categories of the "Expenditure Type"

TOTAL OPERATIONAL BUDGET 2010 $3,848,350.00



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7003000 7002800 7002600 7002400

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JP01 JP02 JP03 JP04 JP05 JP06 JP07 JP08 JP09 JP10 JP11 JP12 JP13 JP14 JP15 JP16 JP17 JP18 JP19 JP20 JP21 JP22 JP23 JP24 JP25 JP26 JP27 JP28 JP29 JP30 JP31 JP32

Jason DDH Collar
- Proposed DDH
- Historic DDH

DDH Traces
- Proposed DDH
- Historic DDH
- Digitized Trails

Jason Deposit Outline
- Main
- South

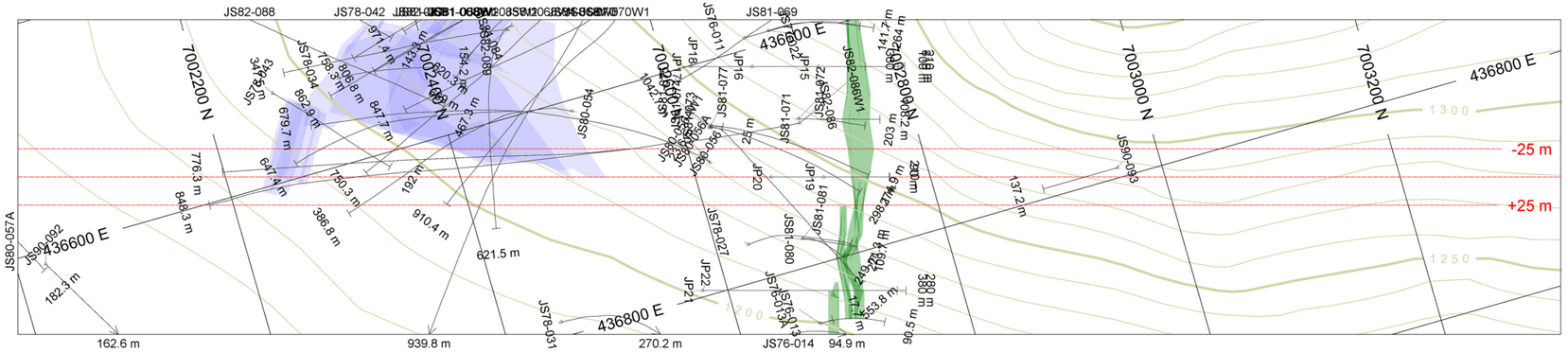
UTM - NAD83, Zone 9

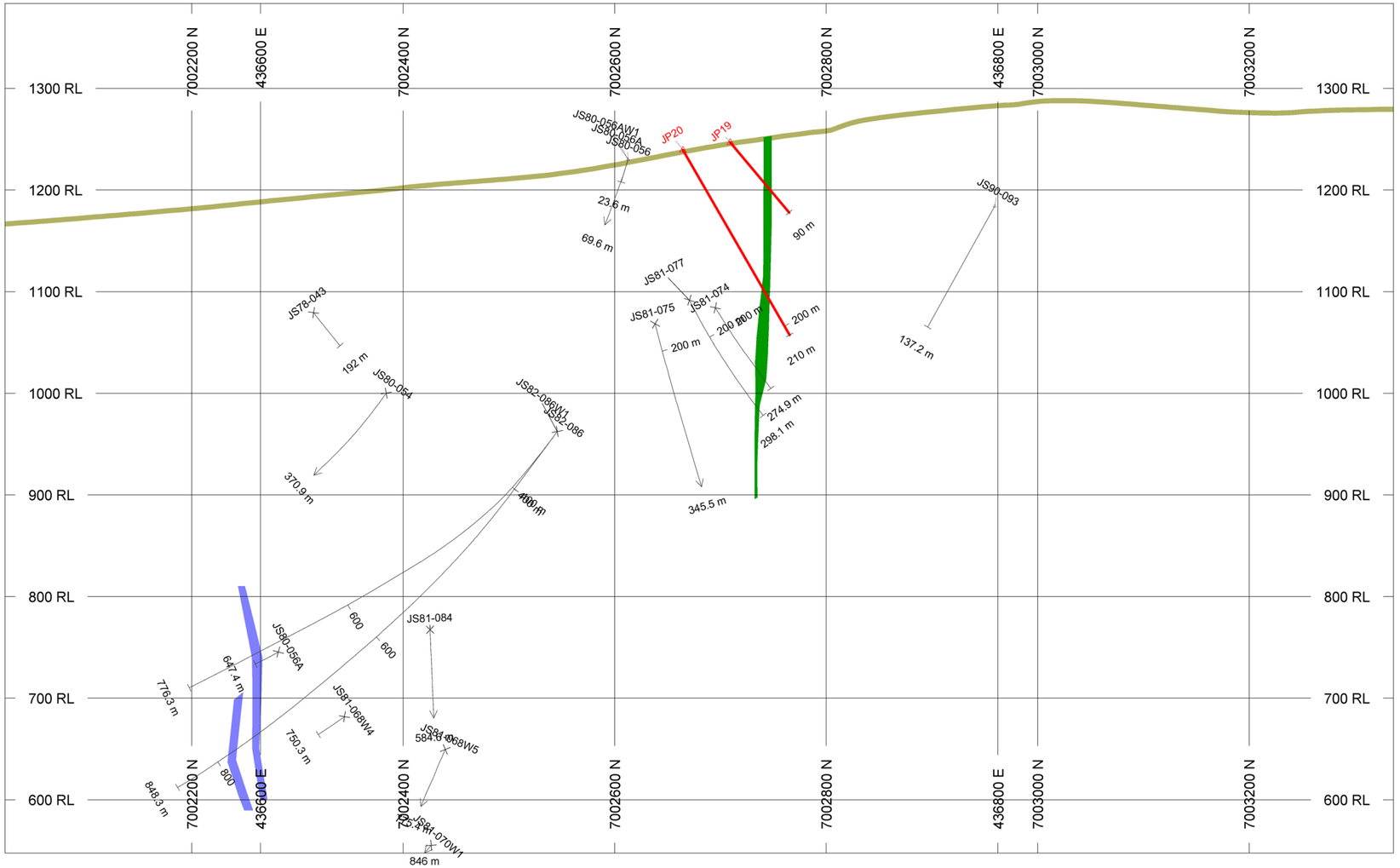
1:3,500

0 25 50 100 150 200 Meters

REVELATION GEOSCIENCE LTD

HBED Jason Area - Plan Map - September 18, 2011





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
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Zn%	R	
Ba%	R	
Pb%	R	

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SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

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(m)

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NAD83 / UTM zone 9N

AZIMUTH = 16°

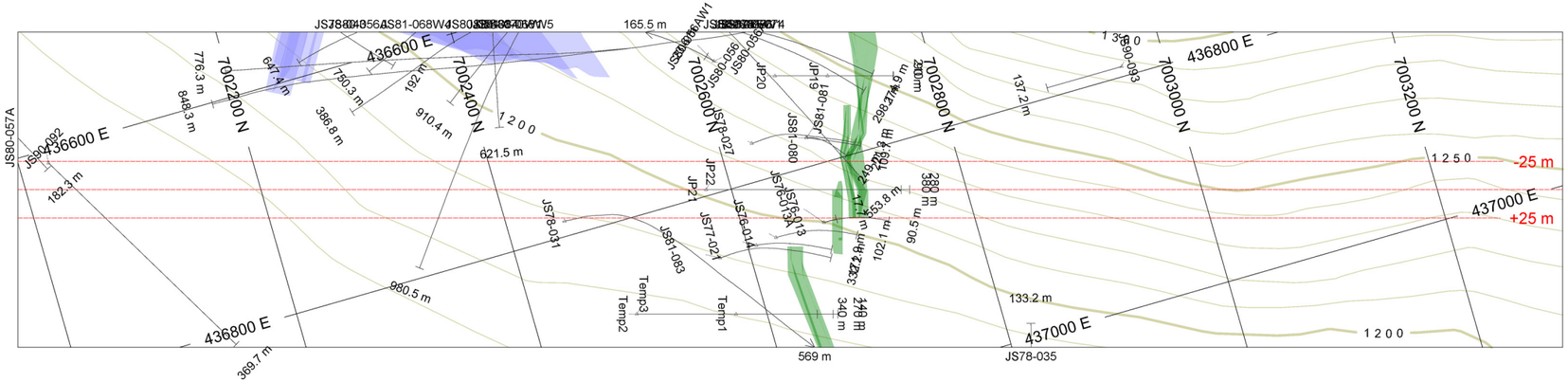
N W E S

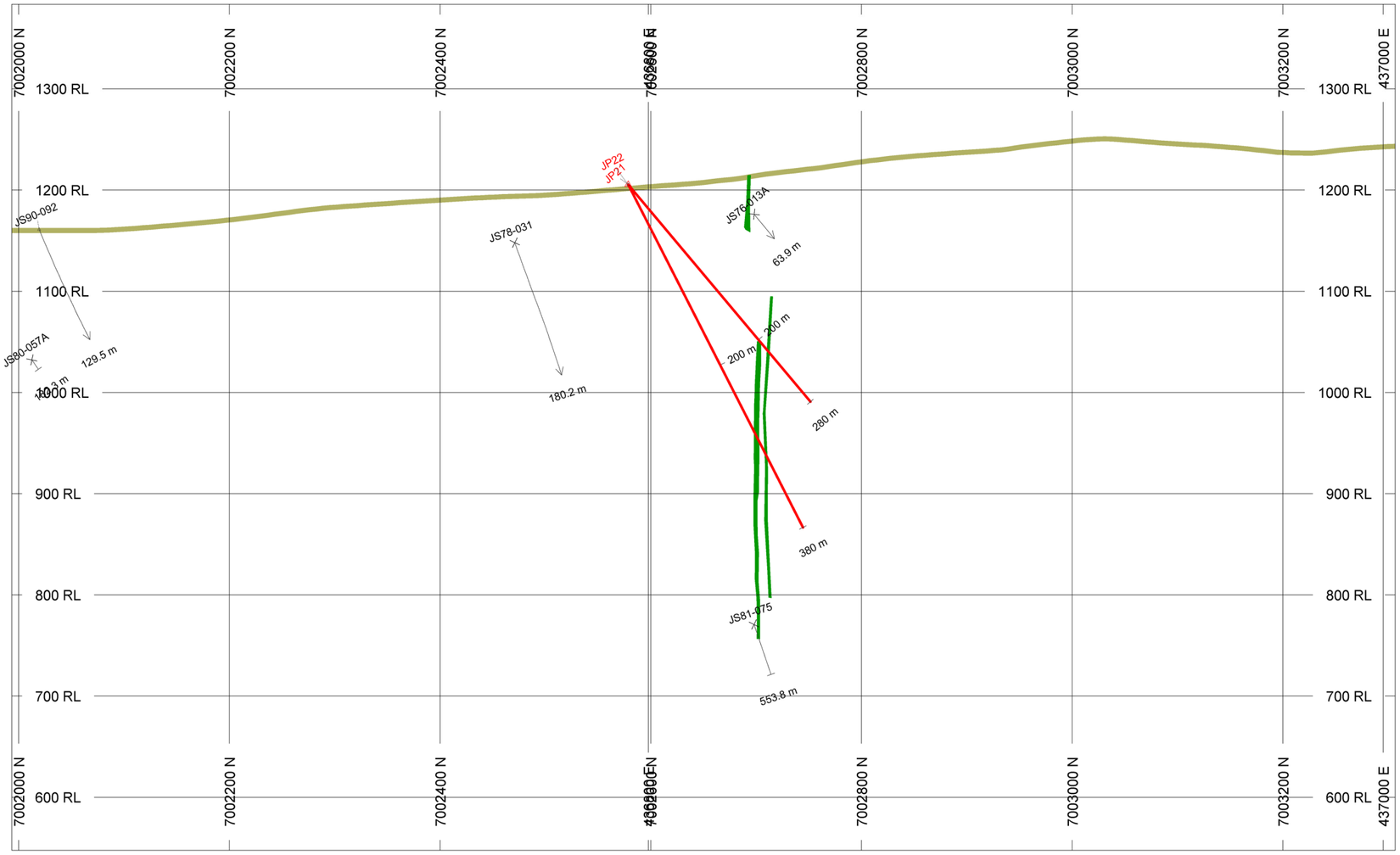
HBED

Jason Property

Main Zone

Section 1000E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

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Zn%	R	
Ba%	R	
Pb%	R	

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NAD83 / UTM zone 9N

AZIMUTH = 16°

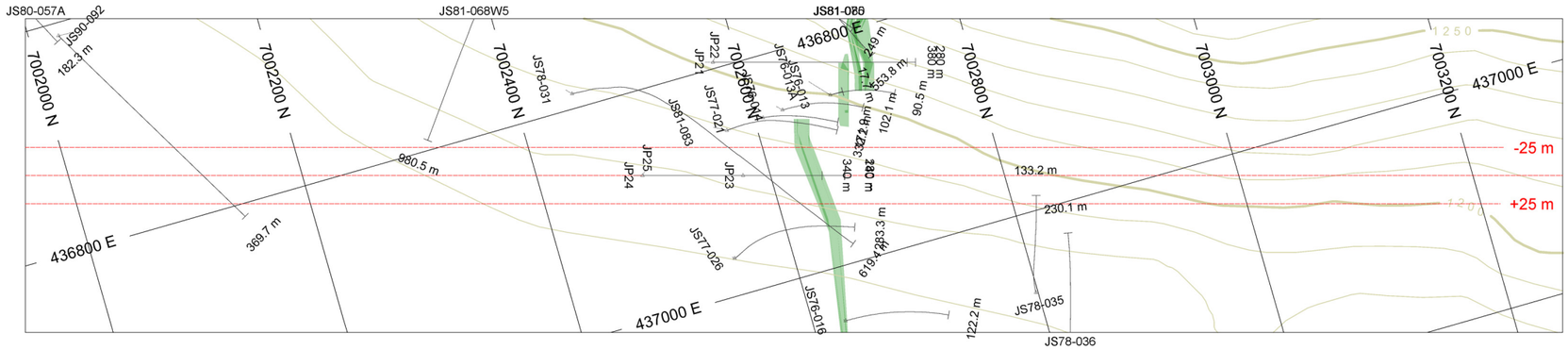
N W E S

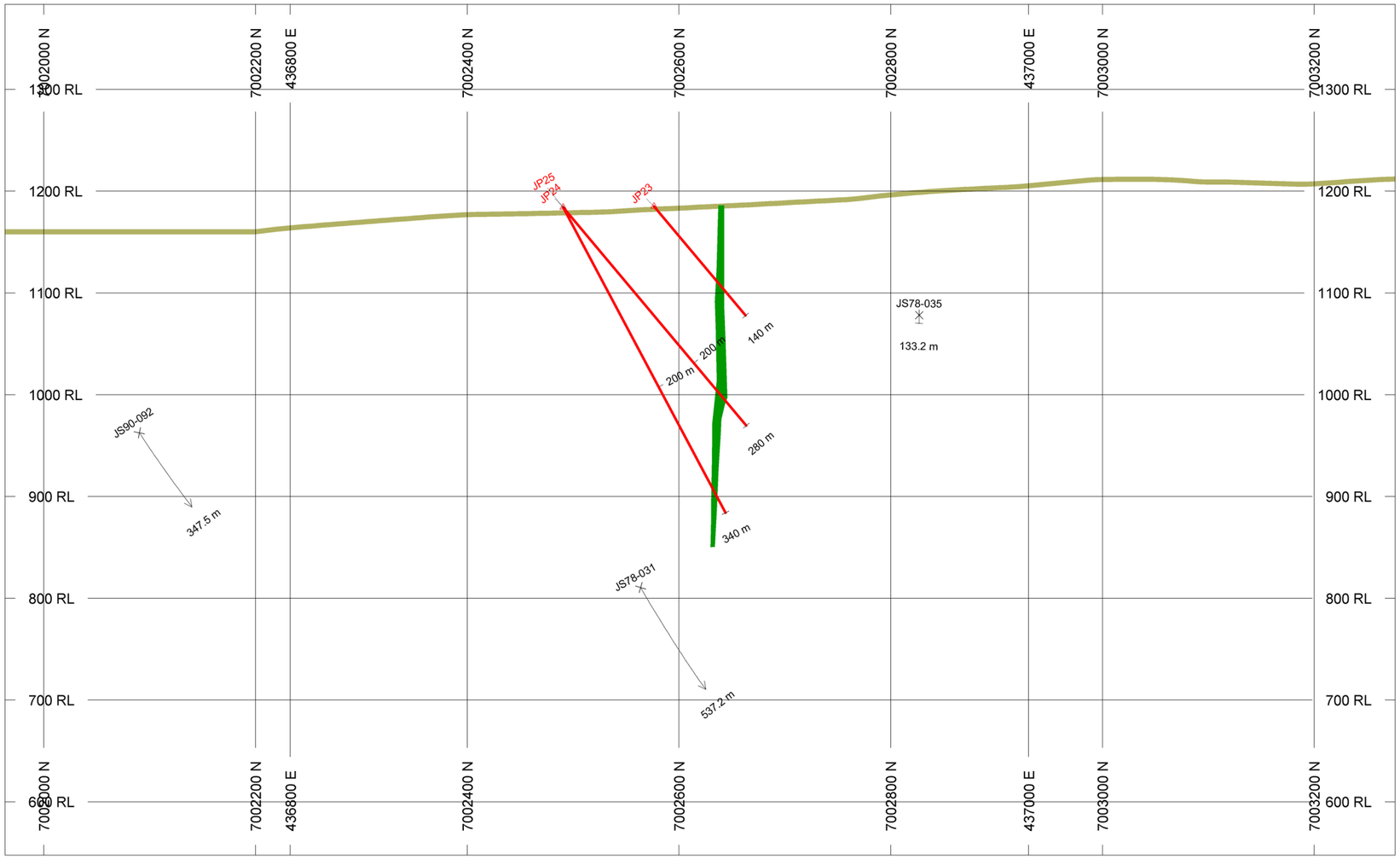
HBED

Jason Property

Main Zone

Section 1100E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY
Tom_Topo_Canvec50k.GRD

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Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

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(m)

