Ontario

We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l’accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d’aide à la communication, veuillez nous contacter.

NTS Sheet 031M05
Larker Lake Mining Division, Timiskaming District
Coleman and Gillies Limit Townships
Ontario, Canada

2018 ASSESSMENT REPORT ON THE HECTOR PROPERTY

Work Completed:
Ground Magnetic Geophysical Survey
Soil and Rock Geochemical Surveys
Diamond Drilling

Approximate Property Location:
596000E, 5243000N
(UTM NAD83 Zone 17N)

Prepared For: Cruz Cobalt Corp.
1470 – 701 West Georgia Street
Vancouver, British Columbia
PO Box 10112 Pacific Centre
V7Y 1C6

Prepared By: APEX Geoscience Ltd.
410-800 West Pender Street
Vancouver, British Columbia
V6C 2V6

Kristopher J. Raffle, B.Sc., P.Geo.
Mohamad Asmail, M.Sc.
Robyn Christian, B.Sc., G.I.T.

Effective Date: April 24, 2019

Contents

Tables

Figures

Appendices

1 Summary

This Assessment Report (the “Report) on the Hector Property (the “Property”) has been prepared for Cruz Cobalt Corp. (“Cruz Cobalt”) by APEX Geoscience Ltd. (“APEX”). The Hector Property comprises 126 contiguous mining claims covering an area of 2,243 hectares (ha), and is located within the Cobalt Embayment of the historic Cobalt Mining Camp, Coleman and Gillies Limit Townships, Larder Lake Mining Division, Timiskaming District, Ontario, Canada. The Property is approximately 500 kilometres (km) north of Toronto, 150 km north of North Bay, and 6 km southwest of the town of Cobalt, Ontario. Cruz Cobalt acquired the project in August 2016 under a share purchase agreement with Cobalt Locaters Inc. and currently holds 100% ownership of the 126 mining claims, which are active and in good standing.

In 2018, APEX was retained by Cruz Cobalt as consultants to complete an exploration program at the Hector Property comprising a ground geophysical survey, a soil and rock geochemical survey and an exploration diamond drilling program. This Report presents the results of the 2018 work and summarizes the results of a soil geochemical survey that was completed at the Property in 2017 by Jean Marc Gaudreau.

Since the first discovery of cobalt in 1903 by J. McKinley, E. Darragh and F. Larose during the building of the railroad into the farming area of New Liskeard, Ontario, the area has been known as the Cobalt Mining Camp, the most prolific cobalt – silver camp in North America for decades. The total estimated production is over 19 million pounds of cobalt and over 450 million ounces of silver. Recent increasing demand for cobalt has renewed interest in exploration in this historic mining camp.

Historically, the Property has been explored since the initial discovery of silver and cobalt in the area with several geophysical, geochemical, prospecting and drilling programs. Several mineral occurrences were identified, and artisanal mining during the 1920s and 1930s produced multiple shafts, pits and trenches, such as the Hector Silver Mine shaft and the James Dolan Property, which each produced approximately 5 tons of cobalt with grades up to 1.7% cobalt. Other underexplored mineral occurrences include the Williamson, Brewster, Kevin Lake, Villa and South Keora occurrences. The South Keora occurrence returned grades up to 12-15% cobalt and 1000 oz/ton silver.

The regional geologic framework comprises the Archean basement (metavolcanics and metasedimentary rocks) that are intruded by synvolcanic to post-tectonic Archean plutonic rocks. These are unconformably overlain by Paleoproterozoic rocks of the Huronian Supergroup, which formed two successor basins, the “Porcupine-type” and “Timiskaming-type” basins. These rocks form the Cobalt Embayment, a north-trending graben interpreted to reflect the setting of a paleo basin in a continental rift system. Paleoproterozoic mafic dyke swarms, the Metachewan, the Nipissing diabase, the Sudbury and the Abitibi dykes, have intruded both Archean and Paleoprotozoic rocks. Within the Cobalt mining camp, the Nipissing diabase is spatially associated with cobalt – silver mineralization. Known historical cobalt – silver deposits are hosted proximal to

the Huronian – Archean unconformity and within and/or adjacent to the Nipissing diabase contacts.

Locally, the Property is largely intruded by the Nipissing diabase. The intrusion of the diabase may have acted as a heat source forming a large-scale hydrothermal system with metal-bearing, polymetallic fluids infiltrating the regional unconformity and fault structures, forming rich-polymetallic veins with a copper, cobalt, arsenic, and silver mineral assemblage. On a regional scale, the unconformable contact of the Paleoproterozoic Huronian supergroup with the diabase has significant potential for mineralization; however, metal-rich veins are only observed in fractures, joints and localized fault networks at the Property.

Exploration at the Hector Property during 2017 and 2018 comprised ground geophysics, soil and rock geochemical sampling, and diamond drilling. Jean Marc Gaudreau collected 428 soil geochemical samples between October 25th and November 3rd, 2017. The following year, APEX completed an exploration program in three phases between July 24th and December 19th, 2018: (Phase 1) a ground magnetometer geophysical survey from July 25th to August 2nd and a rock/soil geochemical survey from July 31st to August 10th, 2018; (Phase 2) follow up rock sampling on October 2nd and 3rd, 2018; and (Phase 3) a diamond drilling program from October 29th to December 19th, 2018. The total cost to complete the 2017 and 2018 exploration programs was $337,200.93.

Geophysical results defined local structural features and magnetic anomalies that may have exploration potential. The ground magnetics over the northeastern section of the Hector Property identified two magnetic anomalies west of Bass Lake:

1) A strong, arcuate, NNW-trending magnetic high anomaly at the center of the Nipissing diabase. The anomaly is most pronounced near the lower contact of the Nipissing diabase to the southeast and covers the historical Hector Silver Mine shaft (Hector Anomaly) and Gilles East
2) A smaller NNW-trending anomaly to the west, proximal to the top of the Nipissing sill and covering the northern part of the Gillies West anomaly

These anomalies may represent stronger magnetic phases of the diabase complex that features linear, NW/SE-trending magnetic highs interrupted by NW/SE magnetic lows that are interpreted as structural jointing and/or localized offsets (faults).

The 2017 soil campaign targeted the Nipissing diabase over the northeastern block of the Hector Property. The survey defined several NW/SE-trending geochemical anomalies:

1) Strong cobalt anomalies at Gilles West, at the west shoreline of Bass Lake and proximal to the historical Hector Silver Mine shaft
2) A moderate copper anomaly at Gilles East
3) Scattered NW/SE-trending silver anomalies within the survey area

The 2018 soil campaign also defined several anomalous metal values including:

1) Strong cobalt anomalies at the Hector, Gillies East and Gilles West anomalies, with values greater than 20 ppm Co, 25 ppm Co and 98 ppm Co, respectively
2) Strong copper anomalies at Gillies East, north of Gillies East and at Gillies West
3) Strong silver anomalies at Gillies East, north of Gillies East and Gillies West

Collectively, the 2017 and 2018 soil geochemical surveys broadly coincide and define:

1) Strong cobalt anomalies over Hector and Gilles West
2) Moderate copper anomalies over Gilles East and north of Gillies East
3) Strong silver anomalies at Gillies West and north of Gillies East

The 2017 and 2018 soil results correlate with strong positive magnetic anomalies over the historical Hector Silver Mine shaft, Gillies East and Gilles West anomalies. Rock geochemistry confirms mineralization at all geophysical and soil anomalies within the Property, and returned significant values of cobalt (2.02%), silver (13.1 g/t) and copper (0.107 %) at Gilles East. The 2017 and 2018 soil and rock anomalies broadly trend NW-SE, possibly related to narrow alteration halos striking NW-SE associated with localized structures and mineralized carbonate-chlorite-silica-potassium veins within the diabase. These structures act as conduits for mineralized fluids.

Diamond drilling focused on the 2017 and 2018 cobalt anomalies, targeting networks of mineralized veins at and/or near historical trenches and pits. Of the 10 diamond drill holes completed, four holes (394.7 m) were drilled at the Hector Anomaly, intersecting mineralization in an upper and lower zone. Six holes were drilled at the Gilles East 1 (263.7 m) and Gilles East 2 (184.5 m) anomalies. Drill results returned values up to 310 ppm cobalt at the Hector Anomaly, and up to 1430 copper and 1.3 ppm silver at Gilles East 2. Anomalous cobalt and copper values are associated with potassic ± carbonate ± chlorite ± silica ± erythrite alteration and or veining ± malachite staining with pyrite-chalcopyrite-cobalt arsenate sulphides.

Results to date indicate that further work is warranted at the Hector Property. Detailed geological mapping and geochemical surveys should be completed, focusing on the unconformable contacts of the Archean and Paleoproterozoic country rocks with the Nipissing diabase, previously identified geochemical and geophysical anomalies, and along strike of historical mineral occurrences. Geophysical and geochemical surveys should also be completed at the underexplored South Keora occurrence. Follow-up exploration drilling could be completed should any high-priority targets be identified.

For 2019, APEX recommends a 30-day exploration program comprising geological mapping, ground magnetics, and rock and soil geochemical surveys. The program could be completed by 4 APEX personnel at a total estimated cost of $113,025.

2 Introduction

This Assessment Report (the "Report") is written for the Hector Property (the "Property"), also known as the Gillies Property, on behalf of Cruz Cobalt Corp. ("Cruz Cobalt"). The Property is comprised of 126 mining claims covering an area of 2,243 hectares (ha) and is located within the Coleman and Gillies Limit Townships, Larder Lake Mining Division, Timiskaming District, Ontario, Canada, approximately 500 kilometres (km) north of Toronto, and 6 km southwest of Cobalt, Ontario (Figure 2.1). Cruz Cobalt acquired the Property in August 2016 under a share purchase agreement with Cobalt Locaters Inc. and currently holds 100% ownership for the 126 mining claims, which are active and in good standing.

APEX Geoscience Ltd. ("APEX") was retained by Cruz Cobalt during 2018 as consultants to execute an exploration program and complete an assessment report specific to the Hector Property. This Report presents the results of a 2017 soil geochemical survey and the 2018 exploration program covering the northeast corner of the Hector claim block.

The 2017 soil geochemical survey was completed by Jean Marc Gaudreau, between October 25th and November 3rd, 2017. A total of 428 soil samples were collected from the northeast corner of the Hector claim block. The 2018 exploration program comprised a 23 line-km ground magnetometer survey, soil and rock geochemical sampling and diamond drilling. A total of 203 soil and 43 rock samples were collected, and 10 drill holes were completed, totaling 843 m. The 2018 program was completed in three phases between July 24th and December 19th, 2018. The total cost to complete the 2017 and 2018 exploration programs was $337,200.93.

Mr. Kristopher Raffle, B.Sc., P.Geo., Principal of APEX, Mr. Mo Asmail, M.Sc., Project Geologist of APEX, and Ms. Robyn Christian, B.Sc., G.I.T., Geologist of APEX, are the authors of this report. Mr. Raffle supervised the 2018 exploration program and visited the Property with Mr. Asmail, on October 2nd and October 3rd, 2018. Mr. Asmail was on site as the Project Geologist for the duration of the diamond drilling phase.

The authors, in writing this report, use sources of information as listed in the references. The Report is a compilation of proprietary and publicly available information as well as information provided by Jean Marc Gaudreau and APEX exploration work. Government publications were prepared by qualified persons holding post-secondary geology, or related university degree(s) and are therefore deemed to be accurate. For those reports that were written by others, whom are not qualified persons, the information in those reports is assumed to be accurate, based on a data review and property visits conducted by the authors; however, they are not the basis for this report.

Unless otherwise stated, all units used in this report are metric, all dollar amounts ($) are in Canadian currency (CAD), and all coordinates are referenced to the North American Datum (NAD) 1983, Universal Transverse Mercator (UTM) Zone 17 North.

Figure 2.1. Hector Property General Location

3 Property Description and Location

3.1 Description and Location

The Hector Property is located approximately 500 km north of Toronto, 150 km north of North Bay and 6 km southwest of the town of Cobalt, located southeast of the intersection between local highways 11 and 11B (Figure 3.1). The town of Cobalt is in northeastern Ontario, Canada, approximately 6 km and a 15-minute drive south of Temiskaming Shores, immediately west of the Ontario-Quebec border. The approximate location in UTM coordinates is 595,000 Easting, 5,245,000 Northing, NAD 1983, Zone 17.

The Property comprises 126 unpatented mining claims covering an area of approximately 2,243 ha (Table 3.1; Figure 3.2). The claims are 100% owned by Cruz Cobalt. The Hector Property is located in the Coleman and Gillies Limit Townships, Timiskaming District, Ontario, Canada. It is situated in the Cobalt Embayment of the historic Cobalt Mining Camp, Larder Lake Mining Division, within the 1:50,000 scale National Topographic System (NTS) Map Sheet 031M05.

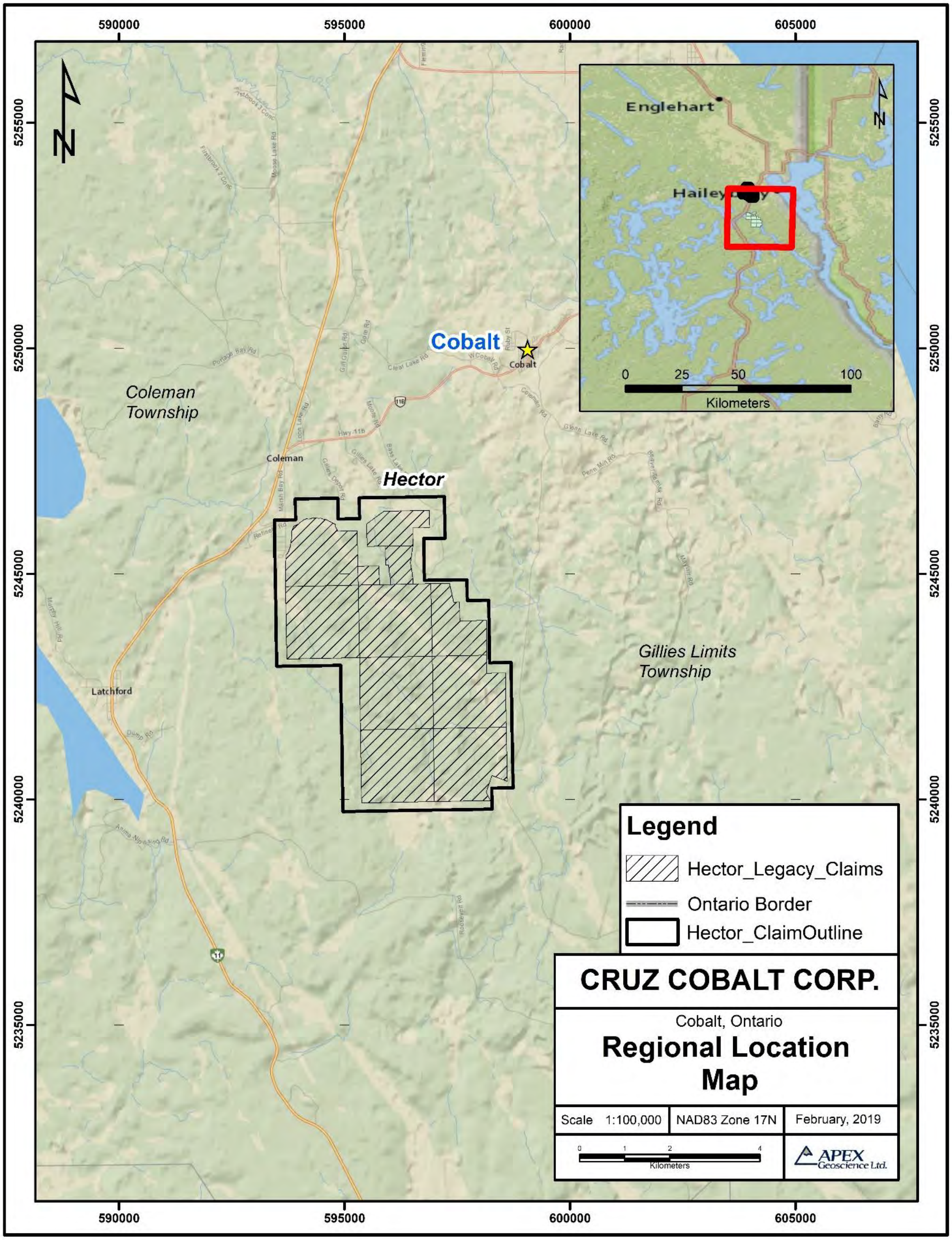
3.2 Regulatory Framework

Prior to February 26, 2018, the 126 mining claims were previously held under a series of 12 legacy claims (Table 3.2). On February 26, 2018, the Ontario Ministry of Northern Development and Mines (MNDM) converted all previously existing recorded ground or map staked mining claims (legacy claims) and transformed them into one or more cell claims or boundary claims on the provincial grid. Mineral claims in Ontario are now acquired and managed within the online Mining Lands Administration System (MLAS). Individual unpatented mining claims are now referred to as a Boundary Cell Mining Claim when two or more owners hold interest in a cell, or a Single Cell Mining Claim when one owner holds 100% interest in a cell (referred to collectively as “mining claims” within this report). Annual assessment work requirements for Boundary Cell and Single Cell mining claims are $200 and $400 per claim, respectively. The Hector Property comprised 82 single cell and 44 boundary cell mining claims, and is subject to annual assessment work requirements of $41,600.00.

Ontario’s *Mining Act* (R.S.O. 1990, Chapter M. 14) is the provincial legislation that governs and regulates prospecting, mineral exploration, mine development and rehabilitation. The purpose of the Act is to encourage prospecting, online mining claim registration and exploration for the development of mineral resources, in a manner consistent with the recognition and affirmation of existing Aboriginal and treaty rights in Section 35 of the *Constitution Act*, 1982.

Before undertaking certain early exploration activities, an exploration plan or permit must be submitted, and notification provided to any surface rights owner(s). Information on surface rights owners is on file as paper copies, with data obtained from the regional Land Registry Office in Haileybury.

Figure 3.1. Hector Property Regional Location



APEX Geoscience Ltd.

Table 3.1. Hector Property Mining Claim Description and Status

Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
102671	4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
102672	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
102673	4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
102946	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
102947	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
106206	4276370, 4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
110483	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
117984	4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
118231	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
118299	4276374, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
118300	4276371, 4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
118301	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
118346	4279619	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
119515	4276376	COLEMAN	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
121214	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
121215	4276378	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
122686	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
125027	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
126362	4276374, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
128384	4276375, 4276376	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
134773	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
136283	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
136284	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
142333	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
142334	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
150733	4276370, 4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.

Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
153024	4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
154325	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
156338	4276376	COLEMAN, GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
156339	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
162417	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
162418	4276376	COLEMAN, GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
165777	4276378	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
165778	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
169658	4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
170914	4279619, 4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
170964	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
171004	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
173145	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
173189	4279619	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
175779	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
178922	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2020-07-19	(100) Cruz Cobalt Corp.
178923	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2020-07-19	(100) Cruz Cobalt Corp.
178924	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2020-07-19	(100) Cruz Cobalt Corp.
179200	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
180941	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
182454	4276369, 4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
182455	4276369, 4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
186181	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
186182	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
189160	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
196998	4276369, 4276370, 4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.

Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
198879	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
198880	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
198881	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
206902	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
206955	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
206956	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
209185	4276375	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
215409	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
215410	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
215976	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
215977	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
215978	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
218349	4276369, 4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
218350	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
219120	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
219121	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
219122	4279619, 4279620	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
221697	4276376	COLEMAN	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
225794	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
227068	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
227119	4276371, 4276374, 4276375, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
227169	4279619	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
227170	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
229169	4276376	COLEMAN, GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
229170	4276376	COLEMAN	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
233050	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.

Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
233975	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
234033	4276371, 4276375	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
253491	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
253572	4276370, 4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
253676	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2020-07-19	(100) Cruz Cobalt Corp.
255721	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
260417	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
265569	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
266313	4276370, 4276371, 4279619	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
266889	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
273809	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
274283	4279620	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
274385	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
280513	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
281998	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
281999	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
282000	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
282050	4276371	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
282584	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
286376	4276371	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
286377	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
286423	4276370, 4276371, 4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
289115	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
290178	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2020-07-19	(100) Cruz Cobalt Corp.
290631	4276371	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
293733	4276374, 4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.

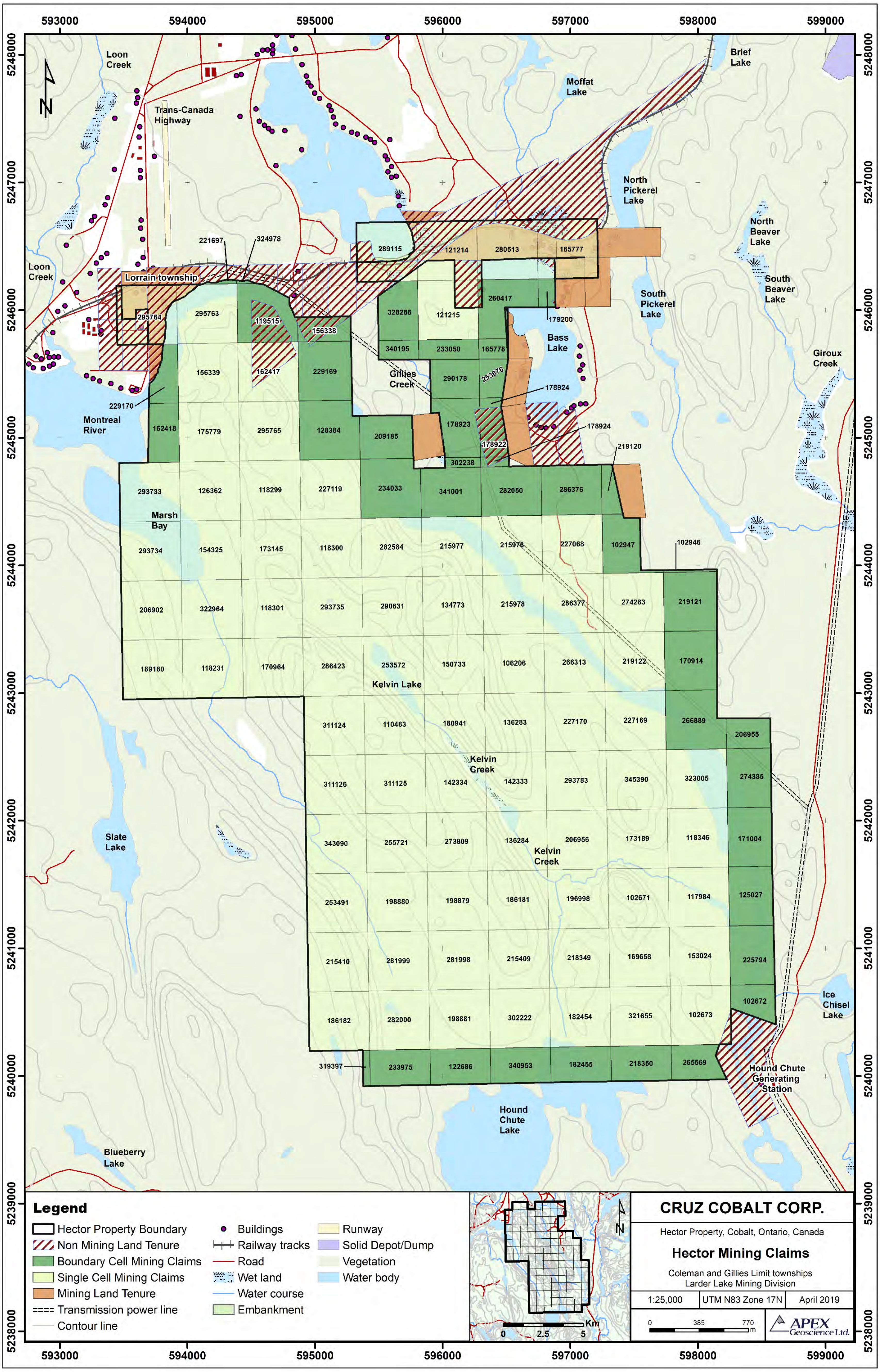
Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
293734	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
293735	4276371, 4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
293783	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
295763	4276376	COLEMAN	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
295764	4276376	COLEMAN	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
295765	4276376	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
302222	4276369	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
302238	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2020-07-19	(100) Cruz Cobalt Corp.
311124	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
311125	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
311126	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
319397	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
321655	4279602	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
322964	4276374	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
323005	4279619	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
324978	4276376	COLEMAN	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
328288	4276378	COLEMAN, GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
340195	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
340953	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
341001	4276371	GILLIES LIMIT	Boundary Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
343090	4276370	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.
345390	4279619	GILLIES LIMIT	Single Cell Mining Claim	2020-09-26	(100) Cruz Cobalt Corp.

Table 3.2. Hector Property Exploration Permit, Status and Legacy Claims

Property	Exploration Permit #	Issue Date	Expiry Date	Legacy Claims
Hector	PR-17-11139	Sep 5, 2017	Sep 5, 2020	4270920, 4275172*, 4276369, 4276370, 4279371, 4276374, 4276375, 4276376, 4276378, 4279602, 4279619, 4279620 *not included in permit

APEX Geoscience Ltd.

Figure 3.2. Hector Property Mining Claims



APEX Geoscience Ltd.

Aboriginal communities potentially affected by activities proposed in an exploration plan are notified by the Ministry of Energy, Northern Development and Mines (ENDM) and have an opportunity to provide feedback before the proposed activities can be carried out. No issues have been raised by nearby aboriginal communities.

Cruz currently has an exploration permit (Permit # PR-17-11139; Table 3.2) in place issued on September 5, 2017 and valid until September 5, 2020. The permit allows for the completion of limited electrical geophysical surveys, line cutting, mechanized striping, and construction of 6 to 10 diamond drill pads. Planned activities detailed in the approved permit application cover the majority of prospective areas on the Property including Bass Lake, Kelvin Lake, and South Keora shaft areas.

Surface rights owners must also be notified when applying for a permit. Notice of Intent for exploration was provided to the surface rights owners associated with the Hector Property; including two separate Property owners in the Bass Lake area, and a single owner in the Gillies Depot area of the Montreal River. This notification included a complete Notice of Intent to Submit an Exploration Permit Application (Notice of Intent), a copy of a proposed Exploration Permit Application, and a map showing the location of the proposed exploration activities. No exploration work has been completed or planned for any of these areas. As of the effective date of the Report, the only work requiring a permit that has been completed on the Property was the 2018 diamond drilling of 10 drill holes in the Bass Lake area.

4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

4.1 Accessibility

The Hector Property is located within the Coleman and Gillies Limit townships, Larder Lake Mining Division, Timiskaming District, northeastern Ontario. The claims are located between the towns of Cobalt and Latchford, south of the Trans-Canada Highway 11 and 11B, approximately 12 kilometers (km) west of the Ontario-Quebec provincial border. The Property is accessible by a network of concession roads and tertiary routes, paved or otherwise, which afford excellent access to the northeastern mining claims. The northeastern claims can be accessed via Bass Lake road off Highway 11B, the southern claims east of the Montreal River can be accessed via Silverfields road, and the southern mining claims west of the Montreal River can be accessed from Roosevelt Forest road, south of Latchford.

The town of Cobalt (population ~1,100) is located approximately 6 km northeast of the Hector Property. The closest major centre, the town of Temiskaming Shores with a population of nearly 9,920 (Statistics Canada, 2016), is located about 20 km northeast of the Property along the Trans-Canada Highway 11. This town was created by the amalgamation of the towns of New Liskeard, Haileybury and Dymond in 2004, towns that are still often referred to interchangeably. Temiskaming Shores provides amenities such as health care, accommodations, water and power infrastructure, rail, bus and taxi services, service contractors and large retail stores.

4.2 Site Topography, Elevation and Vegetation

The physiography is typical of the Precambrian Shield in northeastern Ontario, with rocky rolling bedrock hills, locally steep ledges and cliffs, separated by valleys filled with clay, glacial materials, swamps, streams, small kettle lakes and larger bodies of water. These features support a diversity of animal and bird species such as moose, beaver, black bear, wolf, heron, duck, geese and the common loon.

Elevations at the Property vary from 300 to 360 metres above mean sea level (AMSL). Notable landmarks within the Property include Bass and Gillies lakes to the northeast, the Montreal River running along the central-southeastern portion of the Property, Kelvin Lake west of the Montreal River, Marsh Bay at the northwestern portion of the Property and the Hound Chute Lake at the southern end of the Property.

Vegetation includes trees such as black and white spruce, jack pine, balsam poplar, white birch and balsam fir.

4.3 Climate

The area experiences four distinct seasons. Spring and autumn comprise a mix of warm sunny days and cool nights. Summers are warm, with dry air and average temperatures from 10 into the mid-20 degree Celsius (C) range. Winter temperatures average temperatures from -25 to -5 degrees C, but high winds and high humidity are rare. Average annual snowfall totals 294 cm, and average total rainfall 590 mm.

The operating season can continue year-round but typical periods to avoid are the spring melt and the establishment of ice during the early winter months.

4.4 Local Resources and Infrastructure

Temiskaming Shores provides a variety of necessary amenities, such as bus and rail access, service contractors, large retailers, power and water infrastructure, and hospital services. The major regional mining centres of Sudbury and Timmins, Ontario lie 200 km to the north and southwest of the Property, respectively, and offer a host of exploration and mining related services including analytical laboratories and numerous diamond drill contractors.

5 History

Silver was first discovered at Cobalt in 1903 by J. McKinley, E. Darragh and F. Larose during the construction of the Temiskaming and Northern Ontario Railway. In 1904, a load of silver mineralized rock was shipped by rail, marking the beginning of the mining boom in Cobalt. Production of silver from the Cobalt camp reached its peak in 1911 when 31,507,792 ounces of silver were shipped (Goodwin, 1988). From 1904 and until 1989, the Cobalt mining camp produced 458,830,085 ounces silver, 19,392,037 pounds cobalt, 3,407,495 pounds nickel and 1,964,728 pounds copper (Guindon et al., 2015). The author has been unable to verify the Cobalt area historic production records.

Mineralization was later discovered in additional areas with similar geology within the Cobalt Embayment of the Southern Province, from Gowganda in the west to southeast of Cobalt. In the early 1920s, a decrease in the price of silver and exhaustion of the high-grade veins caused most of the mines to close. Between 1929 and 1950, small operations were undertaken in a number of mines. In the mid-1950s, the demand for cobalt increased and many mines reopened for a short time. An increase in the price of silver in 1960 brought new interest to the camp and 10 mines continued operation (Goodwin, 1988).

Renewed interest in the area in the 1980s-1990s resulted in further early exploration activities. Sporadic exploration in the form of geological, geochemical, and geophysical surveys were completed during the 2000's.

5.1 Exploration and Development Work Conducted by Previous Owners

Historic exploration within the Hector Property is summarized in the tables below including: documented mineral occurrences within the Ontario Mineral Deposit Inventory (MDI), a summary of known historic shafts, trenches, and prospect pits within the Ontario Abandoned Mines Information System (AMIS), historic assessment work reports from 1955 to present within the Ontario Assessment Files Database (OAFD). The spatial location of relevant historic exploration conducted in the Property referred to in Tables 5.1 to 5.3 is presented in Figure 5.1 below.

The exploration history of the present-day Hector Property is divided below geographically between mineral occurrences located in the Bass Lake and Marsh Bay area in the north; and prospects located within the southern and eastern parts of the Property near the Montreal River and extending west to Kelvin Lake.

Table 5.1. Hector Property MDI Mineral Occurrences

Mineral Occurrence	Status	Mineral Deposit Inventory ID	Work History
James Dolan Property	Developed Prospect without Reserves	MDI31M05SE00127	1935: J. Dolan - approximately 5 tons of cobalt mineralized rock was mined from vein, grab samples returned up to 1.7% Co; 1961: Sterling Engineering – 1 drill hole, 125 ft.
Williamson	Occurrence	MDI31M05SE00113	1966: 93 ft shaft sunk on a calcite vein; 16 ft pit sunk on a 2nd vein; 2005-06: Cabo Mining Enterprises Corp drilled 5 holes, 1316ft, stripping; 2011: Outcrop Exploration Ltd, sampling, assays, magnetometer survey. Calcite vein is 7 inches wide, strikes SE; 2nd vein strikes N10W, dips 80E; both veins occur in Nipissing diabase.
Kelvin Lake	Past producing mine without reserves	MDI31M05SE00125	1909-1910: Waldman Silver Mines – 85 ft shaft; 1963: J Burke – a small pit 180 ft east of southwest corner of claim, cobalt-bearing aplitic vein striking N20E, 3 pits sunk on 3 aplite veins; 2006: Sears, Barry and Associates – 2 drill holes, 301 metres.
Brewster	Occurrence	MDI31M05SW00013	1909-1920: Waldman Silver mines – in production (no production data listed); 1947: Brewster Silver & Lead Syndicated Ltd – 30 ft shaft put down on calcite vein, 3 drill holes, 1129 ft. The calcite vein strikes N22E and dips vertically in Nipissing diabase.
South Keora	Past producing mine without reserves	MDI31M05SE00131	1927-1928: South Keora Mines Ltd – a shaft put down 109' and 13' of drifting done on the 100' level, an open cut 30' deep was made northeast of shaft; The South Keora Shaft-vein is 300' long and 4 inches wide, strikes N25E, dips 70W. A 2nd vein 100' long occurs east and parallel to shaft vein. Individual assays were reported up to 12-15% Cobalt, and >1,000 oz/ton Silver.
Hector Silver Mines, Block 4 (Occurs Outside Present Day Hector Property)	Developed Prospect without Reserves	MDI31M05SE00129	Pre-1924-29: Hector Silver Mines – prospecting, shaft sinking, underground development. The shaft was sunk 500 ft. with 3 developed levels. About 5 tons of cobalt ore of unknown grade was produced from claim C-1101 (James Dolan), reported in 1924. (Sergiades, 1968) Circa 1930: J. Dolan – owner. 1962: St. Mary's Explorations Limited -magnetic and resistivity surveys. 1968: W. Gutzman – owner. 1969: EM survey. 2013: Outcrop Explorations Ltd. – ground magnetometer survey, beep mat survey.
Villa, P.	Occurrence	MDI31M05SE00115	1960: P. Villa – pits and trenches put down on a calcite vein that strikes NW.

Table 5.2. Hector Property AMIS Historic Work Sites and Features

Feature Description	UTM Zone	Northing	Easting	Official Name	Feature Condition
EXPLORATION SHAFT - INCLINED SHAFT	17	5244198	593708	MARSH BAY	1993 ASSESSMENT; ONE COMPARTMENT INCLINED SHAFT IN BEDROCK WITH A TIMBERED COLLAR. NO PROTECTION IS PRESENT. FEATURE IS CLEARLY VISIBLE.
EXPLORATION SHAFT - VERTICAL SHAFT	17	5241653	597493	WILLIAMSON	1993 ASSESSMENT; ONE COMPARTMENT SHAFT WITH VERTICAL SIDES IN OVERBURDEN WITH A TIMBER CRIBBED COLLAR. NO PROTECTION IS PRESENT. FEATURE IS CLEARLY VISIBLE.
TRENCH	17	5241672	597463	WILLIAMSON	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION IS PRESENT. FEATURE IS PARTIALLY HIDDEN.
SHAFT - 2 COMPARTMENT - VERTICAL SHAFT	17	5245023	594018	BREWSTER	1993 ASSESSMENT; ONE COMPARTMENT SHAFT WITH VERTICAL SIDES IN OVERBURDEN WITH A TIMBER CRIBBED COLLAR. NO PROTECTION PRESENT. FEATURE IS PARTIALLY HIDDEN. REPORTED BY 1993 ASSESSMENT TO BE 8M DEEP.
SHAFT - 1 COMPARTMENT - VERTICAL SHAFT	17	5245062	594113	BREWSTER	1993 ASSESSMENT; ONE COMPARTMENT SHAFT WITH VERTICAL SIDES IN BEDROCK WITH A TIMBERED COLLAR. NO PROTECTION PRESENT. FEATURE IS PARTIALLY HIDDEN.
WASTE ROCK DUMP	17	5245023	594018	BREWSTER	THIS FEATURE WAS NOT REPORTED BY THE YEAR 1993 SURVEY TEAM.
SHAFT - 2 COMPARTMENT - VERTICAL SHAFT	17	5245278	596458	HECTOR	1993 ASSESSMENT; TWO COMPARTMENT SHAFT WITH VERTICAL SIDES IN BEDROCK WITH TIMBERED COLLAR. SURROUNDED BY A LUNDY TYPE FENCE TOPPED WITH THREE BARBED WIRE STRANDS IN GOOD CONDITION.
LATERAL WORKINGS	17	5245278	596458	HECTOR	PLANS INDICATE WORKINGS ON 18M, 46M, 76M AND 137M LEVELS.
STOPE TO SURFACE	17	5245278	596483	HECTOR	1993 ASSESSMENT; STOPE, OPEN TO SURFACE WHICH IS UNSUPPORTED. SURROUNDED BY LUNDY TYPE FENCE TOPPED WITH THREE BARBED WIRE STANDS IN GOOD CONDITION.
HEAD FRAME	17	5245277	596058	HECTOR	1993 ASSESSMENT; HEADFRAME CONSTRUCTED WITH A TIMBER FRAME AND WOOD CLADDING. FEATURE IS SCHEDULED TO BE REMOVED IN NOVEMBER 1993. 2000 NOTIFICATION; NOTICE TO PROPONENT STATING THE MINE HAZARDS LOCATED ON THIS SITE ARE A SHAFT AND OPEN STOPE. THIS FE…

Feature Description	UTM Zone	Northing	Easting	Official Name	Feature Condition
SHAFT - 2 COMPARTMENT - VERTICAL SHAFT	17	5243623	597888	SOUTH KEORA	1993 ASSESSMENT; TWO COMPARTMENT SHAFT WITH VERTICAL SIDES IN BEDROCK WITH A TIMBERED COLLAR. SURROUNDED BY A LUNDY TYPE FENCE TOPPED WITH THREE BARBED WIRE STRANDS IN GOOD CONDITION.
OPEN CUT	17	5243632	597898	SOUTH KEORA	1993 ASSESSMENT; OPEN CUT WHICH IS UNSUPPORTED. SURROUNDED BY A LUNDY TYPE FENCE TOPPED WITH THREE BARBED WIRE STRANDS IN GOOD CONDITION.
LATERAL WORKINGS	17	5243623	597888	SOUTH KEORA	THIS FEATURE WAS NOT REPORTED BY THE YEAR 1993 SURVEY TEAM.
TRENCH	17	5243228	597258	G. L. CLAIM JS32	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION PRESENT. FEATURE IS PARTIALLY HIDDEN.
TRENCH	17	5243402	597313	G. L. CLAIM JS32	1993 ASSESSMENT; PIT IN OVERBURDEN WITH SLOPED SIDES.
TRENCH	17	5245468	596183	G. L. CLAIM L105813	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION PRESENT. FEATURE IS PARTIALLY HIDDEN.
TRENCH	17	5245482	596173	G. L. CLAIM L105813	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS.
EXPLORATION SHAFT - VERTICAL SHAFT	17	5246043	595873	DOLAN	1993 ASSESSMENT; PROSPECT SHAFT WITH VERTICAL SIDES, IN BEDROCK WITH A TIMBERED COLLAR. SHAFT POSSIBLY CRIBBED WITH CONING/SLUMPING SHAFT COLLAR. WATER LEVEL 3M BELOW GRADE. NO PROTECTION IS PRESENT. FEATURE IS PARTIALLY HIDDEN.
TRENCH	17	5246022	595978	G. L. CLAIM A69	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION IS PRESENT. FEATURE IS CLEARLY VISIBLE.
TRENCH	17	5246048	595998	G. L. CLAIM A69	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS.
TRENCH	17	5245953	595588	G. L. LEASE 728245	1993 ASSESSMENT; PIT IN BEDROCK WITH SLOPED SIDES.
TRENCH	17	5245933	596118	G. L. CLAIM A76	1993 ASSESSMENT; PIT IN OVERBURDEN WITH SLOPED SIDES. FEATURE IS PARTIALLY HIDDEN.
TRENCH	17	5245902	596133	G. L. CLAIM A77	1993 ASSESSMENT; PIT IN OVERBURDEN WITH SLOPED SIDES.
TRENCH	17	5245883	596148	G. L. CLAIM A77	1993 ASSESSMENT; PIT IN BEDROCK WITH SLOPED SIDES. NO PROTECTION PRESENT. FEATURE IS CLEARLY VISIBLE.
TRENCH	17	5243568	598033	AUDLEY GOLD MINES	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION PRESENT. FEATURE IS CLEARLY VISIBLE.

Feature Description	UTM Zone	Northing	Easting	Official Name	Feature Condition
TRENCH	17	5244942	593828	BREWSTER	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS.
TRENCH	17	5244942	593838	BREWSTER	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS.
SHAFT - 1 COMPARTMENT - VERTICAL SHAFT	17	5244933	593763	BREWSTER	1993 ASSESSMENT; ONE COMPARTMENT SHAFT WITH VERTICAL SIDES IN OVERBURDEN WITH A TIMBER CRIBBED COLLAR. NO PROTECTION PRESENT. FEATURE IS CLEARLY VISIBLE. WASTE ROCK PILE SUGGESTS A DEPTH OF <30M.
SHAFT - 2 COMPARTMENT - VERTICAL SHAFT	17	5244952	593878	BREWSTER	1993 ASSESSMENT; TWO COMPARTMENT SHAFT WITH VERTICAL SIDES IN BEDROCK WITH A TIMBERED COLLAR. NO PROTECTION PRESENT. FEATURE IS CLEARLY VISIBLE. VERY LARGE MUCK PILE SUGGESTS A DEPTH IN EXCESS OF 50M OF UNDERGROUND WORKINGS.
TRENCH	17	5243158	598113	G. L. CLAIM T47559	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION IS PRESENT. FEATURE IS PARTIALLY HIDDEN.
TRENCH	17	5245958	595868	G. L. CLAIM A75	1993 ASSESSMENT; PIT IN BEDROCK WITH VERTICAL WALLS. NO PROTECTION PRESENT. FEATURE IS CLEARLY VISIBLE.

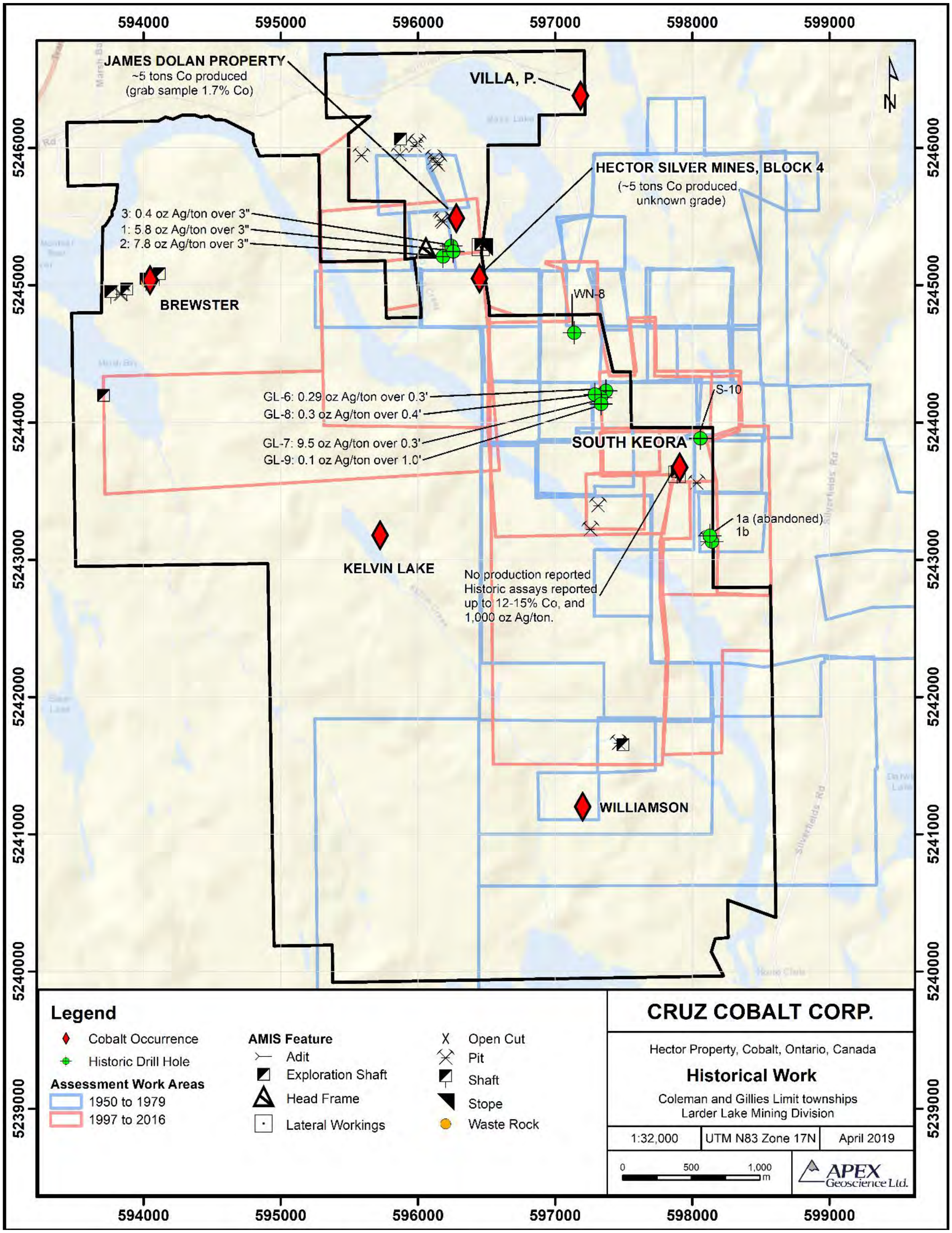
Table 5.3. Hector Property MNDM Assessment Work Summary

Assessment Report ID	Year	Performed For	Work Description	Work Performed
31M05SE0061	1955	Quebec Metallurgical Industries Ltd	Diamond Drilling	2 DDH: WN-8, N-9; 360', no assays reported
31M05SE0057	1956	Partridge Canadian Exploration Ltd	Diamond Drilling	3 DDH: 525' total, no assays reported, drill hole locations not in Ontario Drill Hole Database, only geological logs available in assessment report.
31M05SE0085	1960	R Gareau	Geological Survey / Mapping	Regional and Detail Bedrock Mapping, 189 man-days, no samples reported. East of the Montreal River in the vicinity of the South Keora and Newton prospects.
31M05SE0062	1961	Sterling Engineering	Diamond Drilling	1 DDH: 125', no assays reported; drill hole location not in Ontario Drill Hole Database, Assessment Report outline is in the vicinity of the James Dolan occurrence; geological log available.
31M05SE0084	1962	St Marys Exploration Ltd	Compilation and Interpretation - Geology, Magnetic / Magnetometer Survey, Resistivity	Ground Resistivity survey (5.98 line-miles); Magnetic/Magnetometer Survey (6.82 line-miles). North of the Montreal River, immediately south of the Gilbert mineral occurrence. Three conductive zones were identified within magnetic lows.

Assessment Report ID	Year	Performed For	Work Description	Work Performed
31M05SE0092	1965	Silver Tower Mines Ltd	Geological Survey / Mapping	Detail Bedrock Mapping, 13 man-days, no samples reported. Southwestern corner of the current property outlies, immediately northwest of Hound Chute Lake (southwest of the Williamson occurrence).
31M05SE0050	1966	Unknown	Diamond Drilling	5 DDH, 1525', assays reported s; drill hole locations not in Ontario Drill Hole Database, Assessment Report outline is in the vicinity of the Williamson mineral occurrence; only geological logs available in assessment report.
31M05SE0093	1967	Ragged Chutes Silver Mines Ltd	Geochemical, Geological Survey / Mapping	Bedrock Mapping, 89 sample Soil Survey (Ni, Co) southeast of the Williamson mineral occurrence; up to 24ppm Co, up to 32ppm Ni.
31M05SE0091	1969	T Brown	Electromagnetic Very Low Frequency	Ground EM-VLF survey (5.44 line-miles), located north of the Montreal River and south of the Gilbert and Hector occurrences.
31M05SE0027	1970	J Neilson	Assaying and Analyses, Diamond Drilling	3 DDH, 116' total; 1: 5.8 oz Ag/ton over 3"; 2: 7.8 oz Ag/ton over 3"; 3: 0.4 oz Ag/ton over 3"
31M05SE0033	1970	W Niemi	Diamond Drilling	1 DDH: G-17-1, 338', no assays reported. Southeast of the South Keora occurrence.
31M05SE0077	1971	Keevil Mining Group, Silverfields Mining Corp	Geochemical	Soil Survey (1130 samples), Co, Ag; up to 20ppm Co
31M05SE0075	1972	A Johnson	Geochemical, Diamond Drilling	4 DDH: GL-6 to GL-9; 1,271' total; GL-6: 0.29 oz Ag/ton over 0.3'; GL-7: 9.5 oz Ag/ton over 0.3'; GL-8: 0.3 oz Ag/ton over 0.4'; GL-9: 0.1 oz Ag/ton over 1.0'; Soil Survey (367 Humus), Ag, Co, Mn;
31M05SE0076	1974	Teck Corporation Ltd	Electromagnetic, Geological Survey / Mapping, Magnetic / Magnetometer Survey, Self-Potential	Ground EM (4.3 line-mi), Mag (10.2 line-mi), Self Potential (8.7 line-mi) and Geological Mapping
31M05SE0074	1976	Teck Mining Group Ltd	Geochemical	Soil Survey (361 samples); Cu, Pb, Zn, Ni, Mn, Ag, Au
31M05SE0070	1979	K Home	Diamond Drilling	1 DDH, 199'
31M05SE0072	1997	Wabana Exploration Inc	Assaying and Analyses, Electromagnetic Very Low Frequency, Gradiometric, Magnetic / Magnetometer Survey, Open Cutting,	Rock samples (45 samples), Ground Mag/Magnetometer/EM-VLF survey (26 line-km), Stripping (50 hrs), Prospecting (6 days)

Assessment Report ID	Year	Performed For	Work Description	Work Performed
			Overburden Stripping, Prospecting By Licence Holder	
31M05SE2073	2004	Cabo Mining Enterprises Corp	Geochemical, Geological Survey / Mapping, Manual Labour	Soil Survey (26 samples, no anomalous values reported); Geological Mapping. South of the Montreal River, north of the Kelvin Lake occurrence.
20000007349	2012	Outcrop Explorations Ltd	Electromagnetic Very Low Frequency, Magnetic / Magnetometer Survey	VLF and Mag Survey (31.1-line km). Three distinct magnetic responses recorded. Area covers the South Keora occurrence.
20000008012	2013	Outcrop Explorations Ltd	Assaying and Analyses, Geochemical, Prospecting By Licence Holder	Rock and Soil samples (20 man days and 33 samples total)
20000008004	2013	Outcrop Explorations Ltd	Magnetic / Magnetometer Survey	Mag Survey (13 man days), non-grid, 427 readings, 100m lines, 12.5m point intervals. South of Bass Lake, north of the Montreal River in vicinity of historic Hector and Newton prospects. Two magnetic low anomalies identified.
20000007892	2013	Outcrop Exploration Ltd	Magnetic / Magnetometer Survey, Prospecting By Licence Holder	Prospecting and Mag Survey (2 man days)
20000008176	2014	Outcrop Exploration Ltd	Magnetic / Magnetometer Survey	Mag Survey, 288 readings, 50m line spacing, 12.5m stations
20000008304	2014	Outcrop Exploration Ltd	Assaying and Analyses, Prospecting By Licence Holder	19 grab samples (up to 74ppm Co). East of the Montreal River, south of Bass Lake in the vicinity of the Newton and South Keora occurrences.

Figure 5.1. Hector Property Historical Work



5.1.1 Bass Lake and Marsh Bay Areas

Waldman Silver Mines Ltd. was active between 1909 and 1920 near Marsh Bay at what later became known as Brewster Silver and Lead Syndicate Ltd. occurrence. At the Brewster occurrence, a northeast striking subvertical chalcopyrite-cobalt mineralized calcite (±quartz) vein occurs upon which a 30-foot (9 m) shaft was sunk. During 1947 three diamond drill holes totalling 344 m were completed by the Brewster Syndicate near the shaft but did not intersect significant mineralization (Thomson, 1960). AMIS data indicates the presence of four shafts, two surface trenches, and a waste rock pile distributed over an approximately 400 m northeast trend (Table 5.2). A distance of 800 m to the south at Marsh Bay shallowly south dipping 15 cm wide quartz veins containing pyrite-chalcopyrite mineralization exposed in a small shaft are documented (Thomson, 1960).

The historic Hector Silver Mines shaft is located at the southwest end of Bass Lake. The surrounding area was explored for silver-cobalt veins prior to 1924, the year shaft sinking began; however, silver-cobalt veins were reportedly worked only on the C-1243 and C-1101 claims covering the Hector Shaft and James Dolan occurrence 300 m to the northwest within the present-day Hector Property.

At Hector, a diabase-hosted, locally high-grade silver-cobalt vein is exposed at surface. The vein strikes approximately east, dips to the south; and is thought not to persist below the 60-foot (18 m) level of the mine. It is not known if mineralization continued below the base of the diabase sill intersected at a vertical depth of 480 feet (146 m), below which a 50 to 90 foot (15 to 27 m) thick succession of Coleman conglomerate occurs. The Hector shaft was developed to a depth of 500 feet (152 m) with levels at 60, 150, 250 and 490 feet (18, 46, 76, and 149 m). Based on historic plan maps it is likely that the western portions of the 18 m level extend into the present-day Hector Property claims (Thomson, 1960).

During the 1930's, James Dolan reportedly mined approximately 5 tons (4.5 tonnes) of cobalt mineralized rock from the James Dolan occurrence via a 15 foot (4.5 m) deep open cut (Thomson, 1960). Grab samples returned assays of "up to" 1.7% cobalt (Table 5.1, Wilson, 2017a). The near vertical vein reportedly strikes northeast and contained niccolite and native bismuth, in addition to cobalt-bearing minerals. Sterling Engineering later tested the James Dolan occurrence with a single 38 m inclined drill hole on a 310° azimuth. The drill hole intersected narrow clay gouge zones, calcite veining, and minor chalcopyrite mineralization; however, no assays were reported (Plaskett, 1961).

Prior to 1948, James Dolan put down several test pits west of Bass Lake. The trenched area corresponds to the area tested by 2018 Cruz drill holes 18HC08, 09 and 10. They were described as cobalt mineralized calcite (±quartz) veins associated with aplite dykes, in addition to silver mineralization at the southeast end of the vein trend; likely in close proximity to 2018 Cruz drill holes 18HC05, 06 and 07. On the west side of Gillies Creek, a west-northwest striking, steeply north dipping cobalt mineralized vein was traced over

60 m by shallow trenches (Thomson, 1960). The trenched areas correspond to what are presently referred to as the Gillies West occurrence.

Before 1960, a 60-foot (18 m) adit was driven along a northwest trending, steeply south dipping aplite-dyke hosting a cobalt-mineralized vein. The vein occurs on the west side of Gillies Creek within claim C-1107 located just outside the present-day Hector Property (Thomson, 1960; Figure 5.1). The earliest records of claim C-1107 is dated to 1924, with the most recent reference being to the Gilbert Interests Limited during 1968 (Wilson, 2017b).

During 1961, St Mary's Exploration Ltd. completed ground resistivity and magnetic geophysical surveys immediately south of the Gilbert Interests occurrence and Hector Shaft. The surveys outlined several north-northwest trending, short-strike length conductive anomalies (Burton, 1962).

J. Neilson, on behalf of the Nial Mining Syndicate drilled three short diamond drill holes along west and northwest azimuths located approximately 150 m west of the Hector Shaft and within the present-day Hector Property. Drill holes 1, 2 and 3 each intersected 7.6 cm (3 inch) pink aplite veins containing silver-bismuth-nickel mineralization that assayed 5.8, 7.8, and 0.4 ounces/ton (oz/t) silver, or 199, 267, and 14 grams-per-tonne (g/t) silver, respectively (Neilson, 1970).

5.1.2 Montreal River, and Kelvin Lake Areas

South Keora Mines Ltd. acquired the C-1220 claim in 1924 located along the eastern claim boundary of the Hector Property. The company commenced shaft sinking on a cobalt-bearing vein that was originally discovered in 1913; however, poor results led to suspension of activates by 1928. The shaft was driven to a depth of 33 m, and 43 m of drifting was completed to the northeast from the 30 m level. The northeast striking steeply northwest dipping 10 cm vein was mapped over a 100 m strike length on surface and returned select assays of 12 to 15% cobalt and 1,000 oz/t silver. The vein was tested via four shallow diamond drill holes (A-1 through 4) in 1951 by Audley Gold Mines Ltd. and did not return encouraging results.

K. Home completed a single 60 m drill hole targeting a 13 cm chalcopyrite mineralized aplite-calcite vein exposed in a shallow prospect pit located 550 m southeast of the South Keora shaft. The drill hole intersected a narrow aplite-calcite vein similar to the surface zone; however, no assays were reported (Home, 1979).

At a distance of 1 km northwest from the South Keora occurrence, just outside the present-day Hector Property, lies the T.J. Newton prospect. Shaft sinking occurred during 1927 by the Newton Limit Syndicate targeting a northwest striking subvertical vein traced by surface trenching over 30 m southeast of the shaft. The vein is up to 18 cm in width on surface and contains a small amount of cobalt mineralization within a quartz-calcite gangue. The vein was reportedly pinched to less than 1 cm in width at a depth of 15 m. A second shaft reportedly targeted a sub-parallel vein 75 m to the northeast. The shaft extended to a depth of 48 m with 43 m of crosscut development on the 46 m level in addition to 11 m of crosscuts on the 15 m level completed later in 1956. A total of 9 diamond drill holes were completed in 1953 and 1955 by Quebec Metallurgical Industries Ltd. (QM-1 through 9) with holes 1 through 7 targeting the shaft vein, and 8 and 9 targeting a second occurrence 150 m northwest of the shaft. Drill hole QM-6 collared adjacent to the shaft reportedly intersected high grade silver which led to 1956 shaft dewatering and development on the 15 m level, though it was abandoned before reaching the drilled intercept (Thomson, 1960). No drill hole assays were reported.

Partridge Canadian Explorations Ltd. completed 8 diamond drill holes (P-1 through 8) along the Montreal River within their JS-32 claim located 600 m west of the South Keora shaft. The drilling targeted a northwest striking, steeply northeast dipping 1 m wide pyrite “band” originally discovered in 1907. The drilling intersected the pyrite band over a strike of 140 m and to a maximum vertical depth of 240 m. Assays for gold and silver returned only trace values (Thomson, 1960).

At a distance of 1.5 km to the west of the JS-32 occurrence, on the east shore of Kelvin Lake, three north-northeast trending cobalt mineralized veins hosted in aplite were tested by several small surface pits (Thomson, 1960).

At the Williamson occurrence, located 2 km southeast of Kelvin Lake, a 28 m vertical shaft and 5 m pit was put down on a narrow 18 cm, southeast striking calcite vein. A pit 45 m to the northwest centred on a narrow 2.5 cm chalcopyrite mineralized vein (Thomson, 1960). Approximately 550 m to the southwest, north-northwest striking, steeply west dipping, 5 to 10 cm quartz-calcite-aplite veins occur with one vein containing cobalt-niccolite mineralization. During 1965, L.J. Cunningham tested the Williamson occurrences via 465 m of diamond drilling in five holes. Drill hole W65-1 targeting the northeast showing have returned 10 g/t silver over 0.60 m at 61 m deep. Mineralization was hosted within sheared calcite veined Archean volcanic rocks that were intersected beneath the Nipissing diabase. Drill hole W65-3 drilled under the southwest showing, and intersected 8.6 g/t Ag over 0.6 m of mineralized diabase at 34 m deep (Cunningham, 1966).

Ragged Chutes Silver Mines Ltd. completed geologic mapping and a small 44 sample humus soil survey on the claims immediately south of the Williamson occurrence during 1967; however, the soils, analyzed for silver, cobalt or nickel, did not return anomalous values and no mineral occurrences were located (Fowler, 1967).

During 1971, Silverfields Mining Corp. Ltd., then owned by Teck Corporation Ltd. (Teck), completed a large humus soil geochemical survey at their Gillies Limit Property over a 2 x 2 km area east and south of Bass Lake. Samples were collected along a series of 60 m spaced north-south oriented gridlines at 30 m sample spacing. The majority of the grid occurred east of the present-day Hector Property. However, samples collected within the Property returned anomalous cobalt values of 35, 45 and 180 parts-per-million (ppm) over a 200 m distance 600 m south from the T.J Newton shaft, and 55 ppm cobalt along the westernmost survey line directly south of Bass Lake (Moore, 1971).

The following year Teck completed infill sampling of anomalies and surveying of newly acquired claims along the Montreal River immediately south of the Gilbert Interests occurrence, and 800 m south of the T.J. Newton prospect. Significant silver anomalies, with a peak value of 25 ppm silver, occur in the area south of the Gilbert Interests occurrence. Infill sampling south of the T.J. Newton shaft defined an approximately 100 x 100 m greater than 10 ppm silver anomaly. The anomaly was subsequently tested via four inclined diamond core holes totalling 387 m drilled along southwest and northeast azimuths (GL-6 through GL-9). All holes reportedly intersected carbonate stringers and veinlets, locally containing pyrite, chalcopyrite and galena mineralization. GL-7 returned the highest silver values of 9.51 oz/t (326 g/t) silver over 10 cm from 43 m downhole, results which were not replicated within flanking drill holes GL8 and GL-9 (Blecha, 1972).

During 1974, Teck acquired claims west of the Montreal River and completed geologic mapping, ground magnetic, electromagnetic (EM) and self-potential surveys (SP). The claims were underlain by Archean volcanic rocks, similar to the Gillies Limit claims east of the river. Magnetic surveys identified northwest trending lineaments; however, EM and SP surveys did not return significant anomalies (Lalonde and Neelands, 1974). The work was followed up in 1976 by a 360 B-horizon soil sample survey. Survey lines were oriented northeast-southwest at 100 m spacing with samples collected at 15 and 30 m intervals depending on the terrain. Soils were analyzed for copper, lead, zinc, nickel, manganese, silver and gold. The results defined an approximately 500 x 200 m, northwest oriented copper-lead-zinc geochemical anomaly (defined as greater than 35 ppm copper and lead, and 75 ppm zinc) centred 500 m southwest of the JS-32 occurrence (Neel and McLeod, 1976).

During 1997, Wabana Explorations Inc. completed a total of 26 line-km of magnetic and Very Low Frequency (VLF) EM surveys on their Montreal River claims covering much of the historic Teck Gillies Limit and Montreal River claim groups south of the T.J. Newton shaft and west of the Montreal River. Similar to the previous Teck survey results, the Wabana survey outlined northwest trending magnetic and VLF anomalies on the west side of the Montreal River. The survey also defined east-west trending magnetic and VLF anomalies in the area south of the T.J. Newton shaft that was drilled by Teck. Outcrop stripping of the historic JS-32 pyrite occurrence was also completed; however, no assay results were reported (Laronde, 1997).

During 2004, Cabo Mining Enterprises Corp. completed a 26-soil sample reconnaissance over a weak 1999 Ontario Geological Survey (OGS) airborne EM anomaly located on the south side of the Montreal River via two parallel north-south oriented survey lines. Gold values, up to 12 parts-per-billion (ppb), and poor nickel and copper values were associated with the anomaly. No further follow-up work was recommended (Sears, 2004).

Outcrop Explorations Ltd. completed 2012 ground magnetic and VLF-EM surveys again over the area of the historic Teck Gillies Limit claims covering the T.J Newton and South Keora shaft areas. Surveys were conducted along 100 m spaced east-west oriented lines at 12.5 m station spacing. Results identified several north-northwest magnetic lineaments and a low east-west magnetic anomaly in the 1972 Teck drilled area. The VLF-EM data returned predominantly cultural anomalies (Ploeger, 2012).

During 2013, Outcrop Explorations Ltd. carried out a geophysical survey and rock and soil sampling. The company extended the magnetic survey grid northwest to Gillies Creek in the area south of the Bass Lake and east to the T.J. Newton shaft. While magnetic data does not appear to have been diurnally corrected, the results show a northwest trending magnetic lineament extension similar to the 2012 survey results to the south. The results were likely a reflect of the underlying Archean volcanic sequence (Kon, 2013a).

Thirteen rock grab samples from the historic T.J. Newton, South Keora, and JS-32 areas were collected. Sample BL-03 from South Keora returned 13 g/t silver, 0.15% copper, and 0.10% lead. Samples BL-06, 08, and BL-10 through BL-13 were collected from base metal mineralized Archean volcanic rocks located about 350 m southwest of the 1972 Teck drilled area. The samples returned anomalous values ranging from 0.028% to 0.35% lead, and 0.14% to 1.04% zinc. Soil samples collected included 10 samples from overburden-filled prospect pits in the area of Teck's Gillies Creek silver-cobalt soil anomalies and 10 samples collected at 25 m spacing over a 2012 magnetic low anomaly 400 m west of the Teck drilled area. The Gillies Creek base of prospect pit soils returned elevated (>10 ppm) copper-cobalt-lead-zinc values, while the magnetic low target soils were locally elevated with respect to lead and zinc (Kon, 2013b).

Additional rock sampling, totalling 19 samples, of the historic JS-32 occurrence was completed by Outcrop Explorations Ltd. during 2014 (Kon, 2014). Samples BL-14-05, 11, and 16 were collected over an approximately 200 m northwest trend. The samples were described as sheared and pyrite bearing, or quartz-pyrite vein material and have returned assays ranging from 1.0 to 5.5 g/t silver, 0.20% lead, and 0.0045 to 1.39% zinc.

5.2 Historical Production at the Hector Property

Approximately 4.5 tonnes of cobalt mineralized rock was reportedly produced from the James Dolan occurrence circa 1935. Grab samples are reported to have returned assays of "up to" 1.7% cobalt (Table 5.1 and Figure 5.1). During 2018, the James Dolan occurrence was subject to surface rock sampling and subsequent diamond drill testing by Cruz Cobalt and is described in Section 7 Exploration.

6 Geological Setting and Mineralization

6.1 Regional Geology

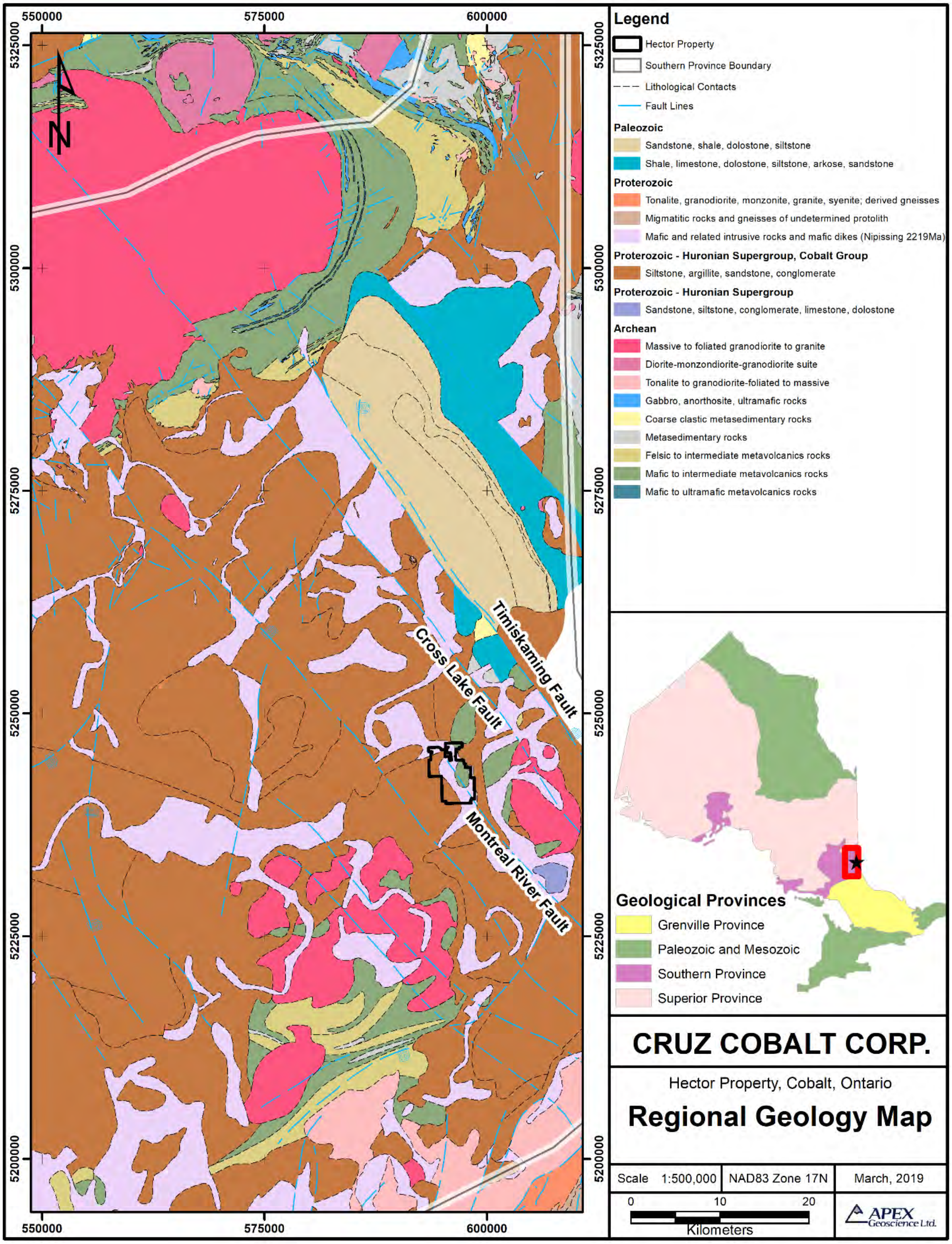
The Cobalt -Gowganda silver mining camp is located in the northeastern part of the Southern Province, proximal to the boundary of the Superior and Grenville provinces, also known as the Cobalt Embayment. This embayment extends for approximately 200 km from Gowganda in the northeast to southeast of Cobalt. Several mineral occurrences along the northern and eastern boundaries of the Cobalt Embayment is widely distinguished. Cobalt – silver mineralization in this camp is strongly associated late mafic dykes intruding Archean and Paleoproterozoic rocks. The regional geology map is presented in Figure 6.1.

6.1.1 Archean Basement

The oldest exposed rocks in northeastern Ontario are the Archean rocks of the Abitibi Greenstone Belt. These are comprised of metavolcanics and metasedimentary rocks that have been subdivided into a series of assemblages (Ayer et al. 2005): the Lower Pacaud Assemblage, the oldest supracrustal unit at 2747 – 2736 Ma; the Deloro Assemblage (2730 – 2724 Ma); the Stoughton Roquemaure Assemblage (2723 – 2720 Ma), the Kidd-Munro Assemblage (2719 – 2717 Ma); the Tisdale Assemblage (2710 – 2706 Ma); and the Black River Assemblage (2701 – 2696 Ma). Two types of successor basins exist in the belt: the 2690 – 2685 Ma early “Porcupine-type” basins and the late 2677 – 2670 Ma “Timiskaming-type” basins. The Timiskaming assemblage includes alluvial to fluvial conglomerates, sandstones, turbidites and alkalic to calc-alkalic volcanic rocks unconformably overlying metavolcanics and/or Porcupine assemblage units, which is dominated by wacke sequences and unconformably overlie metavolcanic and sedimentary rocks (Ayer et al. 2002).

The Archean basement is intruded by the 2745 – 2660 Ma plutonic rocks, comprised of synvolcanic felsic to ultramafic intrusions, syntectonic tonalite, granodiorite, diorite, feldspar-quartz porphyries to alkalic intrusions with mafic phases, and post-tectonic intrusions comprising granite and pegmatite (Ayer et al., 2002). Mafic dyke swarms also cut the Abitibi Greenstone Belt (Osmani, 1991). These include the north-trending, vertical to sub-vertical quartz diabase Matachewan dykes (2454 Ma), the radiating gabbroic swarm of the Nipissing Diabase (2219 Ma), the west to northwest-trending, vertical olivine tholeiites Sudbury dykes (1238 Ma), and the northeast-trending olivine gabbro to monzodiorite Abitibi dykes (1140 Ma).

Figure 6.1. Regional Geology



6.1.2 Proterozoic Huronian Supergroup

Paleoproterozoic rocks of the Huronian Supergroup unconformably overlie the Archean metavolcanic and metasedimentary rocks. These rocks were deposited in a north-trending graben, the Cobalt Embayment, a large (~10,000 km^2), somewhat circular domain 120 km in diameter. The embayment is bounded by Archean rocks, except to the south where it is truncated by the Grenville Front tectonic zone and is interpreted as a continental rift system reflecting the original configuration of a paleo basin.

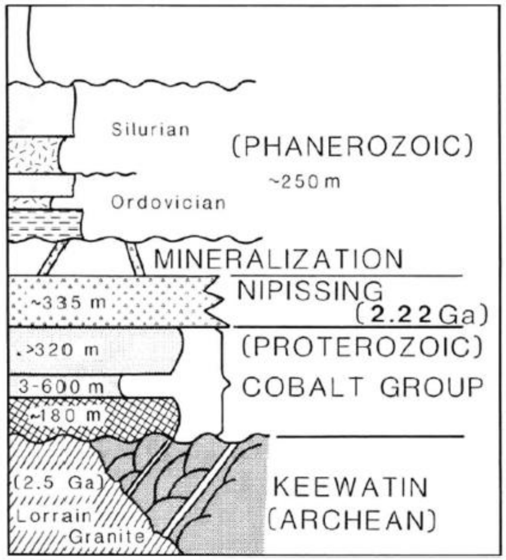
Four formations were deposited in the embayment, the Gowganda, Lorrain, Gordon Lake and River Bar forming the most upper sedimentary cycle of the Huronian Supergroup, collectively known as the Cobalt Group (Bennett et al. 1991). The Gowganda Formation is subdivided into the lower Coleman Member and the upper Firstbrook Member. The Coleman Member consists of clast and matrix-supported conglomerate and interpreted to be glacial or debris flow or turbidity currents. The upper Firstbrook Member is interpreted to be deposited in a delta environment consisting of pebble wacke, wacke, siltstone, mudstone and arenite. The Lorrain Formation which conformably overlies the Gowganda Formation, consists of arkose and quartz arenite and is interpreted to be deposited in a shallow marine or fluviatile environment. The Huronian sedimentary rocks is unconformably overlain by rare Paleozoic sedimentary rocks made up of limestone, dolostone and sandstone, followed by Pleistocene and Quaternary sediments.

6.1.3 Proterozoic Nipissing Diabase Sills

Both Archean and Proterozoic rocks have been largely intruded by gabbroic rocks of the Nipissing Intrusive event (2219 Ma), forming regionally-distributed sills, dykes and sheets up to a few hundred meters thick (Bennett et al. 1991). The diabase is the most abundant and widespread igneous rocks intruding the Archean metavolcanics and Huronian sedimentary rocks and comprise a range of rock types from fine-grained border facies to coarser-grained inner-facies; the most common is pyroxene gabbro but olivine gabbro, hornblende gabbro, leucogabbro, granophyric gabbro, feldspathic pyroxenite, and late-stage granophyres are also common.

These are interpreted to originate from a radiating dike swarm related to a magmatic event located under the Labrador Trough (Ernst, 2007), which locally appears to be controlled by Archean and Huronian structures. In general, the sills are horizontal to shallowly dipping and form regionally basin and dome like undulations, and locally at times have been shown to follow pre-existing steep faults in the basement. Jambor (1971b) suggested a thickness of 300 – 355 m of the sill and up to 10 mm thick chill margins at the contacts with the intruded country rocks. A simplified stratigraphic column for the Cobalt area is presented below in Figure 6.2.

Figure 6.2. Simplified Stratigraphic Column of the Cobalt Area (Kerrich et al. 1986) with Thicknesses from Jambor (1971a)



6.1.4 Regional Structural Geology

Deformation within the Cobalt Embayment is dominated by three separate fault sets:

1) A major southeast-trending fault system is manifested by the Montreal River, Cross Lake, and Timiskaming Fault (from west to east). This regional-scale fault system is part of the Lake Timiskaming Structural Zone, a northwest-southeast trending graben structure that trends from the Grenville Front at the southern extent of the embayment northward well beyond the Cobalt area. Geological and geophysical evidence indicates that these major fault systems were probably initiated in the late Archean, prior to Huronian sedimentation, and were reactivated during and after Huronian sedimentation and intrusion of the Nipissing diabase (Andrews et al. 1986).

2) A second fault set trends northeast, resulting in offsets of the Nipissing diabase prior to silver mineralization (Thompson, 1964). These faults and the southeast-trending system are generally veined with carbonate and silicate minerals and exhibit no apparent control over the occurrence of the silver veins, as most are barren (Jambor, 1971a).

3) The third set of faults, trending east-southeast, are generally smaller, subvertical normal faults that show displacements of up to 7.5 m, and locally host silver veins (Wilson, 1986).

6.2 Property Geology

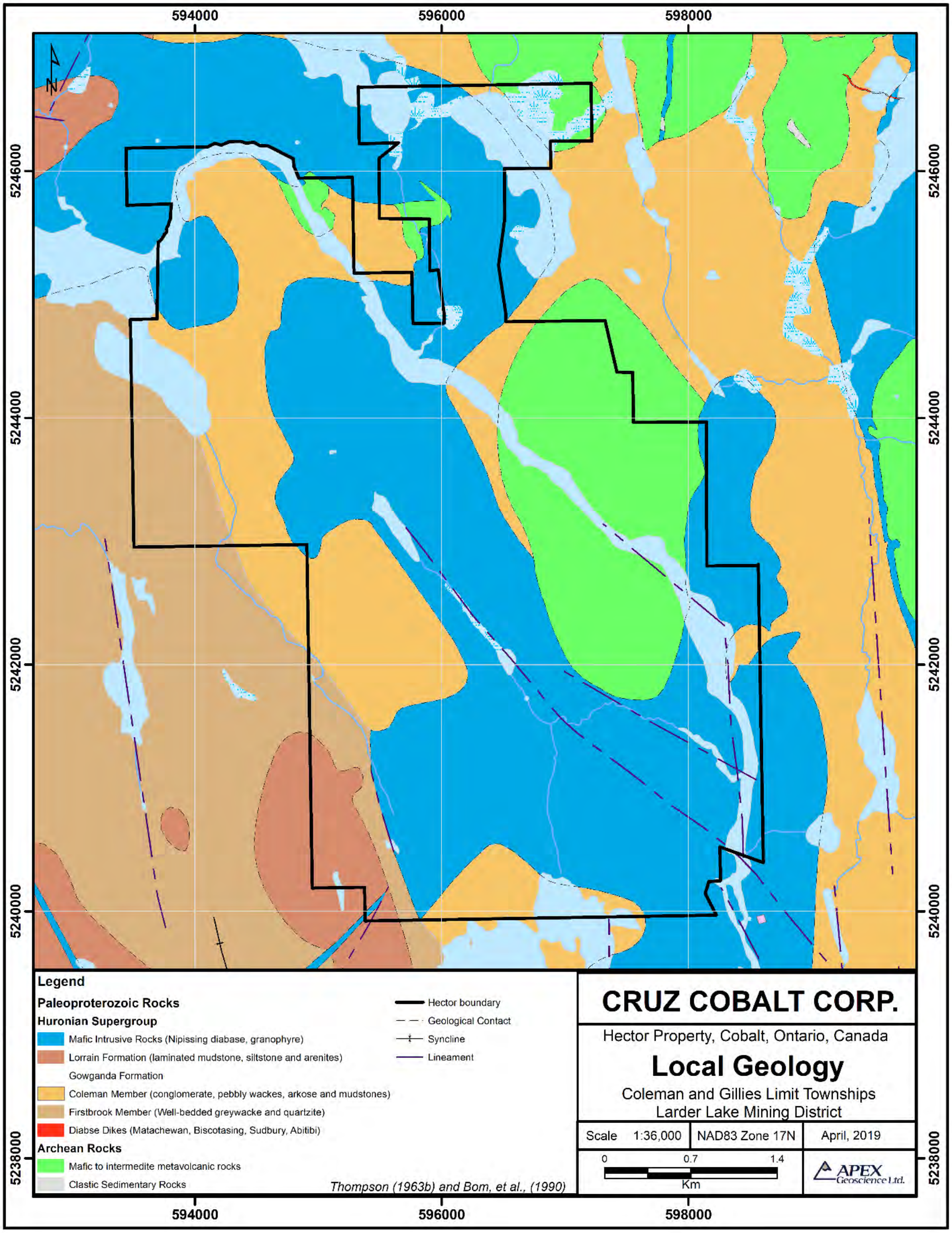
The Property area and surrounding was mapped over the course of several decades by various government geologists. The property geology is best represented by ODM Map 2051 covering the northern two-thirds of the Property (Thomson, 1963b); and ODM Map 2551 covering the southern third of the Property (Born et al., 1990). Work completed by Antediluvial Consulting Inc. during 2017 also provided geological observations and an up-to-date summary of the Property geology. The local property geology map is presented in Figure 6.3.

The Archean basement is comprised of mafic to intermediate metavolcanic rocks unconformably overlain by Paleoproterozoic rocks. The Archean rocks are mostly observed in the eastern section of the property with discrete outcrops between Bass Lake and March Bay to the north. These rocks appear to have been exposed by erosion and the lateral strike-slip movement of the Montreal River Regional Fault.

The Paleoproterozoic rocks underlie all remaining parts of the property and consist of sediments of the Huronian Supergroup and the Nipissing intrusive rocks. The local stratigraphy of the Huronian Supergroup consists of Gowganda and Lorrain formations of the Cobalt Group. The Gowganda Formation is subdivided into the lower Coleman Member, consisting of conglomerate, pebbly wackes, arkose and mudstones, and the upper Firstbrook Member, consisting of laminated mudstone, siltstone and arenites. West of the Montreal River. The sediments have a gentle dip to the west and considerably thickens towards Tran-Canada Highway 11. In the southeast and east, the sediments underlie the sill and is considerably more eroded than in the northern and the central western area of the Property.

The Nipissing diabase have intruded the Archean and Paleoproterozoic rocks and dips moderately to the west. It covers the central and the NE/NW portions of the Property. The diabase consists of quartz gabbro, vari-textured quartz gabbro, hypersthene gabbro and minor granophyre. Contact metamorphism have resulted in spotted chlorite and epidote alteration/veining near the margins with Cobalt Group country rocks. The thickness of the Nipissing diabase is variable and can be considerable to the north of the Property, from 150 to 300 metres, which had most of the historic exploration occurring at this area.

Figure 6.3. Hector Property Local Geology



APEX Geoscience Ltd.

6.3 Mineralization

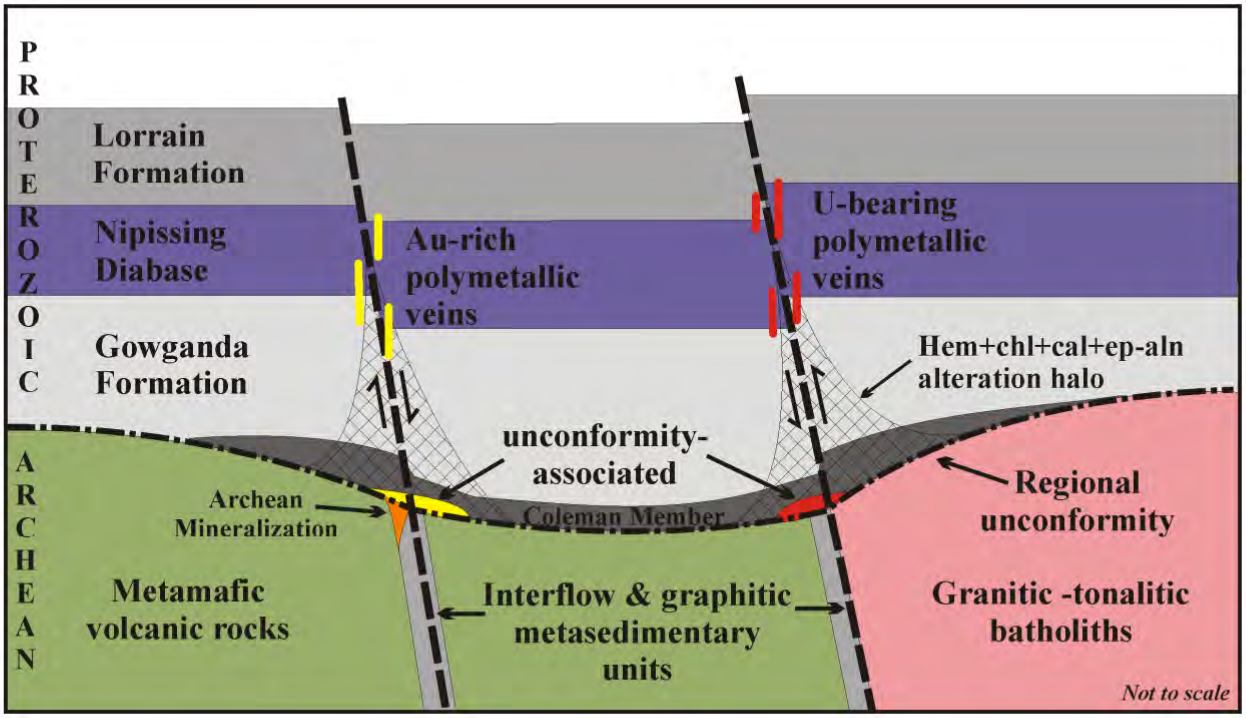
The Property is located within the historic Cobalt Mining Camp. Cobalt is well known for its association with silver mining, with cobalt seen as a by-product. The area has also been explored for gold, copper and diamonds. Typical silver-cobalt mineralization is found near the contact of the Archean and the Proterozoic Huronian Supergroup. (Joyce et. al., 2012). The basement Archean and Proterozoic rocks are intruded by the Nipissing Diabase. Although there are different views of the mineralization process, the metal mineralization seems to be associated with the unconformable contact, and within 100 m of its upper and lower contacts. Most models of mineralization are related to structures and the intrusion of the Nipissing Diabase, which may have acted as a heat source and driving hydrothermal fluids and deposition of cobalt-silver minerals in shears, fractures and faults. The Cobalt Camp silver arsenite veins are not unique and are similar to other epigenetic, hypothermal (cobalt-nickel-silver-gold-bismuth) assemblages. (Kerrich et al., 1986; Joyce et al, 2012).

