

LONGFORD

EXPLORATION

Geochemical Survey Report

On the

Arch Island Property

Arch Creek, Whitehorse Mining District, Yukon, Canada

Located Within:

NTS Sheet 115 G05

Centered at Approximately:

Latitude 61.49° North by Longitude 139.63° West

UTM NAD83 07V 572494E 6818259N

CLAIM NAMES:

AR 1-9, YD12517-YD12525

AR61, YC18892

Field Work Conducted July 17, 2017

Report Prepared For:

Group Ten Metals Inc.

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1 Introduction

The Arch Island Property consists of 10 claims (1.9 km²) covering an area of the Kluane Mountains in the Arch Creek drainages just east of the Donjek River. The terrain features broad valleys, rocky ridges and rounded upland areas incised by steep creek canyons approximately 40 km northwest of Burwash Landing, Yukon Territory.

A one day exploration program was carried out on July 17 by a 2 person team consisting of a geologist and an assistant. The goal of this program was to test the effectiveness of sampling bark from black spruce trees to detect geochemical anomalies suggestive of favourable geology to host Ni or PGE deposits. Total expenditures before GST amounted to \$5,437.43 (Appendix A)

2 Claim Summary

The Arch Island project claims are currently held by Tom Morgan and are under a pending option agreement to Group Ten Metals Inc. A list of claims and their expiry dates is given in Table 2.1.

Table 2.1 Arch Island project claim summary.

GRANT_NUM	Name	OWNER	STAKE_DATE	RECORDED	EXPIRY_DAT
YD12517	AR 1	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12518	AR 2	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12519	AR 3	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12520	AR 4	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12521	AR 5	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12522	AR 6	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12523	AR 7	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12524	AR 8	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YD12525	AR 9	Tom Morgan - 100%	2010-05-25	2010-06-22	2023-06-22
YC18892	AR 61	Tom Morgan - 100%	2000-09-18	2000-09-20	2022-09-20

3 Location

The Arch Island Property covers rounded upland areas of the Kluane Ranges and the Arch Creek valley on NTS map sheet 115 G5 approximately 40 km by road northwest of Burwash Landing and 285km from Whitehorse, Yukon Territory (Figure 3.1). Access is via the Alaska Highway to KM 1799 turning onto the Quill Creek gravel road to km 15, then turn right onto the Arch Creek access road for 10km to reach the property.

Whitehorse is well equipped to support the mining industry with general services, a skilled labour force, transportation (the Alaska Highway, Whitehorse airport) and abundant hydroelectric grid power. The property is located within the Kluane & White River First Nations territorial lands. Helicopter charter is available from Haines Junction, 125km south of the property. Locally Destruction Bay has a nursing station, fuel, lodging, restaurants, and repair services. Cellular service covers higher elevation portions of the project area.

Table 3.1 Driving distances to the Property.

Location	Description	Road Distance
Whitehorse (pop. 25,000)	Nearest city with services	295 km
Haines Junction	village	125
Burwash Landing	village	40
Destruction Bay	village	55

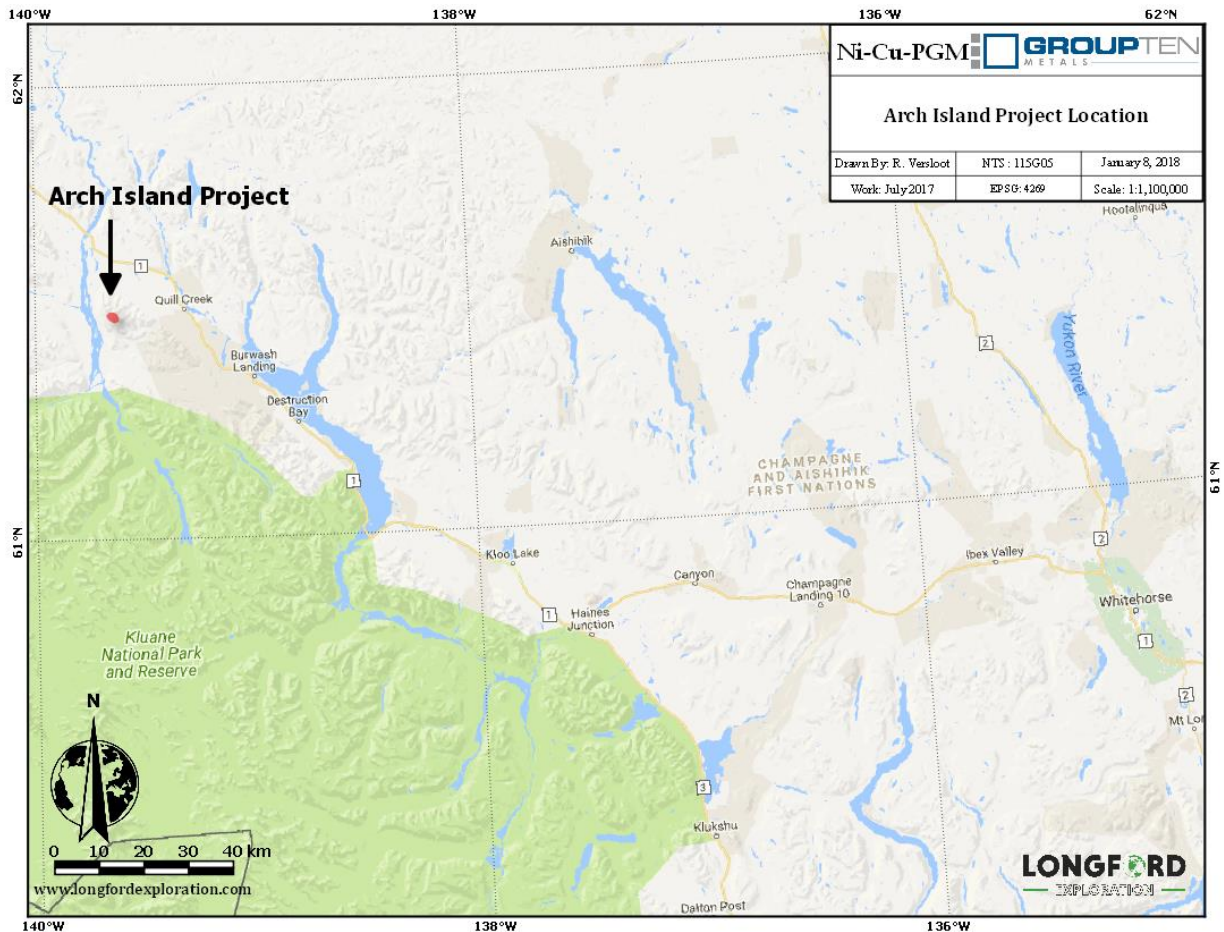


Figure 3.1 Arch Island project location map.

4 Summary of Previous Investigations

The region was first explored in the early 1900's by prospectors looking for the source of placer copper on the upper White River. One native copper deposit (Canyon City) was discovered in 1905. Limited development work uncovered several large tabular masses of native copper. In the 1930's placer miners were active on Quill, Arch, Burwash, Wade and Swede Johnson Creeks. Old camps, placer tailings and abandoned equipment mark the creeks that were mined.

The area surrounding the Arch Island property has been explored periodically since the early 1950's after the completion of the Alaska Highway in 1942-1945 provided access to the general area. The discovery of the Wellgreen mineral deposit on upper Quill Creek (Minfile 115G024) initiated an exploration boom

through the Kluane Ranges focussed on rocks of the Kluane Ultramafic Belt a 600km long trend in the southwest corner of the Yukon characterized by mineralized mafic to ultramafic Triassic aged sills.

The Wellgreen deposit 5 km southeast of the Arch Island property, was mined between 1972 and 1973, producing 171,652 tonnes with an average grade of 2.23% Ni, 1.39% Cu, 0.073% Co and 2.15 grams/tonne Pt and Pd, then shut down due to weak metal prices, excessive dilution and erratic distribution. The deposit, now 100% owned by Wellgreen Platinum Ltd has an Inferred Mineral Resource of 846 million tonnes at 1.57 g/t Pt Eq. or 0.41% Ni Eq, both at a 0.57 g/t Pt Eq or 0.15% Ni Eq cut off (Simpson, 2014).

Five MINFILE occurrences are in the vicinity of the Arch Island property (Table 3.1) hosted by rocks of the Pennsylvanian to Lower Permian Skolai Group (Station Creek and Hasen Creek formations), Nikolai volcanics and Kluane Range intrusives. To the northwest the Skolai rocks are locally intruded by ultramafic sills, close to the favourable unit contact, which host the target PGE-Ni-Cu mineralization. Overlying the Skolai rocks are basalts of the upper Triassic Nikolai formation. All rocks have been folded into a series of anticlines and synclines along fold axis parallel to the dominant 290-310° trend and then folded again along NE axes (D. James, 2016). At lower elevations and on benches above the Wade and Maple Creek canyons, bedrock is overlain by Quaternary unconsolidated till, fluvial gravel and mud deposits. Recent slumps, mudslides and scarps occur where the overburden is eroding on hillsides and into the creek gullies.

Previous work in the area from 1953-2016 included prospecting, geological mapping, rock & soil sampling, ground and airborne geophysical surveys. The most recent exploration at the nearby Tobi showing in 2016 consisted of “a 200 line km airborne magnetic geophysical survey to delineate favourable ultramafic sills and the extent of the Kluane Ranges suite intrusion, and prospecting with rock geochemical and auger bedrock interface sampling including the collection and analysis of 69 rock samples. The Tobi showing was evaluated and partially delineated and two additional significant Cu-Ni-PGE showings were discovered, West Basin and Maple Peak” (J. Pautler, 2017). Most recently in 2017, Aurora Geosciences re-processed the aeromagnetic data available for the 115G mapsheet.

Assessment reports and geological files found in the Yukon Geological Survey database with information pertaining to the Arch Island property can be summarized as follows:

Table 4.1 Assessment reports and documents concerning the Property.

Date	Report ID	Author	Title
1953	019524	Davis, 1953	Geological Investigation on the Saddle, Bit, Wade, Horse & Bridle claims for Callinan Flin Flon Mines.
1955	017461	Allan, 1955	SP survey on upper Maple Creek
1986		Deklerk, 2009	Area restaked and road building by Columbia Mining Ltd.
1987-88	092602	P. Van Angeren 1988	Minor prospecting, soil & rock geochemical sampling of pyritic greenstone by Gold City Resources Inc.
1988-89	092744	Davidson, G. 1989	Soil sampling and mag survey by Lodestar Exploration Inc. just west of Tobi on Donjek River flats.
1997	GSC Bulletin 506	Hulbert, L.J. 1997	Geology and metallogeny of the Kluane mafic-ultramafic belt, Yukon territory.
2003		Carne, R.	Metallogeny of the Kluane Ranges.
2004	Open File 2004-20	S. Israel & D.P. Van Zeyl	Preliminary geological map of the Quill Creek map area, (parts of NTS 115G/5, 6 and 12).