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NAD83 / UTM zone 9N

AZIMUTH = 16°

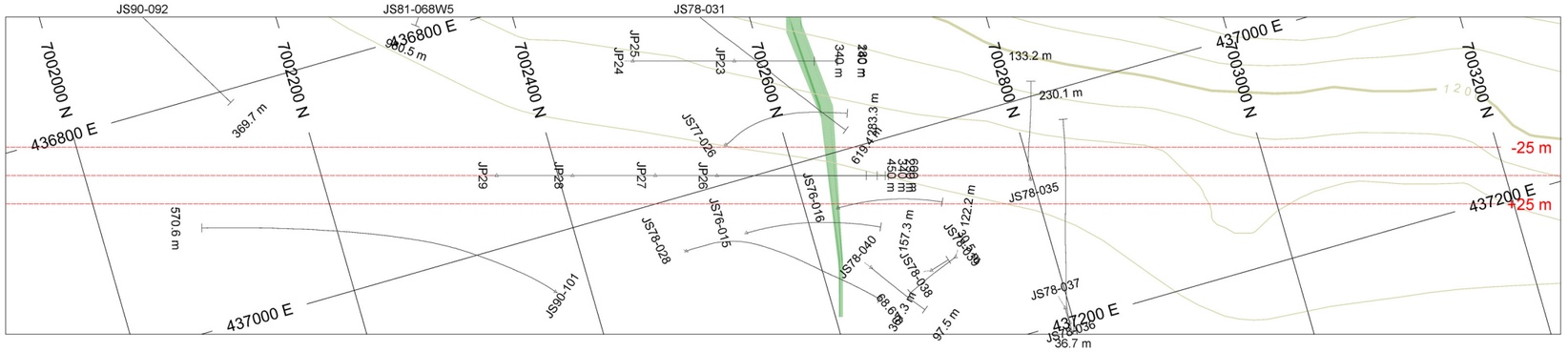
N W E S

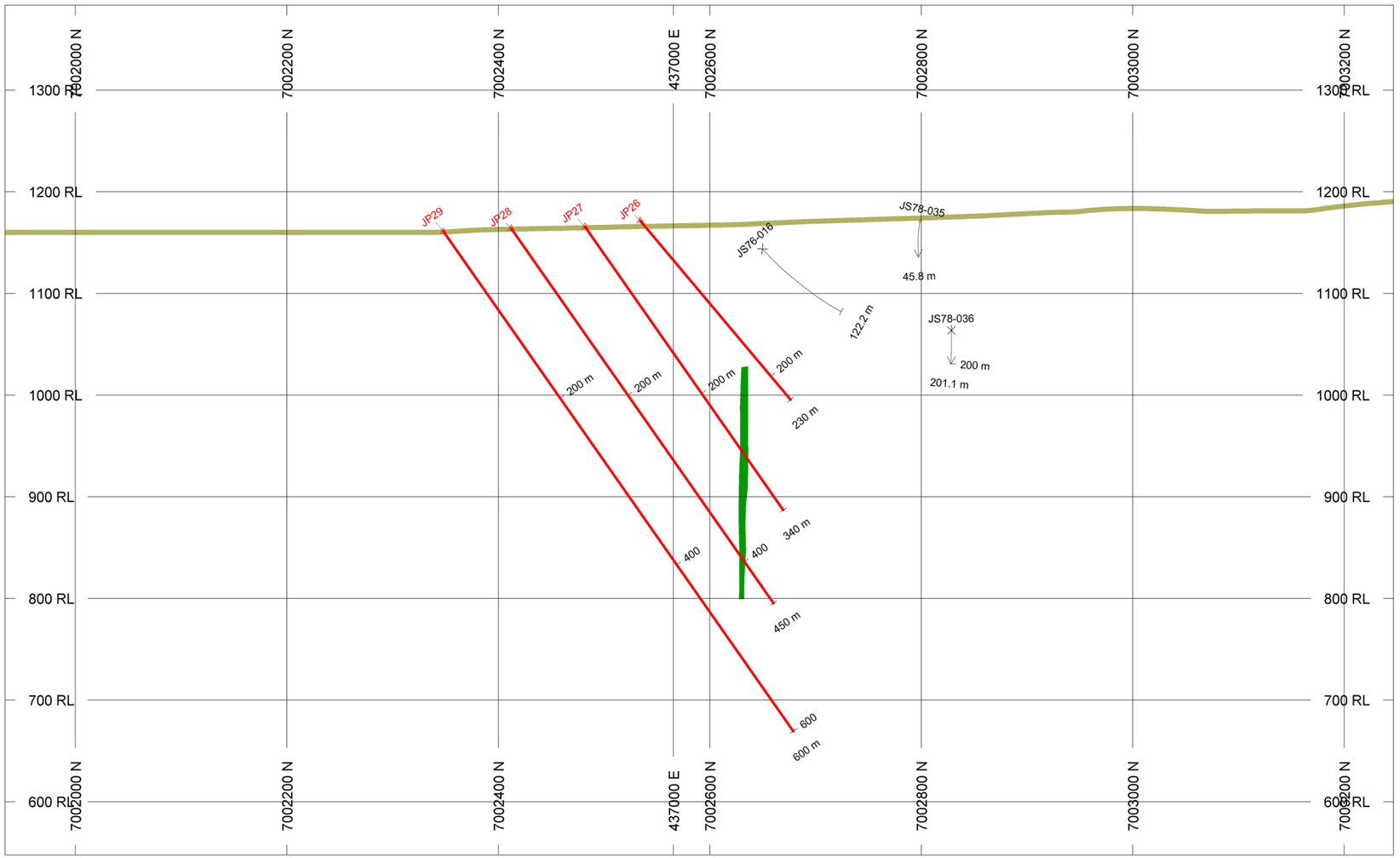
HBED

Jason Property

Main Zone

Section 1200E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

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Ba%	R	
Pb%	R	

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(m)

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NAD83 / UTM zone 9N

AZIMUTH = 16°

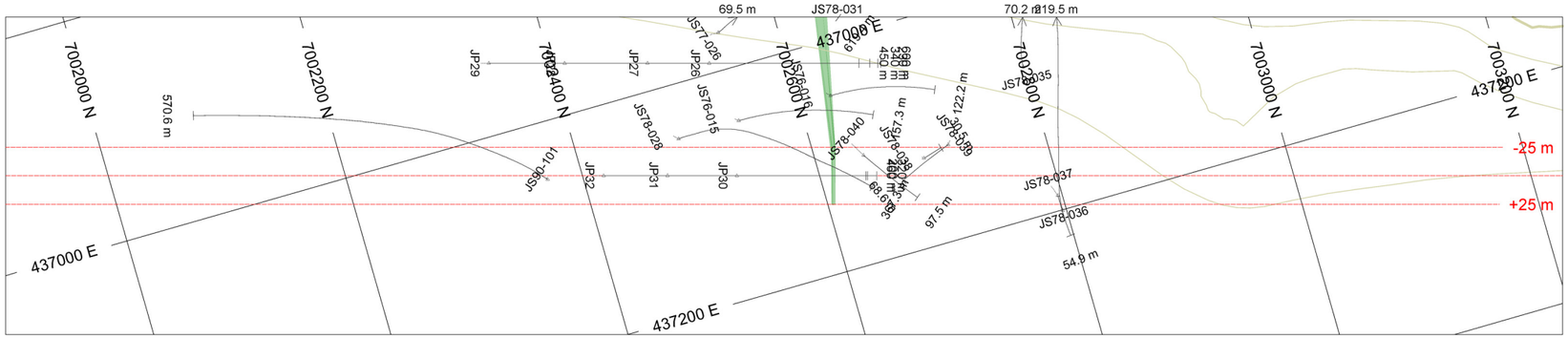
N W E S

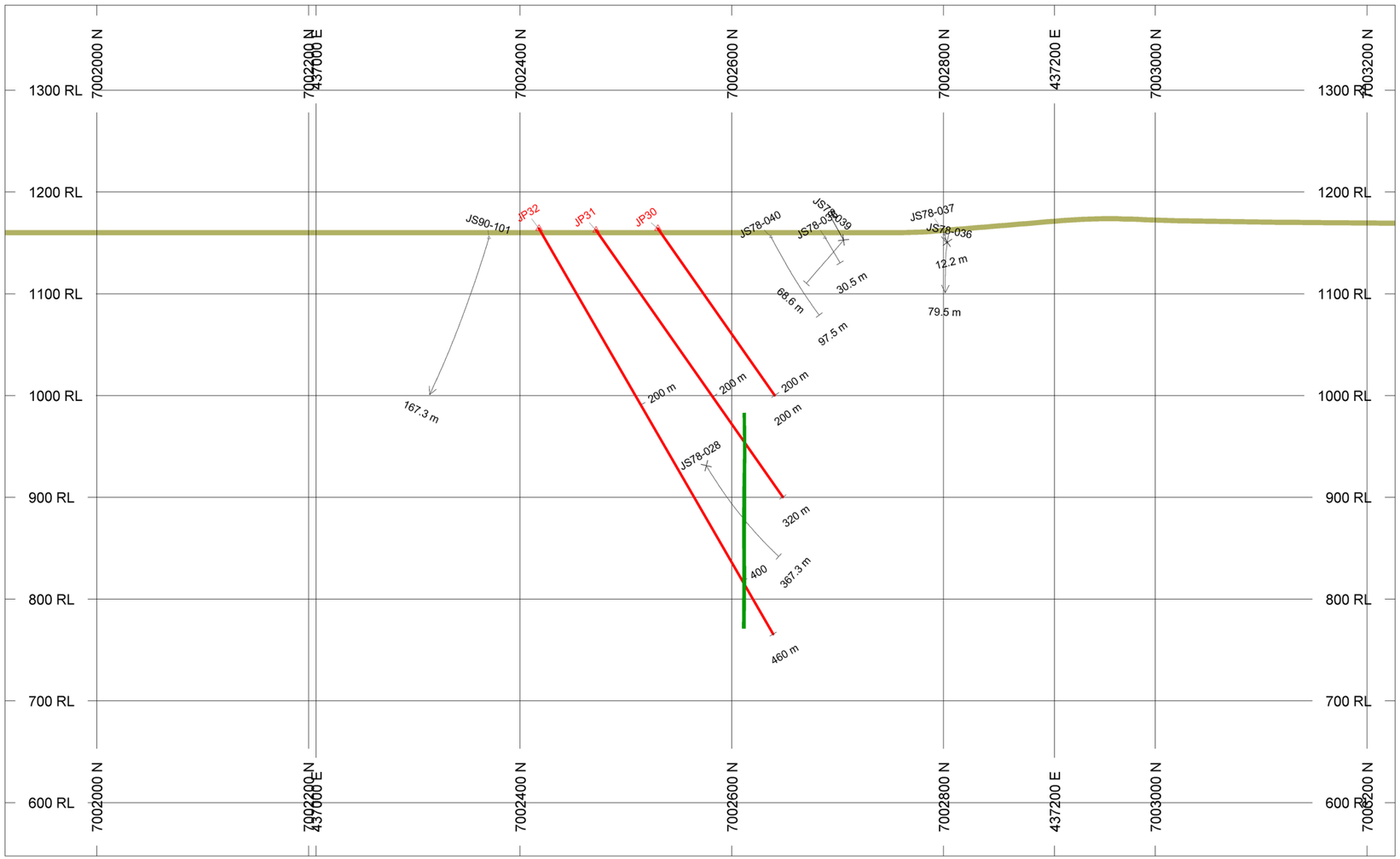
HBED

Jason Property

Main Zone

Section 1300E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY
Tom_Topo_Canvec50k.GRD

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Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

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TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

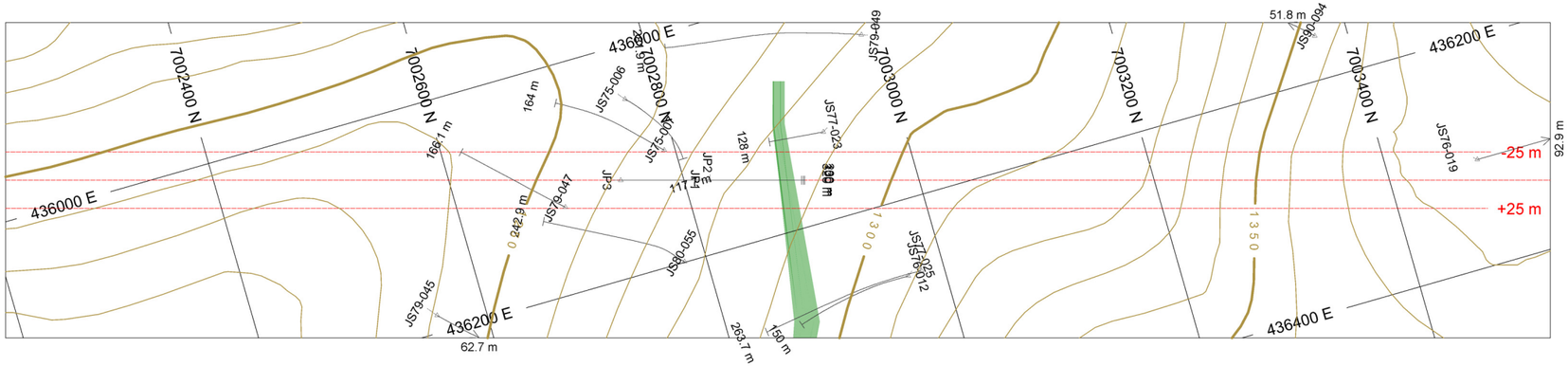
N W E S

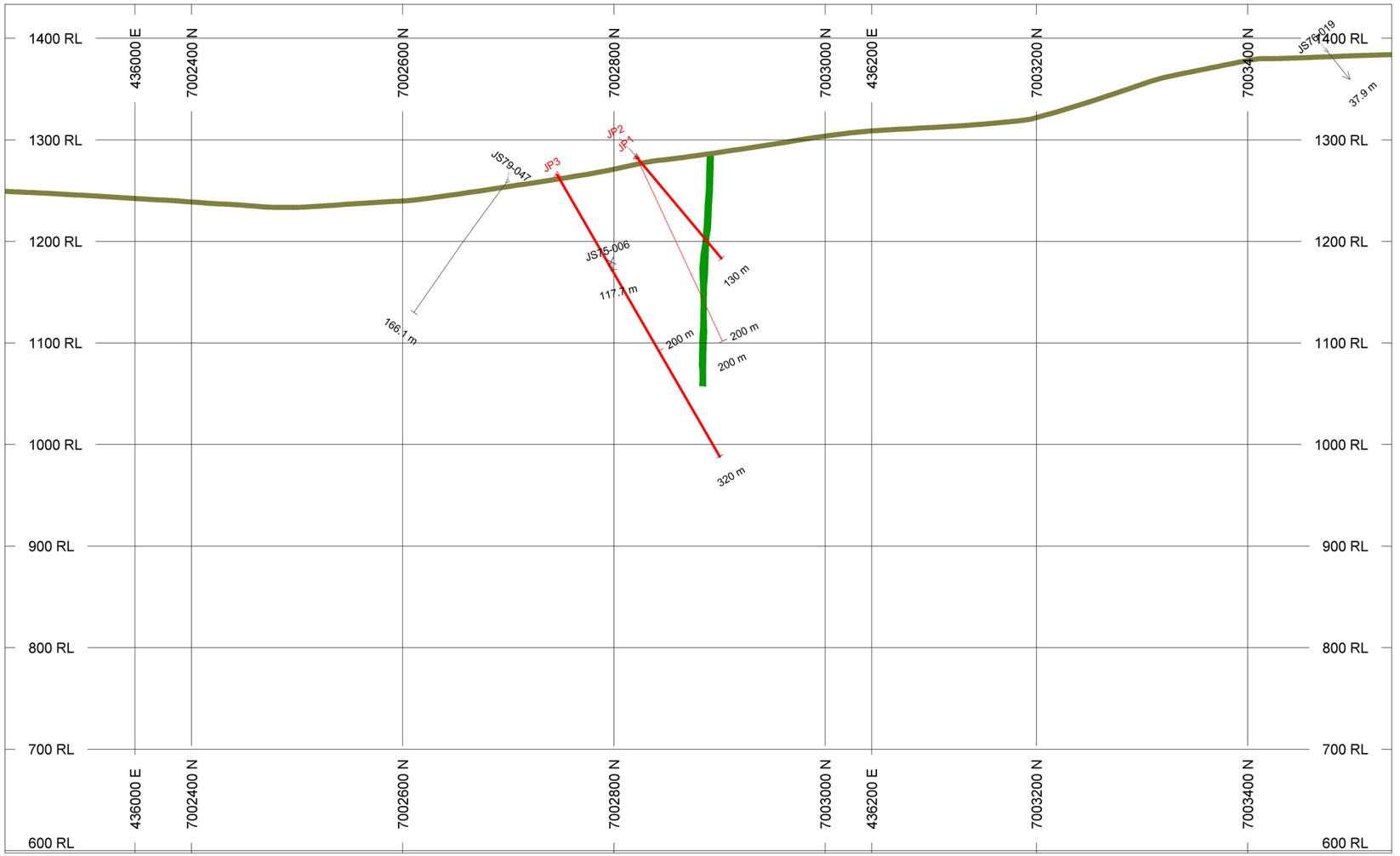
HBED

Jason Property

Main Zone

Section 1400E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436153 m	7002880 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