Recent discoveries of polymetallic mineralization in a geological setting akin to that of the historical Cobalt Camp silver-cobalt veins have demonstrated the potential of the Cobalt Embayment to host hydrothermal mineral deposits enriched in economic metals other than silver. This has prompted a re-evaluation of the metallogeny of this important Paleoproterozoic basin in northern Ontario (Potter and Taylor, 2010). The integration of field mapping, ore mineralogy, and petrography has resulted in the identification of observed similarities of the regionally distributed hydrothermal mineralization with the following main characteristics (extracted from Potter and Taylor, 2010):

1) Occurrence in steeply-dipping, discordant calcite-quartz vein systems hosted in Nipissing Diabase and adjacent Huronian metasedimentary rocks;
2) Spatial association with periodically reactivated, regional fault systems rooted in the Archean basement; and
3) Polymetallic, precious-metal-bearing (Cu, Co, Ni, Fe, As, Au, Ag, +/- U) ore assemblage. When fully developed, the regionally distributed polymetallic veins systems exhibit a common paragenetic sequence and internal zoning with:
    a. Narrow silicate selvages (chlorite + quartz +/- epidote +/- K-feldspar +/- albite) with sporadic “early stage” sulphides (pyrite +/- chalcopyrite);
    b. A transition to calcite gangue and precipitation of hematite followed by the “main-stage” polymetallic mineralization (chalcopyrite + pyrite + cobaltite + precious-metal minerals +/- pitchblende +/- Bi-bearing sulphides +/- galena);
    c. “Late-stage” massive calcite +/- galena

A simplified exploration model for the genesis of regionally-distributed, polymetallic vein mineralization in the Cobalt Embayment is shown in Figure 6.4 below. The polymetallic veins are interpreted as a shallow, peripheral component of large-scale hydrothermal systems where flow was focussed along both the regional unconformity and reactivated faults that offset the unconformity.

Figure 6.4. Simplified Exploration Model for Regionally Distributed Polymetallic Vein Mineralization in the Cobalt Embayment (Potter and Taylor, 2010)



APEX Geoscience Ltd.

7 2017 and 2018 Exploration

In 2018, APEX Geoscience Ltd. ("APEX") was retained by Cruz Cobalt as consultants to complete a soil and rock geochemical survey, a ground geophysical survey, and an exploration diamond drilling program at the Hector Property. This section presents the results of this work. In addition to the work completed by APEX during 2018, this section also summarizes the results of a soil geochemical survey that was completed in 2017 at the Hector Property by Jean Marc Gaudreau. A total of 428 soil samples were collected between October 25th and November 3rd, 2017.

The 2018 Hector Property exploration program was designed to evaluate and follow up on the 2017 survey and historical results, and to generate targets for future exploration. The 2018 exploration program was completed in three phases: (Phase 1) a soil (203 samples) and rock (31 samples) geochemical survey from July 31st to August 10th, 2018, and a 23 line-km ground magnetometer geophysical survey from July 25th to August 2nd; (Phase 2) follow up rock sampling (12 samples) on October 2nd and 3rd, 2018; and (Phase 3) a 10 hole (843 m) diamond drilling program from October 29th to December 19th, 2018. The 2018 geophysical and geochemical surveys were completed by APEX personnel. The drilling program was supervised by APEX personnel and executed by Vital Drilling Services of Sudbury, Ontario. Drill core logging and sampling was completed by APEX geological staff. Personnel involved with the program are listed in Appendix 1.

The total cost to complete the 2017 and 2018 exploration programs, including geophysical and geochemical surveys, rock prospecting, and diamond drilling with associated costs for supervision, wages, logistics (mobilization, travel, equipment rentals, supplies, accommodations, food), geochemical analyses, data processing, evaluation, interpretation, and reporting, was $337,200.93 (Appendix 1).

7.1 2017 and 2018 Soil Geochemical Surveys

The 2017 soil geochemical survey was completed west of Bass Lake, covering an area containing historical shafts and pits. The survey grid covered an area of approximately 1.14 ha. Samples were collected along east-west or north-south oriented lines with a line spacing of 100 m and a sample spacing of 25 m. A total of 428 samples were collected from B horizon soils. Summary statistics for cobalt (Co), copper (Cu), silver (Ag), arsenic (As) and nickel (Ni) are presented in Table 7.1. Plan maps showing the 2017 soil sample locations and analytical results for cobalt (Co) copper (Cu), and silver (Ag) are presented in Figures 7.1 to 7.4.

The 2018 survey was also west of Bass Lake, covering an area of approximately 1.6 ha. Samples were collected along east-west or north-south oriented lines with a line spacing of 100 m and a sample spacing of 50 m. Some samples could not be collected due to surface disturbance (logging activities, trails, swampy areas, ponds, undeveloped soil profile). A total of 203 samples were collected from Ah horizon soils (humus). Summary statistics for cobalt (Co), copper (Cu), silver (Ag), arsenic (As), nickel (Ni) and lead (Pb) are presented in Table 7.2. Plan maps showing the 2018 soil sample locations and analytical results for cobalt (Co) copper (Cu), and silver (Ag) are presented in Figures 7.5 to 7.8.

Table 7.1. 2017 Soil Sample Geochemistry Summary Statistics

Statistics	Co (ppm)	Cu (ppm)	Ag (ppm)	As (ppm)	Ni (ppm)
Mean	13.61	15.06	0.27	4.02	32.00
Median	12.25	10.05	0.24	3.10	30.50
Minimum	4.28	0.90	0.09	0.40	10.90
Maximum	43.10	180.00	2.23	78.20	95.90
70th Percentile	14.90	16.18	0.29	4.20	35.29
90th Percentile	20.29	30.65	0.39	6.80	44.49
95th percentile	23.47	43.93	0.48	8.60	50.26

Table 7.2. 2018 Soil Sample Geochemistry Summary Statistics

Statistics	**Co (ppm)**	**Cu (ppm)**	**Ag (ppm)**	**As (ppm)**	**Ni (ppm)**	**Pb (ppm)**
Mean	6.24	36.44	1.17	18.05	25.50	63.00
Median	4.40	32.10	0.93	13.40	23.20	59.80
Minimum	1.40	4.40	0.06	1.30	6.40	6.00
Maximum	98.20	240.00	5.48	290.00	88.70	199.00
70th Percentile	5.70	42.58	1.48	18.68	29.46	82.68
90th Percentile	10.12	64.58	2.46	30.52	40.44	122.80
95th percentile	13.06	83.50	2.97	39.34	50.84	144.10

Individual soil sample coordinates and descriptions for the 2017 and 2018 soil geochemical surveys are presented in Appendix 2. Full analytical results and copies of the laboratory certificates are presented in Appendix 3.

A total of 631 soil samples were collected during the 2017 and 2018 surveys. Soil geochemical results have defined several north-northwest trending geochemical anomalies within the Nipissing diabase in and/or near historical pits, shafts and mineralized veins. Copper and silver anomalies are observed at the Gillies West, Gillies East and north of Gillies East. Three additional northwest-trending soil anomalies were also identified:

1) The Hector Anomaly is a 200 by 200 m soil anomaly occurring approximately 300 m northwest of the historic Hector silver mine shaft, and returned 4 samples with values greater than 25 ppm cobalt.
2) The Gillies East Anomaly is approximately 600 m northwest of the Hector Anomaly, and returned 6 samples with values greater than 25 ppm cobalt.
3) The Gillies West Anomaly is proximal to Gillies Creek, at the western margin of the survey area, and returned the highest cobalt value of 98 ppm.

Figure 7.1. 2017 B Horizon Soil Sample Locations

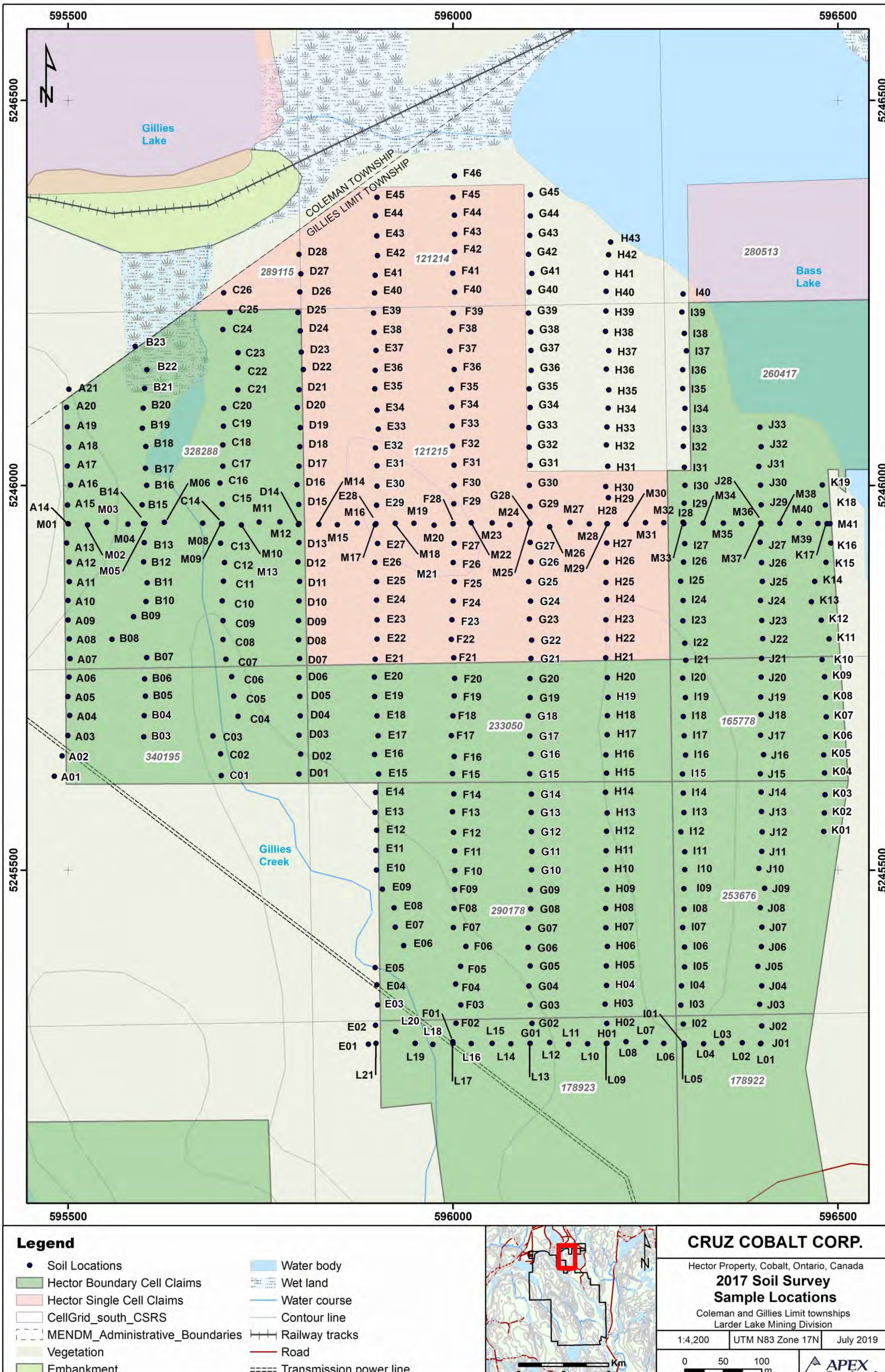


Figure 7.2. 2017 B Horizon Soil Geochemistry for Cobalt (Co)

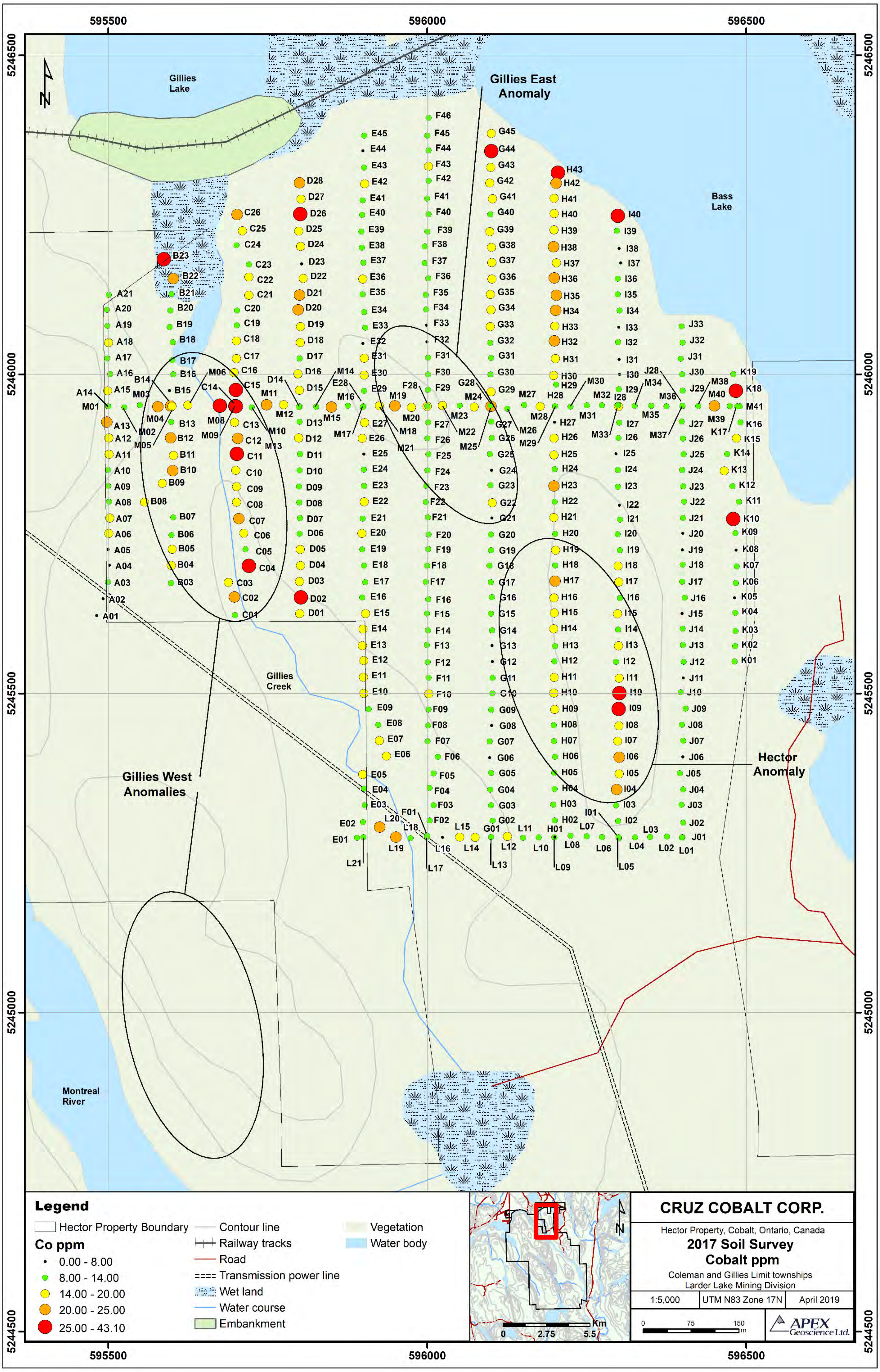


Figure 7.3. 2017 B Horizon Soil Geochemistry for Copper (Cu)

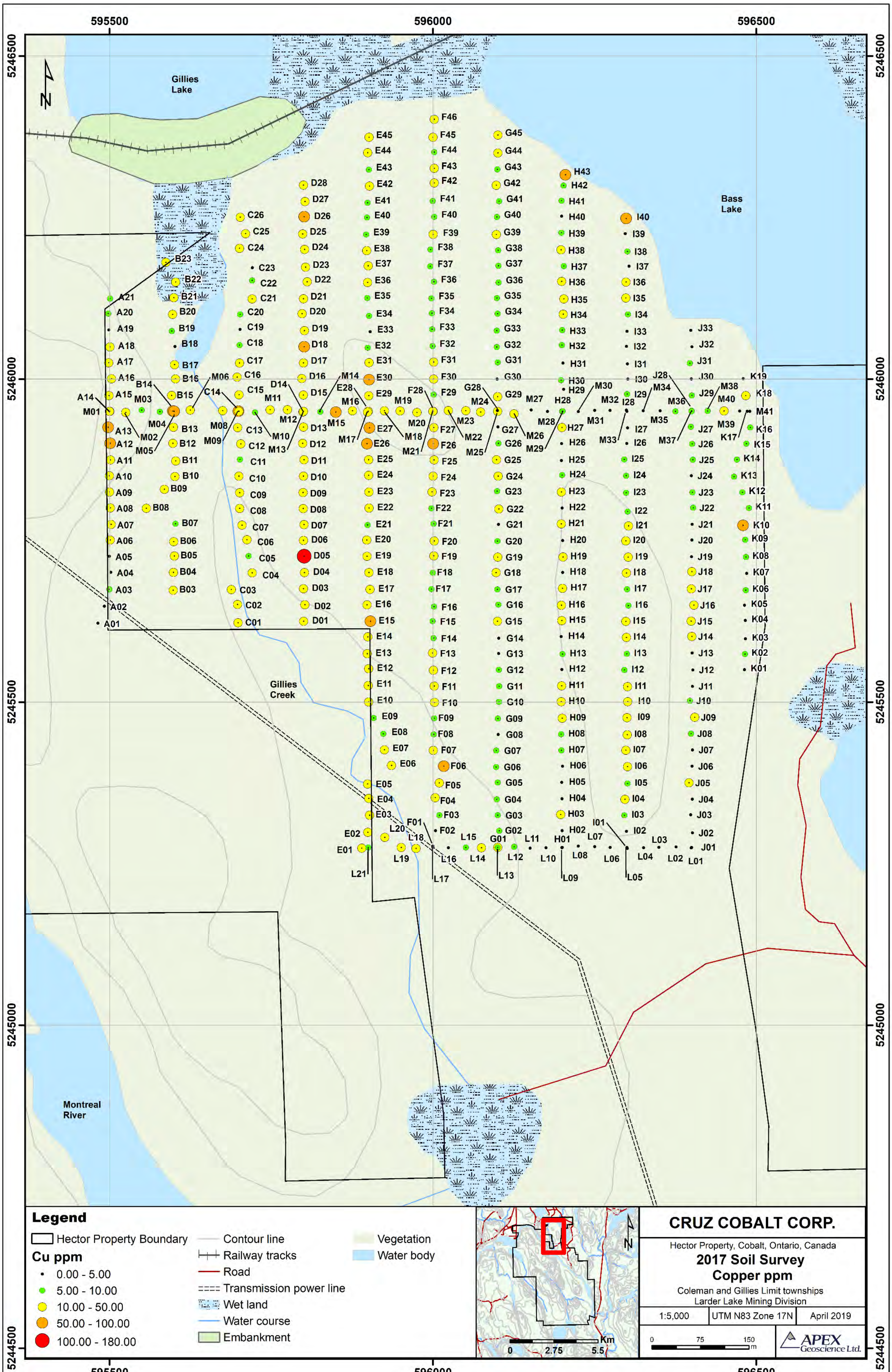


Figure 7.4. 2017 B Horizon Soil Geochemistry for Silver (Ag)

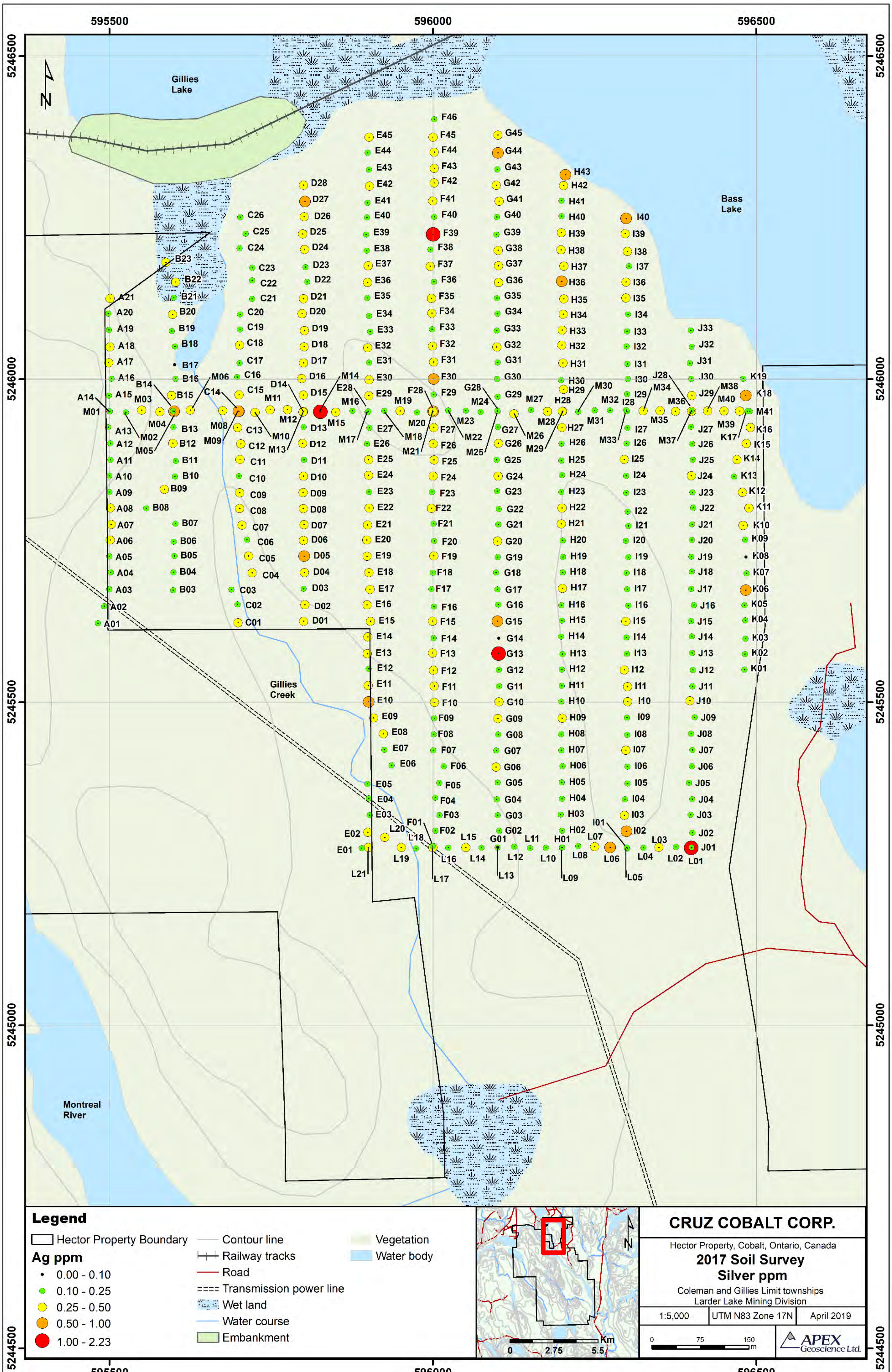
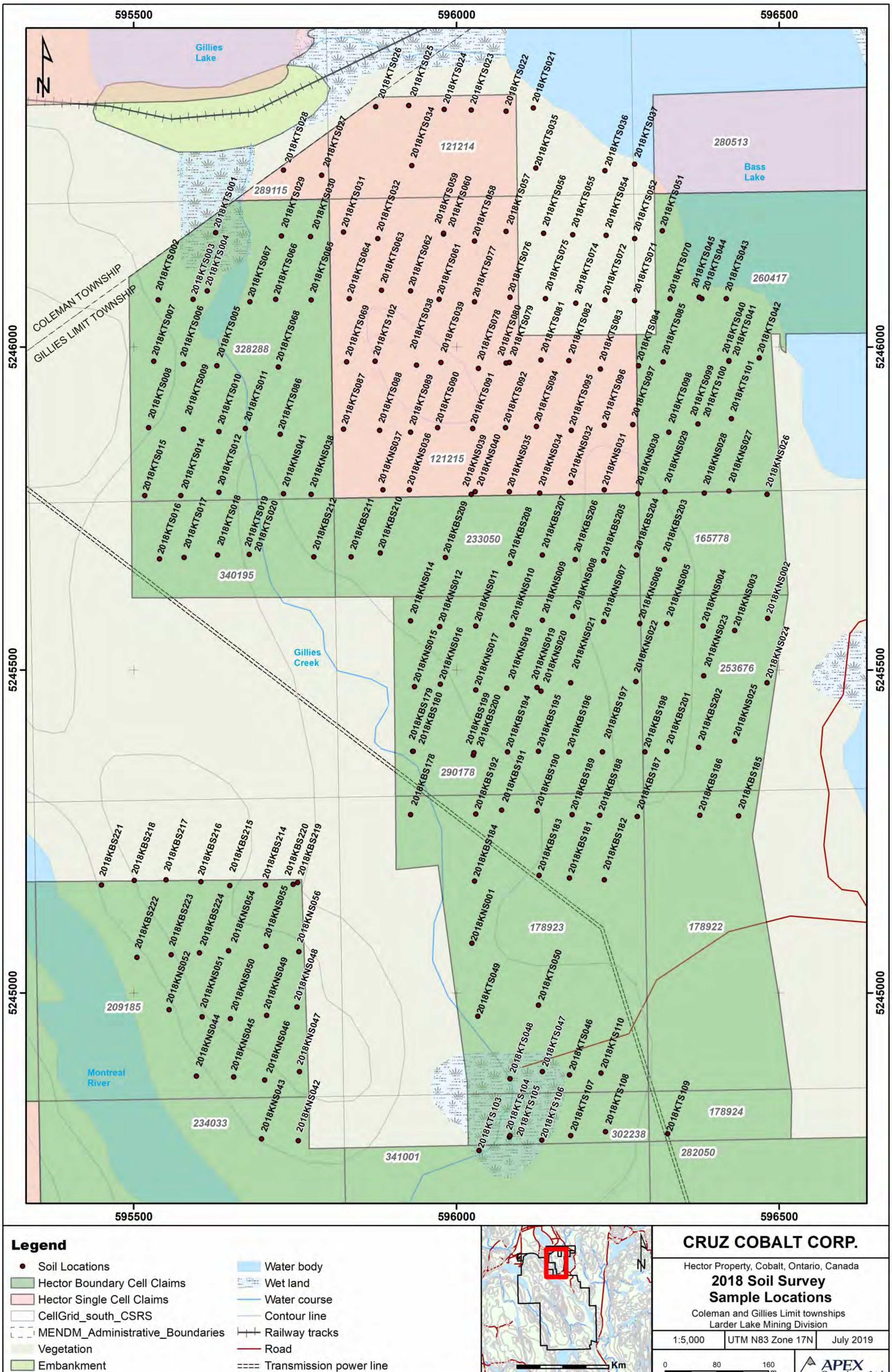


Figure 7.5. 2018 Ah Horizon Soil Sample Locations



APEX Geoscience Ltd.

Figure 7.6. 2018 Ah Horizon Soil Geochemistry for Cobalt (Co)

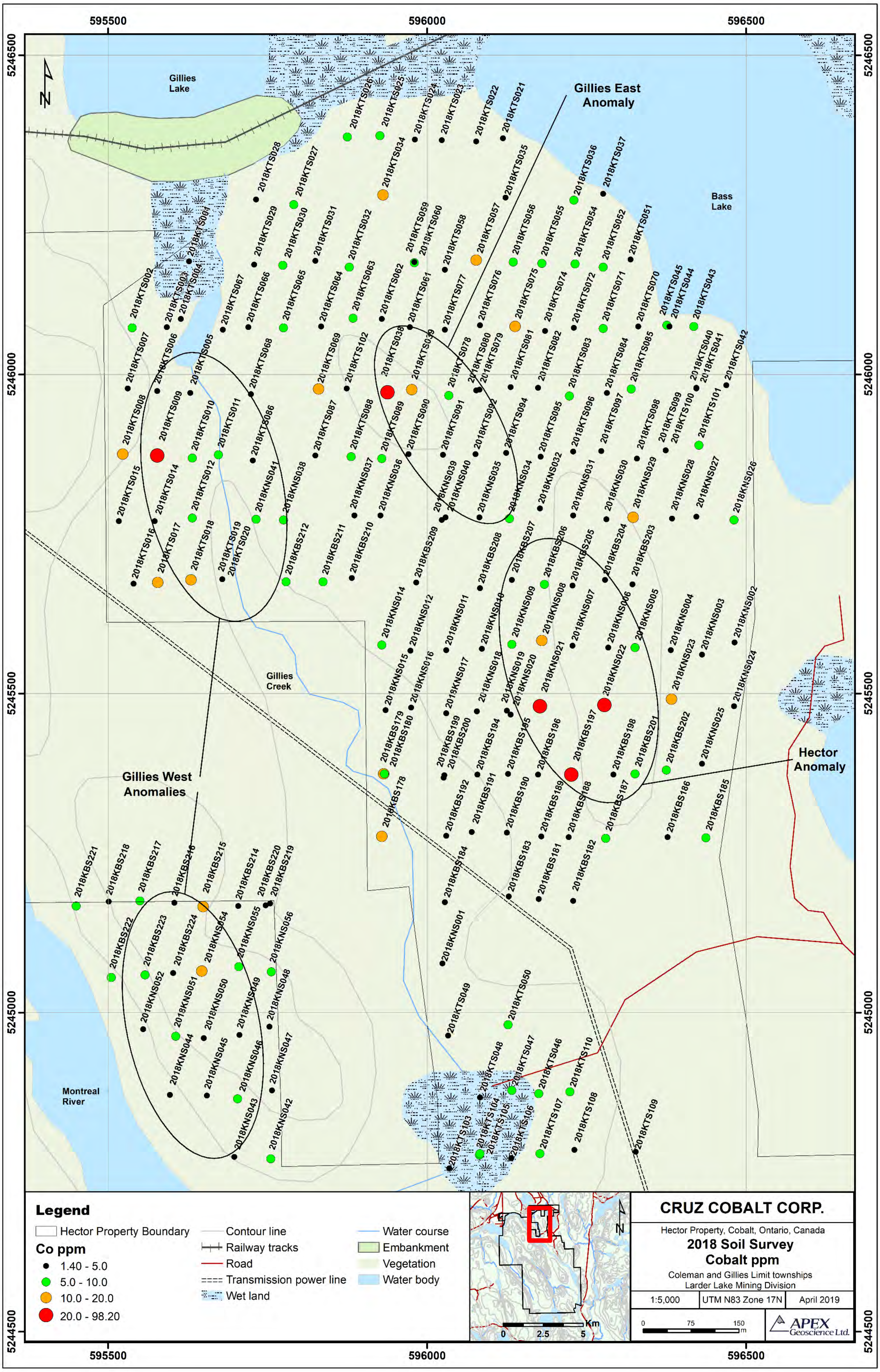


Figure 7.7. 2018 Ah Horizon Soil Geochemistry for Copper (Cu)

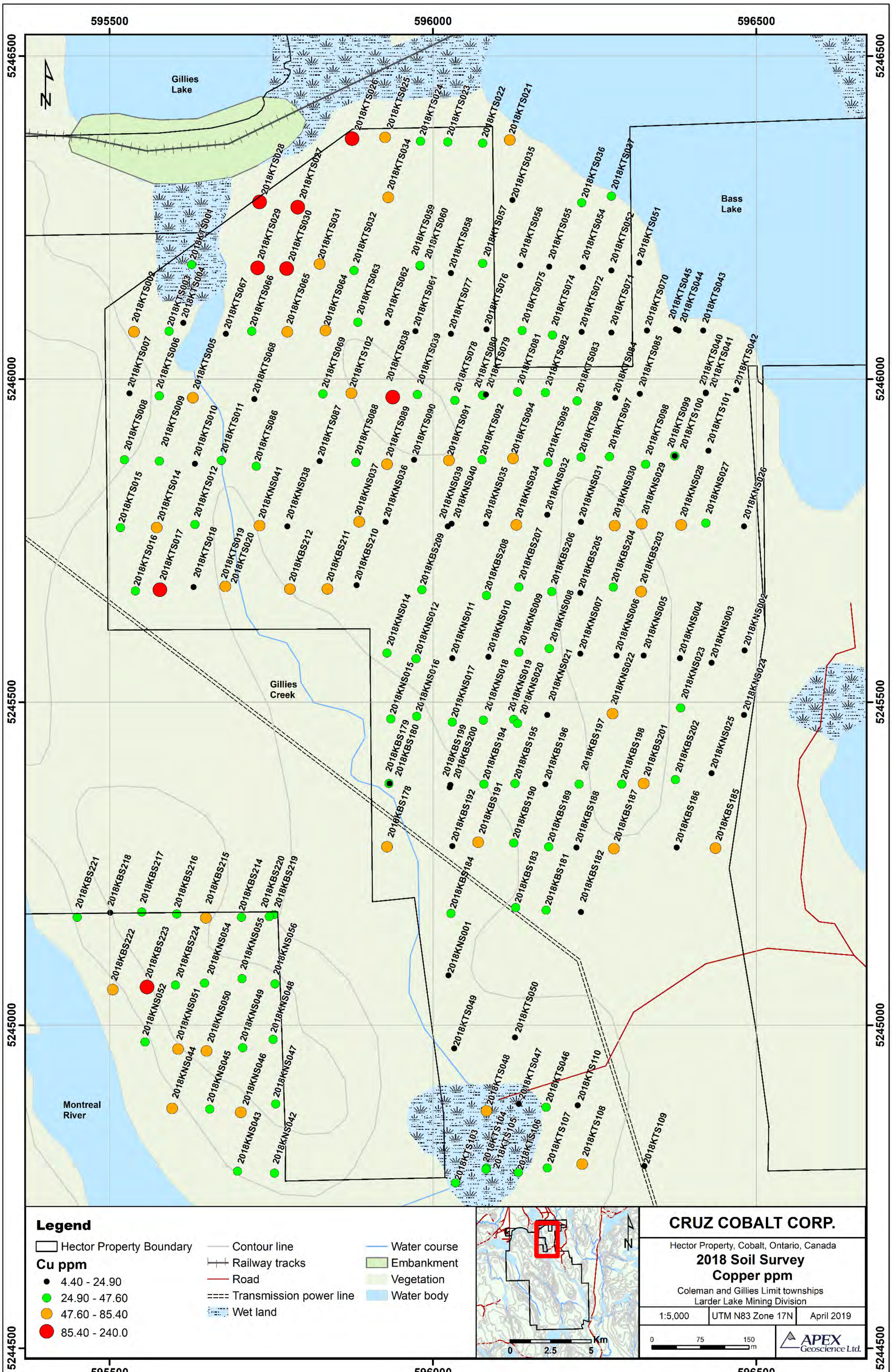
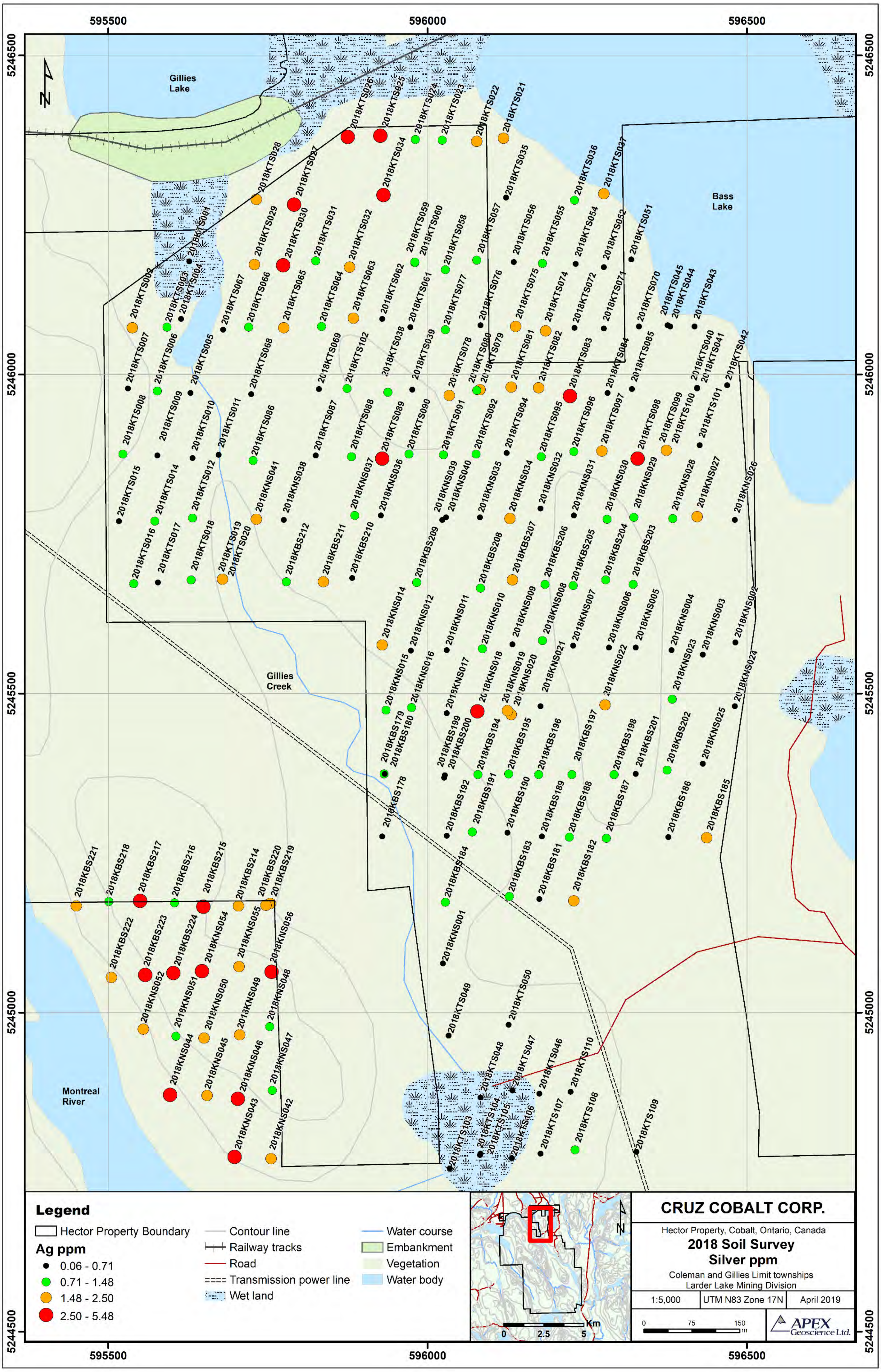


Figure 7.8. 2018 Ah Horizon Soil Geochemistry for Silver (Ag)



7.2 2018 Rock Geochemical Survey

A total of 43 rock samples were collected during 2018 in the vicinity of Bass Lake, in the northeast part of the Hector Property. Rock samples tested historical occurrences, known pits, shafts and mineralized veins, and new sites of interest. Collected rock samples were representative of the mineralized vein systems within the property and typically found in outcrops, talus and floats.

Seven rock grab samples returned values greater than 0.1% cobalt, and up to 2.02% cobalt from the Gillies East, Gillies West and Hector anomalies. Anomalous silver (up to 13.1 ppm) and gold (up to 0.37 ppm) values were also returned (Table 7.3). Summary statistics for cobalt (Co), copper (Cu), silver (Ag), arsenic (As), gold (Au) and nickel (Ni) are presented in Table 7.4. Plan maps showing the 2018 rock sample locations and analytical results for cobalt (Co) copper (Cu), and silver (Ag) are presented in Figures 7.9 to 7.12.

Table 7.3. 2018 Anomalous Rock Sample Results

Sample ID	Prospect	Sample Type	Co (%)	Ag (g/t)	Au (g/t)	Cu (g/t)
2018KBP040	Gillies East	Prospect Pit Float	2.02	13.1	-	-
2018KBP042		Outcrop	0.61	4.1	-	-
2018KBP034	Gillies West	Outcrop	0.82	-	-	-
2018KBP033		Outcrop	0.42	-	-	-
18MAP075	Hector	Prospect Pit Float	0.4	0.4	-	-
18KRP601		Prospect Pit Float	0.19	-	-	-
2018KBP037	Gillies West	Prospect Pit Float	0.19	-	-	-
2018KBP061		Outcrop	-	-	0.37	-
18KRP604	Gillies East	Prospect Pit Float	-	0.5	-	0.107

Table 7.4. 2018 Rock Sample Geochemistry Summary Statistics

Statistics	Co (%)	Cu (%)	Ag (g/t)	Au (g/t)	Ni (%)
Mean	0.12	0.02	0.61	0.01	0.01
Median	0.01	0.01	0.10	0.00	0.01
Minimum	0.00	0.00	0.10	0.00	0.00
Maximum	2.02	0.11	13.10	0.37	0.16
70th Percentile	0.03	0.02	0.20	0.00	0.01
90th Percentile	0.41	0.05	0.94	0.03	0.04
95th percentile	0.78	0.06	3.54	0.04	0.09

The Gillies East anomaly returned the highest assay values for cobalt, silver and copper while the Gillies West anomaly have returned the highest assay value for gold. The Hector anomaly returned a moderate assay value for both cobalt and silver. Individual rock sample coordinates and descriptions are presented in Appendix 2. Full analytical results and copies of the laboratory certificates are presented in Appendix 3.

Figure 7.9. 2018 Rock Sample Locations

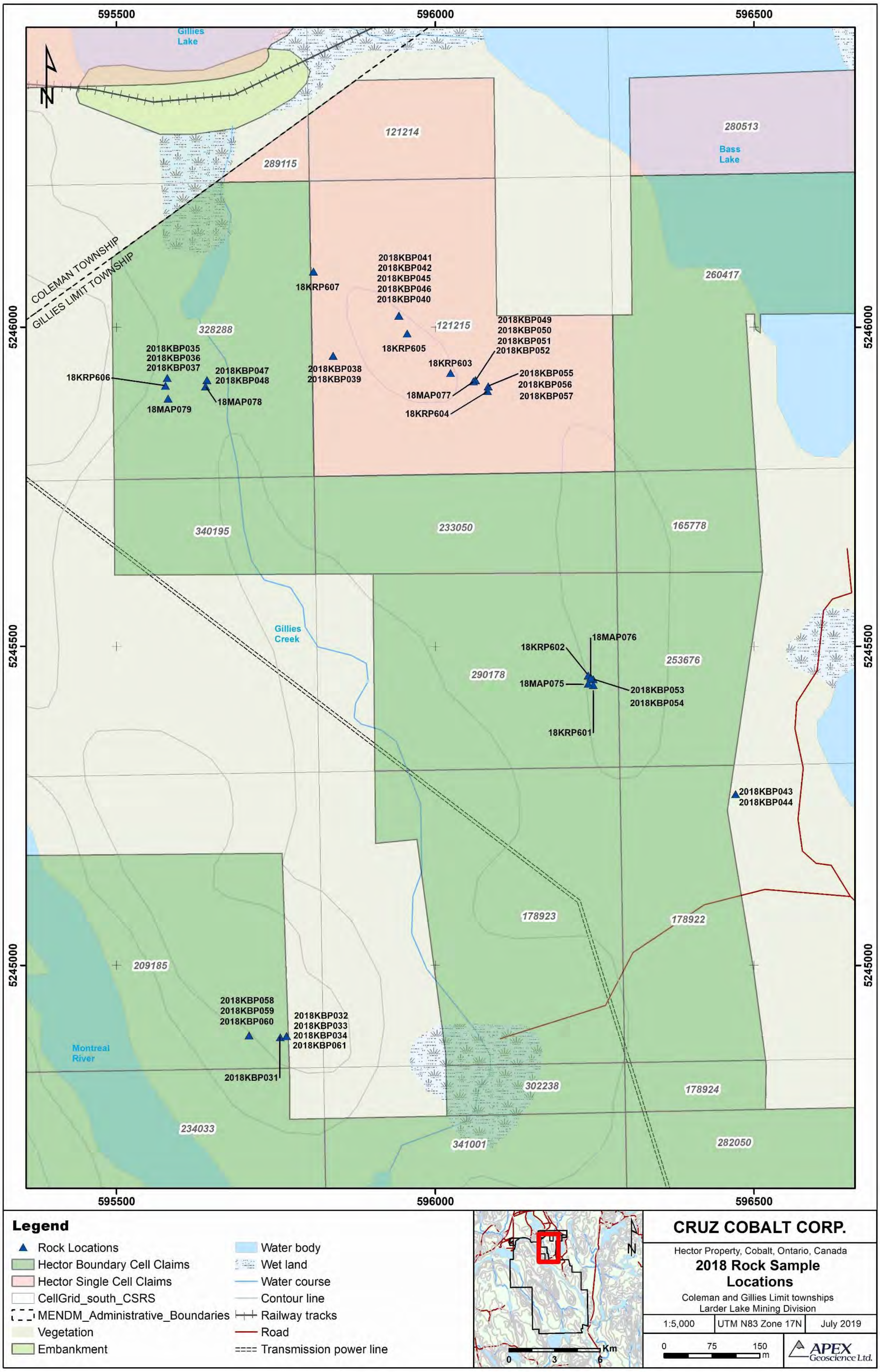


Figure 7.10. 2018 Rock Geochemistry for Cobalt (Co)

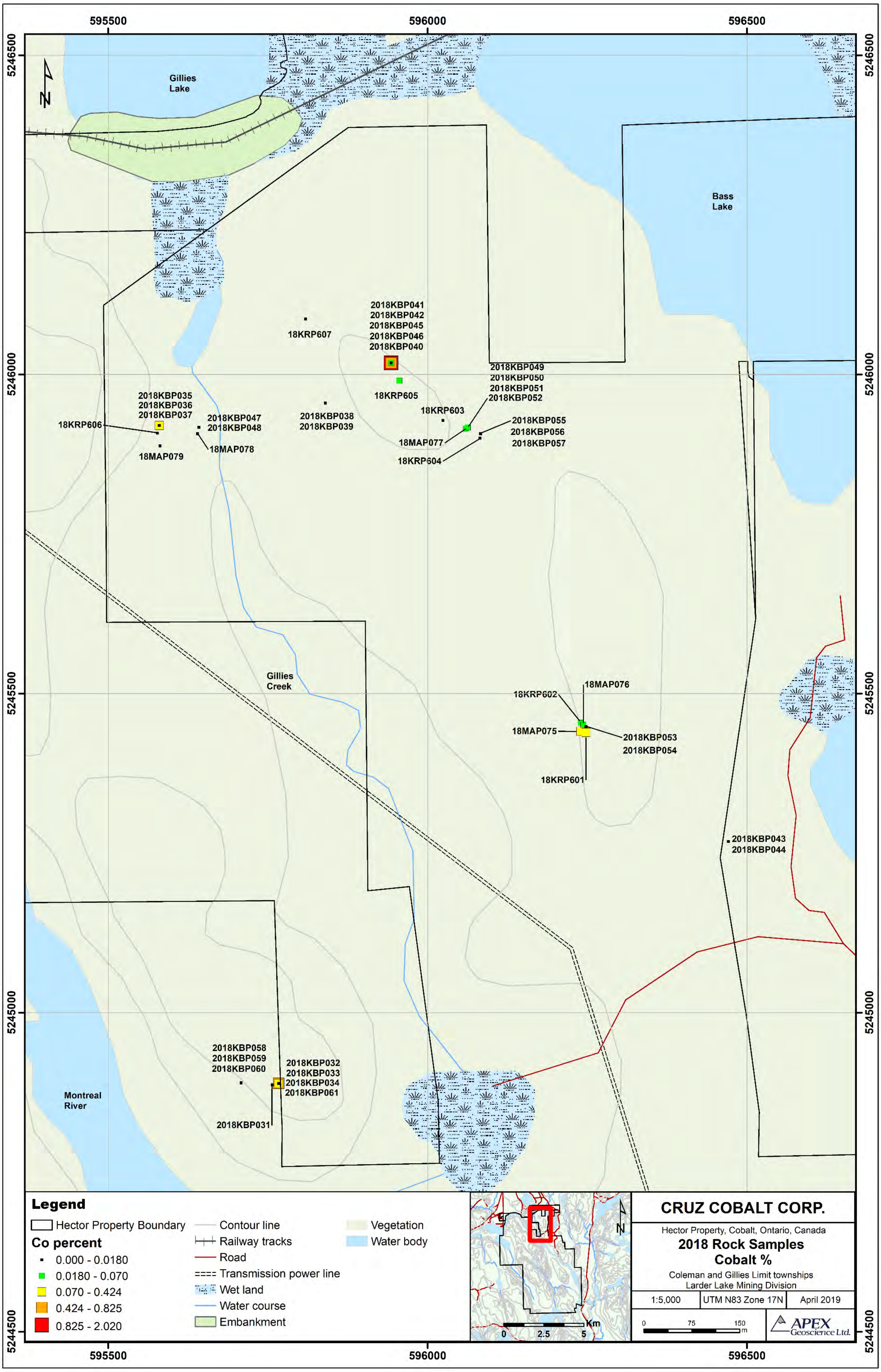


Figure 7.11. 2018 Rock Geochemistry for Copper (Cu)

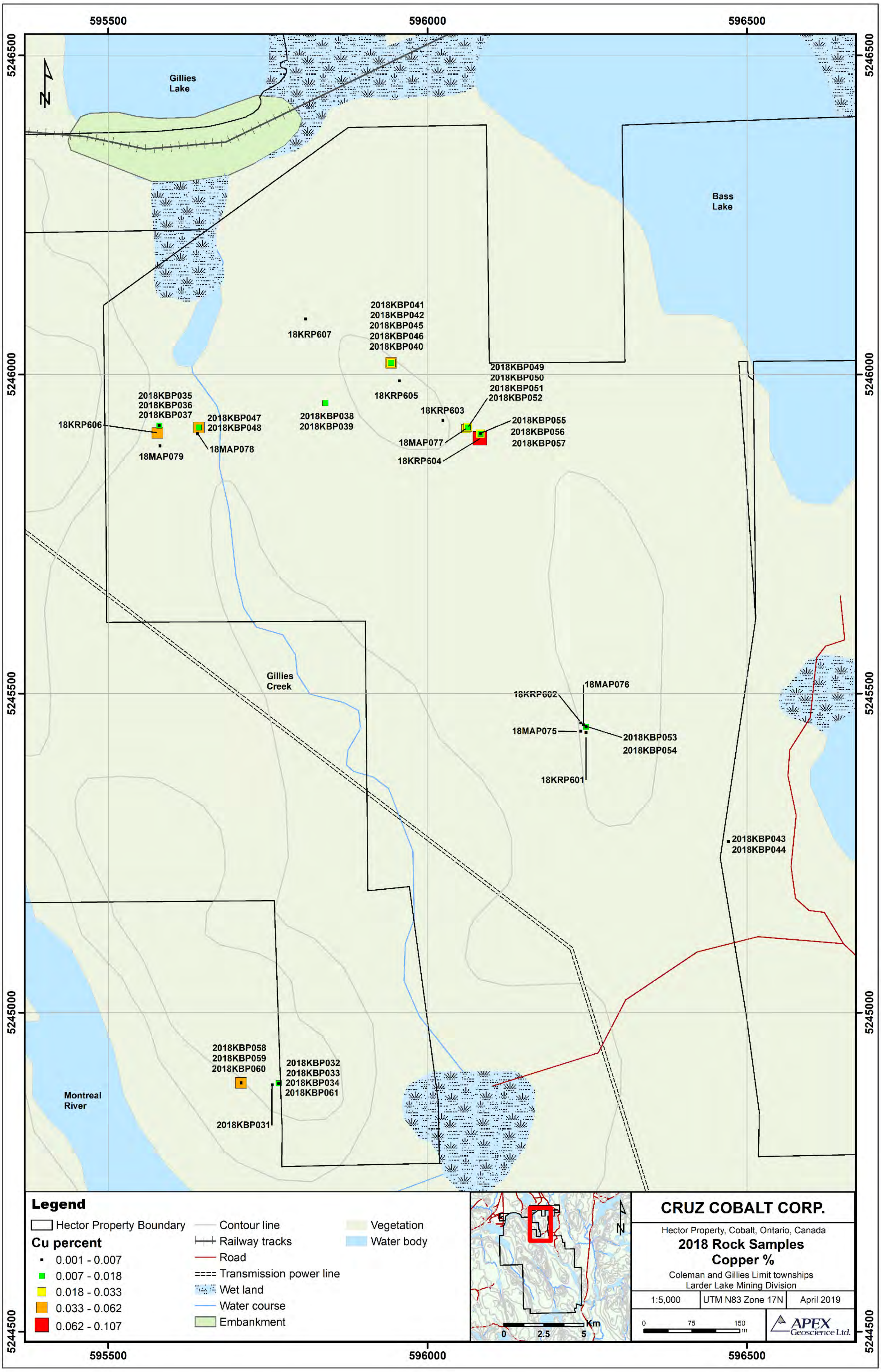
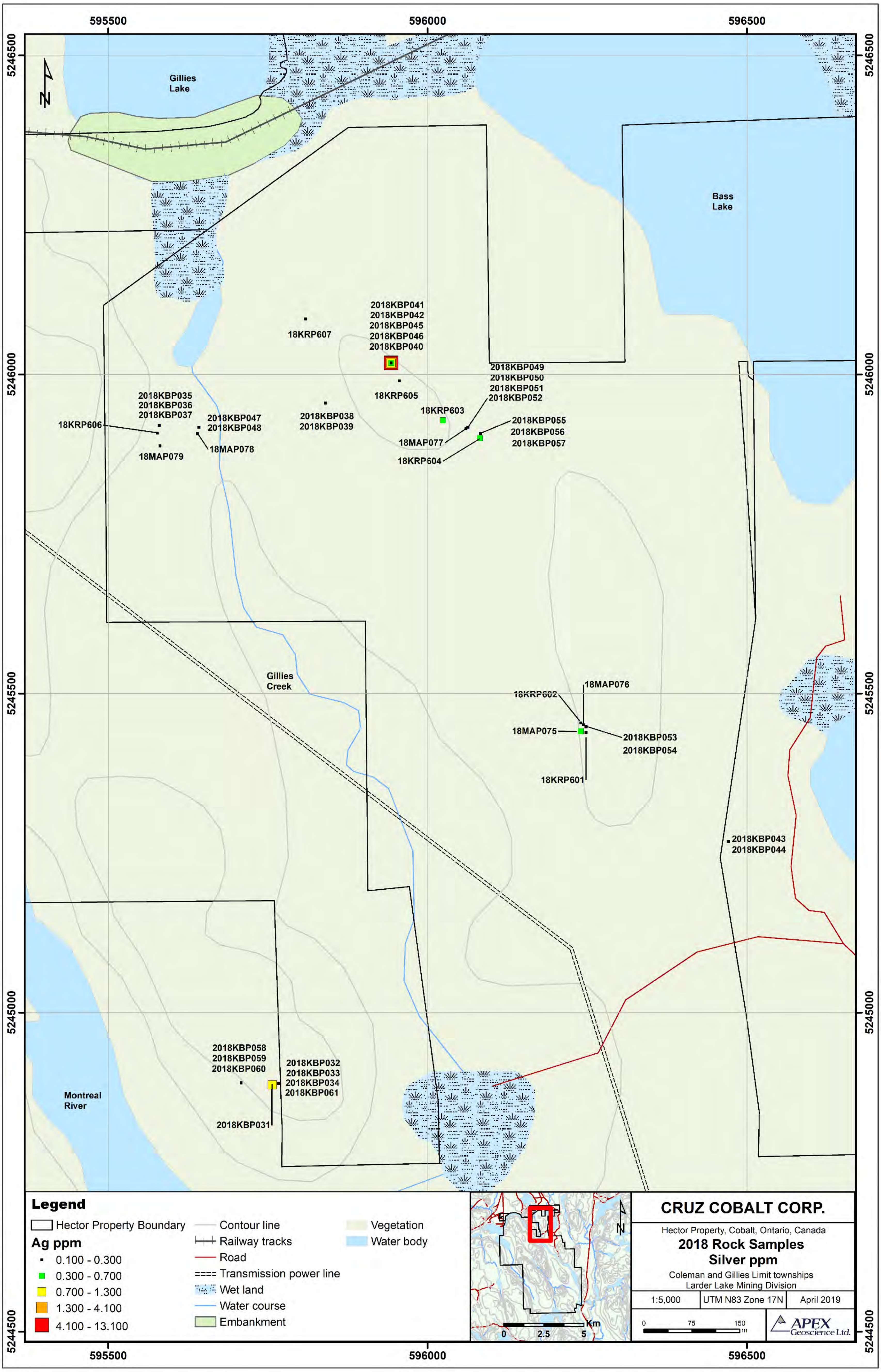


Figure 7.12. 2018 Rock Geochemistry for Silver (Ag)



7.3 2018 Ground Magnetometer Survey

A 23 line-km ground magnetic (magnetometer) survey was completed at the Hector Property as part of the 2018 exploration program between July 25th, 2018 and August 2nd, 2018. The ground magnetics survey was conducted to augment the soil sampling survey and to map the extents of the Nipissing diabase in the northwest area of the Property. The survey grid was composed of 33 traverse lines, with lines ranging in length from 215 m to 1030 m, spaced at 50 m, and oriented east-west.

7.3.1 Equipment and Procedures

The ground magnetic survey was conducted on foot using a "walking" magnetometer capable of acquiring nearly continuous data. No line-cutting or grid making was required for the survey work to be completed, rather, the traverse lines were established on-the-go using handheld GPS receivers that were pre-loaded with the proposed survey line paths. The GPS operator did not use flagging tape to mark the traverse lines as the magnetometer operator was always within view of the GPS operator.

The survey was completed using a Gem Systems Inc. GSM-19W CDGPS magnetometer collecting readings of the total magnetic field in walking mode at a 1 Hz frequency. A Gem Systems GSM-19 magnetometer was set up at a fixed location near the grid to record the diurnal variation at a fixed location (base station). The base station was positioned at approximately 596699E, 5244799N.

The GSM-19W walking magnetometers have a built-in GPS receiver which is used to affix a GPS location to each magnetic intensity measurement. The station locations were recorded using NAD27 datum UTM Zone 17 projection, then immediately re-projected to NAD 83 datum UTM Zone 17 projection.

Equipment and software used:

Base Magnetometer:	GemSystem Overhauser GSM-19
Rover Magnetometer:	GemSystem Overhauser GSM-19W
Handheld GPS Receiver:	Garmin GPSmap 64
QA/QC and Processing:	Geosoft Oasis montaj

GSM-19W magnetometer specifications:

Sensitivity:	0.022 nT @ 1 Hz, (0.015 nT option)
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Dynamic Range:	20,000 to 120,000 nT
Gradient Tolerance:	Over 10,000 nT/m
Sampling Intervals:	60+, 5, 3, 2, 1, 0.5, 0.2 sec

Metal cultural features (cabins, metal drums, pipelines, power lines, etc.) were rarely observed in the field during the survey. A power line near traverse lines in the southern part of the block had no effect on geophysical results.

During the survey, small lakes / ponds, streams and marshy areas within the grid area were avoided and as a result, traverse lines were adjusted accordingly. The majority of traverse lines did not significantly deviate from the proposed lines, except where topography or private properties were a factor.

7.3.2 Data Processing and QA/QC

The quality of the data collected by both the base and walking magnetometers were assessed for excessive noise based on the recorded signal quality, the 4th difference noise levels, and the presence of high-frequency and high-amplitude signals in the magnetic intensity survey readings. The base magnetometer data was additionally reviewed for excessive space weather noise (due to solar events such as mass coronal ejections, etc.). The data collected by the base magnetometer was found to be sufficient for all diurnal corrections. The quality of the station coordinates recorded by the walking magnetometer was assessed for low confidence (less than 4 satellites visible to the GPS antenna) and unlikely positions (jumps in position that were not humanly possible). Poor quality data was then either removed from the database or filtered to assign more realistic station locations.

Diurnal corrections were performed by subtracting the magnetic field intensity readings recorded by the base magnetometer from the coincident magnetic field intensity readings recorded by the walking magnetometer – linear interpolation of the base magnetometer data was carried out to match the cycling rate of the walking magnetometer.

The survey was completed over multiple days, therefore an overlap line of more than 100 metres was traversed at the start and end of each day to facilitate levelling of the survey data to a common datum. To perform the levelling, the average magnetic intensity was calculated from each traverse of the overlap line, and then this value was subtracted from each corresponding dataset.

The diurnally corrected and leveled survey data was then merged into a single database; corrected and leveled data is labelled residual magnetic intensity (RMI). A simple moving window mean filter was also applied to the dataset to help smooth out high frequency noise; ideal window size was subjectively determined to be 5 to 7 readings.

Data was processed and gridded using Geosoft Oasis Montaj. The grids were created using the minimum curvature method, also called RANGRID, with 15 m cell size. GeoTIFF images of the grids was exported from Geosoft and imported into ArcGIS 10.3 to generate the geophysical survey figures for this report.

7.3.3 Survey Results

Residual magnetic intensity (RMI; Figure 7.10) and RMI first vertical derivative (1VD; Figure 7.11) data show laterally persistent linear highs and corresponding lows paralleling the structural trend at the Property. The high anomalies may represent stronger magnetic phases within the diabase complex; the magnetic lows are interpreted as structural jointing and/or localized offsets (faults).

The magnetic survey results provide a significant improvement in resolution versus the existing airborne magnetic data, defining local structural features and magnetic anomalies that may have exploration potential. Two primary anomalies of interest were identified west of Bass Lake:

3) A strong, arcuate, NNW-trending magnetic high anomaly at the center of the Nipissing diabase. The anomaly is most pronounced near the lower contact of the Nipissing diabase to the southeast and covers the historical Hector Silver Mine shaft (Hector Anomaly) and Gillies East.
4) A smaller NNW-trending anomaly to the west, proximal to the top of the sill and covering the northern part of the Gillies West anomaly.

Both anomalies are coincident with cobalt in soil anomalies from the 2017 and 2018 geochemical surveys and/or historical workings or mineral occurrences.

Figure 7.1. 2018 Ground Magnetic Survey Residual Magnetic Intensity (RMI)

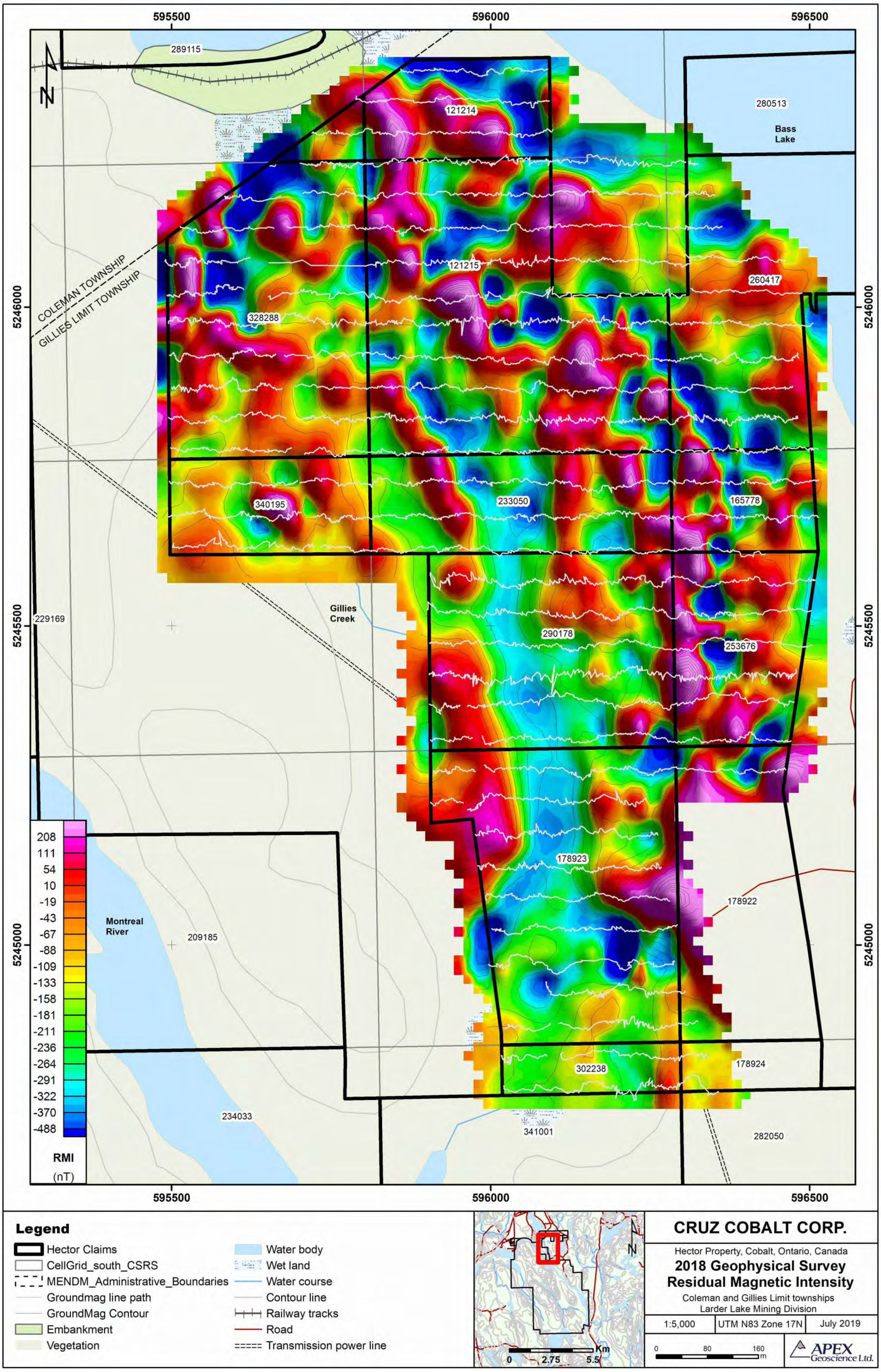
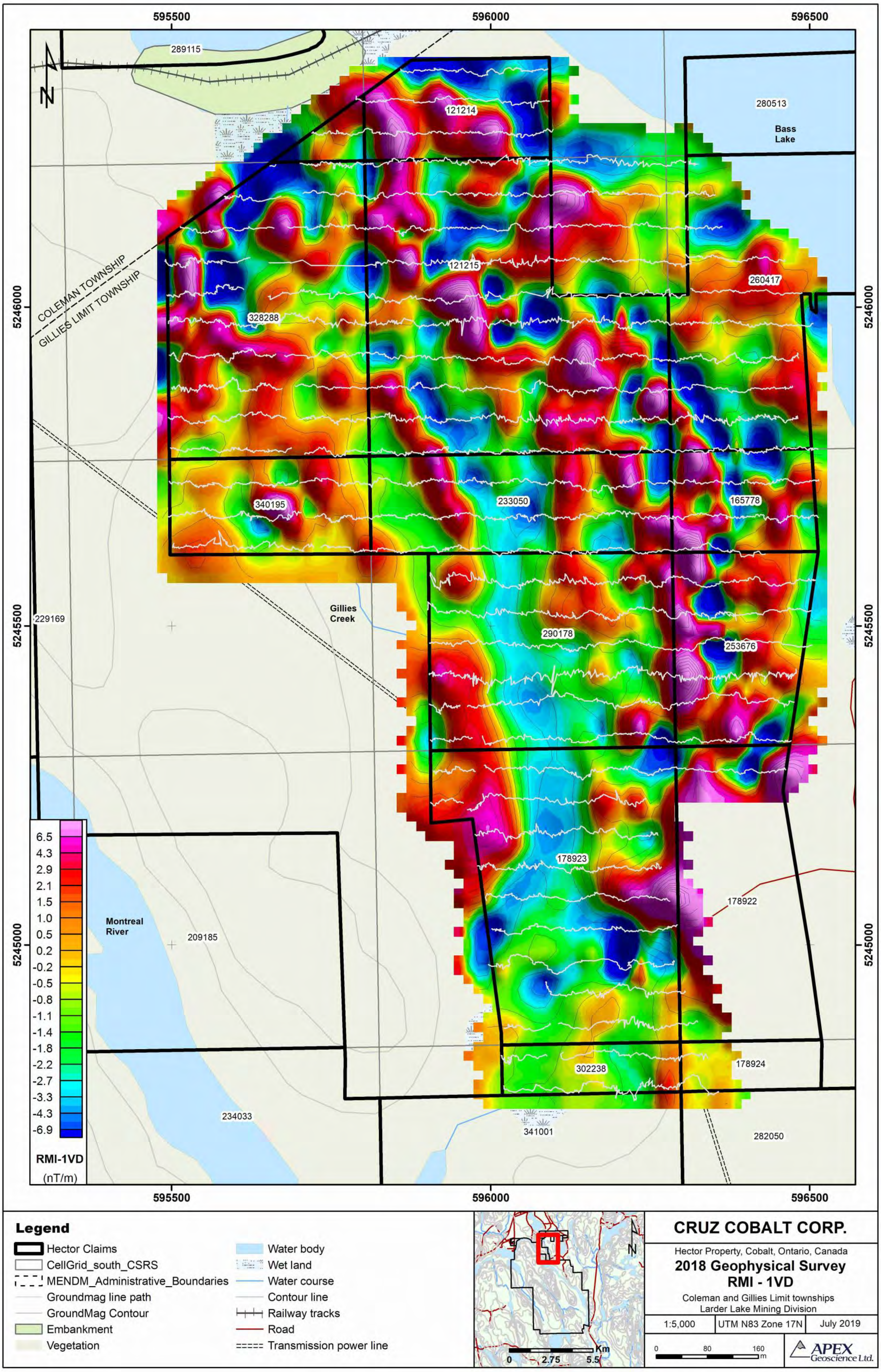


Figure 7.2. 2018 Ground Magnetic Survey Residual Magnetic Intensity First Vertical Derivative (RMI 1VD)



7.4 Diamond Drilling

Ten NQ diameter diamond drill holes, totalling 843 m, were completed during the 2018 program (Table 7.5; Figure 7.12). The drilling program tested historical cobalt results, in addition to 2017 and 2018 surface geochemical anomalies and ground magnetic anomalies at the Hector and Gillies East targets. Four drill holes totalling 395 m tested the Hector anomaly, 3 holes totalling 264 m tested the Gillies East 1 anomaly, and 3 holes totalling 185 m targeted the Gillies East 2 anomaly.

Table 7.5. 2018 Diamond Drill Hole Details

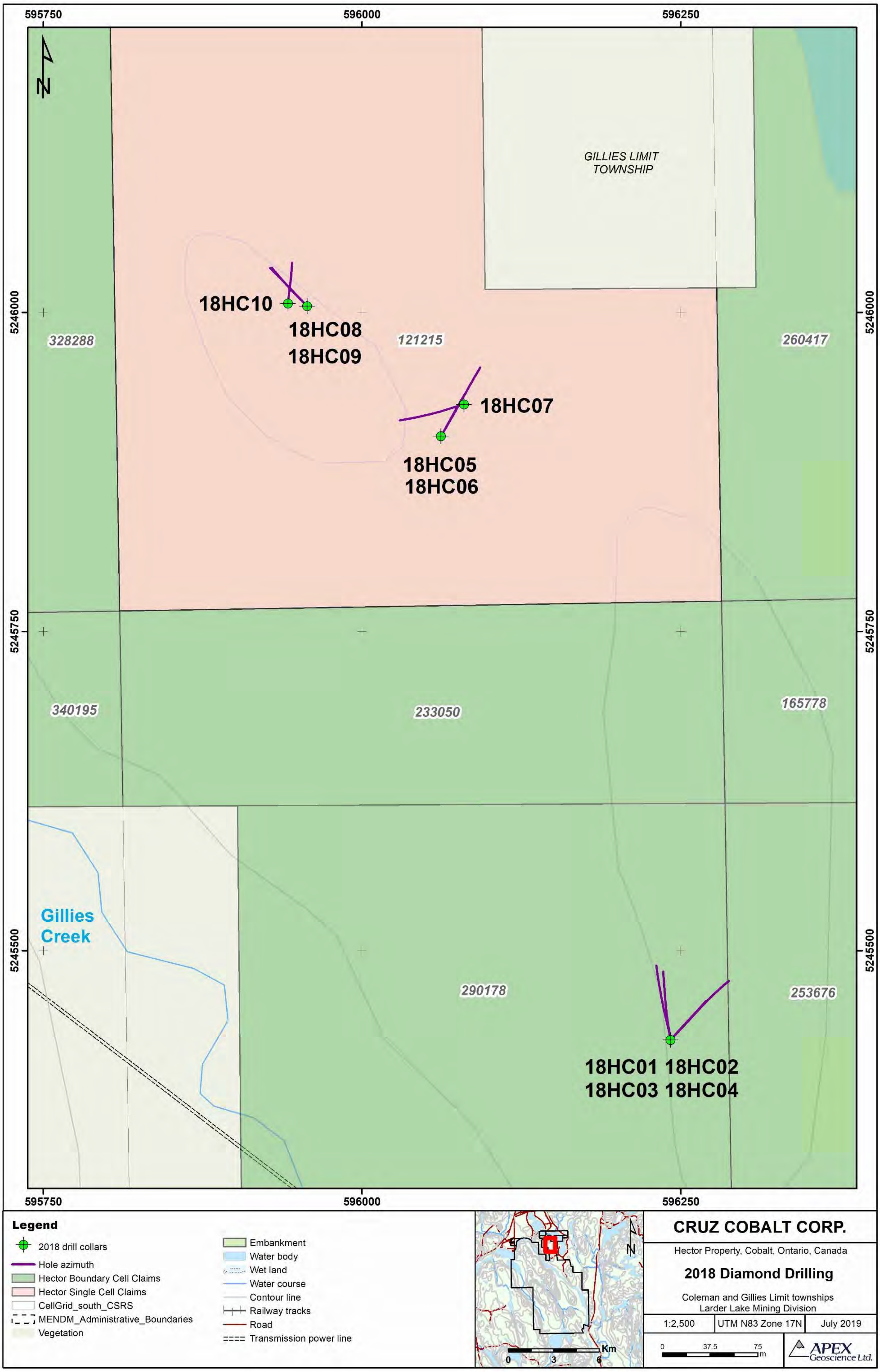
Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip	Depth (m)	Samples Collected	Samples Assayed
18HC01	596242	5245430	294	350	-45	85.7	48	48
18HC02	596242	5245430	294	350	-60	105	43	43
18HC03	596242	5245430	294	40	-50	105	43	43
18HC04	596242	5245430	294	40	-65	99	32	32
18HC05	596062	5245903	303	30	-45	91.5	36	36
18HC06	596062	5245903	303	30	-60	98.5	28	28
18HC07	596080	5245928	294	255	-45	74	27	27
18HC08	595957	5246005	295	315	-45	59	25	25
18HC09	595957	5246005	295	315	-60	80	26	26
18HC10	595942	5246007	295	5	-45	45.5	34	34
					Total:	843.2	342	342

For each drill hole, geological observations were recorded comprising lithology, mineralization, alteration, veining and structural measurements. Geotechnical data were recorded comprising core recovery, rock quality designation (RQD) and magnetic susceptibility. Down-hole survey directional data was collected using a Reflex EZ-Shot instrument. Geological and geotechnical drill logs are presented in Appendix 2. Full analytical results and copies of the laboratory certificates are presented in Appendix 3.

7.4.1 Hector Anomaly Results

Drill holes 18HC01 through 18HC04 targeted historical trenches and cobalt in rock and soil geochemical anomalies. All holes drilled through variable phases of the Nipissing diabase without reaching the lower contact with the Archean rocks. The holes intersected moderate to strong alteration and near surface anomalous cobalt (Co) and copper (Cu) values beneath the vertical projection of the historical trench. Mineralization was present as disseminated to clotty pyrite-chalcopyrite and is associated with moderate to intense chlorite-silica and potassic alteration of diabase host-rocks and narrow carbonate-quartz-potassium feldspar vein zones.

Figure 7.3. 2018 Diamond Drill Hole Locations



Drill hole 18HC01 returned 66 ppm Co and 132 ppm Cu over 10.88 m core length from a depth of 5.12 m. Drill holes 18HC02, 18HC03, and 18HC04 intersected a second zone of mineralization between 80-95 m depth. Drill hole 18HC02 returned 310 ppm Co over 1 m core length at a depth of 83.45 m, 18HC03 reported 300 ppm Cu and 90 ppm Co over 2.10 core length at 93.40 m, and 410 ppm Cu and 80 ppm Co over 1 m core length at 92 m down hole. Significant drill hole intercepts are presented in Table 7.6. Cross sections for the Hector Anomaly holes are presented in Figures 7.13 and 7.14.

Table 7.6. 2018 Diamond Drill Hole Significant Intercepts

Target	Drill Hole	From (m)	To (m)	Interval (m)*	Co (ppm)	Cu (ppm)	Au (ppb)	Ag (ppm)
Hector	18HC01	5.12	16	10.88	66	132	-	-
	and	24	25	1	110	-	-	-
	18HC02	83.45	84.45	1	310	60	-	-
	and	89.45	91.45	2	110	110	-	-
	and	94.33	95.02	0.69	130	150	-	-
	18HC03	11.8	17	5.2	-	127	-	-
	and	89.1	89.6	0.5	130	240	-	-
	and	93.4	95.5	2.1	90	300	-	-
	18HC04	92	93	1	80	410	-	-
Gillies East 1	18HC05	12	14	2	70.00	50.00	-	-
	and	30.8	31.3	0.5	40.00	230.00	-	-
	18HC06	10.5	15.5	5	42	162	-	-
	and	50	51	1	50	650	-	-
	18HC07	4.0	4.5	0.5	30.00	110.00	-	-
	and	32	33	1	40.00	110.00	-	-
Gillies East 2	18HC08	8	9	1	-	-	37	1.3
	and	18	21	3	97	57	-	-
	18HC09	18	23	5	-	472	-	-
	including	18	19	1	-	1420	-	-
	and	74.15	74.65	0.5	120	-	21	-
	18HC10	15	16	1	110	-	33	-
	and	18	21	3	-	283	-	-
	including	19	20	1	-	560	-	-

**The true width of mineralization is estimated to be 70-80% of the drilled interval.*

Figure 7.4. Drill Cross Section 18HC01 and 18HC02

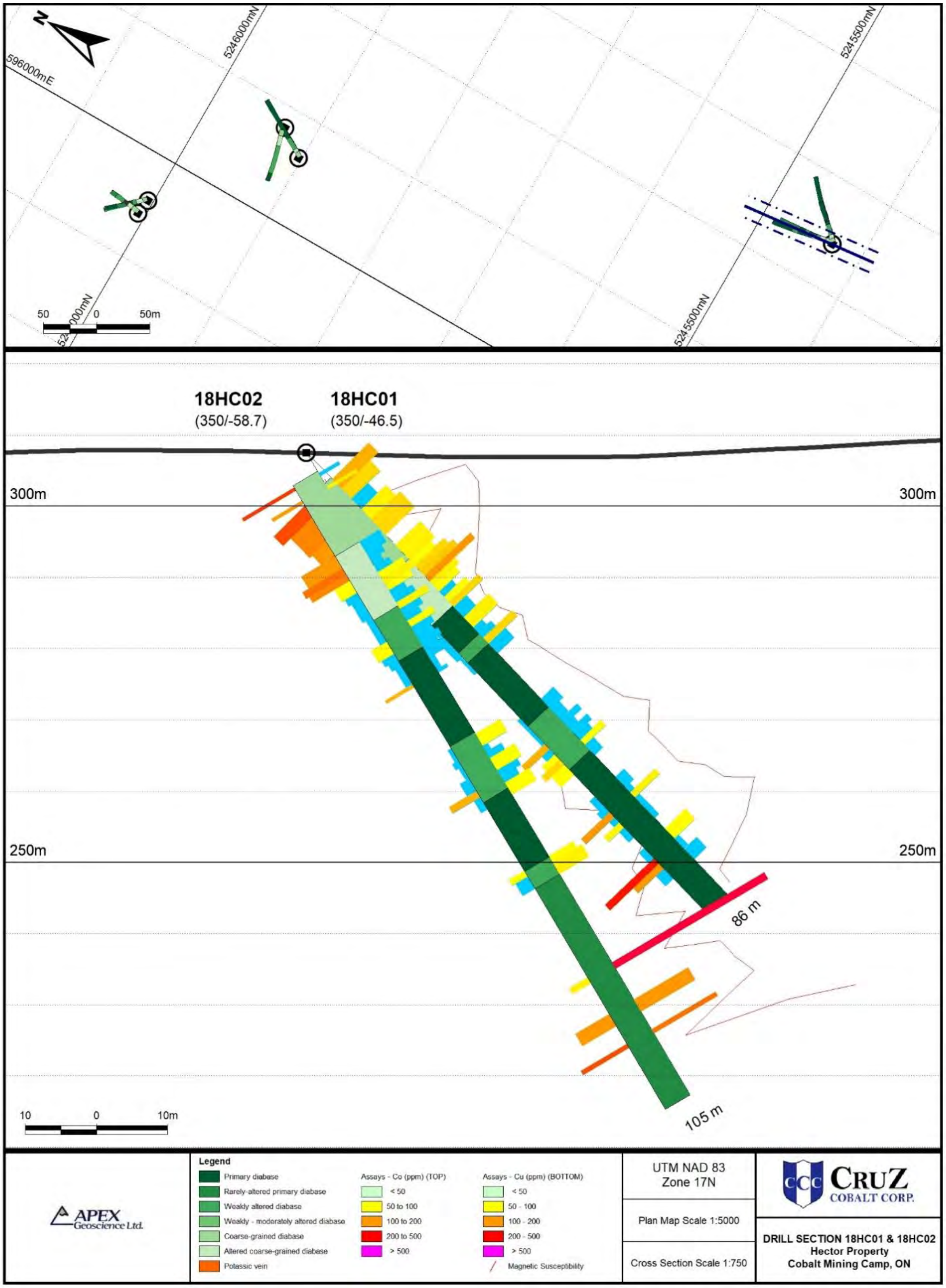
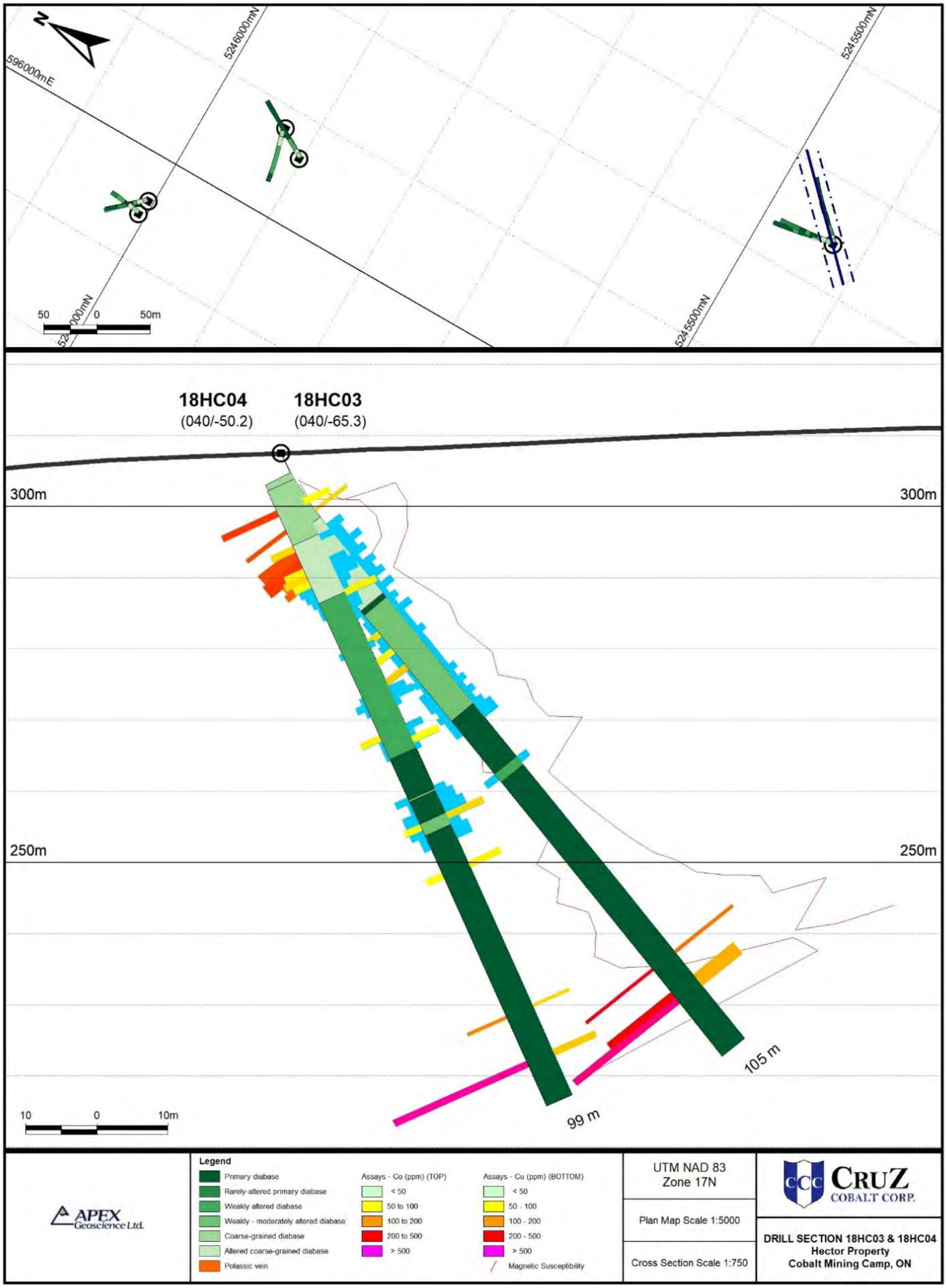


Figure 7.5. Drill Cross Section 18HC03 and 18HC04



7.4.2 Gillies East 1 Anomaly Results

The Gillies East 1 target is a northwest trending, sub-vertical vein zone intermittently exposed on the surface over a 100 m strike that returned anomalous cobalt in rock and soil values. Hole 18HC06 drilled across the projected strike of the vein at a -60° dip. The drill hole intersected a broad zone of anomalous copper returning 162 ppm Cu and 42 ppm Co over 5 m core length at a depth of 10.5 m. The zone is associated with moderate chlorite-potassic alteration and disseminated pyrite-chalcopyrite mineralization. A deeper, narrow zone of pyrite-chalcopyrite vein mineralization coincident with the vertical projection of surface mineralization returning 650 ppm Cu over 1 m core length at a depth of 50 m. Drill hole 18HC05 returned 230 ppm Cu over 0.5 m at a depth of 30.8 m. A cross section for the Gillies East 1 Anomaly holes is presented in Figure 7.15.