Date	Report ID	Author	Title
2008	095044	Furgo, 2008	DIGHEM airborne survey for Coronation Minerals Inc. located EM anomaly in the upper Maple Creek valley.
2016		Pautler, J. 2016	200km airborne magnetic survey, prospecting & rock geochemical and auger bedrock sampling, 69 samples.
2016		Walcott, P. 2016	Review of Catalyst Property geophysical data.
2016		James, D. 2016	Arch Project, Geophysical Interpretation Assessment Report
2017		Pautler, J. 2017	YMEP proposal for a target evaluation program on the Tobi project
2017	Open File 2017-36	Aurora Geosciences	Reprocessing of airborne magnetic data for NTS 115G.

5 Exploration History

The area surrounding the Arch Island property has been explored periodically since the early 1950's after the completion of the Alaska Highway in 1942-1945 provided access to the Quill Creek drainage. The discovery of the Wellgreen mineral deposit on upper Quill Creek (Minfile 115G024) initiated an exploration boom through the Kluane Ranges focussed on rocks of the Kluane Ultramafic Belt.

There is no known mineral occurrence on the Arch Island claims to date. The following is a record of the known work history relevant to the immediate area (after Pautler, 2017):

1953-5: Geological mapping and an SP survey by Callinan Flin Flon Mining Ltd. uncovered a gabbro body (*Callinan – Figure 5*) northwest of Maple Creek (*Davis, 1953 and Allan, 1955*).

1986: Area was restaked and road building was carried out by Columbia Mining Ltd. (*Deklerk, 2009*).

1987-8: The northern portion (PC claims) and south-central portion (Don claims) of the nearby Tobi Project were acquired by Avanti Mining Ltd. and transferred to Gold City Resources Inc., which completed minor prospecting and rock geochemical sampling (*Hart and Doherty, 1988, and Van Angeren, 1988*). Limited work uncovered an occurrence of gabbro float (*Figure 5*).

1988-9: Soil geochemical sampling and magnetometer surveying conducted by Lodestar Exploration Inc. under option from Harjay Exploration Ltd. on the SF and Missy claims just north of northwestern property area, outlined a magnetic high anomaly proximal to Pt, Pd and Au in soil anomalies (*Davidson, 1988 and 1989*).

2008: A DIGHEM airborne magnetic-electromagnetic geophysical survey was carried out for Coronation Minerals Inc. as part of a survey over their Wellgreen property (*Fugro, 2008*). Significant anomalies were obtained along the northwest fork of Maple Creek in areas of favourable geology (underlying Station/Hasen Creek contact).

2016: A 200 line km airborne magnetic geophysical followed by prospecting, rock geochemical and auger bedrock interface sampling, total of 69 rock samples. The Tobi showing was evaluated and partially delineated and two additional significant Cu-Ni-PGE showings were discovered, West Basin and Maple Peak (Pautler, J. 2016 & 2017).

2016: Geophysical data compilation and interpretation by Walcott & Assoc. summarized in a Geophysical Interpretation Report (James, D., 2016).

Historical data on the general Arch Creek area includes prospects along the Arch and Maple Creeks drainages summarized from previous reports in the following Table 5.1.

Table 5.1 Historical activity (D. James, 2016).

Year	Work	Results
1952-54	Staked by Conwest Exploration Company Ltd. and Teck Exploration Company. Geological mapping, prospecting.	Two copper-nickel showing identified. Musqueteer (now Teck) and Conwest showings. (<i>Walker, 1955 and Frohberg, 1953</i>)
1955	Ground EM and Magnetic surveys over the Teck and east of Conwest Showings by Teck	Linear magnetic anomaly over buried ultramafic sill. (<i>Clarke, 1956</i>)
1967	Geological mapping, magnetometer and EM-16 surveys by J.B. O'Neil and C. Gibbons.	Linear magnetic anomaly (<i>Hilker, 1967</i>)

Year	Work	Results
1972	Geological mapping, geochemical sampling, magnetometer and EM surveying by the Nickel Syndicate	No results available. Strong magnetic high and several weak or broad conductors reported in Yukon Minfile (<i>Deklerk, 2009</i>).
1986-88	Geochemical sampling in 1986 by Kluane Joint Venture on large grid extending along the north side of Arch Creek from the Wellgreen property to Serpentine Creek. Grid lines 100m apart with samples at 50m intervals. In 1987 magnetometer and VLE-EM surveys over same grid. One 85.6m drill hole in 1988 through Donjek sill.	Poor sampling conditions towards the west end of the grid (Serpentine Creek area) because of permafrost and deep overburden. Weak, spot anomalies in Pt, Pd, Cu, Ni and Au. EM conductors and linear magnetic features. Grid does not cover the Conwest or Teck Showing but does overlap part of the 2013 Arch grid. Weakly anomalous values from drillhole. (<i>Eaton, 1987</i>)
1988	Ground magnetic survey and 30 soil samples close to mouth of Arch Creek by Lodestar.	Linear magnetic anomaly coincident with anomalous soils. Anomalous Pt, Pd and Au. 7 samples >20ppb Au, 7 samples >50 ppb Pt and 12 samples >20ppb Pd. (<i>Davidson, 1989</i>)
1987	Property examination and mapping by Dawson Eldorado Mines Inc.	Maple Creek gabbro and band of limestone mapped (<i>Hart and Doherty, 1987</i>).
2000	Geochemical sampling and trenching around Teck showing by Auterra Ventures Inc.	Detailed trench mapping and consistent sampling over the sill. (<i>Vanwermeskerken, 2001</i>)
2001	Rock sampling and 11 km of magnetic and VLF EM surveys by around the Teck showing	Anomalous magnetic linear 60m north of the Tech showing. VLF EM was less responsive and two weak axes appear to border the magnetic anomaly. (<i>Brickner, 2002</i>)
2012	Short program of mapping, prospecting and sampling around the Conwest showing. 18 rock, 14 soil samples collected.	Anomalous Pb, Zn, Fe, Au and Cu (<i>Pautler, 2012</i>).
2013	Compilation of previous work, chip sampling at Teck showing. Testing of different biogeochemical and geophysical surveys over a 4 line km grid centered on the Teck showing. Work for Bill Harris and Tom Morgan. Claims were optioned to Ashburton Ventures (now Group Ten) late in the year.	Best chip samples were in altered ultramafic close to contact with Station Creek. Spruce bark samples performed the best of the 4 methods tested. Projected sill location was traced and new anomalies were detected. ELF geophysical survey was better than the HLEM but needs further processing. (<i>James, 2014</i>)

6 Geological Setting and Mineral Potential

6.1 Regional Geology

The regional and property geology is summarized from the Arch Creek (Catalyst Property) assessment report by D. James, 2016 and from Metallogeny of the Kluane Ranges by R. Carne, 2003. The Tobi property is located within the Kluane Ultramafic Belt, a 600km long belt of rocks in the southwest corner of the Yukon that are characterized by mineralized mafic to ultramafic Triassic aged sills known as the Kluane mafic-ultramafic suite. The Kluane Ultramafic Belt extends from northern BC into Alaska and hosts magmatic Ni-Cu-PGE (+/- Au) deposits and occurrences. It is the second largest Ni-Cu-PGE mafic-ultramafic belt in North America after the Circum-Superior Belt in central Canada (Hulbert, 1997).

The Kluane Ultramafic Belt lies within a displaced slice of the Wrangell Terrane which is bounded on the south by the Duke River Fault and on the north by the Denali Fault. The Wrangell Terrane is underlain by

Carboniferous to Permian and Triassic sedimentary and volcanic rocks, intruded by the upper Triassic Kluane Ultramafic suite and Cretaceous granitic intrusions (Figure 6.1).

Topographically, the Kluane Ultramafic Belt is in the Kluane Ranges which are foothills to the St. Elias Mountains that range along the Yukon-Alaska border. The ultramafic rocks are distinctively coloured (glassy black to dark brown or light green to pale grey when altered) and can be seen as distinctive linear features.

The dominant structural direction, controlled by the major Duke River and Denali faults, ranges in orientation from 270° to 310°. Movement of Wrangellia northwards along the Denali Fault began in the Tertiary and continues today. The fault is steeply dipping and the order of displacement may be 100s of kilometres. The Duke River Fault is also near vertical and joins the Denali Fault southwest of Haines Junction. Between the major faults small scale faulting is common and faults increase in number to the southeast. Major fold axes are oriented in the same dominant northwest direction. The folds are tight and inclined to the southwest. A later folding episode has refolded the strata at right angles to the dominant direction along northeast axes.

The Kluane mafic-ultramafic sills are elongated cumulate bodies than are postulated to be the crystallized magma chambers that fed the overlying Triassic Nikolai basalts. The sills are layered, with a thin rim of gabbro around the margins grading into an ultramafic core of peridotite and dunite (Hulbert, 1997). The width of the sills ranges from less than 10 to 600m and they can cover up to 20 km in strike length. The sills intrude the older Pennsylvanian to Permian Skolai Group near the contact between the lower Station Creek Formation and the overlying Hasen Creek formation. Most of the sills are poorly exposed and some are deformed and altered by faults. Nickel and Copper values increase from east to west along the belt. Compared to other Ni-Cu-PGE deposits worldwide, the belt is known for having high concentrations of PGEs such as Osmium, Iridium, Ruthenium and Rhodium and high Platinum to Palladium ratio.

The oldest formation in the Skolai Group is the Station Creek volcanic and volcanoclastic rocks with increasing sedimentary content in the upper half (Carne, 2003). The Station Creek Formation, includes shale siltstone, limestone and argillite interbedded with fine grained tuff layers that decrease in abundance upwards. The contact with the overlying Hasen Creek Formation is gradual and is placed at the top of the tuff layers.