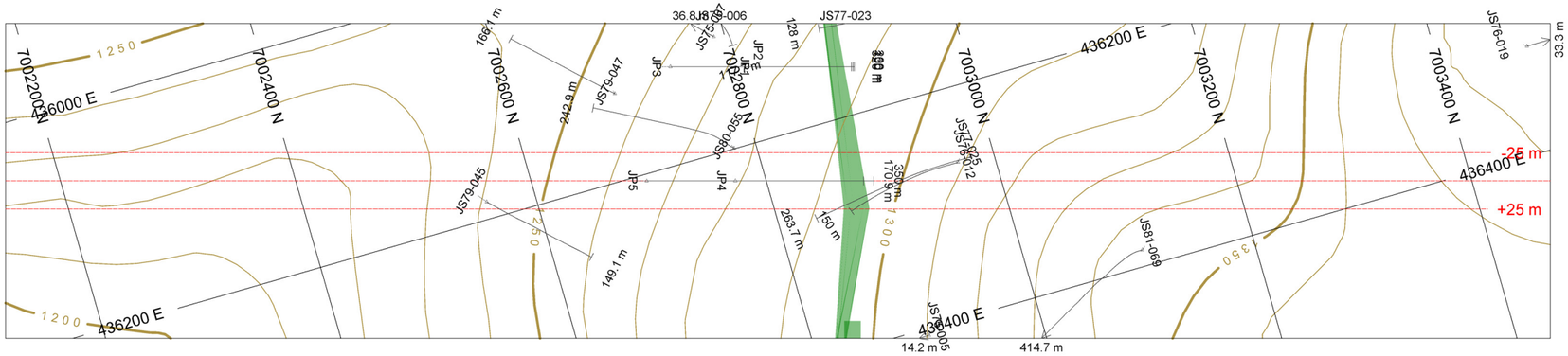
N W E S

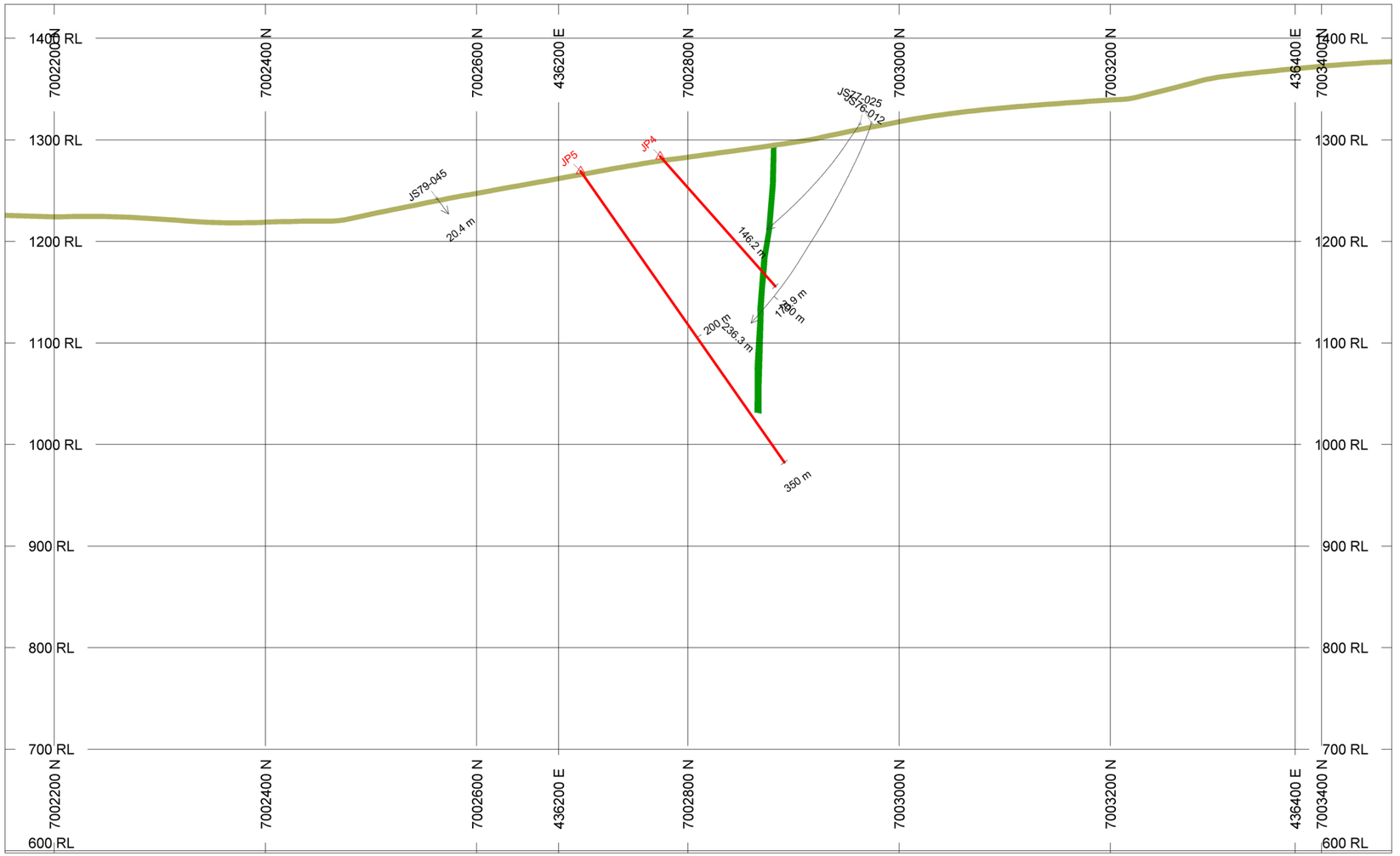
HBED

Jason Property

Main Zone

Section 400E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436238 m	7002810 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

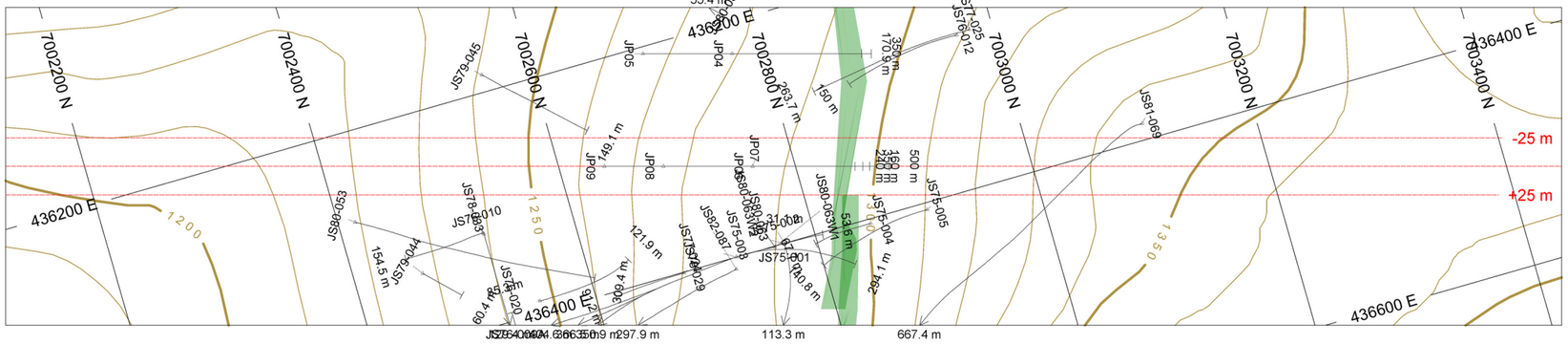
N W E S

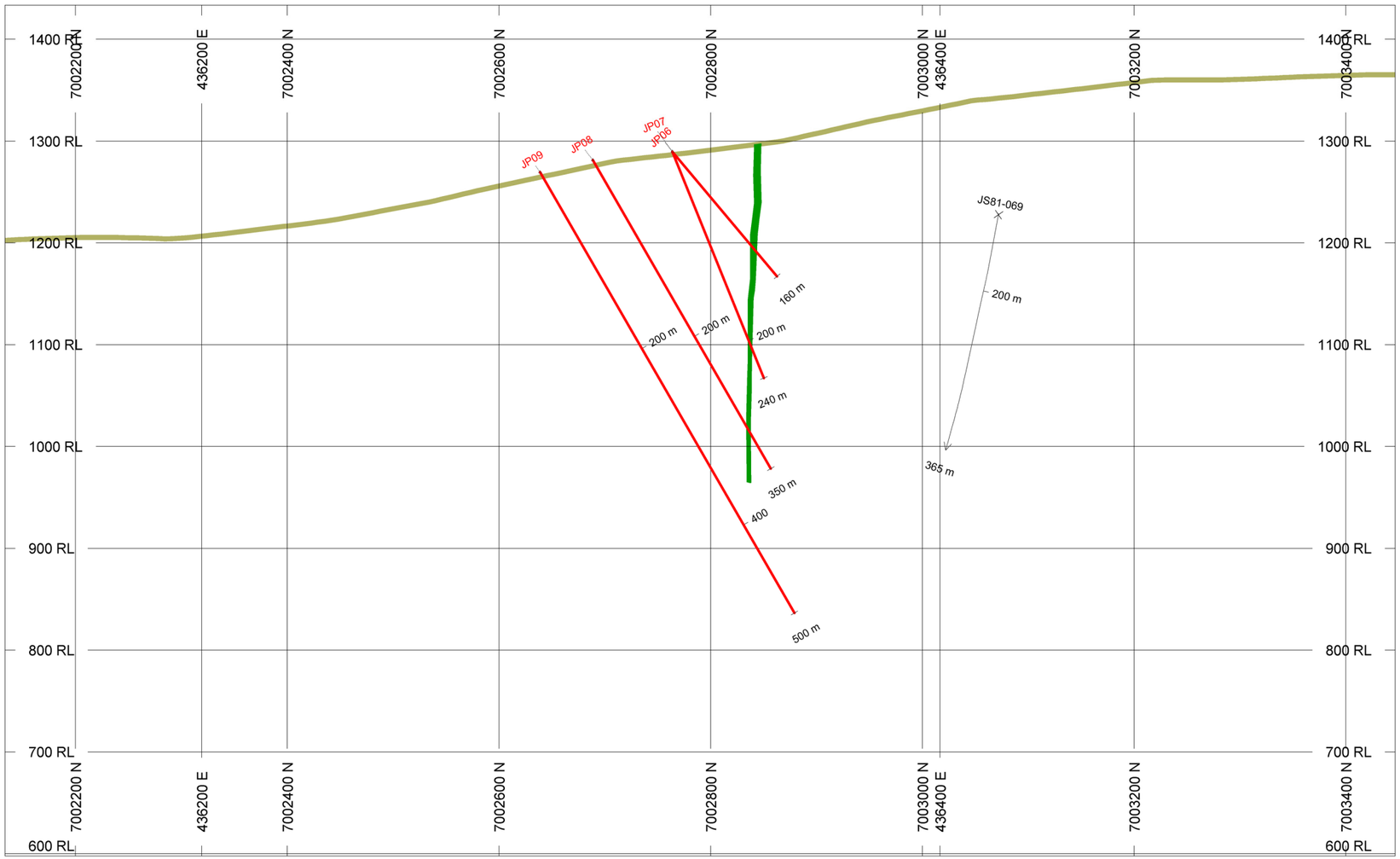
HBED

Jason Property

Main Zone

Section 500E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436335 m	7002790 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

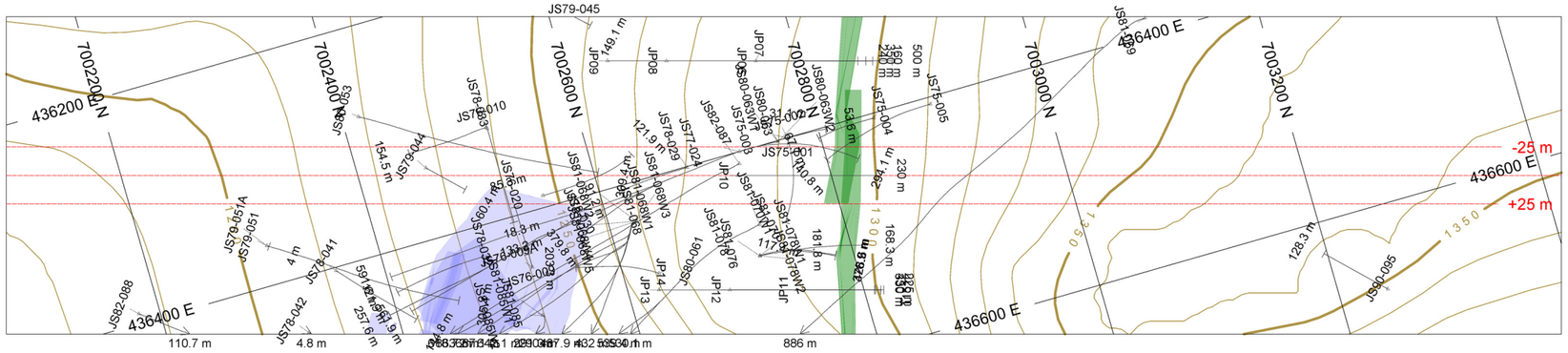
N W E S

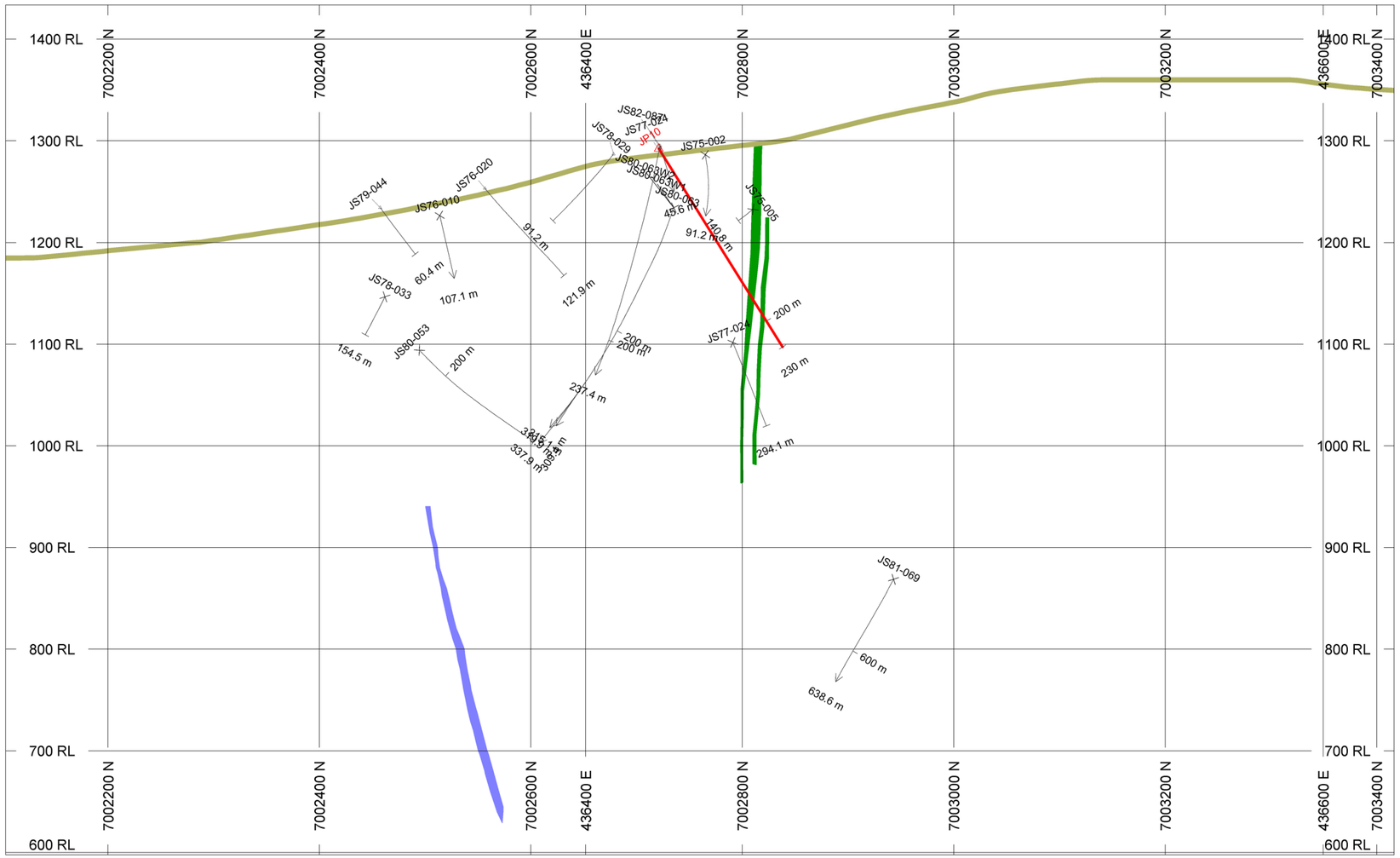
HBED

Jason Property

Main Zone

Section 600E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436431 m	7002760 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

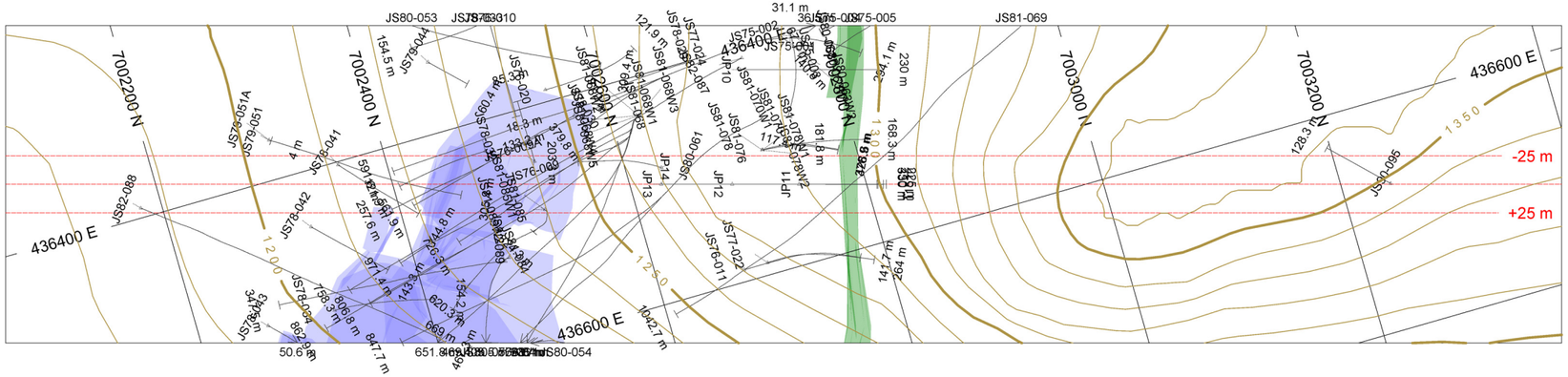
N W E S

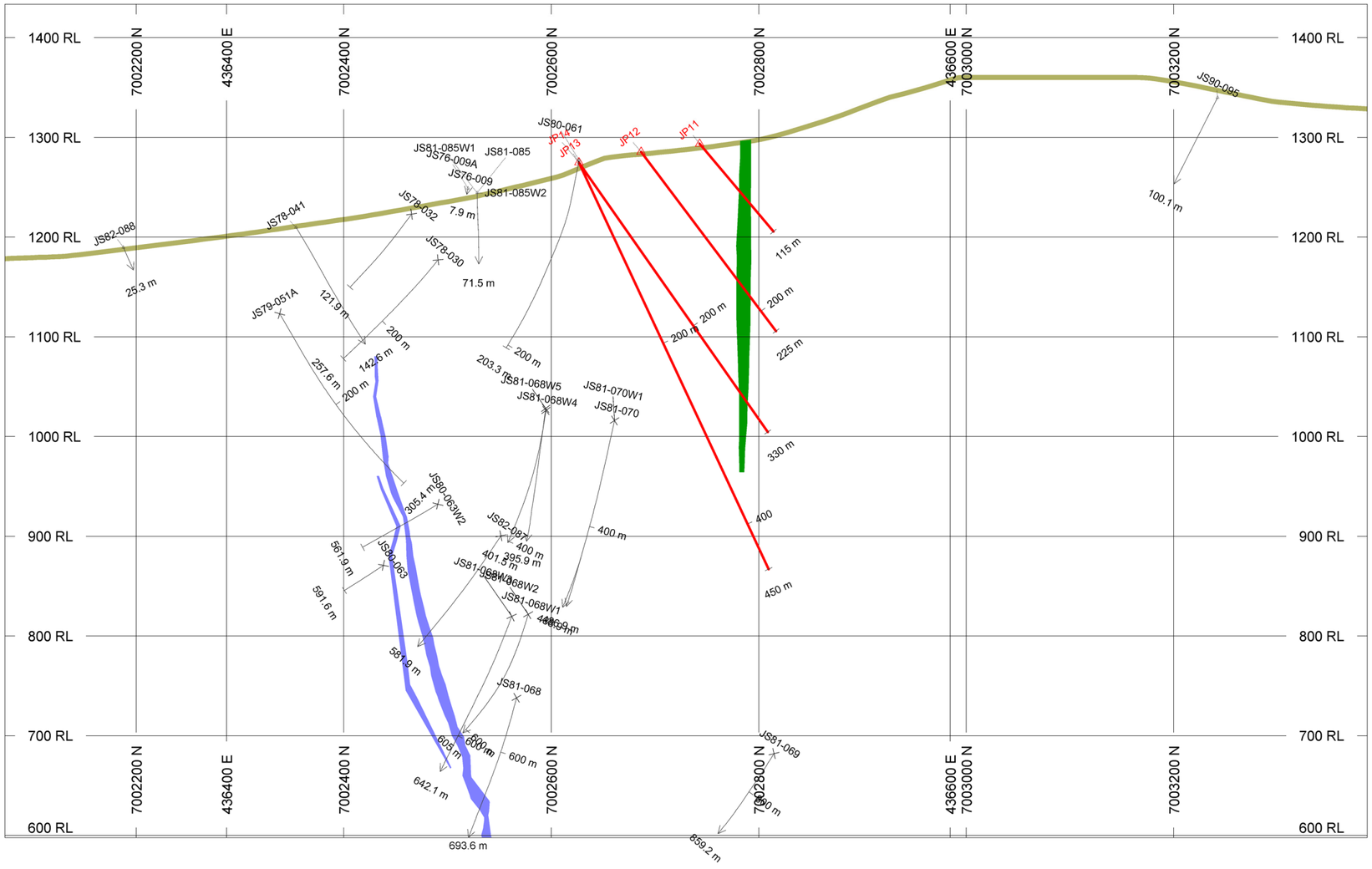
HBED

Jason Property

Main Zone

Section 700E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436527 m	7002730 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