7.4.3 Gillies East 2 Anomaly Results

The Gillies East 2 target is centred over an area of historic prospect pits and shallow vertical shafts. The previous exploration was driven by a series of narrow, northwest trending fracture-controlled pyrite-chalcopyrite-erythrite (hydrous cobalt-arsenite) mineralized potassic altered quartz veins that returned cobalt values of 2.02% and 0.61% in float and rock outcrop. Mineralization intersected in 18HC08, 18HC09 and 18HC10 is coincident with the vertical projection of the vein system and is strongly associated with moderate to intense alteration haloes surrounding carbonate-potassium feldspar-silica (±chlorite) veins, and clotty pyrite-chalcopyrite.

Drill Hole 18HC08 drilled oblique across the area of the historic trenches at a -45° dip. The drill hole returned 97 ppm Co over a 3 m core length interval from a depth of 18 m beneath the vertical projection of surface mineralization. Drill hole 18HC09 drilled at a -60° dip intersected a broader zone of copper mineralization returning 472 ppm Cu over a 5 m core interval from a depth of 18 m, including 0.14% Cu over 1 m. Drill hole 18HC10 drilled to the north at a -45° dip intersected the same zone returning 283 ppm Cu over 3.0 m; including 560 ppm Cu over 1m core length from a depth of 18.00 m. A cross section for the Gillies East 2 Anomaly holes is presented in Figure 7.16.

Figure 7.6. Drill Cross Section 18HC05, 18HC06 and 18HC07

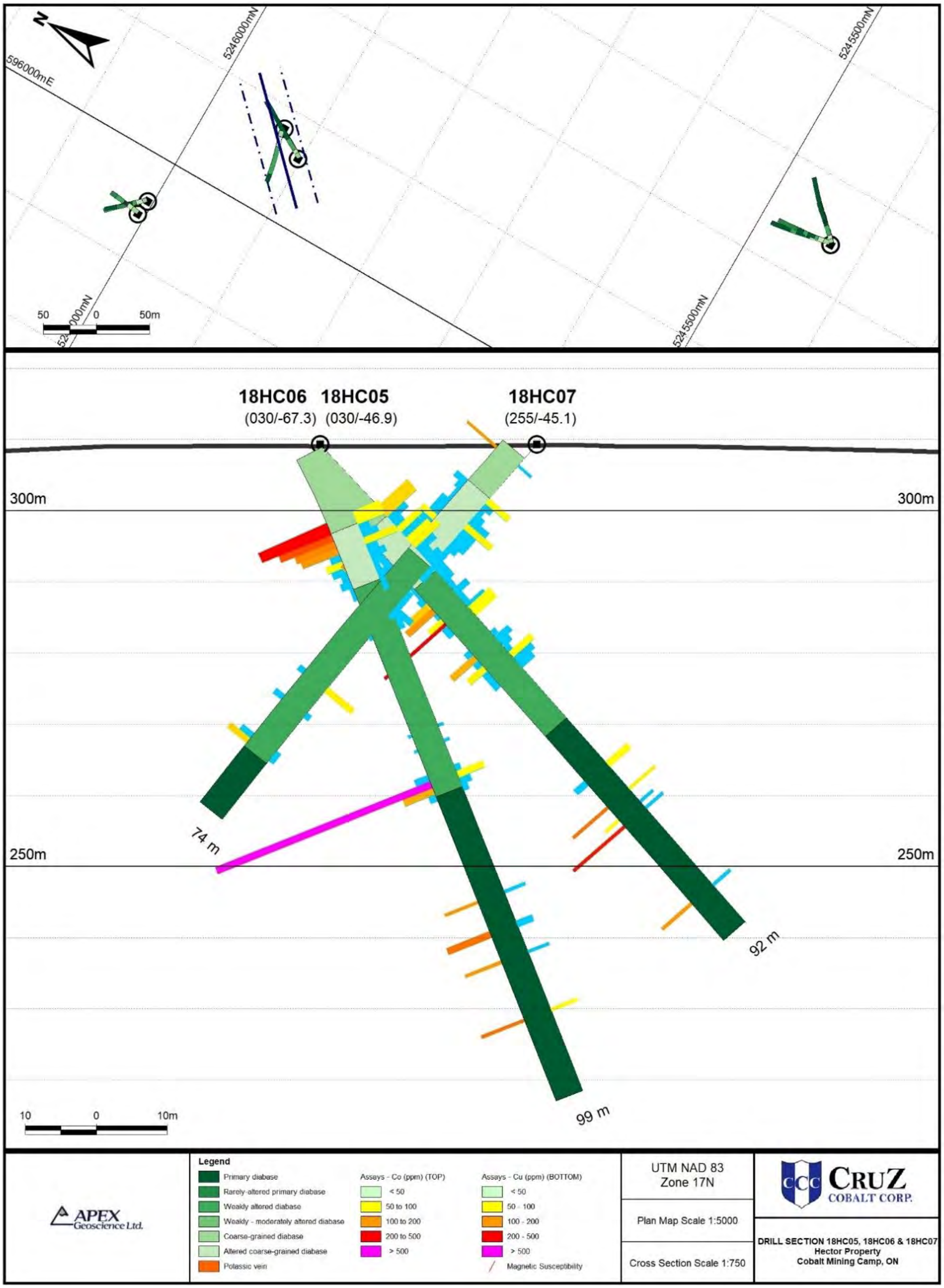
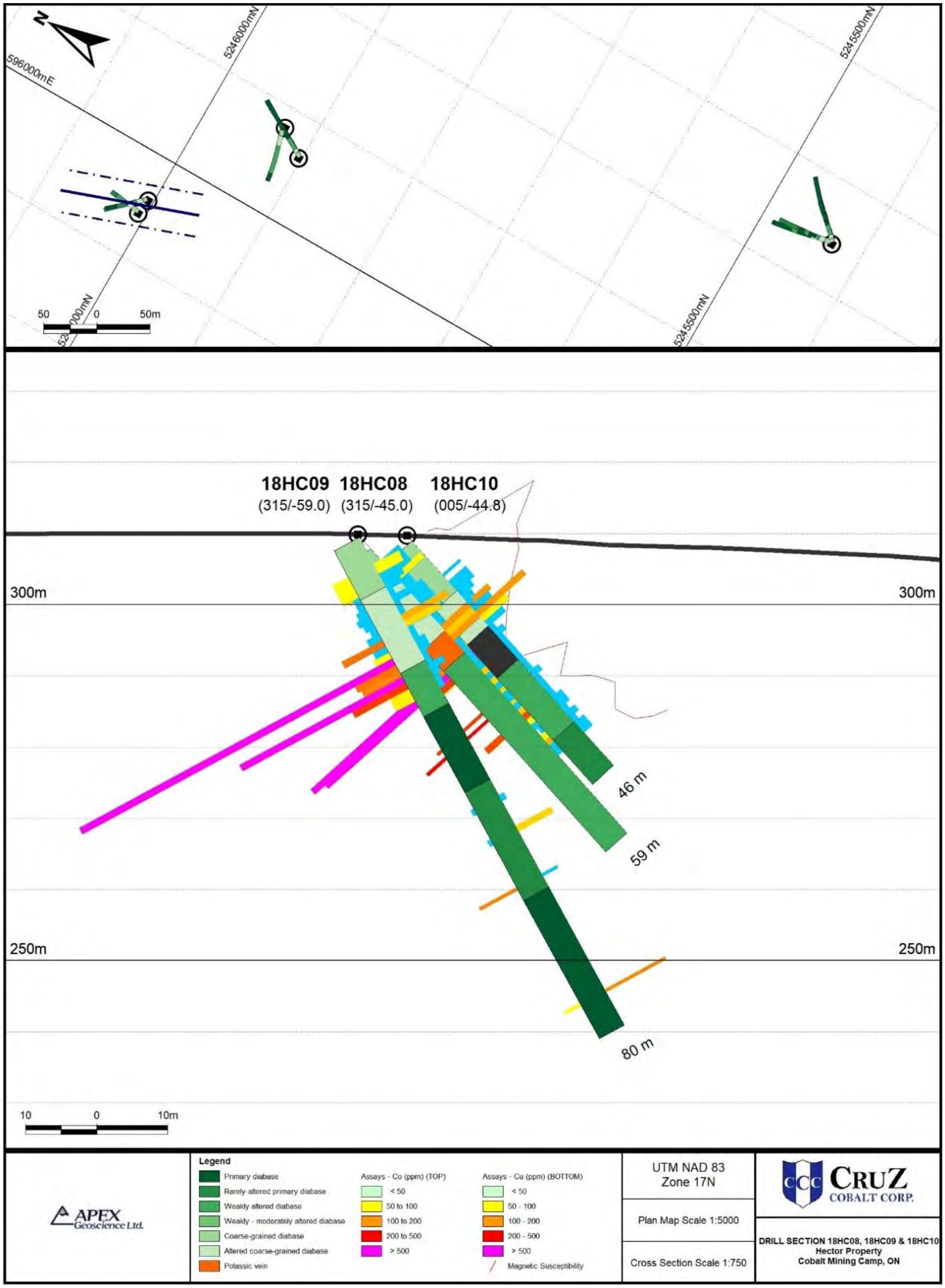


Figure 7.7. Drill Cross Section 18HC08, 18HC09 and 18HC10



8 Sample Preparation, Analyses and Security

8.1 2017 Soil Samples

8.1.1 Sample Collection and Shipping

A total of 428 soil samples were collected by Jean Marc Gaudreau at the Hector Property in 2017, primarily targeting the B horizon. A shovel or auger was used to dig a small hole to reach the B horizon. Depending on ground conditions and vegetation, the hole depth ranged from a few centimetres (cm) up to 61 cm, but was typically 10 to 12 cm. Samples weighing approximately 50 to 100 grams (g) were placed in labelled sample bags and sealed. Sample locations were recorded with a handheld GPS device and written in a notebook along with the matching sample number and a description of the sample, and later transcribed to an Excel spreadsheet. Handheld GPS devices are accurate to ± 5 m.

From the field, samples were transported to AGAT laboratories in Mississauga, Ontario for analysis. The authors of this Report consider the measures employed in the chain of custody of the samples to be sufficient for this stage of exploration.

8.1.2 Sample Preparation and Analysis

Once received by AGAT, the soil samples were dried and screened to -180 microns (80 mesh). The prepared samples were analyzed by AGAT method number 201-071 (Metals Package by 4 Acid Digest, ICP/ICP-MS Finish). A prepared sample is digested with hydrochloric, perchloric, nitric and hydrofluoric acids. The final solution is then analyzed by inductively coupled plasma mass spectrometry (ICP-MS).

8.1.3 Quality Assurance and Quality Control

For the 2017 soil sampling program, Cruz Cobalt relied on the internal quality assurance and quality control (QA/QC) measures employed by AGAT laboratories. QA/QC measures at AGAT include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates, and analytical quality controls (blanks, standards, and duplicates). AGAT Mississauga is certified with ISO/IEC 17025:2005 and ISO 9001:2008 accreditation from the Standards Council of Canada.

It is the authors’ opinion that the sample collection, preparation, security, analytical and QA/QC measures used during the 2017 soil sampling program were adequate for this stage of exploration at the Hector Property.

8.2 2018 Soil Samples

8.2.1 Sample Collection and Shipping

A total of 203 soil samples were collected by APEX personnel at the Hector Property in 2018, primarily targeting the Ah horizon (humus). A shovel was used to clear the sample area of surface material and dig a small hole to reach the Ah horizon. Depending on ground conditions and vegetation, the hole depth ranged from a few centimetres (cm) up to 30 cm, but was typically 4 to 6 cm. Samples weighing approximately 50 to 100 grams (g) were placed in labelled sample bags along with a sample tag inscribed with the unique sample number, and sealed. Sample locations were recorded with a handheld GPS device and on a tablet device along with the matching sample number, the date, the sampler's name and a description of the sample. Additional details, such as site disturbance, ground cover, vegetation and landform were also recorded on the tablet device. All data recorded on the tablet was later copied into an Excel spreadsheet. Handheld GPS and tablet devices are accurate to ± 5 m and ± 7 m respectively.

Soil samples were placed into woven poly (rice) bags for shipment to the analyzing laboratory. Cable ties were used to securely close the rice bags. Samples were transported by APEX personnel to the ALS geochemistry laboratory in Sudbury, Ontario for preparation. From there, the samples were transported within the ALS network to the ALS geochemistry laboratory in North Vancouver, British Columbia for analysis.

The authors did not have control over the soil samples at all times during transport, and therefore cannot personally verify what happened to the samples from shipping up to the time they were received by ALS. However, the authors have no reason to believe that the security of the samples was compromised in any way during transport or once they entered the ALS chain of custody.

8.2.2 Sample Preparation and Analysis

Once received by ALS, the soil samples were logged in to the ALS computerized tracking system, assigned bar code labels and weighed. The samples were then dried at 60°C and weighed again. Each sample was screened to -180 micron (80 mesh). The plus fraction was retained for storage and the minus fraction was split to obtain a 0.5 gram sample for analysis. All rejects were retained for storage.

The prepared samples were analyzed by ALS Geochemistry Method ME-MS41 (Ultra Trace Analysis by Aqua Regia Digestion and ICP-MS). A prepared sample (nominal 0.5 g) is digested with 75% aqua regia (3:1 ratio of HCl:HNO3) in a graphite heating block. The solution is then analyzed by inductively coupled plasma mass spectrometry (ICP-MS) with results corrected for spectral inter-element interferences.

8.2.3 Quality Assurance and Quality Control

Quality assurance and quality control (QA/QC) measures at ALS include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates (every 50 samples), and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted with each analytical run, with the minimum number of QC samples dependant on the rack size specific to the chosen analytical method. Results for quality control samples that fall beyond the established limits are automatically red-flagged for serious failures and yellow-flagged for borderline results. Every batch of samples is subject to a dual approval and review process, both by the individual analyst and the Department Manager, before final approval and certification. ALS Sudbury is certified with ISO/IEC 17025:2017 and ISO 9001:2015 accreditation from the Standards Council of Canada.

The QA/QC measures employed by APEX in the field during the 2018 soil sampling program comprised inserting field duplicate samples at a rate of approximately 1 duplicate per 20 samples. Duplicate sample were collected to assess the repeatability of individual analytical values. A total of 11 duplicate samples were collected and analyzed. No significant QA/QC issues were detected during review of the soil sampling data.

It is the authors' opinion that the sample collection, preparation, security, analytical and QA/QC measures used during the 2018 soil sampling program were adequate for this stage of exploration at the Hector Property.

8.3 2018 Rock Samples

8.3.1 Sample Collection and Shipping

A total of 43 rock samples were collected by APEX personnel at the Hector Property in 2018. One representative rock sample, weighing no more than 2.5 kg, was collected from each sample site. Samples were placed in labelled sample bags along with a sample tag inscribed with the unique sample number and sealed. Sample locations were recorded with a handheld GPS device and written on a sample card bearing the matching sample number, the date and the sampler's name. Rock samples were described in terms of lithology, mineralization, alteration, mineralogy, grain size and texture. These observations were recorded on the sample card and later transcribed to an Excel spreadsheet. Handheld GPS devices are accurate to ± 5 m.

Rock samples were placed into woven poly (rice) bags for shipment to the analyzing laboratory. Cable ties were used to securely close the rice bags. Samples were transported by APEX personnel to the ALS geochemistry laboratory in Sudbury, Ontario for preparation. From there, the samples were transported within the ALS network to the ALS geochemistry laboratory in North Vancouver, British Columbia for analysis.

The authors did not have control over the rock samples at all times during transport, and therefore cannot personally verify what happened to the samples from shipping up to the time they were received by ALS. However, the authors have no reason to believe that the security of the samples was compromised in any way during transport or once they entered the ALS chain of custody.

8.3.2 Sample Preparation and Analysis

Once received by ALS, the rock samples were logged in to the ALS computerized tracking system, assigned bar code labels and weighed. The samples were then dried and crushed to pass a U.S. Standard No. 10 mesh, or 2 mm screen (70% minimum pass). A

500 g split is taken and pulverized to pass a U.S. Standard No. 200 mesh, or 75 micron screen (85% minimum pass). All rejects were retained for storage.

The prepared samples were analyzed by ALS Geochemistry Methods ME-ICP81 (Cobalt, Copper and Nickel by Sodium Peroxide Fusion and ICP-AES), PGM-ICP23 (Platinum, Paladium and Gold by Fire Assay and ICP-AES, and Ag-AA45 (Silver by Aqua Regia Digestion and AAS). For ME-ICP81, a prepared sample (nominal 0.2 g) is subject to sodium peroxide fusion and analysis by inductively coupled plasma atomic emission spectroscopy (ICP-AES). For PGM-ICP23, a prepared sample (nominal 30 g) is subject to standard lead oxide collection fire assay and analysis by ICP-AES. For Ag-AA45, a prepared sample (nominal 0.5 g) is digested with 75% aqua regia (3:1 ratio of HCl:HNO3) in a graphite heating block. The solution is then analyzed atomic absorption spectroscopy.

8.3.3 Quality Assurance and Quality Control

For the 2018 rock sampling program, Cruz Cobalt and APEX relied on the internal quality assurance and quality control (QA/QC) measures employed by AGAT laboratories. Quality assurance and quality control (QA/QC) measures at ALS include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates (every 50 samples), and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted with each analytical run, with the minimum number of QC samples dependant on the rack size specific to the chosen analytical method. Results for quality control samples that fall beyond the established limits are automatically red-flagged for serious failures and yellow-flagged for borderline results. Every batch of samples is subject to a dual approval and review process, both by the individual analyst and the Department Manager, before final approval and certification. ALS Sudbury is certified with ISO/IEC 17025:2017 and ISO 9001:2015 accreditation from the Standards Council of Canada.

It is the authors' opinion that the sample collection, preparation, security, analytical and QA/QC measures used during the 2018 soil sampling program were adequate for this stage of exploration at the Hector Property.

8.4 2018 Diamond Drilling

8.4.1 Sample Collection and Shipping

Ten NQ diameter diamond drill holes, totalling 843 m, were completed during the 2018 program. Once extracted, drill core was placed in wooden core boxes, sealed with wooden lids and transported to a core logging tent. For each drill hole, geological observations were recorded comprising lithology, mineralization, alteration, veining and structural measurements. Geotechnical data were recorded comprising core recovery, rock quality designation (RQD) and magnetic susceptibility. Down-hole survey directional data was collected using a Reflex EZ-Shot instrument.

A total of 292 drill core intervals were selected and sent for analysis, totalling 320.57 metres of core length. Sample lengths ranged from 0.5 m to 2.0 m, depending on the intensity of visual mineralization and alteration. The average sample length was 1.0 m. The sample intervals were marked out and tagged by APEX geologists, and the core was then photographed. Samples were sawed in half longitudinally using a core saw. For each sample, one half core was sent for analysis and the other was left in the box. Duplicate samples were cut into quarters, where one quarter of the core was used as the "original" sample and the other quarter was used as the "duplicate" sample. The remaining half core was left in the box.

Drill core samples were placed into labelled plastic sample bags along with a sample tag inscribed with the unique sample number. The samples were placed into woven poly (rice) bags for shipment to the analyzing laboratory. Cable ties were used to securely close the rice bags. Samples were transported by APEX personnel to the ALS geochemistry laboratory in Sudbury, Ontario for preparation. From there, the samples were transported within the ALS network to the ALS geochemistry laboratory in North Vancouver, British Columbia for analysis.

The authors did not have control over the drill core samples at all times during transport, and therefore cannot personally verify what happened to the samples from shipping up to the time they were received by ALS. However, the authors have no reason to believe that the security of the samples was compromised in any way during transport or once they entered the ALS chain of custody.

8.4.2 Sample Preparation and Analysis

Once received by ALS, the drill core samples were logged in to the ALS computerized tracking system, assigned bar code labels and weighed. The samples were then dried and crushed to pass a U.S. Standard No. 10 mesh, or 2 mm screen (70% minimum pass). A 500 g split is taken and pulverized to pass a U.S. Standard No. 200 mesh, or 75 micron screen (85% minimum pass). All rejects were retained for storage.

The prepared samples were analyzed by ALS Geochemistry Methods ME-ICP81 (Cobalt, Copper and Nickel by Sodium Peroxide Fusion and ICP-AES), PGM-ICP23 (Platinum, Paladium and Gold by Fire Assay and ICP-AES, and Ag-AA45 (Silver by Aqua Regia Digestion and AAS). For ME-ICP81, a prepared sample (nominal 0.2 g) is subject to sodium peroxide fusion and analysis by inductively coupled plasma atomic emission spectroscopy (ICP-AES). For PGM-ICP23, a prepared sample (nominal 30 g) is subject to standard lead oxide collection fire assay and analysis by ICP-AES. For Ag-AA45, a prepared sample (nominal 0.5 g) is digested with 75% aqua regia (3:1 ratio of HCl:HNO3) in a graphite heating block. The solution is then analyzed atomic absorption spectroscopy.

8.4.3 Quality Assurance and Quality Control

Quality assurance and quality control (QA/QC) measures at ALS include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates (every

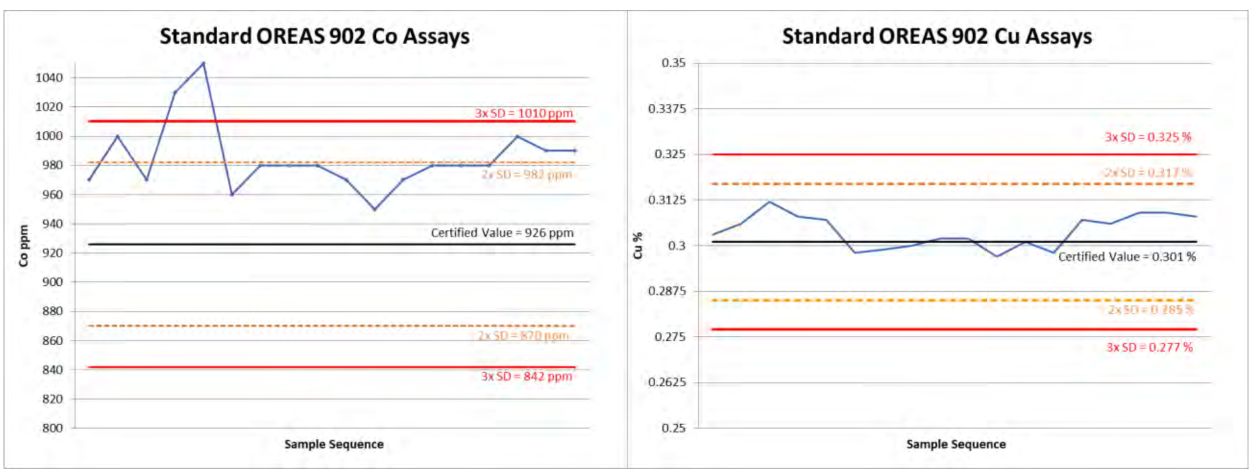
50 samples), and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted with each analytical run, with the minimum number of QC samples dependant on the rack size specific to the chosen analytical method. Results for quality control samples that fall beyond the established limits are automatically red-flagged for serious failures and yellow-flagged for borderline results. Every batch of samples is subject to a dual approval and review process, both by the individual analyst and the Department Manager, before final approval and certification. ALS Sudbury is certified with ISO/IEC 17025:2017 and ISO 9001:2015 accreditation from the Standards Council of Canada.

The QA/QC measures employed in the field by APEX during the 2018 diamond drilling programs comprised inserting analytical standards, blanks and duplicate samples into the sample stream, each at an approximate rate of 1 QA/QC sample per 20 samples. Standards and blanks are compared to expected values to ensure the lab results fall within the acceptable margin of error. Similarly, duplicate sample results are compared to originals to test the repeatability of lab results.

Standards

Analytical standards were inserted into the sample stream to verify the accuracy of the laboratory analysis. OREAS 902 Certified Reference Materials (CRMs) were selected for the diamond drilling program. QA/QC summary charts for cobalt and copper are presented in Figure 8.1. The charts indicate the measured values for each standard in addition to the certified value, and the second and third “between laboratory” standard deviation for cobalt (Co) and copper (Cu).

Figure 8.1. QA/QC Analytical Standards (Co and Cu)



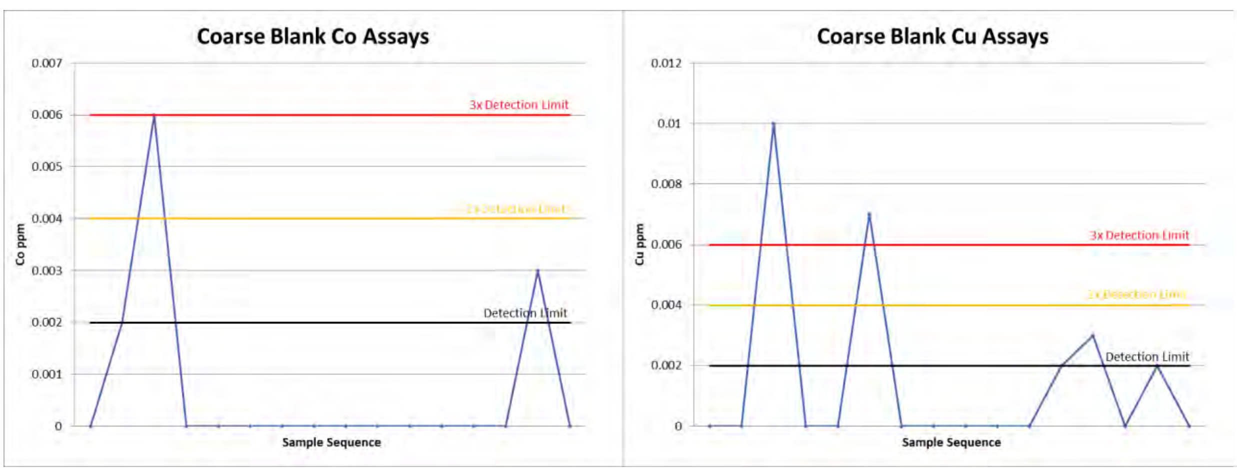
There are two general industry standard criteria employed by which standards are assigned a “pass” or “reviewable” status. First, a “reviewable” standard is defined as any standard occurring anywhere in the sample sequence returning a value greater than three standard deviations (>3SD) above or below the accepted value. Second, if two or more consecutive standards from the same batch return values greater than two standard deviations (>2SD) above or below the accepted value on the same side of the mean, they are classified as “reviewable”. QA/QC samples falling outside the established limits are flagged and subject to review and possible re-analysis, along with the 10 preceding and succeeding samples.

A total of 18 standards were inserted into the sample stream of 292 drill core samples. Two samples were initially considered reviewable for returning values >3SD above the certified value for Co, and three samples were initially considered reviewable for returning consecutive values >2SD above the certified value for Co. All other standards were assigned a “pass” status according to the criteria outlined above. Cobalt values were consistently high versus the certified value. This is likely due to the more aggressive digestion and different analytical technique used for the drill core. Because of the consistency of the values and the lack of any major outliers, the results were deemed acceptable. No reviewable samples were observed for copper.

Blanks

Barren coarse material was used for coarse “blank” samples to monitor potential contamination during the sample preparation procedure. Analytical Solutions Ltd. (ASL) coarse silica blanks were used, sourced from Carboniferous sedimentary rocks of the Maritimes Basin in New Brunswick. QA/QC summary charts for the blanks are presented in Figure 8.2. The charts indicate the measured values for each blank in addition to the analytical method detection limit, 2x the detection, and 3x the detection limit for cobalt (Co) and copper (Cu). A blank is considered “reviewable” if it returns a value greater than 3x the detection limit of the analytical method.

Figure 8.2. QA/QC Blank Samples (Co and Cu)

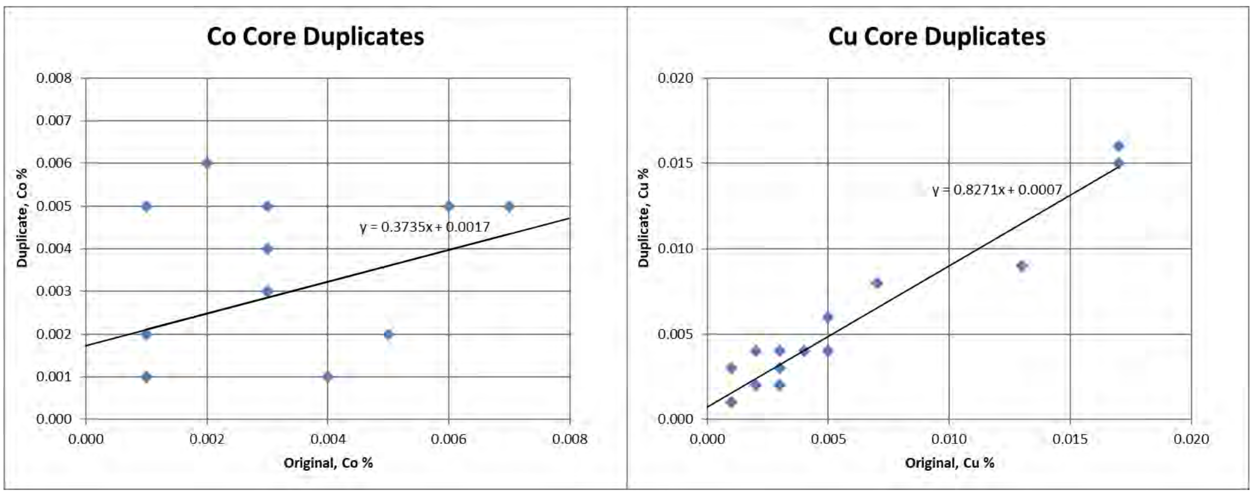


A total of 16 blanks were inserted into the sample stream of 292 drill core samples. Two samples were initially considered reviewable for returning values greater than 3x the detection limit for Cu. Upon review, the results were deemed to be acceptable. All other blanks were assigned a “pass” status according to the criteria outlined above.

Duplicates

Duplicate (quartered drill core) samples were collected to assess the repeatability of individual analytical values. A total of 17 duplicate samples were collected and analyzed. Figure 8.3 shows the original versus duplicate core duplicate values for cobalt (Co) and copper (Cu). The results indicate a good overall repeatability of the copper values. This is interpreted to indicate a low “nugget” effect with respect to copper analysis. Excluding primary geological heterogeneity (quarter-core), the data show a homogenous distribution of copper values within the Hector drill core. There is a higher “nugget” effect indicated by the cobalt values.

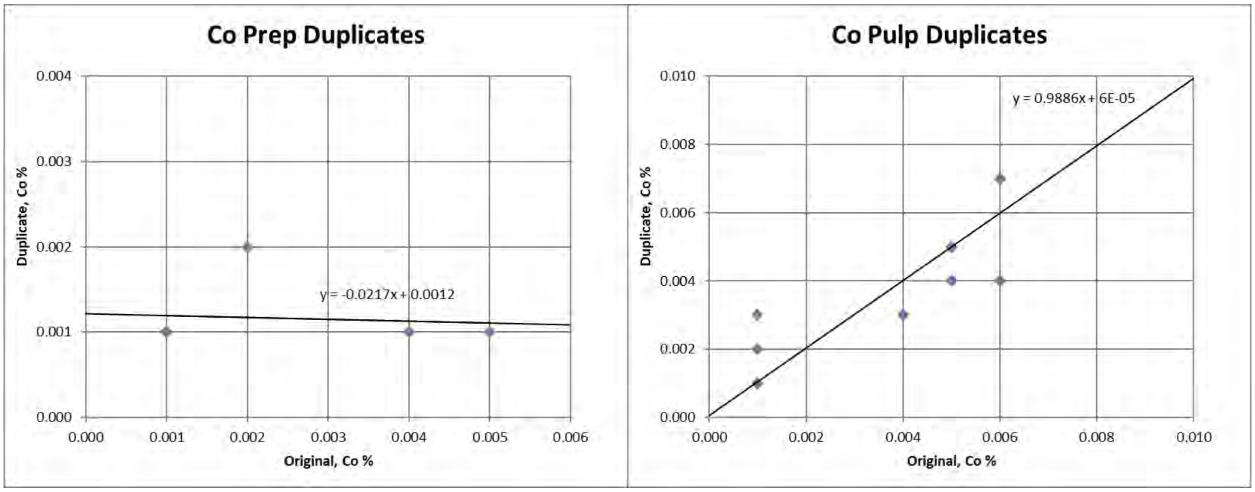
Figure 8.3. QA/QC Quartered Core Duplicate Samples (Co and Cu)



As part of their internal QA/QC program, ALS completed routine re-analysis of prep (coarse reject) and pulp duplicates to monitor precision. Only the prep and pulp duplicates for the 2018 soil sampling program are available. ALS analyzed a total of 6 prep duplicates and 9 pulp duplicates for cobalt, for a total of 15 prep/pulp duplicates analyzed. Figure 8.4 shows the original versus duplicate prep and pulp values for cobalt (Co).

It is the authors’ opinion that the sample collection, preparation, security, analytical and QA/QC measures used during the 2018 soil sampling program were adequate for this stage of exploration at the Hector Property.

Figure 8.4. QA/QC Prep and Pulp Duplicate Samples (Co and Cu)



APEX Geoscience Ltd.

9 Exploration Expenditures

The 2017 Hector Property exploration program was completed between October 25th and November 3rd, 2017. The 2018 exploration program was completed in three phases between July 24th and December 19th, 2018. The total cost to complete the exploration programs was $337,200.93. Table 9.1 provides a summary of the exploration expenditures incurred at the Hector Property in 2017 and 2018. A detailed breakdown of the expenditures is provided in Appendix 1.

Table 9.1. Summary of 2017 and 2018 Hector Property Exploration Expenditures

Program	Days Worked	Associated Costs	Survey Costs	Total Cost
2017 Program	10	$16,082.00	$13,000.00	$29,082.00
2018 Phase 1	19	$32,452.59	$24,912.50	$57,365.09
2018 Phase 2	2	$4,874.40	$3,250.00	$8,124.40
2018 Phase 3	53	$92,137.19	$150,492.25	$242,629.44
Total	84	$145,546.18	$191,654.75	$337,200.93

10 Interpretation and Conclusions

The Hector Property is an early stage exploration project with historical development and small-scale production from the 1920s and early 1930s targeting silver and cobalt. The Property is located within the Cobalt Embayment, associated with the structurally significant Montreal River fault system. The Cobalt Embayment is recognized for occurrences of, and potential to host additional arsenide Ag-Co vein deposits.

The work that was completed during 2017 and 2018 evaluated and confirmed the exploration potential in the vicinity of Bass Lake, the Hector Silver Mine and the James Dolan historic mineral occurrences. In drill core, mineralization appears to be preferentially hosted in altered and sulphidized rock adjacent to mineralized veins. As a result, anomalous cobalt and copper values strongly correspond to strong carbonate ± chlorite ± silica ± potassic ± erythrite alteration and/or veining ± malachite staining of the host diabase with pyrite-chalcopyrite-cobalt arsenate sulphides.

Favourable target areas on the Property include the South Keora, Kevin Lake, Williamson and Brewster mineral occurrences, and contacts with and under the Nipissing Sill located in all areas of the Hector Property. Drilling through more central portions of the sill requires additional information on sill thickness, and the potential utilization of deep EM techniques prior to finalizing additional drill targets.

The anomalous trends that have been identified through the soil and rock geochemistry, ground geophysical surveys and drill testing of targets shows distinct northwest-southeast trending anomalies coincident with the strike of the Montreal River fault located to the southwest of the focus of exploration. A better understanding of the local and regional structural controls is necessary to target additional silver-cobalt mineralization at the Property. Future work should include detailed geological, alteration and structural mapping, soil and rock geochemistry over additional zones of interest, additional data compilation and modelling, and drilling of favorable targets.

11 Recommendations

Results to date indicate that further work is warranted at the Hector Property. Recommended areas for further exploration activities are Brewster, Kelvin Lake and Williamson. All three have limited exploration but have recorded cobalt mineralization with exploration shafts at Brewster and Williamson.

Detailed geological mapping and geochemical surveys should be completed, focusing on the unconformable contacts of the Archean and Paleoproterozoic country rocks with the Nipissing diabase, previously identified geochemical and geophysical anomalies, and along strike of historical mineral occurrences. Geophysical and geochemical surveys should also be completed at the underexplored South Keora occurrence. Follow-up exploration drilling could be completed should any high-priority targets be identified.

If early stage exploration groundwork results are favorable, drill testing exploration targets in the central and southern portions of the Hector Property should be considered. Prior to drilling, a detailed geological, alternation and structural review, followed up by reconnaissance geochemical surveys is recommended. It is important to understand the geometry of the lithologies encountered to properly evaluate the thicknesses of the Nipissing diabase bodies and depth to the Proterozoic/Huronian-Archean unconformity.

For 2019, APEX recommends a 30-day exploration program comprising geological mapping, ground magnetics, and rock and soil geochemical surveys. The program could be completed by 4 APEX personnel at a total estimated cost of $113,025.

Table 11.1. Proposed 2019 Hector Property Exploration Budget

Budget Item	Cost
APEX Personnel	$60,000
Accommodation / Food / Travel	$20,000
Rentals (geophysical equipment, trucks, software, etc.)	$4,500
Analytical (250 soils, 50 rocks)	$10,000
Miscellaneous Fuel and Field Supplies	$1,750
Office and Logistics	$1,500
Data Processing and modelling	$2,500
Data Management and Reporting	$2,500
Subtotal	$102,750
10% Contingency	$10,275
TOTAL (not including GST)	$113,025

12 References

Andrews, A.J., Owsiacki, L., Kerrich, R. and Strong, D.F. (1986): The silver deposits at Cobalt and Gowganda Ontario. I: Geology, petrology, and whole-rock geochemistry. Canadian Journal of Earth Sciences, 23, p. 1480-1506.

Ayer, J.A., Amelin, Y., Corfu, F., Kamo, S., Ketchum, J. Kwok, K. and Trowell, N. (2002): Evolution of the southern Abitibi greenstone belt based on U–Pb geochronology: autochthonous volcanic construction followed by plutonism, regional deformation and sedimentation; Precambrian Research, 115, p. 63–95.

Ayer, J.A., Thurston, P.C., Bateman, R., Dubé, B., Gibson, H.L., Hamilton, M.A., Hathway, B., Hocker, S.M., Houlé, M.G., Hudak, G., Ispolatov, V.O., Lafrance, B., Lesher, C.M., MacDonald, P.J., Péloquin, A.S., Piercey, S.J., Reed, L.E. and Thompson, P.H. (2005): Overview of results from the Greenstone Architecture Project: Discover Abitibi Initiative; Ontario Geological Survey, Open File Report 6154, 146 p.

Bennett, G, Dressler, B.O. and Robertson, J.A. (1991): The Huronian Supergroup and Associated Intrusive Rocks; Ontario Geological Survey, Special Volume 4, Part 1, p. 549-592.

Blecha, M. (1972) Report on the 1972 Exploration Work on the Gilles Limit Property, Scheak-Bradley & August Johnson Options. AFN: 31M05SE0075, 21 p.

Born, P. and Hitch M.W. (1990): Precambrian Geology, Bay Lake area, eastern half; OGS, Map 2552, scale 1:20,000.

Burton, D. (1962): Report on the Magnetic and the Ratio Resistivity Surveys on a Portion of the Property of St. Mary's Explorations Limited Block 10, Gillies Limit, Ontario. AFN: 31M05SE0084, 19 p.

Cunningham, L.J. (1966). Drill Report 43 Gilles Limit. AFN: 31M05SE0050, 12 p.

Ernst, R.E. (2007): Large igneous provinces in Canada through time and their metallogenic potential, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 929-937.

Fowler, W.G. (1967) Geological Report on Ragged Chutes Silver Mines Limited, Gillies Limited Township, Ontario. AFN: 31M05SE0093, 17 p.

Home, K., 1979. Diamond Drill Record. AFN: 31M05SE0070, 4 p.

Goodwin, J.R. (1988): Report on Geophysical Surveys on the North Cobalt Claim Group in Bucke Township for Silvern Resources Limited. AFN: 31M05NE0012, 29 p.

Guindon, D.L., Farrow, D.G., Hall, L.A.F., Daniels, C.M., Debicki, R.L., Wilson, A.C., Bardeggia, L.A. and Sabiri, N. (2016): Report of Activities 2015, Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake and Sudbury Districts; Ontario Geological Survey, Open File Report 6318, 106p.

Hughes, T. (2017): Evaluation Report on the Cobalt Properties for Cruz Cobalt Corp, Volume 1 Summary. Unpublished internal reports.

Jambor, J.L. (1971a): General Geology of the Cobalt Area: Canadian Mineralogist, Volume 11, p. 12-33.

Jambor, J.L. (1971b): The Nipissing diabase: Canadian Mineralogist., Volume 11, p. 34-75.

Joyce, D., Tait, K., Vertoli, V., Back, M., and Nicklin, I. (2012): The Cobalt Mining District, Cobalt, Ontario, Canada. *Mineralogical Record*, Volume 43, Number 6 (Nov-Dec)., 685-713.

Kerrich, R., Strong, D.F., Andrews, A.J., and Owsiacki, L. (1986): The silver deposits at Cobalt and Gowganda, Ontario. III: Hydrothermal regions and source reservoirs – evidence from H, O, C, and Sr isotopes and fluids inclusions. Canadian Journal of Earth Sciences, 23: 1519-1550.

Kon, A. (2013a): Assessment Work Report Ground Magnetometer Survey, Bass Lake Claim Group for Outcrop Explorations Ltd. AFN: 20012027, 34 p.

Kon, A. (2013b): Assessment Work Report Prospecting and Sampling, Bass Lake Claim Group for Outcrop Explorations Ltd. AFN: 20012052, 35 p.

Kon, A., 2014. Assessment Work Report for Outcrop Explorations Ltd. AFN: 20012786, 31 p.

Lalonde, E.F. and Neelands, J.T. (1974): Report on the Geological and Geophysical Surveys on the Montreal River Claims in Gilles Limit Township, Ontario. AFN: 31M05SE0076, 20 p.

Laronde, D. (1997): Ground Geophysical Surveys Montreal River Property, Wabana Explorations Inc., Gilles Limit Township. AFN: 31M05SE0072, 57 p.

Moore, H.A. (1971): North Gilles Limit. AFN: 31M05SE0077, 19 p.

Neel, J.T. and McLeod, H.D. (1976). Report on the Geochemical Survey of the Montreal River Claims in Gilles Limit Township, Ontario for Teck Mining Group Limited. AFN: 31M05SE0074, 44 p.

Neel, J.T. and McLeod, H.D., 1976. Report on the Geochemical Survey of the Montreal River Claims in Gilles Limit Township, Ontario for Teck Mining Group Limited. AFN: 31M05SE0074, 44 p.

Neilson, J. (1970). Township of Gillies Limit (N.Pt.) Report No. 54, Diamond Drilling Log. AFN: 31M05SE0027, 5 p.

Osmani, I.A. (1991): Proterozoic Mafic Dyke Swarms in the Superior Province of Ontario; in Geology of Ontario, Ontario Geological Survey, Special Volume 4, Part 1, p.627-660.

Plaskett, G.G. (1961). Gillies Limit (N.Pt.) Township Report No. 33, Drill Hole Log by Sterling Engineering. AFN: 31M05SE0062, 3 p.

Ploeger, C.J. (2012): Magnetometer and VLF EM Surveys over the Gillies Property, Gillies Limit Township, Ontario by Canadian Exploration Services Ltd for Outcrop Explorations Limited. AFN: 20010636, 16 p.

Potter, E.G. and Taylor, R.P. (2010): Genesis of Polymetallic Vein Mineralization in the Paleoproterozoic Cobalt Embayment, Northern Ontario: Implications for Metallogenesis and Regional Exploration. GeoCanada 2010. 4p.

Sears, S. (2004): Report on Geological Mapping & soil Sampling in Gillies Limit North Area (Montreal River Grid), Assessment Report for Cabo Mining Enterprises Corp. AFN: 31M05SE2073, 26 p.

Sergiades, A. O., (1968): Silver Cobalt Calcite Vein Deposits of Ontario, Mineral Resources Circular No. 10. Ontario Department of Mines, 498 p.

Potter, E. and Taylor, R. P. (2010): Genesis of Polymetallic Vein Mineralization in the Paleoproterozoic Cobalt Embayment, Northern Ontario: Implications for Metallogenesis and Regional Exploration.

Thomson, R. (1960): Preliminary Report on Parts of Coleman Township and Gillies Limit to the South & Southwest of Cobalt. ODM PR 1960-3, 69 p.

Thomson, R. (1964): Cobalt Silver Area, Southwestern Sheet, Timiskaming District, Ontario; Ontario Department of Mines, Map 2051, scale 1:12 000 or 1 inch to 1000 feet.

Wilson, B.S., 1986. A sulphur isotope and structural study of the silver vein host rocks at Cobalt, Ontario: Unpublished M.Sc. thesis, Carleton University, Ottawa, Ontario, 156 p.

Wilson, A., 2017a. Mineral Deposit Inventory for Ontario, James Dolan Property and Hector Silver Mines. MDI Record: MDI31M05SE00127, 4 p.

Wilson, A., 2017b. Mineral Deposit Inventory for Ontario, Gilbert Interests Limited and Gillies Limit Black 4. MDI Record: MDI31M05SE00128, 4 p.

13 Certificate of Author

13.1 Kristopher Raffle Certificate of Author

I, Kristopher Raffle, P.Geo., residing in Vancouver, British Columbia, do hereby certify that:

1. I am a Principal and Consultant of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.

2. I am the author and responsible for all the sections of the report entitled **"2018 Assessment Report on the Hector Property"**, dated April 24th, 2019 (the "Assessment Report").

3. I am a graduate of The University of British Columbia, Vancouver, British Columbia with a B.Sc. in Geology in 2000 and have practiced my profession continuously since 2000.

4. I am a Professional Geologist (P.Geo.) registered with Engineers and Geoscientists of British Columbia, and I am a 'Qualified Person' in relation to the subject matter of this Report.

5. To the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to make the Assessment Report not misleading.

6. I consent to the filing of the Assessment Report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this 24th of April 2019
Vancouver, British Columbia, Canada

"Signed"

Kristopher Raffle, B.Sc., P.Geo.

13.2 Mohamad Asmail Certificate of Author

I, Mohamad Asmail, M.Sc., residing in Burnaby, British Columbia, do hereby certify that:

1. I am a Geologist of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.

2. I am the author and responsible for all the sections of the report entitled **"2018 Assessment Report on the Hector Property"**, dated April 24th, 2019 (the "Assessment Report").

3. I am a graduate of The University of Western Ontario, London, Ontario with a B.Sc. in Earth Sciences in 2012 and a M.Sc. in Earth Sciences in 2018. I have worked as an exploration geologist for 3 years.

4. To the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to make the Assessment Report not misleading.

5. I consent to the filing of the Assessment Report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this 24th of April 2019
Vancouver, British Columbia, Canada

"Signed"

Mohamad Asmail, M.Sc.

13.3 Robyn Christian Certificate of Author

I, Robyn Christian, G.I.T., residing in Vancouver, British Columbia, do hereby certify that:

1. I am a Geologist of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.

2. I am the author and responsible for Section 9 and Appendix 1 of the report entitled **"2018 Assessment Report on the Hector Property"**, dated April 24th, 2019 (the "Assessment Report").

3. I am a graduate of Simon Fraser University, Burnaby, British Columbia with a B.Sc. in Geology in 2014 and have practiced my profession continuously since 2014.

4. I am a Geoscientist in Training (G.I.T.) registered with Engineers and Geoscientists of British Columbia, and I am a 'Qualified Person' in relation to the subject matter of this Report.

5. To the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to make the Assessment Report not misleading.

6. I consent to the filing of the Assessment Report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this 24th of April 2019
Vancouver, British Columbia, Canada

"Signed"

Robyn Christian, B.Sc., G.I.T.

Appendix 1. 2017 and 2018 Personnel and Exploration Expenditures

2017 Soil Program

Date	Num	Description	Amount
Geological field work			
10-19-2017	0102	Hector Soil Sample Programme Crew Advance Payment	$3,000.00
11-09-2017	0103	Hector Soil Sample Programme Crew Payment	$10,000.00
		Total Geological field work	$13,000.00
Geological office work			
10-31-2017	20171031	Antediluvial Hector Soil Sample Programme	$2,600.00
		Total Geological office work	$2,600.00
Assays & related costs			
01-15-2018	18444702M	AGAT Laboratories: assay analysis, work order 17T282580, Nov 10, 2017, inv 18444702M	$2,268.00
01-15-2018	18444694M	AGAT Laboratories: assay analysis, work order 17T282581, Nov 10, 2017, inv 18444694M	$2,268.00
01-15-2018	18444707M	AGAT Laboratories: assay analysis, work order 17T282583, Nov 10, 2017, inv 18444707M	$2,268.00
01-18-2018	18445552M	AGAT Laboratories: assay analysis, work order 17T282584, Nov 10, 2017, inv 18445552M	$2,268.00
01-15-2018	18444704M	AGAT Laboratories: assay analysis, work order 17T282585, Nov 10, 2017, inv 18444704M	$2,268.00
01-15-2018	18444684M	AGAT Laboratories: assay analysis, work order 17T282586, Nov 10, 2017, inv 18444684M	$2,142.00
		Total Assays & related costs	$13,482.00
Total Expenditures		**Total**	**$29,082.00**

2018 Phase 1

Date	Num	Description	Amount
Geological field work			
08-31-2018	2018-376	Party Leader Geological Services Field - Katelynn Brown (July 22-Aug 21/18)	$10,250.00
08-31-2018	2018-376	Geological Services Performed Field - Kaylyn Neimetz (July 22-Aug 21/18)	$8,712.50
08-31-2018	2018-376	Geological Services Performed Field - Karys Leonard-Fortune (July 22-Aug 21/18)	$5,950.00
		Total Geological field work	$24,912.50
Geological office work			
08-31-2018	2018-376	Geological Services Performed Office - Robyn Christian (May 22-June 21/18)	$520.00
08-31-2018	2018-376	Geological Services Performed Office - Kris Raffle (May 22-June 21/18)	$320.00
08-31-2018	2018-376	Geological Services Performed Office - Dallas Smolski (May 22-June 21/18)	$825.00
08-31-2018	2018-376	Geological Services Performed Office - Rob L'Heureux (May 22-June 21/18)	$344.00
08-31-2018	2018-376	Geological Services Performed Office - Robyn Christian (June 22-July 21/18)	$40.00
08-31-2018	2018-376	Geological Services Performed Office - Dallas Smolski (June 22-July 21/18)	$236.50
08-31-2018	2018-376	Geological Services Performed Office - Kris Raffle (June 22-July 21/18)	$960.00
08-31-2018	2018-376	Geological Services Performed Office - Kris Raffle (July 22-Aug 21/18)	$1,496.00
08-31-2018	2018-376	Geological Services Performed Office - Mark Hanki (July 22-Aug 21/18)	$690.00
08-31-2018	2018-376	Geological Services Performed Office - Karys Leonard-Fortune (July 22-Aug 21/18)	$159.00
08-31-2018	2018-376	Geological Services Performed Office - Katelynn Brown (July 22-Aug 21/18)	$542.75
08-31-2018	2018-376	Geological Services Performed Office - Robyn Christian (July 22-Aug 21/18)	$188.00
08-31-2018	2018-376	Geological Services Performed Office - Kaylyn Niemetz (July 22-Aug 21/18)	$60.00
09-30-2018	2018-443	Geological Services Performed Office - Tara Gunson (Aug 22-Sept 21/18)	$68.25
09-30-2018	2018-443	Geological Services Performed Office - Kris Raffle (Aug 22-Sept 21/18)	$1,384.00
09-30-2018	2018-443	Geological Services Performed Office - Robyn Christian (Aug 22-Sept 21/18)	$148.00
09-30-2018	2018-443	Geological Services Performed Office - Taylor Milne (Aug 22-Sept 21/18)	$802.75
11-30-2018	2018-562	Geological Services Performed Office - Mark Hanki (Oct 22-Nov 21/18)	$155.25
12-31-2018	2018-621	Geological Services Performed Office - Mark Hanki (Nov 22-Dec 21/18)	$40.25
12-31-2018	2018-621	Geological Services Performed Office - Taylor Milne (Nov 22-Dec 21/18)	$42.25
		Total Geological office work	$9,022.00
Overhead & management fee			
08-31-2018	2018-376	Operator's overhead and management fee (10%)	$1,665.51
09-30-2018	2018-443	Operator's overhead and management fee (10%)	$39.15
		Total Overhead & management fee	$1,704.66
Rentals & other project income			
08-31-2018	2018-376	APEX rental - GPS walking magnetometer (2 weeks @ $1,040/wk)	$2,080.00
08-31-2018	2018-376	APEX rental - base magnetometer (2 weeks @ $595/wk)	$1,190.00
08-31-2018	2018-376	APEX rental - laptop (3 weeks @ $150/wk)	$450.00
08-31-2018	2018-376	APEX rental - 3 radios (3 weeks @ $90/wk)	$270.00
08-31-2018	2018-376	APEX rental - 3 data loggers (3 weeks @ $90/wk)	$270.00
08-31-2018	2018-376	APEX rental - geosoft software (1 week)	$500.00
		Total Rentals & other project income	$4,760.00
Assays & related costs			
08-31-2018	2018-376	ALS Canada: assay analysis, certificate SD18196580, Aug 29/18, inv 4406647	$1,641.40
08-31-2018	2018-376	ALS Canada: assay analysis, certificate SD18197526, Aug 31/18, inv 4406661	$5,043.63
		Total Assays & related costs	$6,685.03
Field supplies			
08-31-2018	2018-376	Katelynn Brown: supplies, July 30-Aug 6/18	$147.37
		Total Field supplies	$147.37
Freight - other			
09-30-2018	2018-443	FedEx: courier, waybill 063710310008441, Aug 10/18, inv 2-360-20778	$87.35
09-30-2018	2018-443	FedEx: courier, waybill 063710310008458, Aug 10/18, inv 2-360-20778	$67.59
09-30-2018	2018-443	FedEx: courier, waybill 063710310008465, Aug 10/18, inv 2-360-20778	$108.45
09-30-2018	2018-443	FedEx: courier, waybill 063710310008472, Aug 10/18, inv 2-360-20778	$90.53
09-30-2018	2018-443	FedEx: courier, waybill 063710310008489, Aug 10/18, inv 2-360-20778	$37.62
		Total Freight - other	$391.54
Rental - automotive			
08-31-2018	2018-376	Katelynn Brown: truck rental, July 24-Aug 11/18	$2,677.12
		Total Rental - automotive	$2,677.12

Travel - accomodations			
08-31-2018	2018-376	Katelynn Brown: accommodations, July 23-Aug 11/18	$1,425.00
08-31-2018	2018-376	Kaylyn Niemetz: hotel, Sudbury, Aug 10-11/18	$281.20
		Total Travel - accomodations	$1,706.20
Travel - airfare			
08-31-2018	2018-376	Vision Travel Solutions: airfare, Katelynn Brown, Sudbury/Edmonton, Aug 11/18, inv 4342233	$823.12
08-31-2018	2018-376	Vision Travel Solutions: airfare, Karys Leonard-Fortune, Sudbury/Edmonton, Aug 11/18, inv 4342233	$823.12
08-31-2018	2018-376	Vision Travel Solutions: airfare, Kaylyn Niemetz, Sudbury/Edmonton, Aug 11/18, inv 4342233	$823.12
08-31-2018	2018-376	Karys Leonard-Fortune: excess baggage fee, July 29-Aug 11/18	$265.00
		Total Travel - airfare	$2,734.36
Travel - food			
08-31-2018	2018-376	Karys Leonard-Fortune: food, July 30-Aug 9/18	$415.82
08-31-2018	2018-376	Katelynn Brown: food, July 23-Aug 10/18	$750.07
08-31-2018	2018-376	Kaylyn Niemetz: food, July 25-Aug 11/18	$1,137.83
		Total Travel - food	$2,303.72
Travel - fuel			
08-31-2018	2018-376	Katelynn Brown: fuel, July 24-Aug 10/18	$222.41
08-31-2018	2018-376	Kaylyn Niemetz: fuel, July 30-Aug 2/18	$98.18
		Total Travel - fuel	$320.59
Total Expenditures		**Total**	**$57,365.09**

2018 Phase 2

Date	Num	Description	Amount
Geological field work			
10-31-2018	2018-505	Geological Services Performed Field - Mo Asmail (Sept 22-Oct 21/18)	$1,250.00
10-31-2018	2018-505	Geological Services Performed Field - Kris Raffle (Sept 22-Oct 21/18)	$2,000.00
		Total Geological field work	$3,250.00
Geological office work			
10-31-2018	2018-505	Geological Services Performed Office - Kris Raffle (Sept 22-Oct 21/18)	$1,280.00
10-31-2018	2018-505	Geological Services Performed Office - Mo Asmail (Sept 22-Oct 21/18)	$251.25
10-31-2018	2018-505	Geological Services Performed Office - Yuliana Bui (Sept 22-Oct 21/18)	$153.00
		Total Geological office work	$1,684.25
Overhead & management fee			
10-31-2018	2018-505	Operator's overhead and management fee (10%)	$263.71
		Total Overhead & management fee	$263.71
Assays & related costs			
10-31-2018	2018-505	ALS Canada: assay analysis, certificate SD18249803, Oct 21/18, inv 4477345	$947.94
		Total Assays & related costs	$947.94
Rental - automotive			
11-30-2018	2018-562	Kris Raffle: car rental, Oct 1-3/18	$188.01
		Total Rental - automotive	$188.01
Travel - accomodations			
11-30-2018	2018-562	Kris Raffle: hotel, Sudbury, Oct 1-2/18	$145.59
12-31-2018	2018-621	Mo Asmail: hotel, New Liskeard ON, Oct 1-3/18	$276.00
		Total Travel - accomodations	$421.59
Travel - airfare			
10-31-2018	2018-505	Vision Travel Solutions: airfare, Mo Asmail, Vancouver/Sudbury/London, Oct 1, 5/18, inv 4349552	$431.12
10-31-2018	2018-505	Vision Travel Solutions: airfare, Kris Raffle, Vancouver/Sudbury (ret), Oct 1, 5/18, inv 4349553	$569.63
11-30-2018	2018-562	Kris Raffle: excess baggage fee, Mo Asmail, Oct 5/18	$155.00
		Total Travel - airfare	$1,155.75
Travel - food			
11-30-2018	2018-562	Kris Raffle: food, Oct 1-3/18	$173.45
		Total Travel - food	$173.45
Travel - fuel			
11-30-2018	2018-562	Kris Raffle: fuel, Oct 3/18	$39.70
		Total Travel - fuel	$39.70
Total Expenditures		**Total**	**$8,124.40**

2018 Phase 3

Date	Num	Description	Amount
Geological field work			
11-30-2018	2018-562	Geological Services Performed Field - Mo Asmail (Oct 22-Nov 21/18)	$8,500.00
11-30-2018	2018-562	Geological Services Performed Field - Abhishek Warrier (Oct 22-Nov 21/18)	$8,075.00
12-31-2018	2018-621	Geological Services Performed Field - Mo Asmail (Nov 22-Dec 21/18)	$14,000.00
12-31-2018	2018-621	Geological Services Performed Field - Abhishek Warrier (Nov 22-Dec 21/18)	$13,300.00
12-15-2018	16VDS143	Drilling Services Performed Field - Vital Drilling (Nov 10 - Dec 8/18)	$106,617.25
		Total Geological field work	$150,492.25
Geological office work			
11-30-2018	2018-562	Geological Services Performed Office - Rob L'Heureux (Oct 22-Nov 21/18)	$216.00
11-30-2018	2018-562	Geological Services Performed Office - Kris Raffle (Oct 22-Nov 21/18)	$3,200.00
11-30-2018	2018-562	Geological Services Performed Office - Abhishek Warrier (Oct 22-Nov 21/18)	$195.00
11-30-2018	2018-562	Geological Services Performed Office - Mo Asmail (Oct 22-Nov 21/18)	$251.25
11-30-2018	2018-562	Geological Services Performed Office - Robyn Christian (Oct 22-Nov 21/18)	$280.00
11-30-2018	2018-562	Geological Services Performed Office - Yuliana Bui (Oct 22-Nov 21/18)	$1,305.00
11-30-2018	2018-562	Geological Services Performed Office - Kaylyn Niemetz (Oct 22-Nov 21/18)	$600.00
12-31-2018	2018-621	Geological Services Performed Office - Kaylyn Niemetz (Nov 22-Dec 21/18)	$219.00
12-31-2018	2018-621	Geological Services Performed Office - Robyn Christian (Nov 22-Dec 21/18)	$2,972.00
12-31-2018	2018-621	Geological Services Performed Office - Yuliana Bui (Nov 22-Dec 21/18)	$2,673.00
12-31-2018	2018-621	Geological Services Performed Office - Kris Raffle (Nov 22-Dec 21/18)	$1,816.00
12-31-2018	2018-621	Geological Services Performed Office - Shannon Frey (Nov 22-Dec 21/18)	$595.00
01-31-2019	2019-019	Geological Services Performed Office - Mo Asmail (Dec 22-31/18)	$198.75
01-31-2019	2019-019	Geological Services Performed Office - Yuliana Bui (Jan 1-21/19)	$238.50
01-31-2019	2019-019	Geological Services Performed Office - Mo Asmail (Jan 1-21/19)	$300.00
01-31-2019	2019-019	Geological Services Performed Office - Shannon Frey (Jan 1-21/19)	$4,054.50
01-31-2019	2019-019	Geological Services Performed Office - Kris Raffle (Jan 1-21/19)	$480.00
01-31-2019	2019-019	Geological Services Performed Office - Alfonso Rodriguez Madrid (Jan 1-21/19)	$480.25
01-31-2019	2019-019	Geological Services Performed Office - Rob L'Heureux (Jan 1-21/19)	$160.00
02-28-2019	2019-069	Geological Services Performed Office - Yuliana Bui (Jan 22-Feb 21/19)	$688.50
02-28-2019	2019-069	Geological Services Performed Office - Shannon Frey (Jan 22-Feb 21/19)	$6,035.00
02-28-2019	2019-069	Geological Services Performed Office - Kris Raffle (Jan 22-Feb 21/19)	$1,064.00
02-28-2019	2019-069	Geological Services Performed Office - Robyn Christian (Jan 22-Feb 21/19)	$108.00
03-31-2019	2019-121	Geological Services Performed Office - Shannon Frey (Feb 22-March 21/19)	$7,025.25
03-31-2019	2019-121	Geological Services Performed Office - Yuliana Bui (Feb 22-March 21/19)	$4,230.00
03-31-2019	2019-121	Geological Services Performed Office - Robyn Christian (Feb 22-March 21/19)	$1,317.50
03-31-2019	2019-121	Geological Services Performed Office - Kris Raffle (Feb 22-March 21/19)	$856.00
		Total Geological office work	$41,558.50
Overhead & management fee			
11-30-2018	2018-562	Operator's overhead and management fee (10%)	$132.57
12-31-2018	2018-621	Operator's overhead and management fee (10%)	$2,090.25
12-31-2018	2018-621	Project management fee	$5,000.00
01-31-2019	2019-019	Operator's overhead and management fee (10%)	$135.23
		Total Overhead & management fee	$7,358.05
Rentals & other project income			
11-30-2018	2018-562	APEX rental - portable XRF (1 week)	$1,340.00
11-30-2018	2018-562	APEX rental - laptop (2 weeks)	$300.00
12-31-2018	2018-621	APEX rental - magnetic susceptibility meter (1 month)	$565.00
12-31-2018	2018-621	APEX rental - laptop (1 month)	$565.00
		Total Rentals & other project income	$2,770.00
Assays & related costs			
12-31-2018	2018-621	Mo Asmail: standards, Nov 13/18	$145.00
12-27-2018	4584608	ALS Canada: assay analysis, certificate SD18330092, Dec 27/18, inv 4584608	$48.90
01-08-2019	4603128	ALS Canada: assay analysis, certificate SD19009890, Jan 15/19, inv 4582387	$17,957.74
		Total Assays & related costs	$18,151.64
Field supplies			
10-31-2018	2018-505	ALS Canada: supplies, sample bags & tags, Oct 29/18, inv 4503109	$89.77
12-31-2018	2018-621	Mo Asmail: supplies, Oct 27-Dec 30/18	$2,024.21

12-31-2018	2018-621	Abhishek Warrier: supplies, Oct 29-Nov 16/18	$120.96
01-31-2019	2019-019	Mo Asmail: supplies, Oct 29-Nov 22/18	$153.74
		Total Field supplies	$2,388.68
Freight - other			
11-30-2018	2018-562	FedEx: courier, waybill 773592139940, Oct 29/18, inv 2-366-68280	$96.49
12-31-2018	2018-621	FedEx: courier, waybill 773723804274, Nov 15/18, inv 2-370-41252	$33.04
01-31-2019	2019-019	FedEx: courier, waybill 812533924974, Dec 3/18, inv 2-374-52424	$81.53
01-31-2019	2019-019	FedEx: courier, waybill 773953038717, Dec 12/18, inv 2-374-52424	$127.40
		Total Freight - other	$338.46
Rental - automotive			
12-31-2018	2018-621	Mo Asmail: truck rental, Oct 29-Nov 28/18	$1,767.40
12-31-2018	2018-621	Mo Asmail: truck rental, Dec 14-18/18	$205.36
01-31-2019	2019-019	Mo Asmail: truck rental, Nov 28-Dec 20/18	$1,289.60
		Total Rental - automotive	$3,262.36
Rental - buildings			
12-31-2018	2018-621	Blackstone Development: core shack rental, 2 weeks, Dec 11/18, inv 2018-25	$500.00
		Total Rental - buildings	$500.00
Rental - equipment			
12-31-2018	2018-621	Reflex: APS with charger rental, Dec 1-31/18, inv 61402	$775.00
12-31-2018	2018-621	Mo Asmail: equipment rental, APS with charger, Nov 13-30/18	$465.00
01-31-2019	2019-019	Reflex: APS with charger rental credit, inv 4796	-$300.00
		Total Rental - equipment	$940.00
Subcontract other			
12-31-2018	2018-621	Mo Asmail: subcontract services, core cutter, Dec 17/18	$600.00
		Total Subcontract other	$600.00
Travel - accomodations			
12-31-2018	2018-621	Mo Asmail: hotel, Haileybury ON, Nov 6-30/18	$3,304.00
12-31-2018	2018-621	Mo Asmail: hotel, New Liskeard ON, Dec 1-19/18	$3,024.00
12-31-2018	2018-621	Abhishek Warrier: hotel, Toronto, Oct 28-29/18	$67.08
		Total Travel - accomodations	$6,395.08
Travel - airfare			
10-31-2018	2018-505	Vision Travel Solutions: airfare, Abhishek Warrier, Calgary/Toronto/Sudbury, Oct 28, 29/18, inv ...	$403.62
10-31-2018	2018-505	Vision Travel Solutions: airfare, Mo Asmail, London/Sudbury, Oct 29/18, inv 4353694	$195.06
12-31-2018	2018-621	Vision Travel Solutions: airfare, Abhishek Warrier, Toronto/Calgary, Dec 19/18, inv 4359958	$637.82
12-31-2018	2018-621	Mo Asmai: excess baggage fee, Oct 3-Dec 19/18	$152.50
12-31-2018	2018-621	Abhishek Warrier: excess baggage fee, Oct 29/18	$150.00
		Total Travel - airfare	$1,539.00
Travel - food			
12-31-2018	2018-621	Mo Asmail: food, Nov 3-20/18	$1,690.44
12-31-2018	2018-621	Mo Asmail: food, Nov 21-Dec 6/18	$1,472.25
12-31-2018	2018-621	Mo Asmail: food, Dec 7-19/18	$1,000.44
12-31-2018	2018-621	Abhishek Warrier: food, Oct 28-Dec 19/18	$121.76
		Total Travel - food	$4,284.89
Travel - fuel			
12-31-2018	2018-621	Mo Asmail: fuel, Oct 29-Dec 20/18	$1,955.36
12-31-2018	2018-621	Abhishek Warrier: fuel, Oct 29-Nov 3/18	$95.17
		Total Travel - fuel	$2,050.53
Total Expenditures		**Total**	**$242,629.44**

Appendix 2. Sample Descriptions and Drill Logs

2017 Soil Sample Descriptions

2018 Soil Sample Descriptions

2018 Rock Sample Descriptions

2018 Diamond Drill Logs

2017 Soil Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Elevation	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Sample Colour	Thickness (cm)	Sampler*	Comments
A01	2017-11-01	595482	5245622	298.18				20	O to B	dark brown	5	J. M. G.	sample taken 18m west of station; 15cm layer of organics, 5cm grey to B hor sampled; sandy soil
A02	2017-11-01	595492	5245648	298.71	forest				O to B	rusty tan - light brown	3	J. M. G.	sample taken 5m west of station due to low ground (flooded?); layer of oraganics - 3cm grey to B hor sampled; sandy soil
A03	2017-11-01	595500	5245675	299.92	forest				O to B	rusty tan - light brown	12	J. M. G.	sample taken at location, on hydroline; thick organics 12cm into B horizon; sandy soil
A04	2017-11-01	595502	5245701	300.19	forest	mature jack pine	flat terrain	15	B	rusty brown	5	J. M. G.	sample taken at location; 10cm organic layer - 5cm grey to b hor; sandy soil
A05	2017-11-01	595500	5245726	299.96	forest	mature jack pine	flat terrain	11	B	rusty brown	4	J. M. G.	sample taken at location; 7cm organic layer - 4cm grey to B hor; sandy soil
A06	2017-11-01	595501	5245751	300.23	forest		flat terrain			rusty tan - light brown		J. M. G.	sample taken at location; sandy soil, rocks on top; 5m west of claim? line
A07	2017-11-01	595503	5245775	306.46	mixed forest		sloped hill		O to B	rusty - dark brown		J. M. G.	sample taken at location; organics grade into B hor; sandy soil with some rocks
A08	2017-11-01	595501	5245801	310.52	mixed forest, rocky ground		slope of mountain		O to B	rusty brown		J. M. G.	sample taken at location; 6cm organics into B hor sampled; sandy soil, rocky matrix
A09	2017-11-01	595500	5245825	314.00	mixed forest, rocky ground		slope	12	B	light brown		J. M. G.	sample taken off station due to log pile; thin organic layer grades into B hor at 12cm; sandy-rocky soil
A10	2017-11-01	595500	5245850	315.19	mixed forest, rocky ground		mountain slope		O to B	tan brown		J. M. G.	sample taken at location; thin organic layer grades into B hor; sandy soil with some large rocks
A11	2017-11-01	595502	5245875	318.27	mixed forest, rocky ground		flat terrain on mountain slope		O to B	tan brown		J. M. G.	sample taken at location; thin organic layer grades into B hor; sandy soil with some rocks and pebbles in matrix
A12	2017-11-01	595501	5245900	319.08	mixed forest, very rocky ground		gentle slope on hill side		O to B	tan brown		J. M. G.	sample taken at location; thin organic layer, mixed with large rocks grades into B hor, sampled; sandy soil with rocky matrix; 5m west of … lines
A13	2017-11-01	595498	5245925	319.95	mixed forest, very rocky ground		mountain slope		O to B	tan brown		J. M. G.	sample taken 5m west of location; thin organic layer grades into B hor sampled; sandy, gravely soil
A14	2017-11-01	595500	5245950	318.47	mixed forest		flat area of mountain top		O to B	tan brown		J. M. G.	sample taken at location; thin organics grade into B hor sampled; sandy-rocky soil; duplicate of M1
A15	2017-11-01	595499	5245974	322.12	mature-mixed forest		flat terrain on mountain slope		O to B	tan brown		J. M. G.	sample taken at location; thin organics grade into B hor sampled; sandy soil
A16	2017-11-01	595503	5246000	323.33	mature-mixed forest		flat terrain		O to B	rusty-tan-brown		J. M. G.	sample taken at location; thin organic to B hor sampled; sandy soil; claim post 17m south; outcrop 20m west
A17	2017-11-01	595499	5246025	323.55	mixed forest		side of outcrop		O to B	rusty brown		J. M. G.	sample taken at location; thin organic to B hor sampled; sandy soil; outcrop faces 7m west
A18	2017-11-01	595501	5246050	320.59	mature-mixed forest		mountain slope		O to B	tan rusty brown		J. M. G.	sample taken at location; thin organic-rocky to B hor sampled; sandy soil, pebbles and rocks in matrix
A19	2017-11-01	595499	5246076	316.00	mature forest		mountain slope		O to B	rusty tan		J. M. G.	sample taken at location on claim line; thin organic to b hor; sandy soil; outcrop 20m west
A20	2017-11-01	595498	5246101	313.02	mature forest		mountain slope	9	O to B	rusty tan brown	4	J. M. G.	sample taken at location; 5cm organic, 4cm grey to B hor sampled; sandy soil; 4m east of claim post #4
A21	2017-11-01	595501	5246125	311.60	mature forest		flat mountain terrain		O to B	rusty tan brown		J. M. G.	sample taken at location; thin organic to b hor sampled; sandy soil with few pebbles in matrix
B01	2017-11-01	595599	5245622	304.25								J. M. G.	no sample taken - beyond depth of auger; checked with shovel, organics too deep
B02	2017-11-01	595600	5245649	303.96								J. M. G.	no sample taken - beyond depth of auger; checked with shovel, organics too deep
B03	2017-11-01	595598	5245673	299.94						brown		J. M. G.	sample taken with auger, spot-on location; full auger length to B hor; sandy soil;checked with shovel - organic too deep
B04	2017-11-01	595599	5245701	299.90						brown		J. M. G.	sample taken with auger - 3/4 length to B hor; sandy soil; checked with shovel - organic too deep
B05	2017-11-01	595600	5245726	297.98						brown		J. M. G.	sample taken with auger - 3/4 length to B hor; sandy soil; checked with shovel - organic too deep
B06	2017-11-01	595599	5245748	297.63						brown		J. M. G.	sample taken with auger - full length to B hor; sandy soil; checked with shovel - organic too deep
B07	2017-11-01	595602	5245776	297.63						brown		J. M. G.	sample taken with auger - 1/2 length to B hor; sandy soil; checked with shovel - organic too deep
B08	2017-11-01	595557	5245800	302.68	mixed forest		base of moutain slope		O to B	dark brown		J. M. G.	sample taken 43m west due to thick organics in swamp - sample taken at base of mountain slope; sandy soil with pebbles
B09	2017-11-01	595585	5245829	305.42	mature-mixed forest		slope	2	O to B	dark brown		J. M. G.	sample taken 15m west of station due to very rocky ground; thin oganic, 2cm grey to B hor; sandy-gravely soil
B10	2017-11-01	595601	5245849	306.21	mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken 5m south of station due to rocky ground; sandy soil with pebbles and rocks
B11	2017-11-01	595602	5245873	305.99	mature-mixed forest		flat terrain		O to B	tan rusty brown		J. M. G.	sample taken 4m north of station due to rocky ground; sandy soil with some rocks
B12	2017-11-01	595598	5245900	308.16	mature-mixed forest, rocky ground		flat terrain		O to B	tan brown		J. M. G.	sample taken spot on location; sandy soil with some rocks
B13	2017-11-01	595599	5245925	308.47	rocky ground		flat terrain		O to B	brown		J. M. G.	sample taken spot on location; coarse sandy soil with pebbles
B14	2017-11-01	595598	5245950	312.17			steep mountain slope		O to B	brown		J. M. G.	sample taken spot on location; sandy-rocky-pebbly soil; 3 pits within 15m radius; duplicate of M5
B15	2017-11-01	595596	5245975	310.34	mature-mixed forest		near creek	3	O to B	rusty tan brown		J. M. G.	sample taken 4m west of station due to rocks
B16	2017-11-01	595602	5246000	300.30	mixed forest, rocky ground		bottom of mountain slope		O to B	tan brown		J. M. G.	sample taken spot on location, west of creek; sandy soil with rocks and pebbles in matrix
B17	2017-11-01	595601	5246022	299.26				19	O to B	tan brown	19	J. M. G.	sample taken spot on location, side of creek with high water mark; sandy soil with some pebbles in matrix; 7cm organic layer; outcrop faces 17m west
B18	2017-11-01	595601	5246050	300.49				10	O to B	dark brown-light brown	10	J. M. G.	sample taken spot on location, along side of creek with high water mark; 5cm organic layer; sandy soil
B19	2017-11-01	595596	5246074	298.67				10	O to B	tan brown	10	J. M. G.	sample taken spot on location, edge of creek with high water mark; 4cm organic layer; coarse sandy soil
B20	2017-11-01	595598	5246100	298.85	mixed forest		flat terrain	10	O to B	rusty tan brown	10	J. M. G.	sample taken spot on location; 8cm organic layer; sandy soil with pebbles
B21	2017-11-01	595599	5246126	300.19	mixed forest		flat terrain	8	O to B	light brown	8	J. M. G.	sample taken 5m west of station due to thick organic low area; sandy soil
B22	2017-11-01	595602	5246150	301.29	mixed forest			13	O to B	rusty tan brown	13	J. M. G.	sample taken spot on location; 10cm organic layer; sandy soil with some pebbles
B23	2017-11-01	595587	5246181	302.20	mixed forest, rocky ground		flat terrain		O to B	rusty tan brown		J. M. G.	sample taken 5m north, 12m west of station due to very rocky low ground; sandy soil with rocks and pebbles in matrix
C01	2017-11-03	595699	5245623	295.27	mature forest	jack pine	flat terrain		O to B	light tan brown	2	J. M. G.	sample taken spot on location; thin organic layer; sandy soil with rocks in matrix
C02	2017-11-03	595698	5245651	291.54			flat terrain	7	O to B	rusty tan brown	7	J. M. G.	sample taken spot on location; 4cm organic layer; sandy soil with pebbles in matrix; outcrop 7m west; found on claim line
C03	2017-11-03	595688	5245674	291.84	mature-mixed forest, swampy, rocky		flat terrain		O to B	tan brown		J. M. G.	sample taken 12m west of station within creek bed; outcrop near creek
C04	2017-11-03	595721	5245700	290.27	mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken 20m east of station in creek bed; sandy, rocky, pebbly soil
C05	2017-11-03	595715	5245726	294.29	mixed forest			9	O to B	tan brown	9	J. M. G.	sample taken 14m east of station, low creek bank out to station in creek bed; 7cm organic layer; sandy soil with rocks in matrix
C06	2017-11-03	595713	5245751	294.74	mature -mixed forest		stream bank			tan brown		J. M. G.	sample taken 13m east of station - station in creek bed; sandy soil with some pebbles in matrix
C07	2017-11-03	595705	5245774	292.81	mixed forest		beside creek		O to B	tan brown		J. M. G.	sample taken 5m east of station on high water mark bank; gravelly coarse sandy soil
C08	2017-11-03	595701	5245800	294.23	mixed forest				O to B	rusty tan brown		J. M. G.	sample taken 6m east of station, too high water mark (bank) to sample - dug to no B with shovel - sample taken on bank; coarse sandy
C09	2017-11-03	595701	5245824	293.66	mixed forest, …modow?				O to B	light brown		J. M. G.	sample taken 5m east of station due to low ground … monow? - side of high water mark; rocky area; gravely-clay sandy soil
C10	2017-11-03	595700	5245850	291.32	mixed forest, B… Monow?				O to B	dark brown		J. M. G.	sample taken spot on location - on edge of B… modow - high water mark; gravelly-sandy soil
C11	2017-11-03	595702	5245875	292.53	bomer monow?							J. M. G.	sample taken spot on with auger; tried on edge of bomor medow? Failed to get to B hor - used auger
C12	2017-11-03	595703	5245900	293.76	mixed forest		slope		B	tan brown		J. M. G.	sample taken spot on, berner modow?; rocky sample, gravely sandy mixed soil
C13	2017-11-03	595698	5245925	296.65	mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken spot on; rocky excavation; gravely soil; on claim line
C14	2017-11-03	595699	5245950	296.34	mixed forest				O to B	rusty brown		J. M. G.	sample taken 4m west of station due to rocky ground; rocky excavation; sandy pebbly soil; on claim line; duplicate of M9
C15	2017-11-03	595700	5245976	297.16	mixed forest		flat terrain		O to B	rusty tan brown		J. M. G.	sample taken 4m north-west of station; rocky excavation
C16	2017-11-03	595697	5246003	298.21	mixed forest		flat terrain		O to B	tan - light brown		J. M. G.	sample taken spot on location; rocky excavation; sandy clay soil with rocks and pebbles in matrix
C17	2017-11-03	595701	5246025	295.79	mixed forest		flat terrain		O to B	light brown		J. M. G.	sample taken spot on location; some rocks in excavation; sandy clay soil; claim post 10m south
C18	2017-11-03	595701	5246052	296.19	mixed forest		flat terrain		O to B	rusty tan brown			sample taken spot on location; sandy soil with some rocks
C19	2017-11-03	595702	5246077	294.55	mixed forest		flat terrain	10	O to B	light brown		J. M. G.	sample taken spot on location; sandy soil with some rocks in excavation
C20	2017-11-03	595702	5246100	295.80	mixed forest		flat terrain	12	O to B	tan brown	12	J. M. G.	sample taken spot on location; 8cm organic layer; sandy soil with some rocks
C21	2017-11-03	595721	5246124	294.93	mixed forest				O to B	tan brown		J. M. G.	sample taken 20m east of station on side of B.M.?; rocky excavation; sandy pebbly soil, rocks in matrix
C22	2017-11-03	595721	5246152	294.76	mature-mixed forest			14	O to B	light brown	14	J. M. G.	sample taken 20m east of station - station in B.M?; sandy soil; rocky excavation; outcrop 15m east
C23	2017-11-03	595721	5246172	292.97	mature-mixed forest		flat terrain	12	O to B	light brown	12	J. M. G.	sample taken 21m east of station, edge of B.M?; sandy soil
C24	2017-11-03	595701	5246202	292.54				61	B	grey/brown		J. M. G.	sample taken spot on with auger in B.M?; sandy soil; no shovel used - too much water
C25	2017-11-03	595710	5246225	296.33	benier mondow?			61		grey		J. M. G.	auger sample - location 32m to shovel … organic … 10m east of station - dug to water, water filled hole ~13"; fine grained sand/soil; shovel not used
C26	2017-11-03	595702	5246250	295.75	grassy meadow			6	O to B	grey-light brown	6	J. M. G.	sample taken spot on, edge of creek meadow high water mark
D01	2017-11-03	595800	5245625	301.34	mature forest	jack pine	flat terrain	7	O to B	tan brown	7	J. M. G.	sample taken spot on; gravely sandy soil
D02	2017-11-03	595802	5245651	300.72		red pine	flat terrain	5	O to B	rusty tan brown	5	J. M. G.	sample taken spot on location; sandy, gravely soil
D03	2017-11-03	595800	5245675	299.40	mature forest	red pine	bottom of slope	4	O to B	tan light brown	4	J. M. G.	sample take spot on location; sandy soil with rocks and pebbles in matrix
D04	2017-11-03	595802	5245701	305.71	mature mixed forest	mossy red pines	slope	11	B	rusty	4	J. M. G.	sample taken spot on location; some rocks in excavation; coarse sandy soil with gravel and rocks
D05	2017-11-03	595801	5245726	307.69	mature mixed forest		flat terrain	2	O to B	rusty tan brown	2	J. M. G.	sample taken spot on location; coarse sandy soil with rocks and gravel
D06	2017-11-03	595800	5245750	308.29	mature mixed forest	mossy red pines	flat terrain		O to B	light brown		J. M. G.	sample taken spot on location; sandy clay soil
D07	2017-11-03	595801	5245775	308.67	mature mixed forest		flat terrain		O to B	tan light brown		J. M. G.	sample taken spot on location; sandy clay soil with some rocks
D08	2017-11-03	595799	5245799	308.94	mature mixed forest		flat terrain		O to B	brown		J. M. G.	sample taken spot on location; sandy-clay soil
D09	2017-11-03	595799	5245824	306.60	mixed forest		flat terrain		O to B	dark brown		J. M. G.	sample taken spot on location; rocky excavation; very sandy soil, rocks in matrix
D10	2017-11-03	595800	5245850	306.05	mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken spot on location; rocky excavation to B hor; rocky, clay-sandy soil
D11	2017-11-03	595801	5245875	306.14	mature mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken spot on location; rocky excavation to B hor; rocky soil
D12	2017-11-03	595799	5245901	305.34	mature mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken spot on location; rocky excavation; sandy soil, some clay, gravel matrix
D13	2017-11-03	595800	5245926	303.18	mature mixed forest				O to B	light brown		J. M. G.	sample taken spot on location; clay-sandy soil