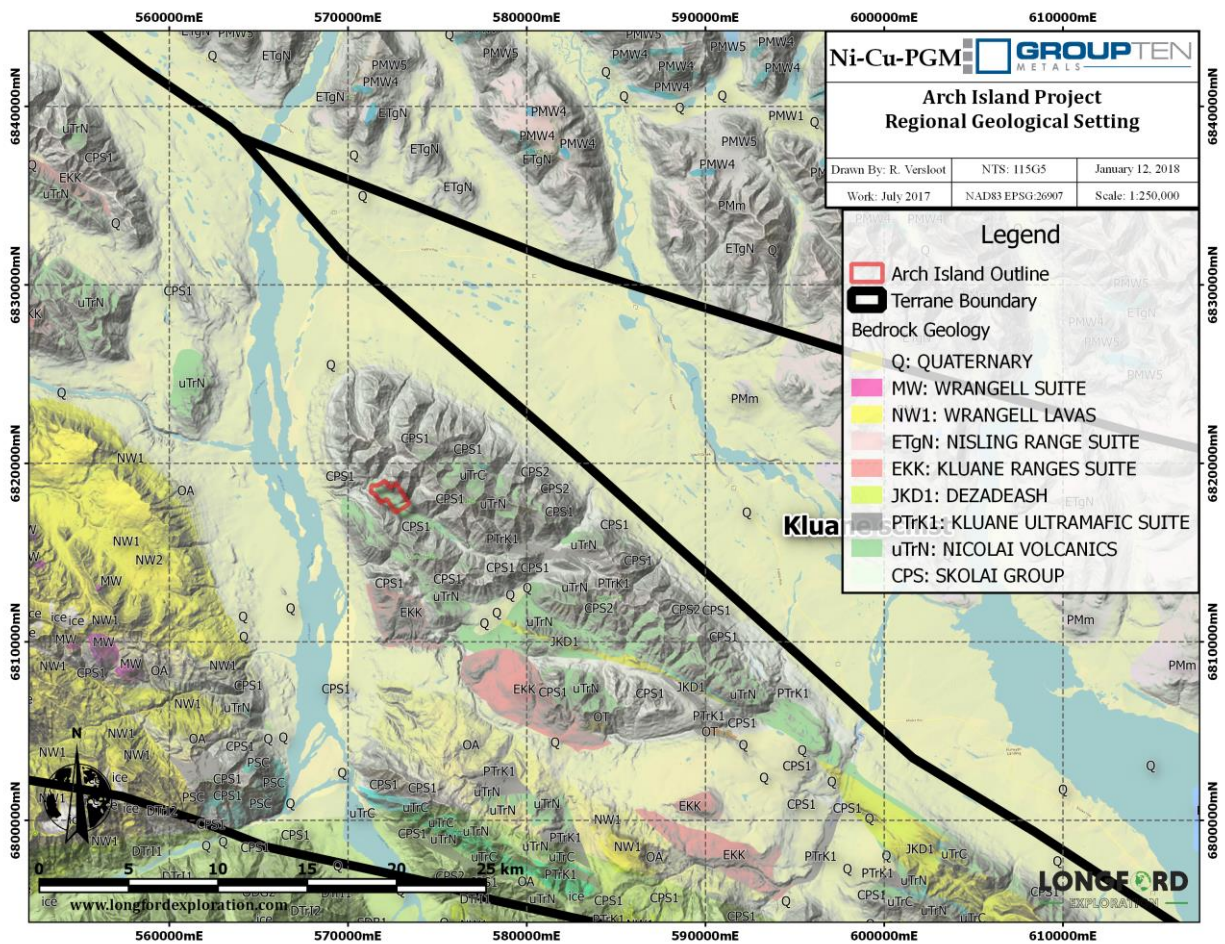


Figure 6.1 Arch Island regional geological setting.

The Hasen Creek Formation consists of shale, cherty argillite, chert and siltstone grading up into limestone, conglomerate, greywacke and sandstone.

Sill-like gabbroic bodies of the Maple Creek Gabbro intrude the Hasen Creek Formation. They are generally found higher in the sequence than the ultramafic sills and may be feeders to the Nikolai volcanics. Maple Creek gabbros can be distinguished from Kluane gabbros because they do not grade into peridotite or dunite, can be finer grained and may display columnar jointing. They also are not associated with Ni-Cu-PGE mineralization.

The Nikolai Group is one of the more extensive units in the region. It consists of a thick pile (up to 1 km thick) of basalt flows and pillow lavas with local interbedded limestone, unconformably overlying the Hasen Creek formation. The likely sources of the Nikolai volcanics are magma chambers represented by the Kluane ultramafic sills and feeders represented by the Maple Creek Gabbro.

Other units of less relevance to the Catalyst property are found in the ultramafic belt and are described in the table of formations (Table 6.1) below.

Table 6.1 Table of formations (after James, 2016). Units and descriptions from the Yukon Geological Survey digital geology map (Open File 2016-1) with modifications from Hulbert, 1997.

Q – Quaternary	Unconsolidated alluvium, colluvium and glacial deposits.
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NW Miocene to Pliocene Wrangell Lavas	NW1 -Extensive volcanic unit, volumetrically significant but not associated with mineralization. Occur on the southwest side of Wrangellia overlapping onto the Alexander Terrane. Abundant west of the Donjek River and typically form piles 400-1000m thick. Mafic to felsic volcanic rock with NW2 – volcanic conglomerate.
MW Mid to late Miocene Wrangell Suite	Youngest intrusions in the area. Related to the Wrangell Lavas. Felsic to mafic composition.
OT Oligocene Tkope Suite	Homogeneous granite with lesser granodiorite, diorite and gabbro. Subvolcanic rhyolite, rhyodacite and dacite.
Kgd, Kd, Kg late Early Cretaceous Kluane Ranges Suite	Found along the length of the ultramafic belt but are more prevalent in the north. Medium to coarse-grained, biotite-hornblende granodiorite, quartz diorite, quartz monzonite and hornblende diorite. Minor diorite and gabbro.
uTrC upper Triassic Chitistone	Conformably overlies the Nikolai Group, varying in thickness from zero to several hundred metres. Argillaceous limestone and argillite; massive limestone, limestone breccia and well-bedded limestone, gypsum and anhydrite. (McCarthy, Chitistone and Nazina limestone)
uTrNv upper Triassic Nikolai formation	uTrN3 – thinly bedded grey limestone and argillite. uTrN2 – dark green to maroon amygdaloidal basalt and basaltic andesite flows, locally pyroxene and plagioclase phyrlic. (Nicolai Greenstone) uTrN1 – light to dark green volcanic breccia, pillow lava and basal conglomerate.
LTrK late Triassic Kluane Ultramafic Suite.	Preferentially intrudes at or near the Hasen Creek-Station Creek contact. LTrK1 - peridotite, dunite and clinopyroxenite, layered intrusions, locally with gabbroic chilled margins.(Kluane-type mafic-Ultramafics Gabbro-Diabase Sills) LTrK2 - Maple Creek gabbro. Fine to coarse grained diabase and gabbro sills and dykes. Intrudes the Skolai Group and locally the Kluane ultramafic suite.
PH lower Permian Skolai Group - Hasen Creek Fm.	PHp – fine-grained clastic rocks. Lower part contains volcanoclastics, rare basalts, rare chert beds and chert-pebble conglomerate. PHc – limestone, locally fossiliferous, massive to bedded.
PSv Mississippian to Pennsylvanian Skolai Group- Station Creek Fm.	PSv-undifferentiated Skolai Gp; includes Hasen and Station Creek formations PSvb - Dark green basalt flows, pillows, pillow breccia, local magnetite-rich jasper. PSvt – bedded to massive chert, tuff PSv – interbedded volcanic breccia, volcanoclastics; minor basalt flow. PSvt – laminated volcanic tuff and volcanoclastic siltstone.

6.2 Regional Mineralization

There are four main types of Ni-Cu-PGE mineralization in the Kluane Ultramafic Belt found in all the mineralized sills from southeast Alaska to northern B.C. (Hulbert, 1997):

1. Basal accumulations of massive sulphides
2. Disseminated sulphides at the gabbro-ultramafic contact in each intrusion
3. PGE and Au rich zones associated with hydrothermal quartz-carbonate alteration at the edges of the sills and extending into the country rock.
4. Disseminated and lesser net textured or massive sulphides in the ultramafic core of each sill.

Two other types of mineralization have a limited range (Hulbert, 1997):

1. Skarn ores developed in Permian carbonates at Wellgreen.
2. Ni-rich ores within the footwall in the White River sill.

The most common sulphide minerals are pyrrhotite, pyrite, pentlandite and chalcopyrite; the common oxide minerals are magnetite and ilmenite. Figure 6.2 below illustrates a typical, simplified ultramafic sill. The best known deposit and the sole producer in the belt is Wellgreen Platinum's Wellgreen Deposit (Minfile 115G024). At Wellgreen the platinum group metals combine with As, Sb, Te, Bi, Ni, S, Co and Fe to form minerals and alloys. Sperrylite (PtAs₂) and Sudburyite (PdSb) are two of the more abundant minerals (Hulbert, 1997).

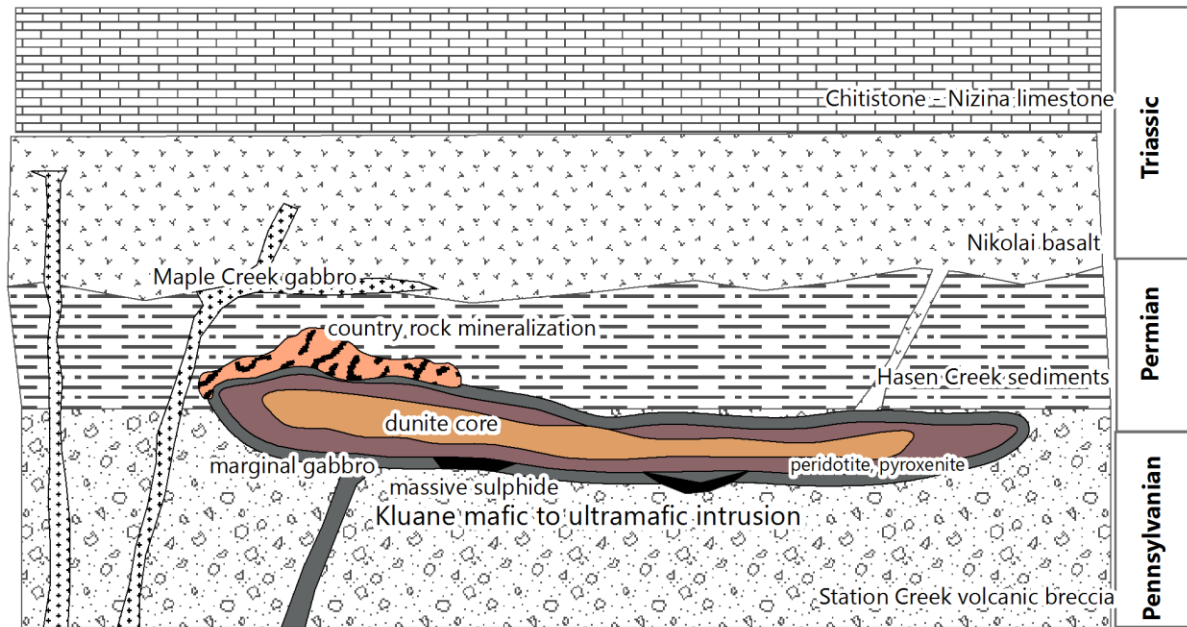


Figure 6.2 Deposit model for the Kluane Belt (modified from Hulbert, 1997)

6.3 Property Geology

On the Arch Island property, the oldest units are the Permian Skolai Group consisting of Station Creek volcanics overlain by Hasen Creek sediments and Triassic Nikolai mafic volcanics.