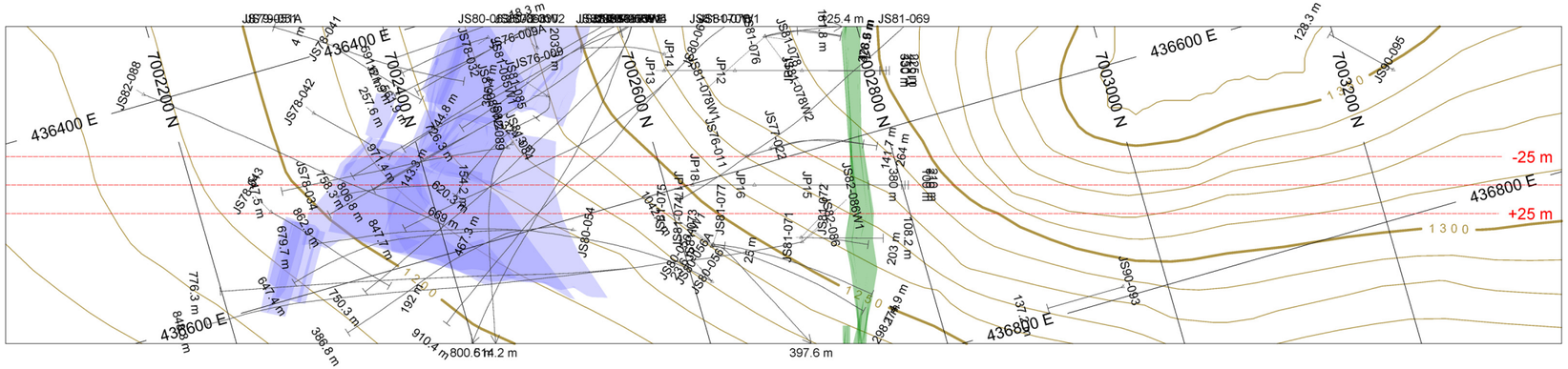
N W E S

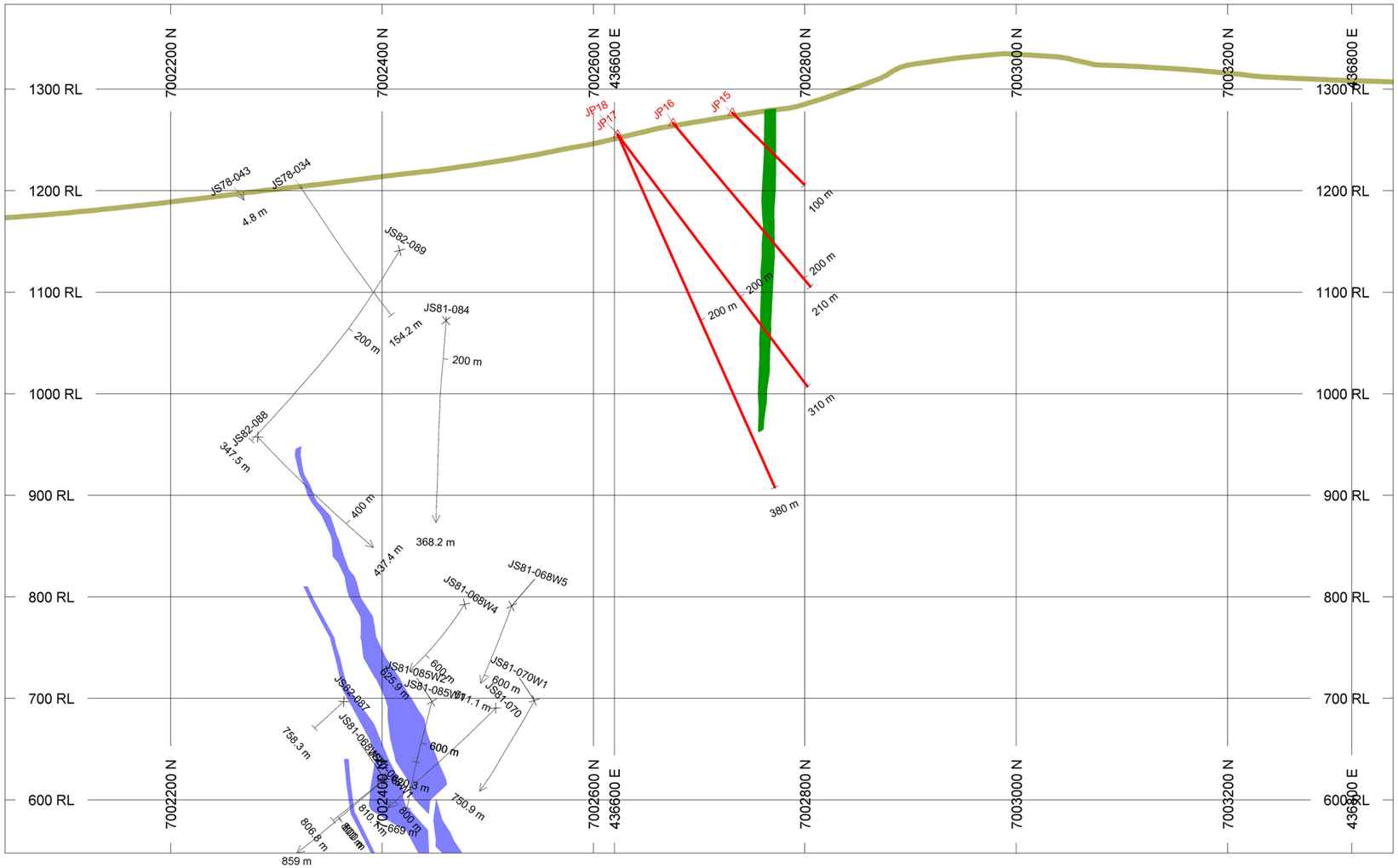
HBED

Jason Property

Main Zone

Section 800E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436623 m	7002700 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

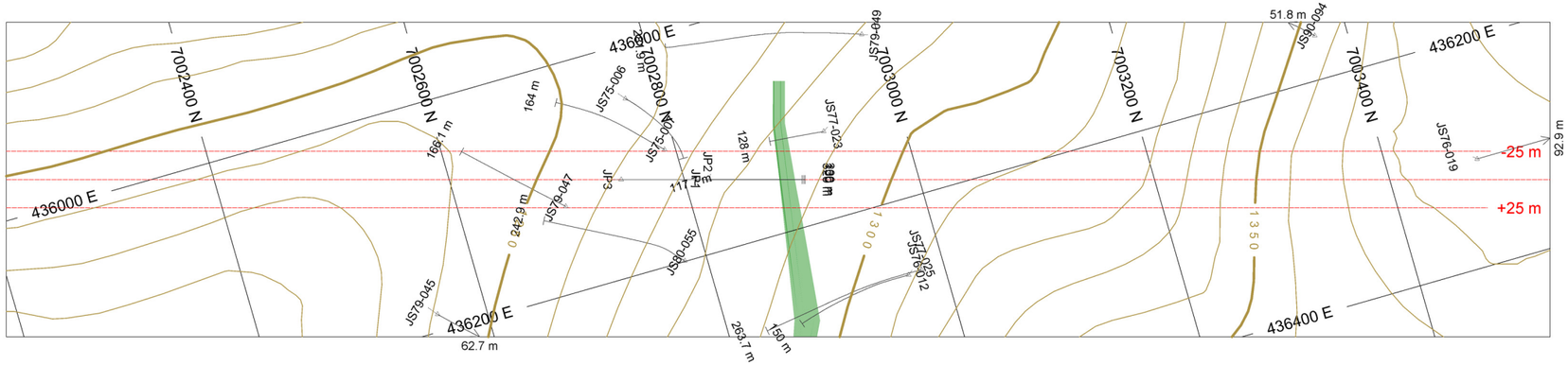
N W E S

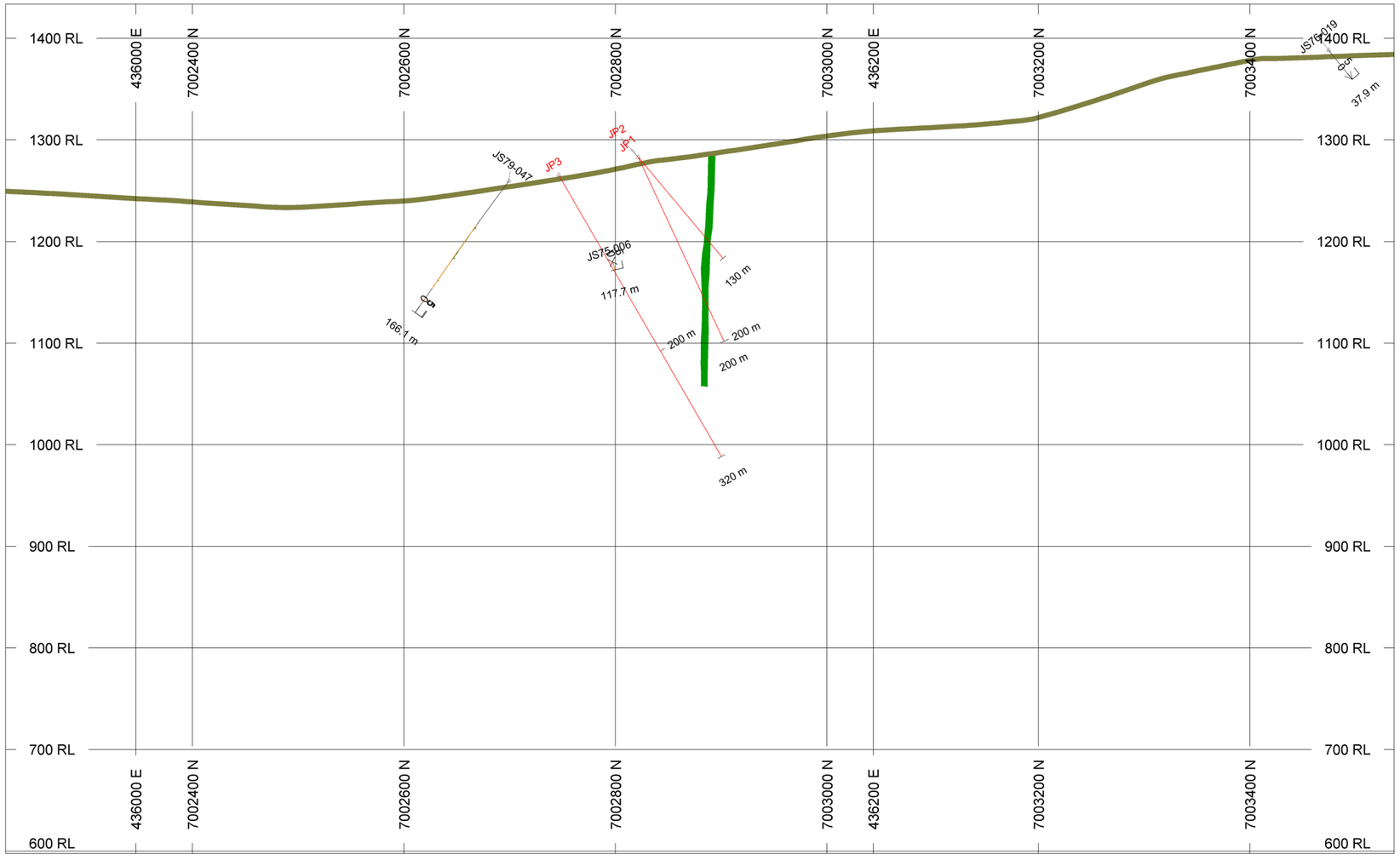
HBED

Jason Property

Main Zone

Section 900E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436153 m	7002880 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

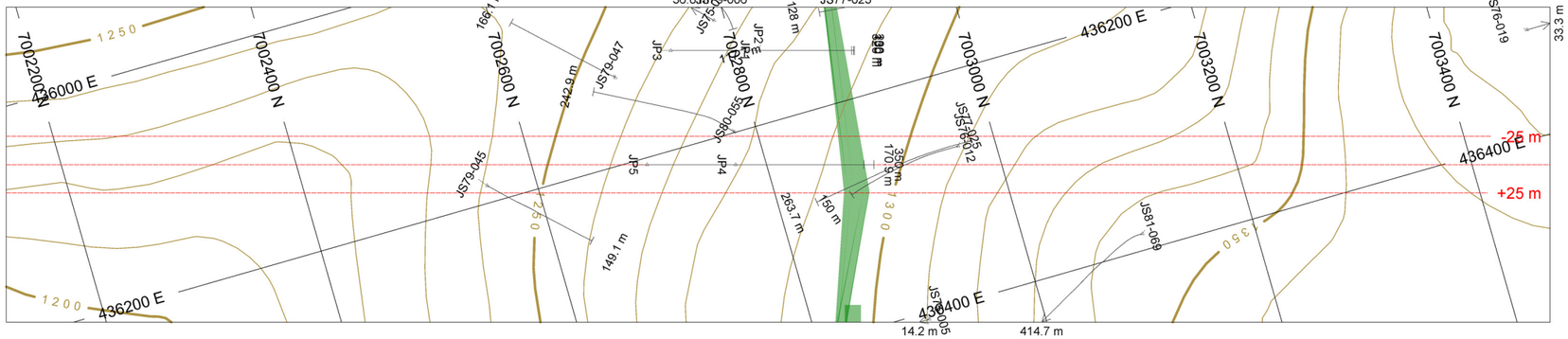
N W E S

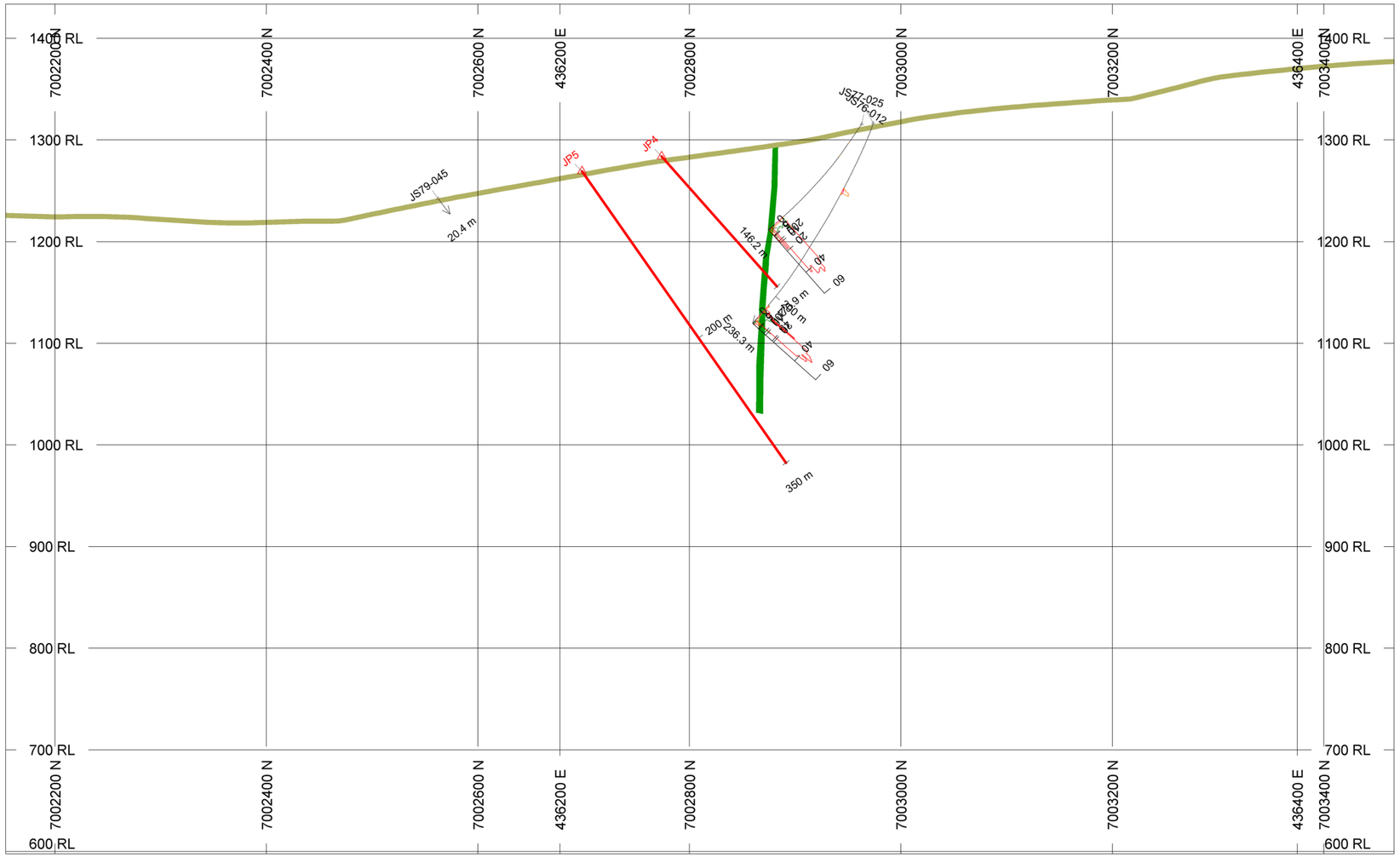
HBED

Jason Property

Main Zone

Section 400E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY
Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436238 m	7002810 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