2017 Soil Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Elevation	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Sample Colour	Thickness (cm)	Sampler*	Comments
D14	2017-10-31	595799	5245949	302.05	mature mixed forest, rocky ground				O to B	tan brown		J. M. G.	sample taken spot on location; rocky, sandy soil; duplicate of M13
D15	2017-11-03	595800	5245975	302.68	mature mixed forest		flat terrain		O to B	tan brown		J. M. G.	sample taken spot on location; rocky excavation; sandy soil with rock and pebbles in matrix
D16	2017-11-03	595797	5246001	301.76	mature mixed forest		flat terrain		O to B	dark brown		J. M. G.	sample taken spot on location; coarse sandy soil with pebbles in matrix
D17	2017-11-03	595800	5246025	299.95	mixed forest		slope		O to B	light brown		J. M. G.	sample taken spot on location; rocky excavation to b hor; sandy soil with some pebbles in matrix
D18	2017-11-03	595801	5246050	305.06	mixed forest		slope	10	O to B	rusty brown	10	J. M. G.	sample taken spot on location; sandy soil; some small shallow excavations beside outcrop near sample
D19	2017-11-03	595802	5246075	303.38	mixed forest		slope		O to B	tan brown		J. M. G.	sample taken spot on location; rocky excavation; sandy soil with rocks in matrix
D20	2017-11-03	595798	5246101	306.16	mixed forest		hill slope		O to B	rusty		J. M. G.	sample taken spot on location; sandy soil with pebbles in matrix; long … 15m east and shallow … close by
D21	2017-11-03	595800	5246124	294.42	mixed forest		mountain top	3	O to B	rusty tan brown	3	J. M. G.	sample taken spot on location; rocky excavation; sandy soil with rocks in matrix; outcrop 3m east
D22	2017-11-03	595806	5246150	303.50	mixed forest		outcrop/mountain top	7	O to B	tan rusty brown	7	J. M. G.	sample taken 6m east of location; sandy soil with small pebbles in matrix
D23	2017-11-03	595803	5246173	304.54	mixed forest	pines	mountain top	12	O to B	tan - dark brown	12	J. M. G.	sample taken spot on location; sandy-clay soil with small pebbles in matrix
D24	2017-11-03	595802	5246201	296.77	mixed forest		base of cliff	2	O to B	rusty tan brown	2	J. M. G.	sample taken 4m east of location due to cliff; sandy soil, minor clay, rocks and pebbles in matrix
D25	2017-11-03	595799	5246224	297.40	mixed forest		flat terrain	4	O to B	tan brown	4	J. M. G.	sample taken spot on location; rocky excavatio; sandy soil with rocks in matrix
D26	2017-11-03	595801	5246251	300.86	mature mixed forest		slope		O to B	tan brown		J. M. G.	sample taken spot on location; coarse sand and gravel mix
D27	2017-11-03	595802	5246275	305.85	mature forest		flat terrain		O to B	rusty tan brown		J. M. G.	sample taken spot on location; rocky excavation; sandy and gravely sample
D28		595800	5246300				top of slope		O to B	tan brown			sample taken 7m west of station due to very rocky ground; sandy-gravely soil; rocky excavation
E01	2017-10-28	595890	5245274	292.66					B	light brown		J. M. G.	No B hor at location, moved 10m east; sandy soil; 50m west, mountain rock faces; duplicate of L21
E02	2017-10-31	595899	5245298	278.97	mature forest	jack pines	flat terrain	7	B	light tan brown	2	J. M. G.	sample taken on claim line 20m east; sandy soil
E03	2017-10-31	595902	5245325	281.15	mature forest	jack pines	flat terrain		B	greyish brown		J. M. G.	sample taken spot on location; sandy rocky soil
E04	2017-10-31	595901	5245351	281.75	mature forest	jack pines	flat terrain	10	B	greyish brown	10	J. M. G.	sample taken spot on location; rocky, sandy soil with pebbles; 20m south of hydro lines
E05	2017-10-31	595899	5245373	283.59	mature forest	jack pines	flat terrain		B	light brown		J. M. G.	sample taken spot on location, within hydro line …; rocky crummly ground; mud horizon present, 10cm organic layer
E06	2017-10-31	595936	5245402	285.63	mature forest	alders	low/flat terrain		B	light brown		J. M. G.	sample taken 36m east of station due to creek; 6cm organic layer, thin muddy … mix to B hor
E07	2017-10-31	595925	5245426	288.18		alders	low outwash		B	light brown		J. M. G.	sample taken 24m east of location due to stream out wash; rocky ground; 6cm organic layer; sandy-clay soil with rocks and cobbles - gravely
E08	2017-10-31	595923	5245451	289.22		alders	low area/outwash	10	B	light brown		J. M. G.	sample taken 25m east due to summer creek; low ground and outwash; thin organic layer; sandy clay soil with pebbles
E09	2017-10-31	595908	5245475	289.61	mature-mixed forest	pines		4	O to B	rusty brown	4	J. M. G.	sample taken 6m east of station due to creek 20m west; sandy soil with few pebbles
E10	2017-10-31	595901	5245500	292.28	mature mixed forest	pines		10	B	rusty brown	2	J. M. G.	sample taken spot on location; coarse sandy soil, some pebbles
E11	2017-10-31	595900	5245526	291.61	mature mixed forest	jack pine	flat terrain	7	B	rusty tan brown	9	J. M. G.	sample taken spot on location; sandy soil and some pebbles
E12	2017-10-31	595901	5245552	291.51	mature forest	jack pine			B	tan rusty brown	2	J. M. G.	sample taken 3m east of station, 20m east of creek wash; coarse sandy soil
E13	2017-10-31	595899	5245575	295.32					B	rusty brown	2	J. M. G.	sample taken on claim line, side of ravine; coarse sandy soil mixed with small pebbles in matrix
E14	2017-10-31	595899	5245601	298.15			ravine slope		B	rusty dark brown		J. M. G.	sample take spot on location; 5cm organic layer; sandy soil with some pebbles
E15	2017-10-31	595903	5245625	301.69	mature mixed forest		hill		B	tan brown		J. M. G.	sample taken spot on location - top of rolling hill - ravine on both sides; coarse sandy soil with gravel matrix
E16	2017-10-31	595898	5245650	302.28	mature mixed forest		flat terrain	5	O to B	tan brown	5	J. M. G.	sample taken spot on location; sandy rocky soil
E17	2017-10-31	595903	5245674	302.94			flat terrain	5	O to B	rusty tan brown	5	J. M. G.	sample taken spot on location; sandy gravely soil
E18	2017-10-31	595901	5245700	303.11			flat relief		O to B	tan brown		J. M. G.	sample taken spot on location; sandy clay soil, gravely matrix
E19	2017-10-31	595898	5245726	303.02	mature mixed forest				O to B	light brown		J. M. G.	sample taken spot on location; sandy soil with minor clay and small pebbles
E20	2017-10-31	595898	5245751	304.48	mature mixed forest		flat terrain			light brown/tan		J. M. G.	sample taken spot on location; sandy gravely soil with rock rocks
E21	2017-10-31	595899	5245774	306.24	mixed mature forest		flat terrain	11	B	tan brown	4	J. M. G.	sample taken spot on location; sandy soil, gravely
E22	2017-10-31	595901	5245800	306.70	mixed mature forest		flat terrain	4	O to B	tan brown	4	J. M. G.	sample taken spot on location; sandy soil with pebbles
E23	2017-10-31	595901	5245825	305.77	mixed mature forest		flat terrain		O to B	light brown		J. M. G.	sample taken spot on location; sandy soil, a little clay
E24	2017-10-31	595901	5245851	308.93			outcrop		O to B	tan brown		J. M. G.	sample taken spot on location; sandy soil with bpebbles in matrix
E25	2017-10-31	595901	5245875	306.83	rocky ground		outcrop		O to B	brown		J. M. G.	sample taken spot on location; sandy soil with pebbles; outcrop 4m west
E26	2017-10-31	595898	5245900	308.87	rocky ground, forest	pines	talus slope		O to B	dark brown		J. M. G.	sample taken 4m east of station on talus slope of outcrop mountain; sandy soil, gravely matrix
E27	2017-10-31	595902	5245924	311.26	rocky ground		outcrop/mountain	6	B	rusty tan brown	2	J. M. G.	sample taken 5m east of station, side of mountain outcrop; sandy soil with rocks
E28	2017-10-25	595899	5245949	314.96					B	light tan		J. M. G.	sample taken 7m west of station, possible … trench, no sample location and outcrop - lots of roots; grey 10cm layer above B hor; duplicate of M17
E29	2017-10-25	595901	5245974	318.04					B	tan brown		J. M. G.	sample taken spot on location; sandy soil, lots of roots
E30	2017-10-25	595901	5245999	321.49					B	tan brown		J. M. G.	still on top of …; sample taken spot on location; disturbances with in 20m … trenches; sandy soil; bedrock at 24cm; sample occupies "basic"; hor at 23…
E31	2017-10-25	595901	5246025	322.83				9		dark brown	3	J. M. G.	sample taken spot on location; lots of roots; ontop of whales back, some rock
E32	2017-10-25	595899	5246048	323.34						brown		J. M. G.	sample taken 3m west due to outcrop; clay below B hor; sandy soil
E33	2017-10-25	595903	5246073	317.64						brown-tan		J. M. G.	sample taken spot on location; outcrop 15m south, line over outcrop - ND; thin grey layer over B hor; sandy soil
E34	2017-10-25	595901	5246098	312.11					B	tan-brown		J. M. G.	sample taken 3m east of location; no gravel/pebbles - clean - sandy loamy soil; on slope east of … back to west
E35	2017-10-25	595899	5246125	305.76					B	tan-brown		J. M. G.	sample taken spot on location; possible sahllow trench - 4m west of sample; clean, no pebbles; 3cm grey layer above B hor
E36	2017-10-25	595899	5246149	308.98					B	tan-brown		J. M. G.	sample taken spot on location; 3.5cm organics layer; sandy pebbly soil
E37	2017-10-25	595900	5246175	311.30			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; some rocks, pebbles mixed into B hor
E38	2017-10-25	595898	5246199	310.03			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; sandy clay soil, no rocks
E39	2017-10-25	595897	5246224	309.97					B	light brown		J. M. G.	sample taken spot on location; west of old claim line; thin light grey soil under organics; sandy soil, no rocks, no pebbles
E40	2017-10-25	595898	5246250	309.00					B	light brown - tan		J. M. G.	sample taken 2m east from location; much less rocks, somewhat follows out claim line; sandy soil
E41	2017-10-25	595899	5246273	312.66					B	tan brown		J. M. G.	sample taken spot on location; humus then 3cm grey, B hor below grey; rocks, pebbles, sandy soil
E42	2017-10-25	595902	5246299	313.78					B			J. M. G.	sample taken spot on location; 5m east of old claim line; no grey layer, rocky; sample found between rocks
E43	2017-10-25	595901	5246324	315.04	rocky terrain				B	brown tan		J. M. G.	sample taken spot on location; organic layer, 2cm grey layer, then B hor
E44	2017-10-25	595899	5246350	314.98			slope		B			J. M. G.	sample taken spot on location; A: 5cm, B: 5-19cm; rocks, boulders
E45	2017-10-25	595901	5246374	310.54			slope		B	tan brown		J. M. G.	sample taken 4m west of location on cut survey line 5m north of claim post 4 (old) 4272860; rocky bolders in B hor; minor pebbles
F01	2017-10-28	596000	5245277	305.34	mature forest	jack pines		20	B	rusty tan		J. M. G.	sample taken spot on location; 10cm organic layer, 10cm grey layer; sandy loam; duplicate of L17
F02	2017-10-31	596004	5245301	293.82	mature forest	jack pines	creek	9	B	tan brown		J. M. G.	sample taken 4m east of station in creek, high water mark - on power line; 7cm organic layer, 2cm grey layer to B hor; sandy soil
F03	2017-10-31	596010	5245325	293.07	mature forest	jack pines, alders			B	rusty tan brown		J. M. G.	taken 10m east of station due to low ground; 4cm organic layer, 4cm grey layer; sandy soil
F04	2017-10-31	596004	5245352	292.30			low ground		B	brown		J. M. G.	sample taken 7m east of station due to low tag alders ground; 25cm organic, 3cm grey; sandy soil; on edge of low area
F05	2017-10-31	596010	5245375	290.97	mature forest	jack pine	low area		B	light brown		J. M. G.	sample taken 15m east of station in low area (cannot collect by shovel); 15cm organics, 25cm grey to B hor; sandy soil
F06	2017-10-31	596017	5245401	293.07	forest	mature pine, alder	low area		B	brown		J. M. G.	sample taken 16m from edge of low area (tag alders); 20cm organic, 3cm grey to B hor; sandy soil
F07	2017-10-31	596001	5245425	295.43	forest	mature pine, alder	low area		B	tan brown		J. M. G.	sample taken spot on location on bottom of slope beside low area (tag alder); 15cm organics, 12cm grey to b hor; sandy soil
F08	2017-10-31	596001	5245450	299.10	forest	mature jack pine	gentle slope		B	rusty tan		J. M. G.	sample taken spot on location; thin organics, 5cm grey to B hor; sandy soil, few rocks
F09	2017-10-31	596002	5245475	301.56	forest	mature jack pine	gentle slope		B	brown		J. M. G.	sample taken spot on location; thin organics, 2cm grey to B hor; sandy soil
F10	2017-10-31	596003	5245499	304.57	mature mixed forest				B	tan brown		J. M. G.	sample taken spot on location; thin organics, 3cm grey to B hor; sandy soil
F11	2017-10-31	596002	5245525	307.35	mature mixed forest		flat terrain		B	rusty tan		J. M. G.	sample taken spot on location; thin organics, 5cm grey to B hor; sandy soil
F12	2017-10-31	596001	5245549	308.90	mature mixed forest		flat terrain		B	rusty tan		J. M. G.	sample taken spot on location; 4cm organics, 5cm grey to B hor; sandy soil
F13	2017-10-31	595999	5245576	307.48	mature mixed forest		flat terrain		B	tan brown rusty		J. M. G.	sample taken spot on location; thin organics, 5cm grey to B hor; coarse sandy soil
F14	2017-10-31	596001	5245599	303.67	mature mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 4cm organics, 4cm grey to B hor; sandy soil; 10m east of claim line
F15	2017-10-31	596000	5245625	302.99			top ravine		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organics, 5cm grey to B hor; coarse sandy soil
F16	2017-10-31	596002	5245648	299.66			bottom of slope of ravine		B	rusty brown		J. M. G.	sample taken spot on location; 10cm organics, 5cm grey to B hor; sandy soil; large 15m width ravine
F17	2017-10-31	595998	5245675	304.81	mature mixed forest		slope		B	rusty brown		J. M. G.	sample taken spot on location; 6cm organics, 5cm grey to B hor; sandy soil
F18	2017-10-31	596000	5245700	309.07	mature mixed forest		hill face slope		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organics, 4cm grey to B hor; sandy soil
F19	2017-10-31	596002	5245726	309.68			slope		B	rusty brown		J. M. G.	sample taken spot on location; 7cm organics; coarse sand with pebble sin matrix
F20	2017-10-31	596002	5245749	307.78	mature forest		ravine		B	tan brown		J. M. G.	sample taken spot on location in small ravine; thin organics grade into B hor; sandy soil
F21	2017-10-31	596001	5245776	313.39			top of rolling hill		B	tan brown		J. M. G.	sample taken spot on location; thin organics, 2cm grey to B hor; sandy soil with few rocks
F22	2017-10-31	595998	5245800	314.69	mature mixed forest		flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; high ground; thin organic grades into B hor; coarse sandy soil with small pebbles in matrix
F23	2017-10-31	595999	5245825	315.26	rocky ground		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; organic grades into B hor; sandy soil with rocks in matrix

2017 Soil Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Elevation	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Sample Colour	Thickness (cm)	Sampler*	Comments
F24	2017-10-31	596000	5245850	315.85	rocky ground, mixed forest				B	brown		J. M. G.	sample taken 5m south of station; thin organic grades into B hor; sandy clay? Soil; top of elevation
F25	2017-10-31	596002	5245875	320.22	rocky ground, mixed forest		flat terrain		B	rusty brown		J. M. G.	sample taken 4m south of location; top of hill; 10cm organics, rock excavation to B hor; sandy soil with rocks in matrix
F26	2017-10-31	596000	5245900	320.46	mixed forest		flat terrain		B	brown		J. M. G.	sample taken spot on location; 4cm organic, 5cm grey to B hor; sandy soil with few rocks
F27	2017-10-31	596002	5245925	322.12			mountain top		B	rusty brown		J. M. G.	sample taken 4m east of station; thin organic, 2cm grey to B hor; sandy soil with rocks
F28	2017-10-25	596000	5245950	319.13								J. M. G.	sample taken 3m west of location; 1cm grey after organics, possibly at bedrock; rocky excavation; still on W. back hill; same location as M12; 23cm bedrock; trench 4m west of sample
F29	2017-10-25	596001	5245976	319.58			hill		B	dark brown		J. M. G.	sample taken spot on location; organic, 2cm grey
F30	2017-10-25	596001	5246000	320.02					B	dark brown		J. M. G.	sample taken spot on location; outcrop close by - near cliff face; rocky excavation; lots of rocks; sandy soil with rocks
F31	2017-10-25	596001	5246026	313.37					B	tan dark brown		J. M. G.	sample taken spot on location at bottom of cliff face; some rocks, B hor pebbly and rocky
F32	2017-10-25	596000	5246051	310.90			hill slope		B	tan dark brown		J. M. G.	sample taken spot on location, bottom of hill-trench to east at bottom of hill; roots; sandy soil, few rocks and pebbles
F33	2017-10-25	595999	5246077	309.00					B	brown		J. M. G.	sample taken spot on location; old trench crossed to west 25m; organic, 5cm grey to B hor; sandy soil
F34	2017-10-25	595998	5246102	308.87			flat terrain		B	light brown		J. M. G.	sample taken spot on location; 8-10cm organics, 5cm grey
F35	2017-10-25	595998	5246125	310.49			flat terrain		B	light brown		J. M. G.	sample taken spot on location; thin humus; sandy soil minor pebbles
F36	2017-10-25	596002	5246150	308.82			flat terrain		B	medium brown		J. M. G.	sample taken spot on location; organic, 4cm grey; sandy soil, some pebbles
F37	2017-10-25	595996	5246174	313.76			flat terrain		B	medium brown		J. M. G.	sample taken spot on location; organic, 7cm grey then B hor, some pebbles within sandy loamy matrix
F38	2017-10-25	595996	5246200	314.41			flat terrain		B	light brown		J. M. G.	sample taken spot on location; clean sandy soil
F39	2017-10-25	596000	5246224	314.37	mixed forest		flat terrain		B	dark tan brown		J. M. G.	sample taken spot on location; 7cm organics; sandy soil
F40	2017-10-25	596002	5246251	311.81	mixed forest		flat terrain		B	tan/medium brown		J. M. G.	sample taken spot on location; same as previous, very few pebbles
F41	2017-10-25	596000	5246275	314.90			hill slope		B	dark brown		J. M. G.	sample taken 5m west of location; rocky hillside with minor grade uphill to north; organic, 3cm grey soil; lots of roots and rocks, some pebbles in B hor; sandy soil
F42	2017-10-25	596002	5246303	313.50			hill slope		B	tan brown		J. M. G.	sample taken spot on location; rocky hill side, at top pf slope; humus then grey, rocks; B hor deeped down, lots of rocks; sandy soil with some pebbles and rocks; hard excavation
F43	2017-10-25	596002	5246326	310.88			flat terrain		B	dark brown		J. M. G.	sample taken 3m off location; same as previous - rocky; 7cm organic, rocky matrix, 75% rocks
F44	2017-10-25	596002	5246351	313.42					B			J. M. G.	sample taken spot on location; same as previous; bedrock or large rock, sample taken from … up tp top of B …
F45	2017-10-25	596000	5246374	316.20					B	tan brown		J. M. G.	At suruty? Line; rocky at sample location - searched for good location - 2m east; excavated through fist size rocks - organics removed; salvaged B hor from below organics; sandy pebble matrix
F46	2017-10-25	596002	5246402	309.12					B	light brown		J. M. G.	sample taken on slope N side of hill "steep"; rocky, organic, 4cm grey, B hor; sandy with pebbles matrix; can see cabin to east
F051	2017-10-31	596015	5245374	292.51								J. M. G.	
G01	2017-10-28	596100	5245275	307.97	mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey; sandy soil; duplicate of L13
G02	2017-10-30	596103	5245301	304.01		jack pine	gentle slope		B	tan brown	4	J. M. G.	sample taken spot on location; 10cm organic, 4cm grey to B hor; sandy soil
G03	2017-10-30	596100	5245325	303.71			flat terrain		B	rusty tan brown	6	J. M. G.	sample taken spot on location; thin organic, 6cm grey to B hor; sandy soil
G04	2017-10-30	596099	5245349	305.57					B	rusty tan brown	7	J. M. G.	sample taken spot on location, 4m east of ATV trail; thin organic, 7cm grey to B hor; sandy soil
G05	2017-10-30	596100	5245376	307.31					B	rusty tan brown		J. M. G.	sample taken spot on location; 4m east of trail; thin organic, 4cm grey to B hor; sandy soil
G06	2017-10-30	596098	5245400	310.84			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; ATV tain at sample station, moved off to east 3m - trespassing sign 20m to …; thin organics, 5cm grey to B hor; sandy soil
G07	2017-10-30	596098	5245425	310.50	mature mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 4cm organic, 4cm grey then B hor; sandy soil
G08	2017-10-30	596101	5245450	310.73	mature mixed forest		flat relief		B	tan brown		J. M. G.	sample taken spot on location; 3cm organic, 5cm grey to B hor; sandy soil
G09	2017-10-30	596101	5245474	313.48	mature mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 3cm organic, 4cm grey into B hor; sandy soil
G10	2017-10-30	596102	5245500	314.04	mature mixed forest		flat terrain		B	rusty tan		J. M. G.	sample taken spot on location; thin organic, 4cm grey to B hor; course sandy soil with a few pebbles
G11	2017-10-30	596102	5245524	315.30	mature mixed forest		flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; thin organic, 4cm grey to B hor; sandy soil
G12	2017-10-30	596102	5245550	315.47	mature mixed forest		flat terrain		B	light brown		J. M. G.	sample taken spot on location; 5cm organic, 6cm grade into B hor; sandy soil
G13	2017-10-30	596102	5245575	316.89					B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organics, 5cm grey to B hor; sandy soil; ribbons to east?
G14	2017-10-30	596102	5245599	319.50			gentle slope		B	rusty brown		J. M. G.	sample taken spot on location; thin organics, 3cm grey to B hor; sandy soil; on claim line? (ribbons)
G15	2017-10-30	596100	5245625	322.48			slope		B	dark brown		J. M. G.	sample taken 7m east of station due to outcrop and rocky ground; 15cm organics and mud to B hor; sandy, clay soil
G16	2017-10-30	596101	5245651	325.03			bench		B	rusty tan		J. M. G.	sample taken spot on location; up a bench; 5cm organic to B hor; sandy soil, some rocks
G17	2017-10-30	596100	5245674	324.24			gentle slopw		B	rusty tan brown		J. M. G.	sample taken spot on location; 4cm organic, 4cm grey to B hor; sandy soil, few rocks
G18	2017-10-30	596098	5245700	323.98			slope		B	tan brown		J. M. G.	sample taken spot on location; outcrop east and west; shallow B hor; sandy gravely soil
G19	2017-10-30	596100	5245724	324.24	rocky ground, mature mixed forest				B	rusty		J. M. G.	sample taken spot on location; 4cm organic to B hor; sandy soil with rocks and pebbles in matrix
G20	2017-10-30	596100	5245749	323.22					B	brown		J. M. G.	sample taken spot on location; thin organic to B hor; sandy soil with pebbles in the matrix
G21	2017-10-30	596101	5245775	322.32			flat terrain	8	B	dark brown	4	J. M. G.	sample taken spot on location; low area; 7cm organic, 4cm grey to b hor; sandy soil
G22	2017-10-30	596102	5245799	321.58					B	rusty dark brown		J. M. G.	sample taken 7m north of station due to low ground; thin organics, 2cm grey to B hor; sandy soil
G23	2017-10-30	596099	5245826	323.03			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; 7cm organics, 5cm grey to B hor; sandy soil
G24	2017-10-30	596101	5245850	323.98					B	rust brown		J. M. G.	sample taken spot on location; rural ground south of large pit; 7cm organic to B hor; sandy soil, rocks in matrix
G25	2017-10-30	596098	5245875	322.42			flat terrain		B	light brown		J. M. G.	sample taken spot on location; 10cm organic to B hor; sandy soil; hole fillinf with water
G26	2017-10-30	596101	5245900	323.71			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 6cm grey to B hor; sandy soil; large trench 5m south
G27	2017-10-30	596100	5245926	328.90	mature mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, 2cm grey to B hor; sandy soil
G28	2017-10-26	596100	5245951	326.71					B	tan brown		J. M. G.	sample taken spot on top of rise, see outcrop 25m west; thin organic then B hor, som peeble; sandy soil; duplicate os M25
G29	2017-10-26	596100	5245973	321.01			low hill slope		B	dark tan brown		J. M. G.	sample taken spot on side of low hill side; thin organic, 2cm grey to B hor; sandy soil
G30	2017-10-26	596099	5246000	318.12					B	tan brown		J. M. G.	sample taken spot on side of low rise; thin organic, 7cm grey to B hor; sandy soil; 4m east of old claim post 4272860 post #2
G31	2017-10-26	596100	5246026	314.12					B	rusty dark brown		J. M. G.	sample taken spot at bottom of low rise; thin organic, 3cm grey to B hor; on claim line
G32	2017-10-26	596099	5246050	313.24			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic; sandy soil
G33	2017-10-26	596099	5246075	313.35			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; thin organic, 4cm grey to B hor; coarse sandy soil
G34	2017-10-26	596100	5246101	314.69			flat terrain		B	tan light brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey then B hor; sandy soil
G35	2017-10-26	596099	5246125	317.93			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey then B hor; sandy soil with few small pebbles
G36	2017-10-26	596102	5246149	318.29			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, few pebbles; sandy soil
G37	2017-10-26	596101	5246175	316.91					B	tan brown		J. M. G.	sample taken spot on location; 5-2cm organic, thin greyto B hor; sandy soil, fewer pebbles; top of rise
G38	2017-10-26	596101	5246199	312.03					B	light brown tan		J. M. G.	sample taken spot on location; 5-7cm organic - no base or rise; sandy soil
G39	2017-10-26	596098	5246224	303.73			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 7cm organic; sandy clay B hor; matrix of sand and clay, few small pebbles
G40	2017-10-26	596099	5246251	301.89			flat terrain		B	light brown		J. M. G.	sample taken spot on location; thin organic, clay in matrix and sandy; ribbon from claim line on east side of sample 4m
G41	2017-10-26	596102	5246275	300.95			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic; sandy soil
G42	2017-10-26	596098	5246300	304.84	rocky ground				B	dark brown		J. M. G.	south side ofgravel ridge, same as G43; cobbly, sandy matrix; sandy clay with pebbles
G43	2017-10-26	596100	5246325	309.68					B	dark brown		J. M. G.	sample taken spot on location; some rock on top of sandy rock ridge; thin organic, coarse sandy matrix; pebbles in B hor
G44	2017-10-26	596101	5246350	306.90			top of slope		B	dark brown		J. M. G.	sample taken spot on location; coarse gravel - lots of rocks; top of slope; 7cm organics then B hor; sandy soil
G45	2017-10-26	596101	5246377	300.69	rocky ground				B	dark/light brown		J. M. G.	searched for location at top of steep slope south of suruty line, 25m east of claim post; organic 10cm, many rocks moved to get sample; gravely, sandy, minor clay in sample
H01	2017-10-28	596199	5245275	316.55	mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 6cm organic, 3cm grey to B; sandy soil; duplicate of L9
H02	2017-10-30	596200	5245301	307.20	mature mixed forest		flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey to B hor; sandy soil
H03	2017-10-30	596198	5245326	308.55			flat terrain to gently rolling		B	light brown		J. M. G.	sample taken spot on location; 7cm organic + brown mud; sandy soil
H04	2017-10-30	596200	5245350	313.37			gradual slope		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey to B hor; sandy soil
H05	2017-10-30	596199	5245376	314.80			side of slope		B	tan brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey to B hor; sandy soil; 15m^2 x 2m^2 trench, 3m north of sample
H06	2017-10-30	596200	5245401	315.40			top pf slope		B	rusty brown		J. M. G.	sample taken spot on location; 4cm organic, 6cm mud to B hor; sandy soil; trench/pit - large - 15m east of sample
H07	2017-10-30	596199	5245425	316.88			flat on top of slope		B	tan light brown		J. M. G.	sample taken spot on location; some rock in excavation; thin organic, 1cm grey to B hor; sandy soil with some rocks; long trench 15m east
H08	2017-10-30	596198	5245450	317.76			side of slope		B	tan light brown		J. M. G.	sample taken spot on location; thin organic to B hor; sandy soil;numerous trenches/pit to east of sample
H09	2017-10-30	596200	5245475	316.63					B	tan brown		J. M. G.	sample taken spot on location; 3m north of trenched outcrop; rocky; thin organic to B; sandy clay matrix with pebbles and some rock s
H10	2017-10-30	596199	5245501	316.46					B	rusty brown		J. M. G.	sample taken 4m west of station due to rocky ground; thin oprganic, 4cm organic to B hor; sandy soil with some rocks
H11	2017-10-30	596199	5245525	318.84	mature mixed forest				B	rusty tan light brown		J. M. G.	sample taken spot on location; 5cm organic, 6cm grey to B hor; sandy soil
H12	2017-10-30	596199	5245550	322.91	mature mixed forest		flat relief		B	rusty tan light brown		J. M. G.	sample taken spot on location; 6cm organic nd mud, 2cm grey to B hor; sandy soil
H13	2017-10-30	596200	5245574	324.00					B	rusty brown		J. M. G.	sample taken 5m SW of station due to rocks; 6cm organic, 2cm grey to B hor; sandy soil with a few rocks in matrix
H14	2017-10-30	596198	5245601	323.65			flat terrain		B	rusty tan brown		J. M. G.	sample taken 3m west - outcrop edge …?; thin organic, 2cm grey to B hor; sandy soil

2017 Soil Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Elevation	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Sample Colour	Thickness (cm)	Sampler*	Comments
H15	2017-10-30	596199	5245626	323.75	rocky ground				B	rusty tan brown		J. M. G.	sample taken 4m west of location due to rocks; 2cm grey to B hor; sandy soil; 15m west of claim line
H16	2017-10-30	596199	5245650	324.04	rocky ground				B	brown		J. M. G.	sample taken spot on location; thin organic to B hor; rocky, gravely soil with some clay and pebbles
H17	2017-10-30	596200	5245676	325.34	rocky ground				B	rusty brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey to B hor; sandy soil with pebbles in matrix
H18	2017-10-30	596201	5245701	324.93			flat terrain		B	light brown		J. M. G.	sample taken spot on location; 10cm organic; sandy soil, wet sand
H19	2017-10-30	596201	5245724	327.22	rocky ground				B	rusted brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey to B hor; sandy soil, rocks in matrix, minor pebbles
H20	2017-10-30	596201	5245750	324.58	mature mixed forest		flat terrain		B	light brown		J. M. G.	sample taken 10m to west due to low ground (water infilling); 10cm organic to B hor; sandy soil
H21	2017-10-30	596198	5245776	324.82	rocky ground		flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey to B hor; hit bedrock at 21cm???; sandy soil
H22	2017-10-30	596200	5245800	324.60			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; 4cm organic, 2cm grey to B hor; sandy soil
H23	2017-10-30	596199	5245825	322.86			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; 2cm grey to B hor; sandy soil, few rocks
H24	2017-10-30	596200	5245851	323.70					B	rusty tan brown		J. M. G.	sample taken 4m west of station due to outcrop - outcrop south of sample - edge ...; 4cm organic to B hor; sandy soil
H25	2017-10-30	596199	5245874	322.11			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 4cm organic, 8cm grey to B hor; sandy soil
H26	2017-10-30	596199	5245900	322.90	mature mixed forest		flat terrain		B	tan to light brown		J. M. G.	sample taken spot on location; 4cm organic, 4cm grey to B hor; sandy soil; outcrop to north
H27	2017-10-30	596200	5245925	324.11					B	dark brown		J. M. G.	sample taken spot on location on outcrop; 5cm organic, 2cm grey to B hor; sandy soil with some rocks
H28	2017-10-26	596200	5245950				ridge		B	tan/brown		J. M. G.	sample taken spot on location, top of outcrop ridge; 20cm organic; sandy soil with pebbles; duplicate of M29
H29		596202	5245984	319.58					B	tan/brown			sample taken 8m north of location due to outcrop - tranch at bottom of cliff face; thin organic; sandy soil; station on mountain, had to move forward below cliff
H30	2017-10-26	596198	5245998	318.13			flat terrain		B	dark brown		J. M. G.	sample taken spot on location; 7cm organic, 2cm grey; sandy soil
H31	2017-10-26	596201	5246025	321.55			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; sandy soil; thin organic
H32	2017-10-26	596199	5246052	322.42			flat terrain		B	tan light brown		J. M. G.	sample taken spot on location; thin organic, 4cm grey to B hor; sandy soil
H33	2017-10-26	596200	5246076	322.18			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 6cm organic, 2cm grey; sandy soil
H34	2017-10-26	596202	5246100	320.70			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 6cm organic; sandy soil with some pebbles
H35	2017-10-26	596202	5246124	320.60			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic; coarse sand, some pebbles
H36	2017-10-26	596199	5246151	319.88			flat terrain		B	rusty dark brown		J. M. G.	sample taken spot on location; shallow organic to B hor; some pebbles
H37	2017-10-26	596202	5246175	318.76			gentle slope		B	tan light brown		J. M. G.	sample taken spot on location; 12cm organic, 2cm grey; lots of roots; sandy soil
H38	2017-10-26	596198	5246200	316.99			gentle slope		B	tan brown		J. M. G.	sample taken spot on location; thin organic layer; coarse sandy matrix with minor pebbles
H39	2017-10-26	596199	5246226	316.12					B	rusty tan brown		J. M. G.	sample taken spot on location; 10cm organic layer; coarse/fine sandy matrix
H40	2017-10-26	596199	5246252	314.97					B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic layer, 5cm grey layer; fine sandy soil
H41	2017-10-26	596199	5246276	318.53			mountain slope		B	tan brown		J. M. G.	sample taken spot on location, side of mountain slope 44 degrees; thin organic, rocky slope; sandy pebbles matrix
H42	2017-10-26	596202	5246299	325.55			morraine		B	tan brown		J. M. G.	sample taken spot on location; 8cm organics, 5cm grey; sandy pebbly matrix with some rocks
H43	2017-10-26	596205	5246316	320.33					B	tan brown		J. M. G.	sample taken 9m south of station due to steep rocky slope (north side of marain); rocky, thin organic; sample taken around rocks; sandy pebbly, rocky matrix; coarse sand
I01	2017-10-28	596301	5245273	324.15			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, 3m grey; sandy soil; duplicate of L5
I02	2017-10-29	596299	5245300	324.03			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 8cm grey to B hor; sandy soil; top flat of elevation
I03	2017-10-29	596296	5245325	322.30			flat		B	light brown tan		J. M. G.	sample taken spot on location on flat above rise; thin organic, 4cm grey to B hor; sandy soil with small pebbles (rusty) upper layer
I04	2017-10-29	596297	5245350	325.91	mature mixed forest, rocky ground				B	dark brown		J. M. G.	sample taken spot on location on elevation top of K...; outcrop 10m east; thin organic to B hor; rocky sandy matrix, pebbles included
I05	2017-10-29	596301	5245374	326.41			flat		B	rusty dark brown		J. M. G.	sample taken spot on flat on high elevation; hit possible bedrock at 30cm; 4cm organic, 6cm grey to B hor; sandy soil a few rocks
I06	2017-10-29	596301	5245400	326.30			flat terrain		B	light tan brown		J. M. G.	sample taken spot on location; outcrop 7m east; 6cm organic, 4cm grey to B hor; sandy soil; on high elevation
I07	2017-10-29	596298	5245425	326.87	rocky ground				B	rusty tan brown		J. M. G.	sample taken spot on location; ontop of Kurie (hill)? - outcrops surround; thin organic to B hor; sandy soil with rocks in matrix (rooty)
I08	2017-10-29	596300	5245449	325.62			flat outcrop		B	rusty dark brown		J. M. G.	sample taken spot on location; outcrops surround; thin organic, 3cm grey to B hor; sandy soil with some rocks
I09	2017-10-29	596300	5245476	325.12			gentle slope		B	dark brown		J. M. G.	sample taken 3m south of station; thin organic to B hor; sandy soil with rocks in matrix and some pebbles; outcrops surround location; basil till bedrock at 30cm
I10	2017-10-29	596301	5245501	321.98	rocky ground		flat		B	rusty tan brown		J. M. G.	sample taken spot on location; still on outcrops, outcrops surrounded, some minor trenches; thin organic to B hor;sandy soil with some rocks in matrix; claim line 10m east of station, 25m east - trail seen
I11	2017-10-29	596301	5245524	322.08	rocky ground				B	rusty tan brown		J. M. G.	sample taken spot on location; ... outcrops on all sides that has been trenched on faces; shallow organic, 2cm grey to B hor; some rocks in sample
I12	2017-10-29	596296	5245550	319.41			flat		B	tan dark brown		J. M. G.	sample taken 3m west due to outcrop - outcrops surrounds; thin organic, 2cm grey to B hor;sandy soil with some rocks; on claim line, ribbons, long trench 15m west of station
I13	2017-10-29	596300	5245575	320.43	mature mixed forest		slope		B	tan brown		J. M. G.	sample taken spot on location; descends down slope on K...; ribbons, possible claim line; sandy soil
I14	2017-10-29	596299	5245600	325.79					B	tan brown		J. M. G.	sample taken 3-4m east off station, outcrop at station; thin organics to B hor; sandy soil a few pebbles
I15	2017-10-29	596298	5245625	325.04	rocky ground		flat		B	tan brown		J. M. G.	sample taken spot on location; outcrop surrounds; thin organic, 2cm dark grey to B hor; sandy soil with rock matrix
I16	2017-10-29	596302	5245649	326.55					B	tan light brown		J. M. G.	sample taken spot on location; thin oganic, 2cm grey, then B hor; sandy soil with some pebbles; top of knowls
I17	2017-10-29	596300	5245675	327.46	rocky ground, mature mixed forest				B	rusty tan brown		J. M. G.	sample taken spot on location; top of knowl; thin organic; sandy soil and rocks in matrix
I18	2017-10-29	596299	5245700	326.66	rocky ground				B	tan brown		J. M. G.	sample taken spot on location; still on ND knowl hill;7cm organic, 2cm grey to B hor; sandy soil with some rocks and pebbles
I19	2017-10-29	596302	5245724	325.92	rocky ground				B	dark brown		J. M. G.	sample taken spot on location; outcrop surrounds; thin organic to B hor; sandy soil with some clay and minor small pebbles
I20	2017-10-29	596298	5245750	326.41	rocky ground				B	dark brown		J. M. G.	sample taken spot on location; top of knowl hill, outcrops 2m west of station; large trench (blasted) 7m east; 4cm organic, 4cm grey to B hor; sandy soil with some rocks in matrix
I21	2017-10-29	596302	5245773	323.43	rocky				B	rusty dark brown		J. M. G.	sample taken spot on location; top og knowl hill; shallow pits surround; thin organic, 5cm grey to B hor; sandy soil with some pebbles
I22	2017-10-29	596301	5245795	320.63					B	tan brown		J. M. G.	sample taken 3m south of station due to lire pita nd trench that wraps around station; thin organic to B hor; soil with few pebbles in matrix
I23	2017-10-29	596299	5245824	315.42					B	rusty tan brown		J. M. G.	sample taken spot on location; top of knowl; 2 old trenches 15m south and west; shallow organics; 3m grey; sandy soil with few pebbles
I24	2017-10-29	596299	5245850	314.47					B	tan dark brown		J. M. G.	sample taken spot on location; top of hill knowl - outcrop 5m west of station; thin organic, 3cm grey; sandy soil, few pebbles
I25	2017-10-29	596296	5245875	309.61	mature mixed forest				B	dark brown		J. M. G.	sample taken 3m west of station due to outcrop on knowl hill; 6cm organics, 3cm grey; lots of rocks to B hor; sandy soil
I26	2017-10-29	596300	5245900	299.63					B	rusty tan brown		J. M. G.	sample taken spot on location; 4cm organic, 4cm grey; sandy soil; 7m south to outcrop, 5m face, large knowl hill, 7m west large pits
I27	2017-10-29	596301	5245924	297.41	mature mixed forest		gentle slope		B	rusty tan brown		J. M. G.	sample taken spot on location; number of shallow trenches; thin organics; 5cm grey; sandy soil with small pebbles in matrix
I28	2017-10-26	596299	5245952	315.09			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 7cm organic, 3cm grey; sandy soil, few pebbles; duplicate of M33
I29	2017-10-27	596300	5245977	313.40			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 7cm organic, then B hor; sandy soil with minor pebbles
I30	2017-10-27	596301	5246000	312.32			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 10cm organic then B hor; sandy soil, on claim line
I31	2017-10-27	596301	5246023	311.34			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey; sandy soil; on claim line
I32	2017-10-27	596299	5246051	311.63			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic; sandy soil
I33	2017-10-27	596300	5246074	312.33			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 6cm organic; sandy soil; large pit 3m to east
I34	2017-10-27	596302	5246100	309.16			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic; sandy soil with some pebbles
I35	2017-10-27	596298	5246125	308.06	rocky ground		slope		B	dark brown		J. M. G.	sample taken spot on location, end of slope; lots of cobble begore B hor; sandy, some clay and pebbles
I36	2017-10-27	596299	5246150	307.01	rocky ground		slope		B	brown		J. M. G.	sample taken spot on location, 35 degree slope; lots of cobble, 10cm organic, soil with pebbles
I361	2017-10-27	596376	5245949	308.58								J. M. G.	
I37	2017-10-27	596303	5246175	306.16	rocky ground		slope		B	tan brown		J. M. G.	sample taken spot on location, 30 degree slope; thin organic, 10cm organic, 2cm grey; sandy soil with some pebbles (rusty); 7m south of large pitalso 50m from cabin on lake
I38	2017-10-27	596301	5246197	308.02	rocky ground		slope		B	brown		J. M. G.	sample taken spot on location, side of slope; slope of 30 degree; sandy clay soil with pebbles mixed; 7m north large pit, 75-100m south of cabin
I39	2017-10-27	596297	5246225	309.25			flat terrain		B	brown tan		J. M. G.	sample taken spot on location; thin organic, 2cm grey; sandy pebbly matrix soil
I40	2017-10-27	596299	5246248	302.04			slope		B	brown		J. M. G.	sample taken spot on location; slope to lake 43 degrees; thin organic, 2cm grey; gravely matrix; 10-15m to water shoreline
J01	2017-10-28	596399	5245274	316.92			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; on claim line; 6cm organic, 2cm grey; sandy soil
J02	2017-10-29	596401	5245298	314.85	mature mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 4cm organic, 2cm grey; sandy soil
J03	2017-10-29	596399	5245326	315.56			flat terrain		B	light tan brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey; sandy soil
J04	2017-10-29	596401	5245350	316.05					B	tan brown		J. M. G.	At end of trail/bush road sample taken; thin organic, 5cm grey to B hor; sandy soil
J05	2017-10-29	596396	5245375	316.86					B	rusty brown		J. M. G.	sample taken 5m west of station due to bedrock ascending up outcroppings; possible old small trenches; 5cm organics, 2cm grey; sandy soil and pebbles in matrix
J06	2017-10-29	596401	5245401	316.09	rocky ground		flat terrain		B	rusty tan brown		J. M. G.	sample taken 10m south of road - outcropping on west side of sample 2m; thin organic, 4cm grey to B hor; sandy soil
J07	2017-10-29	596401	5245426	316.24	mature mixed forest		flat terrain		B	rusty tan dark brown		J. M. G.	sample taken spot on location; 10cm organic, 2cm grey to B hot, sandy soil with some pebbles in matrix
J08	2017-10-29	596399	5245451	317.81					B	light tan brown		J. M. G.	sample taken spot on location over outcrop to west 5m; 6cm organic to B hor; sandy soil and few pebbles
J09	2017-10-29	596405	5245476	319.63	rocky ground				B	dark brown		J. M. G.	sample taken spot on location beside bush road - outcrop hill to west - trench beside road 15m west; thin organic to B hor; sandy soil with rocks of cobble, pebbles in matrix
J10	2017-10-29	596398	5245502	321.54	mature mixed forest		flat terrain		B	rusty brown tan		J. M. G.	sample taken spot on location; shallow organic, 1cm grey to b hor; sandy soil with some pebbles
J11	2017-10-29	596401	5245524	326.95	mature mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic to B hor; 3cm grey to B hor; soil with some pebbles in matrix
J12	2017-10-29	596402	5245550	329.75	mature mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic, 4cm grey to B hor; sandy soil
J13	2017-10-29	596401	5245576	329.45	mature mixed forest		flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; claim line 10m to north; shallow organic to loamy 15cm to B hor; sandy soil

2017 Soil Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Elevation	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Sample Colour	Thickness (cm)	Sampler*	Comments
J14	2017-10-29	596400	5245602	330.12	mature mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic to 6cm transition to B hor; sandy soil
J15	2017-10-29	596399	5245625	330.89			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic, rocks to B hor; sandy and clay soil
J16	2017-10-29	596404	5245650	328.21			flat terrain		B	rusty ran brown		J. M. G.	sample taken spot on location; ; thin organic, 7cm mud to B hor; sandy soil
J17	2017-10-29	596400	5245675	328.09			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic, mud 7cm to B hor; sandy soil
J18	2017-10-29	596400	5245702	327.78			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic brown muddy, sandy loam to B hor, some rocks and pebbles in matrix
J19	2017-10-29	596400	5245725	325.68	mature mixed forest				B	light brown tan		J. M. G.	sample taken spot on location; shallow trench 7m east of sample, shallow organic, mud 7cm to B hor
J20	2017-10-29	596400	5245751	323.20			slope		B	rusty tan brown		J. M. G.	sample taken spot on location; on slope 1st bench, bendrock on mountain talus slope; thin organic, 6cm grey to B hor; sandy soil
J21	2017-10-29	596401	5245775	315.07					B	rusty		J. M. G.	sample taken 6m north due to rocky talus; thin organic, 7cm muddy hor before B; sandy matrix
J22	2017-10-29	596403	5245801	312.88			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; 10cm organic to 4cm grey to B hor; sandy soil
J23	2017-10-29	596401	5245825	314.87			flat terrain		B	light brown tan		J. M. G.	sample taken spot on location; thin organic, 6cm grey to B hor; sandy soil
J24	2017-10-29	596400	5245850	314.84			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, 4cm grey to B hor; sandy soil
J25	2017-10-29	596402	5245875	312.32	mature forest				B	rusty dark brown		J. M. G.	sample taken spot on location; 7cm organic to B hor; gravelly sand
J26		596401	5245900	309.92			flat terrain		B	tan to dark brown		J. M. G.	sample taken spot on location; thin organic, 4cm grey to B hor; sandy soil
J27		596399	5245926	308.30					B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 2cm grey to B hor; sandy soil with some pebbles in matrix
J28		596400	5245951	307.47			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; 10cm organic, 2cm grey; sandy soil with some pebbles; duplicate of M37 beside trail
J29	2017-10-27	596400	5245975	309.41			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; thin organic, 4cm grey; sandy soil
J30	2017-10-27	596400	5246000	310.22			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 5cm organic, 5cm grey; sandy soil
J31	2017-10-27	596397	5246024	312.43			flat terrain		B	rusty tanbrown		J. M. G.	sample taken spot on location; 7cm organic, 2cm grey; sandy soil with some pebbles
J32	2017-10-27	596400	5246050	310.70			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic; sandy soil, few small pebbles
J33	2017-10-27	596399	5246075	307.80			slope		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, 2cm grey; sandy soil
K01	2017-10-27	596482	5245550	314.56					B	tan brown		J. M. G.	sample taken 5m west of survey cutline; 10cm organic to B hor; sandy soil with numerous small pebbles
K02	2017-10-27	596483	5245574	313.30					B	tan brown		J. M. G.	sample taken 5m west of survey line; 10cm organic into B hor; sandy soil with pebble and cobble matrix within
K03	2017-10-27	596483	5245598	314.13					B	tan brown		J. M. G.	survey line 3m south of sample at 596486E, 5245603N; sample taken 5m west of survey line; 10cm organic to B; sandy soil, a few small pebbles
K04	2017-10-27	596483	5245626	314.53					B	rusty brown		J. M. G.	sample taken 5m west of survey line claim line; 7cm organic, 5 cm grey; sandy soil many rocks
K05	2017-10-27	596482	5245650	314.60					B	dark brown		J. M. G.	sample taken 5m west of survey line; 10cm organc to B hor; sandy soil; trench 8m to west of station
K06	2017-10-27	596484	5245673	314.34			gentle slope		B	rusty tan brown		J. M. G.	sample taken 5m west of survey line; thin organic into B hor rocky, gravelly matrix; sandy soil with cobbles/pebbles; a little clay in matrix
K07	2017-10-27	596485	5245699	311.51			flat terrain		B	rusty tan brown		J. M. G.	sample taken 5m west of station due to survey line; 10cm organic; sandy soil; outcrop 3m to west
K08	2017-10-27	596484	5245724	313.02					B	rusty tan brown		J. M. G.	sample taken 6m west of station possible very old excavation along outcrop to west; shallow organic to B hor; sandy soil
K09	2017-10-27	596483	5245751	312.27					B	tan brown		J. M. G.	sample taken 6m west of location, survey line, claim line; sandy soil; survey pin 1: 596488E +-3m 5245737N
K10	2017-10-27	596480	5245774	311.05			flat terrain		B	dark brown		J. M. G.	sample taken 5m west of survey line; thin organic; coarse gravel sand B hor; gravel matrix
K11	2017-10-27	596489	5245800	312.37			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 20m west of road, marning in survey and adjusting; thin organic, 2cm grey; sandy soil with some rocks and cobble
K12	2017-10-27	596479	5245825	312.31					B	tan brown		J. M. G.	sample taken 10-12m off location due to cottage road base; 8cm organic to B hor; sandy soil
K13	2017-10-27	596466	5245849	310.49					B	tan brown		J. M. G.	sample taken 24m west of location due to new cottage road base…shallow organic to B hor; sandy soil
K14	2017-10-27	596470	5245875	311.85			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; 7m west of new cottage road; thin organic, many roots; sandy soil with few pebbles
K15	2017-10-27	596485	5245900	312.27					B	rusty tan brown		J. M. G.	sample taken 5m to west due to face of gravel excavation for cottage lor; thin organic, rocky B hor; sandy matrix with some cobble and pebbles
K16	2017-10-27	596491	5245925	315.28			flat terrain		B	dark tan brown		J. M. G.	sample taken spot on location; on claim line; shallow organic, 2cm grey; sandy soil with large pebble in matrix
K17	2017-10-27	596486	5245950	314.33					B	rusty tan brown		J. M. G.	sample taken a few meteres south of claim line; shallow organic, 2cm grey ; sandy soil with a few rocks; duplicate of M41
K18	2017-10-27	596484	5245974	311.87	rocky ground		slope		B	tan brown		J. M. G.	sample taken spot on location; down slope 35 degrees; 10cm organic, 3cm grey; gravel matrix, sandy soil, some clay
K19	2017-10-27	596480	5246000	306.75			slope		B	yellow tan brown		J. M. G.	sample taken spot on location; bottom of hill, 25m to large shore; shallow organic, 3cm grey; sandy soil
L01		596400	5245275				flat terrain		B	rusty brown			sample taken spot on location; on claim line; 6cm oragnic, 2cm grey; sandy soil; duplicate of J1
L02	2017-10-28	596376	5245276	316.22	mature mixed forest				B	tan light brown		J. M. G.	sample taken spot on location; outcrop 15m to NW; 12cm organic (below mud); sandy soil
L03	2017-10-28	596349	5245275	320.46	mature mixed forest		gentle slope		B	rusty brown		J. M. G.	sample taken spot on location; 5cm organic, 2cm grey; sandy soil
L04	2017-10-28	596326	5245275	322.37	mature mixed forest		flat terrain		B	light brown tan		J. M. G.	sample taken spot on location; 20cm organic (sandy loam); sandy soil
L05		596300	5245275		mature mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, 3m grey; sandy soil; duplicate of I1
L06	2017-10-28	596274	5245275	324.52			gentle slope		B	light tan brown		J. M. G.	sample taken spot on location; 20cm grey then B hor; sandy soil
L07	2017-10-28	596250	5245276	320.52			gentle slope		B	light brown		J. M. G.	sample taken spot on location; 10cm organic, 5cm grey then B hor; sandy soil
L08	2017-10-28	596225	5245277	318.48			gentle slope		B	rust brown		J. M. G.	sample taken spot on location; thin organic, 12cm grey
L09		596200	5245275		mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 6cm organic, 3cm grey; sandy soil; duplicate of H1
L10	2017-10-28	596175	5245275	314.40	mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 6cm organic, 5cm grey; sandy soil
L11	2017-10-28	596150	5245274	311.87			gentle slope		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, 5cm grey; sandy soil
L12	2017-10-28	596126	5245276	307.60			flat terrain		B	rusty tan brown			sample taken spot on location; thin organic, 6cm grey; sandy soil
L13		596100	5245275		mixed forest		flat terrain		B	tan brown			sample taken spot on location; thin organic, 2cm grey; sandy soil; duplicate of G1
L14	2017-10-28	596075	5245274	306.97		jack pine	flat terrrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 10cm organic, 10cm grey; sandy soil
L15	2017-10-28	596051	5245275	304.56			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 10cm organic, 10cm grey; sandy soil
L16	2017-10-28	596024	5245275	304.06		jack pine	flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 5m west of road; 10cm organic, 10cm grey-B; sandy soil
L17		596000	5245275				flat terrain		B	rusty tan brown			sample taken spot on location; 10cm organic, 10cm grey; sandy soil; duplicate of F1
L18	2017-11-01	595974	5245274	288.46					B	brown		J. M. G.	skipped with shovel - low creek bed (alder) try with auger; taken with auger "13" 1/2 auger length in station bed; sandy soil
L19	2017-10-28	595951	5245275	294.09					B	light brown		J. M. G.	sample taken spot on location; side of low creek bed (high water mark): 10cm organic, 7cm clay organic mix, B hor; sandy clay matrix to 60cm depth
L20	2017-10-28	595926	5245291	294.25					B	light brown		J. M. G.	excavated by shovel to 60cm; organic then hard compacted fine sandy clay and rocks - no B hor - retuen with auger, moved 14m north to B hor, 10cm organic; few pebbles
L21		595900	5245275						B	light brown			No B at location, move 10m west; thin organic to B hor; sandy soil; 50m west, mountain rear faces; duplicate of E1
M01		595500	5245950		mixed forest		flat area of mountain top		B	tan brown			sample taken spot on location; thin organic grades into B hor; sandy rusty soil
M02	2017-11-01	595525	5245948	319.31	mixed forest		flat area of mountain top		B	tan brown		J. M. G.	sample taken spot on location; thin organic to b hor; rocky pebbly soil
M03	2017-11-01	595550	5245952	320.26			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic to b hor; sandy soil
M04	2017-11-01	595578	5245949	313.17	rocky ground, mature mixed forest		slope		B	tan brown		J. M. G.	sample taken spot on location; outcrop face 4m west; thin organic, 2cm grey to b hor; sandy soil
M05		595600	5245950				slope		B	brown			sample taken spot on location; edge of steep mountain base; thin organic grades into B; very rocky sandy soil; pebbles; 3 pits within 15m ravines; duplicate of B14
M06	2017-11-01	595625	5245952	305.95	mixed forest		flat		B	brown		J. M. G.	sample taken spot on location; low area on flat to creek, high water mark; thin organic grades into B hor; sandy clay soil with some rocks and pebbles
M07	2017-11-01	595640	5245950	302.30					B			J. M. G.	auger faced too rocky stronm bed?? … west of creek 595640E 5245950N
M08	2017-11-03	595675	5245951	293.87					B			J. M. G.	Auger sample failed too rocky: thin organic, large rocks moved to get material - gravely matrix coarse sandy pebbly mix; shovel sample: treid with shoevel, water filled, moved to high water mark
M09		595700	5245950		mixed forest				B	rusty brown			sample taken 4m west of station due to rocky ground, rocky excavation; thin organic into B hor; sandy pebbly soil; duplicate of C14
M10	2017-11-03	595725	5245948	300.28	mixed forest		flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; 5cm organic, rocky excavation to B1; sandy soil, coarse sand; pit 5m west of sample
M11	2017-11-03	595748	5245952	303.74	mature forest		slope		B	tan brown		J. M. G.	sample taken spot on location; side of slope, 4cm organic grades into B; sandy soil and rocks and pebbles in matrix
M12	2017-11-03	595775	5245953	305.10	mature mixed forest		flat terrain		B	tan brown		J. M. G.	sample taken spot on location; rocky excavation; thin organic grades into B hor; sandy soil with gravely matrix
M13		595800	5245950		rocky ground		flat terrain		B	tan brown			sample taken spot on location; thin organic grades into B hor; rocky sandy sample; duplicate of D14
M14	2017-10-31	595826	5245949	301.32	mixed mature forest				B	tan brown		J. M. G.	sample taken spot on location; thin organic, grades into B hor; coarsed sandy soil with a few pebbles; on flat below hill, 20 m west of pit
M15	2017-10-31	595850	5245949	306.75			slope		B	tan brown		J. M. G.	sample taken spot on location; side of mountain slope; 15m east of pit; thin organic grades into B hor; rocky; soil qith cobbles; no QV/Ca…dump no…; pit, bedrock
M16	2017-10-31	595876	5245951	309.20	mixed forest		gentle slope		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic grades into B; sandy soil
M17		595900	5245950						B	tan brown			sample taken at same location as E28, same description; 12m to west due to outcrop and rocky ground, lots of roots; sandy soil; 10cm grey; duplicate of E28
M18	2017-10-25	595925	5245951	315.74			slope		B	dark brown		J. M. G.	sample taken 4m east of location, some rocks, thin organic, mix sandy soil; top of hill
M19	2017-10-25	595949	5245951	318.81					B	dark brown		J. M. G.	sample taken spot on location; top of whalesback - lots of boulders around, rocky digging, shallow humus; gravely B hor; some 3cm grey above B
M20	2017-10-25	595975	5245948	320.36					B	dark brown		J. M. G.	sample taken 3m off location due to rocks; rocks dig organic, 3cm grey then B hor; some boulders moved to get sample
M21		596000	5245950						B	dark brown			sample taken 3m west of location; possibly bedrock below, maybe boulder; 1cm grey then B hor; sandy soiol with few pebbles; duplicate of F28; bedrock at 23cm (basil)
M22	2017-10-26	596024	5245951	327.36					B	rusty dark brown		J. M. G.	sample taken spot on location; top of rise, 3m east of outcrop;outcrop at 29cm; 7cm organicm sandy matrix with rocks
M23	2017-10-26	596051	5245951	328.18					B	tan brown		J. M. G.	sample taken spot on location; top of rise, outcrop 15m south of sample; 6cm organic; few rocks, minor clay in matrix

2017 Soil Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Elevation	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Sample Colour	Thickness (cm)	Sampler*	Comments
M24	2017-10-26	596074	5245949	326.94	rocky ground				B	tan brown		J. M. G.	sample taken spot on location; top of rise, rocky ground and roots; thin organic, 3cm grey; sandy soil
M25		596100	5245950						B	tan brown			sample taken spot on location; top of rise, see outcrop 25m west; thin organic; sandy soil with some pebbles; duplicate of G28
M26	2017-10-26	596126	5245946	322.35					B	rusty dark brown		J. M. G.	sample taken 3m east of location at bottom of outcrop hill;outcrop north face; thin organic; sandy soil
M27	2017-10-26	596152	5245952	320.16					B	tanbrown		J. M. G.	sample taken spot on location; 3m east of large outcrop, no organic, 3m grey; sandy soil with some rocks
M28	2017-10-26	596177	5245950	321.33					B	rusty tan brown		J. M. G.	sample taken spot on location; on rise; thin organic, 5m grey; sandy soil with few rocks
M29	2017-10-26	596201	5245950	322.68					B	tan brown		J. M. G.	sample taken spot on location; sandy soil; duplicate of H28
M30	2017-10-26	596225	5245950	320.51					B	rusty tan brown		J. M. G.	sample taken spot on location; surrounded by outcrop; still on rise; thin organic, 3cm grey; sandy soil, a few pebbles
M31	2017-10-26	596250	5245951	316.16					B	rusty tan brown		J. M. G.	sample taken spot on location; bottom of outcrop hill, outcrop 4m west from sample; thinorganic, 3cm grey, few rocks
M32	2017-10-26	596274	5245952	314.90			flat terrain		B	tan brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey; sandy soil
M33		596300	5245950				flat terrain		B	rusty tan brown			sample taken spot on location; 7cm organic, 3cm grey; sandy soil, few pebbles; duplicate of I28
M34	2017-10-27	596325	5245951	310.81			flat terrain		B	rusty brown		J. M. G.	sample taken spot on location; thin organic; sandy soil with some pebbles
M35	2017-10-27	596351	5245951	309.67			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 3cm grey; sandy soil
M36		596375	5245950				low terrain		B	tan brown			sample taken spot on location; low terrain, thin organic; samdy soil with some pebbles
M37		596400	5245950				flat terrain		B	rusty brown			sample taken spot on location; 10cm organic, 2cm grey; sandy soil with some pebbles; duplicate of J28; beside trail
M38	2017-10-27	596425	5245951	310.36			flat terrain		B	rusty tan brown		J. M. G.	sample taken spot on location; thin organic, 1cm grey; sandy soil
M39	2017-10-27	596450	5245951	313.39	rocky ground				B	tan brown		J. M. G.	sample taken spot on location; top of hill; shallow organic, work through very rocky material to B; gravel matrix
M40	2017-10-27	596474	5245950	313.75			11		B	rusty tan brown		J. M. G.	sample taken spot on location; near top of hill; thin organic, 2cm grey; sandy matrix with a few pebbles
M41		596490	5245950				61		B	rusty tan brown			sample taken a few meters south of station at claim line; shallow organic, 2cm grey; sandy soil with a few rocks; duplicate of K17

* Jean Marc Gaudreau

2018 Soil Sample Descriptions

Sample ID	Type	East N83 Z17	North N83 Z17	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Moisture	Sample Colour	Thickness (cm)	Contamination	Sampler *
2018KTS001	Regular	595627	5246177	Grass Cover	small bush	well drained bog,flood area near drainage	8	Ah	Moist	Dark Brown	1-2	O horizon	K. L-F
2018KTS002	Regular	595538	5246073	Leaf Cover,Thin Moss Cover,Deadfall	Birch,Balsam Fir, maple	surrounded by trees,outcrop across entire sample site causing it to be a NS	10	Ah	Moist	Dark Brown Black	>2	O horizon	K. L-F
2018KTS003	Regular	595592	5246074	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Poplar,Cedar,Balsam Fir	surrounded by trees	8	Ah	Moist	Dark Brown Black	1-2	O horizon	K. L-F
2018KTS004	Regular	595614	5246087	Grass Cover	small bush	well drained bog,flood area near drainage	15	Ah	Wet	Dark Brown Black	1-2	O horizon	K. L-F
2018KTS005	Regular	595629	5245971	Needle Cover,Rock Cover,Deadfall	Alders,Balsam Fir, maple	surrounded by trees	15	Ah	Moist	Dark Brown Black	>2	O horizon	K. L-F
2018KTS006	Regular	595577	5245974	Leaf Cover,Thin Moss Cover	Alders,Balsam Fir, maple	surrounded by trees	4	Ah	Moist	Black	>2		K. L-F
2018KTS007	Regular	595531	5245978	Thin Moss Cover,Deadfall	Alders,Poplar, Balsam Fir, maple	surrounded by trees	4	Ah	Moist	Dark Brown Black	>2		K. L-F
2018KTS008	Regular	595523	5245875	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir	surrounded by trees	4	Ah	Moist	Black	>2		K. L-F
2018KTS009	Regular	595577	5245873	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Poplar,Balsam Fir	surrounded by trees	10	Ah	Moist	Dark Grey Black	1-2	O, B horizons	K. L-F
2018KTS010	Regular	595632	5245869	Deadfall	Alders,Pine	surrounded by trees	8	Ah	Moist	Light Brown	>2	O, B horizons	K. L-F
2018KTS011	Regular	595673	5245874	Grass Cover	No Tree Cover	well drained bog,flood area near drainage	20	Ah	Wet	Dark Brown Black	>2	O horizon	K. L-F
2018KTS012	Regular	595632	5245775	Sphagnum Moss < 30cm	Birch,Cedar,Balsam Fir, maple	surrounded by trees,stagnant	15	Ah	Wet	Black	>2	O horizon	K. L-F
2018KTS014	Regular	595573	5245770	Leaf Cover,Sphagnum Moss < 30cm,Deadfall	Alders,Birch,Cedar	surrounded by trees,stagnant	10	Ah	Wet	Black	>2		K. L-F
2018KTS015	Regular	595517	5245770	Bare Soil,Leaf Cover,Deadfall	Alders,Black Spruce,Birch,Poplar,Balsam Fir	surrounded by trees	8	Ah	Moist	Black	>2	O horizon	K. L-F
2018KTS016	Regular	595540	5245672	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Black Spruce,Birch,Poplar,Balsam Fir	surrounded by trees	4	Ah	Moist	Reddish Brown	>2	O horizon	K. L-F
2018KTS017	Regular	595578	5245674	Grass Cover,Sphagnum Moss < 30cm,Deadfall	Alders,Black Spruce,Balsam Fir	surrounded by trees,stagnant	8	Ah	Wet	Dark Brown	>2	O horizon	K. L-F
2018KTS018	Regular	595630	5245678	Sphagnum Moss < 30cm,Thin Moss Cover,Deadfall	Alders,Balsam Fir	surrounded by trees,stagnant	20	Ah	Wet	Black	>2	O horizon	K. L-F
2018KTS019	Regular	595679	5245679	Thin Moss Cover	No Tree Cover	outcrop across entire sample site causing it to be a NS	2	Ah	Moist	Black	>2		K. L-F
2018KTS020	Duplicate	595679	5245679	N/A	N/A								K. L-F
2018KTS021	Regular	596119	5246370	Leaf Cover	Balsam Fir, maple	surrounded by trees	8	Ah	Moist	Black	>2		K. L-F
2018KTS022	Regular	596077	5246365	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Birch,Pine, maple	surrounded by trees	4	Ah	Moist	Dark Brown	<1	O, Ae horizons	K. L-F
2018KTS023	Regular	596023	5246367	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Balsam Fir, maple	surrounded by trees	4	Ah	Dry	Dark Brown	<1	O, Ae horizons	K. L-F
2018KTS024	Regular	595981	5246368	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Clear Cut Old,Balsam Fir	surrounded by trees	4	Ah	Moist	Chocolate Brown	<1	O, Ae horizons	K. L-F
2018KTS025	Regular	595926	5246374	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Balsam Fir	surrounded by trees	4	Ah	Moist	Dark Brown	<1	O, Ae horizons	K. L-F
2018KTS026	Regular	595875	5246372	Thin Moss Cover,Deadfall	Black Spruce,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2		K. L-F
2018KTS027	Regular	595791	5246266	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Balsam Fir	surrounded by trees	2	Ah	Moist	Dark Brown Black	<1	B horizon	K. L-F
2018KTS028	Regular	595732	5246274	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Birch,Balsam Fir	surrounded by trees	4	Ah	Moist	Reddish Brown	<1	O horizon	K. L-F
2018KTS029	Regular	595729	5246172	Needle Cover	Pine	surrounded by trees	2	Ah	Moist	Dark Brown Black	<1	O horizon	K. L-F
2018KTS030	Regular	595774	5246171	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir	surrounded by trees	4	Ah	Moist	Black	<1	O horizon	K. L-F
2018KTS031	Regular	595825	5246178	Leaf Cover,Needle Cover,Thin Moss Cover	Birch,Balsam Fir, maple	surrounded by trees	4	Ah	Moist	Dark Grey Black	<1	O, Ae horizons	K. L-F
2018KTS032	Regular	595878	5246168	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Birch,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2	B horizon	K. L-F
2018KTS034	Regular	595931	5246281	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Birch,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. L-F
2018KTS035	Regular	596123	5246277	Leaf Cover	Alders,Birch,Poplar,Balsam Fir	surrounded by trees	10	Ah	Moist	Light Brown	>2	O, B horizons	K. L-F
2018KTS036	Regular	596230	5246273	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Pine,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K. L-F
2018KTS037	Regular	596276	5246283	Thin Moss Cover	Black Spruce,Cedar,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	>2		K. L-F
2018KTS103	Regular	596035	5244756	Needle Cover	Alders,Black Spruce,Balsam Fir, rasberry	surrounded by trees,well drained bog	2	Ah	Moist	Dark Grey Black	<1	O, Ae horizons	K. L-F
2018KTS104	Regular	596082	5244777	Grass Cover	No Tree Cover	well drained bog	6	Ah	Moist	Chocolate Brown	>2	O, B horizons	K. L-F
2018KTS106	Regular	596132	5244772	Sphagnum Moss < 30cm	Poplar,Balsam Fir	surrounded by trees,stagnant	30	Ah	Wet	Dark Brown	>2	O horizon	K. L-F
2018KTS105	Duplicate	596083	5244779	N/A									K. L-F
2018KTS107	Regular	596177	5244779	Thin Moss Cover,Deadfall	Alders,Balsam Fir	surrounded by trees,stagnant	6	Ah	Dry	Dark Grey Black	>2	O, Ae horizons	K. L-F
2018KTS108	Regular	596231	5244785	Grass Cover,Leaf Cover	Alders,Balsam Fir	surrounded by trees	4	Ah	Moist	Dark Brown	1-2	O ,B ,Ae horizons	K. L-F
2018KTS109	Regular	596327	5244782	Thin Moss Cover	Alders,Balsam Fir	grassy,surrounded by trees	2	Ah	Moist	Dark Brown Black	<1	O horizon	K. L-F
2018KTS110	Regular	596224	5244876	N/A	No Tree Cover	surrounded by trees	4	Ah	Wet	Dark Grey Black	>2	O ,B ,Ae horizons	K. L-F
2018KTS046	Regular	596175	5244873	N/A	Poplar	surrounded by trees	4	Ah	Moist	Dark Grey Black	>2		K. L-F
2018KTS047	Regular	596133	5244878	Grass Cover	No Tree Cover	stagnant	6	Ah	Moist	Dark Grey Black	>2		K. L-F
2018KTS048	Regular	596083	5244867	Thin Moss Cover	Black Spruce	surrounded by trees,well drained bog	2	Ah	Moist	Black	1-2	O horizon	K. L-F
2018KTS049	Regular	596033	5244964	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Black Spruce,Balsam Fir	grassy,surrounded by trees	6	Ah	Moist	Black	>2		K. L-F
2018KTS050	Regular	596127	5244981	Leaf Cover	Poplar, maple	surrounded by trees	4	Ah	Dry	Dark Grey Black	>2		K. L-F
2018KTS051	Regular	596319	5246180	Leaf Cover	Alders,Birch	surrounded by trees	6	B	Moist	Light Brown	>2	B horizon	K. L-F
2018KTS052	Regular	596276	5246168	Leaf Cover	Poplar	surrounded by trees	0	Ah	Moist	Light Brown	>2	B horizon	K. L-F
2018KTS054	Regular	596232	5246173	Leaf Cover	Alders,Poplar,Balsam Fir	surrounded by trees	0	Ah	Moist	Light Grey	>2	B horizon	K. L-F
2018KTS055	Regular	596180	5246174	Leaf Cover	Alders,Poplar,Balsam Fir	surrounded by trees	4	Ah	Moist	Light Brown	>2	B horizon	K. L-F
2018KTS056	Regular	596135	5246176	Bare Soil,Leaf Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees	0	Ah	Moist	Light Brown	>2	B horizon	K. L-F
2018KTS057	Regular	596077	5246179	Needle Cover	Pine	surrounded by trees	2	Ah	Moist	Light Brown	>2	O, B horizons	K. L-F
2018KTS058	Regular	596028	5246164	Bare Soil,Needle Cover,Deadfall	Poplar,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Dark Brown	>2	O, Ae horizons	K. L-F
2018KTS059	Regular	595980	5246175	Thin Moss Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees	0	Ah	Moist	Black	1-2	O horizon	K. L-F
2018KTS060	Duplicate	595980	5246176	N/A									K. L-F
2018KTS061	Regular	595973	5246074	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Dark Brown	<1	O ,B ,Ae horizons	K. L-F
2018KTS062	Regular	595929	5246087	Grass Cover,Leaf Cover,Thin Moss Cover,Deadfall	Alders,Birch,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Dark Brown	1-2	O, Ae horizons	K. L-F
2018KTS063	Regular	595884	5246088	Thin Moss Cover	Poplar,Balsam Fir, maple	surrounded by trees,outcrop across entire sample site causing it to be a NS	0	Ah	Moist	Black	1-2	O horizon	K. L-F
2018KTS064	Regular	595834	5246075	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Pine, maple	surrounded by trees	4	Ah	Moist	Black	1-2	O horizon	K. L-F
2018KTS065	Regular	595775	5246073	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Black Spruce,Poplar,Tamarack,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K. L-F
2018KTS066	Regular	595720	5246074	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Poplar,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Reddish Brown	<1	O horizon	K. L-F

2018 Soil Sample Descriptions

Sample ID	Type	East N83 Z17	North N83 Z17	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Moisture	Sample Colour	Thickness (cm)	Contamination	Sampler *
2018KTS067	Regular	595680	5246070	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Balsam Fir	surrounded by trees	4	Ah	Moist	Light Brown	>2	O ,B ,Ae horizons	K. L-F
2018KTS068	Regular	595724	5245969	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Balsam Fir	surrounded by trees	4	Ah	Moist	Dark Brown	>2		K. L-F
2018KTS069	Regular	595830	5245977	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees,outcrop across entire sample site causing it to be a NS	2	Ah	Moist	Dark Brown Black	>2	O horizon	K. L-F
2018KTS102	Regular	595874	5245978	Needle Cover,Thin Moss Cover	Balsam Fir	surrounded by trees,outcrop across entire sample site causing it to be a NS	2	Ah	Moist	Black	>2	O horizon	K. L-F
2018KTS038	Regular	595938	5245972	Leaf Cover,Thin Moss Cover,Deadfall	Poplar, maple	surrounded by trees	4	Ah	Moist	Chocolate Brown	>2	O horizon	K. L-F
2018KTS039	Regular	595976	5245976	Leaf Cover,Needle Cover,Thin Moss Cover	Birch,Poplar,Balsam Fir, maple	surrounded by trees,outcrop across entire sample site causing it to be a NS	0	Ah	Moist	Dark Brown Black	1-2	O horizon	K. L-F
2018KBS185	Regular	596437	5245274	Leaf Cover,Thin Moss Cover	Alders, fern	surrounded by trees	2	Ah	Moist	Black	>2		K.B.
2018KBS186	Regular	596377	5245275	Leaf Cover	Birch,Balsam Fir, maple, fern	surrounded by trees	0	Ah	Moist	Dark Brown Black	<1	O horizon	K.B.
2018KBS187	Regular	596280	5245273	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	<1	O, Ae horizons	K.B.
2018KBS188	Regular	596222	5245275	Leaf Cover	Alders,Birch, maple	surrounded by trees	2	Ah	Dry	Dark Grey Black	<1	Ae horizon	K.B.
2018KBS189	Regular	596179	5245276	Leaf Cover	Alders,Birch, fern	surrounded by trees	4	Ah	Moist	Dark Grey Black	1-2	Ae horizon	K.B.
2018KBS190	Regular	596125	5245282	Leaf Cover,Needle Cover	Alders,Pine,Balsam Fir, maple	surrounded by trees	6	Ah	Moist	Black	1-2		K.B.
2018KBS191	Regular	596070	5245283	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Pine,Balsam Fir	surrounded by trees	6	Ah	Moist	Black	1-2		K.B.
2018KBS192	Regular	596030	5245277	Needle Cover,Thin Moss Cover	Pine	grassy,surrounded by trees	0	Ah	Dry	Dark Grey Black	<1	Ae horizon	K.B.
2018KBS199	Regular	596026	5245368	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Pine,Balsam Fir	surrounded by trees	6	Ah	Moist	Black	>2		K.B.
2018KBS200	Duplicate	596027	5245372	N/A									K.B.
2018KBS194	Regular	596079	5245373	Leaf Cover,Needle Cover	Black Spruce,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K.B.
2018KBS195	Regular	596127	5245374	Leaf Cover	Alders,Birch	surrounded by trees	2	Ah	Moist	Dark Brown Black	<1	O, Ae horizons	K.B.
2018KBS196	Regular	596174	5245373	Leaf Cover,Deadfall	Alders,Black Spruce,Birch, maple	surrounded by trees	4	Ah	Moist	Dark Brown Black	<1	O horizon	K.B.
2018KBS197	Regular	596226	5245373	Leaf Cover	Alders,Black Spruce, maple	surrounded by trees	6	Ah	Dry	Black	1-2		K.B.
2018KBS198	Regular	596292	5245373	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Pine,Balsam Fir, maple	surrounded by trees	10	Ah	Moist	Black	1-2	O horizon	K.B.
2018KBS201	Regular	596326	5245374	Leaf Cover,Thin Moss Cover	Alders,Balsam Fir	surrounded by trees	4	Ah	Moist	Black	>2		K.B.
2018KBS202	Regular	596375	5245380	Leaf Cover	Alders,Birch, maple	surrounded by trees	2	Ah	Moist	Black	<1	O horizon	K.B.
2018KBS203	Regular	596322	5245671	Leaf Cover	Maple, Fern, Unknown	surrounded by trees	2	Ah	Moist	Black	1-2		K.B.
2018KBS204	Regular	596279	5245678	Leaf Cover	Alders,Birch,Balsam Fir, maple	surrounded by trees	4	Ah	Moist	Dark Brown Black	<1	O horizon	K.B.
2018KBS205	Regular	596228	5245669	Leaf Cover,Needle Cover	Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Dry	Black	1-2	O horizon	K.B.
2018KBS206	Regular	596184	5245671	Leaf Cover	Alders,Birch, maple, fern	surrounded by trees	2	Ah	Moist	Black	1-2		K.B.
2018KBS207	Regular	596133	5245678	Leaf Cover	Alders,Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K.B.
2018KBS208	Regular	596083	5245665	Leaf Cover	Alders,Black Spruce,Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Dry	Dark Brown Black	1-2	O horizon	K.B.
2018KBS209	Regular	595983	5245674	Leaf Cover	Alders,Birch, fern	surrounded by trees	4	Ah	Moist	Black	1-2	Ae horizon	K.B.
2018KBS210	Regular	595882	5245681	Leaf Cover,Needle Cover	Alders,Pine,Balsam Fir, maple	surrounded by trees	0	Ah	Moist	Black	<1	O horizon	K.B.
2018KBS211	Regular	595837	5245675	Leaf Cover,Needle Cover	Alders,Pine	surrounded by trees	4	Ah	Dry	Black	1-2	Ae horizon	K.B.
2018KBS212	Regular	595779	5245675	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Pine,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2		K.B.
2018KTS040	Regular	596422	5245978	Leaf Cover	Alders,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Dark Grey Black	1-2	O ,B ,Ae horizons	K. L-F
2018KTS041	Duplicate	596422	5245979	N/A									K. L-F
2018KTS042	Regular	596469	5245983	Bare Soil,Leaf Cover	Alders	surrounded by trees	0	Ah	Moist	Dark Grey Black	<1	O, Ae horizons	K. L-F
2018KTS043	Regular	596418	5246075	Bare Soil,Leaf Cover,Deadfall	Birch	surrounded by trees	2	Ah	Moist	Dark Grey Black	>2		K. L-F
2018KTS044	Regular	596380	5246075	Bare Soil,Leaf Cover,Needle Cover	Birch,Poplar,Balsam Fir, maple	surrounded by trees	0	Ah	Moist	Light Grey	<1	Ae horizon	K. L-F
2018KTS045	Regular	596376	5246077	Thin Moss Cover,Deadfall	Alders,Birch, maple	surrounded by trees	0	Ah	Moist	Chocolate Brown	>2		K. L-F
2018KTS070	Regular	596331	5246075	Leaf Cover	Alders,Birch,Poplar	surrounded by trees	2	Ah	Moist	Dark Grey Black	<1	O, Ae horizons	K. L-F
2018KTS071	Regular	596276	5246072	Leaf Cover	Alders,Poplar, maple	surrounded by trees	2	Ah	Moist	Chocolate Brown	<1	Ae horizon	K. L-F
2018KTS072	Regular	596230	5246073	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees	0	Ah	Moist	Dark Brown	<1	O ,B ,Ae horizons	K. L-F
2018KTS074	Regular	596185	5246068	Thin Moss Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2		K. L-F
2018KTS075	Regular	596138	5246075	Leaf Cover,Thin Moss Cover,Deadfall	Alders,Birch,Poplar, maple	surrounded by trees	2	Ah	Moist	Dark Brown Black	>2	O horizon	K. L-F
2018KTS076	Regular	596083	5246077	Bare Soil,Leaf Cover,Needle Cover,Deadfall	Alders,Pine,Poplar,Balsam Fir	surrounded by trees	4	Ah	Moist	Chocolate Brown	>2		K. L-F
2018KTS077	Regular	596028	5246070	Leaf Cover,Needle Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2		K. L-F
2018KTS078	Regular	596034	5245967	Bare Soil,Thin Moss Cover,Deadfall	Alders,Poplar, maple	surrounded by trees	0	Ah	Moist	Dark Brown Black	<1	O horizon	K. L-F
2018KTS079	Regular	596082	5245976	Bare Soil,Leaf Cover,Deadfall	Alders,Birch,Poplar	surrounded by trees	2	Ah	Moist	Dark Brown Black	<1	O, Ae horizons	K. L-F
2018KTS080	Duplicate	596077	5245975	N/A									K. L-F
2018KTS081	Regular	596131	5245980	Leaf Cover	Birch,Poplar,Balsam Fir, maple	surrounded by trees	0	Ah	Moist	Black	1-2	O, Ae horizons	K. L-F
2018KTS082	Regular	596174	5245979	Leaf Cover,Needle Cover	Alders,Balsam Fir, maple	surrounded by trees	6	Ah	Moist	Black	>2	O horizon	K. L-F
2018KTS083	Regular	596223	5245966	Thin Moss Cover	Birch,Poplar, maple	grassy,outcrop across entire sample site causing it to be a NS	2	Ah	Moist	Black	>2	O horizon	K. L-F
2018KTS084	Regular	596282	5245971	Bare Soil,Leaf Cover,Needle Cover	Alders,Poplar,Balsam Fir	surrounded by trees	4	Ah	Dry	Light Brown	>2	B horizon	K. L-F
2018KTS085	Regular	596320	5245977	Bare Soil,Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Poplar,Balsam Fir	surrounded by trees	4	Ah	Moist	Dark Grey Black	>2	B horizon	K. L-F
2018KNS002	Regular	596482	5245580	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	2	Ah	Dry		>2	O horizon	K. N.
2018KNS003	Regular	596431	5245561	Leaf Cover,Needle Cover	Alders,Birch, maple	surrounded by trees	2	Ah	Dry		>2	O, Ae horizons	K. N.
2018KNS004	Regular	596382	5245568	Grass Cover,Leaf Cover,Needle Cover	Alders,Black Spruce,Birch, maple	surrounded by trees	0	Ah	Dry	Light Brown	>2	B horizon	K. N.
2018KNS005	Regular	596326	5245572	Leaf Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	0	Ah	Dry		>2	B horizon	K. N.
2018KNS006	Regular	596284	5245572	Leaf Cover	Alders,Birch, maple and fern	surrounded by trees	0	Ah	Dry		>2	O, Ae horizons	K. N.
2018KNS007	Regular	596228	5245575	Leaf Cover,Needle Cover	Black Spruce,Birch, maple, fern	surrounded by trees	2	Ah	Moist	Black	1-2	O, Ae horizons	K. N.
2018KNS008	Regular	596180	5245583	Leaf Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	2	Ah	Moist	Black	1-2	O, Ae horizons	K. N.
2018KNS009	Regular	596133	5245577	Leaf Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	0	Ah	Moist		>2	Ae horizon	K. N.
2018KNS010	Regular	596086	5245570	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch, fern	surrounded by trees	0	Ah	Dry	Dark Grey Black	>2	O, Ae horizons	K. N.