Locally the oldest unit, the Station Creek Formation consists of augite basaltic and andesitic volcanic flows that are succeeded upwards by fine to medium grained tuff (Carne, 2003). Volcanic agglomerate and breccia are locally present and discontinuous beds of argillite and limestone occur throughout. The upper portion of the formation is transitional with overlying Hasen Creek Formation with the contact informally put at the cessation of pyroclastic deposition (Campbell, 1981). Sedimentary and volcanic textures suggest a restricted marine basin as the environment of deposition for the Station Creek Formation.

The Hasen Creek Formation consists of a fine grained clastic lower member composed of grey to black shale, cherty argillite, chert and siltstone overlain by argillaceous limestone and massive buff-coloured bioclastic limestone containing narrow beds of reddish-brown conglomerate, greywacke and sandstone. Thin basaltic flows, breccia and tuff are locally present.

The Nikolai Assemblage basalt flows can be divided into: fine diabasic-textured flows, porphyritic flows with or without amygdules, and very fine-grained amygdaloidal lava flows (Carne, 2003). Phenocrysts include plagioclase, augite, olivine and hornblende in a groundmass of plagioclase, augite, magnetite, ilmenite and volcanic glass.

7 2017 Work Program

7.1 Bark Sampling

A one day bark sampling program was carried out over the property on July 17, 2017. A total of 68 samples were collected and submitted to Acme Labs in Whitehorse for aqua regia digestion ICP-MS analysis. Samples were collected at 50m intervals on lines 100m apart by scraping the dry bark into paper sample bags.

The survey covered the inferred contact between the Hasen Creek formation and the Upper Triassic Nikolai volcanic formation which is poorly exposed and thought to be favourable for Ni and PGE mineralization as it lies on trend with the Wellgreen deposit. The number of black spruce available for sampling diminished with increasing elevation though this only affected the 1-2 northeastern most planned sample sites per line.

Results show generally higher Ni values associated with the Nikolai volcanics (Figure 7.1). Results for Pt and Pd were below the detection limit.

7.2 Geophysical Interpretation

The reprocessing of historic aeromagnetic data in 2017 shows the Arch Island project as being on trend with the Wellgreen project (Figure 7.2). This suggests that the favourable geology for mineralization present at Wellgreen may continue to the Arch Island project and be hidden under quaternary cover.

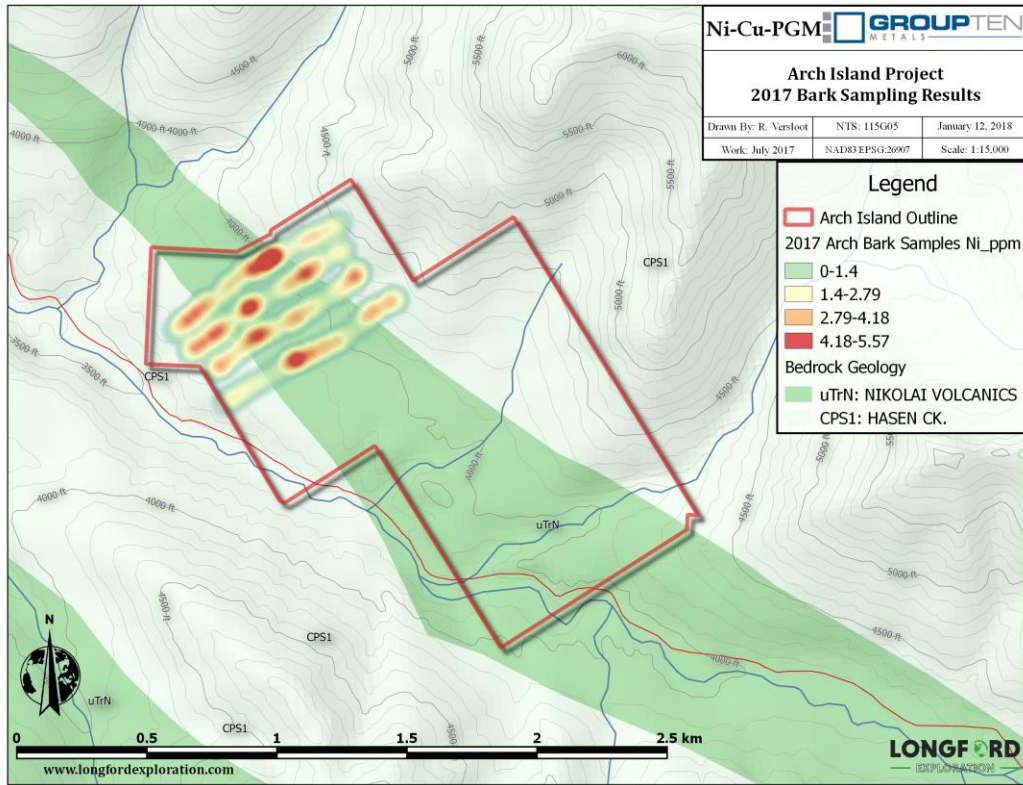


Figure 7.1 2017 Arch Island bark sampling results for Ni.

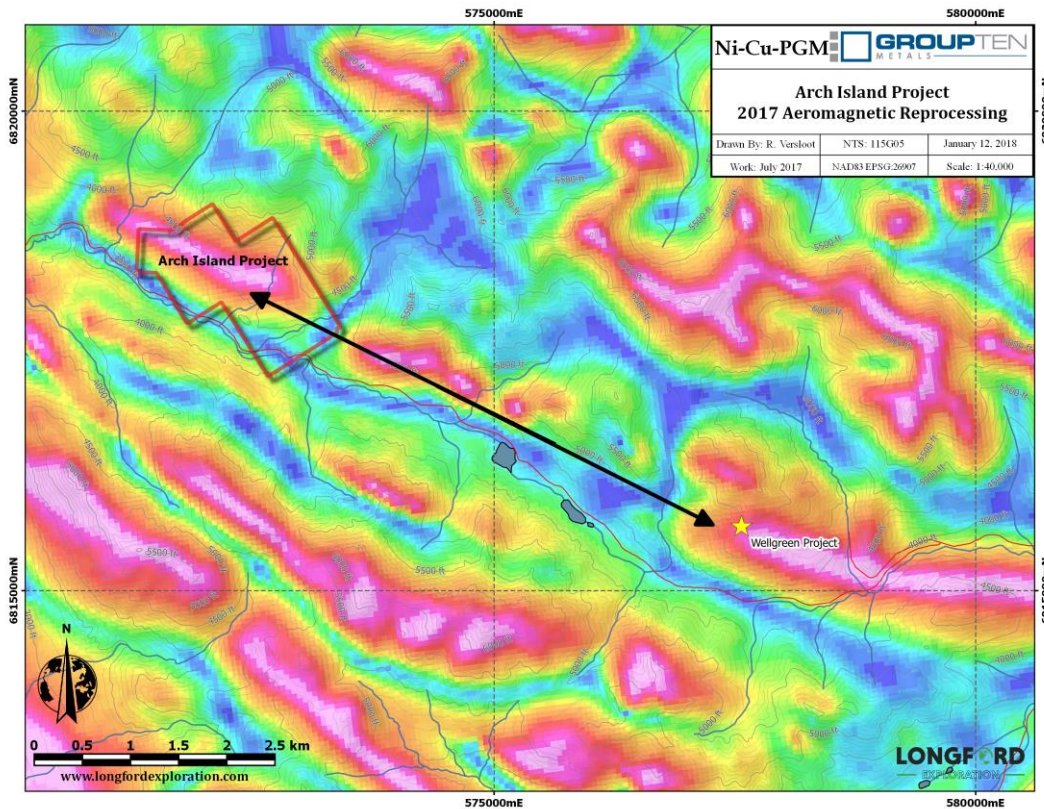


Figure 7.2 2017 aeromagnetic reprocessing showing trend with Wellgreen project.

8 Conclusions and Recommendations

The 2017 bark sampling program was successful in proving that geochemical sampling of bark from black spruce can be used as a potential exploration method in covered terrains for this region of the Yukon. Coupled with the recently re-processed aeromagnetic data showing a trend from the nearby Wellgreen project, a compelling case can be made for the potential of the Arch Island project to host Ni-PGE mineralization.

A followup program of further bark sampling across the property is recommended as part of the next phase. Soil sampling should also be tested on the property on the slopes away from the swampier areas. Finally ground geophysics should also be evaluated as a potential method to better define the contact between the Hasen Creek and Nikolai units.

9 References

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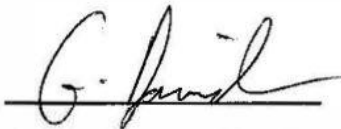
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10 Statement of Qualifications

I, Graham Davidson, with business address at 53 Grandin Woods, St. Albert, Alberta T8N 2Y4 hereby certify that:

- I am a practising Geologist, resident in St. Albert, Alberta;
- I am a member in good standing with Association of Professional Engineers, Geologists and Geophysicists of Alberta (# 42308);
- I hold a Bachelor of Science (Honours) degree in Geology (1982) from the University of Western Ontario;
- I have practiced my profession as a geologist since graduation;
- I have no direct or indirect interest in the Arch Island Project, which is the subject of this report.
- I have based this report on:
 - Field work conducted by exploration contractors under my direct supervision
 - Historical research into past operations on and adjacent to the subject claims
- I consent to the use of this report for any Filing Statement, Statement of Material Facts, or support document.