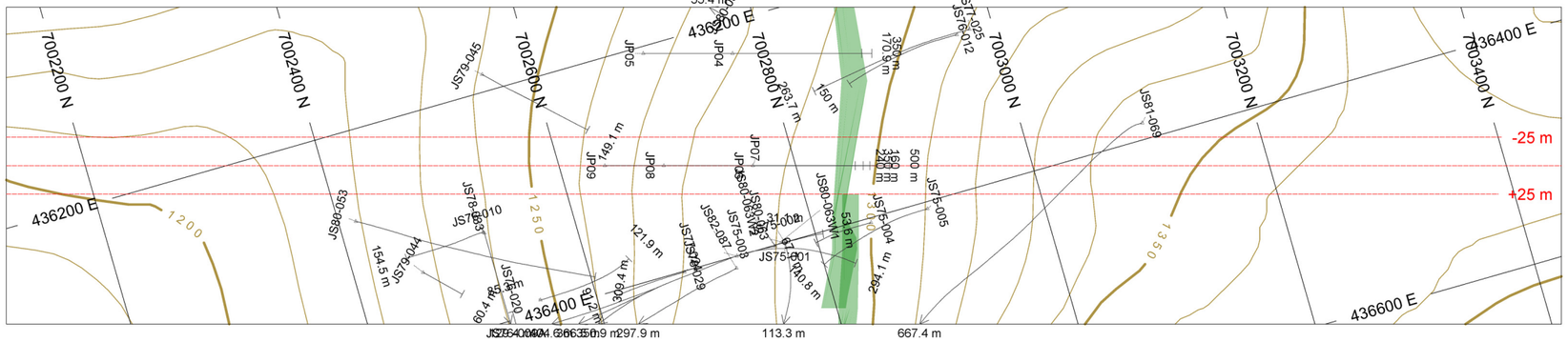
N W E S

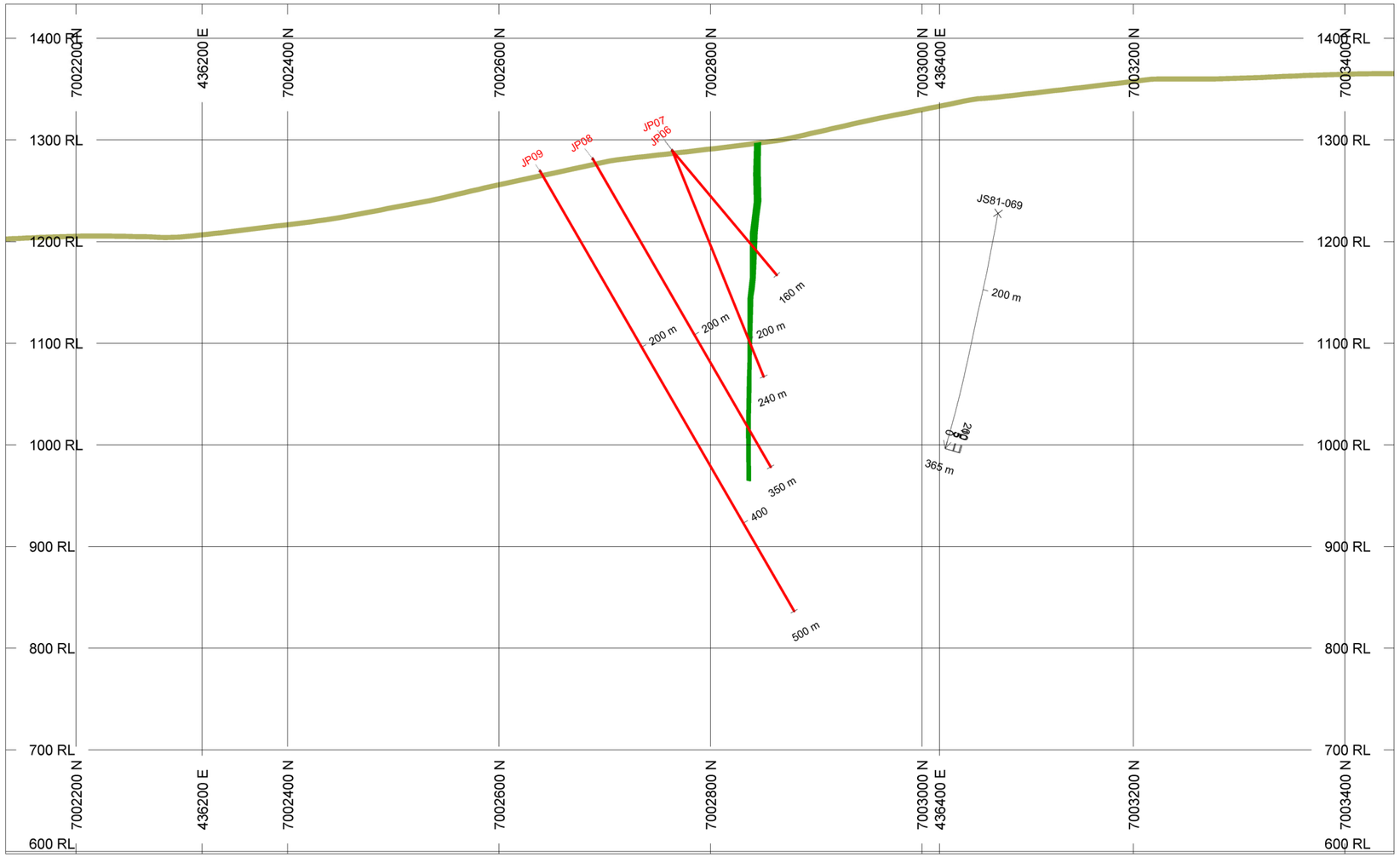
HBED

Jason Property

Main Zone

Section 500E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436335 m	7002790 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

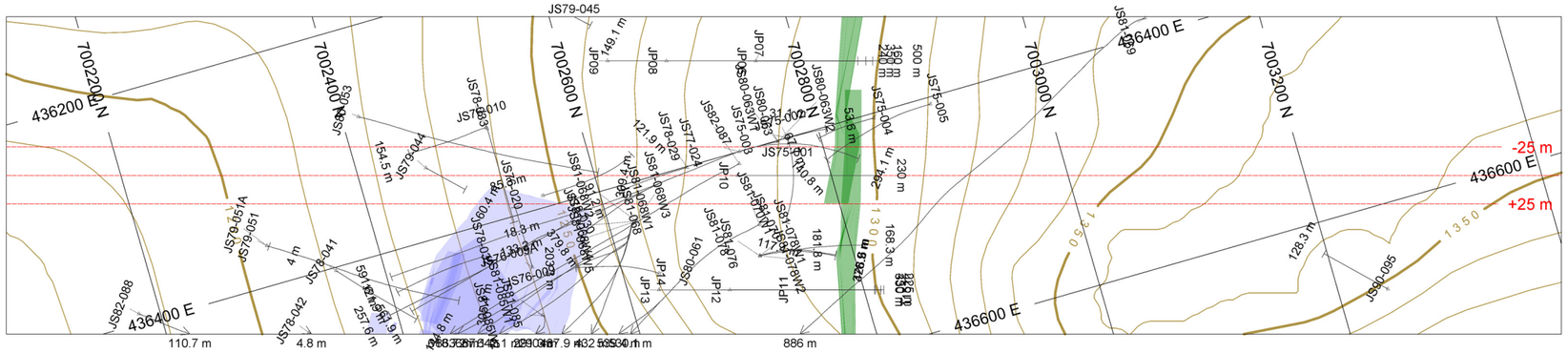
N W E S

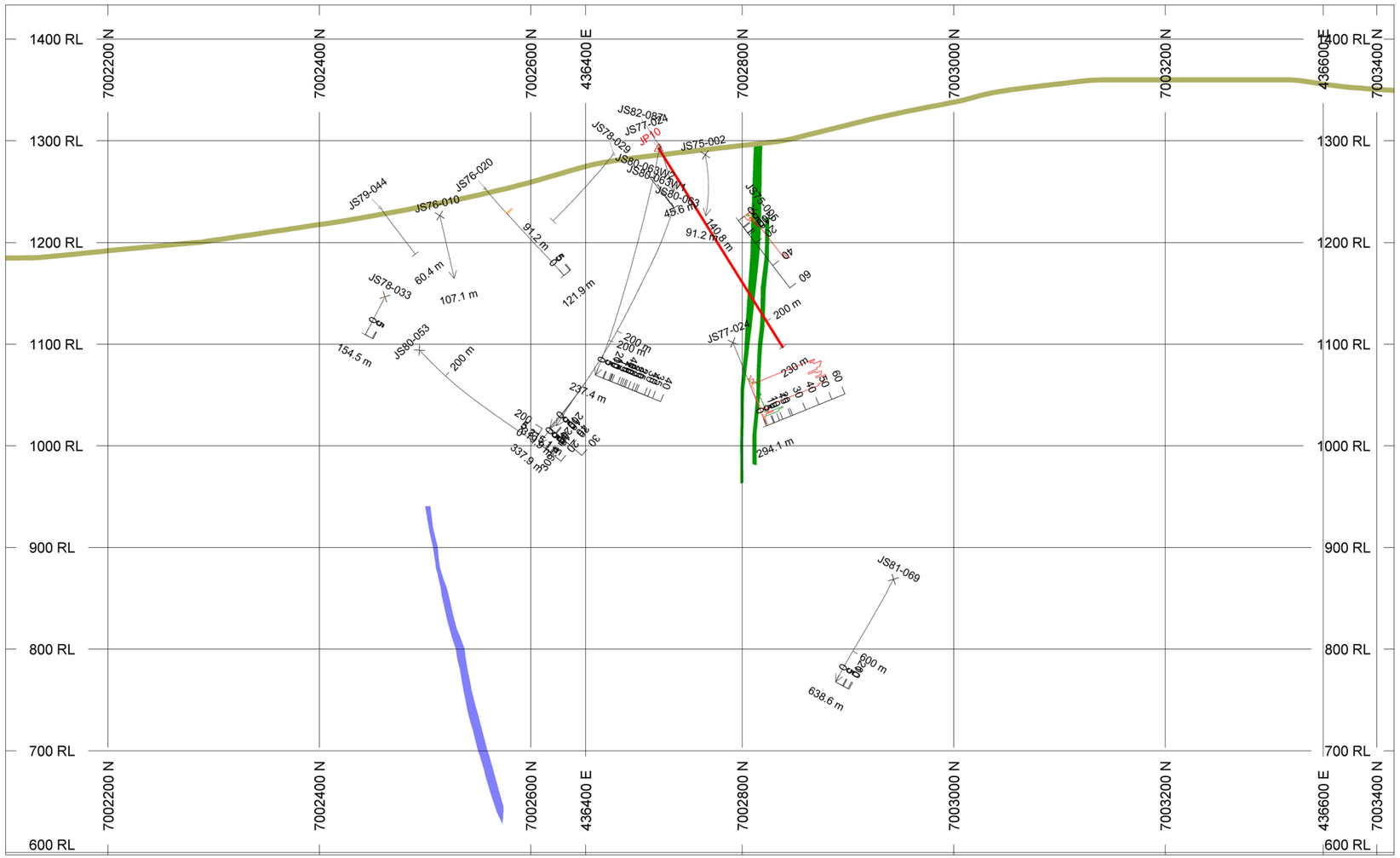
HBED

Jason Property

Main Zone

Section 600E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436431 m	7002760 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

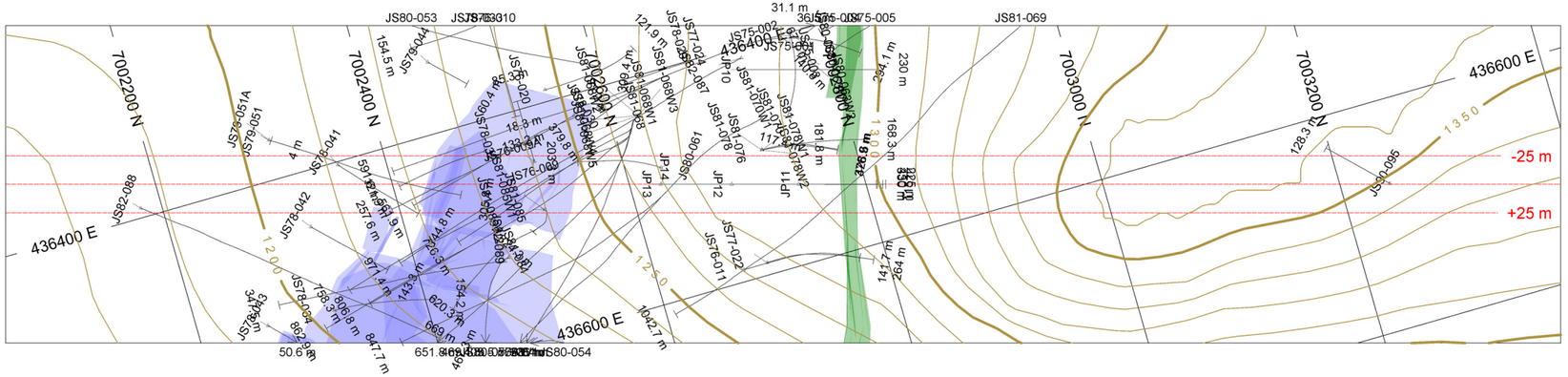
N W E S

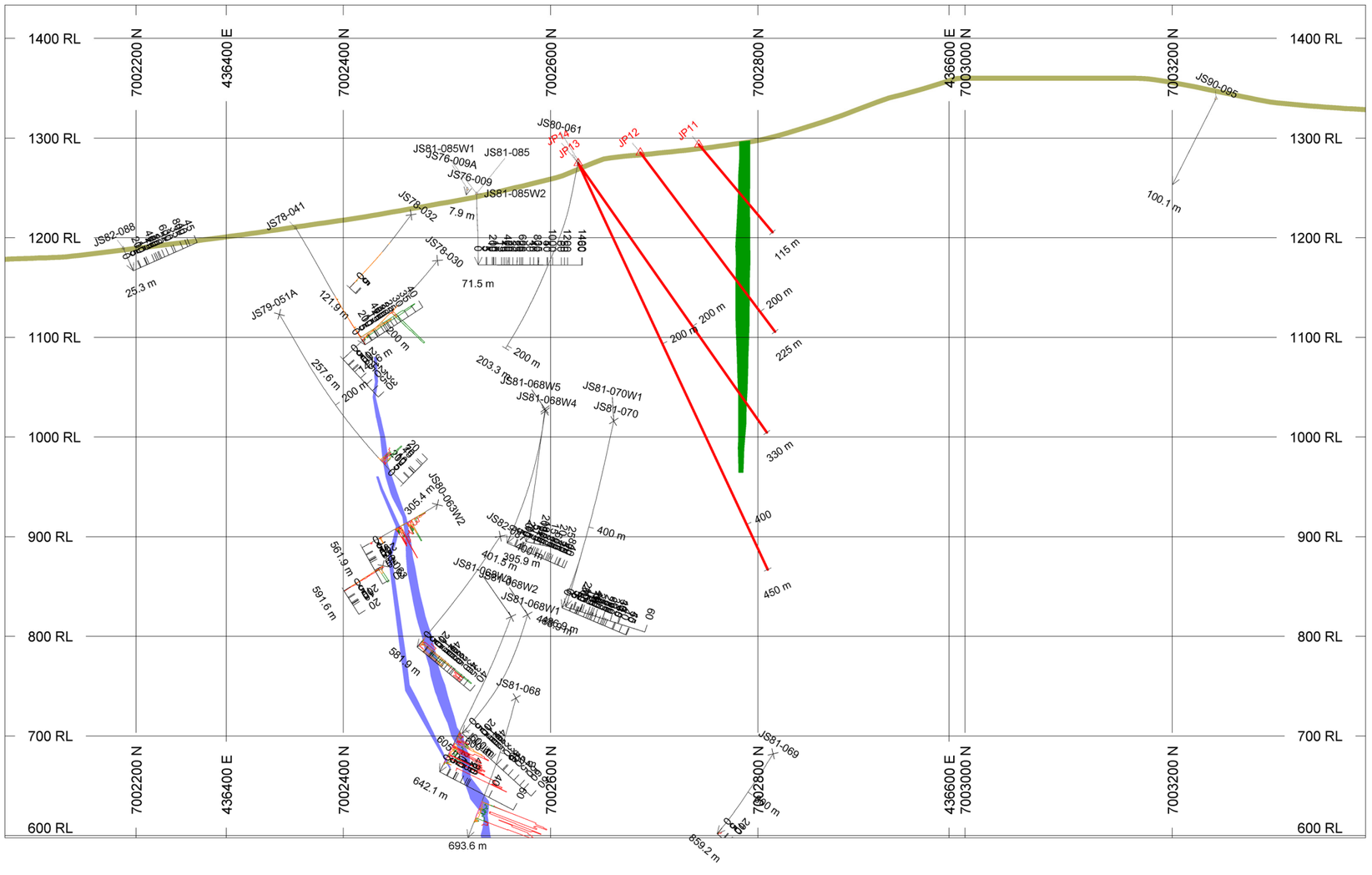
HBED

Jason Property

Main Zone

Section 700E





TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436527 m	7002730 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1434 m	597.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