2018 Soil Sample Descriptions

Sample ID	Type	East N83 Z17	North N83 Z17	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Moisture	Sample Colour	Thickness (cm)	Contamination	Sampler *
2018KNS011	Regular	596030	5245568	Leaf Cover,Needle Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS012	Regular	595974	5245567	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS014	Regular	595929	5245576	Leaf Cover,Needle Cover,Sphagnum Moss < 30cm,Thin Moss Cover	Alders,Black Spruce,Birch	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS015	Regular	595935	5245474	Grass Cover,Leaf Cover,Needle Cover,Deadfall	Alders,Black Spruce, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. N.
2018KNS016	Regular	595975	5245478	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Black Spruce,Birch	surrounded by trees	0	Ah	Moist	Black	>2	O, Ae horizons	K. N.
2018KNS017	Regular	596030	5245469	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Black Spruce,Birch,Pine, fern, maple	surrounded by trees	0	Ah	Moist	Black	>2	O horizon	K. N.
2018KNS018	Regular	596078	5245472	Grass Cover,Leaf Cover,Needle Cover	Alders,Black Spruce,Birch, fern	surrounded by trees	2	Ah	Moist	Black	1-2	O, Ae horizons	K. N.
2018KNS019	Regular	596125	5245473	Grass Cover,Leaf Cover,Thin Moss Cover	Alders,Birch	surrounded by trees	2	Ah	Moist	Black	1-2	O, Ae horizons	K. N.
2018KNS020	Duplicate	596131	5245467	N/A									K. N.
2018KNS021	Regular	596177	5245480	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Black Spruce,Birch, fern	surrounded by trees	2	Ah	Moist	Dark Grey Black	>2		K. N.
2018KNS022	Regular	596278	5245482	Grass Cover,Needle Cover,Thin Moss Cover	Alders,Birch,Pine	outcrop across entire sample site causing it to be a NS	0	Ah	Moist	Dark Brown Black	<1	O horizon	K. N.
2018KNS023	Regular	596383	5245491	Leaf Cover,Thin Moss Cover	Alders,Birch	outcrop across entire sample site causing it to be a NS	0	Ah	Moist	Dark Brown Black	<1	O horizon	K. N.
2018KNS024	Regular	596481	5245480	Leaf Cover,Thin Moss Cover,Deadfall	Alders,Birch,Pine, fern	surrounded by trees	2	Ah	Dry	Dark Grey Black	>2	O horizon	K. N.
2018KNS025	Regular	596431	5245390	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Pine	surrounded by trees	2	Ah	Dry	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS026	Regular	596481	5245772	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Dry	Light Brown	1-2	O, B horizons	K. N.
2018KNS027	Regular	596422	5245777	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS028	Regular	596384	5245774	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple, fern	surrounded by trees,outcrop across entire sample site causing it to be a NS	0	Ah	Moist	Dark Brown Black	1-2	O horizon	K. N.
2018KNS029	Regular	596323	5245776	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Balsam Fir, fern, maple	surrounded by trees	0	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS030	Regular	596281	5245773	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	>2	O horizon	K. N.
2018KNS031	Regular	596229	5245779	Grass Cover,Leaf Cover,Needle Cover	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS032	Regular	596177	5245790	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS034	Regular	596129	5245774	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Black	1-2	O, Ae horizons	K. N.
2018KNS035	Regular	596082	5245776	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple and fern	surrounded by trees	2	Ah	Dry	Dark Grey Black	1-2	O, Ae horizons	K. N.
2018KNS039	Regular	596029	5245776	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple and fern	surrounded by trees	0	Ah	Moist	Light Brown	>2	Ae horizon	K. N.
2018KNS039	Duplicate	596023	5245772	N/A									K. N.
2018KNS036	Regular	595927	5245779	Grass Cover,Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir	grassy	2	Ah	Dry		>2	Ae horizon	K. N.
2018KNS037	Regular	595886	5245779	Leaf Cover,Needle Cover,Thin Moss Cover	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K. N.
2018KNS038	Regular	595775	5245772	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Moist		>2	O, Ae horizons	K. N.
2018KNS041	Regular	595732	5245773	Leaf Cover,Rock Cover,Sphagnum Thin Moss Cover < 30cm,Deadfall	Alders,Birch,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K. N.
2018KNS042	Regular	595755	5244771	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, fern	surrounded by trees	0	Ah	Moist	Dark Brown Black	<1	O horizon	K. N.
2018KNS043	Regular	595698	5244774	Leaf Cover,Thin Moss Cover,Deadfall	Alders,Birch,Pine,Balsam Fir, maple	surrounded by trees	0	Ah	Moist	Dark Brown Black	<1	O horizon	K. N.
2018KNS044	Regular	595597	5244871	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Birch,Pine,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. N.
2018KNS045	Regular	595655	5244870	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Birch,Pine,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. N.
2018KNS046	Regular	595703	5244865	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple	surrounded by trees	4	Ah	Moist	Chocolate Brown	1-2	O horizon	K. N.
2018KNS047	Regular	595757	5244878	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Balsam Fir, fern	grassy	0	Ah	Dry	Dark Grey Black	1-2	O, Ae horizons	K. N.
2018KNS048	Regular	595753	5244978	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Balsam Fir, fern	grassy	2	Ah	Moist	Black	1-2	O, Ae horizons	K. N.
2018KNS049	Regular	595706	5244965	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Balsam Fir, fern	surrounded by trees	2	Ah	Dry	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS050	Regular	595650	5244960	Leaf Cover,Needle Cover,Deadfall	Alders,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. N.
2018KNS051	Regular	595606	5244963	Needle Cover,Rock Cover,Deadfall	Alders,Birch,Pine,White Spruce, fern, maple	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. N.
2018KNS052	Regular	595555	5244974	Leaf Cover,Needle Cover,Rock Cover,Deadfall	Alders,Birch,Pine,White Spruce,Balsam Fir, fern	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. N.
2018KNS054	Regular	595647	5245065	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple	surrounded by trees	0	Ah	Wet	Dark Brown Black	<1	O horizon	K. N.
2018KNS055	Regular	595705	5245072	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	1-2		K. N.
2018KNS056	Regular	595756	5245064	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Birch,Balsam Fir, maple and fern	surrounded by trees	2	Ah	Dry	Dark Brown Black	1-2	O horizon	K. N.
2018KTS086	Regular	595727	5245865	Leaf Cover,Needle Cover,Deadfall	Alders,Birch,Balsam Fir	surrounded by trees	2	Ah	Moist	Black	1-2	O horizon	K. L-F.
2018KTS087	Regular	595825	5245873	Leaf Cover,Thin Moss Cover,Deadfall	Alders,Poplar	surrounded by trees	4	Ah	Dry	Light Brown	>2	O, Ae horizons	K. L-F.
2018KTS088	Regular	595881	5245871	Thin Moss Cover	Alders,Poplar	surrounded by trees,outcrop across entire sample site causing it to be a NS	4	Ah	Moist	Black	>2		K. L-F.
2018KTS089	Regular	595929	5245868	Leaf Cover,Needle Cover,Rock Cover,Thin Moss Cover,Deadfall	Alders,Pine, maple	surrounded by trees,outcrop across entire sample site causing it to be a NS	2	Ah	Moist	Dark Brown Black	>2	O horizon	K. L-F.
2018KTS090	Regular	595971	5245875	Leaf Cover	Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	<1	O horizon	K. L-F.
2018KTS091	Regular	596025	5245874	Leaf Cover,Thin Moss Cover,Deadfall	Alders,Poplar	surrounded by trees	4	Ah	Moist	Black	>2	Ae horizon	K. L-F.
2018KTS092	Regular	596076	5245875	Leaf Cover,Needle Cover,Deadfall	Poplar,Balsam Fir, maple	surrounded by trees	6	Ah	Moist	Black	>2		K. L-F.
2018KTS094	Regular	596124	5245877	Leaf Cover	Alders,Birch, maple	surrounded by trees	10	Ah	Moist	Black	>2		K. L-F.
2018KTS095	Regular	596178	5245871	Leaf Cover,Needle Cover,Deadfall	Birch,Balsam Fir, maple	surrounded by trees	6	Ah	Moist	Dark Brown Black	1-2	O, Ae horizons	K. L-F.
2018KTS096	Regular	596229	5245879	Leaf Cover,Needle Cover	Alders,Birch,Balsam Fir, maple	stagnant	4	Ah	Moist	Dark Brown Black	1-2		K. L-F.
2018KTS097	Regular	596273	5245880	Leaf Cover,Needle Cover	Alders,Birch,Tamarack,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Dark Brown Black	1-2	O horizon	K. L-F.
2018KTS098	Regular	596329	5245868	Leaf Cover,Needle Cover,Thin Moss Cover,Deadfall	Alders,Pine,Poplar,Balsam Fir	surrounded by trees	4	Ah	Moist	Dark Brown	<1	O horizon	K. L-F.
2018KTS099	Regular	596374	5245881	Leaf Cover	Alders,Birch,Poplar, maple	surrounded by trees	2	Ah	Moist	Dark Grey Black	<1	O, Ae horizons	K. L-F.
2018KTS100	Duplicate	596374	5245881	N/A									K. L-F.
2018KTS101	Regular	596426	5245889	Bare Soil	Alders,Poplar	surrounded by trees	0	Ah	Moist	Dark Brown	>2		K. L-F.
2018KBS219	Regular	595754	5245171	Leaf Cover	Birch,Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	>2		K. B.
2018KBS220	Duplicate	595747	5245168	N/A									K. B.
2018KBS214	Regular	595704	5245167	Leaf Cover	Balsam Fir, maple	surrounded by trees	2	Ah	Moist	Black	1-2		K. B.
2018KBS215	Regular	595649	5245166	Leaf Cover	Birch,Balsam Fir, maple	surrounded by trees	4	Ah	Moist	Dark Brown Black	<1	O horizon	K. B.
2018KBS216	Regular	595604	5245172	Leaf Cover	Maple, Fern	surrounded by trees	2	Ah	Moist	Black	1-2		K. B.

2018 Soil Sample Descriptions

Sample ID	Type	East N83 Z17	North N83 Z17	Ground Cover	Site Vegetation	Landform	Depth (cm)	Horizon	Moisture	Sample Colour	Thickness (cm)	Contamination	Sampler *
2018KBS217	Regular	595550	5245175	Leaf Cover	Alders,Birch, maple	surrounded by trees	2	Ah	Moist	Black	1-2		K. B.
2018KBS218	Regular	595501	5245174	Needle Cover,Sphagnum Moss < 30cm	Alders,Pine, maple , fern	surrounded by trees,outcrop across entire sample site causing it to be a NS	2	Ah	Moist	Dark Grey Black	1-2		K. B.
2018KBS221	Regular	595450	5245167	Needle Cover	Pine, maple	surrounded by trees,outcrop across entire sample site causing it to be a NS	0	Ah	Dry	Dark Brown	<1	O horizon	K. B.
2018KBS222	Regular	595505	5245055	Leaf Cover,Needle Cover	Birch,Pine	surrounded by trees,outcrop across entire sample site causing it to be a NS	4	Ah	Dry	Dark Brown Black	1-2	O horizon	K. B.
2018KBS223	Regular	595558	5245059	Needle Cover	Pine,Balsam Fir, maple	surrounded by trees,outcrop across entire sample site causing it to be a NS	2	Ah	Dry	Dark Brown Black	<1	O horizon	K. B.
2018KBS224	Regular	595602	5245062	Leaf Cover	Alders,Black Spruce,Balsam Fir	surrounded by trees	4	Ah	Moist	Black	>2	O horizon	K. B.
2018KNS001	Regular	596024	5245077	leafs grass needles small moss	spruce alders, fern	surrounded by trees	0	Ah			<1	O horizon	K. N.
2018KBS184	Regular	596028	5245173	Leaf, Needle Cover	Adler, sycamore, fern	surrounded by trees	0	Ah	Moist	Dark grey black	1-2	Ae horizon	K. B.
2018KBS183	Regular	596128	5245182	Leaf, grass cover	no tree cover, fern	feild, forest	2	Ah	Moist	Black	1-2		K. B.
2018KBS181	Regular	596175	5245178	Leaf cover, deadfall	Birch, fir, maple	surrounded by trees	4	Ah	Moist	Black	1	Ae horizon	K. B.
2018KBS182	Regular	596229	5245175	Leaf cover	Alder, birch	surrounded by trees	2	Ah	Moist	Black	1-2	O, Ae horizons	K. B.
2018KBS178	Regular	595929	5245276	Leaf, grass cover	alder, fir	surrounded by trees	2	Ah	Dry	Dark grey	30		K. B.
2018KBS179	Regular	595932	5245374	leaf, deadfall	alder	surrounded by trees	0	Ah	Dry	Black	15		K. B.
2018KBS180	Duplicate	595933	5245374	N/A									K. B.

* Kaylyn Niemetz (K. N.), Karys Leonard-Fortune (K. L-F), Katelynn Brown (K.B.)

2018 Rock Sample Descriptions

Sample ID	Date	East N83 Z17	North N83 Z17	Prospect	Lithology	Grain Size	Type	qtz	flds	amph	pyx	carb	sx	ox	py	apy	cpy	other	Alteration	Intensity	Magnetism	Veining	Width (cm)	Strike	Dip	Other structure	Relief	Sampler*
2018KBP031	9-Aug-18	595757	5244887	Pit #12 Float	cal-flds breccia	fine	float	0	30	0	25	39	1	5	100	0	0		chl, kaol	very strong	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP032	9-Aug-18	595767	5244889	Pit #12 Vein	cal and k-spar vein in diabase	fine	outcrop	0	40	0	55	0	5	0	50	50	0		chl	strong	mod		0.5	150	75			K. B., K. N., K. L-F.
2018KBP033	9-Aug-18	595767	5244889	Pit #12 Vein	cal and k-spar vein in diabase	aphanitic diabase, fine k-spar	outcrop	5	64	0	10	20	1	0	100	0	0		chl, kaol	mod	N/A		3	60	70			K. B., K. N., K. L-F.
2018KBP034	9-Aug-18	595767	5244889	Pit #12 Vein	cal and k-spar vein in diabase	fine	outcrop	5	70	0	10	15	0	0	0	0	0		kaol	mod	N/A		3	60	70			K. B., K. N., K. L-F.
2018KBP035	9-Aug-18	595580	5245920	Pit #14	diabase	med	outcrop	0	59	0	37	0	3	1	70	30	0		chl, kaol	mod	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP036	9-Aug-18	595580	5245920	Pit #14	granite	fine	float	25	70	0	0	5	0	0	0	0	0		Si, K	strong	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP037	9-Aug-18	595580	5245920	Pit #14	granite	fine (crystalline)	float	45	52	0	0	0	3	0	70	0	30		Si	mod	N/A		>25	N/A	N/A			K. B., K. N., K. L-F.
2018KBP038	8-Aug-18	595840	5245955	Pit #4	diabase	med	float	0	50	0	40	0	0	10	0	0	0		N/A	N/A	strong		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP039	8-Aug-18	595840	5245955	Pit #4	diabase	med	outcrop	0	58	0	38	0	4	0	60	30	10		N/A	N/A	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP040	8-Aug-18	595943	5246018	Pit #5	granite	fine (crystalline)	float	60	30	0	0	0	10	0	70	10	20		Si	mod	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP041	8-Aug-18	595943	5246018	Pit #5	diabase	fine	outcrop	0	38	0	52	10	0	0	0	0	0		kaol	mod	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP042	8-Aug-18	595943	5246018	Pit #5	k-spar vein in altered diabase	fine	outcrop	0	45	0	55	0	0	0	0	0	0		kaol	mod	N/A		5	N/A	N/A			K. B., K. N., K. L-F.
2018KBP043	8-Aug-18	596471	5245268	Shaft	k-spar vein in altered diabase	fine	outcrop	20	66	10	4	0	0	0	0	0	0		Si, K	mod	N/A		20	230	90			K. B., K. N., K. L-F.
2018KBP044	8-Aug-18	596471	5245268	Shaft	altered diabase	med (crystalline)	outcrop	2	48	0	45	0	5	0	100	0	0		Si	weak	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP045	10-Aug-18	595943	5246018	Pit #1	qtz vein in diabase	fine (euhedral vein crystals)	outcrop	50	20	0	27	0	3	0	100	0	0		Si, chl	mod	N/A		4	290	90			K. B., K. N., K. L-F.
2018KBP046	10-Aug-18	595943	5246018	Pit #1	diabase	fine (crystalline)	outcrop	0	58	0	41	0	1	0	100	0	0		chl	weak	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP047	10-Aug-18	595642	5245917	Pit #3	diabase	fine (crystalline)	outcrop	0	65	0	30	0	5	0	100	0	0		chl	weak	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP048	10-Aug-18	595642	5245917	Pit #3	granite	fine	outcrop	10	90	0	0	0	0	0	0	0	0		K, chl	weak	N/A		20	290	90			K. B., K. N., K. L-F.
2018KBP049	8-Aug-18	596063	5245917	Pit #8 ext	granite	fine	outcrop	10	90	0	0	0	0	0	0	0	0		Si	weak	N/A		N/A	300	90			K. B., K. N., K. L-F.
2018KBP050	8-Aug-18	596063	5245917	Pit #8	granite	fine	outcrop	5	85	0	0	10	0	0	0	0	0		Si	weak	N/A		35	300	90			K. B., K. N., K. L-F.
2018KBP051	8-Aug-18	596063	5245917	Pit #8	granite	fine (crystalline)	float	10	50	0	40	0	0	0	0	0	0		N/A	N/A	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP052	8-Aug-18	596063	5245917	Pit #8	granite	fine (crystalline)	float	10	85	0	0	5	0	0	0	0	0		N/A	N/A	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP053	9-Aug-18	596248	5245448	Pit #13	diabase	med	outcrop	0	37	8	50	0	5	0	75	25	0		chl	weak	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP054	9-Aug-18	596248	5245448	Pit #13	granite	fine (crystalline)	outcrop	10	85	0	0	5	0	0	0	0	0		Si	weak	N/A		N/A	130	90			K. B., K. N., K. L-F.
2018KBP055	8-Aug-18	596083	5245907	Contact	diabase	med	outcrop	3	42	0	52	0	3	0	80	0	20		Si, chl	weak	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP056	8-Aug-18	596083	5245907	Contact	granite (wall rock alteration?)	med	outcrop	38	58	0	4	0	0	0	0	0	0		Si, K	strong	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP057	8-Aug-18	596083	5245907	Contact	granite	fine (crystalline)	outcrop	30	60	0	0	7	3	0	100	0	0		Si	mod	N/A		N/A	300	90			K. B., K. N., K. L-F.
2018KBP058	9-Aug-18	595708	5244890	Pit #11	diabase breccia within cal	fine	float	0	25	0	35	40	0	0	0	0	0		N/A	N/A	N/A		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP059	9-Aug-18	595708	5244890	Pit #11	k-spar vein in altered diabase	fine	outcrop	25	75	0	0	0	0	0	0	0	0		Si, K	mod	N/A		2	100	85			K. B., K. N., K. L-F.
2018KBP060	9-Aug-18	595708	5244890	Pit #11	diabase	med	outcrop	0	55	0	45	0	0	0	0	0	0		N/A	N/A	mod		N/A	N/A	N/A			K. B., K. N., K. L-F.
2018KBP061	9-Aug-18	595767	5244889	Pit #12	diabase	fine	outcrop	0	43	0	50	7	0	0	0	0	0		chl, kaol	mod	mod		N/A	N/A	N/A			K. B., K. N., K. L-F.
18KRP601	2-Oct-18	596248	5245439		Qz Vein		bldr									1											low	K.R.
18KRP602	2-Oct-18	596240	5245454	Jane Dolan	Si-diabase	crs	bldr									5			Si	str	none	high		310	90	fx/silica	low	K.R.
18KRP603	3-Oct-18	596024	5245928		Qz Vein	crs	o/c												Si		none	high	25cm	120/300	90		low	K.R.
18KRP604	3-Oct-18	596082	5245900		Qz Vein	crs	bldr										5		Si		none	high	25cm	300/120	90	vein		K.R.
18KRP605	3-Oct-18	595956	5245990		Qz Vein	crs	bldr											Co	Si			high		320	70			K.R.
18KRP606	3-Oct-18	595577	5242908		Qz Vein		o/c											Co						070/250	90			K.R.
18KRP607	3-Oct-18	595809	5246087		Qz Vein		bldr																					K.R.
18MAP075	2-Oct-18	596240	5245441		Qz vein		Float												Si. Ery									M.A.
18MAP076	2-Oct-18	596244	5245451		Altered rock		Float												Si. Ery									M.A.
18MAP077	2-Oct-18	596060	5245915		Altered silicified rock / vein		o/c								2		tr	tr Co	Si. Ery, carb	str		high	30cm	300 - 310				M.A.
18MAP078	3-Oct-18	595640	5245907		Pink Silica vein	mg	o/c								tr		tr	2% Co?	Si. Ery	str		high	30cm	250	90			M.A.
18MAP079	3-Oct-18	595581	5245888		Silicified vein		o/c								tr				Si			high	30cm	NE				M.A.

* Kaylyn Niemetz (K. N.), Karys Leonard-Fortune (K. L-F), Katelynn Brown (K.B.), Kris Raffle (K.R.), Mo Asmail (M.A.)

2018 Drill Hole Collars

Hole ID	Easting N83 Z17	Northing N83 Z17	Elevation N83 Z17	Azimuth	Azimuth Survey Type	Dip (degree)	Hole Depth (m)	Casing (m)	Casing Pulled	Core Size	Artesian flow	Drill Type	Drilling Company	Geologist
18HC01	596242	5245430	294	350	Reflex APSII	-46.5	85.7	4.5	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC02	596242	5245430	294	350	Reflex APSII	-58.7	105	3	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC03	596242	5245430	294	40	Reflex APSII	-50.2	105	4	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC04	596242	5245430	294	40	Reflex APSII	-65.3	99	3	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC05	596062	5245903	303	30	Reflex APSII	-46.9	91.2	1.5	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC06	596062	5245903	303	30	Reflex APSII	-67.3	98.5	1.5	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC07	596080	5245928	294	255	Reflex APSII	-45.1	74	3	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC08	595957	5246005	295	315	Reflex APSII	-45	59	3	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC09	595957	5246005	295	315	Reflex APSII	-59	80	1.5	Yes	NQ	No	CS1000	Vital Drilling	M.A.
18HC10	595942	5246007	295	5	Reflex APSII	-44.8	45.5	1.5	Yes	NQ	No	CS1000	Vital Drilling	M.A.

2018 Drill Hole Downhole Surveys

Hole ID	Depth (m)	Magnetic field (nt)	Temperature (C)	Azimuth uncorrected	Azimuth corrected	Dip	Surveyer
18HC01	15	5777	14.1	357.3	346	46.5	Simon
18HC01	69	5478	5.4	2.3	351	46.2	Simon
18HC01	85.5	5535	4.5	4.3	353	46.4	Simon
18HC02	12	5565	7	1.7	350.4	58.7	Simon
18HC02	63	5509	10.1	6.8	355.5	59.1	Simon
18HC02	105	5203	12.3	7.4	356.1	59.6	Simon
18HC03	12	5716	13.1	54.9	43.6	50.2	Simon
18HC03	51	5821	16.2	53.6	42.3	50.9	Blain
18HC03	105	5200	9.7	61.7	50.4	51.2	Simon
18HC04	15	5340	11.2	53.6	42.3	65.3	Simon
18HC04	63	5731	13.3	54.3	43	65.7	Blain
18HC04	99	5551	8.3	52.9	41.6	66	Simon
18HC05	12	5703	11.3	41.4	30.1	46.9	Simon
18HC05	63	5474	11.1	40.1	28.8	47.7	Simon
18HC05	91.5	5368	9.5	42.8	31.5	48.2	James
18HC06	11.5	5486	8.3	40.4	29.1	67.3	James
18HC06	62.5	5451	12.6	40.2	28.9	67.7	Simon
18HC06	94.5	4937	9.7	43.2	31.9	67.9	Simon
18HC07	14	5512	8.7	263	251.7	45.1	Jeanguy
18HC07	65	5548	10.6	271.6	260.3	45.7	Simon
18HC08	17	5448	8.7	328.1	316.8	45	Jeanguy
18HC08	59	5499	2.9	326	314.7	45.5	Simon
18HC09	6	10.3	5516	325.7	314.4	59	Jeanguy
18HC09	74	5514	1.8	331.4	320.1	59.7	Jeanguy
18HC10	14	5563	9.3	18.9	7.6	44.8	Jeanguy
18HC10	45.5	5475	12.7	14.9	3.6	45.5	Jeanguy

2018 Drill Hole Geotechnical Measurements

Hole ID	From	To	Recovery	Recovery Percent	RQD	RQD Percent	Magsus 1	Magsus 2	Magsus 3	MagSus Ave
18-HC-01	4.85	6.00	1.15	1.00	55.00	47.83	10.3	1.85	2	4.72
18-HC-01	6.00	9.00	3.05	1.02	2.34	0.77	27.9	1.63	1.26	10.26
18-HC-01	9.00	12.00	2.88	0.96	2.20	0.76	4.35	9.5	1.56	5.14
18-HC-01	12.00	15.00	2.91	0.97	2.30	0.79	1.06	76.8	49.2	42.35
18-HC-01	15.00	18.00	2.9	0.97	2.05	0.71	73.2	86.02	64.2	74.47
18-HC-01	18.00	21.00	2.87	0.96	2.03	0.71	98.3	60.7	60.5	73.17
18-HC-01	21.00	24.00	2.9	0.97	1.01	0.35	79.2	50.5	50	59.90
18-HC-01	24.00	27.00	2.91	0.97	2.24	0.77	64.8	37.7	31.2	44.57
18-HC-01	27.00	30.00	2.9	0.97	2.01	0.69	42.5	27.3	13.2	27.67
18-HC-01	30.00	33.00	2.85	0.95	1.51	0.53	27.1	23	15.5	21.87
18-HC-01	33.00	36.00	2.82	0.94	1.90	0.67	21.2	19.1	28.7	23.00
18-HC-01	36.00	39.00	3.05	1.02	2.15	0.70	24.4	32.5	36.5	31.13
18-HC-01	39.00	42.00	2.94	0.98	1.44	0.49	19	27.6	19.5	22.03
18-HC-01	42.00	45.00	2.89	0.96	1.93	0.67	25.9	25.1	27.2	26.07
18-HC-01	45.00	48.00	3.08	1.03	1.34	0.44	32.2	33.2	24.1	29.83
18-HC-01	48.00	51.00	2.6	0.87	1.77	0.68	32.8	36.3	35.4	34.83
18-HC-01	51.00	54.00	2.95	0.98	2.33	0.79	37.9	40.7	38.3	38.97
18-HC-01	54.00	57.00	3.1	1.03	2.42	0.78	38.7	46.1	43.4	42.73
18-HC-01	57.00	60.00	2.9	0.97	2.00	0.69	83.3	39.8	40.2	54.43
18-HC-01	60.00	63.00	2.82	0.94	2.05	0.73	41.7	37.2	37.8	38.90
18-HC-01	63.00	66.00	3.16	1.05	2.93	0.93	38.9	39.1	40.6	39.53
18-HC-01	66.00	69.00	3.04	1.01	2.05	0.67	3.12	42.5	72.5	39.37
18-HC-01	69.00	72.00	3.1	1.03	2.07	0.67	56.6	45.1	52.8	51.50
18-HC-01	72.00	75.00	3.03	1.01	1.43	0.47	50.1	51.1	64.3	55.17
18-HC-01	75.00	78.00	3.07	1.02	2.70	0.88	59.1	91.1	60.6	70.27
18-HC-01	78.00	81.00	2.97	0.99	2.40	0.81	60.1	39.8	44.8	48.23
18-HC-01	81.00	84.00	3	1.00	2.28	0.76	9.92	6.06	8.22	8.07
18-HC-01	84.00	85.70	1.70	1.00	1.30	0.76	4.1	9.4	6.67	6.72
18-HC-02	3.00	6.00	2.08	0.69	1.12	0.54	1.45	1.42	1.22	1.36
18-HC-02	6.00	9.00	2.61	0.87	1.70	0.65	1.55	1.41	77.7	26.89
18-HC-02	9.00	12.00	2.97	0.99	1.68	0.57	4.41	8.76	16.4	9.86
18-HC-02	12.00	15.00	3.02	1.01	2.08	0.69	28.9	18.2	26.5	24.53
18-HC-02	15.00	18.00	2.93	0.98	1.99	0.68	96.3	38.2	48.5	61.00
18-HC-02	18.00	21.00	3.01	1.00	1.97	0.65	46.9	38.5	24.2	36.53
18-HC-02	21.00	24.00	2.88	0.96	1.20	0.42	39.7	22.9	9.06	23.89
18-HC-02	24.00	27.00	3.05	1.02	1.16	0.38	17.5	18.9	22.4	19.60
18-HC-02	27.00	30.00	3	1.00	1.85	0.62	23.2	14.8	1.22	13.07
18-HC-02	30.00	33.00	3.01	1.00	1.90	0.63	7.18	1.18	16.7	8.35
18-HC-02	33.00	36.00	2.98	0.99	1.88	0.63	21.7	29.8	37.1	29.53
18-HC-02	36.00	39.00	3	1.00	2.47	0.82	23.4	27.6	34.3	28.43
18-HC-02	39.00	42.00	3	1.00	2.27	0.76	31.8	41.7	40.5	38.00
18-HC-02	42.00	45.00	2.8	0.93	1.95	0.70	37.7	40.3	38.9	38.97
18-HC-02	45.00	48.00	2.8	0.93	1.53	0.55	34.1	21.3	44.4	33.27
18-HC-02	48.00	51.00	2.85	0.95	2.15	0.75	62.5	59.1	47.9	56.50
18-HC-02	51.00	54.00	3	1.00	1.23	0.41	41	85.4	71.2	65.87
18-HC-02	54.00	57.00	3.05	1.02	1.70	0.56	37.8	33.2	40.7	37.23
18-HC-02	57.00	60.00	2.82	0.94	2.48	0.88	35.5	32.5	31.2	33.07

2018 Drill Hole Geotechnical Measurements

Hole ID	From	To	Recovery	Recovery Percent	RQD	RQD Percent	Magsus 1	Magsus 2	Magsus 3	MagSus Ave
18-HC-02	60.00	63.00	3.05	1.02	2.08	0.68	21.4	31.7	28.2	27.10
18-HC-02	63.00	66.00	2.95	0.98	2.34	0.79	44.5	48.6	56.2	49.77
18-HC-02	66.00	69.00	3.02	1.01	2.12	0.70	55.3	90.7	58.2	68.07
18-HC-02	69.00	72.00	2.8	0.93	1.66	0.59	105	42.4	51.2	66.20
18-HC-02	72.00	75.00	2.72	0.91	2.14	0.79	46.3	43.1	48.2	45.87
18-HC-02	75.00	78.00	2.92	0.97	1.47	0.50	40	54.1	47.2	47.10
18-HC-02	78.00	81.00	3.04	1.01	1.80	0.59	22.8	7.45	63.3	31.18
18-HC-02	81.00	84.00	2.68	0.89	1.58	0.59	71.1	44.6	72.3	62.67
18-HC-02	84.00	87.00	2.93	0.98	1.00	0.34	7	46.1	57.1	36.73
18-HC-02	87.00	90.00	2.66	0.89	1.33	0.50	80.4	55.3	83.9	73.20
18-HC-02	90.00	93.00	3	1.00	1.90	0.63	69.2	55.6	105	76.60
18-HC-02	93.00	96.00	2.95	0.98	1.50	0.51	105	77.6	66.5	83.03
18-HC-02	96.00	99.00	2.95	0.98	2.02	0.68	28.4	5.24	22.1	18.58
18-HC-02	99.00	102.00	3.01	1.00	2.34	0.78	82.1	99.9	99.8	93.93
18-HC-02	102.00	105.00	2.98	0.99	2.65	0.89	126	127	167	140.00
18-HC-03	3.00	6.00	2.94	0.98	164.00	55.78	1.47	1.33	1.99	1.60
18-HC-03	6.00	9.00	2.9	0.97	2.63	0.91	1.55	1.93	29.8	11.09
18-HC-03	9.00	12.00	2.94	0.98	1.07	0.36	3.03	2.75	54.1	19.96
18-HC-03	12.00	15.00	2.94	0.98	2.20	0.75	69.2	75.9	23.7	56.27
18-HC-03	15.00	18.00	3.01	1.00	1.95	0.65	27.9	52.1	82.4	54.13
18-HC-03	18.00	21.00	3.05	1.02	2.65	0.87	45.1	34.6	48.3	42.67
18-HC-03	21.00	24.00	2.98	0.99	1.88	0.63	36.1	4.14	11.9	17.38
18-HC-03	24.00	27.00	3	1.00	1.92	0.64	18.9	19.7	27.2	21.93
18-HC-03	27.00	30.00	2.85	0.95	1.56	0.55	19.1	22.5	40.3	27.30
18-HC-03	30.00	33.00	2.82	0.94	1.51	0.54	27.5	34.7	31.7	31.30
18-HC-03	33.00	36.00	3.05	1.02	2.26	0.74	30.2	30.9	19	26.70
18-HC-03	36.00	39.00	3	1.00	1.52	0.51	33.2	30.5	24.6	29.43
18-HC-03	39.00	42.00	2.9	0.97	2.36	0.81	33.1	32.9	32.6	32.87
18-HC-03	42.00	45.00	2.94	0.98	2.05	0.70	26.1	38	14	26.03
18-HC-03	45.00	48.00	2.75	0.92	2.28	0.83	42.3	37.5	36.2	38.67
18-HC-03	48.00	51.00	3.05	1.02	2.74	0.90	32.9	36.3	32	33.73
18-HC-03	51.00	54.00	2.75	0.92	1.46	0.53	33.8	38.2	33.3	35.10
18-HC-03	54.00	57.00	2.92	0.97	2.00	0.68	53.4	46.1	59.6	53.03
18-HC-03	57.00	60.00	2.87	0.96	1.98	0.69	11.8	9.92	9.76	10.49
18-HC-03	60.00	63.00	2.55	0.85	1.90	0.75	7	7.03	24.2	12.74
18-HC-03	63.00	66.00	2.96	0.99	2.40	0.81	12.8	18.4	15.7	15.63
18-HC-03	66.00	69.00	3.01	1.00	2.03	0.67	17.6	16.6	23	19.07
18-HC-03	69.00	72.00	3.16	1.05	2.66	0.84	26.3	20.5	20.7	22.50
18-HC-03	72.00	75.00	3.1	1.03	2.36	0.76	30.6	27.2	22.5	26.77
18-HC-03	75.00	78.00	2.95	0.98	1.50	0.51	24.9	42.3	28.7	31.97
18-HC-03	78.00	81.00	2.7	0.90	1.90	0.70	58.9	38.1	27.7	41.57
18-HC-03	81.00	84.00	3.12	1.04	2.22	0.71	41.2	56.2	43.6	47.00
18-HC-03	84.00	87.00	3.1	1.03	2.34	0.75	64.4	60.9	60.1	61.80
18-HC-03	87.00	90.00	2.8	0.93	1.26	0.45	74.7	87.5	78.5	80.23
18-HC-03	90.00	93.00	2.5	0.83	0.37	0.15	115	69.2	54.5	79.57
18-HC-03	93.00	96.00	3.04	1.01	2.61	0.86	142	130	74.2	115.40
18-HC-03	96.00	99.00	3.07	1.02	2.60	0.85	90.2	98.3	38.3	75.60

2018 Drill Hole Geotechnical Measurements

Hole ID	From	To	Recovery	Recovery Percent	RQD	RQD Percent	Magsus 1	Magsus 2	Magsus 3	MagSus Ave
18-HC-03	99.00	102.00	2.96	0.99	2.14	0.72	92.7	70.7	140	101.13
18-HC-03	102.00	105.00	2.54	0.85	1.27	0.50	142	126	154	140.67
18-HC-04	4.04	6.00	1.96	1.00	1.60	0.82	1.5	3.98	3.9	3.13
18-HC-04	6.00	9.00	3.06	1.02	2.74	0.90	1.97	2.2	7.2	3.79
18-HC-04	9.00	12.00	2.95	0.98	2.11	0.72	7.35	47.9	53.4	36.22
18-HC-04	12.00	15.00	2.85	0.95	1.73	0.61	52.9	40.1	33.6	42.20
18-HC-04	15.00	18.00	2.77	0.92	1.41	0.51	43.3	47.8	28.3	39.80
18-HC-04	18.00	21.00	3.01	1.00	1.48	0.49	37.5	2.03	16.5	18.68
18-HC-04	21.00	24.00	3.09	1.03	1.92	0.62	15.3	19.1	20.3	18.23
18-HC-04	24.00	27.00	3.07	1.02	1.81	0.59	21.3	22.9	24.1	22.77
18-HC-04	27.00	30.00	2.75	0.92	1.77	0.64	20.8	23.5	20.5	21.60
18-HC-04	30.00	33.00	2.97	0.99	1.82	0.61	25.4	25.9	28.6	26.63
18-HC-04	33.00	36.00	2.98	0.99	2.32	0.78	34.9	31.8	30.3	32.33
18-HC-04	36.00	39.00	2.87	0.96	2.01	0.70	36	36.3	38.1	36.80
18-HC-04	39.00	42.00	2.8	0.93	1.92	0.69	33.4	27.4	32.9	31.23
18-HC-04	42.00	45.00	2.8	0.93	1.68	0.60	36.8	33.6	34.3	34.90
18-HC-04	45.00	48.00	3.07	1.02	2.65	0.86	29.5	35.2	41.7	35.47
18-HC-04	48.00	51.00	3.04	1.01	1.05	0.35	36.9	40	47.2	41.37
18-HC-04	51.00	54.00	3.06	1.02	2.52	0.82	28.8	29.9	47.6	35.43
18-HC-04	54.00	57.00	3.03	1.01	1.92	0.63	61.5	42.2	85.2	62.97
18-HC-04	57.00	60.00	3.2	1.07	2.89	0.90	90.5	57.7	50.5	66.23
18-HC-04	60.00	63.00	2.6	0.87	2.40	0.92	43.6	60.5	69.9	58.00
18-HC-04	63.00	66.00	2.9	0.97	2.60	0.90	92.2	35.1	52.8	60.03
18-HC-04	66.00	69.00	3	1.00	2.60	0.87	44.6	41.8	43.6	43.33
18-HC-04	69.00	72.00	3.01	1.00	2.55	0.85	40.2	68.6	52.9	53.90
18-HC-04	72.00	75.00	2.85	0.95	1.50	0.53	52.3	45.5	37.4	45.07
18-HC-04	75.00	78.00	3	1.00	1.85	0.62	57.3	55.5	74.5	62.43
18-HC-04	78.00	81.00	2.97	0.99	2.62	0.88	62.5	60.4	61.9	61.60
18-HC-04	81.00	84.00	2.72	0.91	1.73	0.64	55.8	54.9	50.5	53.73
18-HC-04	84.00	87.00	3	1.00	1.53	0.51	46.2	70.5	85.6	67.43
18-HC-04	87.00	90.00	3	1.00	2.05	0.68	112	92.4	112	105.47
18-HC-04	90.00	93.00	2.74	0.91	1.64	0.60	181	185	194	186.67
18-HC-04	93.00	96.00	3	1.00	2.37	0.79	222	171	202	198.33
18-HC-04	96.00	99.00	2.75	0.92	1.80	0.65	10.5	1.3	4.47	5.42
18-HC-05	1.56	3.00	1.44	1.00	1.32	0.92	1.08	1.00	1.04	1.04
18-HC-05	3.00	6.00	3.01	1.00	2.58	0.86	1.48	1.17	1.32	1.32
18-HC-05	6.00	9.00	2.98	0.99	2.57	0.86	1.48	1.17	1.32	1.32
18-HC-05	9.00	12.00	2.99	1.00	2.61	0.87	1.49	1.18	1.34	1.34
18-HC-05	12.00	15.00	2.95	0.98	2.60	0.88	1.49	1.18	1.34	1.34
18-HC-05	15.00	18.00	2.98	0.99	1.44	0.48	0.97	0.73	0.85	0.85
18-HC-05	18.00	21.00	3	1.00	1.88	0.63	1.17	0.90	1.03	1.03
18-HC-05	21.00	24.00	2.96	0.99	2.64	0.89	1.51	1.20	1.35	1.35
18-HC-05	24.00	27.00	2.96	0.99	2.05	0.69	1.24	0.97	1.11	1.11
18-HC-05	27.00	30.00	3.05	1.02	2.15	0.70	1.29	1.00	1.14	1.14
18-HC-05	30.00	33.00	3.01	1.00	2.00	0.66	1.22	0.94	1.08	1.08
18-HC-05	33.00	36.00	2.96	0.99	2.18	0.74	1.30	1.02	1.16	1.16
18-HC-05	36.00	39.00	2.97	0.99	2.75	0.93	1.56	1.24	1.40	1.40

2018 Drill Hole Geotechnical Measurements

Hole ID	From	To	Recovery	Recovery Percent	RQD	RQD Percent	Magsus 1	Magsus 2	Magsus 3	MagSus Ave
18-HC-05	39.00	42.00	2.97	0.99	2.25	0.76	1.33	1.05	1.19	1.19
18-HC-05	42.00	45.00	2.97	0.99	2.17	0.73	1.30	1.01	1.16	1.16
18-HC-05	45.00	48.00	2.95	0.98	2.92	0.99	1.63	1.31	1.47	1.47
18-HC-05	48.00	51.00	2.95	0.98	2.40	0.81	1.40	1.11	1.25	1.25
18-HC-05	51.00	54.00	3	1.00	2.47	0.82	1.43	1.13	1.28	1.28
18-HC-05	54.00	57.00	3.02	1.01	2.68	0.89	0.1	-0.12	-0.18	-0.07
18-HC-05	57.00	60.00	2.97	0.99	2.30	0.77	1.7	0.09	-0.25	0.51
18-HC-05	60.00	63.00	2.98	0.99	2.97	1.00	0.01	1.24	2.28	1.18
18-HC-05	63.00	66.00	2.97	0.99	2.97	1.00	-0.62	0.34	-0.3	-0.19
18-HC-05	66.00	69.00	3.01	1.00	2.58	0.86	-0.34	-0.58	2.23	0.44
18-HC-05	69.00	72.00	3	1.00	2.80	0.93	1	0.93	-0.51	0.47
18-HC-05	72.00	75.00	2.9	0.97	1.90	0.66	-0.1	0.03	0.75	0.23
18-HC-05	75.00	78.00	2.97	0.99	2.04	0.69	-0.03	-0.21	0.27	0.01
18-HC-05	78.00	81.00	3.01	1.00	2.73	0.91	-0.07	0.05	0.27	0.08
18-HC-05	81.00	84.00	2.92	0.97	0.80	0.27	-0.03	-0.09	0.01	-0.04
18-HC-05	84.00	87.00	3.04	1.01	2.60	0.86	2.41	18.1	0.21	6.91
18-HC-05	87.00	90.00	3.05	1.02	2.62	0.86	0.1	1.31	1.37	0.93
18-HC-05	90.00	91.20	1.2	1.00	0.34	0.28	0.36	1.95	0.51	0.94
18-HC-06	0.40	2.50	2.1	1.00	1.70	0.81	-0.31	0.75	1.24	0.56
18-HC-06	2.50	5.50	3.01	1.00	2.82	0.94	-0.21	-0.49	0.12	-0.19
18-HC-06	5.50	8.50	2.88	0.96	2.88	1.00	0.8	-0.62	0.87	0.35
18-HC-06	8.50	11.50	2.82	0.94	2.28	0.81	1.26	0.21	-0.6	0.29
18-HC-06	11.50	14.50	3.05	1.02	2.88	0.94	0.14	0.23	0.62	0.33
18-HC-06	14.50	17.50	2.93	0.98	2.44	0.83	0.65	0.31	0.78	0.58
18-HC-06	17.50	20.50	2.99	1.00	2.29	0.77	0.32	-0.87	0.09	-0.15
18-HC-06	20.50	23.50	2.9	0.97	2.33	0.80	-0.43	0.09	0.1	-0.08
18-HC-06	23.50	26.50	2.7	0.90	1.17	0.43	-0.03	0.1	0.78	0.28
18-HC-06	26.50	29.50	2.97	0.99	2.03	0.68	-0.31	0.12	-0.29	-0.16
18-HC-06	29.50	32.50	2.96	0.99	1.83	0.62	0.01	-0.05	3.58	1.18
18-HC-06	32.50	35.50	2.8	0.93	0.35	0.13	-0.1	-0.14	0.05	-0.06
18-HC-06	35.50	38.50	2.82	0.94	2.00	0.71	0.36	0.1	-2.1	-0.55
18-HC-06	38.50	41.50	3.01	1.00	2.23	0.74	0.49	0.49	0.65	0.54
18-HC-06	41.50	44.50	2.9	0.97	2.80	0.97	0.2	-0.9	-0.36	-0.35
18-HC-06	44.50	47.50	3.02	1.01	2.37	0.78	-0.96	-0.3	0.18	-0.36
18-HC-06	47.50	50.50	2.98	0.99	2.30	0.77	0.56	0.07	1.18	0.60
18-HC-06	50.50	53.50	3.1	1.03	2.72	0.88	0.36	0.6	0.89	0.62
18-HC-06	53.50	56.50	2.93	0.98	2.52	0.86	0.2	5.49	0.23	1.97
18-HC-06	56.50	59.50	3	1.00	2.45	0.82	-0.58	-0.54	-0.42	-0.51
18-HC-06	59.50	62.50	2.94	0.98	2.89	0.98	1.95	0.18	0.05	0.73
18-HC-06	62.50	65.50	2.94	0.98	2.71	0.92	-0.29	-0.12	1.18	0.26
18-HC-06	65.50	68.50	2.96	0.99	2.16	0.73	0.4	-0.09	0.42	0.24
18-HC-06	68.50	71.50	3.1	1.03	2.42	0.78	0.1	0.76	1.29	0.72
18-HC-06	71.50	74.50	2.8	0.93	1.12	0.40	0.31	0.07	0.14	0.17
18-HC-06	74.50	77.50	2.67	0.89	1.90	0.71	1.33	0.18	-0.01	0.50
18-HC-06	77.50	80.50	2.65	0.88	1.54	0.58	-0.84	-0.96	0.73	-0.36
18-HC-06	80.50	83.50	2.5	0.83	0.40	0.16	1.93	0.12	0.2	0.75
18-HC-06	83.50	86.50	2.1	0.70	0.42	0.20	0.03	0.07	-0.1	0.00

2018 Drill Hole Geotechnical Measurements

Hole ID	From	To	Recovery	Recovery Percent	RQD	RQD Percent	Magsus 1	Magsus 2	Magsus 3	MagSus Ave
18-HC-06	86.50	89.50	2.4	0.80	1.00	0.42	-0.21	-0.12	-0.54	-0.29
18-HC-06	89.50	92.50	3	1.00	2.82	0.94	0.42	0.45	0.29	0.39
18-HC-06	92.50	95.50	2.68	0.89	2.02	0.75	0.51	-0.12	0.67	0.35
18-HC-06	95.50	98.50	2.57	0.86	1.99	0.77	0.12	0.62	-0.16	0.19
18-HC-07	2.80	5.00	2.2	1.00	1.92	0.87	0.67	0.25	-0.75	0.06
18-HC-07	5.00	8.00	2.9	0.97	2.55	0.88	-0.23	0.12	0.42	0.10
18-HC-07	8.00	11.00	3.04	1.01	3.04	1.00	-0.53	-0.01	-0.31	-0.28
18-HC-07	11.00	14.00	2.96	0.99	2.60	0.88	-0.21	-0.29	0.42	-0.03
18-HC-07	14.00	17.00	3.02	1.01	2.83	0.94	-0.03	0.23	0.56	0.25
18-HC-07	17.00	20.00	3	1.00	2.59	0.86	0.36	0.64	0.16	0.39
18-HC-07	20.00	23.00	2.96	0.99	2.73	0.92	-0.07	1.11	0.23	0.42
18-HC-07	23.00	26.00	2.95	0.98	2.61	0.88	-0.31	0.42	1.97	0.69
18-HC-07	26.00	29.00	2.9	0.97	2.60	0.90	-0.09	0.32	5.45	1.89
18-HC-07	29.00	32.00	3	1.00	2.92	0.97	1.64	0.31	-0.23	0.57
18-HC-07	32.00	35.00	3.07	1.02	2.72	0.89	0.31	3.8	0.51	1.54
18-HC-07	35.00	38.00	2.9	0.97	2.90	1.00	0.91	-0.03	0.03	0.30
18-HC-07	38.00	41.00	3.01	1.00	2.86	0.95	0.27	-0.03	-0.07	0.06
18-HC-07	41.00	44.00	3.03	1.01	2.59	0.85	0.16	0.12	0.09	0.12
18-HC-07	44.00	47.00	2.97	0.99	2.37	0.80	0.09	-0.38	0.09	-0.07
18-HC-07	47.00	50.00	3.03	1.01	2.47	0.82	0.12	0.82	0.05	0.33
18-HC-07	50.00	53.00	2.95	0.98	2.07	0.70	0.51	-0.1	0.16	0.19
18-HC-07	53.00	56.00	3	1.00	1.76	0.59	3.14	0.42	0.51	1.36
18-HC-07	56.00	59.00	2.94	0.98	2.12	0.72	0.8	2.45	0.36	1.20
18-HC-07	59.00	62.00	3.07	1.02	2.57	0.84	-0.31	0.27	-0.65	-0.23
18-HC-07	62.00	65.00	2.85	0.95	2.30	0.81	1.13	-0.45	1.66	0.78
18-HC-07	65.00	68.00	2.92	0.97	2.43	0.83	-0.12	1.77	0.89	0.85
18-HC-07	68.00	71.00	3.04	1.01	1.80	0.59	3.14	4.2	2.45	3.26
18-HC-07	71.00	74.00	3.1	1.03	1.65	0.53	1.26	6.53	2.39	3.39
18-HC-08	2.70	5.00	2.7	1.17	1.30	0.48	0.62	-0.14	0.12	0.20
18-HC-08	5.00	8.00	3	1.00	1.67	0.56	0.01	1.7	0.93	0.88
18-HC-08	8.00	11.00	2.9	0.97	2.12	0.73	0.86	0.47	0.31	0.55
18-HC-08	11.00	14.00	2.94	0.98	2.64	0.90	0.2	0.14	1.7	0.68
18-HC-08	14.00	17.00	3	1.00	2.50	0.83	-0.73	3.16	0.53	0.99
18-HC-08	17.00	20.00	2.4	0.80	1.15	0.48	-0.53	-0.31	0.29	-0.18
18-HC-08	20.00	23.00	2.84	0.95	1.60	0.56	1.07	1.66	2.14	1.62
18-HC-08	23.00	26.00	2.88	0.96	2.18	0.76	-0.38	0.01	-0.43	-0.27
18-HC-08	26.00	29.00	2.9	0.97	2.87	0.99	0.32	1.75	1.93	1.33
18-HC-08	29.00	32.00	2.8	0.93	1.39	0.50	1.9	0.09	1.44	1.14
18-HC-08	32.00	35.00	3	1.00	2.94	0.98	0.07	0.1	1.46	0.54
18-HC-08	35.00	38.00	3	1.00	2.66	0.89	1.97	0.1	-0.32	0.58
18-HC-08	38.00	41.00	2.9	0.97	2.10	0.72	-0.14	2.23	-0.29	0.60
18-HC-08	41.00	44.00	3.03	1.01	2.94	0.97	0.12	1.06	3.42	1.53
18-HC-08	44.00	47.00	3	1.00	2.70	0.90	1.28	-0.67	0.1	0.24
18-HC-08	47.00	50.00	2.86	0.95	1.34	0.47	-0.03	0.6	-0.09	0.16
18-HC-08	50.00	53.00	3	1.00	1.65	0.55	0.21	0.1	0.21	0.17
18-HC-08	53.00	56.00	2.83	0.94	2.00	0.71	0.07	-0.01	0.21	0.09
18-HC-08	56.00	59.00	3.03	1.01	2.10	0.69	15.3	0.05	-0.75	4.87

2018 Drill Hole Geotechnical Measurements

Hole ID	From	To	Recovery	Recovery Percent	RQD	RQD Percent	Magsus 1	Magsus 2	Magsus 3	MagSus Ave
18-HC-09	1.04	2.00	0.96	1.00	0.70	0.73	27.7	0.01	-0.69	9.01
18-HC-09	2.00	5.00	3	1.00	2.26	0.75	9.74	0.25	-0.05	3.31
18-HC-09	5.00	8.00	2.98	0.99	1.85	0.62	1.9	-0.16	-0.8	0.31
18-HC-09	8.00	11.00	3	1.00	1.60	0.53	-0.16	0.31	1.39	0.51
18-HC-09	11.00	14.00	3	1.00	2.12	0.71	0.38	-0.1	0.75	0.34
18-HC-09	14.00	17.00	2.97	0.99	2.45	0.82	4.42	1.07	0.62	2.04
18-HC-09	17.00	20.00	2.3	0.77	1.00	0.43	0.18	3.45	0.69	1.44
18-HC-09	20.00	23.00	2.94	0.98	1.70	0.58	0.51	-0.38	1.39	0.51
18-HC-09	23.00	26.00	3.02	1.01	2.82	0.93	0.05	3.64	0.27	1.32
18-HC-09	26.00	29.00	3.03	1.01	2.53	0.83	-0.42	3.29	-0.81	0.69
18-HC-09	29.00	32.00	2.96	0.99	2.85	0.96	0.01	1.39	-0.05	0.45
18-HC-09	32.00	35.00	2.85	0.95	2.60	0.91	0.75	-0.87	0.32	0.07
18-HC-09	35.00	38.00	2.97	0.99	2.60	0.88	-0.58	0.42	0.43	0.09
18-HC-09	38.00	41.00	3.08	1.03	2.70	0.88	-0.16	-0.2	-0.16	-0.17
18-HC-09	41.00	44.00	3.02	1.01	2.40	0.79	1.09	2.21	0.65	1.32
18-HC-09	44.00	47.00	2.7	0.90	0.96	0.36	-0.2	0.82	-0.45	0.06
18-HC-09	47.00	50.00	2.87	0.96	2.02	0.70	0.75	-0.78	0.42	0.13
18-HC-09	50.00	53.00	3.03	1.01	2.84	0.94	-0.05	-0.38	1.53	0.37
18-HC-09	53.00	56.00	2.9	0.97	1.75	0.60	-0.34	0.23	-0.6	-0.24
18-HC-09	56.00	59.00	3.06	1.02	2.62	0.86	0.64	0.29	0.21	0.38
18-HC-09	59.00	62.00	3.04	1.01	1.84	0.61	1.35	-0.47	0.03	0.30
18-HC-09	62.00	65.00	2.95	0.98	2.80	0.95	1.22	2.34	0.21	1.26
18-HC-09	65.00	68.00	3	1.00	2.04	0.68	2.45	0.21	2.69	1.78
18-HC-09	68.00	71.00	3.05	1.02	2.05	0.67	0.01	1.68	0.23	0.64
18-HC-09	71.00	74.00	2.9	0.97	2.62	0.90	0.91	1.88	0.8	1.20
18-HC-09	74.00	77.00	3.04	1.01	2.07	0.68	4.19	0.1	0.36	1.55
18-HC-09	77.00	80.00	2.8	0.93	1.20	0.43	1.07	1.77	-0.18	0.89
18-HC-10	1.00	2.00	1	1.00	0.26	0.26	4.09	30.1	4.45	12.88
18-HC-10	2.00	5.00	2.84	0.95	1.97	0.69	9.22	32	32.7	24.64
18-HC-10	5.00	8.00	2.97	0.99	1.98	0.67	123	83.6	68.8	91.80
18-HC-10	8.00	11.00	3	1.00	2.82	0.94	62.2	55.9	70.6	62.90
18-HC-10	11.00	14.00	3.03	1.01	2.64	0.87	54.4	55	45.2	51.53
18-HC-10	14.00	17.00	3.03	1.01	2.55	0.84	49.9	5.81	36.6	30.77
18-HC-10	17.00	20.00	2.72	0.91	1.90	0.70	40.9	1.45	0.618	14.32
18-HC-10	20.00	23.00	3.02	1.01	2.51	0.83	0.846	0.52	0.596	0.65
18-HC-10	23.00	26.00	3.01	1.00	2.42	0.80	0.689	1.38	8.16	3.41
18-HC-10	26.00	29.00	2.97	0.99	1.77	0.60	24.1	6.22	70.5	33.61
18-HC-10	29.00	32.00	2.98	0.99	2.51	0.84	10.4	25.8	6.29	14.16
18-HC-10	32.00	35.00	2.9	0.97	1.87	0.64	36.4	3.72	52.2	30.77
18-HC-10	35.00	38.00	2.99	1.00	2.72	0.91	60.6	38.8	19.9	39.77
18-HC-10	38.00	41.00	2.98	0.99	2.55	0.86	32.3	21	28.4	27.23
18-HC-10	41.00	44.00	3.05	1.02	2.17	0.71	18	32.3	48.6	32.97
18-HC-10	44.00	45.50	1.47	0.98	1.04	0.71	56.4	53.1	54.71	54.74

2018 Drill Core Lithology

Hole ID	From	To	Interval	Lithology	Colour	Description
18HC01	4.85	20.70	15.85	Coarse grained Diabase	Medium grey/green with white specks	Massive, medium to coarse-grained, grey to green, weakly - moderately altered diabase with medium-grained white specks (30-40%) and trace up to 0.2% sulphides. White specks have green margins and appears to be generally elongated, euhedral to anhedral plagioclase that has gone some alteration. Within this zone, cm-scale intervals (<5%) contain maroon-red alteration and appears to be more silicified and potassic in nature. These overgrown the plagioclase and generally contain a high modal % of sulphides than the rest of the zone. Sulphides are dissimenated and mainly constitute trace pyrite and cpy.
18HC01	20.70	29.80	9.10	Altered coarse-grained Diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with maroon-coloured, potassic alteration. This interval have gradational contacts with the surrounding rocks. Trace disseminated sulphides (pyrite) is seen throughout this interval. This interval is silicified and more fractured; where fractured the rocks are oxidized.
18HC01	29.80	35.20	5.40	Primary Diabase	Dark green	Massive, dark-coloured, unaltered, non mineralized diabase.
18HC01	35.20	37.10	1.90	Weakly altered Diabase	Dark green with red specks	Massive, finer-grained, weakly altered, weakly mineralized rock. Trace minute epidote veinlets crosscut this interval (not related to mineralization). Sulphides are trace and mainly constitute pyrite.
18HC01	37.10	49.40	12.30	Primary Diabase	Dark green	Massive, dark-coloured, unaltered, non mineralized diabase.
18HC01	49.40	57.80	8.40	Weakly altered Diabase	Dark green with red specks	Massive, weakly altered, finer-grained, weakly mineralized rock. Trace minute black veinlets [XRF - Fe 100K - 175K; Co; below detection limit] crosscut this interval @ 47.8m and 49.65m. Sulphides are trace and range from fine-grained to medium-grained individual pyrite, a single mm-scale sulphide stringer @ 49.45m, clots of ultrafine-grained sulphides - these are strongly associated with the pink K-alteration. The appearance of sulphides and alteration dissapate from 56.60 - 65.85m (almost primary diabase) and increases again from 66.10 - 68.33m. From 75.3 - 77m, the rocks are moderately altered and crosscut by irregular light pink veinlets (XRF - Co; below DL) but sulphide % is roughly 0.5% (big 1cm wide clot of fine-grained pyrite and Cpy is with one of the pink veins @ 75.85m.
18HC01	57.80	85.70	27.90	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace fine-grained sulphides.
18HC02	3.00	14.50	11.50	Coarse-grained Diabase	Medium green with white specks	Massive, medium to coarse-grained, green, weakly altered with patches of moderate alteration (up to 5% of K-alteration + silicifcation) and mineralization (diss pyrite and cpy). The rocks exhibit medium-grained, elongated, euhedral to anhedral white specks (sauccertized plagioclase, 30-40%) with green margins. The potassic zones are more silicified and contain more sulphide % than chloritic zones.
18HC02	14.50	25.00	10.50	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with maroon-coloured, potassic and light-green propyllitic altertion. This interval have gradational contacts with the upper and lower intervals (lower transitions over few cm). Minor disseminated sulphides (pyrite and chalcopyrite) is seen throughout this interval. Fractures of the rocks are more evident from 22.10 - 25m and generally are oxidized.
18HC02	25.00	31.75	6.75	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered with patches of moderate alteration from 27.10 - 29.7m and around veining, weakly - moderately mineralized rock with trace clots of cpy, disseminated and clots of py throughout. Minor mm to cm-scale, pink + white / K-carb veins crosscut this interval with no sulphides in or surrounding the veins. The last 1 - 2m of this interval is transitional to the primary diabase, trace alteration and ONLY due to the presence of sulphides were included in this zone.
18HC02	31.75	45.75	14.00	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace individual specks of fine-grained sulphides. No potassic alteration.
18HC02	45.75	54.90	9.15	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase with patches of moderate alteration. The weak alteration halo extends1-2m around the main alteration halo (48.95 -54m); this interval is moderately mineralized with up to 0.5% sulphides; clots of disseminated + clotty py and disseminated cpy. Within this mod. alteration halo, a 15cm wide zone is strongly altered (51.20 - 51.35m).
18HC02	54.90	66.20	11.30	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with rare fine-grained sulphides.
18HC02	66.20	69.00	2.80	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase with veining. The alteration is limited to mm to cm-scale veining and mineralization is mostly pyrite (disseminated and clusters). The veining is basicaly K-carb-chlorite with trace quartz; some sulphide is adjacent to these veins. The bottom 30cm of this interval is not altered but is included in this interval ONLY due to the presence of sulphides (up to 2% py).
18HC02	68.90	105.00	36.10	Rarely-altered primary diabase	Dark green	Massive, dark-coloured, chlorite-altered with rare pink specks of K-alteration. This interval hosts 2 unique veins (a shallow angle, barren, 1cm wide pink vein at 84 - 84.20m and a mineralized, 3-4cm wide vein at 94.45m) and a moderately silicified - mineralized zone at 87.07 - 87.20m with up to 2% sulphides). Also, between 89.45 and 91.45, disseminated sulphides is seen despite the rock lack any potassic alteration, only chlorite.

2018 Drill Core Lithology

Hole ID	From	To	Interval	Lithology	Colour	Description
18HC03	3.00	10.50	7.50	Coarse-grained Diabase	Medium green with white specks	Massive, medium to coarse-grained, green, weakly altered with patches of moderate alteration (up to 5% of K-alteration + silicifcation) and mineralization (diss pyrite and cpy). The rocks exhibit medium-grained, elongated, euhedral to anhedral white specks (sauccertized plagioclase, 30-40%) with green margins. The potassic zones are more silicified and contain more sulphide % than chloritic zones but still considered trace except for a15cm wide zone @ 9.04 - 9.14cm.
18HC03	10.50	24.30	13.80	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with pink and maroon-coloured, potassic and light-green propyllitic altertion. This interval contain patches of moderately altered diabase up to 19.30m (which can be considered part of the previous lithology, but the percentage of altered/mineralized patches is noticeable to consider it within this interval). This is marked by moderate alteration / mineralization below 19.3m, which is true representation of the same unit seen in hole 2. Noticeable amount of disseminated and clotty sulphides (pyrite and chalcopyrite) are seen throughout. From 23.45 - 23.72, the rock is strongly altered with K and trace sulphides
18HC03	24.40	25.10	0.70	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with rare fine-grained sulphides.
18HC03	25.10	44.40	19.30	Weakly - moderately altered diabase	Dark green and red specks	Massive, finer-grained, weakly altered diabase with moderate - strong alteration from 28.9 - 29.22m, possibly vein (no upper sharp contact though). The alteration is mainly potassic and mineralization range from trace up to 3% sulphides over multiple narrow zones (1cm up to 10cm, 5% of this interval); mostly pyrite (disseminated and in clusters). The rock from 29.3 - 31.5m is more fractured and oxidized, comparable to that in hole 2 @ 22.10 - 25m.
18HC03	44.40	54.00	9.60	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace individual specks of fine-grained sulphides. No potassic alteration.
18HC03	54.00	55.50	1.50	Weakly altered diabase	Dark green and red specks	Massive, finer-grained, weakly altered diabase. Gradational change in alteration with surrounding rocks and weak K-fluids crosscutting the rock at 54.78m over 3-4cm. Minor sulphides mainly fine to medium-grained py from 54.05 - 54.6m, disseminated and clotty.
18HC03	55.50	105.00	49.50	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace individual specks of fine-grained sulphides. No potassic alteration. A 1-3mm maroon vein occur at 59.5 - 59.9m at a shallow angle to core axis.
18HC04	4.04	12.50	8.46	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite particularily from 7.12 - 8m). The rocks exhibits medium tp coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%).
18HC04	12.50	21.42	8.92	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with pink and maroon-coloured, potassic and light-green propyllitic altertion. This interval contain cm - dm patches of moderate alteration (12.5 - 12.8; 13.11 - 13.5; 16.35 - 16.75m) with disseminated and clotty sulphides (up to 5%). The upper contact is transitional, however, the lower contact is slightly more defined over few centimeters. From 20m, the interval is similar to the same "spotty-red zone" seen in hole 2 and 3. Noticeable amount of disseminated and clotty sulphides (pyrite; 5%) is seen from 14.42 - 17.5m)
18HC04	21.42	45.50	24.08	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase with trace sulphides and trace sub-mm pink veinlets at shallow degree to core axis. The rock exhibits a sharp change in alteration over few centimeters.
18HC04	45.50	51.80	6.30	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace individual specks of fine-grained sulphides. No potassic alteration.
18HC04	51.80	52.10	0.30	Weakly - moderately altered diabase	Dark green and red specks	Massive, finer-grained, weakly altered diabase with moderate - strong alteration over this zone. The alteration is potassic + silica, and mineralization is mainly pods of pyrite (up to 1cm)
18HC04	52.10	55.50	3.40	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace specks of fine-grained sulphides. No potassic alteration.
18HC04	55.50	57.35	1.85	Weakly - moderately altered diabase	Dark green and red specks	Massive, finer-grained, weakly altered diabase with moderate - strong K-alteration around mm to cm-scale veining (K-Carb-Chl-Qtz). Mineralization is trace disseminated pyrite. The rock is more fractured at the lower contact with the vein.
18HC04	57.35	99.00	41.65	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace up to 0.2% sulphides (disseminated specks and clots) in cm-scale patches/veins
18HC05	1.56	13.90	12.34	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite near magnetite halos). The rocks exhibits medium to coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%).

2018 Drill Core Lithology

Hole ID	From	To	Interval	Lithology	Colour	Description
18HC05	13.90	24.34	10.44	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with red/and maroon-coloured, potassic and light-green propyllitic altertion. This interval contain cm - dm patches of strong alteration (14.6-15.65m) with disseminated and clotty sulphides (up to 2%). The upper contact is transitional, however, the lower contact is slightly more defined over few centimeters. Noticeable amount of clotty sulphides ina 1cm wide stringer @ 15 - 15.1m (pyrite; 5%).
18HC05	24.34	52.50	28.16	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase (interlayered intervals of primary and weakly altered diabase) with trace sulphides and sub-mm pink veinlets up to 10cm wide K-carb-chlorite-quartz veins (up to 5% sulphides) - veins are @ 40 - 50 degree to core axis. From 36.02 - 42.5m, there are cm-scale patches (~10%) of moderate - strong alteration (possibly veining) with minor sulphides.
18HC05	52.50	91.20	38.70	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace sulphides (disseminated specks and clots) in mm to cm-scale patches/veins (<2%).
18HC06	0.40	12.30	11.90	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite near magnetite halos). The rocks exhibits medium to coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%).
18HC06	12.30	20.80	8.50	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with redé maroon-coloured, potassic and light-green propyllitic altertion. This interval contain cm - dm patches of strong alteration (12.6-13.10m; 5% sulphides) with disseminated and clotty sulphides (up to 3%) throughout this interval. The upper contact is transitional, however, the lower contact is slightly more defined over few centimeters. Clotty sulphides are seen in chlorite pods.
18HC06	20.80	52.35	31.55	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase (interlayered intervals of primary and weakly altered diabase) with trace sulphides and sub-mm light red /pink veinlets @ 40 - 50 degree to core axis. From 49-52.35m, there are cm to dm-scale patches of moderate alteration and sulphidization around veining.
18HC06	52.35	98.50	46.15	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace sulphides (disseminated specks and clots). Trace mm-scale veinlets and 1 major vein (7cm wide mineralized vein) @ 73.4 - 73.75m.
18HC07	2.80	10.73	7.93	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite near magnetite halos). The rocks exhibits medium to coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%), spotty K-feldspars and dark grey magnetite. A 20cm wide altered zone at 4.17 -4.37m
18HC07	10.73	24.24	13.51	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with red /maroon-coloured, potassic and light-green propyllitic altertion interlayered with cm-dm patches of the upper lithology. The rock contains disseminated and clotty sulphides; a sulphide stringer @ 11.45 - 11.55m contains up to 25% pyrite. The lower contact is defined over few centimeters.
18HC07	24.24	63.00	38.76	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase (interlayered intervals of primary and weakly altered diabase) with trace sulphides and sub-mm light red /pink veinlets @ 40 - 50 degree to core axis. From 48-54m, there are trace sub mm-scale veinlets with no sulphides but 1-2cm patches of moderate alteration is seen between 48.2 - 48.4m.
18HC07	63.00	74.00	11.00	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace sulphides (disseminated specks and clots). Trace mm-scale veinlets.
18HC08	2.70	6.20	3.50	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite near magnetite halos). The rocks exhibits medium to coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%), spotty K-feldspars and dark grey magnetite.
18HC08	6.20	19.00	12.80	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with patches of strong K-alteration. The rock exhibits a red /maroon-coloured potassic and light-green propyllitic alteration. Disseminated and clotty sulphides is common; a cm-scale sulphide stringer @ 9.42m contains up to 25% pyrite. The lower contact with the vein is sharp.
18HC08	19.00	23.27	4.27	Potassic vein	Dull red	Light red K-vein with minor sulphides (pyrite), strongly silicified, contains narrow zones of the host rocks.
18HC08	23.27	59.00	35.73	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered (interlayered intervals of primary and weakly altered) diabase with trace sulphides and trace sub-mm white - pink veinlets @ 40 - 50 degree to core axis. From 49.75-50m. there is minor alteration - no sign of sulphides. There are trace sub mm veinlets throughout up to cm-scale veins/strong alteration halos (from 31.7 - 33.07m) with trace sulphides in veins and its margins.

2018 Drill Core Lithology

Hole ID	From	To	Interval	Lithology	Colour	Description
18HC09	0.40	8.45	8.05	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite). The rocks exhibits medium to coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%), spotty K-feldspars and dark grey magnetite. A 0.5cm wife vein (silica - carb - chlorite with hematite spots) runs along the core axis (5 degree) from 4.7 - 6.10m.
18HC09	8.45	20.40	11.95	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with patches of strong K-silica alteration (12.25 - 13.65m; 16.10-20.4m) . The rock exhibits a red /maroon-coloured potassic and light-green propyllitic alteration. Disseminated and clotty sulphides is common. The rocks is intruded by a shallow-angled vein from 17.6 - 20.5m)
18HC09	20.40	27.50	7.10	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered (interlayered intervals of primary and weakly altered) diabase with trace sulphides and trace sub-mm white - pink veinlets @ 40 - 50 degree to core axis. From 22-23m, the amount of K-specks are moderate and sulphides increase up to 20% cpy @ 22.60-23m.
18HC09	27.50	39.90	12.40	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace sulphides (disseminated specks and clots). Trace mm-scale veinlets.
18HC09	39.90	57.50	17.60	Rarely altered diabase	Dark green with red specks	Massive, finer-grained, rarely altered diabase with meter patches of weak alteration; trace sulphides and trace sub-mm white - pink veinlets @ 40 - 50 degree to core axis between 42.5 - 43.5m and 47.6 - 48.3m.
18HC09	57.50	80.00	22.50	Primary Diabase	Dark green	Massive, dark-coloured, chlorite-altered with trace sulphides (disseminated specks and clots). Trace mm-scale veinlets.
18HC10	1.00	10.90	9.90	Coarse-grained Diabase	Medium green with white specks	Massive, coarse-grained, green, weakly altered (up to 5% K-alteration) and trace mineralization (diss pyrite). The rocks exhibits medium to coarse-grained, elongated, euhedral to anhedral white specks with green margins (sauccertized plagioclase, 30-40%), spotty K-feldspars and dark grey magnetite. Very weak alteration from 5.12 - 6.57m and a patch of moderate alteration from 7.66 - 8.07m with trace sulphides.
18HC10	10.90	17.85	6.95	Altered coarse-grained diabase	Medium green and maroon	Massive, medium to coarse - grained, moderatly altered with patches of strong K-silica alteration (16.15 - 17.85m) The rock exhibits a red /maroon-coloured potassic and light-green propyllitic alteration. Both disseminated and clotty sulphides is seen in the strongly altered patch. The rocks is intruded by a 15cm vuggy, light red vein (equivalent to V2 in the last hole) @ 16m. The first 2m of this 'unit' is transitional but the lower contact is slightly more defined.
18HC10	17.85	24.50	6.65	Silicified diabase	Medium green - grey	Massive, medium green to grey, moderately to strongly silicified and mineralized zone with up to 10 % sulphides (> 5% cpy and py in dm-scale patches within this zone).
18HC10	24.50	36.80	12.30	Weakly altered diabase	Dark green with red specks	Massive, finer-grained, weakly altered diabase with patches of moderate alteration / mineralization. Minor sulphides (up to 1%) and trace, white - pink veinlets, sub mm up to 1cm wide pink (Eritherite-coloured vein @ 31.77m with a 1cm wide nlob of cpy).
18HC10	36.80	45.50	8.70	Rarely altered diabase	Dark green with red specks	Massive, finer-grained, rarely altered diabase intermixed with patches of primary diabase, trace sulphides and trace sub-mm white - pink veinlets @ 40 - 50 degree to core axis - no sulphides.

2018 Drill Core Alteration

Hole ID	From	To	Alteration	Intensity	Description
18HC01	5.12	20.7	Potassic / Chlorite/Silica	Weak / moderate	Weak potassic alteration overprinting moderate propylitic alteration. Patches (<5%) of moderate K-alteration.
18HC01	20.7	27.1	Potassic / Chlorite/Silica	Moderate / weak	Moderate potassic alteration overprint chlorite and sauccertized plagioclase
18HC01	27.1	29.8	Potassic / Chlorite/Silica	Strong /weak	A relatively strong potassic alteration overprint chlorite and sauccertized plagioclase
18HC01	29.8	35.2	Potassic	Weak	Weak potassic alteration
18HC01	35.2	37.1	Potassic	Moderate	Moderate potassic alteration
18HC01	37.1	53.2	Potassic	Weak	Weak potassic alteration
18HC01	53.2	57.8	Potassic /silica	Moderate / weak	Moderate K-alteration (spotty pink) and minor silification - core is harder than surrounding intervals + more sulphides (marked on core)
18HC01	57.8	66.1	Potassic	Weak	Weak potassic alteration. Trace sulphides
18HC01	66.1	68.33	Potassic	Weak - moderate	Patches (~30%) of moderate K-alteration. Malachite staining at 68m (XRF - Co; Below DL).
18HC01	68.33	75.25	Potassic	Weak	Weak potassic alteration. Rare sulphides
18HC01	75.25	76.46	Potassic	Moderate	Moderate K-alteration (spotty pink) and moderate pink veining + more sulphides (marked on core). XRF - Co; 1.2K
18HC01	76.46	85.7	Potassic / Chlorite	Rare - none / moderate	Moderate chlorite alteration in dark green, gabbroic- textured rocks. Trace sulphides
18HC02	3	14.5	Potassic / Propyllitic	Weak / Moderate	Weak spotty K-alteration with cm-scale zones (1%; 7 - 10 cm zone @ 3.47 and 5.6-5.7) with moderate K-alteration and sulphides. Chlorite clots and sauccertized plagioclase is common.
18HC02	14.5	21.7	Potassic	Weak - moderate	Moderate potassic alteration dominates that tranition into the next zone. Few zones are weakly altered - comparable to the first zone in this hole. Sauccertized cg-plagioclase is abundant.
18HC02	21.7	27.8	Potassic	Moderate	Moderate K-alteration dominates with abundant pink throughout, no plagioclase.
18HC02	27.8	45.75	Potassic	Rare	
18HC02	45.75	48.95	Potassic	Weak	Spotty K-alteration.
18HC02	48.95	53.5	Potassic	Moderate	Moderate K-alteration dominates with abundant pink throughout. A strongly altered zone extends over 15cm from 51.20 - 51.35. The zone is transitional into upper and lower zones
18HC02	53.5	54.9	Potassic	Weak	Spotty K-alteration.
18HC02	54.9	66.2	Potassic / Chlorite	Rare / Weak	Chlorite alteration dominates over K-alteration.
18HC02	66.2	67.8	Potassic	Weak	Spotty K-alteration.
18HC02	67.8	105	Potassic / Chlorite	Rare / Mod	Rare K-alteration with moderate chlorite alteration. Chlorite alteration increase around veining.
18HC03	3	10.5	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magntite halos
18HC03	10.5	19.3	Potassic / Propyllitic	Weak / Moderate	Weak spotty K-alteration with cm-scale zones with moderate K-alteration and sulphides. Chlorite clots and sauccertized plagioclase is still common.
18HC03	19.3	23.45	Potassic /silica	Moderate	Moderate K-alteration dominates with abundant pink throughout, no plagioclase. Silicified + K intervals within this zone at 40 - 60 degree to core axis hosts most of the minerlization.
18HC03	23.45	23.72	Potassic	Strong	Strong K-alteration but only trace fine-grained py is seen
18HC03	23.7	24.4	Potassic /silica	Moderate	Moderate K-alteration dominates with abundant pink throughout, no plagioclase
18HC03	24.4	25.1	Potassic	Rare/none	Rare K-alteration and moderate propyllitic alteration
18HC03	25.1	28.9	Potassic /silica	Weak / Moderate	Moderate K-alteration dominates with abundant pink throughout, trace plagioclase
18HC03	28.9	29.22	Potassic	Strong	Strong K-alteration and chloritized mafics, only trace fine-grained py is seen
18HC03	29.22	34.4	Potassic	Weak - Moderate	Moderate K-alteration dominates with patches of weak alteration, no plagioclase
18HC03	34.4	44.4	Potassic / Chlorite	Weak/moderate	Spotty K-alteration with minor disseminated sulphides
18HC03	44.4	54	Potassic	Rare/none	Rare K-alteration and moderate propyllitic alteration
18HC03	54	55.1	Potassic	Weak - Moderate	Moderate K-alteration dominates with patches of weak alteration, no plagioclase
18HC03	55.1	93.5	Potassic	Rare/none	Rare K-alteration and moderate propyllitic alteration. From 68m onward, creamy plagioclase (20 - 30%) is seen throughout the core.
18HC03	93.5	95.5	Chlorite / silica	Moderate	Strong chlorite and moderate silica alteration with diss and clotty py (fg - mg), 1-2% sulphides
18HC03	95.5	105	Potassic	Rare/none	Rare potassic alteration + spotty altered plagioclase.
18HC04	4.04	12.5	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magntite.

2018 Drill Core Alteration

Hole ID	From	To	Alteration	Intensity	Description
18HC04	12.5	20	Potassic / Propyllitic	Weak / Moderate	Weak spotty K-alteration with cm-scale zones moderate K-alteration + sulphides. Chlorite clots and sauccertized plagioclase is still common. Strong alteration from 12.5 - 12.8; 13.11 - 13.5; 16.35 - 16.75 and 17.4 - 17.5m
18HC04	20	21.4	Potassic /silica	Moderate	Moderate K-alteration dominates + minor silification, no/rare plagioclase.
18HC04	21.4	45.5	Potassic	Weak	Weak spotty K-alteration with trace sub-mm pink veinlets and trace sulphides.
18HC04	45.5	51.8	Potassic	Rare/none	Rare K-alteration and moderate propyllitic alteration.
18HC04	51.8	52.1	Potassic /silica	Moderate	Moderate K-alteration dominates + minor silification, no/rare plagioclase.
18HC04	52.1	55.5	Potassic	Rare/none	Rare K-alteration and moderate propyllitic alteration.
18HC04	55.5	57.35	Potassic /silica	Weak to Moderate	Moderate K-alteration dominates + minor silification, no/rare plagioclase.
18HC04	57.35	91.6	Potassic	Rare/none	Rare K-alteration and moderate propyllitic alteration.
18HC04	91.6	93	Chlorite/silica	Moderate / Weak	Weakly silicified, strongly chlorite-altered zone
18HC04	93	99	Potassic	Rare/none	Rare K-alteration (in patches) and moderate propyllitic alteration.
18HC05	1.56	13.90	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC05	13.9	14.60	Potassic /silica	Weak to Moderate	Moderate patches of K-alteration in a weakly altered zone. Trace silification, rare plagioclase (only sauucertized).
18HC05	14.6	15.65	Potassic	Strong	Strong K-alteration dominated and fine to coarse-grained sulphide clots, py stringer @ 15 - 15.1m.
18HC05	15.65	24.34	Potassic /silica	Weak to Moderate	Moderate K-alteration dominates + minor silification, no/rare plagioclase.
18HC05	24.34	42.50	Potassic	Weak	Weak spotty K-alteration with minor (up to 3%) sub-mm up to 10cm wide veins and/or strong alteration halos. Trace sulphides. From 36.02 - 42.5m, moderate alteration/veining is slightly more developed here.
18HC05	42.5	91.20	Potassic	Rare/none	Rare K-alteration (in patches) and moderate propyllitic alteration. Only alteration is around trace veins (1 to 10mm).
18HC06	0.40	12.60	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magntite.
18HC06	12.60	20.80	Potassic /silica	Moderate	Moderate K-alteration dominates + patches of strong alteration (12.6 - 13.03m) + minor silification, rare plagioclase.
18HC06	20.80	49.00	Potassic	Weak	Weak spotty and patchy K-alteration with minor (up to 1%) sub-mm veinlets. Trace sulphides.
18HC06	49.00	52.35	Potassic /silica	Moderate	Moderate K-alteration + minor silification + alteration halos around veining (@ 50.6-51m).
18HC06	52.35	98.50	Potassic	Rare	Rare K-alteration + spotty altered plagioclase. Moderate chlorite alteration throughout; chlorite clots and chloritized xenoliths are seen in the diabase.
18HC07	2.80	10.73	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC07	10.73	24.24	Potassic /silica	Moderate	Moderate K-alteration dominates + patches of strong alteration (11.45 - 11.55 & 19.3-24.24m) + minor silification, rare plagioclase.
18HC07	24.24	31.00	Potassic / Propyllitic	Weak / Moderate	Weak spotty K-alteration with cm-scale zones moderate K-alteration + sulphides. Chlorite clots and sauccertized plagioclase is still common.
18HC07	31.00	32.40	Potassic /silica	Moderate	Moderate K-alteration dominates + patches of strong alteration around minor veining.
18HC07	32.40	63.00	Potassic / Propyllitic	Weak / Moderate	Weak spotty K-alteration with trace sulphides. From 48.2-48.4, there are cm-scale patches of mod alteration.
18HC07	60.50	61.10			
18HC07	63.00	74.00	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC08	2.70	6.20	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC08	6.20	19.00	Potassic /silica	Moderate	Moderate K-alteration dominates + patches of strong alteration (10-20%) + silification, rare plagioclase.
18HC08	19.00	23.00	Potassic	Intense	Intense K-alteration +/- silica with minor sulphides - vein.
18HC08	23.00	59.00	Potassic / Propyllitic	Weak / Moderate	Weak spotty K-alteration + trace sulphides. Chlorite clots and sauccertized plagioclase is partial. From 31.7 - 33.07, cm-scale patches of moderate alteration (in a halo and around veining).
18HC09	4.04	7.30	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC09	7.30	12.25	Potassic / silica	Weak to Moderate	Weak spotty K-alteration with patches of moderate alteration + minor sulphides. Chlorite clots and sauccertized plagioclase is partially common.