Graham Davidson P.Geol.



APPENDIX A: Statement of Costs

DATE: January 19, 2018



SEND TO:

Group Ten Metals
 #814 - 675 West Hastings Street
 Vancouver, BC
 V6B 1N2
 604 357-4790

Longford Exploration Services
 14501 Kidston Road
 Coldstream, BC
 Canada V1B1R7
 778-809-7009

Catalyst AR North 2017 Cost Summary

Personnel		Days	Rate	Line Total
Geologist-Versloot	July 17, 2017	1	\$ 500.00	\$ 500.00
Soil Sampler/assistant - Martinolich	July 17, 2017	1	\$ 300.00	\$ 300.00
		2	Cat. Total	\$ 800.00
Food and Lodging		Units	Rate	Line Total
Food and Groceries	\$40 per person	2	\$ 40.00	\$ 80.00
			Cat. Total	\$ 80.00
Transportation		Units/Days	Unit Price	Line Total
Truck	1 ton with safety and recovery gear	1	\$ 140.00	\$ 140.00
Fuel	per km for truck	20	\$ 0.55	\$ 11.00
			Cat. Total	\$ 151.00
Equipment Rentals		Units	Unit Price	Line Total
Electronics Kit	Radios, Sat phones, GPS, per man day	2	\$ 20.00	\$ 40.00
			Cat. Total	\$ 40.00
Consumable		Units	Unit Price	Line Total
Sample Bags		2	\$ 5.00	\$ 50.00
Flagging Tape		2	\$ 5.00	\$ 20.00
office consumables		2	\$ 3.00	\$ 20.00
			Cat. Total	\$ 90.00
Analytical		Units	Unit Price	Line Total
Analysis-Bark	VGMAS, VG104+PGM	68	\$ 30.40	\$ 2,067.20
			Cat. Total	\$ 2,067.20
Post Field		Units	Unit Price	Line Total
Assessment Report prep and work filing		1	\$ 1,500.00	\$ 1,500.00
			Cat. Total	\$ 1,500.00

Estimated Sub Total \$ 4,728.20
 Management 15% \$ 709.23
 SUB TOTAL \$ 5,437.43
 GST 5% \$ 271.87
 Total \$ 5,709.30

APPENDIX B: Assay Certificates



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: Longford Exploration Services Ltd.
6970 Napier Street
Burnaby British Columbia V5B 2C4 Canada

Submitted By: James Rogers
Receiving Lab: Canada-Whitehorse
Received: August 15, 2017
Report Date: September 05, 2017
Page: 1 of 4

CERTIFICATE OF ANALYSIS

WHI17000324.1

CLIENT JOB INFORMATION

Project: Catalyst-2
Shipment ID:
P.O. Number
Number of Samples: 68

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VGMAS	68	Plant Maceration to 1mm			VAN
VG101_PGM	68	Aqua Regia digestion ICP-MS analysis	1	Completed	VAN

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
PICKUP-RJT Client to Pickup Rejects

ADDITIONAL COMMENTS

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

Invoice To: Longford Exploration Services Ltd.
6970 Napier Street
Burnaby British Columbia V5B 2C4
Canada

CC:



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. Bureau Veritas 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.



BUREAU VERITAS MINERAL LABORATORIES
Canada

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Bureau Veritas Commodities Canada Ltd.

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Project: Catalyst-2
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CERTIFICATE OF ANALYSIS

WHI17000324.1

Method Analyte Unit MDL	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
	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	0.001	
1889663	Vegetation	0.25	7.27	0.55	83.3	27	3.4	0.93	64	0.175	1.1	0.07	0.7	0.20	34.3	0.04	0.10	<0.02	4	1.36	0.024
1889664	Vegetation	0.26	6.84	0.59	102.5	17	2.5	0.65	56	0.129	1.0	0.07	0.6	0.14	42.8	0.04	0.10	<0.02	3	1.48	0.025
1889665	Vegetation	0.25	7.02	0.59	96.0	35	3.3	0.75	95	0.173	1.0	0.08	<0.2	0.18	57.8	0.08	0.09	<0.02	4	1.37	0.023
1889666	Vegetation	0.28	7.77	0.51	94.2	17	3.3	1.02	103	0.182	1.0	0.07	0.5	0.21	50.8	0.04	0.10	<0.02	4	1.92	0.028
1889667	Vegetation	0.08	5.07	0.24	74.0	8	1.2	0.29	34	0.067	0.3	0.02	0.4	0.06	37.3	0.02	0.05	<0.02	<2	0.89	0.012
1889668	Vegetation	0.25	5.42	0.55	84.6	23	2.6	0.71	54	0.152	0.8	0.16	<0.2	0.18	54.2	0.03	0.08	<0.02	3	1.46	0.017
1889669	Vegetation	0.09	5.10	0.38	76.6	99	1.4	0.40	89	0.078	0.4	0.03	0.5	0.08	43.9	0.04	0.04	<0.02	<2	1.17	0.013
1889670	Vegetation	0.33	7.14	0.63	96.7	66	3.2	0.92	126	0.199	0.9	0.13	0.4	0.22	58.3	0.05	0.11	<0.02	4	1.53	0.023
1889671	Vegetation	0.14	5.10	0.28	61.0	30	1.3	0.44	46	0.088	0.5	0.03	0.5	0.09	32.8	0.03	0.05	<0.02	<2	1.21	0.012
1889672	Vegetation	0.14	4.47	0.29	104.1	31	1.3	0.42	50	0.082	0.3	0.02	0.4	0.09	45.3	0.02	0.06	<0.02	2	1.78	0.013
1889673	Vegetation	0.20	6.22	0.47	89.3	21	2.4	0.73	84	0.128	0.9	0.05	0.2	0.13	68.1	0.04	0.08	<0.02	3	1.84	0.017
1889674	Vegetation	0.25	6.23	0.51	75.7	22	2.8	0.75	48	0.150	0.6	0.06	0.3	0.16	52.3	0.04	0.09	<0.02	3	1.80	0.019
1889675	Vegetation	0.33	8.09	0.79	75.3	26	4.1	1.31	71	0.236	1.2	0.09	0.6	0.24	51.0	0.04	0.18	<0.02	4	1.48	0.030
1889676	Vegetation	0.15	6.03	0.33	128.6	13	1.8	0.55	112	0.095	0.5	0.02	0.4	0.08	62.0	0.04	0.09	<0.02	2	1.57	0.015
1889677	Vegetation	0.08	8.31	0.23	74.0	26	1.1	0.27	33	0.057	<0.1	0.02	0.3	0.06	36.6	0.01	0.03	<0.02	<2	0.79	0.016
1889678	Vegetation	0.22	7.72	0.52	80.1	24	2.6	0.85	77	0.155	0.8	0.05	<0.2	0.17	46.3	0.07	0.09	<0.02	3	1.63	0.026
1889679	Vegetation	0.17	8.23	0.55	128.0	40	2.2	0.55	49	0.116	0.4	0.08	0.2	0.16	78.7	0.04	0.08	<0.02	3	1.48	0.025
1889680	Vegetation	0.12	8.47	0.43	113.5	39	1.5	0.45	41	0.087	0.6	0.03	0.8	0.09	74.1	0.03	0.05	<0.02	2	1.48	0.023
1889681	Vegetation	0.16	8.20	0.43	96.1	45	2.1	0.57	63	0.122	0.8	0.04	0.2	0.12	76.3	0.03	0.07	<0.02	2	0.93	0.021
1889682	Vegetation	0.15	6.81	0.46	112.5	31	2.3	0.71	56	0.136	0.8	0.05	0.4	0.15	68.9	0.04	0.09	<0.02	3	1.65	0.020
1889683	Vegetation	0.06	5.74	0.28	123.0	31	1.1	0.34	66	0.057	0.2	0.02	0.4	0.05	52.0	0.03	0.04	<0.02	<2	1.26	0.012
1889684	Vegetation	0.15	7.40	0.41	91.8	27	1.9	0.67	62	0.118	0.5	0.03	0.3	0.16	67.5	0.03	0.07	<0.02	3	2.07	0.020
1889685	Vegetation	0.21	7.02	0.45	91.3	24	2.2	0.74	67	0.143	0.6	0.07	0.2	0.15	47.0	0.03	0.08	<0.02	3	1.92	0.018
1889686	Vegetation	0.36	6.65	0.69	74.4	29	3.5	1.11	51	0.213	1.0	0.07	0.4	0.21	47.0	0.04	0.12	<0.02	4	1.48	0.025
1889687	Vegetation	0.11	4.37	0.21	106.7	17	1.3	0.39	94	0.067	0.3	0.02	0.4	0.06	32.4	0.03	0.04	<0.02	<2	1.23	0.012
1889688	Vegetation	0.29	5.83	0.54	111.0	15	2.6	0.74	77	0.153	0.7	0.07	0.6	0.19	44.6	0.04	0.09	<0.02	3	1.58	0.016
1889689	Vegetation	0.12	5.03	0.36	70.3	76	1.6	0.56	72	0.091	0.4	0.04	0.7	0.11	45.3	0.04	0.06	<0.02	2	1.45	0.014
1889690	Vegetation	0.23	6.16	0.50	74.7	60	2.6	0.77	77	0.167	0.7	0.06	0.5	0.16	41.4	0.04	0.08	0.03	3	1.52	0.017
1889691	Vegetation	0.15	6.28	0.38	113.3	38	2.3	0.67	77	0.109	0.6	0.05	0.4	0.11	49.0	0.04	0.08	<0.02	2	1.44	0.015
1889692	Vegetation	0.26	6.55	0.35	109.0	41	2.5	0.75	70	0.138	0.7	0.05	<0.2	0.16	61.9	0.03	0.09	<0.02	3	1.37	0.017

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.