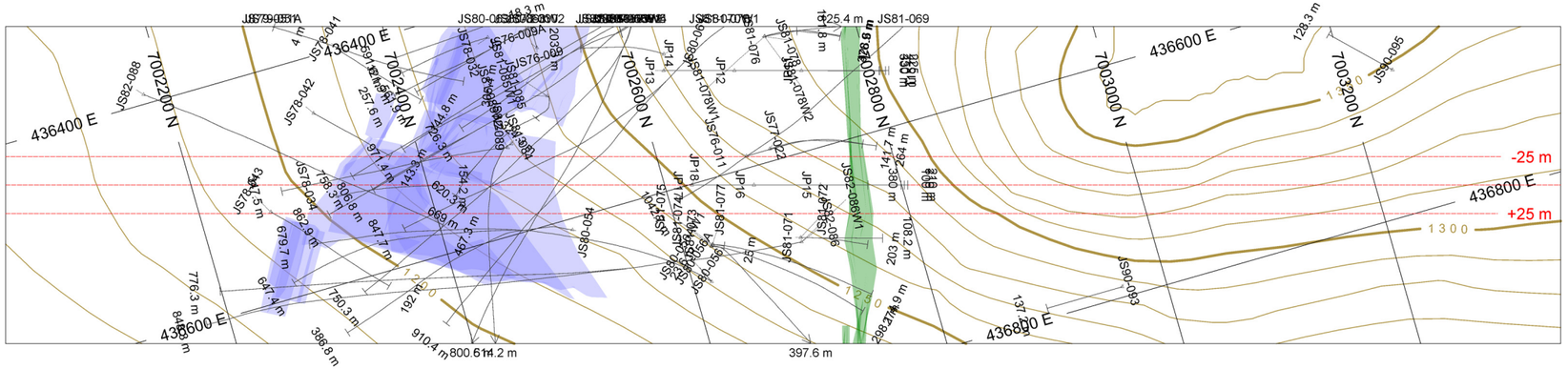
N W E S

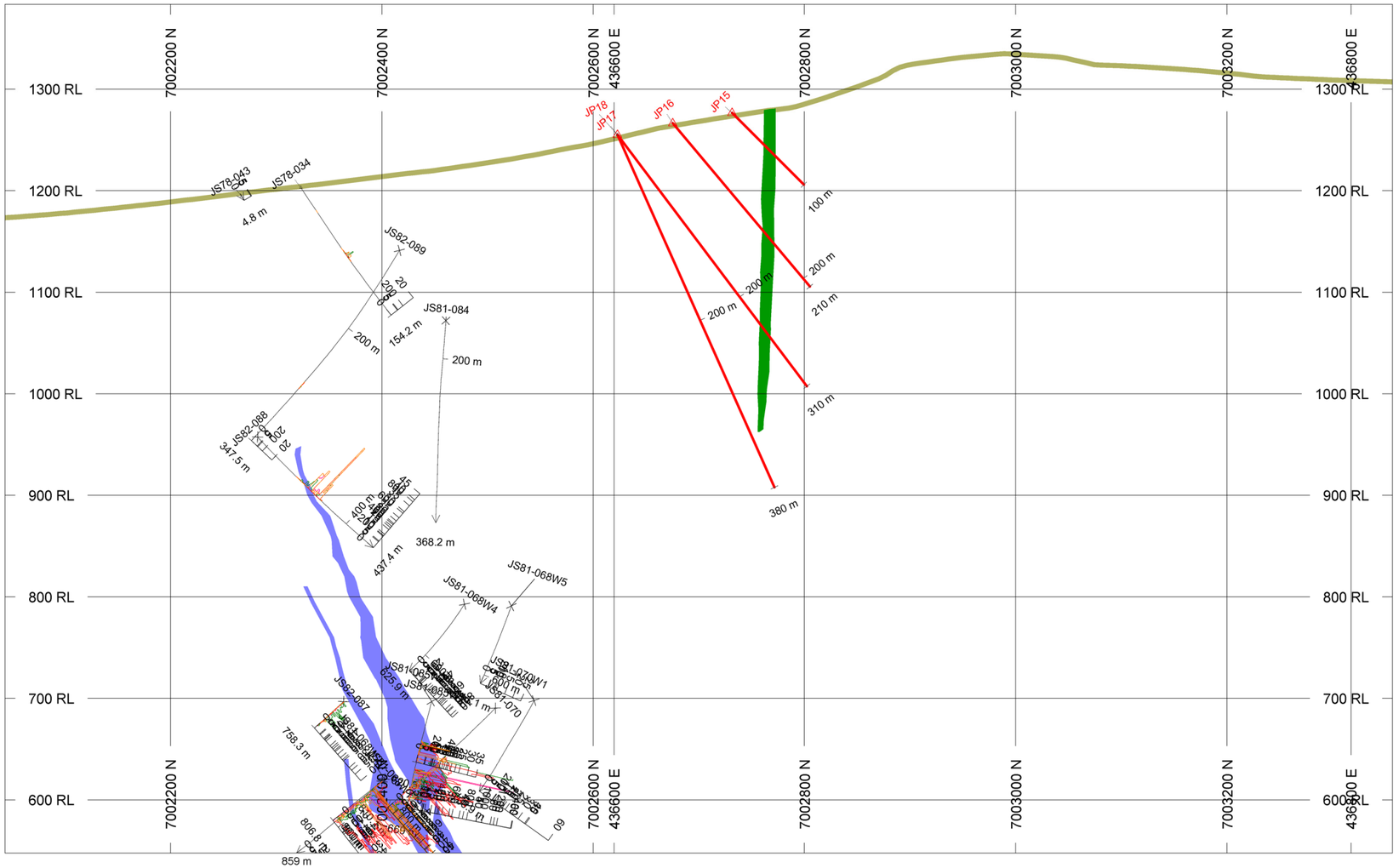
HBED

Jason Property

Main Zone

Section 800E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436623 m	7002700 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

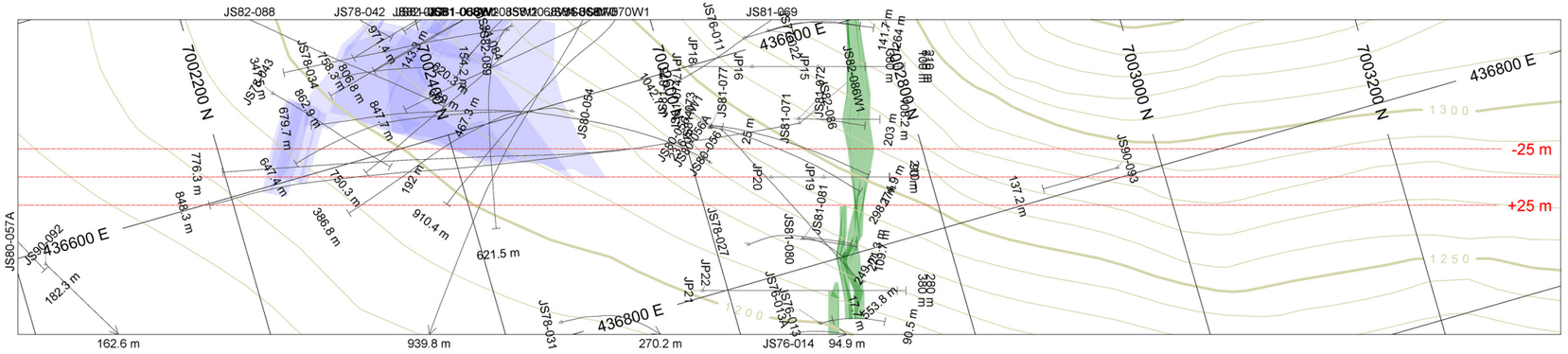
N W E S

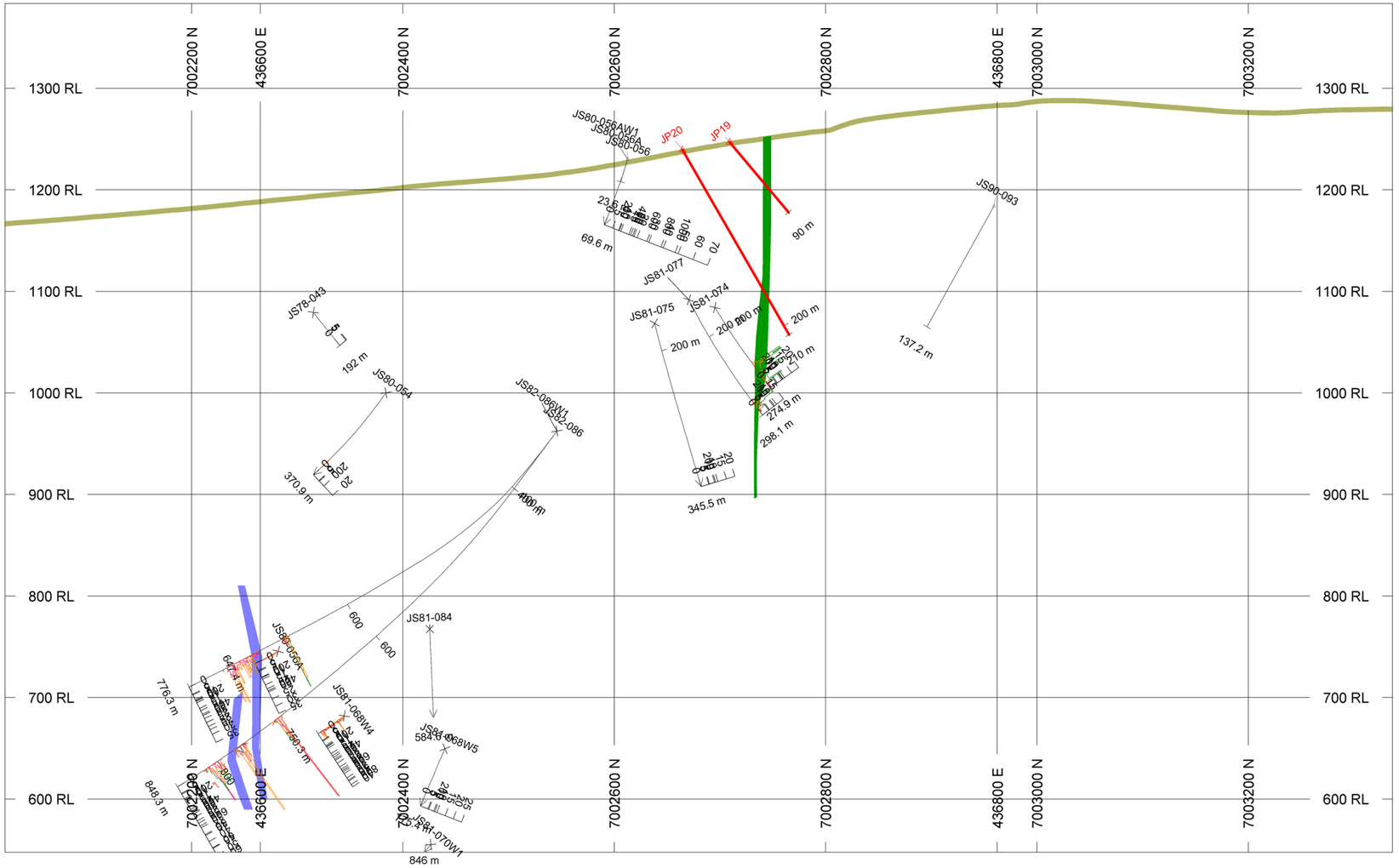
HBED

Jason Property

Main Zone

Section 900E





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436719 m	7002680 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

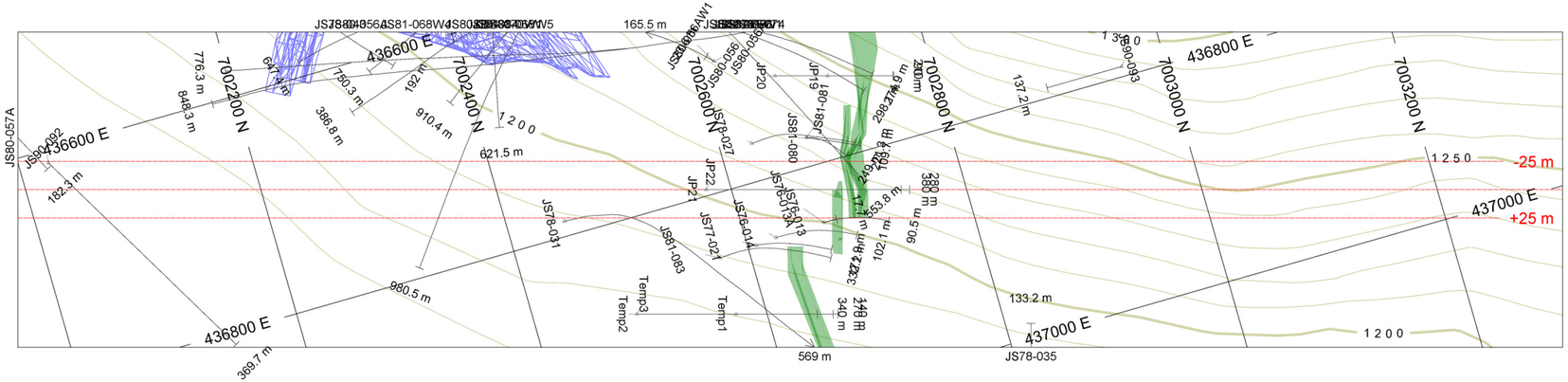
N W E S

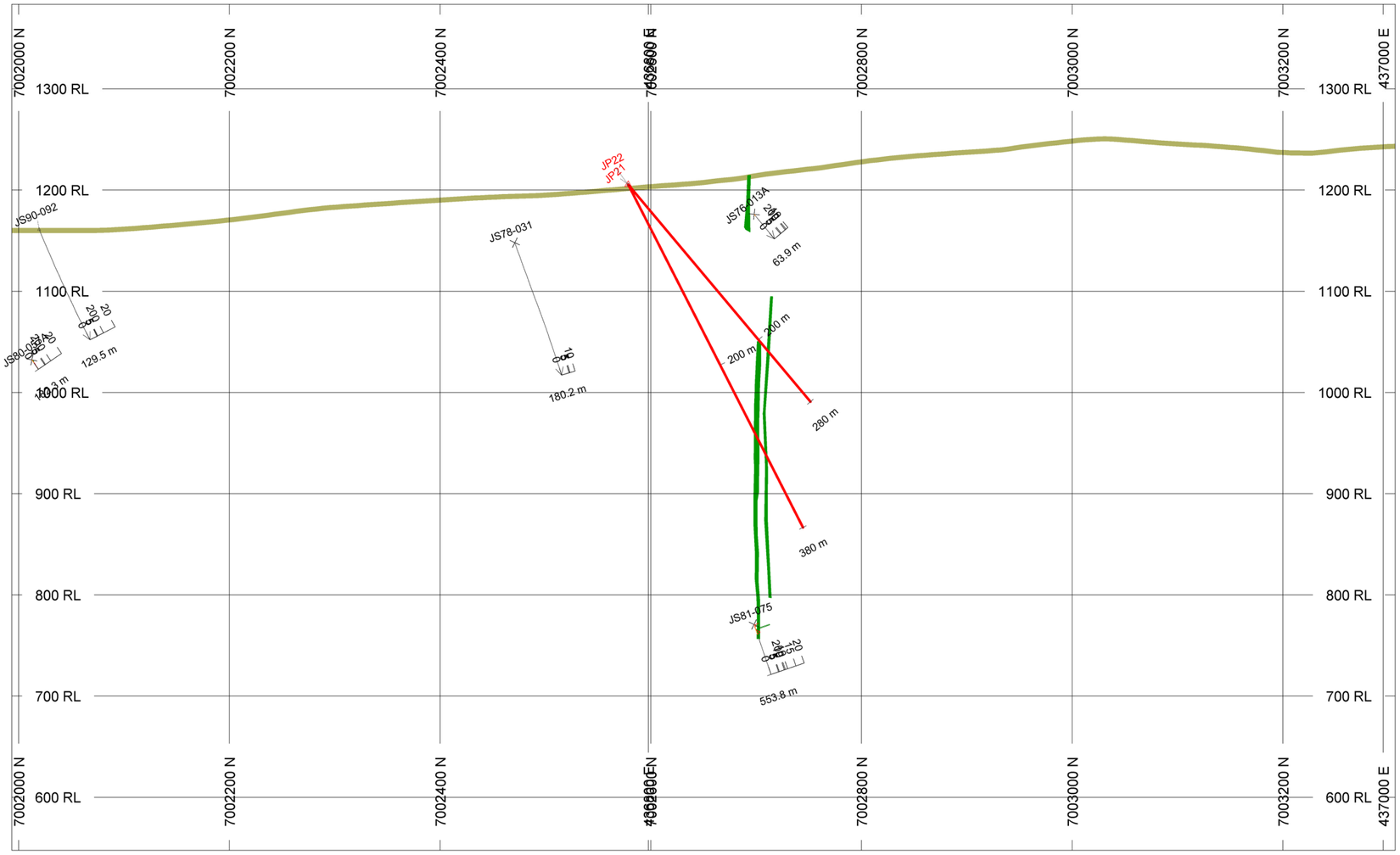
HBED

Jason Property

Main Zone

Section 1000E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436815 m	7002650 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

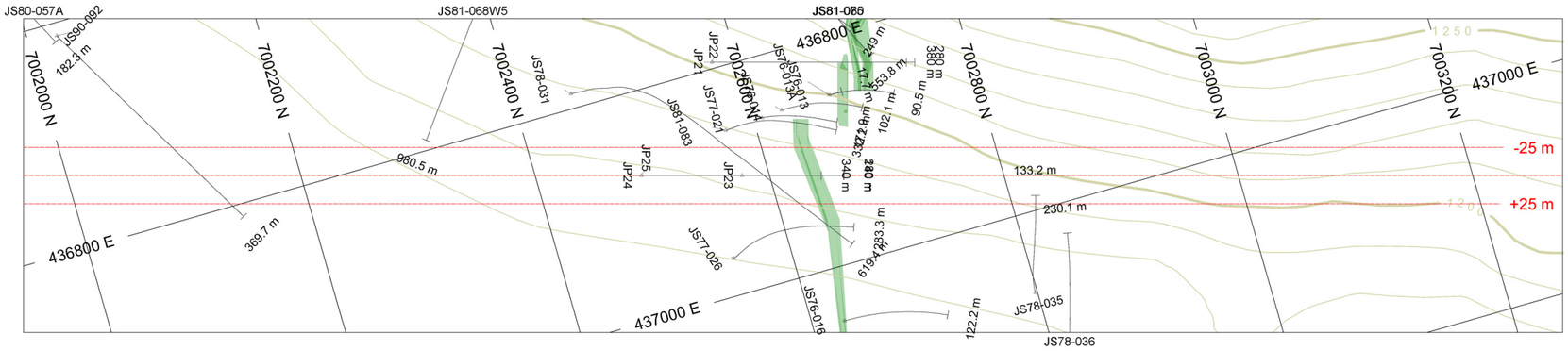
N W E S

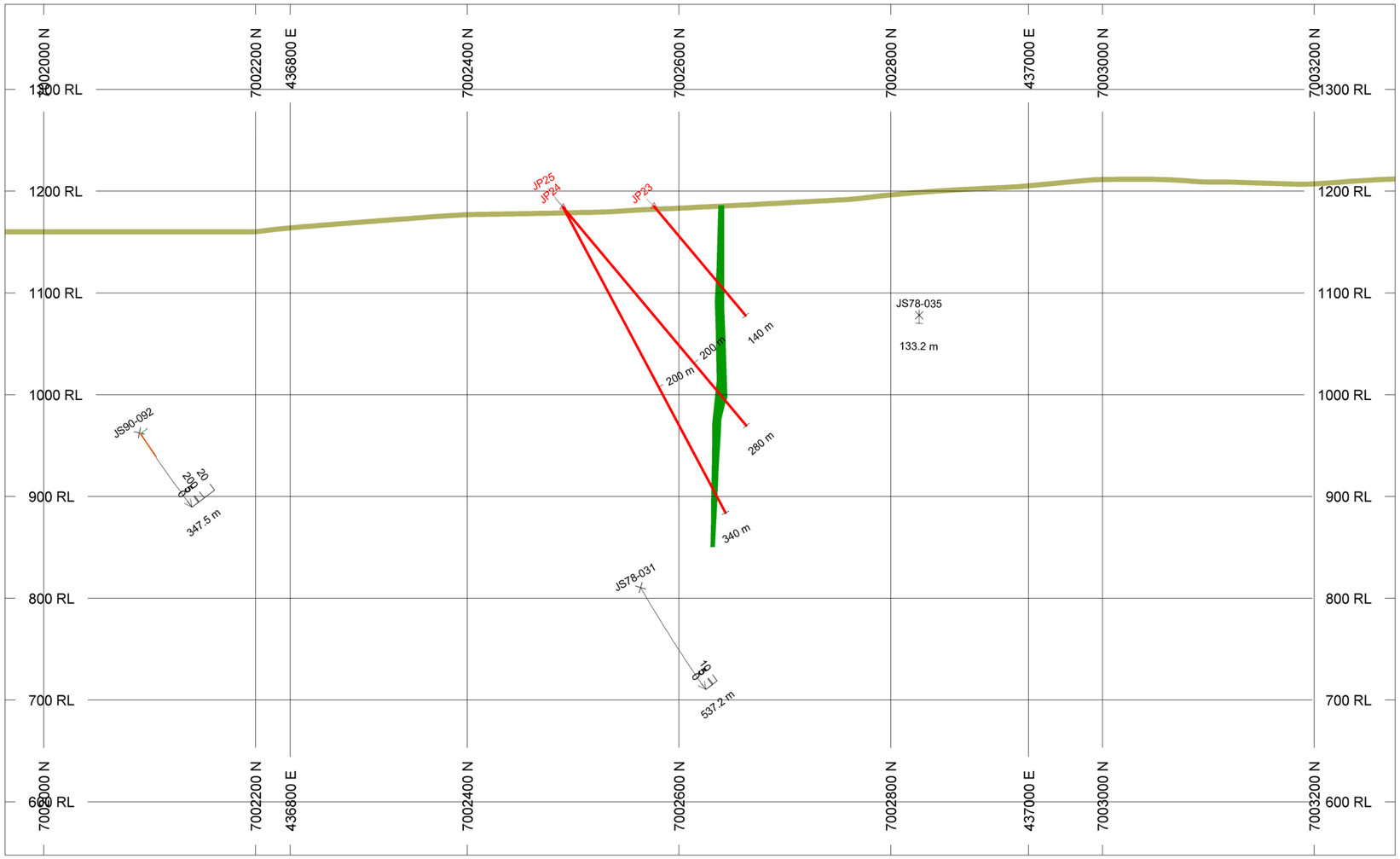
HBED

Jason Property

Main Zone

Section 1100E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY
Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	436911 m	7002620 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