2018 Drill Core Alteration

Hole ID	From	To	Alteration	Intensity	Description
18HC09	12.25	20.40	Potassic / silica	strong to Intense	Intense K-alteration + silica with major sulphides. From 17.6 - 20.4, a vein is intruding the rock.
18HC09	20.40	20.40	Potassic / silica	Weak to Moderate	Spotty K-alteration with patches of moderate alteration + major sulphides, mainly cpy from 22.6 - 23m.
18HC09	20.40	27.50	Potassic / Propyllitic	Weak	Weak spotty K-alteration + trace sulphides.
18HC09	27.50	39.90	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. True diabase texture
18HC09	39.90	57.50	Potassic / Propyllitic	Weak	Weak spotty K-alteration + trace sulphides.
18HC09	57.50	80	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots is rarely seen but xenoliths in the diabase is seen throughout
18HC10	1.00	7.66	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC10	7.66	8.07	Potassic / silica	Moderate	A patch of moderate K/silica alteration + trace sulphides.
18HC10	8.07	10.9	Potassic	Rare	Rare K-alteration with moderate chlorite alteration. Chlorite clots and sauccertized plagioclase is common as well as magnetite.
18HC10	10.90	16.15	Potassic /silica	Moderate	Moderate K/silica alteration dominates, rare plagioclase.
18HC10	16.15	17.85	Potassic / silica	Strong	Strong K-alteration + silica with major sulphides. From 16 - 16.15m, a vein is intruding the rock.
18HC10	17.85	24.4	Silica	Strong	Strong silica alteration with major sulphides (up to 10%) in this zone
18HC10	24.40	37	Potassic /silica	Weak to Moderate	Weakly altered rocks with patches of moderate K/silica alteration over cm to decimeters, moderate alteration halos also seen around veining. Moderate sulphides in the last 1.5m
18HC10	37.00	45.5	Potassic	Rare	Rare to weak K-alteration.

2018 Drill Core Structures

Hole ID	From	To	Structure	Intensity	Description
18HC01	14.7	15	Fractures	Weak	Weakly fractured rocks
18HC01	20.7	21.05	Fractures	Moderate	Patches of moderate fracturing; fracture planes are oxidized.
18HC01	26.9	27.1	Fractures	Moderate	Broken pieces of rocks.
18HC01	48	48.3	Blocky	Moderate	Blocky rocks (90%). Low recovery
18HC01	56	56.15	Blocky	Moderate	Blocky rocks (90%). Low recovery
18HC01	70.9	71	Blocky	strong	Blocky rocks (100%).
18HC01	72	73.4	Blocky	strong	Blocky rocks (30%).
18HC02	3	3.2	Blocky	moderate	Blocky rocks (100%).
18HC02	6.7	7	Fractures	strong	Broken pieces of rocks, low recovery (39cm missing)
18HC02	9	10.2	Blocky	moderate	Blocky rocks (30%).
18HC02	21.12	30.2	Blocky	moderate	Blocky and fractured pieces of rocks (20%).
18HC02	51.2	53.9	Blocky	moderate	Blocky and fractured pieces of rocks (20%).
18HC02	69.5	70.3	Fracture	moderate	Fracture zone, blocky rock (30%)
18HC02	74.8	77.45	Fracture	strong	Fractured and blocky rocks (up to 50%).
18HC02	80	83.35	Blocky	Weak	Broken pieces of rocks (10%)
18HC02	84	89.3	Blocky	moderate	Broken pieces of rocks (50%) with possible fault gauage at 89m.
18HC03	3	6	Blocky	Weak	Blocky rocks (20%)
18HC03	8	13	Blocky	moderate	Blocky and fractured rocks (40%)
18HC03	19.3	20.5	Min plane	Weak	A weak plane of mineralization crosscutting the rocks @ roughly 50 degree. Same in min-alt zone @ 9.04 - 9.14m and 12.02 - 12.12m.
18HC03	29	31.5	Blocky	moderate	Blocky and fractured rocks (20%)
18HC03	30.05	30.07	Fault	Weak	Rubble with minor gouge.
18HC03	33.77	33.9	Blocky	moderate	Broken pieces of rocks (70%).
18HC03	44.4	44.6	Blocky	moderate	Broken pieces of rocks (100%).
18HC03	51.5	51.54	Blocky	moderate	Broken pieces of rocks (30%).
18HC03	63.3	63.7	Blocky	moderate	Broken pieces of rocks (30%).
18HC03	67.5	68	Blocky	moderate	Broken pieces of rocks (30%).
18HC03	71	72.5	Blocky	Weak	Broken pieces of rocks (10%).
18HC03	44.2	44.4	Min plane	Weak	2 patches of K-alteration (5cm each) at roughly 50 degree to core axis
18HC03	74.5	78	Blocky	moderate	Broken pieces of rocks (30%).
18HC03	86.3	90	Blocky	moderate	Broken pieces of core (30%).
18HC03	90	93	fracture	strong	Rubble with minor gouge.
18HC04	16.3	17.3	Blocky	Strong	Blocky and fractured rocks (70%)
18HC04	24	25.5	Blocky	Weak	Blocky and fractured rocks (20%)
18HC04	32.45	32.76	Blocky	Moderate	Blocky and fractured rocks (60%)
18HC04	41	41.06	Blocky	Strong	Blocky and fractured rocks (80%)
18HC04	55.6	57.1	Fracture	Strong	Fractured rocks around cm-scale brecciated vein.
18HC04	74.5	75	Blocky	Weak	Blocky and fractured rocks (40%)
18HC04	76.8	78	Blocky	Moderate	Blocky and fractured rocks (50%)
18HC04	82.8	84.6	Blocky	Strong	Blocky and fractured rocks (70%)
18HC04	90.45	91	Blocky	Strong	Blocky and fractured rocks (70%)
18HC04	96.3	97.45	Fracture	Moderate	Fractured rocks with chlorite infillings.
18HC05	17.45	18	fracture	Moderate	Fractured rocks along core axis
18HC05	32.65	33	fracture	Moderate	Fractured rocks along core axis
18HC05	78.3	79.5	breccia	Moderate	Blocky and fractured rocks (50%)
18HC06	23.5	22.33	Blocky	Strong	Blocky and fractured rocks (80%)
18HC06	28.05	29.9	fracture	Moderate	Fractured rocks @ 40 - 50 degree to core axis (50%)
18HC06	31.4	36.5	Blocky	Strong	Blocky and fractured rocks (80%)
18HC06	74	75.3	Blocky	Weak	Blocky and fractured rocks (<30%)
18HC06	80.5	86.86	Blocky	Strong	Blocky and fractured rocks (80%) with rubbly material (possible fault gouge)
18HC07	49.5	50	Blocky	Weak	Blocky and fractured rocks (20%)
18HC07	52	53	Blocky	strong	Blocky and fractured rocks (80%)
18HC07	61.55	61.7	Blocky	Weak	Blocky and fractured rocks (30%)
18HC07	69.5	71.3	Blocky	Weak	Blocky and fractured rocks (20%)
18HC08	6.4	9.3	Blocky	Moderate	Blocky and fractured rocks (50%). Little rubbly material at 7m, possibly fault!
18HC08	19	20.9	Blocky	Strong	Blocky and fractured rocks (70%)
18HC08	30.9	32	Blocky	Strong	Rubbly and fractured rocks (70%)
18HC08	48.5	49.9	Blocky	Weak	Blocky and fractured rocks (20%)
18HC09	4.8	6.75	fracture	moderate	Fractured rocks along core axis due to a shallow-angled vein
18HC09	16.12	19.3	Blocky	Strong	Blocky and fractured rocks (70%)
18HC09	44.15	46.35	fracture	moderate	Fractured rocks along core axis
18HC09	47.94	48.05	fault	moderate	Fault gouge and rubbly material in the fault.
18HC09	77.4	78.75	fracture	moderate	Fractured rocks along core axis, blocky intervals (80%). Very little rubble material
18HC10	1.5	2	Blocky	Moderate	Blocky and fractured rocks (50%)
18HC10	27	30	fracture	weak	Fractured and blocky rocks (20%)
18HC10	32.6	33	fracture	moderate	Fractured rocks with yellow - rusty staining on fracture planes

2018 Drill Core Veining

Hole ID	From	To	Vein Style	Composition	% of Rock	Angle to Core	Description
18HC01	22.65	22.8	veinlets	K-Chl-Qtz	10	40	Minute (sub-mm) pink (with white portions) veinlets at 40 - 50 degree. Sulphides (up to 2%) within 1-2cm from the vein.
18HC01	24.97	25.02	vein	Qtz-Carb-Chl	100	50	A white with 2 spots of green (chlorite) and pink (K) in the vein. Vein margins are occupied by chlorite. No sulphides observed in the vein or its margins.
18HC01	35.2	37.1	veinlets	Epidote	0.01	45	Trace minute (sub-mm) epidote veinlets (3-5).
18HC01	47.8	47.8	Veinlet	Unkown	100%	50	2mm wide dull black-coloured vein range from 100 - 175k iron content in XRF.
18HC01	49.45	49.45	stringer	Sulphide	100	40	1mm wide stringer of pyrite (fg; cubic and anhedral).
18HC01	49.65	49.65	Veinlet	Unkown	100	50	2mm wide dull black-coloured vein range from 100 - 175k iron content in XRF. This veinlet is crosscut by a 1mm wide light pink veinlet @ 25 degree to the core axis.
18HC01	66.1	66.27	vein	K-Chl-Carb	50%	30	3 - 4cm wide pink - light green - rusty with spots of malachite staining. Vein composition is a combination of potassium, chlorite, carbonate, heavily oxidized spots beneath the vein and stockwork of light pink veinlets. Sulphides occur at the margins of the veins, particualrily in the oxidized zone. XRF - high values of heavy minerals (Ti, Cr) and K, Ca.
18HC01	68	68	Veinlet	K-Malachite	100	50	A fracture-filled veinlet with green malachite staining.
18HC01	75	77	veinlets	K-Carb-Chl	5%	Random	tockwork of sub-mm up to 1cm wide veinlets with minor sulphides (cpy and py @ 75.84m).
18HC02	12.15	12.15	veinlet	K-carb	100	60	1mm wide K-vein with 3-5% sulphides.
18HC02	23.47	23.48	vein	Qtz - Chl - Carb	100	50	Barren, coarse-grained quartz, carbonate on margin and chlorite within vein.
18HC02	27.12	27.15	vein	Qtz-K-Carb-Chl	90	50	Barren, K-dominated vein with minor quartz, carbonate on margin and chlorite within vein.
18HC02	29.4	29.43	vein	K-carb-chl	100	40	A weathered, slightly oxidized (soft) K-vein with trace chlorite and carbonate. An individual clot of pyrite is seen in the vein.
18HC02	66.52	66.52	veinlet	K-carb	100	40	Barren 0.5cm wide vein with minor sulphides around the lower contact of the vein.
18HC02	66.7	66.71	vein	K-Carb-Chl	100	45	1cm wide pink K and green chl. A weak alteration halo (over 3-4cm) is around the vein.
18HC02	67.67	67.68	vein	Qtz-K-Carb-Chl	100	35	Barren vein with quartz + carbonate on margin and chlorite + K within vein. No sign of sulphides.
18HC02	84	84.2	vein	K-Chl-Qtz	30	10	1 cm wide pink vein with thin film of chlorite on margins. No sulphides seen on or around vein. The rock surrounding the vein (20-35cm above and below the vein) has undergone grain-size reduction and contain disseminated sulphides.
18HC02	94.45	94.48	vein	Qtz-Chl-K-carb	100	40	3-4cm wide mineralized vein with up to 20% sulphides in the vein, mainly clotty py up to 1cm in diameter
18HC03	17.8	18	veinlets	K-Chl-carb	10	45	mm-scale pink - green veinlets parallel to each other. No sulphides in veinlets.
18HC03	22.55	22.55	veinlet	K-Chl	100	50	Mm-scale pink veinlet with chlorite on margins. Trace coarse-grained sulphides
18HC03	24.32	24.35	vein	K-carb	100	50	A 2-3cm wide K-carb vein with no sulphides in or around the vein. The host rock crosscut by the vein is brecciated. This vein crosscut 1mm wide pink veinlet.
18HC03	28.9	29.22	vein	K	100	irregular	A strongly K- altered zone in the core with a relatively sharp lower contact and a gradational uppr contact - possibly a vein
18HC03	34.1	34.14	vein	Chlorite	90	50	A strongly chlorite-altered zone with a relatively sharp contacts, possibly a vein. Up to 5% sulphides.
18HC03	54.78	54.82	vein	K-Chl	50	50	A K-Chl, weathered / oxidized veinlets with rubbly texture.
18HC03	89.3	89.45	vein	K-carb-Chl-silica	40	30	Mineralized vein (up to 5% sulphides, fine to coarse grained pyrite) at margins of vein.
18HC04	23.81	23.82	veinlet	K-Carb	50	30	A 1-2mm wide pink - white veinlet, slightly oxidized and no sulphides.
18HC04	29.45	30.05	veinlets	K-carb	5	30-45	A series of 1-2mm wide, pink - white veinlets with trace chlorite at margins, no sulphides.
18HC04	36.1	38.8	veinlets	K-carb-Chl-silica	5	40	mm-scale veinlets crosscuting the rock @ 35 - 45 degree to core axis. No mineralization in or around the vein, only oxidized alteration halos around veining.
18HC04	44.95	45.5	veinlet	K-carb-malachite	5	10	mm-scale veinlet with malachite staining in the vein. No alteration halos but trace py and cpy in the vein.
18HC04	56.6	56.95	veins	K-Carb-Qtz-Chl	30	40	Cm-scale pink +/-white veins with up to 15% sulphides, cubic pyrite, at the margins of the vein (over 1cm wide mineralized halo). The red/maroon alteration halo is seen in the 2nd vein, where the host rock is brecciated over a 2cm wide.
18HC04	63.36	63.46	vein	K-carb-Chl-silica	50	40	Barren, sheeted carb/chl+qtz/K veinlets with no alteration halo around the vein. The entire width of the veinlets is 2cm wide.
18HC04	83.7	83.7	veinlet	K-carb	100	40	1mm wide, maroon red with carb on margins. No sulohides in/around veining.
18HC04	85.15	85.42	vein	K-carb-Chl-silica	60	30	3-4cm wide vein with up to 10% coarse-grained pyrite, cubic and fine-grained py in stringers.
18HC05	28.17	28.33	vein	K-carb-Chl-silica	40	40	1-2cm wide veins with diss cubic sulphides at the margin of the vein. The lower contact of the vein with the country rocks is brecciated
18HC05	28.82	30.9	veinlets	K-carb	2	40	Trace sub-mm to mm-scale veinlets. No sulphides
18HC05	30.9	31.16	veins	K-carb-chll-silica	90	50	An 8cm wide pink vein with major sulphides and 2cm of brecciated country rocks with chlorite- carbonate infilling
18HC05	34.4	34.46	vein	K	100	70	A light red vein with trace sulphides
18HC05	37.8	41.85	veins	K-carb	5	70	A light red veins with trace sulphides
18HC05	60.97	70.05	vein	K-carb	30	40	Barren mm-scale vein with alteration halo.
18HC05	70.27	70.3	vein	K-Carb-Chl	60	50	Barren 1cm wide vein.

2018 Drill Core Veining

Hole ID	From	To	Vein Style	Composition	% of Rock	Angle to Core	Description
18HC05	61.65	61.8	vein	K-Carb	30	40	Red alteration halo crosscut by mm-scale veinlet with trace alteration.
18HC05	62.9	62.91	vein	Carb-Chl	100	40	Brecciated carb-chl vein with trace sulphides.
18HC05	66.08	66.08	vein	Carb-Chl-K	100	35	Mm-scale vein with trace sulphides.
18HC05	68.35	68.35	veinlet	Carb-Chl	100	40	Mm-scale veinlet with trace sulphides.
18HC05	69.7	69.7	veinlet	K-Chl-Carb	100	40	1cm wide vein with 1% cpy.
18HC05	83.97	83.97	vein	Chl-Carb	100	55	1cm wide vein with up to 20% sulphides
18HC05	84.45	84.45	veinlet	Carb-Chl	100		3mm wide carb-chlorite vein with no sulphide
18HC06	13.1	13.2	veinlet	Carb	10	30	3mm wide veinlet with brecciated small fragments of the country rocks in the veinlet. NO sulphides
18HC06	42.8	43.3	veinlet	K-Carb-(hem?)	5	50	1-2mm wide, white, light pink, barren veinlets at irrgular and 50 degree to core axis.
18HC06	45.1	45.6	veinlet	K-Carb	5	50	1-2mm wide, white, light pink, barren veinlets at 50 degree to core axis.
18HC06	50.6	51	vein	K-Chl-Carb-Silica	20	35	2-3cm wide vein with sulphides (up to 10-15%) at margins of the vein
18HC06	52	69.1	veinlets	K-Chl-Carb-Silica	1	45	Trace mm-scale veinlets, mostly barren, only @ 68.5m is mineralized with py and cpy (5mm; 10-15% sulphides).
18HC06	73.4	73.75	vein	K-Chl-Carb-Silica	90	30	a 7cm wide vein with up to 5% cpy (medium-grained) and trace medium-grained pyrite.
18HC06	77.3	77.5	vein	K-Chl-Silica	10	20	A 1cm wide vein with red K-vein at margins and light pink veinlet central to chlorite and carbonate. Both cpy (in vein) and py (at margins) are seen
18HC06	86.05	86.3	vein	Chl-Carb-K	30	5	A 1cm wide vein cpy blobs (up to 5mm in vein and marginal to vein) and disseminated py (at margins)
18HC07	11.45	11.55	vein	K-Carb	20	50	2cm wide vein with up to 20% pyrite
18HC07	31.4	32.2	veinlets	K-Carb-Chl	30	40	Mm-scale veinlets with minor sulphides on the margins.
18HC07	48	54	veinlets	K-Carb	1	40	Trace sub mm-scale veinlets in weakly altered rocks
18HC07	72.85	73.25	veinlets	K-Carb	0.025	40	trace sub mm-scale light coloured veinlets.
18HC08	9.05	9.17	vein	K-Carb-silica	80	50	Light red vein with minor sulphides
18HC08	9.4	9.48	vein	K-silica	30	40	LIght red vein with major sulphides (20% pyrite stringer)
18HC08	16.7	17.9	vein	K-silica	50	40	Light red, strong alteration, possibly vein-like alteration, sharp margins on the upper contact and gradational contact in the lower contact
18HC08	19	23.27	vein	K-silica	90	50	Massive, light red vein with minor black halos of the country rocks with up to 1cm rounded quartz eyes and minor sulphides
18HC08	32.95	33.07	vein	K-silica-carb-chl	50	50	1cm wide vein with trace sulphides
18HC08	45.82	45.87	vein	Carb-Chl	70	80	Massive carbonate vein with rounded chlorite pods. No sulphides
18HC09	4.7	6.1	vein	Silica-carb-chl	10	5	sheeted vein along core axis with no sulphides and trace red spots of oxidation
18HC09	9.2	10.35	veinlets	Silica-carb-chl-K	10	10	sheeted veinlets along core axis, almost parallel to each other with no sulphides
18HC09	17.6	20.4	vein	K-silica-Chl	70	10	Vuggy, light red, weathered, vein with strong alteration halos around it. the vein is strongly mineralized with up to At the bottom of the vein, there seems another more defined, sharp-contacted vein intruding the vein at 40 degree with trace pink veinlets within this vein and xenoliths of the country rocks (V2 crosscut V1 - marked on the core - pls see core photo)
18HC09	22.6	23	vein	Carb-Chl-K	20	80	Mineralized (10% cpy) in Chl-Carb pods in what looks like an edge of a vein.
18HC09	36.9	36.91	veinlet	K-carb	100	45	3mm wide , light coloured vein with a single cpy grain
18HC09	47.7	48.3	veinlets	K-carb	10	45	Trace, mm-scale veinlets, irregular orientation to core axis, light alteration halo in this interval, trace sulphides
18HC09	55.46	55.7	veinlet	Carb - K - Chl	10	30	mm-scale veinlet with trace sulphides on the margins of the vein.
18HC09	74.15	74.6	vein	Chl - Carb - Silica	30	50	2cm wide sheeted vein, dark green + soft yellow material + carb + silica; no sulphides
18HC09	78.25	78.84	veinlet	Chl - Carb - Silica	5	10	3mm wide veinlet, sheeted, similar composition to the last vein
18HC10	16	16.15	vein	K-silica	80	45	A 15cm wide, light to dark red, vuggy, barren vein; 2 sets are seen, a light red is intruded by a deep red vein. Sulphides only in the country rock
18HC10	25.65	25.82	vein	Carb-K-silica-Chl	50	40	0.5cm sharp contact vein with 2cm wide, strong alteration halo - no sign of sulphides.
18HC10	29.82	33.64	veinlets	K-carb-silica	2	40	Minor mm up to 1cm wide veinlets with trace mineralization at margins of veins - no sulphides in the vein, except for the one @ 31.66m
18HC10	31.66	31.66	vein	Carb-K	100	80	a 1cm wide vein, pink-coloured with a cm-wide clot of cpy.
18HC10	39.95	45.2	veinlets	Carb	2	50	Minor mm scale white - light pink carb veinlets (high % of Ca from XRF analysis)

2018 Drill Core Mineralization

Hole ID	From	To	Mineral	Mineral I %	Mineral I Occurrence	Mineral	Mineral II %	Mineral II Occurance	Mineral	Mineral III %	Mineral III Occurance	Description
18HC01	4.85	5.12	Py	5	Stringers	Cpy	5	Stringers	Pyr	5	Stringers	Fine-grained py, cpy and pyr in mm-scale stringers hosted in metasedimentary boulder at the start of the hole.
18HC01	5.12	12.75	Py	0.2	Disseminated	Co-As	0.1	disseminated	Cpy			Ultrafine to medium grained blebs of pyrite seen in chloritized zones and around sauccertized plagioclase and K-zones. 1 small grain of cpy is seen.
18HC01	12.75	14	Py	0.5	Disseminated	Co-As	0.1	disseminated				Ultrafine to medium grained blebs of pyrite and dark gery sulphides hosted in a weak K-altered interval.
18HC01	14	20.7	Py	0.01	Disseminated	Co-As	0.1	disseminated				Trace very fine-grained pyrite
18HC01	20.7	29.8	Py	0.5	Disseminated	Co-As	0.1	disseminated	Cpy	0.01		Minor disseminated sulphides throughout, mainly in K-altered, fractured, weakly silicified domains from 22.7 -24.10m --> @ this interval, sulphides (up to 1% py) are concentrated in weakly - moderately silicified, K-altered zones.
18HC01	29.8	35.2	Py	0.01	Disseminated							Trace pyrite throughout.
18HC01	35.2	37.1	Py	0.5	Disseminated							Minor sulphides in weakly altered k-altered rocks.
18HC01	37.1	51	Py	0.01	Disseminated	Py	0.01	Stringer	Cpy	0.01		Trace disseminated py and an individual stringer at 49.45m.
18HC01	51	52.8	Py	0.5	Disseminated	Cpy	0.01	disseminated				Fine-grained py and cpy occur in clots and individual blebs.
18HC01	52.8	63.85	Py	0.01	Disseminated							Fine-grained py occur as individual blebs.
18HC01	63.85	64.1	py	0.5	Disseminated							Fine-grained py occur as clots and individual blebs.
18HC01	64.1	66.1	py	0.01	Disseminated							
18HC01	66.1	68.33	Py	0.5	Disseminated	Cpy	0.01	disseminated				Fine-grained py and cpy occur in clots and individual blebs.
18HC01	68.33	75.8	py	0.01	Disseminated							
18HC01	75.8	77		0.5	Disseminated	Cpy	0.01	disseminated				Fine-grained py and cpy occur in clots and individual blebs. A large 1cm wide cluster of py and cpy occur in a 1cm wide pink vein @ 75.85m
18HC01	77	85.7		0.01	Disseminated							
18HC02	3	15.15	py	0.01	disseminated	Cpy	0.01	disseminated				Trace pyrite throughout, except for 2 zones @ 3..47 - 3.53m and 5.6 - 5.7m contain up to 10% sulphides (py and Cpy)
18HC02	15.15	22.75	py	0.05	disseminated	Cpy	0.1	disseminated				Cm-scale zones of moderate mineralization occur @ 15.15 - 15.25m. 17.55 - 17.77; 17.92 - 18.03, 19.13 - 19.18m; these zones have at least 0.5 and a max of 3% sulphides; ultrafine-grained py to cubic mg, and fine grained cpy.
18HC02	22.75	28.2	py	0.01	disseminated							Trace pyrite throughout, however the zone is moderately altered and could contain micro-sulphides that can not be seen in naked eyes or hand lens.
18HC02	28.2	30.2	py	0.2	disseminated	Cpy	0.01	clot				Trace pyrite throughout with an individual 1cm wide clot of cpy @ 28.28m
18HC02	35.85	35.95	py	0.5	disseminated	Cpy	0.1	disseminated				Fine to medium-grained py and cpy in moderately altered K-zone + chlorite + altered plagioclase
18HC02	35.95	48.95	py	0.01	disseminated							Rare pyrite
18HC02	48.95	53.7	py	0.5	disseminated	Cpy	0.01	disseminated				Fine to medium-grained diss and clotty py + diss cpy in a an altered K-zone
18HC02	53.7	66.2	py	0.01	disseminated							Trace pyrite
18HC02	66.2	68.8	py	0.2	disseminated							Fine to medium-grained pyrite in around minor veining and up to 1% sulphides from 68.55 - 68.90m
18HC02	87.07	87.2	py	2	disseminated							Fine to medium-grained py in moderately silicified zone
18HC02	68.8	89.45	py	0.01	disseminated							Trace pyrite
18HC02	89.45	91.45	py	0.1	disseminated							Disseminated py throughout and few clotty py within this interval
18HC02	91.45	94.45	py	0.01	disseminated							Trace pyrite
18HC02	94.45	94.48	py	10	disseminated							Up to 10% fine-grained clotty py in a quartz - chlorite - k - carbonate vein.
18HC02	94.48	105	py	EOH								Trace
18HC03	3	9.05	py	0.01	disseminated							Rare sulphides
18HC03	9.05	9.15	py	2	disseminated							Fine grained pyrite in weakly silicified zone with potassic altertaion that crosscut the core @ 40-50 degree to CA. Pyrite mainly seen in chlorite and magnetite pods.
18HC03	12.02	12.5	py	1	disseminated							Fine grained pyrite in weakly silicified zone with potassic altertaion. Pyrite is both diss and clotty
18HC03	12.5	19.5	py	0.05	disseminated							Fine-grained pyrite (diss and clotty) throughout the interval
18HC03	19.5	20.5	py	3	disseminated	cpy	0.01	disseminated				Fine to medium grained pyrite (diss and clots) and fine-grained cpy
18HC03	20.5	27.5	py	0.01	disseminated							Fine-grained disseminated pyrite
18HC03	27.5	45.2	py	0.5	disseminated	cpy	0.01	disseminated				Fine to medium grained pyrite (diss and clots) with fine-grained cpy. Up to 3% sulphides @ 27.53-27.6, 34.05-34.20, 38.85-39, 39.45-39.65m. Some patches within this interval contain lesser sulphide contents than others.
18HC03	45.2	89.3	py	0.01	disseminated							Rare sulphides
18HC03	89.3	89.45	py	3	disseminated	py	3	stringers				Mm-scale stringers of fine-grained pyrite and diss, coarse-grained cubic pyrite @ margins of vein
18HC03	89.45	93.5	py	0.01	disseminated							Rare sulphides
18HC03	93.5	95.5	py	2	disseminated	py	0.2	stringers	cpy	0.5	diss	Diss and clotty py + diss cpy in a moderately chloritized and silica-altered interval. Very heavy core
18HC03	95.5	105	py	0.01	disseminated	EOH						Rare sulphides.
18HC04	7.1	8	py	0.5	disseminated							Fine grained sulphides in chloritic and magnetite pods.
18HC04	12.5	13.11	py	0.2	disseminated							Fine to medium-grained disseminated and clotty pyrite
18HC04	13.11	13.5	py	3	disseminated							Fine to medium-grained disseminated and clotty pyrite

2018 Drill Core Mineralization

Hole ID	From	To	Mineral	Mineral I %	Mineral I Occurrence	Mineral	Mineral II %	Mineral II Occurance	Mineral	Mineral III %	Mineral III Occurance	Description
18HC04	16.35	16.75	py	3	disseminated	cpy	0.01	disseminated				Fine to medium-grained disseminated and clotty pyrite + 2 grained of cpy
18HC04	17.42	17.5	py	5	disseminated							Fine to medium-grained disseminated and clotty pyrite
18HC04	17.5	22.4	py	0.2	disseminated							Fine-grained, disseminated pyrite throughout in both k-rich and chlorite-altered intervals
18HC04	40	44.6	py	0.2	disseminated							Fine-grained, disseminated and clotty pyrite
18HC04	51.8	52.05	py	3	clots							Fine-grained clotted pyrite (up to 1cm wide)
18HC04	54.15	57.9	py	1	disseminated	cpy	0.01	disseminated				Fine to medium-grained pyrite around K-Carb-Chl-Qtz veinlets in strongly K-rich + silica (reddish) halo
18HC04	63.05	64.8	py	0.2	disseminated							Fine-grained, disseminated and clotty pyrite
18HC04	64.8	99	py	0.01	disseminated							Rare sulphides.
18HC05	85.15	85.42	py	5	disseminated	py	1	clots				Fine-grained py in stringers and cubic, coarse-grained py in a 4cm wide vein.
18HC05	14.6	16.65	py	3	disseminated	py	2	stringer	cpy	0.2	disseminated	Fine to medium-grained disseminated + clotty pyrite and @ a stringer @ 15 - 15.1m. Trace fine-grained cpy
18HC05	16.65	24.34	py	0.2	disseminated							Fine to medium-grained disseminated and clotty pyrite
18HC05	26.5	28.33	py	0.1	disseminated							Fine to medium-grained disseminated pyrite
18HC05	30.9	31.16	py	0.01	disseminated	cpy	2	disseminated				Trace fine-grained disseminated py and up to 2%, medium-grained, disseminated cpy in light red vein.
18HC05	34.4	34.46	py	0.5	disseminated							Fine to medium-grained disseminated pyrite in a vein
18HC05	37	42.50	py	0.5	disseminated	cpy	0.2	disseminated				Fine to medium-grained disseminated pyrite and cpy in mod-strongly altered zones
18HC05	83.97	83.98	py	10	stringer							Fine to medium-grained pyrite in a 1cm wide vein.
18HC06	0.4	12.30	py	0.01	disseminated							Trace fine-grained pyrite throughout
18HC06	12.3	20.90	py	1	disseminated	cpy	0.1	disseminated				Fine to medium-grained disseminated pyrite in chloritic domains and trace disseminated cpy in strongly altered zones.
18HC06	20.9	49.00	py	0.01	disseminated							Trace fine-grained pyrite
18HC06	49.00	50.60	py	0.5	disseminated							Trace up to 0.5% fine to medium-grained py throughout this interval
18HC06	50.60	51.00	py	3	disseminated	cpy	7	disseminated				Fine to medium-grained disseminated pyrite and cpy on the margins of a 2-3cm wide vein. The mineralized halo extend over 10cm on both ends of the vein.
18HC06	68.50	68.51	py	10	stringer							Fine to medium-grained pyrite clots / stringer in 0.5cm wide Carb-Chl-K-silica vein
18HC06	73.40	73.75	cpy	5	disseminated							Fine to medium-grained disseminated and clotty cpy in a 7cm wide vein
18HC06	77.30	77.50	py	2	disseminated	cpy	0.5	disseminated				Fine to medium-grained disseminated and clotty py and cpy in a cm wide vein
18HC06	86.05	86.30	py	2	disseminated	cpy	2	disseminated				Fine to medium-grained disseminated and clotty py and cpy in a cm wide vein
18HC07	4.17	4.37	py	0.5	disseminated							Fine to medium-grained disseminated and clotty py in moderatly altered zone
18HC07	10.73	11.45	py	0.2	disseminated							Fine to medium-grained disseminated and clotty py in moderatly altered zone
18HC07	11.45	11.55	py	20	stringer							Pyrite stringers in a chlorite - K vein.
18HC07	11.55	24.24	py	0.2	disseminated							Fine to medium-grained disseminated and clotty py in moderatly altered zone
18HC07	29.00	32.40	py	0.5	disseminated							Fine to medium-grained disseminated and clotty py in a weakly altered zone
18HC07	32.40	74.00	py	0.01	disseminated							Rare medium-grained pyrite.
18HC08	9.52	9.48	py	5	disseminated	py	5	clotty				Fine to medium-grained disseminated and clotty py in a cm wide vein
18HC08	17.50	16.70	py	0.2	disseminated							Fine to medium-grained disseminated and clotty py in moderatly altered, light red patches
18HC08	16.70	19.00	py	1	disseminated	py	0.5	clotty				Fine to medium-grained disseminated and clotty py in moderatly altered, light red patches
18HC08	19.00	23.00	py	0.2	disseminated							Fine to medium-grained disseminated and clotty py in a light red vein
18HC09	4.04	9.20	py	0.01	disseminated							Trace pyrite.
18HC09	9.20	17.60	py	1	disseminated	cpy	0.01	disseminated				Fine to medium-grained disseminated and clotty py + trace cpy in altered rocks
18HC09	17.60	18.50	py	2	disseminated	cpy	10	disseminated				Fine to medium-grained disseminated and clotty cpy + up to 2% py in a vein
18HC09	18.50	27.50	py	0.2	disseminated	cpy	0.2	disseminated				Fine to medium-grained disseminated + clotty cpy and py (up to 3% from 22.6 - 23m).
18HC09	27.50	80.00	py	0.01	disseminated	cpy	0.01	disseminated				Fine to medium-grained disseminated py and cpy, mainly close to narrow veins and veinlets.
18HC10	1.00	7.66	py	0.01	disseminated							Rare sulphides
18HC10	7.66	8.05	py	0.5	disseminated	cpy	0.05	disseminated				Fine to medium-grained disseminated py and cpy in a moderate-altered patch
18HC10	10.90	16.37	py	0.5	disseminated	cpy	0.1	disseminated				Fine to medium-grained disseminated and clotty py and cpy.
18HC10	16.37	16.61	py	5	disseminated	cpy	1	disseminated				Fine to medium-grained disseminated and clotty py and cpy in a strongly altered zone
18HC10	16.61	17.85	py	0.2	disseminated	cpy	0.01	disseminated				Fine to medium-grained disseminated and clotty py and cpy.
18HC10	17.85	24.40	py	3	disseminated	cpy	5	disseminated				Fine to medium-grained disseminated and clotty py and cpy in strongly silicified zone. The zone hosts 1-3% sulphides throughout but dm-scale sections contain more than 5% cpy and up to 3% py.
18HC10	24.40	35.60	py	0.5	disseminated	cpy	0.01	clot				Fine to medium-grained disseminated py; @ 31.66m, a pink vein (Eritherite-coloured) contain a 1cm wide cpy clot
18HC10	35.27	35.35	py	10	stringer							Ultra-fine to medium-grained pyrite in a cm-wide stringer @ 45 degree to the core axis

Appendix 3. Analytical Results and Laboratory Certificates

2017 Soil Sample Results

2018 Soil Sample Results

2018 Rock Sample Results

2018 Diamond Drill Results

2017 Soil Sample Results

Sample ID	Field ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
8893689	A1	0.24	5.79	0.90	541	1.17	0.06	1.45	0.03	17.40	6.46	39.80	1.05	3.30	1.22	13.80	0.23	1.80	0.019	1.72	8.50	9.30	0.52	250	0.31	2.27	4.40	16.20	228	11.10	55.00	<0.002	0.02	0.11	6.10	0.60	1.00	336	0.20	<0.01	2.40	0.19	0.25	0.52	35.50	0.10	8.40	20.50	100	17T282580
8893690	A2	0.15	6.47	0.80	524	1.27	0.07	1.37	0.05	19.20	7.99	47.50	1.14	2.50	1.86	15.70	0.48	2.30	0.026	1.70	9.30	12.90	0.52	242	0.43	2.19	6.70	17.20	178	11.50	53.70	<0.002	0.03	0.10	7.00	0.80	1.10	325	0.45	<0.01	2.50	0.23	0.26	0.62	51.10	0.10	9.00	23.10	126	17T282580
8893691	A3	0.17	6.37	0.70	521	1.32	0.07	1.33	0.05	28.80	10.60	48.80	1.19	6.00	1.71	15.00	0.23	2.20	0.022	1.73	11.70	12.10	0.60	240	0.38	2.16	5.30	22.90	233	11.40	58.90	<0.002	0.04	0.13	6.60	0.90	0.90	323	0.24	<0.01	4.90	0.19	0.27	0.63	44.50	0.10	9.60	23.10	124	17T282580
8893692	A4	0.16	6.75	2.80	452	1.14	0.08	1.15	0.08	15.20	7.64	50.10	1.16	3.90	2.30	16.10	0.43	1.30	0.029	1.43	7.30	14.40	0.43	207	0.56	1.89	5.70	17.80	322	11.70	49.40	<0.002	0.05	0.15	6.20	0.90	1.10	281	0.26	<0.01	2.10	0.21	0.25	0.52	53.40	0.10	7.60	25.50	71	17T282580
8893693	A5	0.13	5.31	0.70	480	0.98	0.07	1.08	0.02	18.00	4.28	34.30	0.99	1.50	1.20	14.20	0.38	1.90	0.022	1.53	8.80	9.40	0.36	188	0.51	1.82	4.60	10.90	204	11.20	47.70	<0.002	0.03	0.07	5.30	0.60	0.90	276	0.17	<0.01	2.30	0.19	0.23	0.61	38.20	<0.1	6.80	16.70	99	17T282580
8893694	A6	0.31	6.69	3.80	424	1.35	0.16	1.21	0.10	42.50	19.10	74.50	1.71	22.10	2.97	15.30	0.35	2.10	0.036	1.51	12.20	26.10	0.83	351	0.84	1.77	7.20	36.70	424	11.80	57.20	<0.002	0.05	0.29	9.50	1.30	1.30	208	0.36	0.02	4.10	0.28	0.25	1.10	68.00	0.40	12.30	34.50	116	17T282580
8893695	A7	0.27	6.79	3.10	391	1.33	0.26	1.14	0.10	23.80	17.40	67.00	1.99	15.10	3.35	15.80	0.35	2.40	0.042	1.40	11.60	26.60	0.72	336	0.93	1.61	7.80	32.50	1140	11.80	54.80	<0.002	0.05	0.35	9.60	1.40	1.60	198	0.38	<0.01	4.20	0.27	0.26	1.26	69.90	0.40	13.70	60.80	129	17T282580
8893696	A8	0.26	6.62	2.40	496	1.26	0.14	1.46	0.09	27.50	13.70	51.80	1.50	11.80	2.37	15.00	0.33	3.00	0.029	1.69	11.40	15.20	0.69	334	0.59	2.02	6.90	28.80	460	11.30	54.80	<0.002	0.03	0.17	8.70	1.00	1.20	287	0.34	0.01	3.70	0.28	0.26	0.91	60.90	0.30	11.30	47.60	159	17T282580
8893697	A9	0.16	5.99	3.90	476	1.29	0.12	1.67	0.07	34.70	12.50	50.00	1.23	17.00	2.04	13.80	0.35	3.20	0.026	1.54	12.90	16.10	0.71	381	0.38	2.18	6.20	26.10	233	11.00	54.00	<0.002	0.03	0.23	8.60	1.00	1.10	318	0.31	0.02	3.60	0.25	0.23	0.80	57.70	0.20	13.40	30.30	155	17T282580
8893698	A10	0.14	6.44	3.90	529	1.40	0.10	1.61	0.06	39.80	11.40	57.20	1.06	13.60	2.16	14.40	0.39	1.90	0.023	1.65	12.50	13.90	0.64	336	0.46	2.34	5.30	26.70	339	12.10	52.80	<0.002	0.03	0.15	7.60	1.00	1.10	351	0.25	0.02	6.10	0.22	0.25	0.67	58.20	0.20	11.60	30.70	97	17T282580
8893699	A11	0.18	6.70	6.70	506	1.46	0.15	1.56	0.08	40.20	15.60	66.70	1.55	32.50	2.26	16.70	0.36	2.50	0.031	1.65	18.10	14.20	0.74	335	0.63	2.16	6.60	32.50	307	14.20	62.00	<0.002	0.03	0.22	9.20	0.80	1.30	322	0.29	<0.01	5.00	0.24	0.29	0.97	59.70	0.20	14.60	40.20	129	17T282580
8893700	A12	0.17	6.30	8.60	432	1.37	0.34	1.47	0.06	65.50	15.80	77.10	1.60	72.80	2.94	15.50	0.39	2.90	0.032	1.50	21.00	17.30	0.89	486	0.56	2.04	6.70	34.70	441	14.10	55.40	<0.002	0.03	0.27	11.20	1.20	1.30	258	0.32	0.02	7.60	0.31	0.25	1.39	76.20	0.30	20.40	44.90	153	17T282580
8893701	A13	0.25	6.46	9.60	457	1.70	0.36	1.48	0.18	87.50	21.40	67.60	1.86	66.80	2.82	16.30	0.42	2.90	0.036	1.62	26.70	20.40	0.85	486	0.74	2.03	7.30	35.30	449	19.60	58.80	<0.002	0.03	0.31	10.80	1.40	1.30	269	0.36	0.04	7.80	0.30	0.28	1.52	70.20	0.30	26.80	204.00	159	17T282580
8893702	A14	0.20	6.28	5.30	497	1.36	0.17	1.58	0.12	39.70	10.10	57.40	1.19	18.40	2.06	15.30	0.40	2.30	0.027	1.61	16.00	14.60	0.65	365	0.58	2.29	5.40	22.40	196	11.60	55.10	<0.002	0.03	0.17	8.70	0.60	1.00	347	0.26	<0.01	4.00	0.25	0.24	0.97	55.10	0.20	16.90	33.20	128	17T282580
8893703	A15	0.16	6.22	5.10	488	1.43	0.41	1.55	0.06	31.80	14.30	53.60	1.28	40.80	2.06	15.30	0.41	2.80	0.026	1.58	12.80	16.00	0.71	383	0.83	2.20	6.10	25.30	199	12.10	54.60	<0.002	0.03	0.16	8.60	0.70	1.00	332	0.27	<0.01	3.30	0.25	0.26	0.85	55.30	0.20	13.50	39.10	149	17T282580
8893704	A16	0.16	6.27	1.20	506	1.22	0.11	1.54	0.04	28.30	9.11	35.80	0.97	17.00	1.84	14.20	0.40	2.10	0.023	1.66	11.60	10.20	0.63	299	0.48	2.31	4.90	20.60	337	13.50	51.80	<0.002	0.03	0.16	7.80	1.30	1.20	350	0.23	<0.01	3.50	0.21	0.24	0.68	49.40	0.10	12.50	26.40	115	17T282580
8893705	A17	0.40	6.66	2.60	489	1.38	0.09	1.43	0.07	34.90	12.00	45.20	1.04	18.50	2.13	14.20	0.45	2.00	0.026	1.60	13.70	13.60	0.59	268	0.67	2.13	6.10	26.30	343	11.70	50.60	<0.002	0.04	0.11	7.70	1.00	0.90	323	0.29	<0.01	4.20	0.21	0.24	0.81	50.40	0.10	11.10	33.60	105	17T282580
8893706	A18	0.32	6.41	4.70	480	1.61	0.23	1.56	0.08	41.70	16.20	60.00	1.24	20.70	2.79	15.80	0.51	3.50	0.032	1.58	14.80	14.10	0.71	367	0.90	2.10	7.30	27.70	415	18.40	50.60	<0.002	0.04	0.19	9.20	1.20	1.30	312	0.37	0.02	4.40	0.30	0.25	1.12	70.50	0.40	13.90	43.80	197	17T282580
8893707	A19	0.21	6.34	1.20	491	1.41	0.08	1.61	0.08	23.50	12.70	57.00	0.98	4.80	2.16	14.30	0.55	1.90	0.024	1.59	9.90	10.80	0.64	353	0.39	2.25	5.70	24.60	620	11.00	53.10	<0.002	0.03	0.13	7.80	0.70	1.00	340	0.26	<0.01	2.10	0.24	0.23	0.63	61.10	0.10	11.40	52.90	105	17T282580
8893708	A20	0.15	6.40	1.50	535	1.44	0.09	1.43	0.04	28.80	9.92	43.00	1.02	10.00	2.23	15.50	0.57	1.60	0.025	1.73	11.70	11.80	0.56	276	0.57	2.30	5.40	20.70	370	11.80	56.50	<0.002	0.03	0.14	6.50	0.70	1.00	361	0.24	<0.01	2.70	0.22	0.27	0.57	55.50	0.10	9.50	30.80	89	17T282580
8893709	A21	0.43	6.26	2.70	484	1.28	0.10	1.42	0.15	28.10	14.00	60.50	1.46	8.30	2.26	15.40	0.59	3.10	0.032	1.58	13.70	13.90	0.57	696	0.69	1.95	7.40	21.20	512	12.00	54.00	<0.002	0.04	0.22	7.90	0.70	1.20	288	0.34	<0.01	5.40	0.27	0.25	1.00	59.40	0.40	11.20	64.80	162	17T282580
8893710	B3	0.25	6.43	1.70	535	1.37	0.09	1.85	0.07	60.00	12.40	74.00	1.43	18.00	2.26	15.30	0.65	2.40	0.027	1.80	29.10	16.50	0.92	359	0.45	2.32	6.20	31.30	550	15.00	63.20	<0.002	0.09	0.31	9.30	1.30	1.40	343	0.28	<0.01	8.70	0.24	0.30	1.90	65.00	0.40	16.50	47.80	133	17T282580
8893711	B4	0.17	6.73	2.70	556	1.65	0.12	1.93	0.13	39.20	16.50	73.80	1.62	36.90	2.36	16.40	0.54	2.10	0.029	1.86	19.70	19.70	1.04	361	0.35	2.44	6.30	33.70	533	12.90	68.50	<0.002	0.05	0.14	10.00	1.20	1.00	352	0.28	<0.01	4.00	0.25	0.31	1.06	57.90	0.50	17.30	40.60	119	17T282580
8893712	B5	0.18	6.53	3.10	503	1.49	0.10	2.01	0.05	36.60	15.40	58.40	1.11	16.80	2.95	15.20	0.57	2.20	0.031	1.66	16.80	15.80	1.10	457	0.55	2.50	11.70	32.10	594	11.30	56.00	<0.002	0.12	0.14	11.60	<0.5	1.10	356	0.32	<0.01	3.80	0.31	0.27	0.87	98.00	0.30	16.50	41.20	121	17T282580
8893713	B6	0.17	6.47	4.00	535	1.46	0.09	1.86	<0.02	42.60	13.20	54.80	1.61	19.10	2.37	16.30	0.57	2.50	0.023	1.81	21.00	18.00	0.98	365	0.49	2.29	7.90	31.70	515	13.10	67.90	<0.002	0.28	0.11	9.40	0.90	13.70	334	0.40	<0.01	5.80	0.25	0.31	0.90	57.50	0.20	16.00	39.90	136	17T282580
8893714	B7	0.15	6.48	2.50	479	1.43	0.10	2.22	0.05	46.70	13.10	65.30	1.08	6.10	2.82	15.90	0.61	3.50	0.034	1.61	21.50	13.50	1.11	482	0.36	2.39	7.10	28.30	666	14.40	57.10	<0.002	0.09	0.16	12.10	1.00	1.20	373	0.32	<0.01	4.50	0.31	0.24	0.93	81.30	0.20	20.90	38.50	198	17T282580
8893715	B8	0.21	6.51	4.40	434	1.22	0.22	1.27	0.09	34.30	19.20	79.00	2.04	31.00	3.20	15.50	0.66	2.60	0.033	1.54	12.20	23.90	0.94	435	0.61	1.83	7.60	43.00	389	15.40	59.80	<0.002	0.03	0.35	10.40	0.60	1.40	203	0.38	<0.01	4.00	0.32	0.26	1.21	84.30	0.60	14.10	51.00	138	17T282580
8893716	B9	0.31	6.08	6.30	430	1.30	0.15	1.51	0.07	35.60	15.90	75.10	1.52	22.10	2.88	15.00	0.62	3.30	0.034	1.55	16.50	19.30	0.86	455	0.49	2.02	8.50	31.80	301	12.80	55.30	<0.002	0.03	0.26	10.00	0.80	1.30	256	0.37	<0.01	5.20	0.37	0.24	1.01	77.40	0.30	15.50	37.50	195	17T282580
8893717	B10	0.25	7.07	6.10	481	1.31	0.13	1.37	0.12	46.30	22.40	79.90	1.62	37.10	2.80	15.30	0.62	2.70	0.032	1.61	14.30	23.60	0.83	345	0.68	1.91	8.00	43.00	441	13.20	54.80	<0.002	0.04	0.28	9.50	1.30	1.20	261	0.38	<0.01	4.80	0.30	0.27	1.03	68.70	0.30	13.10	48.30	143	17T282580
8893718	B11	0.16	6.85	27.00	491	1.38	0.14	1.46	0.09	33.40	20.00	71.80	1.38	25.30	3.19	15.90	0.62	3.70	0.034	1.63	16.00	21.40	0.78	332	1.71	1.97	7.90	36.20	268	14.70	51.80	<0.002	0.04	0.29	8.60	0.70	1.20	292	0.38	0.03	5.50	0.31	0.27	1.14	81.00	0.20	12.10	50.10	210	17T282580
8893719	B12	0.37	9.34	3.10	595	1.74	0.15	1.84	0.10	38.50	24.00	96.30	2.18	41.50	3.67	20.60	0.39	3.90	0.044	2.12	18.00	27.70	1.16	506	0.94	2.80	10.40	46.60	462	15.60	77.50	<0.002	0.05	0.40	13.50	1.40	1.80	334	0.68	0.02	6.70	0.38	0.35	1.63	88.70	0.50	19.00	49.60	222	17T282580
8893720	B13	0.18	6.48	8.00	530	1.51	0.19	1.54	0.07	20.90	9.76	46.20	1.16	14.40	1.67	15.00	0.53	1.90	0.024	1.74	9.60	13.60	0.60	298	0.58	2.44	4.30	20.40	207	14.80	56.40	<0.002	0.03	0.23	7.10	0.80	1.00	371	0.27	0.04	2.60	0.19	0.28	0.66	49.70	0.20	9.80	33.80	91	17T282580
8893721	B14	0.22	6.51	8.30	467	1.48	2.55	1.50	0.09	36.90	20.10	68.10	1.89	68.50	2.81	17.90	0.57	3.30	0.039	1.60	19.80	20.80	0.91	454	0.68	2.00	8.50	36.00	255	13.70	61.40	<0.002	0.03	0.37	10.00	1.10	1.50	273	0.41	0.01	5.40	0.33	0.29	1.16	75.10	0.30	16.50	54.30	184	17T282580
8893722	B15	0.34	5.64	3.40	461	1.14	0.18	1.34	0.12	41.90	7.02	57.40	1.30	10.70	2.00	17.50	0.62	2.80	0.029	1.49	20.70	13.10	0.49	324	0.62	1.86	14.60	15.50	316	17.50	51.20	<0.002	0.03	0.23	8.20	0.90	1.60	263	0.74	0.01	9.30	0.34	0.26	1.28	65.10	0.40	14.70	56.20	154	17T282580
8893723	B16	0.21	5.72	4.50	441	1.00	0.19	1.34	0.15	35.60	8.67	55.40	1.88	11.80	2.27	17.80	0.62	3.30	0.029	1.54	17.60	12.80	0.64	349	0.89	1.79	9.20	19.20	194	16.70	61.80	<0.002	0.03	0.30	9.20	1.00	1.50	234	0.46	0.05	7.00	0.39	0.29	1.26	88.90	0.40	12.10	41.50	177	17T282580
8893724	B17	0.09	6.17	0.70	501	1.34	0.09	1.52	0.05	27.80	8.86	45.70	0.95	10.20	1.42	13.30	0.60	2.40	0.021	1.69	13.00	10.10	0.63	289	0.31	2.27	5.00	21.90	173	11.10	53.60	<0.002	0.03	0.09	7.40	0.70	0.80	330	0.22	<0.01	4.40	0.21	0.24	0.75	40.40	0.10	10.90	22.80	128	17T282580
8893725	B18	0.12	6.27	0.90	466	1.28	0.07	1.54	0.06	25.60	8.86	50.60	0.96	4.50	1.46	13.80	0.60	2.20	0.023	1.57	12.20	12.00	0.64	287	0.29	2.19	5.60	22.00	321	10.90	50.50	<0.002	0.03	0.13	7.70	0.80	0.90	314	0.30	0.01	2.90	0.23	0.22	0.66	44.00	0.20	10.90	24.40	125	17T282580
8893726	B19	0.18	7.85	2.50	399	1.55	0.13	1.36	0.09	32.10	9.88	76.70	1.37	7.60	1.65	16.90	0.61	2.60	0.040	1.31	16.80	24.00	0.67	281	0.58	1.68	9.10	24.20	389	14.20	46.30	<0.002	0.10	0.19	10.90	1.20	1.30	234	0.45	<0.01	6.10	0.39	0.25	1.38	62.70	0.30	13.30	34.70	145	17T282580
8893727	B20	0.27	7.74	4.30	332	1.57	0.14	1.08	0.14	16.20	12.40	90.30	1.09	10.70	3.19	14.10	0.69	2.50	0.040	1.06	7.60	20.70	0.55	260	0.74	1.40	6.40	29.50	586	12.90	35.80	<0.002	0.06	0.18	8.70	1.10	1.10	210	0.29	0.01	3.20	0.26	0.17	0.82	84.30	0.20	9.40	33.80	128	17T282580
8893728	B21	0.15	7.76	2.60	473	1.68	0.12	1.50	0.06	42.10	14.00	49.50	1.21	20.00	1.80	16.20	0.69	2.10	0.027	1.45	18.90	18.50	0.67	285	0.53	2.07	7.60	36.40	403	13.70	49.60	<0.002	0.04	0.11	9.00	0.90	1.10	309	0.43	0.01	5.60	0.26	0.24	1.01	51.50	0.20	13.30	29.80	116	17T282580
8893729	B22	0.34	7.70	6.90	403	1.52	0.16	1.24	0.17	45.10	20.50	111.00	1.70	17.00	4.50	16.40	0.72	3.30	0.045	1.35	21.70	31.10	0.78	418	0.94	1.51	15.80	46.20	612	14.90	48.20	<0.002	0.06	0.28	10.60	1.20	1.40	228	1.89	0.04	9.10	0.40	0.23	1.27	99.70	0.40	14.60	57.80	179	17T282580
8893730	B23	0.35	7.15	7.40	402	1.48	0.23	1.30	0.11	35.50	31.50	81.60	2.31	37.70	4.00	17.50	0.66	2.70	0.046	1.46	15.20	28.30	1.04	453	0.99	1.77	8.10	61.10	503	12.40	59.80	<0.002	0.04	0.43	11.60	1.20	1.60	201	0.41	0.03	4.70	0.33	0.27	1.39	91.80	0.50	18.30	72.20	157	17T282580
8893731	C1	0.28	7.16	3.10	449	1.37	0.12	1.12	0.09	25.10	13.20	69.00	1.54	12.00	2.34	15.00	0.69	2.40	0.037	1.50	12.00	23.60	0.58	250	0.81	1.61	8.00	34.40	571	12.80	47.70	<0.002	0.06	0.38	8.10	1.30	1.60	237	0.38	<0.01	3.50	0.26	0.24	0.85	53.50	0.30	9.60	64.60	131	17T282580
8893732	C2	0.21	6.18	5.90	444	1.14	0.16	1.11	0.10	19.80	20.10	74.80	2.23	13.20	3.57	18.10	0.64	2.50	0.037	1.54	10.10	25.40	0.76	515	1.40	1.74	8.30	31.00	346	14.20	58.70	<0.002	0.03	0.37	8.10	1.20	1.40	231	0.43	0.09	3.50	0.31	0.28	0.95	83.90	0.40	9.40	57.30	142	17T282580
8893733	C3	0.21	6.66	3.40	503	1.32	0.12	1.55	0.07	34.30	15.60	77.70	1.64	18.90	2.64	15.20	0.65	3.10	0.030	1.70	16.40	20.80	0.88	388	0.54	2.05	8.60	38.10	263	16.40	56.10	<0.002	0.03	0.21	9.90	0.80	1.40	299	0.35	<0.01	5.40	0.32	0.28	1.02	70.20	0.30	13.30	42.00	183	17T282580
8893734	C4	0.35	8.23	5.00	603	1.59	0.17	1.33	0.11	35.10	28.20	113.00	2.76	38.00	3.90	19.00	0.71	2.90	0.043	1.83	14.10	29.50	1.23	430	0.79	1.55	17.50	62.50	428	20.30	70.90	<0.002	0.04	0.36	10.80	1.00	1.70	230	1.34	0.02	6.00	0.44	0.36	1.04	92.20	0.40	12.40	63.50	148	17T282580
8893735	C5	0.26	5.73	6.10	542	1.01	0.27	1.22	0.08	28.80	10.40	63.20	2.15	8.20	2.35	17.00	0.14	3.00	0.028	1.93	14.30	23.70	0.65	256	1.01	1.62	10.10	26.20	203	16.80	73.80	<0.002	0.03	0.28	8.00	1.40	1.60	248	0.42	0.02	3.90	0.30	0.32	0.92	66.00	0.40	10.90	45.80	177	17T282580
8893736	C6	0.23	6.52	3.30	523	1.27	0.15	1.32	0.13	32.00	16.40	80.80	2.19	15.90	2.84	17.00	0.13	3.00	0.038	1.85	14.90	23.70	0.82	337	0.91	1.69	10.60	37.00	259	17.20	69.70	<0.002	0.03	0.32	9.40	1.40	1.60	254	0.49	0.01	4.50	0.34	0.33	1.03	76.30	0.40	12.60	48.70	167	17T282580
8893737	C7	0.26	6.50	3.40	505	1.37	0.14	1.47	0.19	31.30	20.20	84.60	1.98	19.50	3.00	16.80	0.18	3.10	0.036	1.76	14.70	22.00	0.90	398	0.83	1.71	10.20	41.70	211	19.90	68.00	<0.002	0.03	0.46	9.50	1.10	1.60	252	0.46	0.02	4.50	0.34	0.30	1.01	80.10	0.30	12.90	56.70	176	17T282580
8893738	C8	0.43	6.10	6.00	468	1.33	0.19	1.49	0.15	31.70	20.00	87.70	2.35	20.00	3.67	18.90	0.19	3.20	0.039	1.61	15.00	26.00	0.86	438	1.10	1.63	11.00	38.90	279	20.30	70.00	<0.002	0.03	0.39	10.10	1.40	1.80	243	0.49	0.08	5.50	0.42	0.29	1.02	105.00	0.40	13.80	56.00	189	17T282580
8893739	C9	0.28	6.76	7.50	555	1.16	0.15	1.71	0.12	31.60	18.30	86.50	2.36	12.10	2.78	17.40	0.15	3.20	0.037	1.93	15.40	37.40	1.08	420	0.51	1.89	10.20	40.60	170	18.90	71.50	<0.002	0.04	0.27	10.70	0.90	1.40	275	0.44	<0.01	4.50	0.40	0.29	1.01	76.10	0.30	13.40	68.40	186	17T282580
8893740	C10	0.24	6.66	4.60	519	1.21	0.13	1.68	0.13	32.10	19.00	94.50	2.21	19.00	3.24	16.70	0.14	3.10	0.039	1.74	15.30	43.30	1.10	467	0.73	1.79	10.10	44.30	205	15.70	63.00	<0.002	0.04	0.27	11.00	0.90	1.40	257	0.45	0.04	5.70	0.45	0.27	1.03	82.40	0.30	13.90	53.00	173	17T282580
8893741	C11	0.30	7.68	7.10	521	1.29	0.17	1.61	0.12	22.50	33.70	123.00	3.40	9.10	4.79	23.10	0.09	3.40	0.052	1.64	10.80	65.00	2.07	711	0.62	1.63	11.00	64.60	252	19.60	73.40	<0.002	0.07	0.64	16.80	1.50	2.10	195	0.61	0.05	5.40	0.52	0.37	1.61	121.00	0.70	16.50	73.00	171	17T282580
8893742	C12	0.32	7.00	4.10	541	1.62	0.16	1.21	0.16	29.60	23.10	95.50	2.63	17.90	3.64	19.70	<0.05	2.70	0.059	1.94	14.60	36.90	1.05	339	1.16	1.59	10.90	48.30	386	19.90	75.50	0.022	0.03	0.36	9.90	1.20	1.60	231	0.58	0.07	3.70	0.34	0.37	1.05	80.20	0.50	12.70	63.60	144	17T282580
8893743	C13	0.46	6.59	4.60	527	1.31	0.18	1.35	0.18	45.80	16.30	86.00	2.14	15.10	3.34	17.60	0.11	3.20	0.039	1.79	22.50	25.10	0.86	384	0.81	1.69	10.00	38.40	630	21.40	69.60	<0.002	0.04	0.61	9.20	1.20	1.70	250	0.60	0.06	9.40	0.35	0.31	1.23	78.50	0.40	12.90	74.70	178	17T282580
8893744	C14	0.74	7.11	6.70	402	1.62	0.17	0.86	0.26	44.20	40.10	208.00	2.33	51.40	4.92	18.20	0.22	2.50	0.053	1.29	20.70	38.60	3.08	409	1.09	0.97	43.50	95.90	940	19.80	55.10	<0.002	0.05	0.43	11.40	2.30	1.50	149	1.95	0.07	7.00	0.55	0.23	1.36	99.10	1.10	12.00	85.30	139	17T282580
8893745	C15	0.38	8.13	5.60	559	1.68	0.23	1.10	0.19	36.40	39.90	106.00	3.26	40.60	4.08	20.90	0.12	2.20	0.046	1.82	14.50	35.70	1.10	392	1.08	1.44	11.40	67.10	1650	26.00	79.20	<0.002	0.05	0.47	11.00	1.60	1.80	202	0.51	0.05	5.30	0.31	0.35	1.20	87.40	0.50	13.00	105.00	115	17T282580
8893746	C16	0.22	6.55	2.50	505	1.32	0.11	1.26	0.10	33.90	16.40	84.40	1.89	13.80	2.79	16.10	0.23	3.30	0.035	1.71	16.10	19.90	0.88	379	0.55	1.63	9.10	43.30	653	13.90	61.70	<0.002	0.04	0.25	9.20	1.00	1.30	240	0.44	0.01	4.70	0.29	0.29	1.02	68.50	0.40	12.60	74.30	174	17T282580
8893747	C17	0.22	6.71	1.90	524	1.38	0.11	1.30	0.11	47.90	14.70	85.00	1.88	12.80	2.54	15.30	0.17	3.20	0.030	1.85	22.00	18.40	0.88	361	0.48	1.75	9.30	40.40	748	14.20	63.40	<0.002	0.03	0.23	9.20	1.10	1.30	246	0.39	0.03	8.20	0.29	0.31	1.08	62.80	0.30	13.10	65.50	185	17T282580
8893748	C18	0.27	6.73	2.00	509	1.44	0.11	1.52	0.11	39.80	16.50	85.40	1.62	8.20	3.10	15.90	0.06	3.90	0.034	1.63	18.30	18.20	0.78	394	0.57	1.94	15.60	35.40	706	14.10	59.00	<0.002	0.04	0.20	9.30	1.20	1.40	288	1.52	<0.01	6.60	0.33	0.25	1.20	75.80	0.50	15.30	61.30	220	17T282580
8893749	C19	0.17	5.82	2.50	532	1.25	0.08	1.48	0.11	32.20	9.26	50.50	1.67	4.10	1.58	17.10	<0.05	2.70	0.028	1.74	16.00	19.40	0.64	330	0.36	2.09	7.80	19.80	163	17.40	69.20	<0.002	0.03	0.27	8.00	1.10	1.40	310	0.30	<0.01	6.30	0.33	0.28	0.81	46.50	0.20	11.70	43.00	159	17T282580
8893750	C20	0.24	6.25	2.90	492	1.18	0.10	1.33	0.08	28.00	11.60	69.80	1.74	7.70	2.22	16.50	0.17	3.60	0.031	1.65	13.50	18.70	0.63	325	0.55	1.77	10.60	26.10	276	14.80	59.00	<0.002	0.03	0.80	8.40	0.80	1.30	262	0.61	<0.01	5.30	0.34	0.26	0.96	65.90	0.30	11.40	32.80	209	17T282580
8893751	C21	0.24	6.30	1.60	522	1.35	0.13	1.28	0.11	29.40	18.10	77.30	2.46	15.10	3.05	17.60	<0.05	2.80	0.036	1.71	13.90	24.40	0.76	314	1.09	1.63	9.60	34.00	558	18.10	69.70	<0.002	0.03	0.27	9.10	1.20	1.30	245	0.45	0.03	4.00	0.35	0.30	1.03	76.80	0.40	13.10	66.20	161	17T282580
8893752	C22	0.24	6.54	2.70	548	1.45	0.12	1.44	0.11	40.00	16.80	73.80	2.39	9.40	2.11	19.80	<0.05	3.10	0.036	1.75	19.00	34.00	0.88	370	0.40	1.92	10.30	37.70	213	18.60	70.50	<0.002	0.04	0.31	9.30	0.90	1.50	281	0.47	0.05	7.20	0.35	0.31	0.95	58.40	0.30	14.10	53.90	170	17T282580
8893753	C23	0.12	5.61	1.50	451	1.11	0.07	1.44	0.06	14.30	8.74	44.30	1.65	2.30	1.51	15.40	<0.05	2.20	0.026	1.55	7.00	17.50	0.63	315	0.36	2.02	5.10	17.90	69	11.50	60.50	<0.002	0.03	0.19	8.20	0.50	1.00	266	0.18	<0.01	2.20	0.31	0.25	0.75	48.20	0.10	9.90	30.10	122	17T282580
8893754	C24	0.14	5.86	2.30	458	1.34	0.09	1.70	0.08	46.70	11.80	71.70	1.36	15.10	1.99	14.40	<0.05	2.30	0.029	1.55	21.90	15.30	0.91	356	0.71	2.01	7.20	29.60	492	11.30	58.00	<0.002	0.12	0.18	10.10	0.90	1.00	304	0.32	0.01	5.00	0.28	0.25	1.05	64.00	0.20	19.10	34.60	133	17T282580
8893755	C25	0.20	7.21	2.50	552	1.67	0.17	1.34	0.06	54.10	19.50	103.00	2.96	24.70	3.01	19.40	0.11	3.00	0.039	1.84	28.20	34.30	1.10	385	0.29	1.74	10.70	46.30	234	15.30	79.70	<0.002	0.03	0.41	13.20	1.00	1.60	233	0.54	0.03	7.80	0.34	0.43	1.96	86.40	0.60	22.10	45.10	170	17T282580
8893756	C26	0.14	7.64	2.70	543	1.62	0.11	1.66	0.03	39.90	20.70	72.80	1.93	10.50	3.22	19.40	0.39	3.80	0.039	2.03	18.80	27.30	1.26	512	0.32	2.26	10.20	43.60	102	13.50	72.70	<0.002	0.03	0.26	13.50	1.00	1.80	309	0.49	<0.01	6.30	0.41	0.36	1.47	92.50	0.40	20.40	42.90	228	17T282580
8893757	D1	0.39	7.21	3.30	529	1.27	0.13	1.23	0.14	26.90	19.10	85.10	2.29	14.30	3.28	17.40	0.11	2.80	0.039	1.69	13.10	27.50	0.82	339	0.74	1.61	10.00	46.10	580	15.40	65.10	<0.002	0.04	0.29	9.30	1.20	1.50	235	0.47	0.03	4.30	0.34	0.30	0.96	74.60	0.40	12.30	65.10	155	17T282580
8893758	D2	0.26	7.04	3.20	470	1.41	0.15	1.49	0.10	27.60	26.00	95.30	2.14	16.80	4.09	19.00	<0.05	3.50	0.039	1.65	12.60	30.30	0.97	494	0.69	1.72	10.20	48.90	897	15.00	68.80	<0.002	0.04	0.31	11.10	1.90	1.50	262	0.45	0.05	4.20	0.42	0.27	1.08	104.00	0.30	16.60	49.10	197	17T282580
8893759	D3	0.15	7.02	1.50	565	1.62	0.10	1.31	0.08	28.30	14.30	73.10	1.68	16.40	2.29	15.50	<0.05	1.90	0.029	1.83	11.30	18.00	0.78	306	0.39	2.01	6.60	36.80	335	13.90	67.00	<0.002	0.03	0.15	7.70	0.60	1.00	307	0.29	0.02	5.10	0.24	0.30	0.66	56.80	0.20	9.20	33.60	103	17T282580
8893760	D4	0.38	6.52	6.80	423	1.35	0.43	1.19	0.13	28.70	16.90	96.40	2.63	27.00	5.36	20.00	0.22	2.90	0.046	1.46	14.60	34.40	0.71	361	1.51	1.45	11.60	35.30	2060	16.50	60.50	<0.002	0.05	0.34	9.80	1.70	1.70	209	0.54	0.36	5.00	0.44	0.25	1.17	121.00	0.50	12.90	106.00	159	17T282580
8893776	D5	0.54	6.79	8.80	421	1.30	0.27	1.28	0.12	37.60	17.40	100.00	1.71	180.00	4.24	17.30	0.38	3.20	0.034	1.41	18.00	23.10	0.72	451	0.76	1.61	6.90	61.50	751	14.20	53.00	<0.002	0.06	0.25	11.00	1.70	1.60	261	0.50	0.24	6.30	0.40	0.21	1.07	116.00	0.50	10.00	55.40	133	17T282581
8893777	D6	0.32	6.95	4.90	554	1.43	0.15	1.41	0.07	43.30	12.10	67.70	1.65	27.30	2.30	19.60	0.08	3.20	0.024	1.94	17.00	15.30	0.82	322	0.35	2.06	6.70	36.60	284	12.80	72.00	<0.002	0.03	0.12	11.20	1.00	1.10	310	0.51	0.08	5.40	0.29	0.31	0.85	73.80	0.40	9.20	29.50	130	17T282581
8893778	D7	0.31	7.36	3.40	565	1.33	0.11	1.41	0.09	37.40	11.50	68.30	1.87	19.10	2.36	18.70	0.34	3.10	0.026	2.08	14.50	19.50	0.77	335	0.44	2.00	6.70	35.80	343	12.30	71.20	<0.002	0.03	0.13	10.70	1.20	1.00	306	0.52	0.05	4.10	0.32	0.31	0.86	70.40	0.40	8.60	47.40	125	17T282581
8893779	D8	0.35	7.15	4.90	531	1.38	0.15	1.57	0.11	38.20	13.70	82.30	2.04	32.40	3.08	19.00	0.33	3.60	0.026	1.79	17.80	20.20	0.78	418	0.56	1.96	6.90	38.50	525	13.80	65.40	<0.002	0.04	0.15	11.10	1.20	1.10	301	0.54	0.09	5.40	0.39	0.26	0.99	94.80	0.50	10.40	59.90	150	17T282581
8893780	D9	0.36	6.64	3.70	479	1.31	0.12	1.44	0.07	30.40	12.70	73.40	1.80	23.30	2.83	16.80	0.48	3.10	0.026	1.66	13.60	18.70	0.72	378	0.56	1.80	6.40	35.50	496	12.50	60.30	<0.002	0.03	0.13	10.60	1.10	1.50	279	0.48	0.05	4.20	0.35	0.24	0.87	77.90	0.40	9.30	54.20	132	17T282581
8893781	D10	0.35	7.49	4.40	548	1.24	0.12	1.62	0.10	32.80	11.50	70.60	1.64	19.60	2.87	16.70	0.76	3.30	0.026	1.90	14.30	18.50	0.78	405	0.50	2.12	6.40	34.20	397	11.80	59.00	<0.002	0.04	0.17	10.30	0.90	1.00	320	0.50	0.04	4.40	0.37	0.25	0.87	72.20	0.40	8.20	67.80	140	17T282581
8893782	D11	0.25	7.80	2.90	542	1.39	0.13	1.49	0.10	36.10	13.90	84.50	2.25	24.10	3.62	19.80	0.81	3.70	0.030	1.81	16.50	28.50	0.84	407	0.75	1.91	7.00	42.40	639	14.00	66.10	<0.002	0.07	0.14	11.60	1.10	1.20	303	0.53	0.06	5.50	0.39	0.27	1.13	90.60	0.60	10.00	89.50	147	17T282581
8893783	D12	0.44	7.57	3.40	517	1.42	0.12	1.39	0.09	37.00	15.60	87.60	1.97	19.60	3.30	18.60	0.77	3.00	0.029	1.76	17.00	24.90	0.86	373	0.71	1.81	6.90	46.20	686	14.70	62.20	<0.002	0.05	0.13	11.40	1.30	1.10	280	0.50	0.03	4.70	0.34	0.27	0.94	83.00	0.50	8.80	56.30	123	17T282581
8893784	D13	0.25	7.26	1.70	593	1.35	0.10	1.35	0.05	37.70	11.60	70.00	1.91	11.60	2.31	19.30	0.57	3.00	0.023	2.11	14.90	18.90	0.80	304	0.36	2.02	6.80	35.60	207	12.30	77.30	<0.002	0.03	0.12	11.10	0.80	1.20	296	0.50	0.04	3.90	0.32	0.31	0.80	67.60	0.40	9.10	35.70	125	17T282581
8893785	D14	0.33	8.11	2.60	602	1.32	0.10	1.46	0.07	27.70	12.30	87.60	2.05	19.00	3.18	17.40	0.72	2.70	0.022	2.07	13.90	23.70	0.93	376	0.40	1.97	6.20	44.30	577	12.10	69.70	<0.002	0.04	0.14	10.70	1.00	1.00	297	0.45	0.04	3.60	0.35	0.28	0.82	73.20	0.40	8.10	62.90	110	17T282581
8893786	D15	0.31	8.55	4.80	539	1.38	0.14	1.38	0.12	28.30	17.20	95.60	2.47	31.30	3.77	21.30	0.45	2.80	0.031	1.94	13.90	29.80	1.03	416	0.71	1.84	6.90	51.10	1000	14.10	70.60	<0.002	0.06	0.21	12.10	1.20	1.20	283	0.53	0.06	3.90	0.35	0.29	0.99	100.00	0.70	9.10	66.30	114	17T282581
8893787	D16	0.31	8.03	6.10	493	1.33	0.15	1.25	0.13	25.20	15.50	90.40	2.41	43.60	4.42	20.00	0.74	2.30	0.028	1.71	12.30	32.70	0.82	403	0.71	1.57	6.30	45.40	1050	30.30	66.30	<0.002	0.07	0.21	11.20	1.60	1.20	245	0.47	0.07	3.70	0.36	0.28	0.91	93.70	0.50	8.80	112.00	92	17T282581
8893788	D17	0.37	6.15	3.60	515	1.00	0.12	1.53	0.09	30.80	8.65	64.60	2.28	17.60	2.25	18.30	0.22	3.30	0.021	1.95	14.70	19.20	0.73	362	0.47	1.82	6.20	23.50	230	10.70	77.10	<0.002	0.03	0.17	11.30	1.20	1.20	279	0.47	0.05	5.20	0.39	0.28	0.91	81.00	0.60	9.20	46.10	139	17T282581
8893789	D18	0.49	7.81	5.60	391	1.18	0.16	1.23	0.13	25.70	18.20	77.70	2.23	64.70	4.47	19.40	0.56	2.70	0.033	1.42	12.30	78.10	1.13	316	1.04	1.38	5.50	50.50	882	11.00	53.10	<0.002	0.05	0.15	13.80	1.00	1.10	218	0.41	0.04	4.10	0.32	0.21	0.80	131.00	0.50	7.10	100.00	109	17T282581
8893790	D19	0.34	6.63	7.20	544	1.09	0.14	1.39	0.13	24.10	14.70	55.70	1.79	22.40	2.61	19.10	0.29	3.80	0.024	1.84	11.40	23.20	0.64	323	0.63	1.87	6.80	33.60	269	15.60	68.50	<0.002	0.03	0.33	10.20	1.10	1.20	291	0.62	0.08	4.30	0.36	0.28	0.82	82.00	0.60	7.60	67.30	146	17T282581
8893791	D20	0.26	7.33	5.50	477	1.25	0.14	1.39	0.06	22.50	23.90	66.50	1.66	27.90	3.01	17.70	0.55	2.50	0.026	1.57	10.60	25.70	0.76	326	0.54	1.91	5.50	42.90	274	12.40	58.90	<0.002	0.04	0.21	10.60	1.20	1.20	285	0.51	0.05	3.90	0.30	0.23	0.80	84.10	0.50	7.50	45.70	99	17T282581
8893792	D21	0.32	7.98	3.00	515	1.34	0.16	1.52	0.11	26.30	22.70	69.00	1.78	42.00	3.33	18.60	<0.05	3.00	0.029	1.70	11.50	26.80	0.79	345	0.61	2.04	5.70	41.60	347	14.60	60.60	<0.002	0.06	0.16	13.10	1.10	1.00	307	0.52	0.04	4.20	0.34	0.25	0.92	90.70	0.50	8.80	60.40	116	17T282581
8893793	D22	0.20	7.56	6.30	478	1.41	0.18	1.44	0.10	27.50	16.50	71.10	1.84	44.20	3.22	18.90	<0.05	2.90	0.025	1.58	11.70	21.80	0.77	360	0.57	2.06	4.90	35.30	317	13.90	58.90	<0.002	0.07	0.17	11.80	0.80	1.00	297	0.46	0.02	5.00	0.31	0.24	0.95	94.40	0.50	8.30	44.60	116	17T282581
8893794	D23	0.24	6.35	6.30	424	1.01	0.19	1.28	0.12	29.70	7.62	57.50	1.79	30.50	3.43	20.00	0.24	3.20	0.028	1.40	14.00	18.40	0.55	298	0.91	1.61	6.00	18.40	989	15.10	49.00	<0.002	0.05	0.25	11.60	1.40	1.40	243	0.48	0.05	4.90	0.35	0.21	1.12	99.80	0.50	9.30	46.10	127	17T282581
8893795	D24	0.31	7.34	3.30	512	1.44	0.11	1.45	0.08	29.80	17.10	76.60	1.99	15.60	3.06	18.30	0.08	3.10	0.025	1.76	13.60	22.20	0.76	358	0.52	1.95	6.00	41.90	465	13.90	61.80	<0.002	0.04	0.14	10.70	1.20	1.10	307	0.49	0.04	4.10	0.32	0.25	0.85	81.60	0.40	8.30	63.00	127	17T282581
8893796	D25	0.45	7.45	3.90	569	1.52	0.14	1.40	0.06	39.70	14.30	79.70	2.59	18.90	3.02	21.70	<0.05	3.00	0.025	1.87	19.20	28.00	0.83	386	0.51	1.83	7.50	46.30	505	15.90	76.50	<0.002	0.03	0.18	11.30	1.00	1.40	279	0.63	0.06	7.40	0.37	0.30	0.95	84.60	0.50	9.10	94.90	123	17T282581
8893797	D26	0.36	8.54	8.90	521	1.75	0.24	1.42	0.07	49.00	27.80	128.00	2.78	75.80	5.95	20.30	1.31	3.30	0.035	1.79	20.40	36.80	1.18	622	1.28	1.62	8.60	68.10	1440	19.20	66.90	<0.002	0.05	0.32	14.50	1.30	1.40	257	0.65	0.12	9.00	0.64	0.26	1.42	150.00	0.70	11.30	83.80	141	17T282581
8893798	D27	0.62	7.63	9.60	434	1.50	0.17	1.32	0.13	26.30	17.70	98.60	2.16	27.30	4.15	17.90	0.64	2.50	0.033	1.51	12.10	28.80	0.81	488	0.82	1.64	5.70	45.60	1170	17.00	57.40	<0.002	0.06	0.24	11.00	1.20	1.30	263	0.45	0.04	4.20	0.36	0.22	0.96	103.00	0.50	8.80	96.60	103	17T282581
8893799	D28	0.41	7.63	7.40	532	1.41	0.14	1.49	0.13	28.60	23.00	70.80	2.12	21.50	3.19	19.80	0.44	2.60	0.028	1.77	12.00	26.90	0.76	355	0.79	1.95	6.60	46.90	619	16.00	62.80	<0.002	0.04	0.27	10.40	1.30	1.90	305	0.49	0.05	3.40	0.35	0.25	0.97	88.90	0.40	8.90	113.00	108	17T282581
8893800	E1	0.22	7.04	3.00	593	1.20	0.08	1.53	0.05	25.00	10.70	70.90	1.94	11.90	2.62	18.60	0.37	2.40	0.020	2.19	12.30	21.30	1.01	407	0.31	2.17	5.90	33.40	221	10.90	81.00	<0.002	0.03	0.10	10.40	1.00	1.00	329	0.44	0.04	3.50	0.34	0.30	0.70	80.60	0.40	7.50	37.50	96	17T282581
8893801	E2	0.26	6.68	2.20	551	1.24	0.09	1.30	0.10	33.80	11.30	71.40	1.99	11.40	2.46	19.90	0.33	2.40	0.023	2.04	15.30	19.70	0.93	333	0.31	2.00	6.00	33.70	195	12.10	81.20	<0.002	0.03	0.11	10.70	0.60	1.10	285	0.47	0.02	9.20	0.31	0.30	0.85	74.30	0.40	8.40	36.00	97	17T282581
8893802	E3	0.24	6.64	3.90	518	1.25	0.11	1.62	0.07	34.70	13.80	74.10	1.94	14.60	2.78	19.40	0.38	2.20	0.024	1.87	16.60	25.10	1.12	521	0.38	2.08	6.60	35.30	305	11.30	70.90	<0.002	0.03	0.12	12.80	0.70	1.00	320	0.51	0.02	4.60	0.40	0.28	0.88	86.90	0.40	10.10	43.10	85	17T282581
8893803	E4	0.24	6.47	4.60	509	1.30	0.09	1.89	0.07	38.50	13.50	104.00	1.53	11.00	2.85	19.00	0.27	2.60	0.023	1.79	18.50	19.00	1.10	555	0.46	2.24	6.20	36.20	467	15.30	70.10	<0.002	0.04	0.19	13.40	1.10	1.20	350	0.47	0.06	5.30	0.42	0.26	0.91	97.70	0.40	11.00	37.90	105	17T282581