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: Longford Exploration Services Ltd.
6970 Napier Street
Burnaby British Columbia V5B 2C4 Canada

Project: Catalyst-2
Report Date: September 05, 2017

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CERTIFICATE OF ANALYSIS

WHI17000324.1

Method	Analyte	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt
Unit		ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	
MDL		0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.05	1	0.1	0.02	0.1	2	1	
1889663	Vegetation	1.02	4.1	0.123	200.9	65	11	0.07	0.004	0.22	0.1	0.6	<0.02	<0.05	47	<0.1	<0.02	0.2	<2	<1
1889664	Vegetation	0.75	3.0	0.114	223.6	49	15	0.06	0.005	0.17	<0.1	0.4	<0.02	<0.05	38	<0.1	<0.02	0.2	<2	<1
1889665	Vegetation	0.96	3.9	0.116	188.5	60	12	0.07	0.003	0.25	<0.1	0.4	<0.02	<0.05	71	<0.1	<0.02	0.2	<2	<1
1889666	Vegetation	1.07	4.2	0.126	174.2	69	9	0.08	0.004	0.17	0.1	0.5	<0.02	<0.05	57	0.1	<0.02	0.3	<2	<1
1889667	Vegetation	0.37	2.2	0.048	101.0	26	8	0.03	0.001	0.12	<0.1	0.4	<0.02	<0.05	23	<0.1	<0.02	<0.1	<2	<1
1889668	Vegetation	0.91	3.7	0.101	187.2	58	8	0.07	0.003	0.05	0.1	0.5	<0.02	<0.05	29	<0.1	<0.02	0.2	<2	<1
1889669	Vegetation	0.42	2.2	0.060	141.2	29	8	0.03	0.002	0.07	<0.1	0.4	<0.02	<0.05	22	<0.1	<0.02	<0.1	<2	<1
1889670	Vegetation	1.16	4.5	0.105	201.6	68	8	0.08	0.003	0.05	0.1	0.4	<0.02	<0.05	46	<0.1	<0.02	0.3	<2	<1
1889671	Vegetation	0.50	2.5	0.056	102.2	28	7	0.03	0.001	0.08	<0.1	0.3	<0.02	<0.05	33	<0.1	<0.02	0.1	<2	<1
1889672	Vegetation	0.48	2.5	0.071	151.8	25	11	0.03	0.001	0.07	0.1	0.3	<0.02	<0.05	27	<0.1	<0.02	<0.1	<2	<1
1889673	Vegetation	0.73	3.3	0.084	191.1	42	11	0.05	0.002	0.11	<0.1	0.4	<0.02	<0.05	33	<0.1	<0.02	0.2	<2	<1
1889674	Vegetation	0.85	3.7	0.102	135.1	55	9	0.06	0.003	0.09	<0.1	0.4	<0.02	<0.05	26	<0.1	<0.02	0.2	<2	<1
1889675	Vegetation	1.36	4.5	0.132	107.3	87	9	0.11	0.003	0.15	0.1	0.6	<0.02	<0.05	48	<0.1	<0.02	0.3	<2	<1
1889676	Vegetation	0.46	2.7	0.088	184.7	29	10	0.04	0.002	0.16	<0.1	0.4	<0.02	<0.05	60	<0.1	<0.02	<0.1	<2	<1
1889677	Vegetation	0.33	2.0	0.070	105.7	20	8	0.03	0.002	0.19	<0.1	0.3	<0.02	<0.05	23	<0.1	<0.02	<0.1	<2	<1
1889678	Vegetation	0.84	3.5	0.101	118.9	54	9	0.06	0.002	0.15	0.1	0.6	<0.02	<0.05	54	<0.1	<0.02	0.2	<2	<1
1889679	Vegetation	0.68	3.2	0.094	210.0	44	11	0.05	0.002	0.12	<0.1	0.4	<0.02	<0.05	50	<0.1	<0.02	0.1	<2	<1
1889680	Vegetation	0.51	2.6	0.077	163.8	32	13	0.04	0.002	0.12	<0.1	0.4	<0.02	<0.05	41	<0.1	<0.02	0.1	<2	<1
1889681	Vegetation	0.61	3.0	0.090	189.2	39	11	0.05	0.002	0.13	<0.1	0.3	<0.02	<0.05	57	<0.1	<0.02	0.2	<2	<1
1889682	Vegetation	0.80	3.1	0.091	187.8	51	11	0.05	0.003	0.14	<0.1	0.4	<0.02	<0.05	64	<0.1	<0.02	0.2	<2	<1
1889683	Vegetation	0.31	2.0	0.074	179.5	18	11	0.02	0.002	0.20	<0.1	0.3	<0.02	<0.05	27	<0.1	<0.02	<0.1	<2	<1
1889684	Vegetation	0.65	3.0	0.078	166.2	38	10	0.05	0.002	0.08	<0.1	0.3	<0.02	<0.05	82	<0.1	<0.02	0.1	<2	<1
1889685	Vegetation	0.83	3.5	0.089	137.1	52	10	0.06	0.003	0.13	0.1	0.5	<0.02	<0.05	54	<0.1	<0.02	0.2	<2	<1
1889686	Vegetation	1.17	4.6	0.103	136.4	74	9	0.08	0.003	0.10	0.3	0.5	<0.02	<0.05	53	<0.1	<0.02	0.3	<2	<1
1889687	Vegetation	0.35	2.4	0.065	163.9	24	10	0.03	0.002	0.10	<0.1	0.2	<0.02	<0.05	17	<0.1	<0.02	<0.1	<2	<1
1889688	Vegetation	0.92	3.6	0.092	135.8	53	10	0.06	0.002	0.06	0.1	0.4	<0.02	<0.05	48	<0.1	<0.02	0.2	<2	<1
1889689	Vegetation	0.53	2.5	0.074	152.5	33	6	0.04	0.002	0.06	<0.1	0.3	<0.02	<0.05	28	<0.1	<0.02	<0.1	<2	<1
1889690	Vegetation	0.91	3.2	0.096	142.0	50	6	0.06	0.003	0.07	0.2	0.5	<0.02	<0.05	29	<0.1	<0.02	0.2	<2	<1
1889691	Vegetation	0.61	3.3	0.086	169.1	35	11	0.04	0.002	0.11	0.1	0.4	<0.02	<0.05	29	0.1	<0.02	0.1	<2	<1
1889692	Vegetation	0.80	3.4	0.121	205.8	46	11	0.06	0.003	0.11	0.1	0.3	<0.02	<0.05	45	<0.1	<0.02	0.2	<2	<1



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

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Project: Catalyst-2
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Page: 3 of 4

Part: 1 of 2

CERTIFICATE OF ANALYSIS

WHI17000324.1

Method Analyte Unit MDL	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
	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	0.001	
1889693	Vegetation	0.27	7.06	0.45	90.8	30	2.5	0.69	60	0.156	0.7	0.05	0.2	0.18	38.1	0.04	0.08	<0.02	3	1.71	0.017
1889694	Vegetation	0.24	8.10	0.73	100.9	37	2.8	0.82	84	0.147	0.8	0.06	0.4	0.16	44.5	0.04	0.08	<0.02	3	1.76	0.018
1889801	Vegetation	0.16	5.45	1.05	70.2	18	2.1	0.63	66	0.105	0.6	0.08	0.3	0.20	53.3	0.05	0.08	<0.02	2	0.95	0.021
1889802	Vegetation	0.32	6.04	0.53	117.6	26	2.5	0.74	84	0.142	0.6	0.05	0.5	0.16	62.0	0.04	0.08	0.04	3	1.68	0.018
1889803	Vegetation	0.37	7.04	0.74	96.0	28	3.4	1.07	89	0.200	1.2	0.10	0.3	0.27	48.5	0.07	0.12	0.03	4	1.77	0.026
1889804	Vegetation	0.25	7.24	0.62	87.4	22	3.1	0.98	57	0.165	1.1	0.11	0.4	0.20	55.7	0.06	0.13	<0.02	4	1.71	0.027
1889805	Vegetation	0.14	10.30	0.42	120.5	36	1.9	0.59	66	0.104	0.5	0.06	0.4	0.12	56.5	0.04	0.06	<0.02	2	1.28	0.018
1889806	Vegetation	0.21	6.19	0.56	108.6	26	2.6	0.73	63	0.125	0.9	0.08	0.3	0.21	75.4	0.05	0.08	<0.02	3	1.56	0.016
1889807	Vegetation	0.13	6.11	0.36	149.4	39	1.7	0.58	79	0.103	0.6	0.04	0.2	0.10	45.0	0.03	0.06	<0.02	2	1.43	0.014
1889808	Vegetation	0.29	7.39	0.51	73.5	26	2.9	0.92	70	0.185	1.0	0.07	0.6	0.21	42.0	0.04	0.10	<0.02	4	0.94	0.019
1889809	Vegetation	0.16	6.54	0.74	80.5	26	2.0	0.66	96	0.097	0.7	0.04	<0.2	0.09	41.4	0.03	0.07	<0.02	2	1.40	0.016
1889810	Vegetation	0.15	6.70	0.58	81.8	24	2.5	0.84	96	0.126	1.0	0.05	0.4	0.13	43.8	0.04	0.07	<0.02	3	1.49	0.018
1889811	Vegetation	0.60	11.88	1.25	107.6	47	6.3	1.97	100	0.354	1.8	0.15	0.5	0.41	60.9	0.07	0.21	<0.02	7	1.92	0.038
1889812	Vegetation	0.18	8.18	0.36	108.9	55	2.1	0.63	58	0.116	0.7	0.03	0.2	0.11	48.1	0.03	0.08	<0.02	3	1.36	0.019
1889813	Vegetation	0.13	5.74	0.24	121.9	33	1.2	0.38	50	0.065	0.4	0.01	0.5	0.06	78.4	0.02	0.04	<0.02	<2	1.17	0.013
1889814	Vegetation	0.14	6.03	0.52	91.6	14	2.2	0.68	45	0.123	0.7	0.04	0.8	0.12	46.3	0.03	0.07	<0.02	2	1.23	0.019
1889815	Vegetation	0.10	7.33	0.34	84.4	37	2.0	0.59	67	0.109	0.7	0.04	0.6	0.10	72.6	0.04	0.06	<0.02	3	1.79	0.017
1889816	Vegetation	0.19	8.13	0.40	108.1	25	2.0	0.60	56	0.113	0.4	0.04	0.2	0.11	81.8	0.03	0.07	<0.02	2	2.17	0.024
1889817	Vegetation	0.13	7.43	0.32	59.6	25	1.8	0.49	40	0.093	0.5	0.03	0.2	0.12	36.8	0.02	0.05	<0.02	2	0.78	0.018
1889818	Vegetation	0.09	6.04	0.22	89.8	14	1.2	0.41	56	0.055	0.4	0.03	<0.2	0.04	52.1	0.05	0.04	<0.02	<2	1.23	0.012
1889819	Vegetation	0.13	7.18	0.49	110.4	41	1.4	0.41	63	0.073	0.5	0.04	<0.2	0.08	55.2	0.04	0.05	<0.02	<2	1.37	0.015
1889820	Vegetation	0.16	7.78	1.23	105.1	44	1.9	0.49	60	0.094	0.5	0.03	0.3	0.11	55.8	0.04	0.06	<0.02	2	1.35	0.015
1889821	Vegetation	0.18	7.53	0.45	80.6	32	2.2	0.68	49	0.131	0.6	0.04	<0.2	0.16	35.0	0.04	0.08	<0.02	3	1.31	0.027
1889822	Vegetation	0.28	7.46	0.49	111.3	34	3.2	0.90	82	0.163	0.8	0.06	<0.2	0.14	32.0	0.05	0.10	0.04	4	1.45	0.025
1889823	Vegetation	0.11	6.74	0.28	138.0	28	1.4	0.39	74	0.061	0.4	0.02	<0.2	0.06	38.7	0.02	0.04	0.03	2	1.47	0.017
1889824	Vegetation	0.06	4.06	0.13	114.6	19	0.8	0.29	97	0.033	0.3	0.02	<0.2	0.02	38.5	0.01	0.03	<0.02	<2	1.46	0.014
1889825	Vegetation	0.20	5.70	0.43	92.8	22	2.1	0.65	61	0.126	0.4	0.04	0.7	0.14	28.8	0.03	0.07	<0.02	3	1.34	0.014
1889826	Vegetation	0.21	5.83	0.46	94.7	17	2.5	0.68	64	0.146	0.7	0.06	0.4	0.12	55.4	0.03	0.09	<0.02	3	1.28	0.017
1889827	Vegetation	0.20	6.57	0.51	107.9	18	3.0	0.87	87	0.144	0.9	0.08	0.4	0.17	44.4	0.04	0.09	<0.02	3	1.38	0.019
1889828	Vegetation	0.28	8.51	0.54	84.6	18	3.2	0.86	53	0.174	0.9	0.07	<0.2	0.18	58.3	0.03	0.10	<0.02	4	1.63	0.019