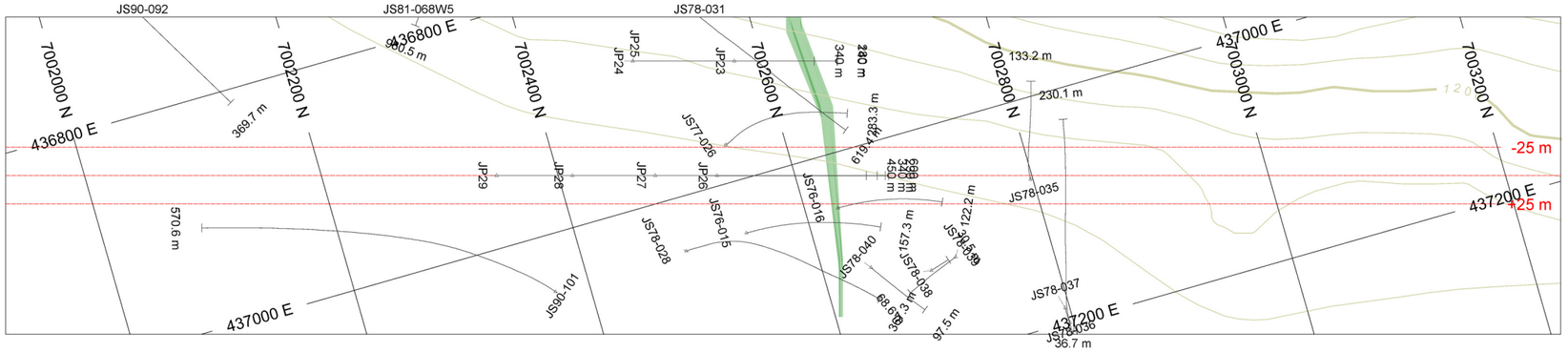
N W E S

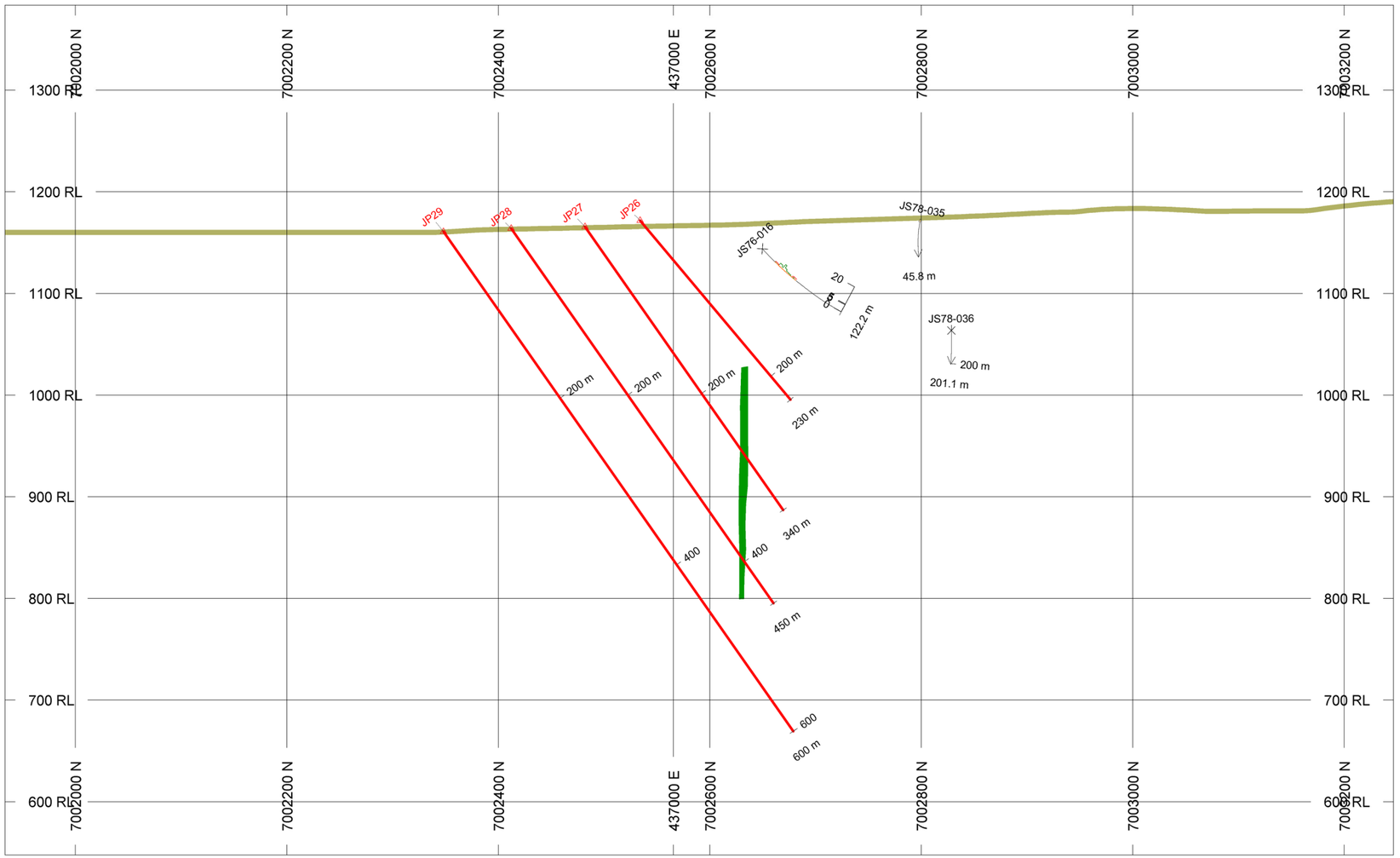
HBED

Jason Property

Main Zone

Section 1200E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	437007 m	7002590 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

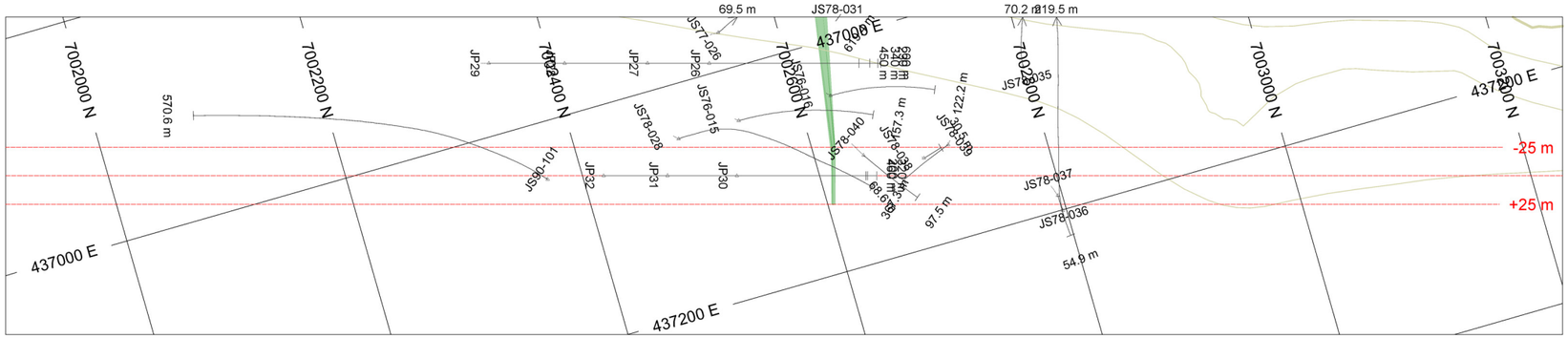
N W E S

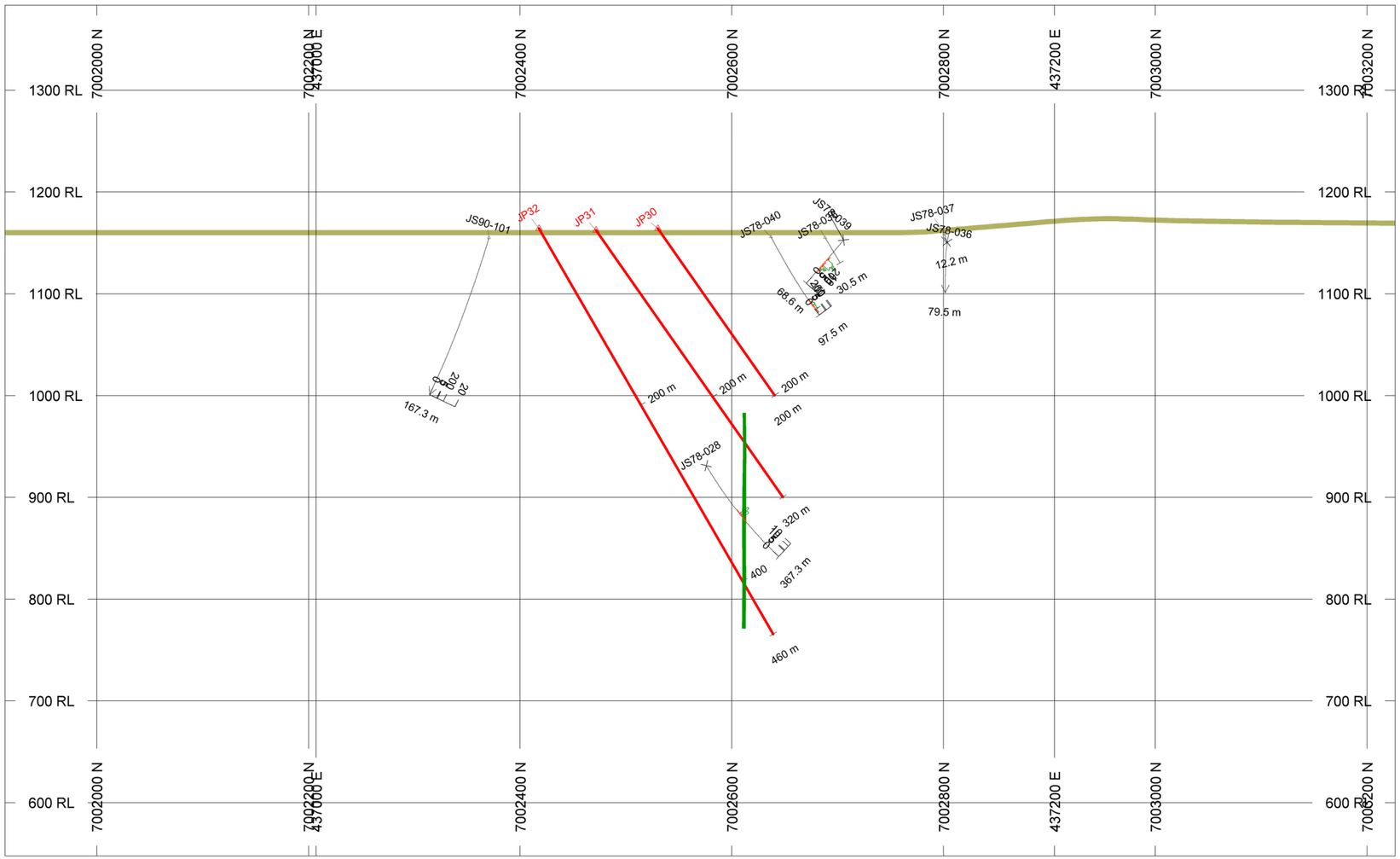
HBED

Jason Property

Main Zone

Section 1300E





REVELATION
GEOSCIENCE LTD

TOPOGRAPHY

Tom_Topo_Canvec50k.GRD

PROFILES	L/R	COL
Ag g/t	R	
Zn%	R	
Ba%	R	
Pb%	R	

SECTION SPECS:

REF. PT. E, N	437104 m	7002570 m
EXTENTS	1366 m	835.9 m
SECTION TOP, BOT	1384 m	547.7 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 16°

N W E S

HBED

Jason Property

Main Zone

Section 1400E

442400 442600 442800

7004000 7003800 7003600 7003400 7003200 7003000

Sekie Stream

98N 96N 94N 92N 90N 88N 86N 84N 82N 80N 78N 76N 74N 72N 70N 68N 66N 64N 62N 60N 58N 56N 54N 52N 50N 48N 46N 44N 42N 40N 38N 36N 34N 32N 30N

1580 1600 1620 1640 1660 1680 1700 1720 1740 1760 1780 1800 1820 1840 1860 1880 1900 1920

N

TS91-020
TS082
TS081
TS077
TS078
TS074
TS079
TS080
TS073
TS88-003
TS88-002
TS90-011
TS89-005
TS89-006
TS90-010
SE-P-28
SE-P-6

Proposed DDH
Historic DDH
West Zone Inferred Resource
West Zone Outcrop
Roads & Trails

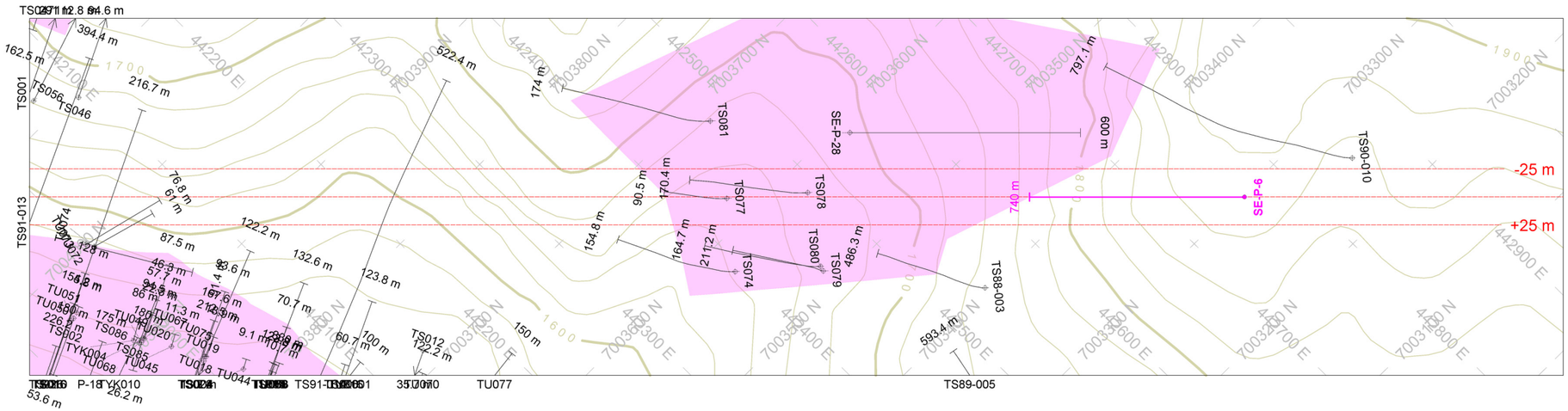
HBED Tom SE - DDH Plan Oct. 26th, 2011

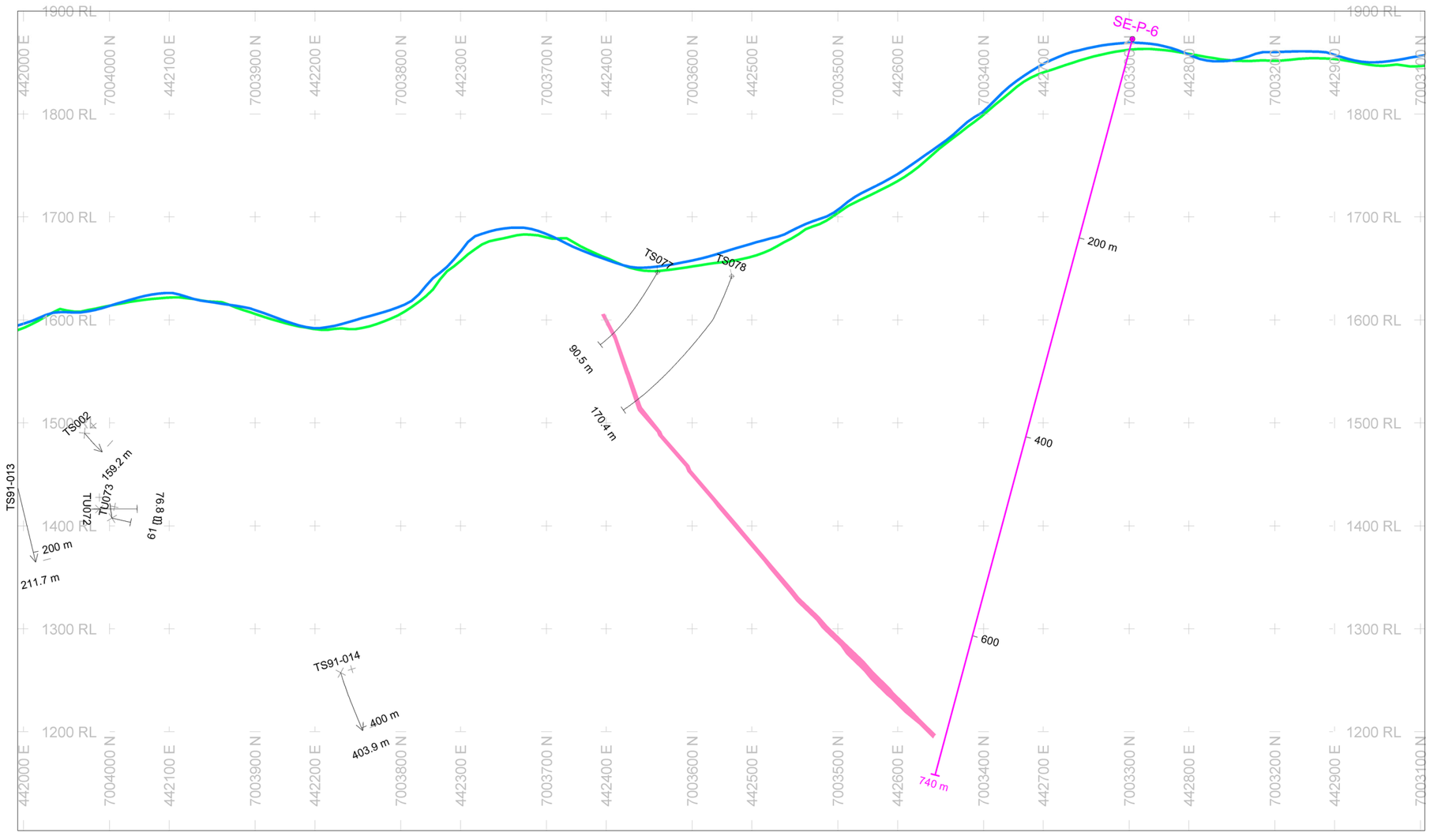
1:3,000

0 12.525 50 75 100 125 Meters

UTM - NAD83, Zone 9

REVELATION GEOSCIENCE LTD





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

HBMS_TomJason_Topo_N83.GRD

Topography (Canvec 50k)