2017 Soil Sample Results

Sample ID	Field ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
8893804	E5	0.18	7.28	3.80	590	1.65	0.12	1.76	0.04	53.60	18.70	81.90	2.41	22.90	3.09	22.60	<0.05	2.60	0.027	2.15	23.00	24.10	1.28	588	0.41
8893805	E6	0.23	6.68	11.60	541	1.31	0.11	1.72	0.09	31.80	17.40	81.20	2.29	17.10	2.96	21.00	<0.05	2.70	0.025	1.97	14.00	28.10	1.13	475	0.44
8893806	E7	0.23	7.60	3.90	610	1.35	0.15	1.49	0.06	31.00	16.90	92.40	2.17	24.80	2.92	19.40	0.40	2.40	0.023	2.20	14.10	23.50	1.22	459	0.29
8893807	E8	0.27	6.68	3.60	608	1.14	0.11	1.42	0.06	29.10	12.30	67.50	2.37	7.90	2.37	20.70	<0.05	2.90	0.023	2.25	14.30	21.50	0.94	359	0.33
8893808	E9	0.29	6.60	1.20	494	1.32	0.10	1.42	0.06	23.80	11.30	66.30	1.77	6.50	3.04	22.00	<0.05	2.60	0.025	1.69	11.50	19.80	0.69	312	0.60
8893809	E10	0.56	7.05	6.10	504	1.37	0.14	1.41	0.10	17.20	14.30	85.30	1.86	11.70	4.11	20.60	0.58	1.90	0.028	1.59	8.00	30.40	0.82	356	0.75
8893810	E11	0.32	7.48	3.00	538	1.37	0.12	1.57	0.07	36.10	15.50	104.00	1.48	19.90	4.51	16.40	0.62	3.80	0.023	1.72	14.80	23.20	0.91	574	0.39
8893811	E12	0.25	8.41	4.20	573	1.40	0.13	1.63	0.10	20.70	19.60	88.20	1.98	15.20	4.34	18.10	0.43	2.40	0.024	2.11	9.60	32.50	1.20	505	0.39
8893812	E13	0.30	8.02	4.50	564	1.22	0.12	1.69	0.06	27.10	18.50	89.30	1.85	14.80	4.65	18.60	0.50	2.30	0.028	2.02	13.30	32.00	1.10	536	0.44
8893813	E14	0.29	8.45	4.70	580	1.36	0.15	1.65	0.10	27.70	14.90	111.00	1.87	24.50	4.80	17.30	0.63	2.20	0.028	1.95	12.30	36.70	1.17	621	0.37
8893814	E15	0.40	8.34	8.90	576	1.40	0.20	1.28	0.11	27.00	19.90	94.50	2.37	57.30	5.06	17.70	0.48	2.20	0.030	1.93	11.90	37.80	1.14	541	0.66
8893815	E16	0.33	7.74	3.60	559	1.32	0.10	1.61	0.07	35.20	12.40	73.60	1.67	14.50	2.83	17.50	0.20	3.40	0.021	1.97	15.90	19.60	0.86	404	0.42
8893816	E17	0.44	7.09	7.60	558	1.19	0.17	1.43	0.10	27.30	10.90	81.50	2.26	12.10	3.27	19.40	<0.05	3.20	0.028	1.90	14.10	26.80	0.72	560	0.50
8893817	E18	0.31	7.13	3.80	514	1.10	0.10	1.35	0.07	25.30	9.98	72.40	1.74	10.20	2.81	15.80	0.14	3.00	0.020	1.77	12.40	24.80	0.77	353	0.42
8893818	E19	0.34	8.41	2.90	596	1.32	0.11	1.61	0.08	35.80	12.60	85.30	2.41	14.70	3.55	16.90	0.17	3.30	0.031	2.13	16.50	25.60	0.98	453	0.53
8893819	E20	0.33	8.08	3.00	579	1.51	0.10	1.53	0.10	37.80	14.30	88.20	1.78	27.90	3.33	17.40	0.27	2.90	0.025	1.96	15.40	20.70	0.97	415	0.39
8893820	E21	0.27	7.04	2.30	492	1.30	0.09	1.71	0.07	25.20	13.30	88.30	1.48	8.50	3.55	18.60	<0.05	3.90	0.023	1.60	11.40	17.10	0.82	543	0.43
8893821	E22	0.27	7.77	6.00	514	1.22	0.13	1.58	0.09	26.10	14.90	72.30	1.90	36.40	3.43	17.80	<0.05	2.70	0.024	1.92	11.20	28.20	0.98	417	0.45
8893822	E23	0.19	7.30	5.10	548	1.29	0.11	1.61	0.03	53.10	10.60	77.40	1.42	44.10	2.71	16.60	<0.05	2.70	0.022	2.03	14.20	22.50	0.92	433	0.32
8893823	E24	0.27	5.67	4.10	388	0.91	0.14	1.38	0.11	18.50	8.46	98.40	1.41	16.00	2.60	17.70	<0.05	2.10	0.024	1.30	8.70	17.70	0.75	495	0.44
8893824	E25	0.28	5.92	8.60	478	1.01	0.14	1.36	0.06	18.40	7.27	50.40	1.46	13.90	2.04	19.50	<0.05	2.60	0.022	1.67	9.00	12.30	0.59	283	0.53
8893825	E26	0.21	7.21	4.20	442	1.11	0.14	1.42	0.11	25.20	14.10	60.60	1.66	70.10	3.78	17.80	<0.05	2.80	0.031	1.58	11.70	26.90	0.79	359	0.58
8893826	E27	0.21	7.07	6.80	457	1.25	0.16	1.42	0.06	22.10	14.80	63.70	1.80	56.60	3.71	19.80	<0.05	2.60	0.029	1.55	10.90	32.30	0.70	315	0.80
8893827	E28	0.19	5.87	3.50	486	1.17	0.10	1.34	0.04	18.90	9.52	42.70	1.24	27.70	1.88	18.20	<0.05	2.20	0.017	1.58	8.00	16.10	0.54	252	0.43
8893828	E29	0.27	7.28	5.40	526	1.08	0.10	1.42	0.05	21.90	10.10	57.90	1.37	16.60	2.60	18.50	<0.05	2.60	0.022	1.73	11.00	19.30	0.58	289	0.52
8893829	E30	0.27	7.86	9.90	532	1.36	0.17	1.82	0.07	47.40	15.40	73.70	1.38	94.70	3.43	16.60	<0.05	2.70	0.023	1.80	14.40	25.00	0.90	463	0.45
8893830	E31	0.20	7.92	7.50	451	1.32	0.18	1.53	0.06	25.70	17.90	69.10	1.57	33.30	3.39	18.10	<0.05	2.60	0.030	1.56	11.40	22.80	0.86	396	0.60
8893831	E32	0.28	5.90	2.10	508	0.91	0.13	1.31	0.06	22.00	5.27	45.30	1.15	6.80	2.22	19.70	<0.05	3.70	0.019	1.59	10.70	11.10	0.45	294	0.55
8893832	E33	0.19	6.80	2.50	514	1.20	0.08	1.71	0.07	16.50	9.11	57.10	1.11	4.50	2.51	17.00	<0.05	1.70	0.018	1.72	6.90	14.30	0.67	461	0.29
8893833	E34	0.17	7.00	1.60	546	1.46	0.07	1.65	0.07	18.80	9.34	56.00	1.19	5.40	2.13	17.50	<0.05	1.40	0.018	1.80	8.60	12.50	0.71	346	0.28
8893834	E35	0.20	7.09	0.80	527	1.27	0.08	1.59	0.06	26.00	11.10	66.80	1.45	5.80	2.45	18.40	<0.05	2.60	0.020	1.76	11.00	15.00	0.75	370	0.33
8893835	E36	0.44	7.37	5.90	483	1.33	0.14	1.35	0.09	25.10	16.50	75.70	2.14	17.00	3.41	18.80	<0.05	2.50	0.028	1.68	11.10	25.50	0.81	400	0.63
8893836	E37	0.29	6.82	4.50	498	1.21	0.11	1.48	0.06	38.30	11.80	74.70	1.76	12.20	2.96	17.50	<0.05	3.10	0.021	1.72	17.60	17.40	0.71	372	0.45
8893837	E38	0.20	7.12	4.40	557	1.29	0.09	1.43	0.05	40.50	10.20	65.50	1.42	13.90	2.31	16.70	<0.05	2.80	0.020	2.06	12.00	14.60	0.78	321	0.24
8893838	E39	0.18	6.81	1.90	500	1.28	0.08	1.37	0.05	22.60	10.60	58.80	1.40	6.70	2.15	16.90	<0.05	2.40	0.018	1.67	9.60	15.40	0.64	296	0.40
8893839	E40	0.16	8.23	1.70	690	1.39	0.07	1.80	0.03	21.30	9.63	53.10	1.20	5.90	2.25	17.70	<0.05	2.40	0.017	2.21	7.70	13.80	0.78	335	0.26
8893840	E41	0.24	7.81	3.60	531	1.20	0.09	1.67	0.05	22.40	13.30	112.00	1.20	6.30	3.17	15.30	0.32	2.70	0.021	1.76	10.70	19.00	0.74	401	0.66
8893841	E42	0.30	6.90	7.20	444	1.48	0.12	1.90	0.09	25.40	19.80	135.00	1.87	17.40	4.32	17.40	0.13	2.40	0.033	1.34	12.70	30.20	1.66	550	0.68
8893842	E43	0.21	7.40	3.40	515	1.34	0.10	1.56	0.10	17.00	10.70	64.70	1.43	5.30	3.29	18.50	<0.05	1.90	0.021	1.73	8.20	17.80	0.66	405	0.43
8893843	E44	0.25	6.71	4.70	477	1.13	0.12	1.30	0.11	22.30	7.86	65.80	1.81	10.20	3.43	18.50	0.05	2.40	0.025	1.57	10.70	21.80	0.56	342	0.67
8893844	E45	0.36	6.59	4.60	484	1.50	0.12	1.37	0.10	29.10	13.40	71.60	2.21	11.20	2.93	21.10	<0.05	3.30	0.029	1.61	13.80	20.20	0.68	370	0.70
8893845	F1	0.18	6.53	3.50	497	1.42	0.07	1.25	0.07	21.70	11.00	50.40	1.47	4.90	2.05	17.90	<0.05	2.10	0.024	1.61	9.60	16.20	0.58	247	0.32
8893846	F2	0.15	6.19	2.00	520	1.37	0.07	1.34	0.06	14.40	8.44	42.70	1.28	4.20	1.85	18.30	<0.05	1.50	0.016	1.68	6.10	11.20	0.51	241	0.26
8893847	F3	0.19	6.51	2.90	446	1.40	0.08	1.46	0.06	31.70	12.10	72.10	1.40	6.80	2.82	18.50	<0.05	2.50	0.021	1.49	15.10	17.10	0.67	358	0.30
8893859	F4	0.17	6.20	1.70	478	1.12	0.10	1.64	0.04	20.60	9.79	48.20	1.19	23.50	2.20	15.10	<0.05	1.90	0.027	1.57	10.20	18.00	0.84	346	0.33
8893860	F5	0.13	6.52	3.20	539	1.27	0.11	1.68	0.03	35.60	11.70	55.20	1.45	35.60	2.40	16.50	<0.05	2.60	0.024	1.88	18.80	19.60	1.00	355	0.32
8893861	F6	0.18	5.70	3.40	435	1.17	0.11	1.59	0.03	23.70	9.17	44.60	0.95	54.10	2.21	12.70	<0.05	2.00	0.025	1.37	10.70	15.70	0.80	358	0.33
8893862	F7	0.14	6.58	2.80	498	1.26	0.09	1.42	0.04	19.80	10.60	44.30	1.21	14.80	2.39	14.40	<0.05	2.20	0.023	1.52	8.40	17.50	0.66	275	0.51
8893863	F8	0.24	6.37	1.90	505	1.49	0.09	1.40	0.05	21.30	9.44	38.00	1.21	9.80	2.26	14.20	<0.05	1.60	0.022	1.61	10.10	15.40	0.59	284	0.33
8893864	F9	0.21	6.55	2.50	480	1.33	0.10	1.47	0.07	21.30	10.90	71.20	1.39	8.80	3.01	15.30	<0.05	2.30	0.029	1.50	9.40	16.80	0.74	424	0.41
8893865	F10	0.31	8.59	2.70	563	1.42	0.13	1.88	0.11	50.40	16.00	94.10	1.74	11.90	3.85	19.30	<0.05	2.50	0.036	1.79	25.20	27.90	1.01	555	0.47
8893866	F11	0.31	7.24	2.00	469	1.30	0.10	1.41	0.09	25.90	12.70	79.30	1.46	15.40	3.31	16.00	<0.05	2.50	0.030	1.44	12.90	21.20	0.72	344	0.53
8893867	F12	0.36	7.12	2.80	442	1.10	0.14	1.36	0.07	19.50	11.70	80.30	1.47	14.50	3.87	16.20	<0.05	3.40	0.033	1.34	9.30	26.00	0.70	390	0.66
8893868	F13	0.29	6.92	3.60	449	1.33	0.11	1.41	0.06	21.40	12.70	71.50	1.56	15.10	3.21	15.90	<0.05	3.10	0.032	1.40	10.60	21.50	0.81	438	0.50
8893869	F14	0.22	6.34	1.80	423	1.13	0.11	1.37	0.07	27.40	9.43	60.50	1.24	9.30	2.95	14.90	<0.05	2.10	0.026	1.32	13.40	17.40	0.64	376	0.48
8893870	F15	0.40	6.72	2.40	431	1.23	0.09	1.36	0.05	17.30	9.35	65.10	1.26	10.00	2.89	14.70	<0.05	2.60	0.030	1.37	8.50	18.90	0.62	309	0.47
8893871	F16	0.17	6.41	2.50	441	1.22	0.08	1.44	0.05	39.00	10.30	54.00	1.03	8.10	2.79	14.60	<0.05	2.10	0.026	1.41	18.70	15.70	0.69	330	0.48
8893872	F17	0.15	6.14	1.70	424	1.11	0.10	1.62	0.07	27.90	10.70	81.60	0.93	7.50	3.41	14.50	<0.05	4.40	0.025	1.37	12.70	12.30	0.68	467	0.37
8893873	F18	0.21	6.50	2.70	521	1.23	0.12	1.36	0.04	21.30	8.96	43.70	0.95	7.90	2.10	14.50	<0.05	2.40	0.022	1.66	9.20	12.50	0.56	270	0.35
8893874	F19	0.44	5.99	4.00	419	1.09	0.12	1.33	0.09	21.10	9.39	57.50	1.15	10.90	2.64	12.70	<0.05	3.00	0.029	1.28	10.20	14.80	0.61	305	0.52
8893875	F20	0.23	7.19	4.40	575	1.31	0.15	1.67	0.07	29.90	10.60	53.50	1.59	26.90	2.51	17.00	<0.05	2.50	0.030	1.77	13.30	19.50	0.83	374	0.56
8893876	F21	0.14	6.06	1.80	499	1.15	0.08	1.53	0.05	16.80	8.18	40.60	0.86	7.00	2.25	13.90	<0.05	1.90	0.020	1.54	7.00	11.80	0.58	330	0.38
8893877	F22	0.27	6.59	2.50	429	1.12	0.12	1.49	0.08	20.50	11.00	64.10	0.99	9.70	3.07	13.40	<0.05	2.00	0.030	1.30	9.80	14.40	0.71	373	0.56
8893878	F23	0.25	6.48	3.20	499	1.22	0.13	1.44	0.06	25.70	10.20	52.30	1.26	28.10	2.43	16.10	<0.05	3.10	0.030	1.55	11.50	15.20	0.61	294	0.63
8893879	F24	0.38	5.45	5.70	434	0.99	0.27	1.21	0.09	23.40	8.79	44.50	1.34	46.30	2.38	15.40	<0.05	2.80	0.034	1.35	11.00	18.40	0.53	346	0.81
8893880	F25	0.36	6.19	4.10	431	1.13	0.20	1.25	0.08	24.90	10.90	57.30	1.51	18.20	3.28	16.90	<0.05	3.00	0.033	1.37	12.10	22.20	0.57	301	0.73
8893881	F26	0.27	7.71	6.70	577	1.37	0.18	1.79	0.07	38.40	13.70	62.50	1.66	72.70	3.31	19.20	<0.05	3.70	0.036	1.83	19.30	20.80	0.89	367	0.77
8893882	F27	0.33	6.59	13.10	477	1.21	0.11	1.48	0.06	25.30	12.40	48.00	1.09	15.60	2.61	14.50	<0.05	2.70	0.028	1.48	10.30	14.70	0.68	313	0.56
8893883	F28	0.76	6.33	4.90	418	1.10	0.15	1.27	0.10	25.00	11.50	62.10	1.62	18.70	3.08	14.70	<0.05	3.20	0.034	1.36	11.20	18.40	0.65	322	0.79
8893884	F29	0.21	6.63	3.20	451	1.01	0.17	1.30	0.06	19.80	9.49	42.50	1.05	6.70	2.37	15.10	<0.05	2.70	0.026	1.42	10.30	14.90	0.53	262	0.70
8893885	F30	0.55	7.09	7.30	354	1.18	0.21	1.09	0.09	23.90	13.00	70.40	1.84	24.30	4.69	15.70	<0.05	2.50	0.048	1.29	11.50	24.50	0.74	397	1.24
8893886	F31	0.28	6.36	4.30	452	1.29	0.10	1.47	0.06	55.10	10.90	53.90	1.18	20.20	2.51	14.80	<0.05	2.90	0.026	1.51	17.60	13.20	0.71	332	0.55
8893887	F32	0.30	6.14	1.70	478	1.05	0.10	1.36	0.07	24.10	7.63	48.00	1.18	7.60	2.13	13.80	<0.05	2.70	0.027	1.54	11.40	12.70	0.56	270	0.57
8893888	F33	0.17	6.32	2.00	490	1.19	0.09	1.32	0.02	21.50	7.51	39.60	1.01	6.00	2.19	14.80	<0.05	2.30	0.023	1.14	10.00	12.70	0.51	281	0.40
8893889	F34	0.26	7.16	1.80	451	1.23	0.10	1.28	0.07	23.20	9.48	60.10	1.18	6.40	3.12	15.30	<0.05	2.50	0.034	1.34	11.50	19.40	0.60	327	0.59
8893890	F35	0.34	6.32	2.20	480	1.08	0.10	1.55	0.07	23.60	8.12	53.10	1.11	5.80	2.65	15.40	<0.05	4.10	0.026	1.48	10.90	12.90	0.62	351	0.41
8893891	F36	0.22	6.69	1.60	489	1.15	0.10	1.31	0.08	27.60	10.10	71.00	1.47	8.60	2.46	14.60	<0.05	2.20	0.027	1.54	13.50	17.40	0.72	330	0.47
8893892	F37	0.28	6.43	2.10	460	1.14	0.14	1.21	0.08	22.90	12.30	75.20	1.63	8.40	3.09	17.10	<0.05	2.30	0.033	1.49	11.60	22.80	0.65	317	0.71
8893893	F38	0.23	6.59	2.70	497	1.10	0.12	1.44	<0.02	41.40	11.50	58.40	1.20	9.70	2.75	14.10	<0.05	3.10	0.025	1.55	20.20	14.40	0.73	357	1.45
8893894	F39	1.28	6.65	2.30	482	1.15	0.11	1.37	0.07	22.70	11.30	69.90	1.29	11.10	2.79	14.80	<0.05	2.60	0.030	1.55	10.20	17.70	0.71	332	0.51
8893895	F40	0.21	6.14	1.70	460	1.13	0.09	1.39	0.07	26.10	8.87	76.70	1.24	6.30	2.59	13.90	<0.05	2.80	0.025	1.45	11.80	13.50	0.64	349	0.49
8893896	F41	0.26	5.58	1.80	346	0.88	0.11	1.04	0.07	22.30	10.50	49.60	1.34	9.90	2.68	12.80	<0.05	0.60	0.029	1.12	10.90	18.10	0.57	244	0.62
8893897	F42	0.32	6.94	4.20	458	1.13	0.15	1.28	0.08	28.90	13.00	83.70	1.72	19.30	3.93	16.30	<0.05	2.80	0.036	1.46	14.40	24.00	0.73	352	0.80
8893898	F43	0.30	7.40	5.50	408	1.26	0.21	1.19	0.26	27.10	14.40	80.40	1.90	16.50	3.98	15.50	<0.05	2.60	0.042	1.28	13.90	23.70	0.69	382	0.97
8893899	F44	0.35	6.47	6.50	518	1.28	0.16	1.40	0.12	29.40	9.76	63.70	1.77	8.20	2.66	15.30	<0.05	2.90	0.035	1.68	14.70	17.30	0.67	425	0.71
8893900	F45	0.34	5.64	5.00	435	1.01	0.15	1.29	0.07	24.20	11.40	69.70	1.46	11.50	3.60	15.00	<0.05	2.00	0.030	1.33	11.90	18.00	0.63	371	0.72
8893901	F46	0.24	6.29	14.40	514	1.08	0.20	1.40	0.20	29.50	11.40	67.40	2.00	12.50	3.51	17.30	<0.05	2.50	0.036	1.64	13.00	24.60	0.76	471	0.66
8893902	G1	0.09	6.31	1.50	494	1.05	0.07	1.59	0.04	34.70	8.78	71.90	1.06	11.30	2.71	14.00	<0.05	1.60	0.023	1.51	13.20	12.50	0.80	397	0.25
8893903	G2	0.14	6.12	2.20	487	0.99	0.09	1.44	0.07	30.10	8.70	63.90	1.21	6.40	2.86	16.40	<0.05	2.30	0.028	1.49	12.80	14.50	0.66	390	0.35
8893904	G3	0.20	6.42	2.90	472	1.12	0.08	1.50	0.05	19.70	9.21	55.40	1.00	6.50	2.37	13.80	<0.05	1.50	0.020	1.47	9.00	15.30	0.68	352	0.28
8893905	G4	0.17	6.49	1.40	465	1.26	0.07	1.53	0.07	22.20	8.40	49.20	0.95	5.30	2.35	14.00	<0.05	1.70	0.021	1.44	11.20	12.60	0.66	343	0.31
8893906	G5	0.24	6.32	1.80	470	1.14	0.08	1.55	0.06	28.80	9.44	79.10	1.09	6.30	2.77	14.50	<0.05	2.30	0.026	1.50	12.50	14.10	0.67	378	0.34
8893907	G6	0.27	6.61	0.90	476	1.10	0.11	1.52	0.09	19.70	7.51	61.60	1.15	6.60	3.07	17.50	<0.05	2.40	0.025	1.50	8.80	14.80	0.65	382	0.36
8893908	G7	0.15	6.54	1.30	474	1.18	0.08	1.39	0.07	24.90	8.20	55.30	1.08	6.60	2.29	14.30	<0.05	2.10	0.023	1.52	12.30	14.80	0.57	286	0.37
8893909	G8	0.12	6.65	1.80	495	1.05	0.09	1.32	0.07	22.70	7.14	48.30	1.15	4.00	2.41	14.70	<0.05	2.20	0.027	1.56	11.20	16.30	0.55	296	0.46
8893910	G9	0.26	6.47	3.10	461	1.24	0.09	1.40	0.07	20.30	9.65	52.00	1.12	6.80	2.16	13.80	<0.05	1.60	0.023	1.47	10.00	14.60	0.62	300	0.35
8893911	G10	0.27	6.20	3.70	430	1.18	0.10	1.52	0.09	26.20	10.70	66.40	1.11	9.30	3.23	16.10	<0.05	2.30	0.028	1.34	12.00	15.30	0.71	473	0.46
8893912	G11	0.17	6.68	1.80	475	1.26	0.08	1.51	0.09	36.30	8.85	59.50	1.13	5.70	2.48	15.40	<0.05	1.90	0.025	1.47	18.80	14.90	0.64	372	0.41
8893913	G12	0.14	6.01	1.10	493	1.25	0.08	1.56	0.04	37.60	7.70	54.90	1.17	7.50	2.00	14.20	<0.05	2.00	0.022	1.57	14.30	11.30	0.64	505	0.28
8893914	G13	2.23	6.06	1.60	495	1.16	0.08	1.46	0.04	23.70	5.58	56.90	1.15	3.30	2.13	15.80	<0.05	2.10	0.023	1.51	12.00	12.70	0.47	277	0.57

Sample ID	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
8893804	2.21	7.00	41.80	523	13.60	87.70	<0.002	0.03	0.17	14.70	0.90	1.20	320	0.54	0.04	7.60	0.36	0.37	1.15	101.00	0.40	12.50	43.30	100	17T282581
8893805	2.10	6.90	38.80	212	13.60	81.30	<0.002	0.03	0.19	12.90	0.70	1.10	304	0.51	0.02	3.70	0.41	0.32	0.87	101.00	0.50	10.00	51.30	108	17T282581
8893806	2.11	7.00	50.50	275	12.30	80.50	<0.002	0.03	0.12	12.40	0.90	1.10	286	0.53	0.11	4.50	0.33	0.33	0.77	86.00	0.50	8.00	45.80	92	17T282581
8893807	1.94	7.10	33.20	189	12.70	92.90	<0.002	0.03	0.14	11.10	0.70	1.10	281	0.55	0.03	3.80	0.35	0.38	0.85	80.10	0.50	8.30	37.50	109	17T282581
8893808	1.96	6.00	27.60	257	11.70	67.40	<0.002	0.04	0.11	10.80	0.90	1.10	296	0.47	0.04	3.60	0.33	0.28	0.78	92.00	0.40	8.60	27.00	100	17T282581
8893809	1.91	5.70	39.00	532	10.50	65.10	<0.002	0.05	0.17	10.70	1.20	1.00	292	0.42	0.05	2.70	0.38	0.24	0.68	106.00	0.50	7.00	45.90	79	17T282581
8893810	1.91	6.10	42.40	572	10.10	56.00	<0.002	0.04	0.23	11.30	1.10	1.00	302	0.59	0.09	8.00	0.43	0.25	0.80	104.00	0.40	8.90	41.30	139	17T282581
8893811	2.01	5.20	50.20	773	10.60	67.90	<0.002	0.05	0.25	11.90	1.10	1.00	313	0.46	0.07	3.10	0.40	0.25	0.75	98.90	0.60	8.40	53.80	89	17T282581
8893812	1.99	5.50	51.00	726	9.80	62.60	<0.002	0.04	0.21	11.30	1.10	1.00	314	0.46	0.07	5.40	0.49	0.23	0.76	110.00	0.40	8.30	63.60	93	17T282581
8893813	2.04	5.10	55.90	2570	10.20	61.50	<0.002	0.05	0.26	10.50	1.00	0.90	336	0.42	0.07	4.70	0.38	0.24	0.71	90.70	0.40	7.60	75.00	70	17T282581
8893814	1.48	6.80	59.40	3140	11.50	55.20	<0.002	0.07	0.22	11.10	1.50	0.90	242	0.48	0.11	4.00	0.44	0.22	0.93	99.40	1.00	8.30	122.00	85	17T282581
8893815	2.13	6.10	36.40	590	10.90	63.40	<0.002	0.04	0.12	10.40	1.10	0.90	323	0.49	0.04	5.20	0.36	0.26	0.87	78.30	0.40	8.90	52.60	137	17T282581
8893816	1.82	7.10	33.50	797	11.90	68.80	<0.002	0.04	0.24	10.10	1.30	1.50	277	0.54	0.04	4.30	0.42	0.29	0.98	81.90	0.50	8.70	124.00	128	17T282581
8893817	1.73	5.80	39.20	600	9.20	56.20	<0.002	0.04	0.12	8.60	0.90	1.00	263	0.46	0.03	3.60	0.34	0.25	0.81	68.70	0.40	7.20	112.00	118	17T282581
8893818	2.11	10.50	42.60	910	12.00	77.00	<0.002	0.05	0.19	9.40	0.70	1.90	372	0.71	0.03	6.80	0.39	0.26	1.19	90.50	0.40	13.30	96.70	193	17T282581
8893819	2.05	6.10	44.40	730	12.40	63.10	<0.002	0.04	0.10	11.40	1.30	1.00	303	0.44	0.04	6.20	0.36	0.26	0.89	83.80	0.50	9.00	45.50	123	17T282581
8893820	2.04	6.60	34.00	622	10.50	58.10	<0.002	0.04	0.11	11.20	1.30	1.00	331	0.63	0.05	4.20	0.43	0.25	0.84	118.00	0.40	11.00	43.70	157	17T282581
8893821	2.00	5.40	39.30	684	10.20	61.10	<0.002	0.04	0.13	11.40	1.50	0.90	299	0.49	0.03	3.60	0.36	0.25	0.86	97.30	0.40	8.50	78.50	109	17T282581
8893822	2.21	5.40	38.60	207	10.60	57.20	<0.002	0.03	0.10	10.80	0.60	0.90	335	0.46	0.02	3.90	0.34	0.25	0.82	79.20	0.30	11.00	30.70	105	17T282581
8893823	1.70	5.20	31.00	1010	13.40	42.80	<0.002	0.04	0.13	9.40	0.80	0.90	227	0.42	0.03	2.50	0.34	0.19	0.69	82.60	0.40	7.50	63.70	84	17T282581
8893824	2.05	5.40	21.00	177	13.60	62.90	<0.002	0.03	0.26	9.10	0.80	0.80	311	0.47	0.07	2.50	0.28	0.27	0.65	73.50	0.40	7.20	22.30	102	17T282581
8893825	1.80	5.20	32.20	448	9.80	47.50	<0.002	0.04	0.20	10.00	1.30	1.70	261	0.44	0.06	4.00	0.36	0.21	0.82	99.80	0.40	7.80	38.20	104	17T282581
8893826	1.95	5.30	36.40	280	11.30	52.40	<0.002	0.04	0.16	9.80	0.90	0.90	285	0.48	0.06	3.30	0.35	0.23	0.82	107.00	0.40	7.80	35.30	103	17T282581
8893827	2.16	3.90	24.70	176	10.40	58.80	<0.002	0.02	0.09	7.40	0.60	0.70	320	0.32	0.04	2.20	0.21	0.25	0.60	75.70	0.20	6.50	18.20	86	17T282581
8893828	2.14	4.90	26.50	269	11.00	54.00	<0.002	0.04	0.37	7.90	1.00	0.80	334	0.42	0.04	3.80	0.31	0.24	0.69	77.50	0.30	6.40	25.60	103	17T282581
8893829	2.54	4.00	41.10	397	12.70	54.40	<0.002	0.04	0.15	11.60	1.00	0.80	355	0.35	0.02	4.20	0.34	0.23	0.84	93.70	0.40	10.60	31.90	104	17T282581
8893830	2.09	4.80	35.10	362	12.90	51.10	<0.002	0.05	0.14	11.30	1.30	0.80	298	0.44	0.01	8.50	0.33	0.24	0.97	93.10	0.40	9.00	31.70	98	17T282581
8893831	1.95	7.20	14.50	216	10.80	51.70	<0.002	0.03	0.32	8.20	1.00	1.10	286	0.67	0.09	4.30	0.38	0.26	0.91	78.90	0.60	7.10	29.30	139	17T282581
8893832	2.49	3.40	22.30	605	9.20	57.10	<0.002	0.03	0.19	8.30	0.90	0.80	379	0.38	0.03	2.40	0.26	0.24	0.56	70.80	0.90	6.50	40.10	69	17T282581
8893833	2.59	4.70	25.30	386	9.50	61.00	<0.002	0.03	0.23	8.20	0.80	0.80	383	0.48	0.04	2.40	0.23	0.24	1.50	66.10	0.30	7.50	24.80	55	17T282581
8893834	2.31	4.60	28.70	414	10.10	62.80	<0.002	0.03	0.11	9.70	0.90	1.10	340	0.43	0.03	4.30	0.28	0.25	0.69	77.80	0.30	8.00	29.20	107	17T282581
8893835	1.76	5.80	45.80	764	10.50	59.20	<0.002	0.06	0.16	10.10	1.30	0.90	269	0.50	0.05	3.90	0.33	0.24	0.85	85.10	0.40	7.80	51.30	101	17T282581
8893836	1.98	5.50	34.00	348	11.60	56.20	<0.002	0.04	0.11	9.30	0.80	1.00	300	0.50	0.05	6.60	0.33	0.26	0.87	85.00	0.50	8.00	43.50	120	17T282581
8893837	2.32	4.60	29.40	265	10.50	65.20	<0.002	0.03	0.10	8.50	0.80	0.80	321	0.41	0.03	4.30	0.27	0.28	0.75	68.60	0.40	7.30	24.10	117	17T282581
8893838	2.05	4.30	33.10	332	9.50	56.80	<0.002	0.03	0.15	8.20	0.70	0.70	301	0.38	0.03	2.80	0.25	0.25	0.67	62.20	0.30	6.70	38.80	90	17T282581
8893839	2.99	3.90	25.50	177	10.20	64.70	<0.002	0.04	0.06	8.80	0.80	0.70	446	0.38	0.03	2.70	0.27	0.26	0.54	61.90	0.40	6.10	24.90	95	17T282581
8893840	2.35	4.70	46.90	459	10.20	47.30	<0.002	0.04	0.11	9.20	1.10	0.80	355	0.47	<0.01	3.70	0.34	0.21	0.66	76.50	1.40	7.20	38.10	104	17T282581
8893841	1.77	5.20	49.00	747	10.20	45.30	<0.002	0.05	0.25	13.30	1.40	0.90	282	0.41	0.05	4.40	0.39	0.19	0.78	122.00	0.30	8.10	96.50	99	17T282581
8893842	2.28	4.40	24.00	1410	10.00	53.70	<0.002	0.04	0.17	8.50	1.20	0.90	354	0.35	0.04	2.10	0.31	0.23	0.59	75.00	0.30	6.60	87.90	80	17T282581
8893843	1.73	5.10	20.90	1120	11.30	51.30	<0.002	0.06	0.19	9.10	1.00	0.90	267	0.42	0.04	3.60	0.34	0.24	0.82	86.70	0.40	7.40	118.00	95	17T282581
8893844	1.84	6.80	36.30	843	13.50	67.80	<0.002	0.04	0.15	10.90	1.50	1.00	281	0.51	0.04	4.80	0.32	0.27	0.98	103.00	0.50	9.40	94.70	131	17T282581
8893845	1.98	4.10	26.30	246	11.00	64.00	<0.002	0.03	0.09	8.30	1.00	0.80	289	0.35	0.03	3.70	0.21	0.25	0.69	62.40	0.30	6.40	22.40	84	17T282581
8893846	2.21	3.50	20.30	274	10.30	66.60	<0.002	0.02	0.06	7.70	0.50	0.90	333	0.31	<0.01	2.00	0.20	0.26	0.44	66.60	0.20	5.90	17.00	58	17T282581
8893847	2.06	4.80	27.20	512	11.10	61.80	<0.002	0.03	0.10	10.60	0.80	0.70	321	0.43	0.01	5.10	0.28	0.25	0.68	92.50	0.30	9.10	25.00	94	17T282581
8893859	2.12	5.60	31.60	371	11.60	60.60	<0.002	0.03	0.11	8.20	0.50	1.20	374	0.39	0.02	2.40	0.28	0.26	0.61	55.80	0.30	9.50	35.10	83	17T282583
8893860	2.17	7.30	35.80	411	13.30	63.30	<0.002	0.03	0.15	9.60	0.80	1.10	285	0.46	0.04	5.60	0.31	0.35	0.81	64.40	0.30	11.50	37.70	110	17T282583
8893861	2.04	4.50	34.60	364	10.10	45.20	<0.002	0.03	0.11	8.90	0.60	0.90	279	0.30	0.07	2.00	0.25	0.22	0.56	59.90	0.20	10.60	27.10	89	17T282583
8893862	2.07	5.30	33.80	327	11.60	53.00	<0.002	0.03	0.13	7.20	0.60	1.00	280	0.37	<0.01	2.30	0.24	0.25	0.63	57.70	0.30	8.50	24.90	97	17T282583
8893863	2.15	4.50	27.80	606	11.80	54.00	<0.002	0.03	0.18	6.90	0.80	1.30	273	0.32	0.02	3.20	0.22	0.28	0.60	54.00	0.30	7.20	40.60	66	17T282583
8893864	1.94	6.20	32.30	608	11.50	52.40	<0.002	0.04	0.14	9.40	0.80	1.10	259	0.42	0.01	3.60	0.32	0.26	0.76	75.10	0.30	9.40	44.70	98	17T282583
8893865	2.47	8.10	44.70	3250	14.90	63.70	<0.002	0.04	0.21	11.30	0.70	1.50	336	0.56	0.02	13.70	0.38	0.30	1.15	90.90	0.40	13.20	63.20	110	17T282583
8893866	1.83	6.40	40.10	977	11.80	49.50	<0.002	0.05	0.20	9.60	1.00	1.40	240	0.47	0.04	6.90	0.31	0.26	0.81	76.10	0.40	9.50	65.50	106	17T282583
8893867	1.77	7.10	38.10	936	12.00	46.00	<0.002	0.04	0.28	9.20	1.10	1.30	232	0.54	0.06	4.00	0.33	0.26	0.91	86.40	0.50	9.00	85.20	136	17T282583
8893868	1.85	7.80	39.60	865	11.10	49.00	<0.002	0.05	0.28	9.20	0.80	1.50	248	0.57	0.07	5.50	0.30	0.27	1.07	74.50	0.50	9.20	54.60	125	17T282583
8893869	1.85	6.20	31.50	637	11.00	46.30	<0.002	0.04	0.14	8.10	0.90	1.10	245	0.44	0.01	12.20	0.30	0.24	1.06	70.80	0.50	8.80	53.50	89	17T282583
8893870	1.87	5.60	29.70	660	10.90	47.10	<0.002	0.04	0.14	8.30	0.80	1.00	248	0.42	0.01	2.70	0.26	0.24	0.77	66.30	0.30	8.10	40.20	107	17T282583
8893871	2.00	5.10	29.50	467	11.50	48.60	<0.002	0.03	0.15	8.10	0.70	1.00	273	0.36	<0.01	9.50	0.25	0.24	1.15	68.20	0.30	10.10	27.90	98	17T282583
8893872	1.97	6.50	30.50	723	12.10	45.00	<0.002	0.04	0.11	9.50	0.90	1.20	275	0.47	0.02	6.30	0.35	0.22	0.99	85.70	0.30	11.70	34.40	198	17T282583
8893873	2.11	4.30	26.80	312	11.20	49.30	<0.002	0.03	0.14	7.10	0.60	1.30	281	0.32	0.03	3.00	0.22	0.26	0.61	51.20	0.40	7.30	29.60	100	17T282583
8893874	1.72	5.70	26.70	528	10.40	39.30	<0.002	0.04	0.18	7.70	0.80	1.20	227	0.37	0.04	3.20	0.28	0.21	0.81	63.30	0.50	7.80	35.80	126	17T282583
8893875	2.45	6.40	35.40	391	12.70	57.00	<0.002	0.04	0.16	9.00	0.90	1.60	317	0.45	0.02	4.20	0.29	0.37	0.95	63.20	0.60	10.90	36.00	111	17T282583
8893876	2.25	4.60	22.40	370	10.80	47.30	<0.002	0.03	0.10	7.30	<0.5	0.90	292	0.33	<0.01	1.80	0.23	0.24	0.53	56.40	0.20	7.80	31.60	76	17T282583
8893877	1.94	5.00	30.40	558	11.20	40.80	<0.002	0.05	0.18	8.80	0.90	1.80	259	0.37	0.03	3.40	0.28	0.22	0.74	72.50	0.40	8.60	35.10	88	17T282583
8893878	2.08	6.50	26.70	250	12.00	47.30	<0.002	0.04	0.18	8.50	0.90	1.20	264	0.43	0.03	3.30	0.30	0.28	0.96	67.10	0.40	9.90	30.60	140	17T282583
8893879	1.63	7.30	26.60	266	13.50	41.70	<0.002	0.04	0.32	7.30	0.80	9.20	206	0.48	0.20	3.30	0.30	0.26	0.95	67.80	5.30	8.30	55.80	128	17T282583
8893880	1.71	7.40	27.00	366	12.30	46.80	<0.002	0.05	0.22	9.10	0.80	1.90	206	0.57	0.02	4.80	0.34	0.26	1.06	83.20	0.50	9.60	58.60	132	17T282583
8893881	2.37	8.40	42.50	277	15.40	55.50	<0.002	0.04	0.26	9.80	0.90	3.90	304	0.62	0.02	8.20	0.35	0.35	1.22	77.70	0.70	11.50	52.10	158	17T282583
8893882	2.12	5.50	29.40	263	12.00	46.20	<0.002	0.05	0.18	8.20	0.60	1.10	269	0.42	0.02	3.50	0.26	0.25	0.80	61.60	0.40	8.90	29.30	113	17T282583
8893883	1.74	6.60	31.00	387	12.80	45.90	<0.002	0.04	0.26	8.90	0.80	1.40	209	0.51	<0.01	4.10	0.31	0.27	1.09	71.80	0.60	8.90	43.40	128	17T282583
8893884	1.90	6.30	23.60	350	11.70	42.00	<0.002	0.04	0.19	7.20	0.90	1.10	253	0.41	0.01	3.30	0.26	0.27	19.30	55.60	0.60	7.30	76.90	115	17T282583
8893885	1.49	6.60	32.70	1100	12.10	41.60	<0.002	0.07	0.41	10.70	1.30	1.30	161	0.54	0.04	4.40	0.33	0.26	1.35	95.70	0.60	10.10	49.40	105	17T282583
8893886	2.03	6.50	29.40	544	11.70	47.50	<0.002	0.04	0.15	9.20	0.60	1.00	260	0.47	<0.01	5.00	0.27	0.25	1.03	62.10	0.40	12.90	36.80	136	17T282583
8893887	1.89	6.40	24.60	340	11.60	45.00	0.002	0.04	0.16	7.70	0.80	1.30	245	0.47	0.02	3.80	0.26	0.24	0.83	53.70	0.40	8.10	51.20	109	17T282583
8893888	2.03	5.20	22.70	329	11.30	26.50	<0.002	0.03	0.15	7.20	0.70	1.20	270	0.41	0.03	4.10	0.24	0.26	0.71	55.30	0.30	7.20	27.30	98	17T282583
8893889	1.75	7.20	29.00	669	10.40	42.40	<0.002	0.04	0.17	8.40	0.90	1.20	222	0.62	0.04	3.90	0.31	0.24	0.96	69.30	0.50	8.20	46.70	102	17T282583
8893890	2.14	18.30	23.20	571	11.90	46.90	<0.002	0.04	0.23	8.40	0.80	1.30	284	0.73	0.04	4.60	0.30	0.28	0.94	66.90	0.50	9.70	38.90	158	17T282583
8893891	1.85	5.30	33.90	538	11.40	49.30	<0.002	0.04	0.18	8.10	0.90	1.10	247	0.31	0.05	5.70	0.24	0.28	0.83	58.10	0.40	7.40	43.60	79	17T282583
8893892	1.61	6.80	34.80	608	11.80	48.90	<0.002	0.04	0.17	8.40	0.90	1.40	211	0.39	0.01	3.90	0.31	0.27	0.85	73.90	0.40	8.20	58.20	97	17T282583
8893893	1.96	5.60	36.20	455	11.60	45.40	<0.002	0.04	0.13	8.30	0.70	30.90	259	0.40	0.02	9.20	0.29	0.25	0.96	68.40	0.30	8.80	36.70	131	17T282583
8893894	1.84	5.90	33.90	524	10.80	45.70	<0.002	0.03	0.16	9.00	0.80	1.00	245	0.32	0.01	3.60	0.29	0.26	0.87	70.20	0.30	8.20	41.80	107	17T282583
8893895	1.88	5.30	27.60	517	11.10	46.60	<0.002	0.03	0.14	8.60	0.90	1.30	251	0.30	0.01	4.30	0.28	0.25	0.79	68.50	0.30	8.20	36.60	124	17T282583
8893896	1.17	2.30	31.00	813	9.50	35.80	<0.002	0.04	0.16	7.70	0.80	0.90	157	<0.05	0.01	3.20	0.18	0.21	0.64	62.60	<0.1	6.90	57.60	27	17T282583
8893897	1.63	7.20	43.60	892	13.20	44.30	<0.002	0.06	0.36	9.10	0.90	2.60	210	0.43	0.03	4.70	0.34	0.26	0.97	84.80	0.70	9.10	108.00	108	17T282583
8893898	1.46	7.20	33.10	2070	13.10	40.60	<0.002	0.07	0.35	9.10	1.40	1.60	192	0.52	0.04	4.80	0.38	0.23	1.04	88.40	0.60	8.50	83.80	102	17T282583
8893899	1.83	6.70	32.50	1480	14.90	50.10	<0.002	0.04	0.31	8.30	0.70	2.60	237	0.38	0.03	5.40	0.30	0.28	0.89	64.10	0.30	8.40	91.70	123	17T282583
8893900	1.75	5.80	27.10	965	12.60	42.20	<0.002	0.03	0.22	7.70	0.60	1.10	233	0.33	0.03	4.00	0.30	0.23	0.73	81.50	0.40	7.50	70.50	83	17T282583
8893901	1.77	7.90	34.10	2000	13.60	50.70	<0.002	0.04	0.34	8.50	0.90	1.60	229	0.42	0.08	3.90	0.32	0.27	0.90	73.40	0.40	7.50	147.00	99	17T282583
8893902	2.15	3.90	28.70	390	10.90	46.30	<0.002	0.03	0.10	8.60	<0.5	1.00	289	0.21	<0.01	5.80	0.24	0.25	0.63	69.80	0.10	7.90	28.70	61	17T282583
8893903	2.01	5.80	27.10	608	11.80	49.30	<0.002	0.03	0.37	8.10	0.50	1.10	269	0.33	0.03	5.30	0.30	0.26	0.76	74.60	0.30	8.10	47.50	96	17T282583
8893904	2.13	4.20	32.60	666	11.80	44.30	<0.002	0.03	0.17	7.50	0.50	9.30	278	0.26	0.01	3.70	0.22	0.24	0.64	58.80	0.20	7.00	53.20	62	17T282583
8893905	2.19	4.10	26.70	521	11.00	46.00	<0.002	0.03	0.12	7.70	0.60	1.10	286	0.25	<0.01	3.60	0.23	0.26	0.58	60.20	0.20	8.10	27.20	67	17T282583
8893906	2.11	5.40	26.90	633	11.40	46.10	<0.002	0.03	0.10	8.50	0.60	1.00	276	0.32	<0.01	4.80	0.27	0.26	0.90	68.70	0.20	9.20	35.90	87	17T282583
8893907	2.08	19.40	23.50	1210	13.00	48.60	<0.002	0.04	0.14	8.70	0.60	1.00	265	2.76	0.02	2.80	0.31	0.26	0.68	78.90	0.30	8.70	39.30	94	17T282583
8893908	2.00	4.70	27.80	732	11.60	46.10	<0.002	0.04	0.15	7.20	0.70	0.90	266	0.26	<0.01	4.30	0.21	0.26	0.67	54.20	0.30	6.90	44.10	79	17T282583
8893909	1.94	4.90	25.30	422	12.20	44.90	<0.002	0.03	0.37	7.20	0.90	1.00	251	0.31	0.03	5.60	0.24	0.28	0.88	58.90	0.50	7.10	36.40	80	17T282583
8893910	2.02	4.70	29.10	468	10.90	50.00	<0.002	0.04	0.18	7.40	0.80	0.80	260	0.28	0.01	3.90	0.21	0.25	0.62	52.50	0.20	7.00	34.10	64	17T282583
8893911	1.93	5.60	28.00	1150	10.80	47.50	<0.002	0.04	0.14	8.90	0.90	1.10	258	0.32	<0.01	4.60	0.30	0.24	0.71	79.00	0.30	9.60	40.70	97	17T282583
8893912	2.10	4.40	29.80	732	11.90	49.90	<0.002	0.04	0.15	7.80	0.90	0.90	266	0.25	0.02	9.60	0.23	0.25	0.75	58.60	0.20	8.90	63.10	86	17T282583
8893913	2.19	4.60	22.10	235	10.50	52.00	<0.002	0.03	0.10	7.40	0.50	0.90	291	0.23	<0.01	5.50	0.23	0.26	0.66	51.80	0.20	8.90	31.90	84	17T282583
8893914	2.20	5.20	15.80	204	10.90	53.70	<0.002	0.03	0.13	7.20	<0.5	1.00	278	0.27	<0.01	3.40	0.28	0.26	0.73	59.30	0.20	7.50	31.00	96	17T282583

2017 Soil Sample Results

Sample ID	Field ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
8893915	G14	0.10	6.31	2.90	476	1.24	0.06	1.45	0.04	20.30	8.23	54.70	0.94	5.00	2.06	13.70	<0.05	1.50	0.021	1.51	8.70	11.50	0.58	291	0.34	2.14	3.60	25.20	411	10.70	49.90	<0.002	0.03	0.10	6.90	0.70	0.70	273	0.19	<0.01	2.40	0.19	0.25	0.52	49.10	0.20	7.20	22.20	63	17T282583
8893916	G15	0.67	6.63	4.90	490	1.29	0.13	1.52	0.06	42.90	11.60	69.10	1.46	19.90	2.61	14.90	<0.05	2.50	0.030	1.49	23.50	22.20	0.69	427	0.56	1.92	7.10	34.50	373	13.30	49.00	<0.002	0.04	0.18	9.60	1.00	4.20	255	0.30	0.02	7.40	0.27	0.28	1.70	69.20	0.30	15.70	32.20	111	17T282583
8893917	G16	0.14	6.49	3.30	493	1.30	0.09	1.49	0.05	28.80	11.70	49.90	1.13	10.00	2.32	14.50	<0.05	2.10	0.025	1.60	9.40	12.80	0.67	329	0.40	2.13	4.50	30.10	359	11.80	50.50	<0.002	0.03	0.14	8.00	0.80	1.00	278	0.26	<0.01	3.20	0.23	0.26	0.70	58.60	0.20	8.60	28.00	91	17T282583
8893918	G17	0.16	6.47	2.20	499	1.17	0.10	1.35	0.06	20.00	12.30	50.80	1.30	7.50	2.72	15.30	<0.05	2.60	0.027	1.53	9.70	20.70	0.59	275	0.62	1.88	6.20	31.40	282	11.20	49.00	<0.002	0.03	0.13	7.90	0.50	1.10	240	0.32	0.02	3.20	0.28	0.25	0.74	68.30	0.30	7.70	39.80	113	17T282583
8893919	G18	0.13	6.38	3.80	478	1.15	0.16	1.42	0.06	26.10	11.80	65.30	1.52	16.40	3.38	17.30	<0.05	2.80	0.030	1.56	10.30	18.70	0.75	351	0.51	2.00	7.40	31.20	239	12.50	54.40	<0.002	0.04	0.16	9.60	0.60	1.20	248	0.35	0.01	3.90	0.31	0.29	0.92	89.20	0.30	9.10	39.50	123	17T282583
8893920	G19	0.23	6.12	4.70	429	1.33	0.13	1.33	0.06	48.60	13.60	61.90	1.24	28.20	2.58	14.20	<0.05	2.20	0.026	1.46	11.40	14.50	0.72	344	0.44	1.91	4.30	30.50	346	12.60	48.50	<0.002	0.03	0.18	8.60	0.80	0.90	231	0.26	0.03	4.30	0.25	0.27	0.95	69.00	0.30	9.70	28.20	90	17T282583
8893921	G20	0.34	6.47	3.30	475	1.12	0.12	1.44	0.09	27.40	10.30	57.40	1.55	6.80	2.60	16.10	<0.05	3.00	0.030	1.52	13.30	17.40	0.64	329	0.64	1.85	7.30	27.20	349	11.30	51.00	<0.002	0.03	0.18	8.80	0.90	1.30	242	0.42	0.03	4.80	0.32	0.28	0.96	68.50	0.40	9.70	59.30	132	17T282583
8893922	G21	0.17	6.06	2.40	462	1.11	0.12	1.25	0.06	26.90	7.02	59.30	1.06	5.00	2.77	19.00	<0.05	2.20	0.022	1.38	15.70	12.50	0.47	273	0.94	2.09	5.60	15.80	209	11.60	46.80	<0.002	0.04	0.15	7.50	0.90	1.20	262	0.32	0.03	3.80	0.30	0.29	0.93	84.20	0.30	10.00	21.70	97	17T282583
8893923	G22	0.18	6.44	6.00	454	1.48	0.16	1.41	0.06	36.80	14.50	65.30	1.33	21.10	2.31	14.80	<0.05	2.20	0.029	1.40	18.30	14.80	0.59	314	0.66	1.92	6.10	34.30	377	10.40	48.50	<0.002	0.04	0.15	9.00	1.00	1.10	253	0.33	0.01	4.20	0.24	0.28	1.06	61.60	0.40	12.10	32.60	92	17T282583
8893924	G23	0.15	6.47	2.10	450	1.33	0.08	1.52	0.06	27.50	9.10	55.40	0.93	5.40	2.47	13.90	<0.05	1.90	0.023	1.42	10.50	11.40	0.66	322	0.36	2.17	4.70	24.30	349	11.00	47.20	<0.002	0.04	0.11	8.00	0.90	1.10	287	0.28	<0.01	3.60	0.24	0.25	0.68	58.30	0.20	8.90	23.30	77	17T282583
8893925	G24	0.26	5.80	4.50	367	0.95	0.20	0.98	0.21	20.10	7.16	60.50	1.37	14.40	3.91	18.00	<0.05	2.80	0.038	1.12	9.90	21.50	0.45	259	1.16	1.37	6.90	18.40	413	12.80	39.90	<0.002	0.05	0.27	7.80	1.00	1.40	165	0.41	0.04	4.00	0.34	0.26	1.19	97.00	0.50	7.80	41.30	120	17T282583
8893926	G25	0.11	6.08	2.40	504	1.23	0.08	1.55	0.02	25.10	8.59	31.60	1.00	10.70	1.75	15.50	<0.05	2.50	0.021	1.55	12.90	11.50	0.66	283	0.31	2.27	4.60	24.00	149	11.70	53.10	<0.002	0.03	0.11	7.60	0.90	1.00	292	0.25	<0.01	3.40	0.23	0.30	0.67	50.80	0.20	9.20	23.00	112	17T282583
8893927	G26	0.26	6.38	3.60	474	1.27	0.08	1.53	0.05	31.40	9.99	60.90	1.05	6.50	2.31	14.80	<0.05	2.20	0.025	1.46	12.10	11.30	0.65	305	0.43	2.11	4.60	26.40	379	11.40	50.60	<0.002	0.03	0.11	8.00	0.70	1.00	276	0.24	0.01	4.30	0.23	0.25	0.86	58.50	0.20	10.20	23.10	100	17T282583
8893928	G27	0.23	6.74	3.50	483	1.33	0.08	1.47	0.07	23.70	10.90	49.30	1.05	5.00	2.31	14.50	<0.05	1.90	0.026	1.49	10.20	13.20	0.58	295	0.41	2.18	4.10	24.90	467	10.70	49.00	<0.002	0.04	0.13	7.20	0.60	1.00	284	0.22	0.01	3.10	0.21	0.24	0.61	53.80	0.30	8.40	27.80	82	17T282583
8893929	G28	0.17	6.48	2.00	487	1.25	0.10	1.55	0.05	18.50	9.46	49.30	1.15	3.50	2.60	16.00	<0.05	1.90	0.025	1.51	8.70	14.00	0.64	355	0.49	2.14	5.20	27.40	652	10.80	51.40	<0.002	0.03	0.16	8.00	0.70	1.10	283	0.30	0.01	2.10	0.27	0.26	0.62	65.10	0.20	8.80	40.60	82	17T282583
8893930	G29	0.17	6.48	3.20	447	1.33	0.15	1.34	0.05	48.90	17.10	70.00	1.48	17.10	2.98	15.30	<0.05	3.00	0.031	1.50	13.60	17.80	0.77	380	0.51	1.87	6.80	36.60	525	13.00	53.50	<0.002	0.04	0.18	9.70	1.10	1.10	224	0.37	0.03	5.50	0.30	0.26	1.16	75.60	0.40	10.90	36.00	137	17T282583
8893940	G30	0.19	6.98	4.10	509	1.29	0.10	1.47	0.08	36.10	10.70	60.40	1.29	3.60	2.37	19.50	<0.05	3.50	0.031	1.62	16.90	14.70	0.59	342	0.59	2.07	9.00	22.90	466	12.30	55.50	<0.002	0.04	0.16	8.30	0.90	2.00	320	0.84	0.03	5.80	0.28	0.27	0.86	62.40	0.50	13.50	43.70	172	17T282584
8893941	G31	0.21	7.74	3.00	430	1.30	0.12	1.36	0.08	32.40	13.20	79.10	1.51	5.80	3.42	20.10	<0.05	3.00	0.041	1.36	16.20	19.70	0.66	383	0.84	1.79	8.80	29.00	746	11.80	49.80	<0.002	0.05	0.27	9.10	1.20	2.30	264	0.78	0.02	4.90	0.33	0.24	0.83	83.10	0.60	12.70	42.10	159	17T282584
8893942	G32	0.36	6.92	1.40	497	1.17	0.09	1.38	0.09	41.70	12.70	71.00	1.77	9.90	2.40	19.00	<0.05	3.10	0.033	1.66	19.90	17.30	0.67	314	0.61	1.91	9.10	31.10	578	11.60	61.90	<0.002	0.05	0.23	10.00	1.60	1.70	276	0.71	0.02	4.30	0.28	0.29	0.95	62.30	0.50	16.30	39.00	163	17T282584
8893943	G33	0.17	6.91	2.20	466	1.31	0.09	1.62	0.06	21.90	15.30	75.60	1.25	5.50	2.74	18.70	<0.05	2.20	0.030	1.51	9.90	14.70	0.82	467	0.50	2.18	7.20	31.00	491	11.10	55.20	<0.002	0.04	0.13	9.60	1.00	1.80	333	0.58	<0.01	2.50	0.30	0.27	0.62	74.00	0.40	14.20	32.20	122	17T282584
8893944	G34	0.24	6.91	2.00	498	1.23	0.08	1.68	0.07	52.00	14.10	81.00	1.42	8.90	3.20	18.30	<0.05	3.80	0.031	1.60	25.00	14.20	0.82	474	0.48	2.15	11.40	32.70	458	11.70	57.80	<0.002	0.03	0.16	9.90	1.00	1.80	323	0.96	0.03	10.10	0.37	0.25	0.84	82.60	0.40	14.10	35.60	206	17T282584
8893945	G35	0.24	6.85	2.10	479	1.18	0.09	1.36	0.07	21.30	14.60	60.60	1.38	6.20	2.39	17.20	<0.05	3.00	0.025	1.52	10.60	17.30	0.62	325	0.63	1.98	6.90	36.40	469	10.40	54.40	<0.002	0.04	0.15	7.70	1.20	1.40	280	0.52	0.02	3.70	0.25	0.26	0.68	59.40	0.30	10.30	38.80	153	17T282584
8893946	G36	0.35	7.41	3.20	509	1.17	0.12	1.43	0.07	26.60	17.00	70.50	1.63	6.90	2.63	18.60	<0.05	3.10	0.032	1.62	13.20	20.50	0.69	362	0.77	1.82	8.60	38.30	460	10.50	54.80	<0.002	0.04	0.24	9.10	1.40	2.10	269	0.62	0.03	3.50	0.31	0.26	0.90	65.50	0.50	12.40	63.50	174	17T282584
8893947	G37	0.31	7.51	3.60	493	1.33	0.15	1.50	0.09	27.50	18.30	80.50	1.90	8.30	3.49	21.30	<0.05	3.30	0.041	1.57	13.20	22.80	0.80	383	0.80	1.78	9.50	40.50	856	11.60	57.50	<0.002	0.05	0.26	9.80	1.80	2.00	264	0.72	0.04	3.60	0.31	0.27	0.91	78.00	0.50	13.60	88.80	173	17T282584
8893948	G38	0.26	7.35	2.90	553	1.26	0.09	1.52	0.08	31.20	15.40	73.80	1.89	9.40	2.51	19.60	<0.05	3.10	0.029	1.79	13.60	18.20	0.90	371	0.52	1.98	9.20	36.30	420	12.30	64.40	<0.002	0.04	0.20	9.10	1.00	2.40	292	0.60	0.02	3.90	0.28	0.30	0.77	60.70	0.40	12.00	43.90	173	17T282584
8893949	G39	0.18	6.93	3.10	525	1.28	0.09	1.37	0.05	41.50	14.20	68.50	1.60	13.40	2.24	18.50	<0.05	2.30	0.025	1.82	14.30	15.10	0.84	340	0.44	1.97	7.90	35.60	407	11.50	68.50	<0.002	0.03	0.18	8.20	1.30	1.60	292	0.55	0.03	4.20	0.24	0.29	0.73	54.90	0.40	11.40	31.00	128	17T282584
8893950	G40	0.25	7.11	1.70	560	1.27	0.09	1.31	0.06	27.10	11.90	59.00	1.94	6.00	2.22	19.20	<0.05	3.60	0.031	1.93	12.70	17.60	0.73	302	0.55	1.96	10.40	28.40	347	11.50	58.40	<0.002	0.04	0.26	8.30	1.30	2.00	284	0.92	0.06	4.50	0.27	0.34	0.76	53.10	0.50	11.90	35.90	164	17T282584
8893951	G41	0.27	7.17	2.40	512	1.30	0.12	1.41	0.09	30.20	14.80	69.70	2.10	5.90	3.02	21.80	<0.05	3.00	0.032	1.64	14.60	23.90	0.74	402	0.61	1.90	9.30	32.90	938	12.40	54.60	<0.002	0.04	0.21	8.70	1.00	2.10	288	0.76	0.03	4.10	0.31	0.31	0.82	72.80	0.50	12.40	50.10	159	17T282584
8893952	G42	0.32	6.94	4.00	507	1.25	0.11	1.43	0.11	29.40	16.60	66.20	2.10	13.80	2.81	20.30	<0.05	3.20	0.036	1.62	13.90	17.30	0.70	355	0.98	1.82	10.40	32.50	756	12.30	48.30	<0.002	0.04	0.21	8.80	1.50	1.90	266	0.74	0.03	3.80	0.38	0.28	0.89	71.10	0.50	13.10	93.30	174	17T282584
8893953	G43	0.24	7.40	4.10	513	1.31	0.11	1.54	0.08	26.60	18.70	68.40	1.59	7.90	2.63	18.40	<0.05	3.30	0.028	1.64	12.40	17.40	0.76	342	0.75	2.00	7.90	37.40	413	11.50	44.10	<0.002	0.04	0.18	8.90	1.20	1.60	297	0.62	0.02	3.40	0.28	0.26	0.80	63.70	0.40	12.70	64.70	178	17T282584
8893954	G44	0.51	8.07	15.70	446	1.78	0.30	1.40	0.18	51.10	38.60	88.20	2.60	44.30	3.58	19.20	<0.05	2.00	0.046	1.51	20.60	23.60	1.02	633	1.73	1.61	8.70	59.00	1290	19.40	43.40	<0.002	0.08	0.57	9.80	1.90	2.40	248	0.64	0.12	8.60	0.35	0.25	1.11	85.70	0.50	16.00	66.60	108	17T282584
8893955	G45	0.37	6.66	6.80	529	1.18	0.17	1.50	0.17	28.00	16.10	69.50	2.92	12.70	2.97	22.00	<0.05	3.60	0.038	1.75	13.50	26.80	0.76	473	1.07	1.77	10.10	29.90	954	15.90	57.20	<0.002	0.04	0.44	9.40	1.70	2.40	270	0.67	0.08	3.50	0.34	0.29	1.00	69.50	0.60	13.70	139.00	202	17T282584
8893956	H1	0.19	6.50	2.50	527	1.13	0.08	1.24	0.05	13.90	8.69	41.20	1.53	4.40	1.91	20.20	<0.05	1.70	0.020	1.66	6.80	12.10	0.47	257	0.41	2.10	5.60	19.60	531	11.60	52.80	<0.002	0.03	0.18	5.80	1.30	1.60	306	0.45	0.03	1.70	0.20	0.28	0.44	49.90	0.50	7.70	32.30	88	17T282584
8893957	H2	0.14	6.87	2.40	476	1.36	0.09	1.50	0.05	16.30	13.30	53.80	1.48	5.00	2.24	19.20	<0.05	2.20	0.027	1.57	7.90	14.90	0.69	344	0.45	2.14	5.50	28.50	507	11.30	51.00	<0.002	0.03	0.15	7.60	1.50	1.40	322	0.48	0.04	2.10	0.21	0.26	0.54	55.50	0.30	10.20	28.70	121	17T282584
8893958	H3	0.12	6.46	4.20	539	1.38	0.08	1.47	0.02	37.40	10.30	44.10	1.26	15.50	1.57	19.60	<0.05	2.30	0.020	1.68	11.80	10.90	0.58	391	0.44	2.31	4.80	21.90	137	11.10	52.70	<0.002	0.02	0.10	6.80	1.00	1.20	337	0.38	0.01	4.10	0.17	0.29	0.71	41.30	0.20	12.30	23.00	127	17T282584
8893959	H4	0.13	6.46	2.30	517	1.28	0.06	1.32	0.04	12.40	10.20	35.50	1.24	3.90	1.54	17.50	<0.05	1.40	0.015	1.63	5.70	11.10	0.53	226	0.29	2.24	4.10	22.50	236	10.70	51.50	<0.002	0.03	0.07	5.70	0.80	1.00	314	0.36	0.02	2.90	0.14	0.26	0.39	39.60	0.20	7.10	23.40	73	17T282584
8893960	H5	0.14	6.60	4.00	492	1.28	0.07	1.48	0.06	18.50	12.50	44.00	1.22	3.90	1.84	19.20	<0.05	1.60	0.021	1.59	8.30	12.90	0.60	323	0.37	2.25	4.80	24.00	327	11.10	51.10	<0.002	0.03	0.17	6.70	1.60	1.30	326	0.39	0.05	2.60	0.19	0.27	0.43	46.00	0.20	10.70	27.80	83	17T282584
8893961	H6	0.19	7.16	2.50	486	1.20	0.11	1.32	0.08	20.00	11.90	54.70	1.38	4.60	2.42	19.80	<0.05	2.50	0.031	1.59	9.60	16.20	0.54	274	0.69	1.98	6.50	23.60	369	12.10	45.00	<0.002	0.04	0.24	7.10	1.10	1.40	292	0.48	0.04	2.50	0.24	0.26	0.59	58.60	0.30	9.20	33.30	131	17T282584
8893962	H7	0.15	6.55	3.30	500	1.35	0.08	1.46	0.07	31.70	14.00	54.70	1.40	7.60	2.00	18.50	<0.05	2.70	0.022	1.60	10.90	11.70	0.64	336	0.52	2.10	6.70	27.50	391	11.40	50.80	<0.002	0.03	0.15	7.50	1.40	1.30	302	0.76	0.02	3.10	0.23	0.27	0.64	53.00	0.30	11.10	40.70	150	17T282584
8893963	H8	0.25	6.95	3.90	504	1.31	0.11	1.35	0.05	28.60	12.90	55.80	1.72	6.10	2.45	21.30	<0.05	3.60	0.027	1.67	13.10	17.00	0.60	282	0.80	1.89	7.90	24.90	410	12.60	49.80	<0.002	0.04	0.14	7.90	1.60	1.70	288	0.55	0.06	3.70	0.27	0.28	0.90	60.20	0.40	11.70	40.60	189	17T282584
8893964	H9	0.27	6.80	78.20	453	1.23	0.19	1.27	0.06	29.20	16.70	66.70	2.17	12.60	3.30	23.10	<0.05	3.60	0.036	1.55	13.90	27.30	0.68	334	1.15	1.69	9.60	27.40	270	12.60	50.60	<0.002	0.04	0.23	9.60	1.90	2.10	232	0.65	0.06	4.70	0.35	0.29	1.26	82.70	0.70	13.90	41.80	196	17T282584
8893965	H10	0.21	6.60	4.40	466	1.30	0.13	1.54	0.08	30.80	18.80	76.10	1.68	16.60	3.72	21.40	<0.05	3.60	0.032	1.47	10.70	16.30	0.74	460	0.75	2.04	8.00	33.10	421	12.00	47.60	<0.002	0.04	0.18	8.80	1.40	1.80	290	0.56	0.02	3.20	0.32	0.24	0.88	85.00	0.40	15.40	33.60	192	17T282584
8893966	H11	0.19	6.67	2.40	491	1.38	0.11	1.39	0.06	33.00	14.10	52.30	1.60	13.30	2.17	21.30	<0.05	2.70	0.026	1.53	14.80	14.80	0.53	294	0.81	2.03	6.80	22.30	277	11.70	46.40	<0.002	0.04	0.14	7.60	1.70	1.50	300	0.47	0.05	6.00	0.25	0.27	0.97	53.80	0.40	13.60	37.10	144	17T282584
8893967	H12	0.13	6.26	2.40	476	1.33	0.07	1.40	0.03	23.30	12.50	41.60	1.13	4.60	1.74	18.30	<0.05	1.60	0.019	1.50	7.60	10.20	0.55	259	0.44	2.21	4.50	20.50	342	10.30	49.80	<0.002	0.03	0.10	6.30	1.40	1.10	312	0.34	0.03	1.70	0.17	0.26	0.50	42.90	0.20	9.70	18.80	76	17T282584
8893968	H13	0.18	6.46	1.60	511	1.12	0.09	1.49	0.04	24.30	10.30	50.20	1.40	9.50	1.96	20.50	<0.05	3.40	0.024	1.57	12.00	12.60	0.59	321	0.70	2.14	7.40	21.50	181	11.30	49.40	<0.002	0.03	0.14	7.70	1.20	1.60	311	0.64	0.03	3.90	0.27	0.27	0.84	53.40	0.40	12.20	25.40	186	17T282584
8893969	H14	0.15	6.69	3.60	500	1.38	0.08	1.67	0.05	32.40	15.80	57.30	1.14	4.40	2.14	19.40	<0.05	2.40	0.023	1.57	13.80	10.30	0.67	392	0.50	2.33	5.40	23.70	522	11.10	49.60	<0.002	0.03	0.12	7.90	1.30	1.30	345	0.41	0.03	4.30	0.22	0.24	0.66	56.40	0.30	13.80	26.40	136	17T282584
8893970	H15	0.21	6.48	2.10	475	1.33	0.12	1.44	0.05	28.50	14.50	56.50	2.01	11.50	2.46	22.70	<0.05	3.80	0.029	1.52	14.40	17.60	0.65	328	0.92	2.00	7.60	24.40	203	12.40	48.90	<0.002	0.03	0.16	8.30	1.40	1.70	283	0.51	0.03	4.70	0.28	0.28	1.00	63.90	0.40	13.30	36.20	217	17T282584
8893971	H16	0.22	6.59	3.10	439	1.21	0.15	1.37	0.05	28.20	18.00	63.70	2.16	18.70	2.84	21.10	<0.05	3.30	0.030	1.54	12.80	20.60	0.87	425	0.65	1.91	7.90	32.40	207	10.70	51.40	<0.002	0.03	0.22	10.10	1.50	1.70	246	0.55	0.03	4.40	0.34	0.28	1.12	77.10	0.50	14.50	35.90	184	17T282584
8893972	H17	0.31	7.18	7.70	390	1.48	0.22	1.16	0.11	25.90	24.40	77.40	2.52	19.10	4.31	22.40	<0.05	4.00	0.044	1.32	12.00	26.80	0.77	404	1.27	1.56	9.80	36.50	530	13.10	46.90	<0.002	0.06	0.47	10.50	2.00	2.30	192	1.01	0.15	5.80	0.34	0.31	1.37	92.50	0.80	15.90	45.00	186	17T282584
8893973	H18	0.14	6.78	2.50	535	1.31	0.07	1.84	0.02	32.50	10.40	50.30	1.23	3.70	1.88	19.70	<0.05	3.50	0.023	1.73	15.50	10.90	0.78	395	0.36	2.45	7.00	20.80	136	10.80	49.60	<0.002	0.03	0.14	8.90	1.30	1.60	364	0.66	0.04	4.80	0.27	0.27	1.00	53.10	0.30	14.80	27.10	187	17T282584
8893974	H19	0.25	6.87	6.60	425	1.32	0.17	1.43	0.09	29.30	19.10	74.00	2.03	16.30	3.41	21.00	<0.05	3.70	0.038	1.40	13.30	21.80	0.73	366	0.91	1.76	8.20	31.00	398	13.40	46.20	<0.002	0.05	0.24	9.40	1.80	1.80	245	0.63	0.06	5.80	0.30	0.27	1.11	71.90	0.50	14.80	45.70	195	17T282584
8893975	H20	0.14	6.45	1.40	531	1.13	0.07	1.57	0.05	18.20	9.67	45.50	1.30	3.70	1.51	21.40	<0.05	2.70	0.018	1.68	9.00	11.70	0.66	317	0.38	2.36	6.40	18.90	170	11.00	49.50	<0.002	0.03	0.12	7.40	1.20	1.40	336	0.51	0.04	2.40	0.26	0.30	0.62	47.30	0.30	10.70	23.60	146	17T282584
8893976	H21	0.37	6.80	8.30	359	1.27	0.29	1.07	0.10	25.80	19.70	80.10	2.49	20.20	5.45	26.90	<0.05	3.60	0.048	1.27	12.70	29.80	0.78	363	2.14	1.41	10.00	32.20	513	14.00	44.70	<0.002	0.06	0.33	10.20	2.40	2.30	182	0.68	0.07	4.70	0.37	0.28	1.39	110.00	0.80	14.40	46.70	188	17T282584
8893977	H22	0.34	6.70	1.80	513	1.19	0.12	1.28	0.05	25.50	11.10	53.90	1.66	4.10	2.46	27.90	<0.05	3.30	0.026	1.63	11.80	15.30	0.47	263	0.96	1.87	8.90	16.70	257	13.60	52.70	<0.002	0.04	0.14	7.50	2.00	2.00	275	0.60	0.02	3.60	0.33	0.29	0.87	69.60	0.40	11.60	38.90	181	17T282584
8893978	H23	0.18	6.73	8.90	479	1.54	0.28	1.45	0.07	30.90	23.40	51.50	1.45	23.90	2.81	22.20	<0.05	2.30	0.040	1.50	14.00	15.40	0.61	343	0.72	2.10	7.10	26.90	482	12.20	46.70	<0.002	0.04	0.18	8.10	2.10	1.70	302	0.77	0.04	4.90	0.22	0.25	0.88	58.50	0.30	15.00	43.60	129	17T282584
8893979	H24	0.20	6.50	2.80	502	1.18	0.12	1.35	0.06	18.70	9.58	48.90	1.36	7.50	2.29	21.50	<0.05	2.80	0.023	1.54	8.70	12.40	0.52	282	0.70	2.08	6.00	16.80	156	11.90	46.90	<0.002	0.07	0.09	7.50	1.40	1.40	309	0.46	0.04	2.90	0.24	0.27	0.69	59.70	0.30	9.50	28.00	141	17T282584
8893980	H25	0.14	7.01	3.30	469	1.41	0.08	1.59	0.04	29.70	16.30	59.20	1.21	3.70	2.58	19.60	<0.05	2.40	0.027	1.46	13.00	12.20	0.70	354	0.43	2.17	5.90	27.80	327	11.40	43.80	<0.002	0.03	0.10	8.30	1.40	1.60	331	0.47	0.02	4.50	0.26	0.23	0.61	65.60	0.20	12.00	29.00	127	17T282584
8893981	H26	0.19	6.98	2.60	471	1.32	0.16	1.50	0.08	30.10	14.30	59.30	1.44	4.30	2.53	19.80	<0.05	2.70	0.028	1.46	14.20	14.30	0.62	350	0.60	2.07	6.70	25.20	433	11.40	46.50	<0.002	0.04	0.10	8.20	1.70	1.40	301	0.49	0.03	6.50	0.27	0.25	0.81	63.00	0.30	12.60	38.20	142	17T282584
8893982	H27	0.28	5.60	3.80	464	0.88	0.15	1.08	0.07	28.50	7.38	44.50	1.46	13.80	2.14	23.70	<0.05	3.90	0.029	1.41	13.40	12.80	0.41	283	0.96	1.44	10.10	14.00	467	13.50	43.20	<0.002	0.04	0.30	7.00	2.10	2.20	212	0.61	0.06	4.50	0.35	0.25	1.12	64.20	0.60	10.90	40.70	217	17T282584
8893983	H28	0.29	6.00	3.90	496	1.12	0.13	1.30	0.07	29.00	9.56	46.10	1.23	7.80	1.85	19.70	<0.05	3.30	0.024	1.50	13.60	11.50	0.46	298	0.60	1.91	7.20	17.30	262	11.10	44.20	<0.002	0.03	0.17	7.30	1.40	1.50	282	0.45	<0.01	5.10	0.28	0.26	0.85	55.80	0.40	10.20	37.30	177	17T282584
8893984	H29	0.33	6.94	2.00	488	1.35	0.08	1.45	0.07	19.00	13.70	62.70	1.50	4.40	2.41	20.10	<0.05	2.90	0.029	1.56	8.20	15.10	0.65	344	0.57	2.08	13.30	25.90	575	10.50	47.90	<0.002	0.04	0.11	8.30	1.50	1.40	304	0.46	0.03	2.60	0.25	0.26	0.66	60.70	0.30	11.20	44.60	161	17T282584
8893985	H30	0.18	6.83	4.20	474	1.39	0.09	1.53	0.05	30.20	15.30	65.10	1.37	5.20	2.38	21.10	<0.05	2.70	0.024	1.51	14.00	13.10	0.71	375	0.49	2.15	6.10	31.30	526	11.70	50.30	<0.002	0.03	0.09	8.60	1.80	1.30	323	0.46	<0.01	5.60	0.25	0.26	0.75	66.70	0.30	12.90	30.50	137	17T282584
8893986	H31	0.26	7.06	2.10	523	1.38	0.08	1.55	0.06	31.70	14.30	64.10	1.60	4.80	2.23	20.80	<0.05	3.30	0.027	1.69	12.80	13.50	0.71	343	0.52	2.14	7.70	29.50	351	11.90	52.00	<0.002	0.03	0.11	8.70	1.60	1.50	314	0.51	0.01	4.00	0.27	0.28	0.82	59.20	0.40	12.70	34.90	172	17T282584
8893987	H32	0.30	7.09	2.50	476	1.18	0.12	1.39	0.07	22.80	20.70	75.80	1.70	7.50	3.08	20.20	<0.05	3.50	0.028	1.52	11.00	20.10	0.72	380	0.69	1.80	8.10	42.80	513	11.10	46.00	<0.002	0.04	0.16	9.10	1.80	1.50	267	0.58	0.03	3.10	0.32	0.27	0.81	77.20	0.40	12.40	49.50	183	17T282584
8893988	H33	0.29	6.68	3.30	475	1.26	0.11	1.44	0.09	36.90	17.60	81.10	1.67	7.40	3.05	20.50	<0.05	3.50	0.029	1.58	17.50	15.70	0.77	414	0.61	1.87	7.80	34.10	403	12.20	48.70	<0.002	0.03	0.13	9.60	1.60	1.50	276	0.54	0.03	5.90	0.34	0.26	0.86	86.00	0.40	14.60	34.50	192	17T282584
8893989	H34	0.39	7.04	3.20	467	1.32	0.15	1.55	0.07	33.20	22.90	87.90	1.84	12.20	3.45	21.30	<0.05	3.90	0.033	1.57	14.80	17.60	0.90	541	0.62	1.85	10.30	42.00	614	12.30	50.40	<0.002	0.04	0.16	10.50	2.00	2.60	273	1.39	0.04	6.60	0.41	0.25	0.98	92.00	0.40	16.70	46.80	194	17T282584
8893990	H35	0.47	7.22	5.50	472	1.38	0.16	1.43	0.13	34.60	23.20	92.30	2.03	21.20	3.60	22.20	<0.05	3.80	0.038	1.62	15.30	19.40	0.87	504	0.73	1.76	9.00	40.30	814	12.90	50.90	<0.002	0.04	0.21	11.10	1.90	1.80	260	0.58	0.05	5.20	0.39	0.28	1.09	93.60	0.50	16.30	59.20	206	17T282584
8893991	H36	0.51	7.81	7.40	474	1.55	0.18	1.26	0.08	29.90	24.40	84.90	2.35	14.20	3.62	22.40	<0.05	4.10	0.040	1.57	15.20	26.60	0.81	386	1.18	1.51	11.00	45.90	1040	12.00	50.60	<0.002	0.06	0.40	10.00	2.00	2.10	224	1.04	0.17	6.70	0.36	0.29	1.20	87.30	0.80	14.00	78.70	188	17T282584
8893992	H37	0.46	7.13	6.50	491	1.36	0.16	1.49	0.13	24.60	16.80	77.40	1.75	7.00	3.69	24.50	<0.05	3.10	0.038	1.58	11.70	23.50	0.71	476	0.74	1.89	9.00	28.10	1210	12.60	51.50	<0.002	0.05	0.34	10.00	2.00	2.00	268	0.66	0.09	4.00	0.37	0.26	1.00	91.80	0.50	13.40	99.00	174	17T282584
8893993	H38	0.43	7.32	5.80	464	1.32	0.13	1.45	0.09	22.20	23.10	94.60	1.98	14.00	3.91	21.10	<0.05	2.50	0.035	1.57	10.40	21.90	0.89	595	0.83	1.73	9.30	44.80	889	11.30	49.60	<0.002	0.05	0.17	10.40	1.90	1.70	266	0.65	0.03	3.50	0.42	0.26	0.83	105.00	0.50	14.40	51.00	130	17T282584
8893994	H39	0.32	7.06	2.40	494	1.49	0.10	1.58	0.08	37.60	18.50	74.70	1.73	5.10	2.80	22.10	<0.05	3.80	0.032	1.60	17.80	16.80	0.77	406	0.52	2.01	8.80	37.00	538	12.20	53.90	<0.002	0.04	0.12	9.50	1.60	1.70	303	0.64	0.04	5.50	0.31	0.29	0.95	70.10	0.40	16.40	43.00	198	17T282584
8893995	H40	0.19	6.56	1.80	500	1.50	0.09	1.48	0.05	28.10	15.00	53.90	1.40	4.00	2.18	22.70	<0.05	3.10	0.023	1.58	12.90	12.70	0.62	314	0.44	2.17	6.30	26.50	701	12.10	53.30	<0.002	0.03	0.14	7.70	1.30	1.30	312	0.59	0.03	5.10	0.22	0.28	0.80	58.30	0.40	13.20	25.70	163	17T282584
8893996	H41	0.21	6.68	2.70	507	1.45	0.09	1.45	0.06	23.80	16.20	69.20	1.75	7.20	2.20	19.90	<0.05	2.40	0.027	1.61	10.60	13.00	0.69	328	0.57	2.07	7.00	30.00	469	11.50	51.70	<0.002	0.03	0.13	7.70	1.40	1.40	301	0.56	0.02	3.30	0.26	0.26	0.69	55.80	0.30	10.70	51.70	131	17T282584
8893997	H42	0.27	7.07	4.00	497	1.48	0.11	1.55	0.07	33.30	23.50	73.60	1.70	6.10	2.79	22.20	<0.05	4.00	0.033	1.49	15.20	14.90	0.73	352	0.71	2.00	8.20	36.00	497	12.70	45.60	<0.002	0.04	0.13	9.30	1.50	1.70	293	0.73	0.04	5.80	0.29	0.26	0.86	72.70	0.40	14.30	41.00	230	17T282584
8893998	H43	0.70	7.50	17.30	412	1.75	0.27	1.37	0.17	41.20	43.10	88.20	3.35	68.10	4.48	23.60	<0.05	3.20	0.052	1.37	18.30	32.20	0.86	506	1.56	1.38	11.00	61.60	1850	20.70	48.30	<0.002	0.07	0.43	9.80	2.30	2.50	215	0.73	0.13	7.20	0.48	0.24	1.30	107.00	0.60	16.70	85.10	167	17T282584
8893999	I1	0.23	6.68	2.20	499	1.31	0.07	1.40	0.04	17.10	12.20	51.70	1.44	3.00	1.92	20.10	<0.05	1.90	0.019	1.57	8.10	12.10	0.56	278	0.40	2.15	6.20	23.40	456	11.00	49.10	<0.002	0.04	0.10	7.00	1.40	1.30	310	0.43	0.02	2.10	0.20	0.27	0.51	49.80	0.30	9.80	36.30	99	17T282584
8894000	I2	0.51	6.60	3.80	514	1.26	0.10	1.41	0.07	25.70	12.10	49.00	1.38	3.00	2.13	22.60	<0.05	2.70	0.025	1.60	11.90	12.50	0.53	303	1.38	2.05	6.50	21.20	782	15.20	49.80	<0.002	0.03	0.16	7.00	1.40	1.60	305	0.44	0.03	3.80	0.24	0.26	0.64	54.80	0.40	10.70	39.90	139	17T282584
8894001	I3	0.35	6.69	3.80	516	1.28	0.14	1.35	0.05	20.90	12.40	51.10	1.64	5.30	2.08	20.40	<0.05	3.00	0.027	1.68	10.60	13.60	0.47	286	0.55	1.95	7.50	21.50	391	12.30	49.70	<0.002	0.03	0.15	7.50	1.30	1.60	291	0.56	0.03	3.00	0.27	0.26	0.73	54.10	0.40	11.10	39.70	153	17T282584
8894002	I4	0.24	6.82	6.00	437	1.46	0.17	1.23	0.06	71.90	23.00	70.10	2.44	38.40	2.86	21.10	<0.05	3.00	0.031	1.58	14.10	19.80	0.78	384	0.77	1.80	7.20	34.60	499	13.50	57.30	<0.002	0.03	0.27	10.70	1.50	1.70	221	0.54	0.03	5.30	0.29	0.31	1.27	74.60	0.60	15.90	48.60	155	17T282584
8894003	I5	0.22	7.22	3.80	454	1.34	0.14	1.23	0.07	21.80	19.50	63.40	1.84	6.20	2.81	19.30	<0.05	2.80	0.028	1.43	11.10	22.90	0.59	305	0.91	1.74	6.80	31.70	446	12.90	46.00	<0.002	0.04	0.20	8.80	1.80	1.70	234	0.53	0.03	3.40	0.27	0.26	0.92	66.90	0.50	11.30	41.70	147	17T282584
8894004	I6	0.20	7.04	5.50	476	1.46	0.16	1.31	0.04	28.50	21.20	67.50	1.83	16.20	2.59	20.90	<0.05	2.50	0.028	1.49	10.30	16.80	0.72	337	0.73	1.94	6.20	36.40	427	12.30	51.30	<0.002	0.03	0.17	8.70	1.70	1.50	274	0.46	0.04	3.10	0.24	0.28	0.77	64.60	0.40	12.10	34.20	134	17T282584
8894005	I7	0.28	6.66	3.00	471	1.33	0.14	1.34	0.08	29.10	18.30	66.60	2.01	12.90	2.77	21.50	<0.05	3.90	0.030	1.57	12.40	18.90	0.70	345	0.75	1.89	7.20	30.60	528	12.50	52.50	<0.002	0.03	0.15	9.40	1.30	1.60	258	0.51	0.04	4.40	0.29	0.28	1.04	70.70	0.50	12.30	41.10	200	17T282584
8894006	I8	0.25	7.39	7.40	476	1.36	0.17	1.22	0.07	27.00	19.40	71.10	2.21	19.50	3.19	23.10	<0.05	2.70	0.036	1.53	12.60	26.10	0.64	309	1.14	1.71	8.50	33.40	499	13.10	50.90	<0.002	0.05	0.27	8.70	1.80	1.80	256	0.54	0.03	4.10	0.31	0.30	1.02	76.80	0.50	11.50	53.80	142	17T282584
8894007	I9	0.24	7.14	8.60	406	1.38	0.21	1.17	0.09	27.90	25.50	77.50	2.49	21.90	3.94	21.30	<0.05	2.90	0.032	1.35	12.40	25.30	0.75	384	1.06	1.59	7.80	37.20	522	13.60	49.70	<0.002	0.05	0.26	10.40	2.10	1.80	200	0.53	0.05	4.90	0.32	0.29	1.19	86.70	0.90	13.70	53.40	157	17T282584
8894008	I10	0.40	7.75	6.00	490	1.68	0.12	1.46	0.06	116.00	36.40	78.10	1.57	30.50	2.77	20.30	<0.05	3.50	0.033	1.44	21.60	19.50	0.69	379	0.63	1.96	7.20	49.40	486	13.90	43.70	<0.002	0.05	0.17	11.60	1.80	1.40	287	0.48	0.04	5.00	0.26	0.28	1.20	70.50	0.40	25.00	43.50	175	17T282584
8894009	I11	0.30	6.94	4.80	440	1.28	0.16	1.33	0.08	36.40	18.10	75.70	1.78	20.10	2.88	19.20	<0.05	3.40	0.031	1.45	14.10	18.90	0.76	390	0.67	1.88	6.40	32.10	397	12.80	47.60	<0.002	0.05	0.19	9.70	1.70	1.40	248	0.48	0.03	6.40	0.28	0.28	1.04	74.10	0.40	11.50	44.10	175	17T282584
8894010	I12	0.27	7.09	4.30	497	1.16	0.10	1.43	0.05	26.50	14.00	56.90	1.41	7.10	2.34	20.10	<0.05	3.40	0.025	1.60	12.40	16.00	0.60	298	0.76	2.04	7.00	22.80	221	12.40	43.80	<0.002	0.04	0.20	8.50	1.40	1.60	296	0.46	0.03	4.30	0.28	0.26	0.88	61.80	0.40	10.60	31.50	174	17T282584
8894011	I13	0.17	6.75	2.80	519	1.29	0.09	1.45	0.06	25.80	14.20	53.20	1.49	8.30	2.08	20.00	<0.05	2.20	0.023	1.65	8.70	12.90	0.61	296	0.51	2.19	5.30	24.80	375	11.30	51.80	<0.002	0.03	0.13	7.50	1.20	1.30	324	0.37	0.01	13.50	0.22	0.26	0.77	54.10	0.30	11.80	32.50	116	17T282584
8894013	I14	0.23	6.68	2.90	496	1.19	0.09	1.39	0.07	29.10	11.40	57.40	1.17	11.40	2.26	14.50	<0.05	2.70	0.024	1.53	11.60	13.50	0.67	278	0.46	1.99	5.40	30.50	348	12.10	44.00	<0.002	0.04	0.13	8.60	0.90	0.90	263	0.40	<0.01	3.30	0.24	0.26	0.79	54.40	0.40	8.70	34.10	107	17T282585
8894014	I15	0.31	6.67	3.60	462	1.27	0.13	1.31	0.07	23.50	15.20	66.90	1.42	14.10	2.95	14.50	<0.05	2.30	0.032	1.40	10.10	20.70	0.68	331	0.76	1.83	5.40	39.20	374	12.40	45.70	<0.002	0.03	0.22	8.70	0.90	1.10	229	0.38	0.01	4.10	0.27	0.24	0.83	68.10	0.40	8.40	37.50	93	17T282585
8894015	I16	0.23	6.44	3.40	459	1.11	0.11	1.27	0.05	25.30	9.76	59.10	1.31	9.50	2.57	14.50	<0.05	2.80	0.028	1.48	12.30	18.40	0.53	260	0.69	1.74	6.00	25.20	444	11.80	43.90	<0.002	0.04	0.19	8.00	0.70	1.00	217	0.42	0.02	3.90	0.28	0.25	0.96	59.50	0.40	8.20	41.00	115	17T282585
8894016	I17	0.18	6.60	7.30	455	1.33	0.14	1.36	0.06	27.50	14.50	61.40	1.28	9.80	2.77	14.10	<0.05	2.70	0.030	1.43	12.40	20.00	0.59	325	0.61	1.85	5.80	33.10	464	12.60	44.50	<0.002	0.04	0.40	8.30	0.80	1.10	236	0.38	0.03	4.40	0.26	0.23	2.42	61.80	0.30	8.60	44.70	118	17T282585
8894017	I18	0.20	6.55	10.20	435	1.21	0.20	1.25	0.12	31.90	14.90	70.10	1.69	27.80	3.19	14.30	<0.05	2.20	0.032	1.42	12.10	21.70	0.81	419	0.50	1.82	4.90	39.00	533	12.40	48.90	<0.002	0.04	0.32	9.50	0.80	1.10	196	0.37	0.02	4.90	0.27	0.25	1.09	69.10	0.40	9.00	53.70	89	17T282585
8894018	I19	0.20	6.40	6.60	398	1.27	0.15	1.21	0.12	21.00	12.60	69.80	1.47	28.90	3.60	14.10	<0.05	2.70	0.038	1.32	9.80	24.20	0.69	337	0.79	1.62	5.70	32.50	709	11.40	40.70	<0.002	0.05	0.28	9.30	0.80	1.10	194	0.39	0.02	4.30	0.27	0.24	1.18	74.00	0.50	8.10	57.40	112	17T282585
8894019	I20	0.23	6.80	4.70	438	1.24	0.15	1.25	0.09	24.30	10.90	65.30	1.38	10.20	2.90	15.10	<0.05	2.80	0.033	1.36	11.80	21.80	0.55	272	0.70	1.74	5.70	30.30	855	12.20	41.90	<0.002	0.05	0.23	8.10	0.80	1.20	218	0.39	0.03	4.40	0.27	0.24	0.99	62.40	0.40	8.30	67.90	117	17T282585
8894020	I21	0.20	6.54	7.10	419	1.16	0.15	1.30	0.12	31.80	11.00	70.90	1.39	21.80	3.68	14.80	<0.05	2.70	0.036	1.34	16.70	19.70	0.65	309	0.89	1.70	6.00	31.10	546	12.40	40.60	<0.002	0.05	0.27	9.70	1.00	1.10	209	0.43	0.03	5.30	0.30	0.24	1.12	79.20	0.40	10.50	46.60	113	17T282585
8894021	I22	0.19	5.92	3.50	492	1.14	0.86	1.39	0.06	22.40	7.56	40.60	0.92	7.40	1.85	13.30	<0.05	2.00	0.019	1.53	9.40	9.60	0.55	293	0.34	2.18	4.10	21.00	368	10.80	47.10	<0.002	0.03	0.16	6.90	0.60	0.90	270	0.29	<0.01	2.80	0.20	0.25	0.61	47.90	0.30	7.50	27.40	82	17T282585
8894022	I23	0.18	6.66	3.40	479	1.19	0.08	1.45	0.05	27.40	10.90	53.30	1.04	8.30	2.38	13.90	<0.05	1.90	0.024	1.53	11.40	13.50	0.63	318	0.45	2.14	4.30	27.70	455	11.00	45.70	<0.002	0.03	0.62	8.20	0.60	0.90	283	0.29	<0.01	3.00	0.24	0.24	0.65	57.80	0.30	8.40	27.20	78	17T282585
8894023	I24	0.21	6.25	3.40	508	1.11	0.09	1.43	0.08	17.50	8.50	51.50	1.13	5.70	2.29	14.40	<0.05	1.80	0.025	1.51	8.40	14.20	0.54	307	0.48	2.07	4.50	21.70	505	10.80	45.80	<0.002	0.03	0.26	7.50	0.60	0.90	270	0.31	<0.01	2.60	0.24	0.23	0.67	54.10	0.30	7.00	71.50	74	17T282585
8894024	I25	0.31	6.17	4.90	436	0.96	0.15	1.09	0.08	20.00	5.16	48.40	1.10	8.80	2.45	15.50	<0.05	2.80	0.031	1.31	10.00	18.90	0.41	234	0.67	1.52	6.60	14.90	573	12.90	39.00	<0.002	0.05	0.27	7.40	0.80	1.30	187	0.42	0.04	3.70	0.31	0.23	1.03	66.90	0.50	7.00	61.90	114	17T282585