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Project: Catalyst-2
Report Date: September 05, 2017

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CERTIFICATE OF ANALYSIS

WHI17000324.1

Method Analyte	VG101																			
	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt	
Unit	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	
MDL	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.05	1	0.1	0.02	0.1	2	1	
1889693	Vegetation	0.86	3.8	0.083	99.9	57	7	0.07	0.002	0.05	0.1	0.5	<0.02	<0.05	21	<0.1	<0.02	0.2	<2	<1
1889694	Vegetation	0.76	3.8	0.117	107.3	50	9	0.06	0.003	0.13	0.1	0.4	<0.02	<0.05	28	<0.1	<0.02	0.2	<2	<1
1889801	Vegetation	0.71	3.0	0.097	265.3	42	12	0.05	0.002	0.22	<0.1	0.5	<0.02	<0.05	36	<0.1	<0.02	0.1	<2	<1
1889802	Vegetation	0.87	3.8	0.094	248.3	50	8	0.06	0.003	0.07	0.2	0.5	<0.02	<0.05	37	<0.1	<0.02	0.2	<2	<1
1889803	Vegetation	1.20	4.7	0.123	167.2	78	9	0.09	0.004	0.09	0.2	0.5	<0.02	0.05	51	<0.1	<0.02	0.3	<2	<1
1889804	Vegetation	1.19	4.1	0.123	205.1	66	11	0.07	0.003	0.13	0.1	0.5	<0.02	<0.05	96	<0.1	<0.02	0.2	<2	<1
1889805	Vegetation	0.65	2.6	0.097	126.0	38	10	0.04	0.002	0.37	<0.1	0.3	<0.02	<0.05	37	<0.1	<0.02	0.1	<2	<1
1889806	Vegetation	0.82	3.6	0.091	248.5	49	9	0.05	0.003	0.09	0.1	0.4	<0.02	<0.05	54	<0.1	<0.02	0.1	<2	<1
1889807	Vegetation	0.59	2.8	0.081	183.1	34	10	0.04	0.002	0.08	<0.1	0.3	<0.02	<0.05	41	<0.1	<0.02	0.1	<2	<1
1889808	Vegetation	1.01	3.9	0.102	167.3	66	9	0.07	0.003	0.08	0.2	0.6	<0.02	<0.05	51	<0.1	<0.02	0.2	<2	<1
1889809	Vegetation	0.56	2.3	0.101	128.0	32	11	0.04	0.003	0.19	<0.1	0.3	<0.02	<0.05	19	<0.1	<0.02	0.1	<2	<1
1889810	Vegetation	0.67	2.8	0.109	129.0	46	11	0.05	0.003	0.20	<0.1	0.4	<0.02	<0.05	35	<0.1	<0.02	0.2	<2	<1
1889811	Vegetation	2.21	7.3	0.196	191.2	140	10	0.16	0.005	0.12	0.3	0.8	<0.02	<0.05	83	0.2	<0.02	0.5	<2	<1
1889812	Vegetation	0.65	3.2	0.094	144.5	42	10	0.05	0.002	0.15	0.1	0.4	<0.02	<0.05	74	<0.1	<0.02	0.1	<2	<1
1889813	Vegetation	0.32	2.2	0.059	227.4	19	11	0.03	0.001	0.10	<0.1	0.2	<0.02	<0.05	41	<0.1	<0.02	<0.1	<2	<1
1889814	Vegetation	0.67	2.7	0.091	125.3	43	7	0.05	0.002	0.08	<0.1	0.4	<0.02	<0.05	70	<0.1	<0.02	0.2	<2	<1
1889815	Vegetation	0.59	2.8	0.072	211.1	37	10	0.05	0.002	0.11	<0.1	0.3	<0.02	<0.05	76	<0.1	<0.02	0.1	<2	<1
1889816	Vegetation	0.60	2.9	0.083	193.6	39	8	0.05	0.002	0.06	0.1	0.3	<0.02	<0.05	48	<0.1	<0.02	0.2	<2	<1
1889817	Vegetation	0.50	2.5	0.068	161.3	32	8	0.04	0.002	0.10	0.2	0.3	<0.02	<0.05	46	<0.1	<0.02	0.1	<2	<1
1889818	Vegetation	0.29	2.2	0.069	187.6	17	11	0.02	0.001	0.07	<0.1	0.4	<0.02	<0.05	40	<0.1	<0.02	<0.1	<2	<1
1889819	Vegetation	0.48	2.4	0.075	161.9	24	10	0.03	0.001	0.21	0.5	0.3	<0.02	<0.05	38	<0.1	<0.02	<0.1	<2	<1
1889820	Vegetation	0.55	2.6	0.081	167.7	34	10	0.04	0.002	0.19	<0.1	0.3	<0.02	<0.05	41	<0.1	<0.02	0.1	<2	<1
1889821	Vegetation	0.77	3.0	0.093	118.5	46	10	0.06	0.002	0.20	<0.1	0.3	<0.02	<0.05	75	<0.1	<0.02	0.2	<2	<1
1889822	Vegetation	0.83	4.8	0.101	110.4	45	10	0.07	0.002	0.11	0.2	0.4	<0.02	<0.05	43	0.2	<0.02	0.2	<2	<1
1889823	Vegetation	0.33	2.4	0.085	130.4	17	13	0.02	0.002	0.19	<0.1	0.4	<0.02	<0.05	54	<0.1	<0.02	<0.1	<2	<1
1889824	Vegetation	0.15	2.0	0.057	177.5	9	11	0.01	0.002	0.19	<0.1	0.3	<0.02	<0.05	35	<0.1	<0.02	<0.1	<2	<1
1889825	Vegetation	0.71	3.1	0.083	119.9	46	9	0.05	0.002	0.09	0.1	0.3	<0.02	<0.05	42	0.1	<0.02	0.2	<2	<1
1889826	Vegetation	0.72	3.3	0.093	242.3	48	6	0.06	0.002	0.06	0.1	0.4	<0.02	<0.05	46	<0.1	<0.02	0.2	<2	<1
1889827	Vegetation	0.89	3.3	0.104	232.8	56	12	0.06	0.003	0.19	<0.1	0.5	<0.02	<0.05	125	<0.1	<0.02	0.2	<2	<1
1889828	Vegetation	1.03	4.1	0.103	208.7	69	9	0.07	0.003	0.09	0.2	0.4	<0.02	<0.05	38	<0.1	<0.02	0.2	<2	<1



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Project: Catalyst-2

Report Date: September 05, 2017

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CERTIFICATE OF ANALYSIS

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Method	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101
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	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02	0.02	2	0.01	0.001	
1889829	Vegetation	0.19	7.28	0.44	94.7	23	2.1	0.64	56	0.134	0.6	0.05	<0.2	0.16	54.1	0.04	0.08	<0.02	3	1.41	0.017
1889830	Vegetation	0.25	7.88	0.51	96.7	27	2.5	0.72	63	0.154	0.8	0.05	0.4	0.18	56.2	0.03	0.09	<0.02	4	1.52	0.021
1889831	Vegetation	0.16	4.17	0.25	75.1	20	1.3	0.35	45	0.076	0.4	0.02	<0.2	0.08	40.1	0.02	0.04	<0.02	2	1.33	0.010
1889832	Vegetation	0.13	5.04	0.39	65.9	10	1.4	0.43	46	0.086	0.4	0.04	0.2	0.11	47.9	0.03	0.06	<0.02	2	1.40	0.014
1889833	Vegetation	0.14	6.61	0.28	91.2	12	1.5	0.40	63	0.085	0.4	0.05	<0.2	0.08	39.8	0.02	0.06	<0.02	2	1.03	0.016
1889834	Vegetation	0.10	5.22	0.23	110.3	21	1.5	0.31	63	0.070	0.3	0.02	0.2	0.06	45.0	0.02	0.04	<0.02	<2	0.88	0.012
1889835	Vegetation	0.13	6.53	0.31	89.1	25	2.0	0.50	47	0.101	0.5	0.04	<0.2	0.11	49.8	0.03	0.06	<0.02	2	1.32	0.022
1889836	Vegetation	0.12	5.00	0.36	96.4	9	1.8	0.53	55	0.093	0.5	0.05	<0.2	0.16	46.6	0.03	0.06	<0.02	<2	1.33	0.016



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Project: Catalyst-2
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CERTIFICATE OF ANALYSIS