PROFILES	L/R	COL
BA	R	
PB	R	
ZN	R	
AG	R	

SECTION SPECS:

REF. PT. E, N	442479 m	7003580 m
EXTENTS	1366 m	796.1 m
SECTION TOP, BOT	1900 m	1104 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

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NAD83 / UTM zone 9N

AZIMUTH = 135°

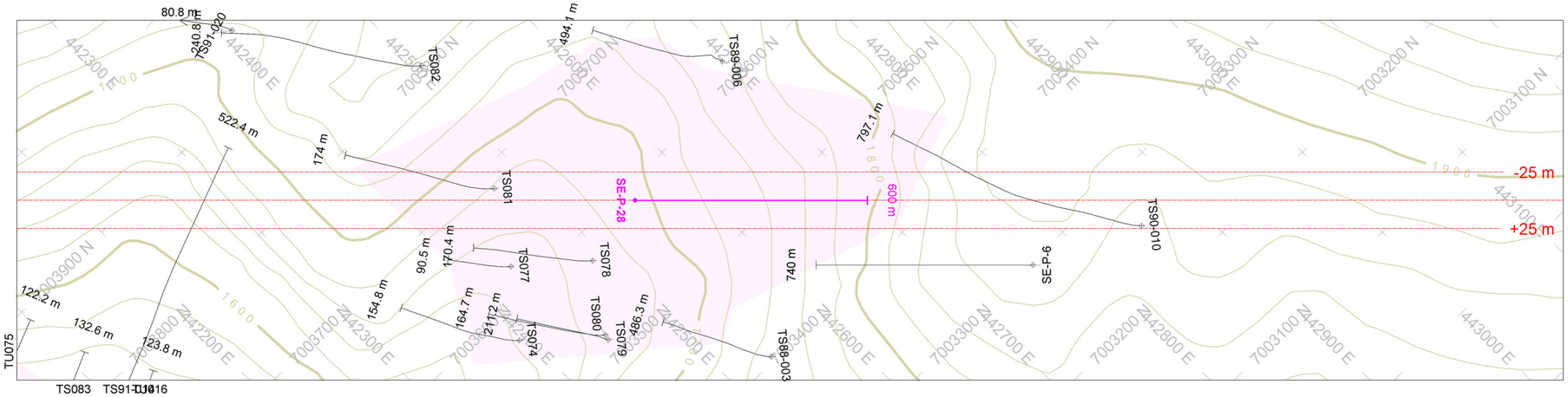
N W E S

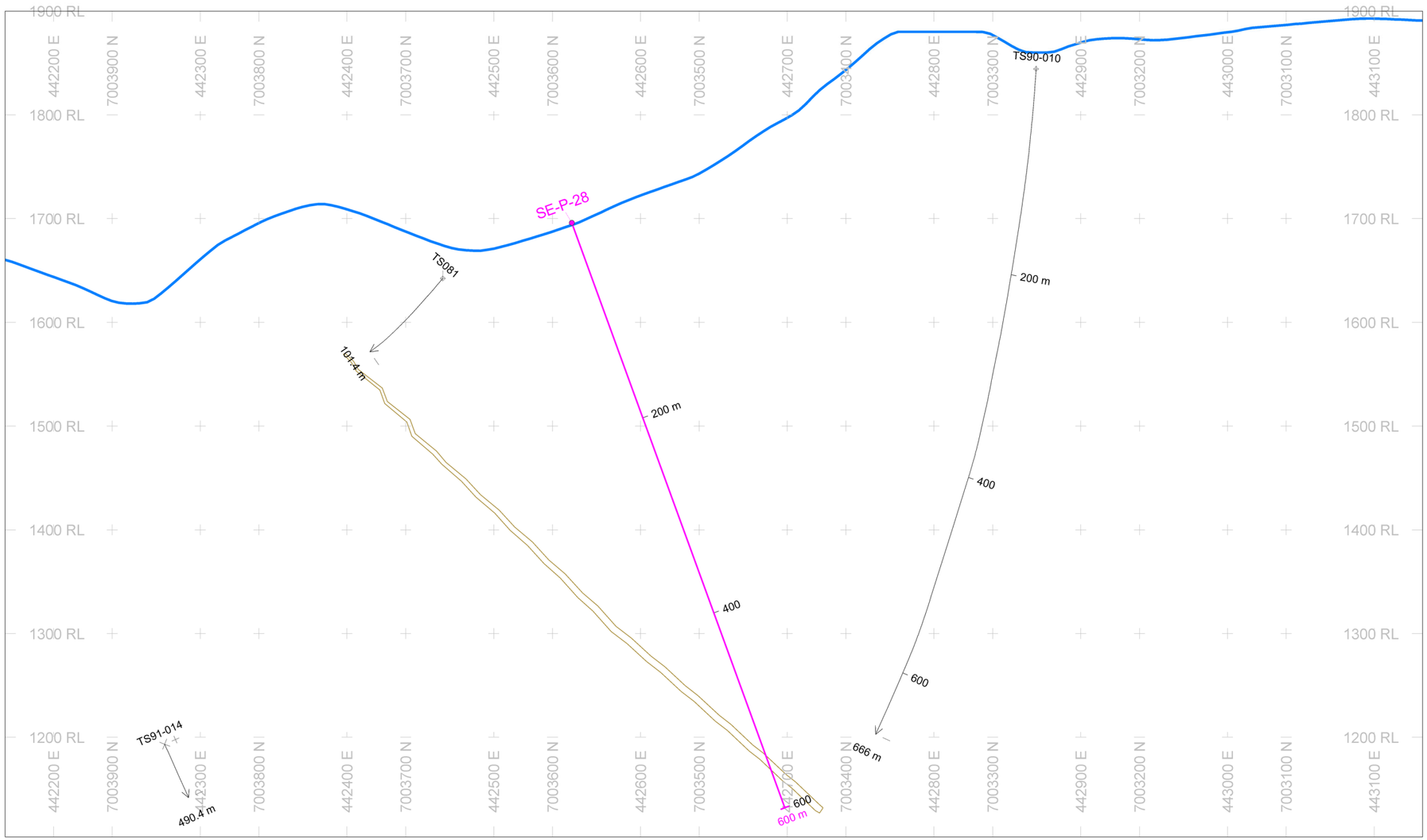
HudBay Minerals

Tom Property

SE Zone

#2





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Topography (Canvec 50k)

PROFILES	L/R	COL
BA	R	
PB	R	
ZN	R	
AG	R	

SECTION SPECS:

REF. PT. E, N	442650 m	7003490 m
EXTENTS	1366 m	796.1 m
SECTION TOP, BOT	1900 m	1104 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 135°

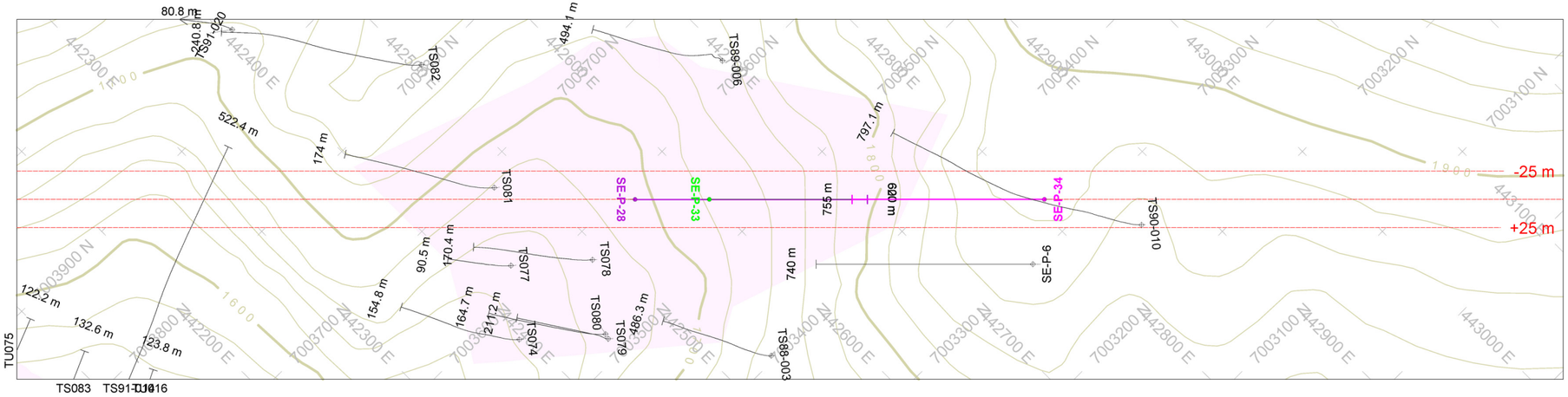
N W E S

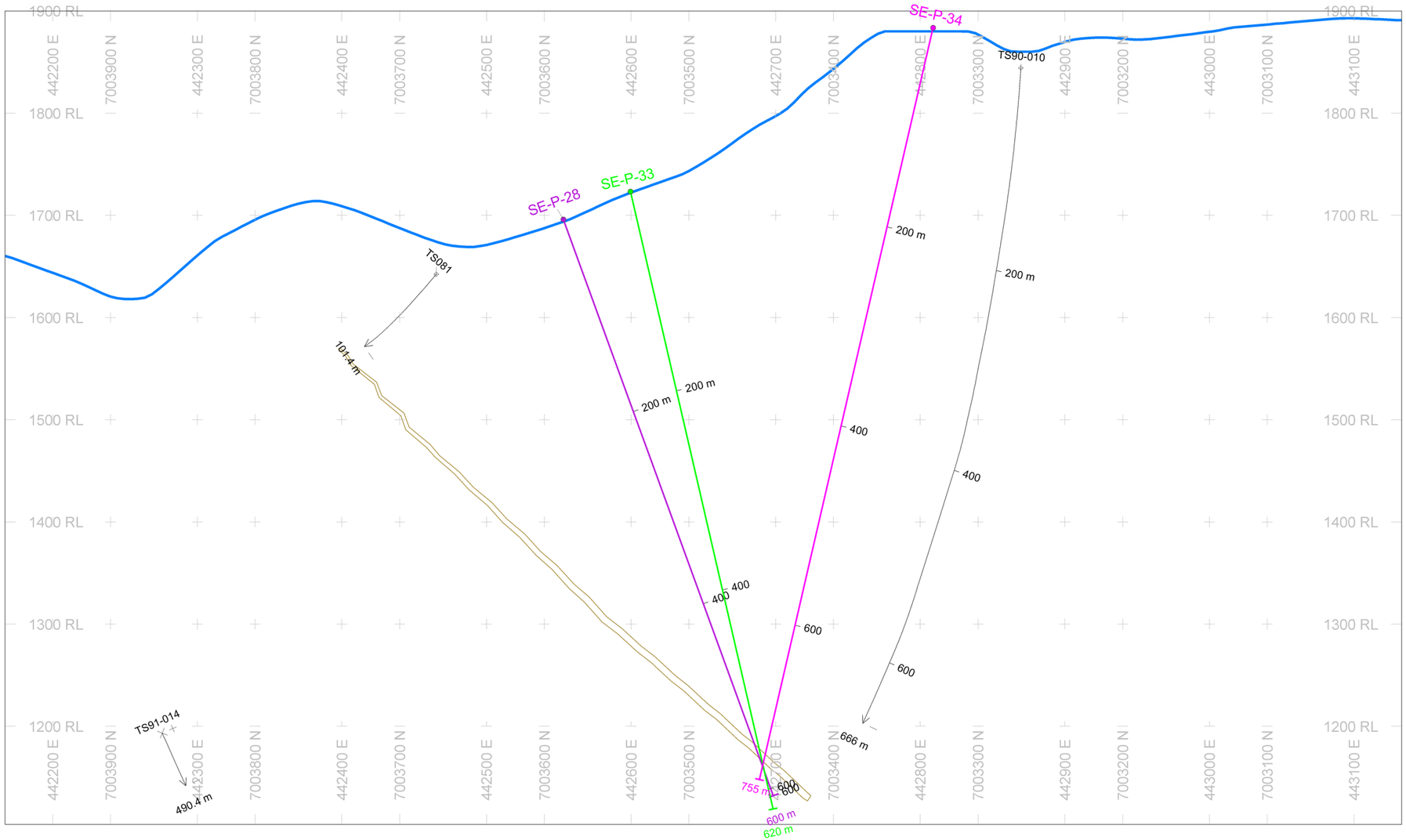
HudBay Minerals

Tom Property

SE Zone

#3





REVELATION GEOSCIENCE LTD

TOPOGRAPHY

Topography (Canvec 50k)

PROFILES	L/R	COL
BA	R	
PB	R	
ZN	R	
AG	R	

SECTION SPECS:

REF. PT. E, N	442650 m	7003490 m
EXTENTS	1366 m	796.1 m
SECTION TOP, BOT	1900 m	1104 m
TOLERANCE +/-	25 m	

SCALE 1 : 5000

(m)

-50 0 50 100 150 200

NAD83 / UTM zone 9N

AZIMUTH = 135°

N E S W

HudBay Minerals

Tom Property

SE Zone

#3

APPENDIX IX

Statement of Qualifications
Kevin Wells, P.Geo

Expenditures Diamond Drill Report
Diamond Drill Holes: TYK001, TYK002, TYK003, TYK004, TYK005, TYK006, TYK007, TYK008, TYK009, TYK010 and TYK011

Kevin Wells
11460 Waresley Street
Maple Ridge, Canada, V2X 9Y9
Telephone: 604 681 6000 Fax: 604 684 6024
Email: kwells@revelationgeo.com

I, Kevin Wells, P.Geo. (BC # 34227), do hereby certify that:

1. I have prepared and reviewed all the items within the Report titled: "***2011 Summary Report Diamond Drilling and Exploration at the Tom-Jason Property, Mayo and Watson Lake Mining Districts, Yukon Territory*** ";
2. I graduated from the Laurentian University in Sudbury Ontario in 1994 with a Bachelor's of Science Honors Degree in Geology;
3. I am a current member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), member # 34227;
4. I have at least 5 years experience in the mineral exploration industry working as a geoscientist;
5. I have experience relevant to those aspects of the preparation of this report for which I have been responsible – specifically specialist knowledge in exploration geology;
6. To the best of my knowledge, this Report contains all the scientific and technical information required to be disclosed, that there has been no material change in any of the information presented herein and that all information is accurate.

Dated April 23, 2012
SIGNED AND SEALED

"Kevin Wells"
Kevin Wells, P. Geo. (APEGBC #34227)

APPENDIX IX

Expenditures Diamond Drill Report

Drill Holes: TYK001, TYK002, TYK003, TYK004, TYK005, TYK006, TYK007, TYK008, TYK009, TYK010 and TYK011

Disposition Type	Grant No	Claim	Hectares	Meters Drilled	Diamond Drilling Contract Cost	Analysis	Camp Logistics/ Transportation	Air Transportation	Paramedic Services	Communication System	Supervision / Geology	10% Admin	Total
Claim	60495	Tom 1 (OL-00001)	20.83	229.00	69,841.42	6,290.27	122,922.98	5,983.88	10,213.80	3,589.49	69,802.73	28,864.46	**317,509.03**
Claim	60497	Tom 3 (OL-00003)	20.90	853.00	260,151.68	27,754.43	457,874.69	22,289.28	38,045.29	13,370.45	260,007.54	107,949.34	**1,187,442.70**
Claim	60498	Tom 4 (OL-00004)	20.90	745.00	227,213.36	6,124.74	399,902.28	19,467.19	33,228.30	11,677.59	227,087.47	92,470.09	**1,017,171.02**
Total:				***1,827.00***	***557,206.46***	***40,169.44***	***980,699.95***	***47,740.35***	***81,487.39***	***28,637.53***	***556,897.74***	***229,283.89***	***$ 2,522,122.75***

MAP 1
Tom and Jason Property Position

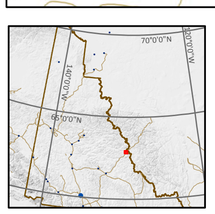
2011 Tom - Jason Project

HBMS Tom & Jason Property Map

1:20,000

0 0.5 1 2 3 4

Kilometers



UTM - NAD83, Zone 9
February 6, 2012

REVELATION GEOSCIENCE