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Method	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt	
Unit	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	
MDL	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.05	1	0.1	0.02	0.1	2	1	
1889829	Vegetation	0.73	3.0	0.077	160.9	50	10	0.05	0.003	0.09	0.1	0.4	<0.02	<0.05	34	<0.1	<0.02	0.2	<2	<1
1889830	Vegetation	0.85	4.8	0.090	174.4	57	9	0.06	0.003	0.10	0.1	0.4	<0.02	<0.05	37	<0.1	<0.02	0.2	<2	<1
1889831	Vegetation	0.43	3.0	0.056	114.8	26	10	0.03	0.002	0.08	0.1	0.3	<0.02	<0.05	24	<0.1	<0.02	<0.1	<2	<1
1889832	Vegetation	0.50	2.5	0.063	113.0	30	9	0.03	0.002	0.07	<0.1	0.3	<0.02	<0.05	26	<0.1	<0.02	<0.1	<2	<1
1889833	Vegetation	0.43	2.6	0.070	144.1	33	11	0.03	0.002	0.25	<0.1	0.5	<0.02	<0.05	21	<0.1	<0.02	0.1	<2	<1
1889834	Vegetation	0.36	2.2	0.055	164.0	24	7	0.03	0.001	0.06	<0.1	0.3	<0.02	<0.05	20	<0.1	<0.02	<0.1	<2	<1
1889835	Vegetation	0.59	2.6	0.085	185.1	40	12	0.05	0.002	0.20	<0.1	0.4	<0.02	<0.05	30	<0.1	<0.02	0.1	<2	<1
1889836	Vegetation	0.57	2.3	0.101	156.7	37	14	0.04	0.003	0.38	<0.1	0.4	<0.02	<0.05	46	<0.1	<0.02	0.1	<2	<1



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Project: Catalyst-2
Report Date: September 05, 2017

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QUALITY CONTROL REPORT

WHI17000324.1

Method	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101
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	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02	0.02	2	0.01	0.001	
Pulp Duplicates																					
1889675	Vegetation	0.33	8.09	0.79	75.3	26	4.1	1.31	71	0.236	1.2	0.09	0.6	0.24	51.0	0.04	0.18	<0.02	4	1.48	0.030
REP 1889675	QC	0.37	7.58	0.78	73.1	25	4.1	1.25	71	0.232	1.1	0.09	0.6	0.26	51.4	0.05	0.13	<0.02	5	1.46	0.033
1889815	Vegetation	0.10	7.33	0.34	84.4	37	2.0	0.59	67	0.109	0.7	0.04	0.6	0.10	72.6	0.04	0.06	<0.02	3	1.79	0.017
REP 1889815	QC	0.10	6.92	0.32	84.3	38	1.6	0.54	70	0.101	0.6	0.04	0.3	0.12	70.5	0.04	0.05	<0.02	2	1.85	0.016
1889822	Vegetation	0.28	7.46	0.49	111.3	34	3.2	0.90	82	0.163	0.8	0.06	<0.2	0.14	32.0	0.05	0.10	0.04	4	1.45	0.025
REP 1889822	QC	0.29	7.63	0.47	112.3	33	3.0	0.86	83	0.160	0.9	0.07	<0.2	0.15	32.3	0.05	0.10	0.04	4	1.50	0.025
Reference Materials																					
STD CDV-1	Standard	0.19	8.63	0.99	25.1	10	6.4	2.04	413	0.284	1.4	0.16	1.8	0.65	119.9	0.04	0.03	<0.02	9	2.00	0.041
STD CDV-1	Standard	0.17	8.99	0.97	23.7	9	6.3	1.92	401	0.263	1.2	0.16	2.1	0.64	117.5	0.05	0.03	<0.02	9	2.07	0.039
STD CDV-1	Standard	0.18	8.31	0.92	23.8	12	6.0	1.87	380	0.246	1.2	0.16	3.7	0.60	112.4	0.04	0.04	0.04	9	2.01	0.036
STD V16	Standard	2.00	7.16	2.83	39.6	36	7.8	1.16	703	0.405	1.6	<0.01	0.9	<0.01	11.5	0.10	0.06	<0.02	161	0.34	0.047
STD V16	Standard	1.60	7.27	2.90	41.1	34	8.2	1.24	696	0.465	1.7	<0.01	1.0	<0.01	11.6	0.08	0.06	<0.02	171	0.32	0.047
STD V16	Standard	1.05	5.80	3.59	40.4	35	6.6	0.96	686	0.383	1.5	<0.01	0.9	<0.01	11.2	0.08	0.07	0.04	133	0.32	0.047
STD V16 Expected		1.6	6.69	2.8	39.2	40	7.48	1.11	720	0.4035	1.6		1		11	0.086	0.07			0.3	0.0488
STD CDV-1 Expected		0.2	8.61	1	23.3	9	6.4	2	385	0.256	1.3	0.17	2.3	0.61	112	0.04	0.03	0.02	8.7	1.94	0.038
FLOUR	Blank	0.59	3.57	0.03	30.1	<2	0.2	<0.01	34	0.005	<0.1	<0.01	0.4	<0.01	1.2	0.03	<0.02	0.08	<2	0.04	0.338
BLK	Blank	<0.01	<0.01	<0.01	0.5	<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	<0.001
FLOUR	Blank	0.64	3.77	0.03	30.9	<2	0.2	0.02	34	0.004	<0.1	<0.01	<0.2	<0.01	1.5	0.03	<0.02	0.08	<2	0.03	0.350
BLK	Blank	<0.01	<0.01	<0.01	0.3	<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	<0.001
FLOUR	Blank	0.64	3.91	0.02	35.0	<2	0.3	0.04	38	0.005	<0.1	<0.01	<0.2	<0.01	1.6	0.03	<0.02	0.07	<2	0.04	0.438
BLK	Blank	<0.01	<0.01	0.04	<0.1	<2	<0.1	0.01	<1	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	0.03	<2	<0.01	0.001
Prep Wash																					
RICE-1	Prep Blank	0.44	1.99	0.07	20.4	4	0.2	0.01	10	<0.001	0.1	<0.01	0.4	<0.01	<0.5	<0.01	<0.02	0.03	<2	<0.01	0.079
RICE-1	Prep Blank	0.38	1.38	0.03	18.4	4	0.2	0.03	9	<0.001	<0.1	<0.01	0.6	<0.01	<0.5	<0.01	<0.02	0.02	<2	<0.01	0.066



QUALITY CONTROL REPORT

WHI17000324.1

Method		VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101	VG101
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt
Unit		ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb
MDL		0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.05	1	0.1	0.02	0.1	2	1
Pulp Duplicates																				
1889675	Vegetation	1.36	4.5	0.132	107.3	87	9	0.11	0.003	0.15	0.1	0.6	<0.02	<0.05	48	<0.1	<0.02	0.3	<2	<1
REP 1889675	QC	1.28	4.8	0.127	110.6	87	8	0.11	0.003	0.14	0.1	0.6	<0.02	<0.05	53	<0.1	<0.02	0.3	<2	<1
1889815	Vegetation	0.59	2.8	0.072	211.1	37	10	0.05	0.002	0.11	<0.1	0.3	<0.02	<0.05	76	<0.1	<0.02	0.1	<2	<1
REP 1889815	QC	0.61	2.5	0.068	213.7	37	10	0.05	0.002	0.11	<0.1	0.3	<0.02	<0.05	70	<0.1	<0.02	0.1	<2	<1
1889822	Vegetation	0.83	4.8	0.101	110.4	45	10	0.07	0.002	0.11	0.2	0.4	<0.02	<0.05	43	0.2	<0.02	0.2	<2	<1
REP 1889822	QC	0.77	4.2	0.105	108.2	47	10	0.07	0.002	0.12	0.2	0.4	<0.02	<0.05	47	<0.1	<0.02	0.2	<2	<1
Reference Materials																				
STD CDV-1	Standard	2.57	12.7	0.132	10.2	29	19	0.14	0.005	0.18	<0.1	0.9	<0.02	0.11	46	0.2	<0.02	0.4	<2	<1
STD CDV-1	Standard	2.45	12.1	0.127	10.1	31	18	0.17	0.005	0.18	<0.1	0.8	<0.02	0.07	45	<0.1	<0.02	0.5	<2	<1
STD CDV-1	Standard	2.40	12.6	0.127	9.6	27	19	0.13	0.005	0.16	<0.1	0.8	<0.02	0.11	39	0.2	<0.02	0.5	<2	<1
STD V16	Standard	0.03	329.5	0.060	2.1	10	7	0.05	0.001	0.23	<0.1	0.3	<0.02	<0.05	45	<0.1	<0.02	<0.1	<2	<1
STD V16	Standard	0.03	347.9	0.058	3.0	11	8	0.05	0.001	0.21	<0.1	0.3	<0.02	<0.05	47	<0.1	<0.02	<0.1	<2	<1
STD V16	Standard	0.03	272.8	0.057	1.8	10	8	0.05	0.001	0.19	<0.1	0.3	<0.02	<0.05	49	<0.1	<0.02	<0.1	<2	<1
STD V16 Expected		0.05	323.1	0.0525	2.2	10.9	5	0.0454	0.0015	0.22				0.0232	50			0.16		
STD CDV-1 Expected		2.31	12.1	0.12	9	30	12	0.15	0.0052	0.18		0.8		0.1	41	0.3		0.5		
FLOUR	Blank	<0.01	1.2	0.134	3.2	4	<1	<0.01	<0.001	0.32	<0.1	0.5	<0.02	0.20	1	0.7	<0.02	<0.1	<2	<1
BLK	Blank	<0.01	0.1	<0.001	0.2	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.05	<1	<0.1	<0.02	<0.1	<2	<1
FLOUR	Blank	<0.01	1.3	0.156	3.6	5	2	<0.01	<0.001	0.35	<0.1	0.3	<0.02	0.20	<1	0.6	<0.02	<0.1	<2	<1
BLK	Blank	<0.01	0.1	<0.001	0.2	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.05	<1	<0.1	<0.02	<0.1	<2	<1
FLOUR	Blank	<0.01	1.5	0.160	3.6	6	<1	<0.01	0.001	0.37	<0.1	0.3	<0.02	0.19	<1	0.7	<0.02	<0.1	<2	<1
BLK	Blank	<0.01	0.3	<0.001	0.1	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.05	<1	<0.1	<0.02	<0.1	<2	<1
Prep Wash																				
RICE-1	Prep Blank	<0.01	1.4	0.019	0.5	<1	<1	<0.01	<0.001	0.07	<0.1	0.3	<0.02	<0.05	8	<0.1	<0.02	<0.1	<2	<1
RICE-1	Prep Blank	<0.01	1.5	0.011	0.4	<1	<1	<0.01	<0.001	0.05	<0.1	0.3	<0.02	<0.05	5	<0.1	<0.02	<0.1	<2	<1