2017 Soil Sample Results

Sample ID	Field ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
8894025	I26	0.18	6.47	2.30	490	1.17	0.09	1.40	0.07	20.90	9.42	59.10	1.22	4.00	2.60	14.30	<0.05	2.50	0.028	1.51	9.90	15.60	0.56	416	0.52	1.98	5.20	21.60	878	11.30	46.10	<0.002	0.04	0.13	7.70	0.80	0.90	255	0.36	<0.01	3.10	0.27	0.24	0.81	59.60	0.30	7.40	48.80	105	17T282585
8894026	I27	0.20	6.27	1.90	444	1.07	0.07	1.47	0.05	14.20	8.61	58.10	0.95	3.80	2.69	13.90	<0.05	1.40	0.024	1.39	6.70	13.00	0.64	363	0.38	2.06	4.60	26.20	546	9.80	43.20	<0.002	0.04	0.11	7.90	0.60	0.80	272	0.33	<0.01	3.60	0.25	0.22	0.53	65.90	0.20	7.50	30.20	59	17T282585
8894027	I28	0.20	6.58	4.30	467	1.27	0.09	1.48	0.05	23.90	11.30	65.10	1.13	4.00	2.82	14.90	<0.05	2.30	0.033	1.46	11.50	15.80	0.68	355	0.48	2.00	5.80	29.10	523	11.00	45.60	<0.002	0.04	0.21	8.80	0.70	1.00	266	0.40	0.01	5.30	0.28	0.24	0.77	68.70	0.30	9.30	37.10	97	17T282585
8894028	I29	0.17	6.57	2.30	463	1.15	0.08	1.55	0.06	22.30	11.50	69.20	1.10	7.90	2.91	13.80	<0.05	3.00	0.026	1.49	10.00	14.40	0.79	423	0.43	1.98	5.30	35.20	499	10.20	45.50	<0.002	0.03	0.12	9.10	0.60	1.00	263	0.35	0.01	3.50	0.30	0.22	0.88	73.20	0.30	9.10	33.70	127	17T282585
8894029	I30	0.24	5.63	1.10	514	0.93	0.08	1.34	0.05	19.40	4.80	40.80	1.04	2.60	1.75	13.80	<0.05	2.60	0.020	1.55	9.60	9.60	0.45	285	0.38	1.99	4.90	14.70	210	10.50	47.60	<0.002	0.02	0.15	7.00	0.70	1.00	258	0.36	<0.01	3.30	0.27	0.25	0.75	48.90	0.30	7.10	28.00	110	17T282585
8894030	I31	0.13	6.53	2.50	513	1.11	0.08	1.50	0.07	21.60	7.16	54.60	1.02	3.20	2.31	14.80	<0.05	2.40	0.026	1.51	11.20	12.50	0.55	324	0.35	2.13	5.10	22.10	398	11.20	46.40	<0.002	0.04	0.12	7.70	0.80	0.90	287	0.36	<0.01	3.00	0.26	0.24	0.68	58.50	0.30	7.80	40.00	101	17T282585
8894031	I32	0.21	6.56	1.30	528	1.17	0.08	1.40	0.06	20.60	8.92	54.00	1.17	4.00	2.40	14.60	<0.05	2.60	0.024	1.63	10.20	14.60	0.56	301	0.56	2.02	5.20	25.70	387	10.90	48.50	<0.002	0.03	0.15	7.80	0.70	1.20	270	0.36	<0.01	3.20	0.27	0.24	0.76	59.40	0.30	7.60	34.40	116	17T282585
8894032	I33	0.23	6.36	1.10	527	1.17	0.07	1.37	0.04	15.00	7.89	47.10	1.05	3.60	1.95	14.20	<0.05	1.60	0.021	1.57	7.00	12.10	0.58	255	0.32	2.16	4.00	25.70	263	10.90	49.30	<0.002	0.03	0.13	6.70	0.60	0.90	279	0.28	<0.01	2.30	0.20	0.24	0.52	49.20	0.40	6.00	35.90	64	17T282585
8894033	I34	0.19	6.42	1.90	514	1.13	0.07	1.40	0.04	17.60	9.26	46.90	0.93	7.50	1.97	13.30	<0.05	1.90	0.022	1.57	7.80	11.90	0.61	285	0.53	2.21	4.50	28.60	376	10.70	47.60	<0.002	0.03	0.18	7.00	0.60	1.50	297	0.38	0.05	2.60	0.20	0.25	0.56	49.30	0.30	6.60	25.90	68	17T282585
8894034	I35	0.28	5.91	2.20	461	0.90	0.11	1.21	0.07	30.30	9.07	55.30	1.53	10.10	2.56	14.20	<0.05	2.10	0.027	1.42	15.00	21.00	0.58	283	0.62	1.69	5.40	26.40	585	13.50	45.00	<0.002	0.04	0.21	7.10	1.00	1.00	218	0.38	0.03	8.80	0.26	0.25	0.90	56.40	0.30	7.40	58.60	84	17T282585
8894035	I36	0.26	6.43	4.40	489	1.15	0.16	1.36	0.13	23.70	13.00	67.50	2.00	11.20	3.17	15.50	<0.05	2.30	0.034	1.57	10.20	24.80	0.68	415	0.76	1.67	6.10	34.90	1240	13.60	48.70	<0.002	0.05	0.34	8.10	0.80	1.10	228	0.40	0.03	3.30	0.29	0.24	0.85	69.90	0.40	7.50	117.00	95	17T282585
8894036	I37	0.15	6.00	2.30	569	1.05	0.09	1.28	0.04	14.50	5.59	33.60	1.00	2.90	1.65	14.90	<0.05	1.90	0.017	1.72	6.90	9.70	0.41	244	0.28	2.25	3.70	13.80	562	11.90	56.50	<0.002	0.03	0.15	5.40	<0.5	0.80	297	0.28	0.01	2.20	0.19	0.28	0.54	41.40	0.20	5.40	35.40	77	17T282585
8894037	I38	0.44	5.66	6.10	532	0.91	0.14	1.34	0.09	21.60	6.17	43.30	1.34	6.10	2.04	15.00	<0.05	2.80	0.026	1.69	10.60	13.90	0.49	294	0.60	1.88	5.70	17.40	522	14.20	50.00	<0.002	0.03	0.29	6.90	0.80	1.10	252	0.37	0.03	3.50	0.27	0.26	0.79	52.80	0.30	7.20	53.10	116	17T282585
8894038	I39	0.27	6.43	4.50	517	1.12	0.12	1.42	0.10	22.30	9.36	58.40	1.25	4.80	2.48	15.50	<0.05	2.50	0.026	1.50	10.70	16.30	0.64	325	0.56	1.89	6.30	30.40	535	11.90	45.20	<0.002	0.03	0.25	7.90	0.50	1.50	254	0.43	0.01	3.10	0.28	0.23	0.78	60.60	0.40	7.90	88.80	107	17T282585
8894039	I40	0.61	6.35	22.50	408	1.51	0.39	1.44	0.21	43.90	26.80	81.70	2.63	69.70	5.47	15.20	<0.05	2.40	0.062	1.41	18.50	31.50	1.00	703	1.23	1.43	9.20	55.90	2300	24.80	39.00	<0.002	0.08	0.64	10.60	1.00	1.20	192	0.50	0.11	7.10	0.62	0.19	1.36	119.00	0.60	10.70	94.10	99	17T282585
8894040	J1	1.22	7.38	2.00	467	1.25	2.92	1.23	0.04	17.80	9.59	56.00	1.18	4.40	2.52	14.30	<0.05	2.80	0.030	1.49	8.60	16.90	0.50	233	0.53	1.85	5.40	24.00	347	28.40	45.60	<0.002	0.09	0.13	7.70	0.90	1.00	243	0.35	<0.01	3.50	0.24	0.26	0.81	52.80	0.30	7.20	23.80	118	17T282585
8894041	J2	0.17	6.35	2.40	521	1.23	0.07	1.40	0.03	20.60	8.80	47.10	1.03	4.60	2.01	13.50	<0.05	2.20	0.021	1.63	8.70	12.20	0.58	287	0.29	2.14	4.00	27.20	414	10.80	50.10	<0.002	0.03	0.16	6.90	<0.5	0.80	285	0.31	<0.01	3.10	0.20	0.24	0.71	47.30	0.20	7.00	25.70	94	17T282585
8894042	J3	0.19	6.66	2.00	513	1.22	0.09	1.39	0.07	21.80	9.43	55.60	1.25	3.20	2.16	14.30	<0.05	2.80	0.027	1.62	9.60	14.50	0.60	275	0.41	2.01	5.70	27.70	489	11.30	49.60	<0.002	0.04	0.15	8.00	0.50	1.00	255	0.40	0.03	3.20	0.26	0.26	0.71	53.10	0.40	7.50	35.70	115	17T282585
8894043	J4	0.20	6.48	2.10	497	1.21	0.09	1.43	0.06	21.60	10.40	58.00	1.18	3.80	2.38	14.60	<0.05	2.90	0.024	1.59	10.10	13.00	0.64	354	0.43	2.03	5.50	27.60	567	11.50	51.20	<0.002	0.04	0.15	7.80	<0.5	1.00	274	0.36	<0.01	3.20	0.25	0.25	0.79	58.10	0.30	8.20	36.10	123	17T282585
8894044	J5	0.24	7.10	3.90	458	1.28	0.10	1.41	0.06	31.80	8.39	65.00	1.04	12.80	2.76	13.80	<0.05	2.70	0.030	1.44	14.30	14.00	0.60	299	0.74	1.93	5.10	24.90	909	12.20	40.20	<0.002	0.05	0.19	8.60	1.10	0.80	259	0.35	<0.01	5.30	0.25	0.23	1.08	60.00	0.30	9.00	42.60	108	17T282585
8894045	J6	0.18	6.25	2.10	514	1.13	0.08	1.46	0.07	20.00	7.41	47.30	1.03	2.90	2.03	14.00	<0.05	3.00	0.021	1.63	9.80	11.80	0.53	313	0.33	2.13	4.60	21.80	486	10.50	48.20	<0.002	0.03	0.16	7.10	0.70	0.90	279	0.32	<0.01	7.40	0.24	0.25	0.80	50.00	0.20	7.50	41.80	125	17T282585
8894046	J7	0.22	6.40	2.10	499	1.23	0.09	1.35	0.06	25.80	8.04	51.30	1.08	3.20	2.40	15.70	<0.05	2.10	0.024	1.59	11.90	12.70	0.52	302	0.43	2.02	5.10	21.60	494	11.70	50.60	<0.002	0.03	0.23	7.20	0.70	1.00	270	0.34	<0.01	4.50	0.26	0.25	0.76	59.40	0.30	7.60	33.00	87	17T282585
8894047	J8	0.21	6.33	3.00	481	1.05	0.08	1.38	0.10	22.30	10.10	54.20	1.06	5.60	2.18	13.30	<0.05	2.10	0.025	1.56	9.20	12.30	0.66	333	0.37	2.00	4.80	25.70	558	10.30	48.30	<0.002	0.03	0.13	7.60	0.50	0.80	265	0.30	0.01	2.70	0.23	0.23	0.67	52.50	0.20	7.40	35.20	90	17T282585
8894048	J9	0.19	6.11	3.90	452	1.04	0.16	1.27	0.06	24.90	9.56	51.50	1.48	11.70	2.70	15.50	<0.05	2.90	0.027	1.47	10.60	18.90	0.60	343	0.56	1.77	5.70	24.90	822	11.80	50.10	<0.002	0.04	0.26	8.70	0.60	1.20	208	0.35	0.01	4.30	0.29	0.27	1.10	66.40	0.50	8.60	48.30	123	17T282585
8894049	J10	0.26	7.12	1.90	483	1.20	0.09	1.48	0.05	21.00	10.80	63.90	1.13	5.50	2.57	14.70	<0.05	2.20	0.025	1.50	10.60	16.10	0.71	311	0.53	2.06	6.10	33.90	477	10.70	45.90	<0.002	0.04	0.15	8.50	0.80	0.90	269	0.35	<0.01	3.20	0.25	0.25	0.73	60.30	0.20	8.00	33.60	99	17T282585
8894050	J11	0.15	6.20	2.70	503	1.18	0.08	1.37	0.05	16.60	7.35	45.10	1.06	3.70	1.92	14.20	<0.05	2.00	0.021	1.60	7.50	10.90	0.57	264	0.39	2.14	3.80	22.10	344	10.40	50.10	<0.002	0.03	0.12	6.70	<0.5	0.80	279	0.21	<0.01	2.20	0.19	0.26	0.57	48.90	0.20	6.60	26.70	86	17T282585
8894051	J12	0.14	6.49	2.40	513	1.23	0.08	1.36	0.06	19.60	8.72	55.60	1.07	3.50	2.26	14.50	<0.05	1.70	0.021	1.56	10.40	14.10	0.56	310	0.39	2.07	4.10	26.60	491	10.80	47.90	<0.002	0.03	0.12	6.80	0.60	0.80	272	0.23	<0.01	4.80	0.21	0.25	0.69	54.30	0.20	7.50	43.10	72	17T282585
8894052	J13	0.23	6.81	2.10	507	1.20	0.08	1.57	0.05	21.10	9.67	65.80	1.15	3.60	2.24	14.50	<0.05	2.40	0.023	1.60	9.30	12.20	0.69	317	0.45	2.22	5.60	27.40	303	17.00	50.10	<0.002	0.03	0.12	8.20	0.60	0.90	280	0.45	<0.01	2.80	0.25	0.25	0.70	57.30	0.20	8.40	31.40	102	17T282585
8894053	J14	0.12	6.48	3.40	547	1.26	0.10	1.35	0.04	24.10	8.66	54.30	1.12	12.00	2.12	14.70	<0.05	1.60	0.020	1.64	9.90	13.40	0.62	289	0.41	2.28	3.60	26.40	247	11.00	51.90	<0.002	0.03	0.12	6.80	<0.5	0.70	285	0.21	0.01	2.80	0.20	0.27	0.63	50.00	0.20	8.00	31.40	64	17T282585
8894054	J15	0.13	6.20	5.40	501	1.36	0.11	1.53	0.07	38.40	7.70	56.60	1.22	20.30	2.03	14.90	<0.05	2.90	0.026	1.64	33.60	12.90	0.66	366	0.40	2.16	4.70	24.10	297	12.20	50.30	<0.002	0.03	0.16	8.80	0.70	0.90	288	0.28	<0.01	9.70	0.26	0.29	1.35	56.70	0.20	14.90	28.40	125	17T282585
8894055	J16	0.14	6.62	4.90	514	1.31	0.10	1.49	0.05	29.30	13.10	62.00	1.13	11.20	2.52	14.60	<0.05	2.10	0.026	1.59	9.40	14.00	0.65	326	0.47	2.16	4.70	31.50	408	11.30	49.90	<0.002	0.03	0.15	7.90	0.70	0.90	282	0.25	0.02	3.00	0.24	0.26	0.66	61.90	5.40	8.30	31.50	87	17T282585
8894056	J17	0.21	6.26	2.70	505	1.31	0.09	1.47	0.06	39.10	8.30	55.00	1.08	12.20	2.11	14.80	<0.05	2.30	0.021	1.64	22.60	10.60	0.62	373	0.45	2.22	4.40	24.30	372	11.40	50.20	<0.002	0.03	0.13	8.90	0.90	1.10	296	0.31	0.01	7.20	0.23	0.27	1.41	55.20	0.30	16.60	28.60	103	17T282585
8894057	J18	0.25	6.83	4.90	448	1.30	0.15	1.26	0.08	19.30	11.60	74.60	1.58	11.10	4.01	16.20	<0.05	2.40	0.036	1.43	9.70	22.40	0.69	337	0.82	1.80	6.20	31.50	571	12.00	49.40	<0.002	0.05	0.23	9.00	0.90	1.10	212	0.35	0.03	3.20	0.31	0.26	1.00	77.80	0.40	9.10	43.90	103	17T282585
8894058	J19	0.21	6.27	0.70	504	1.19	0.08	1.37	0.07	19.30	7.72	48.60	1.00	2.50	1.97	14.30	<0.05	1.80	0.019	1.58	8.00	10.70	0.56	253	0.39	2.18	3.80	20.60	248	11.10	48.60	<0.002	0.03	0.10	6.90	<0.5	0.80	285	0.21	0.02	2.60	0.20	0.26	0.58	50.50	0.20	6.90	25.70	75	17T282585
8894059	J20	0.11	6.44	1.20	504	1.15	0.07	1.38	0.06	16.30	7.91	45.30	0.97	3.70	2.03	13.80	<0.05	1.40	0.020	1.55	7.10	11.70	0.55	244	0.34	2.19	3.50	22.70	457	10.40	48.00	<0.002	0.03	0.14	6.40	0.60	0.90	293	0.20	<0.01	1.60	0.18	0.25	0.47	50.50	0.20	6.40	37.40	59	17T282585
8894060	J21	0.21	5.98	5.50	440	1.33	0.12	1.52	0.10	33.80	9.67	76.30	1.17	4.80	3.67	16.60	<0.05	3.00	0.034	1.39	16.50	15.40	0.66	459	0.50	1.94	6.50	21.60	839	10.80	47.60	<0.002	0.04	0.19	9.10	0.70	1.10	258	0.32	<0.01	6.80	0.34	0.23	1.09	84.00	0.30	11.80	53.40	136	17T282585
8894061	J22	0.14	6.56	1.50	492	1.20	0.09	1.45	0.05	17.50	8.54	60.40	1.06	5.20	2.84	16.10	<0.05	1.50	0.026	1.59	8.20	13.00	0.63	397	0.32	2.13	4.50	21.50	2410	10.90	52.70	<0.002	0.03	0.18	7.60	0.50	0.80	287	0.27	<0.01	2.50	0.24	0.24	0.58	65.20	0.20	7.60	41.30	60	17T282585
8894062	J23	0.13	6.59	2.10	529	1.34	0.08	1.35	0.06	18.20	8.60	50.50	1.13	5.20	2.10	14.50	<0.05	1.90	0.019	1.67	8.70	12.80	0.64	272	0.31	2.16	5.70	27.90	362	10.70	52.80	<0.002	0.03	0.12	7.10	0.50	0.80	282	0.23	0.02	2.70	0.20	0.27	0.59	51.20	0.20	6.70	28.30	80	17T282585
8894063	J24	0.41	6.64	1.70	497	1.20	0.10	1.41	0.06	19.00	8.64	56.80	1.14	4.20	2.43	15.10	<0.05	1.60	0.024	1.52	9.30	16.50	0.63	314	0.38	2.08	4.50	27.00	563	11.60	48.50	<0.002	0.04	0.12	7.70	0.70	0.90	273	0.27	<0.01	2.80	0.23	0.26	0.61	58.50	0.20	7.40	44.70	63	17T282585
8894064	J25	0.16	6.50	3.10	459	1.22	0.09	1.75	0.06	37.40	10.50	77.10	1.01	7.30	3.13	14.80	<0.05	3.00	0.028	1.46	17.30	14.50	0.81	501	0.45	2.17	6.30	34.40	726	11.00	48.70	<0.002	0.03	0.11	9.90	0.60	1.00	298	0.29	<0.01	9.20	0.33	0.24	1.02	82.50	0.20	12.00	35.50	125	17T282585
8894065	J26	0.18	6.71	1.90	505	1.26	0.09	1.34	0.06	22.20	10.50	76.00	1.36	7.60	2.55	15.10	<0.05	2.30	0.027	1.60	10.50	17.90	0.69	305	0.52	1.93	5.80	34.80	380	11.30	54.50	<0.002	0.04	0.20	8.50	0.80	1.10	241	0.31	<0.01	3.50	0.28	0.26	0.79	62.10	0.40	8.60	32.20	105	17T282585
8894066	J27	0.20	7.00	2.50	491	1.22	0.09	1.28	0.07	25.20	11.10	76.00	1.37	7.90	2.84	15.10	<0.05	1.80	0.028	1.59	11.00	18.70	0.75	331	0.44	1.87	5.70	38.50	494	11.30	52.50	<0.002	0.04	0.18	8.30	1.10	2.40	243	0.33	<0.01	9.50	0.27	0.28	0.76	66.50	0.30	8.60	30.80	81	17T282585
8894067	J28	0.21	6.56	1.90	491	1.15	0.09	1.46	0.06	22.10	9.82	61.30	1.21	7.90	2.80	15.20	<0.05	2.60	0.027	1.55	10.10	15.30	0.69	353	0.37	2.04	5.10	31.60	558	11.00	51.90	<0.002	0.04	0.11	8.40	0.70	0.90	269	0.31	<0.01	3.90	0.27	0.26	0.80	68.40	0.20	9.60	33.70	103	17T282585
8894068	J29	0.28	6.98	1.70	407	1.29	0.10	1.74	0.10	27.60	11.00	104.00	1.06	7.30	4.07	14.60	<0.05	3.20	0.030	1.24	12.70	17.40	0.77	564	0.51	1.90	6.60	29.00	1020	10.70	40.90	<0.002	0.05	0.18	11.20	1.00	1.10	257	0.39	0.02	4.80	0.42	0.23	0.99	102.00	0.30	11.80	47.50	126	17T282585
8894069	J30	0.14	6.70	1.80	482	1.26	0.08	1.45	0.05	18.00	9.61	48.70	1.03	4.30	2.30	14.60	<0.05	1.60	0.023	1.49	8.50	13.90	0.65	308	0.36	2.18	4.70	26.90	534	10.90	49.20	<0.002	0.04	0.12	7.80	0.70	0.90	285	0.24	0.01	2.90	0.21	0.25	0.61	56.10	0.30	7.50	37.80	68	17T282585
8894070	J31	0.14	6.54	2.70	479	1.30	0.08	1.61	0.05	17.10	10.70	58.10	1.06	5.30	2.62	15.00	<0.05	1.90	0.026	1.46	7.70	13.80	0.71	370	0.31	2.22	4.30	30.20	529	10.70	49.20	<0.002	0.03	0.12	8.30	0.70	0.90	296	0.23	<0.01	4.20	0.26	0.25	0.58	66.70	0.20	8.40	35.90	79	17T282585
8894071	J32	0.24	6.36	1.50	500	1.23	0.08	1.56	0.08	19.10	8.76	63.10	1.08	4.60	2.43	14.40	<0.05	2.30	0.023	1.54	8.80	12.90	0.66	332	0.35	2.23	4.80	25.50	509	11.10	51.10	<0.002	0.03	0.10	7.90	<0.5	0.90	293	0.25	0.01	3.10	0.25	0.25	0.66	62.90	0.20	8.40	37.10	93	17T282585
8894072	J33	0.16	6.80	1.60	468	1.38	0.09	1.54	0.06	21.40	10.20	71.80	1.10	4.50	3.04	14.90	<0.05	2.50	0.026	1.48	9.80	15.80	0.71	389	0.36	2.12	5.30	27.30	471	10.90	48.90	<0.002	0.04	0.13	8.90	0.70	0.90	293	0.30	<0.01	4.00	0.29	0.24	0.73	75.00	0.20	9.30	29.50	115	17T282585
8894073	K1	0.19	6.59	1.70	505	1.27	0.08	1.55	0.08	21.30	9.72	54.70	1.14	3.90	2.37	15.20	<0.05	2.30	0.026	1.56	10.20	13.40	0.70	345	0.46	2.11	5.30	30.80	541	10.60	51.60	<0.002	0.03	0.20	8.40	0.70	1.00	279	0.29	0.01	3.50	0.25	0.25	0.66	61.00	0.20	9.10	52.00	108	17T282585
8894074	K2	0.16	6.59	2.50	530	1.22	0.09	1.49	0.09	20.40	9.27	49.30	1.37	6.30	2.52	15.60	<0.05	2.40	0.023	1.65	9.70	15.00	0.67	342	0.44	2.09	5.30	29.50	556	11.20	56.30	<0.002	0.03	0.12	8.10	0.70	1.00	278	0.29	<0.01	2.80	0.26	0.26	0.77	63.40	0.30	8.90	52.30	110	17T282585
8894075	K3	0.25	6.25	2.30	516	1.13	0.09	1.43	0.13	23.90	9.12	57.10	1.34	3.70	2.21	15.60	<0.05	2.40	0.027	1.68	10.80	12.50	0.62	392	0.39	1.98	6.20	24.80	310	11.30	57.80	<0.002	0.03	0.12	8.30	0.70	1.00	266	0.30	<0.01	3.10	0.29	0.28	0.75	60.40	0.30	8.40	44.10	110	17T282585
8894076	K4	0.19	6.81	3.00	437	1.32	0.10	1.56	0.11	32.50	12.10	88.80	1.15	4.90	3.78	15.60	<0.05	4.10	0.035	1.42	15.00	15.70	0.73	510	0.61	1.85	7.20	30.50	1000	11.40	47.10	<0.002	0.05	0.27	10.10	1.10	1.10	256	0.40	0.05	5.20	0.38	0.26	1.16	91.00	0.40	12.90	56.70	175	17T282585
8894077	K5	0.24	6.00	1.00	491	1.22	0.07	1.44	0.10	18.70	7.58	52.40	1.17	3.60	2.13	14.90	<0.05	2.60	0.022	1.55	8.90	10.40	0.60	339	0.42	2.04	4.60	21.20	278	10.50	51.90	<0.002	0.03	0.15	7.80	0.60	1.40	269	0.25	<0.01	2.80	0.25	0.27	0.67	57.00	0.20	7.90	41.20	109	17T282585
8894078	K6	0.56	7.00	2.80	482	1.19	0.11	1.41	0.11	26.80	11.10	67.40	1.48	8.90	3.03	15.40	<0.05	3.20	0.033	1.53	13.00	18.50	0.63	369	0.67	1.82	7.10	29.10	579	11.80	48.80	<0.002	0.05	0.18	8.80	0.70	1.10	233	0.40	0.02	4.50	0.32	0.26	0.94	68.60	0.30	9.70	84.30	136	17T282585
8894079	K7	0.12	5.90	2.80	453	1.13	0.09	1.54	0.06	28.10	13.90	75.50	1.11	4.90	3.24	15.80	<0.05	1.70	0.026	1.49	12.40	11.70	0.66	676	0.41	2.07	5.90	21.20	1260	12.00	50.70	<0.002	0.04	0.16	8.70	0.60	1.00	277	0.30	<0.01	4.70	0.31	0.25	0.80	77.90	0.20	10.60	35.20	76	17T282585
8894080	K8	0.09	5.97	2.60	479	1.24	0.15	1.51	0.05	16.80	7.31	49.00	1.03	5.90	2.42	14.60	<0.05	1.80	0.022	1.54	7.80	11.60	0.66	362	0.44	2.19	4.80	21.00	301	10.30	50.30	<0.002	0.05	0.15	7.80	0.70	0.80	286	0.29	0.02	1.90	0.26	0.24	0.68	59.90	0.20	8.30	25.90	77	17T282585
8894081	K9	0.17	6.19	1.50	529	1.24	0.10	1.11	0.04	31.00	8.08	51.70	1.51	8.10	2.17	16.10	<0.05	2.60	0.025	1.80	14.30	16.20	0.58	232	0.59	1.72	6.50	25.70	274	11.70	60.60	<0.002	0.04	0.16	7.60	0.60	1.10	219	0.37	0.01	4.60	0.28	0.31	1.08	56.80	0.30	8.80	27.30	114	17T282585
8894082	K10	0.32	7.54	15.30	433	1.64	0.38	1.07	0.15	79.00	32.90	124.00	3.02	81.30	5.22	15.30	<0.05	2.60	0.053	1.80	13.20	31.70	1.10	704	1.52	1.12	8.70	72.80	1470	21.70	53.40	<0.002	0.08	0.49	11.70	1.20	1.20	144	0.46	0.10	7.80	0.50	0.27	1.52	113.00	0.60	10.80	75.00	105	17T282585
8894083	K11	0.26	7.01	3.50	483	1.27	0.12	1.37	0.07	23.00	13.20	67.50	1.53	6.20	3.06	16.10	<0.05	2.40	0.033	1.54	11.40	20.20	0.69	351	0.69	1.78	7.20	37.10	538	11.70	50.30	<0.002	0.05	0.17	8.90	1.00	1.20	233	0.40	0.02	3.50	0.32	0.27	0.86	70.20	0.40	9.10	57.40	103	17T282585
8894084	K12	0.30	7.19	2.30	512	1.42	0.10	1.30	0.08	30.40	12.60	81.40	1.52	8.70	2.64	15.40	<0.05	2.50	0.029	1.73	14.10	20.50	0.79	294	0.40	1.88	6.90	44.00	584	11.60	56.00	<0.002	0.04	0.21	9.00	0.90	1.00	235	0.42	0.02	5.30	0.28	0.30	0.89	59.90	0.40	8.70	44.20	106	17T282585
8894159	K13	0.25	7.03	1.60	515	1.56	0.10	1.36	0.07	33.80	16.30	71.70	1.84	8.20	2.35	18.20	<0.05	3.30	0.034	1.80	13.50	18.30	0.75	317	0.54	1.96	7.90	39.50	481	12.20	60.70	<0.002	0.05	0.22	9.00	0.80	1.50	282	0.57	<0.01	4.10	0.28	0.28	0.91	57.50	0.50	12.20	40.70	165	17T282586
8894160	K14	0.38	6.44	2.00	515	1.45	0.09	1.51	0.04	30.10	11.50	57.20	1.49	6.20	2.28	17.20	<0.05	3.20	0.024	1.66	14.10	13.30	0.64	341	0.42	2.12	6.00	27.10	579	11.60	52.30	<0.002	0.03	0.10	8.00	<0.5	4.40	326	0.46	<0.01	5.00	0.28	0.25	0.85	58.90	0.30	11.30	45.70	150	17T282586
8894161	K15	0.36	7.09	4.10	492	1.65	0.13	1.57	0.08	29.60	16.40	83.40	2.04	9.50	3.36	19.60	<0.05	4.00	0.033	1.57	13.60	19.50	0.78	422	0.86	1.98	9.10	37.30	670	12.30	48.30	<0.002	0.05	0.35	10.00	0.80	1.90	307	0.95	0.06	4.70	0.38	0.27	1.00	85.30	0.60	12.70	64.90	169	17T282586
8894162	K16	0.35	5.86	2.60	462	1.39	0.08	1.44	0.05	30.80	10.40	54.00	1.22	5.20	1.99	14.90	0.07	2.30	0.023	1.49	14.10	11.40	0.58	312	0.43	1.96	5.60	23.60	348	17.90	43.80	<0.002	0.03	0.24	7.70	<0.5	1.30	304	0.47	<0.01	5.10	0.24	0.23	0.84	53.80	0.30	10.20	42.20	105	17T282586
8894163	K17	0.25	5.98	2.20	479	1.34	0.08	1.35	0.05	19.30	10.20	53.00	1.50	4.30	2.25	16.60	0.06	2.10	0.023	1.51	8.80	14.90	0.52	277	0.59	1.98	5.70	23.50	466	11.10	47.70	<0.002	0.03	0.27	7.30	0.70	1.50	310	0.46	<0.01	2.50	0.24	0.23	0.63	59.00	0.30	9.80	56.00	101	17T282586
8894164	K18	0.52	7.42	4.80	472	1.68	0.19	1.56	0.13	24.30	31.70	82.90	2.77	14.00	4.69	22.70	0.18	2.50	0.044	1.41	11.40	34.20	1.08	483	1.12	1.54	11.70	53.50	731	17.20	45.10	<0.002	0.05	0.32	10.30	1.10	2.00	256	0.85	0.02	3.90	0.59	0.23	0.97	117.00	0.70	11.20	102.00	125	17T282586
8894165	K19	0.17	6.19	0.40	495	1.44	0.08	1.41	0.05	21.10	9.58	43.90	1.29	3.10	2.02	16.80	<0.05	2.40	0.021	1.60	9.30	11.40	0.54	253	0.35	2.18	4.70	22.10	526	10.90	50.60	<0.002	0.03	0.15	6.80	0.70	1.50	338	0.33	<0.01	2.80	0.20	0.25	0.60	52.60	0.20	9.20	26.30	115	17T282586
8894166	L1	0.22	7.48	2.20	452	1.52	0.10	1.24	<0.02	24.10	11.70	53.60	1.42	3.00	2.40	16.70	<0.05	2.60	0.021	1.48	11.70	16.60	0.47	235	0.60	1.86	5.90	22.50	345	11.90	45.50	<0.002	0.08	0.09	7.40	1.00	16.60	278	0.48	<0.01	4.00	0.24	0.24	0.78	51.80	0.20	9.40	23.90	122	17T282586
8894167	L2	0.22	6.09	1.20	494	1.31	0.08	1.40	0.08	28.40	9.00	51.10	1.49	1.60	1.72	17.00	0.06	3.00	0.025	1.64	12.50	10.40	0.54	270	0.45	2.01	5.80	21.50	342	11.70	51.40	<0.002	0.03	0.13	7.70	0.60	1.30	306	0.40	<0.01	3.90	0.23	0.26	0.74	48.80	0.20	9.90	36.50	141	17T282586
8894168	L3	0.26	6.89	1.80	493	1.60	0.08	1.53	0.07	34.40	13.80	63.40	1.43	2.60	2.15	17.40	<0.05	2.70	0.027	1.59	14.70	13.30	0.59	304	0.43	2.14	6.00	29.70	526	11.30	50.70	<0.002	0.04	0.07	8.40	1.00	1.20	322	0.43	<0.01	4.40	0.25	0.24	0.75	57.30	0.20	11.10	48.10	129	17T282586
8894169	L4	0.20	6.44	2.20	502	1.47	0.09	1.58	0.06	27.40	11.80	52.70	1.24	3.40	2.07	16.50	<0.05	2.80	0.024	1.63	11.20	12.60	0.62	306	0.51	2.25	5.40	27.20	514	11.20	49.80	<0.002	0.04	0.10	7.60	<0.5	1.10	332	0.41	<0.01	3.20	0.23	0.25	0.66	53.10	0.20	10.60	39.70	135	17T282586
8894170	L5	0.19	6.59	1.10	499	1.44	0.07	1.48	0.06	22.70	10.80	51.60	1.37	2.90	2.06	16.90	0.19	2.30	0.023	1.62	10.30	12.50	0.57	281	0.32	2.19	5.20	24.40	518	11.00	49.20	<0.002	0.05	0.08	7.50	<0.5	1.20	335	0.43	<0.01	3.20	0.22	0.23	0.63	53.10	0.10	9.60	36.30	110	17T282586
8894171	L6	0.88	6.23	1.20	500	1.39	0.08	1.37	0.07	17.10	9.21	44.40	1.41	1.40	1.96	18.00	0.17	2.20	0.024	1.64	8.00	12.60	0.47	285	0.39	2.12	5.40	17.70	610	11.50	52.90	<0.002	0.03	0.14	6.80	<0.5	1.20	325	0.38	<0.01	1.80	0.23	0.25	0.54	50.60	0.20	8.50	52.80	101	17T282586
8894172	L7	0.26	6.05	1.80	505	1.78	0.06	1.39	0.03	23.20	8.76	46.00	1.22	3.30	1.70	15.90	0.10	1.90	0.019	1.66	9.30	10.30	0.56	261	0.26	2.26	4.10	21.90	310	10.60	50.80	<0.002	0.03	0.05	6.50	<0.5	1.70	342	0.33	<0.01	2.90	0.18	0.25	0.52	45.90	<0.1	8.60	23.70	90	17T282586
8894173	L8	0.20	6.73	1.50	523	1.48	0.08	1.57	0.05	22.70	11.30	61.10	1.41	3.20	2.46	18.10	0.17	2.90	0.028	1.66	11.50	15.00	0.63	336	0.42	2.29	5.70	27.20	447	11.70	52.80	<0.002	0.04	0.08	7.80	0.70	1.10	348	0.43	<0.01	3.40	0.26	0.25	0.66	62.80	0.20	10.70	33.30	133	17T282586
8894174	L9	0.19	5.43	1.70	522	1.07	0.08	1.15	0.06	19.00	4.35	31.20	1.27	0.90	1.30	15.00	0.21	1.50	0.017	1.64	9.40	8.10	0.32	241	0.26	2.08	4.00	12.70	322	11.00	48.80	<0.002	0.02	0.16	4.70	<0.5	1.10	307	0.29	<0.01	3.40	0.18	0.24	0.57	38.20	0.10	5.90	28.30	70	17T282586
8894175	L10	0.18	6.34	2.30	486	1.42	0.07	1.40	0.06	17.00	9.29	44.00	1.22	3.90	1.84	15.60	0.09	1.70	0.023	1.54	7.90	12.80	0.55	270	0.32	2.19	3.60	23.70	421	10.70	47.60	<0.002	0.03	0.12	6.60	<0.5	1.90	320	0.29	<0.01	2.20	0.18	0.23	0.56	47.00	<0.1	7.60	38.60	76	17T282586
8894176	L11	0.17	6.97	3.30	499	1.58	0.07	1.55	0.05	17.90	11.50	55.60	1.38	4.00	2.23	17.60	<0.05	1.60	0.022	1.62	8.90	15.00	0.64	329	0.34	2.32	4.60	28.60	559	11.50	52.20	<0.002	0.03	0.11	7.30	0.60	1.10	353	0.37	<0.01	2.50	0.21	0.25	0.48	54.70	0.20	9.30	36.00	73	17T282586
8894177	L12	0.23	6.78	2.90	453	1.55	0.10	1.52	0.06	26.00	14.40	77.00	1.61	6.20	2.89	19.40	<0.05	2.20	0.029	1.47	12.60	18.70	0.71	378	0.35	2.06	6.20	33.90	821	12.60	51.00	<0.002	0.04	0.10	8.80	0.60	2.50	316	0.45	<0.01	3.50	0.28	0.25	0.68	75.00	0.20	11.00	36.20	100	17T282586
8894178	L13	0.17	6.05	2.30	479	1.40	0.08	1.50	0.04	32.70	12.00	72.20	1.36	9.10	2.47	15.90	<0.05	3.00	0.025	1.47	13.00	12.80	0.75	399	0.24	2.12	5.10	30.20	391	10.90	49.30	<0.002	0.03	0.11	8.20	0.60	1.20	321	0.38	<0.01	6.40	0.27	0.23	0.80	65.50	0.20	10.50	29.70	141	17T282586
8894179	L14	0.22	6.74	3.10	503	1.56	0.10	1.48	0.10	32.10	16.70	74.80	1.60	10.90	2.69	17.20	<0.05	2.40	0.026	1.56	14.50	17.60	0.77	380	0.33	2.05	5.70	40.40	522	11.70	53.90	<0.002	0.03	0.13	8.30	0.80	1.10	316	0.41	<0.01	6.00	0.27	0.26	0.68	67.30	0.20	11.20	46.70	115	17T282586
8894180	L15	0.32	6.73	0.90	410	1.59	0.11	1.45	0.09	20.10	16.50	87.70	1.76	8.00	3.22	17.20	0.13	2.10	0.031	1.36	9.30	22.60	0.84	414	0.43	1.80	11.10	40.80	643	11.60	49.10	<0.002	0.04	0.11	9.60	0.60	1.30	281	0.93	<0.01	2.70	0.31	0.23	0.73	79.70	0.40	12.30	39.00	91	17T282586
8894181	L16	0.23	6.08	0.90	504	1.34	0.07	1.29	0.05	19.50	7.91	38.30	1.43	2.20	1.76	16.60	<0.05	2.10	0.018	1.62	9.10	11.10	0.42	238	0.28	2.10	4.80	16.40	556	10.80	52.70	<0.002	0.03	0.11	5.90	<0.5	1.20	312	0.33	<0.01	3.00	0.21	0.24	0.57	43.10	0.10	8.70	20.90	100	17T282586
8894182	L17	0.27	6.60	1.30	505	1.47	0.08	1.30	0.06	24.20	12.60	53.10	1.41	4.20	2.02	16.00	<0.05	2.70	0.024	1.59	11.30	15.20	0.61	254	0.40	2.01	5.30	29.20	275	11.80	49.40	<0.002	0.03	0.10	7.30	0.70	1.00	302	0.39	<0.01	2.90	0.21	0.24	0.69	46.90	0.20	8.80	25.40	127	17T282586
8894183	L18	0.23	6.01	6.60	482	1.43	0.12	1.80	0.24	36.90	11.40	58.80	1.38	19.90	1.98	16.80	<0.05	2.20	0.028	1.59	18.00	12.90	0.79	362	0.35	2.32	4.80	26.30	553	15.40	51.00	<0.002	0.07	0.19	9.40	1.10	1.10	331	0.35	<0.01	4.30	0.26	0.26	1.24	54.90	0.20	14.10	55.50	91	17T282586
8894184	L19	0.31	7.75	3.50	597	1.96	0.17	1.19	0.03	52.00	22.50	119.00	3.87	26.10	4.09	22.90	0.11	3.20	0.032	2.04	24.50	35.90	1.27	300	0.33	1.71	11.90	57.20	138	16.90	72.80	<0.002	0.02	0.30	13.60	0.60	2.00	247	1.17	0.07	11.00	0.35	0.48	1.35	89.30	0.70	12.70	51.70	126	17T282586
8894185	L20	0.30	6.94	4.00	489	1.39	0.15	1.60	0.06	36.70	22.70	92.50	3.02	18.50	3.35	21.70	<0.05	2.80	0.040	1.77	18.20	34.10	1.35	466	0.42	2.03	8.80	47.40	173	13.10	66.00	<0.002	0.03	0.29	13.00	0.80	1.80	259	0.81	0.03	4.80	0.43	0.35	1.19	95.40	0.60	13.70	47.20	128	17T282586
8894186	L21	0.32	6.28	2.70	541	1.34	0.09	1.40	0.08	24.90	12.10	81.10	2.07	8.60	2.50	18.20	0.07	2.10	0.028	2.01	12.10	20.70	1.00	377	0.32	1.96	10.50	35.90	236	11.90	64.90	<0.002	0.03	0.13	9.30	<0.5	1.50	289	1.12	<0.01	3.20	0.30	0.30	0.71	67.70	0.30	9.40	40.50	98	17T282586
8894187	M1	0.25	6.18	6.40	509	1.63	0.19	1.51	0.09	39.70	10.20	54.00	1.61	16.80	2.06	18.90	<0.05	2.40	0.025	1.64	16.60	15.20	0.62	357	0.59	2.27	5.70	23.10	215	12.40	55.50	<0.002	0.03	0.15	8.60	0.90	1.20	341	0.45	<0.01	4.30	0.26	0.26	0.95	57.00	0.20	15.40	34.40	113	17T282586
8894188	M2	0.19	6.01	2.10	500	1.40	0.10	1.49	0.08	28.70	12.90	62.00	1.68	11.60	2.14	17.40	<0.05	2.20	0.023	1.63	10.50	13.60	0.73	396	0.36	2.14	5.40	28.60	282	11.40	54.90	<0.002	0.03	0.14	8.40	0.50	1.10	304	0.47	<0.01	2.60	0.24	0.26	0.66	56.90	0.20	11.20	62.10	105	17T282586
8894189	M3	0.33	5.91	1.80	478	1.32	0.08	1.35	0.05	30.80	8.94	44.10	1.39	7.60	1.70	16.60	<0.05	2.50	0.022	1.59	10.50	9.80	0.47	269	0.48	2.08	5.60	18.70	185	11.00	51.10	<0.002	0.03	0.13	7.10	0.80	1.60	318	0.42	<0.01	2.90	0.24	0.24	0.70	49.50	0.20	9.60	23.50	121	17T282586
8894190	M4	0.35	6.63	6.30	497	1.73	0.11	1.55	0.14	34.60	21.20	61.60	1.67	8.70	2.53	19.20	<0.05	3.00	0.032	1.68	15.50	14.80	0.65	330	0.57	2.16	6.80	30.90	532	14.20	57.10	<0.002	0.04	0.24	8.30	1.00	1.60	327	0.52	<0.01	4.10	0.29	0.26	0.84	62.30	0.30	12.50	41.90	136	17T282586
8894191	M5	0.61	6.54	12.90	461	1.50	3.19	1.52	0.07	40.40	18.30	76.90	2.21	65.90	2.83	20.30	<0.05	3.80	0.032	1.63	20.70	20.60	0.91	433	0.54	2.04	7.40	35.70	243	12.40	57.20	<0.002	0.03	0.25	10.00	1.00	1.60	287	0.60	<0.01	7.10	0.34	0.30	1.31	74.60	0.40	15.40	52.40	182	17T282586
8894192	M6	0.26	6.12	14.20	477	1.40	0.40	1.62	0.04	52.00	16.30	71.90	2.26	26.10	2.59	16.50	0.16	3.40	0.036	1.64	28.40	22.30	0.86	491	0.52	2.02	7.60	31.60	219	12.90	52.70	<0.002	0.03	0.16	10.60	0.60	2.30	296	0.53	<0.01	10.50	0.37	0.28	1.18	77.40	0.30	15.20	37.70	167	17T282586
8894194	M8	0.46	7.22	6.50	516	1.57	0.19	1.27	0.15	26.00	27.10	87.50	3.09	32.90	3.50	19.70	0.22	2.30	0.041	1.67	11.30	43.50	0.99	354	1.03	1.56	8.90	58.40	445	16.10	60.80	<0.002	0.05	0.30	9.80	0.80	1.60	234	0.57	0.02	3.80	0.37	0.29	1.01	81.70	0.60	10.10	63.60	109	17T282586
8894195	M9	0.94	7.28	6.60	420	1.59	0.20	0.95	0.18	39.30	30.70	165.00	2.70	36.40	4.75	20.30	0.23	2.50	0.044	1.40	17.90	39.10	2.37	383	0.94	1.15	30.20	83.70	916	14.30	50.20	<0.002	0.06	0.29	11.30	1.60	2.20	173	1.92	0.03	5.80	0.52	0.23	1.26	96.70	1.00	10.60	84.50	113	17T282586
8894196	M10	0.41	6.81	2.60	532	1.32	0.13	1.39	0.11	32.80	13.50	78.20	2.45	9.70	2.46	20.00	<0.05	3.00	0.032	1.89	16.00	27.80	0.77	295	0.59	1.79	8.70	34.70	909	13.40	61.80	<0.002	0.05	0.20	9.20	0.90	1.60	262	0.62	<0.01	4.60	0.32	0.29	1.05	60.70	0.40	12.00	80.40	138	17T282586
8894197	M11	0.38	7.21	3.40	516	1.66	0.13	1.30	0.10	43.30	21.00	93.30	2.55	27.30	3.16	19.20	0.19	2.90	0.039	1.76	17.90	21.50	0.98	383	0.64	1.65	11.20	50.30	1220	13.70	57.70	<0.002	0.05	0.29	10.20	1.20	1.50	242	0.80	<0.01	6.00	0.35	0.29	1.14	74.40	0.40	13.60	65.30	132	17T282586
8894198	M12	0.31	6.44	4.80	451	1.58	0.15	1.21	0.11	37.50	14.90	73.10	2.10	12.50	3.12	18.70	<0.05	3.20	0.033	1.52	17.60	21.60	0.67	335	0.89	1.58	8.00	36.50	846	13.30	50.10	<0.002	0.05	0.24	8.50	1.10	1.50	232	0.57	<0.01	6.60	0.31	0.27	1.19	72.00	0.50	12.00	79.90	145	17T282586
8894199	M13	0.36	7.16	3.20	547	1.39	0.11	1.32	0.07	35.60	13.50	81.10	2.51	13.00	2.75	18.40	<0.05	3.30	0.028	1.87	17.70	20.80	0.83	338	0.49	1.80	7.80	39.90	552	13.00	60.30	<0.002	0.04	0.19	9.40	0.80	4.60	254	0.55	<0.01	5.60	0.31	0.30	1.01	65.00	0.30	11.20	62.70	153	17T282586

2017 Soil Sample Results

Sample ID	Field ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm
8894200	M14	1.88	6.59	2.60	522	1.45	0.10	1.48	0.05	28.90	10.80	55.80	1.63
8894201	M15	0.32	6.70	5.70	441	1.44	0.21	1.49	0.07	29.80	22.20	63.40	2.11
8894202	M16	0.18	6.60	4.20	529	1.42	0.10	1.57	0.03	26.30	11.90	54.00	1.35
8894203	M17	0.19	6.33	4.50	494	1.42	0.10	1.41	0.05	24.40	11.80	49.80	1.31
8894204	M18	0.21	6.38	4.70	466	1.33	0.15	1.44	0.08	33.20	19.10	58.80	1.47
8894205	M19	0.32	7.24	9.40	419	1.54	0.21	1.35	0.09	24.20	24.60	70.60	2.30
8894206	M20	0.19	6.76	3.90	485	1.52	0.10	1.52	0.06	33.20	17.80	60.80	1.51
8894207	M21	0.28	6.64	4.90	423	1.38	0.14	1.33	0.07	41.10	14.80	67.90	2.21
8894208	M22	0.23	6.56	3.90	432	1.37	0.14	1.33	0.08	29.00	15.80	73.50	2.11
8894209	M23	0.25	6.80	3.10	464	1.49	0.11	1.50	0.05	48.10	12.50	64.30	1.51
8894210	M24	0.25	6.58	4.00	439	1.44	0.15	1.30	0.06	30.80	15.30	68.80	2.27
8894211	M25	0.24	6.77	5.60	442	1.47	0.14	1.42	0.03	52.30	21.40	75.80	1.84
8894212	M26	0.43	6.46	3.20	463	1.43	0.15	1.34	0.08	25.10	10.20	60.50	2.21
8894213	M27	0.20	6.62	1.70	503	1.39	0.07	1.50	0.04	24.40	12.90	53.70	1.40
8894214	M28	0.26	6.91	1.50	499	1.51	0.10	1.49	0.05	26.80	14.60	61.40	1.59
8894215	M29	0.35	5.79	2.20	504	1.26	0.14	1.35	0.06	29.60	9.11	45.80	1.33
8894216	M30	0.19	6.36	2.40	473	1.62	0.08	1.42	0.06	20.10	11.60	57.40	1.43
8894217	M31	0.23	6.43	1.40	474	1.53	0.52	1.63	0.06	31.80	12.40	67.30	1.27
8894218	M32	0.23	6.45	2.90	475	1.45	0.09	1.57	<0.02	32.20	12.00	68.50	1.41
8894219	M33	0.25	6.73	2.10	474	1.45	0.09	1.60	0.05	24.30	15.90	67.30	1.47
8894220	M34	0.26	6.67	1.70	488	1.55	0.10	1.63	<0.02	34.60	12.40	73.90	1.48
8894221	M35	0.30	6.46	2.50	466	1.40	0.10	1.53	0.07	23.70	11.70	77.10	1.36
8894222	M36	0.33	6.71	1.60	474	1.55	0.10	1.58	0.07	40.50	13.10	80.40	1.62
8894223	M37	0.29	6.74	2.80	487	1.50	0.09	1.48	0.05	27.00	13.20	72.70	1.53
8894224	M38	0.27	7.05	2.60	495	1.55	0.09	1.52	0.05	30.60	13.80	65.70	1.44
8894225	M39	0.29	7.38	3.90	535	1.50	0.12	1.46	0.06	30.50	20.60	75.10	2.45
8894226	M40	0.26	6.54	1.30	507	1.55	0.08	1.65	0.06	30.50	12.90	64.50	1.42
8894227	M41	0.23	6.48	1.90	516	1.51	0.09	1.44	0.06	22.40	11.30	58.50	1.69

Sample ID	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %
8894200	9.60	2.11	18.10	<0.05	2.40	0.025	1.71	11.00	15.00	0.63	328	0.46	2.19
8894201	57.50	3.31	19.60	<0.05	3.10	0.042	1.59	12.60	22.90	0.90	421	0.59	1.90
8894202	18.30	2.11	18.20	<0.05	3.00	0.026	1.68	12.90	14.20	0.68	303	0.45	2.31
8894203	36.90	2.17	17.90	<0.05	2.60	0.026	1.62	10.50	19.40	0.66	279	0.48	2.15
8894204	26.00	2.61	18.30	<0.05	3.10	0.029	1.54	10.20	16.20	0.69	326	0.51	2.08
8894205	35.30	4.21	20.50	0.07	2.80	0.045	1.41	11.70	28.90	0.79	355	0.95	1.89
8894206	11.60	2.33	17.20	<0.05	2.80	0.025	1.58	12.00	14.90	0.68	324	0.40	2.22
8894207	14.90	3.10	17.70	<0.05	3.30	0.032	1.46	19.60	19.70	0.66	339	0.74	1.87
8894208	22.80	2.91	17.30	<0.05	3.30	0.030	1.52	13.00	18.50	0.77	367	0.56	1.85
8894209	17.00	2.37	18.50	<0.05	3.60	0.029	1.53	21.30	14.40	0.66	304	0.63	2.05
8894210	13.20	3.36	21.00	<0.05	2.80	0.033	1.55	14.70	22.00	0.77	355	0.70	1.85
8894211	15.70	2.97	18.30	<0.05	3.60	0.030	1.55	15.80	19.20	0.77	407	0.54	1.95
8894212	12.90	2.67	19.50	<0.05	3.60	0.030	1.57	12.20	17.90	0.60	326	0.68	1.76
8894213	2.50	2.13	17.50	<0.05	2.10	0.022	1.62	11.20	13.40	0.59	300	0.42	2.28
8894214	3.80	2.55	18.30	<0.05	2.80	0.027	1.57	12.90	16.20	0.64	331	0.45	2.13
8894215	6.20	1.79	19.10	<0.05	3.30	0.025	1.56	14.40	11.00	0.44	277	0.52	2.02
8894216	3.70	2.29	18.40	<0.05	1.90	0.023	1.49	8.40	13.20	0.58	375	0.46	2.16
8894217	3.80	2.36	17.10	<0.05	2.20	0.130	1.50	14.50	12.50	0.69	367	0.30	2.28
8894218	3.70	2.48	17.50	<0.05	2.70	0.023	1.55	14.70	13.60	0.67	364	0.39	2.15
8894219	3.20	2.69	18.30	<0.05	2.70	0.034	1.55	11.30	15.40	0.71	391	0.49	2.16
8894220	3.70	2.77	18.10	<0.05	3.00	0.028	1.55	15.90	15.50	0.67	387	0.42	2.19
8894221	4.00	3.06	17.90	<0.05	3.40	0.029	1.44	10.70	16.60	0.67	417	0.46	2.06
8894222	8.00	2.86	18.10	<0.05	4.00	0.029	1.60	19.10	14.60	0.72	406	0.44	2.09
8894223	7.80	2.74	18.50	<0.05	2.40	0.029	1.59	11.90	16.90	0.67	346	0.39	2.08
8894224	5.60	2.69	18.20	<0.05	2.10	0.027	1.59	14.30	17.30	0.72	339	0.44	2.19
8894225	12.40	2.94	19.60	<0.05	2.80	0.033	1.74	14.10	24.50	0.80	333	0.74	1.96
8894226	3.00	2.42	17.70	<0.05	2.60	0.026	1.61	13.70	11.90	0.71	372	0.37	2.27
8894227	3.10	2.43	19.10	<0.05	2.80	0.026	1.64	10.50	16.40	0.56	304	0.57	2.13

Sample ID	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm
8894200	5.70	27.50	389	11.20	53.90	<0.002	0.03	0.17	8.20	0.70	2.10	313
8894201	7.10	38.60	360	12.30	56.00	<0.002	0.04	0.36	10.80	0.90	1.50	255
8894202	5.80	29.40	222	11.70	50.90	<0.002	0.03	0.11	8.40	0.80	1.20	341
8894203	5.10	31.20	215	11.50	49.40	<0.002	0.02	0.11	7.80	<0.5	1.10	320
8894204	5.90	34.60	333	12.30	51.40	<0.002	0.03	0.18	8.50	0.90	1.30	299
8894205	6.90	41.20	381	11.90	49.60	<0.002	0.05	0.32	10.40	1.20	1.60	242
8894206	5.50	30.90	267	11.90	49.10	<0.002	0.04	0.13	8.40	0.90	1.50	316
8894207	7.40	28.00	416	12.70	48.50	<0.002	0.04	0.37	9.30	1.10	1.50	259
8894208	6.80	31.50	375	12.50	50.30	<0.002	0.04	0.26	10.00	1.00	1.50	245
8894209	7.60	26.40	379	13.00	47.10	<0.002	0.04	0.16	8.80	1.00	2.20	303
8894210	7.10	30.50	431	11.20	53.50	<0.002	0.04	0.24	9.90	1.30	1.60	244
8894211	7.10	37.70	536	12.70	52.90	<0.002	0.04	0.30	10.20	1.00	1.60	274
8894212	7.40	23.70	945	11.90	52.80	<0.002	0.05	0.24	8.80	1.00	1.50	262
8894213	4.40	25.70	465	10.70	51.90	<0.002	0.04	0.11	7.30	1.00	1.30	339
8894214	5.60	30.90	448	11.40	49.90	<0.002	0.04	0.10	8.40	1.10	1.60	324
8894215	6.30	17.80	264	11.60	52.50	<0.002	0.03	0.18	7.30	0.50	1.40	299
8894216	5.20	23.30	561	10.50	50.20	<0.002	0.04	0.82	7.70	0.70	1.20	329
8894217	5.80	27.90	515	11.50	50.20	<0.002	0.03	0.14	8.40	0.50	1.20	341
8894218	5.90	28.00	529	11.00	50.60	<0.002	0.03	0.15	8.70	0.80	10.60	314
8894219	6.70	30.80	497	11.00	51.00	<0.002	0.04	0.12	9.00	0.80	1.30	326
8894220	6.10	29.20	680	12.00	50.90	<0.002	0.04	0.10	8.80	<0.5	16.20	330
8894221	6.90	29.50	551	10.60	46.80	<0.002	0.04	0.16	9.20	0.80	1.30	303
8894222	6.60	32.10	613	12.10	52.40	<0.002	0.04	0.23	9.30	1.20	1.30	315
8894223	6.00	34.10	599	10.90	54.00	<0.002	0.04	0.10	8.80	0.70	1.20	304
8894224	5.60	33.00	518	11.10	50.70	<0.002	0.04	0.09	8.50	0.80	1.20	321
8894225	7.20	45.70	464	13.30	57.90	<0.002	0.04	0.17	9.00	1.10	1.40	291
8894226	5.90	27.30	413	11.40	54.00	<0.002	0.03	0.10	8.50	0.90	1.20	347
8894227	6.10	24.80	452	11.60	53.80	<0.002	0.03	0.15	7.60	0.70	1.20	315

Sample ID	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
8894200	0.60	<0.01	3.40	0.26	0.25	0.75	54.30	0.20	10.10	50.20	110	17T282586
8894201	0.48	<0.01	4.30	0.34	0.25	0.99	90.80	0.40	12.60	57.60	149	17T282586
8894202	0.42	<0.01	3.20	0.26	0.25	0.73	59.50	0.20	11.30	28.20	137	17T282586
8894203	0.36	<0.01	2.90	0.23	0.23	0.73	65.20	0.20	9.60	24.50	116	17T282586
8894204	0.41	<0.01	4.90	0.29	0.24	0.96	71.20	0.30	11.20	33.10	127	17T282586
8894205	0.52	<0.01	4.00	0.34	0.26	1.14	95.70	0.50	12.20	39.40	128	17T282586
8894206	0.41	<0.01	4.20	0.26	0.24	0.78	60.40	0.20	10.70	29.10	132	17T282586
8894207	0.86	0.07	9.70	0.31	0.27	1.17	76.90	0.50	11.60	41.40	139	17T282586
8894208	0.57	0.02	4.70	0.32	0.28	1.10	80.20	0.40	11.40	42.30	149	17T282586
8894209	0.58	<0.01	10.30	0.29	0.25	1.13	61.40	0.30	12.90	36.00	160	17T282586
8894210	0.55	0.02	4.80	0.33	0.27	1.08	79.60	0.40	13.20	54.60	130	17T282586
8894211	0.60	0.03	6.10	0.33	0.25	1.20	77.20	0.40	14.20	37.50	174	17T282586
8894212	0.81	<0.01	4.10	0.30	0.25	1.14	65.30	0.40	11.30	78.00	170	17T282586
8894213	0.34	<0.01	3.30	0.23	0.24	0.63	54.70	0.10	9.10	31.10	97	17T282586
8894214	0.52	0.01	3.70	0.27	0.23	0.76	64.40	0.20	10.70	39.70	126	17T282586
8894215	0.48	<0.01	4.80	0.27	0.26	0.89	57.10	0.30	10.00	35.30	159	17T282586
8894216	0.37	<0.01	2.30	0.24	0.23	0.60	58.30	0.20	10.00	44.90	93	17T282586
8894217	0.41	<0.01	6.30	0.25	0.22	0.74	64.50	0.10	11.50	29.00	96	17T282586
8894218	0.43	<0.01	5.00	0.27	0.23	0.77	67.00	0.20	11.50	33.40	125	17T282586
8894219	0.47	<0.01	4.00	0.30	0.23	0.79	72.20	0.40	11.60	35.60	122	17T282586
8894220	0.44	<0.01	5.70	0.31	0.25	0.85	73.90	0.20	12.40	48.50	133	17T282586
8894221	0.55	0.02	3.90	0.34	0.22	0.83	83.90	0.30	12.10	49.60	161	17T282586
8894222	0.48	<0.01	11.10	0.32	0.25	1.08	76.60	0.30	13.30	34.80	169	17T282586
8894223	0.44	<0.01	4.00	0.28	0.24	0.81	68.90	0.20	11.20	35.70	114	17T282586
8894224	0.46	<0.01	6.90	0.28	0.24	0.72	67.40	0.20	10.30	37.40	98	17T282586
8894225	0.49	<0.01	5.20	0.30	0.27	0.92	69.10	0.30	11.50	53.30	126	17T282586
8894226	0.41	<0.01	3.20	0.28	0.26	0.80	65.80	0.20	12.40	34.00	119	17T282586
8894227	0.44	<0.01	3.70	0.27	0.26	0.75	62.30	0.20	10.10	60.90	130	17T282586

2018 Soil Sample Results

Sample ID	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
2018KTS001	0.27	1.18	7.50	<0.02	<10	40	0.52	0.25	0.81	1.30	44.00	3.00	19.0	0.26	27.40	1.82	1.84	0.06	0.02	0.21	0.039	0.02	25.30	2.00	0.09	35	0.49	0.02	0.49	12.30	590	18.10	1.80	0.006	0.38	0.28	1.80	1.00	0.50	26.10	0.01	0.04	0.3	0.017	0.03	1.00	39	0.10	7.85	71	0.9	SD18197526
2018KTS002	2.37	0.39	14.80	<0.02	<10	90	0.35	1.71	0.56	1.70	25.90	8.20	8.0	0.55	64.90	0.58	2.45	0.07	<0.02	0.50	0.153	0.06	18.60	1.90	0.07	187	0.63	0.01	0.20	23.30	880	163.50	4.50	0.001	0.08	1.20	0.30	2.20	3.00	40.20	<0.01	0.05	<0.2	0.009	0.08	0.55	9	0.13	4.45	107	<0.5	SD18197526
2018KTS003	0.83	0.33	16.10	<0.02	<10	20	0.11	0.69	0.13	0.74	16.55	2.60	6.0	0.27	27.60	0.66	1.39	0.06	<0.02	0.30	0.042	0.03	12.70	0.90	0.03	13	0.62	0.02	0.28	13.30	480	29.50	2.10	0.001	0.15	0.75	0.60	1.20	1.40	13.80	<0.01	0.05	<0.2	0.011	0.03	0.44	7	0.11	3.88	24	<0.5	SD18197526
2018KTS004	0.19	1.13	7.30	<0.02	<10	40	0.51	0.17	0.88	0.76	53.60	4.20	25.0	0.56	21.70	1.22	3.25	0.07	0.03	0.20	0.023	0.02	28.30	7.60	0.24	80	0.69	0.02	0.68	17.60	370	16.70	3.00	0.005	0.45	0.60	1.90	0.80	0.40	37.20	<0.01	0.04	0.3	0.027	0.08	0.99	43	0.10	9.74	96	1.1	SD18197526
2018KTS005	0.70	0.33	23.30	<0.02	<10	60	0.12	1.13	0.22	1.62	8.73	4.50	9.0	0.28	54.70	0.55	1.77	<0.05	0.02	0.35	0.119	0.03	4.60	1.80	0.07	40	0.73	0.02	0.27	28.60	440	80.80	2.40	0.002	0.12	1.39	0.70	1.60	1.70	24.00	<0.01	0.09	0.4	0.017	0.04	0.29	11	0.13	1.51	71	0.7	SD18197526
2018KTS006	1.11	0.18	15.80	<0.02	<10	50	0.09	1.01	0.27	1.23	6.83	3.20	4.0	0.29	33.00	0.27	1.04	<0.05	<0.02	0.49	0.085	0.04	4.00	0.50	0.03	56	0.54	0.01	0.14	16.60	550	73.20	1.80	0.004	0.09	1.25	0.30	1.40	1.70	21.00	<0.01	0.06	0.2	0.008	0.03	0.22	6	0.10	0.88	114	<0.5	SD18197526
2018KTS007	0.47	0.35	10.70	<0.02	<10	30	0.08	0.23	0.23	0.18	5.71	2.20	8.0	0.20	10.90	0.54	1.64	<0.05	<0.02	0.15	0.021	0.03	2.60	1.50	0.05	63	0.28	0.01	0.34	8.80	500	13.40	1.90	0.003	0.06	0.34	0.20	0.60	0.40	19.50	<0.01	0.03	<0.2	0.018	0.02	0.13	12	0.06	0.83	45	<0.5	SD18197526
2018KTS008	0.80	1.54	13.10	<0.02	<10	70	0.40	0.71	0.31	0.69	22.40	11.70	29.0	0.81	41.40	0.96	5.00	0.06	0.02	0.24	0.042	0.07	19.10	11.30	0.22	79	0.65	0.02	0.91	31.50	930	25.50	5.70	0.001	0.21	0.51	1.20	1.20	1.00	20.50	<0.01	0.04	<0.2	0.036	0.08	0.70	24	0.12	6.59	71	0.6	SD18197526
2018KTS009	0.32	0.84	290.00	<0.02	<10	40	0.33	0.33	0.32	0.27	23.90	98.20	22.0	0.56	32.10	1.12	3.27	0.05	0.02	0.08	0.025	0.03	17.00	9.80	0.26	376	0.80	0.01	0.66	46.90	450	15.30	4.70	0.001	0.03	0.62	1.40	0.50	0.50	17.40	<0.01	0.03	0.3	0.034	0.05	0.41	21	0.09	4.66	44	0.5	SD18197526
2018KTS010	0.50	0.90	9.90	<0.02	<10	40	0.22	0.28	0.24	0.24	21.80	6.40	26.0	0.82	17.00	1.38	4.95	<0.05	0.02	0.11	0.027	0.04	9.90	10.40	0.25	172	0.42	0.01	1.21	17.90	350	14.30	7.80	<0.001	0.03	0.31	1.40	0.40	0.70	16.20	<0.01	0.04	1.2	0.064	0.05	0.42	32	0.11	2.26	45	0.8	SD18197526
2018KTS011	0.66	0.91	12.00	<0.02	<10	40	0.38	0.48	0.92	1.30	38.20	5.50	24.0	0.49	41.20	1.02	2.56	0.07	0.02	0.21	0.039	0.03	24.20	6.70	0.23	97	0.44	0.02	0.55	21.00	710	39.10	2.30	0.007	0.29	0.42	1.10	2.40	1.00	23.50	<0.01	0.06	<0.2	0.023	0.08	3.31	27	0.08	9.69	70	0.7	SD18197526
2018KTS012	0.89	0.35	29.50	<0.02	10	350	0.19	0.50	2.55	1.69	6.91	8.30	13.0	0.24	36.40	3.36	0.90	0.05	0.08	0.56	0.045	0.02	4.50	1.30	0.19	7600	3.81	0.02	0.21	20.30	1660	35.20	1.60	0.01	0.38	0.69	0.90	3.70	0.80	40.90	<0.01	0.20	0.4	0.006	0.13	0.58	9	0.29	4.14	96	2.7	SD18197526
2018KTS014	0.76	0.15	45.00	<0.02	<10	50	0.08	1.55	0.98	1.29	3.56	3.60	4.0	0.17	50.00	0.30	0.94	0.06	0.02	0.54	0.091	0.03	1.60	0.50	0.08	47	1.09	0.01	0.15	37.30	620	74.90	1.30	0.002	0.21	2.28	0.40	2.70	2.10	24.40	<0.01	0.07	0.2	0.005	0.06	0.17	4	0.15	1.00	108	0.7	SD18197526
2018KTS015	0.71	0.16	22.60	<0.02	<10	50	0.08	1.06	0.54	1.20	3.19	3.60	2.0	0.10	30.20	0.21	0.82	0.05	<0.02	0.52	0.064	0.03	1.60	0.30	0.03	21	0.92	0.01	0.11	22.80	560	60.00	1.20	0.005	0.16	1.61	0.30	1.70	1.50	20.90	<0.01	0.06	<0.2	<0.005	0.03	0.13	4	0.10	0.84	28	<0.5	SD18197526
2018KTS016	1.11	0.23	33.30	<0.02	<10	80	0.07	1.66	0.15	1.73	3.72	4.80	4.0	0.24	42.30	0.31	1.16	0.05	<0.02	0.61	0.104	0.06	1.80	0.60	0.06	25	0.75	0.02	0.20	38.70	610	76.60	3.20	0.004	0.18	1.92	0.40	2.70	2.00	40.00	<0.01	0.12	0.2	0.009	0.07	0.16	5	0.18	0.82	53	<0.5	SD18197526
2018KTS017	0.68	0.67	91.20	<0.02	<10	50	0.56	0.61	1.40	1.24	63.90	14.50	21.0	0.31	133.50	2.53	2.33	0.17	0.03	0.39	0.038	0.02	66.30	1.40	0.13	386	1.35	0.02	0.40	18.50	1290	39.10	1.50	0.019	0.45	0.67	1.60	2.60	0.80	46.00	<0.01	0.31	<0.2	0.011	0.07	3.52	68	0.12	28.40	43	0.5	SD18197526
2018KTS018	1.19	0.22	30.10	<0.02	<10	40	0.10	0.73	3.06	0.78	5.71	11.10	8.0	0.14	19.00	0.74	0.87	<0.05	0.04	0.42	0.054	0.02	2.60	0.50	0.23	507	0.69	0.02	0.16	15.40	910	51.80	0.90	0.011	0.31	0.98	0.50	2.50	1.10	54.40	<0.01	0.14	0.2	0.005	0.06	0.70	12	0.09	1.99	12	1.0	SD18197526
2018KTS019	1.75	0.75	19.80	<0.02	<10	70	0.16	1.82	0.14	2.16	9.17	3.80	38.0	0.67	64.10	0.90	3.40	<0.05	<0.02	0.36	0.174	0.05	4.40	0.80	0.06	95	0.88	0.02	0.20	37.00	950	120.50	4.30	0.001	0.10	1.03	0.20	1.90	3.30	7.10	<0.01	0.05	<0.2	0.008	0.06	0.24	21	0.12	2.36	61	<0.5	SD18197526
2018KTS020	1.63	0.73	18.80	<0.02	<10	70	0.18	1.85	0.14	2.10	9.39	4.00	38.0	0.64	64.90	0.89	3.25	<0.05	<0.02	0.30	0.174	0.05	4.40	0.80	0.06	95	0.80	0.02	0.19	38.00	940	123.00	4.30	0.001	0.10	1.05	0.20	2.20	3.30	6.80	<0.01	0.07	<0.2	0.009	0.06	0.24	20	0.13	2.38	63	<0.5	SD18197526
2018KTS021	2.21	0.39	21.70	<0.02	<10	80	0.23	1.59	0.35	1.61	10.90	4.90	14.0	0.43	51.60	0.66	1.76	0.05	<0.02	0.58	0.167	0.06	4.70	1.20	0.08	32	0.95	0.01	0.37	28.00	890	124.50	3.30	0.002	0.13	1.33	0.50	2.60	2.20	25.60	<0.01	0.11	<0.2	0.015	0.03	0.31	12	0.15	1.54	71	<0.5	SD18197526
2018KTS022	2.18	0.29	15.40	<0.02	<10	130	0.13	1.48	0.53	0.98	7.00	4.60	10.0	0.31	41.80	0.55	1.93	<0.05	<0.02	0.41	0.118	0.07	3.60	1.70	0.06	274	0.69	0.01	0.36	31.00	870	118.00	2.70	0.001	0.11	1.14	0.30	1.70	19.50	21.70	<0.01	0.05	<0.2	0.016	0.06	0.21	9	0.15	1.01	86	<0.5	SD18197526
2018KTS023	1.02	0.27	12.00	<0.02	<10	70	0.12	0.77	0.27	0.74	9.20	2.40	7.0	0.19	26.20	0.44	2.15	<0.05	<0.02	0.22	0.064	0.04	5.10	1.10	0.04	48	0.51	0.01	0.29	16.40	470	49.70	1.80	0.001	0.06	0.69	0.40	1.10	1.40	20.20	<0.01	0.04	<0.2	0.016	0.03	0.21	10	0.09	1.01	70	<0.5	SD18197526
2018KTS024	1.42	0.21	7.00	<0.02	<10	80	0.09	0.52	0.78	1.13	3.86	4.30	6.0	0.20	26.10	0.39	1.04	<0.05	0.02	0.23	0.043	0.09	2.90	1.40	0.08	112	0.46	0.01	0.30	22.80	970	22.90	2.40	0.002	0.16	0.46	0.40	2.10	1.20	47.90	<0.01	0.03	0.2	0.013	0.04	0.13	7	0.11	0.58	161	0.5	SD18197526
2018KTS025	3.26	0.27	21.30	<0.02	<10	200	0.12	1.34	1.16	2.91	4.53	5.90	6.0	0.37	74.90	0.58	1.49	0.06	<0.02	0.52	0.215	0.08	3.50	1.10	0.07	880	0.76	0.02	0.24	28.20	1200	94.70	3.80	0.001	0.19	1.59	0.30	2.60	2.60	48.60	<0.01	0.05	<0.2	0.011	0.11	0.19	9	0.15	0.80	328	<0.5	SD18197526
2018KTS026	3.06	0.39	34.70	<0.02	<10	120	0.13	1.62	0.35	0.95	7.19	6.00	7.0	0.31	95.30	0.95	2.65	<0.05	<0.02	0.47	0.216	0.05	4.90	1.50	0.05	153	1.31	0.01	0.33	34.00	800	95.50	3.20	0.003	0.10	1.34	0.50	1.80	3.30	19.80	<0.01	0.08	<0.2	0.010	0.06	0.26	12	0.18	1.25	153	<0.5	SD18197526
2018KTS027	5.48	0.29	24.70	<0.02	<10	60	0.11	1.16	0.72	1.73	4.20	8.50	10.0	0.36	114.00	0.72	1.97	0.07	<0.02	0.66	0.193	0.07	2.90	2.00	0.09	189	0.93	0.01	0.42	39.30	1040	70.00	3.20	0.003	0.16	1.33	0.50	3.30	2.60	32.80	<0.01	0.08	<0.2	0.022	0.05	0.17	15	0.46	0.75	242	<0.5	SD18197526
2018KTS028	2.50	0.17	24.90	<0.02	<10	60	0.07	1.25	0.57	1.32	3.58	4.00	7.0	0.30	240.00	0.66	1.03	0.07	<0.02	0.53	0.296	0.06	2.00	0.70	0.05	73	1.19	0.02	0.20	42.10	630	75.40	3.10	0.002	0.16	1.53	0.40	2.80	2.60	24.90	<0.01	0.09	<0.2	0.009	0.06	0.17	9	0.17	0.62	295	<0.5	SD18197526
2018KTS029	1.89	0.33	19.50	<0.02	<10	100	0.10	1.37	0.22	1.68	8.58	3.60	9.0	0.31	96.30	0.72	1.96	<0.05	<0.02	0.41	0.222	0.06	4.40	1.30	0.04	38	0.82	0.01	0.33	30.10	490	86.50	3.30	0.003	0.07	1.03	0.60	2.30	2.10	15.90	<0.01	0.09	0.2	0.018	0.07	0.23	12	0.18	1.25	154	<0.5	SD18197526
2018KTS030	2.62	0.30	16.00	<0.02	<10	80	0.25	1.66	0.17	1.08	9.10	5.30	6.0	0.29	94.70	0.58	2.15	<0.05	<0.02	0.38	0.227	0.06	4.90	0.80	0.03	61	0.84	0.01	0.25	33.20	680	180.50	2.50	0.004	0.08	1.00	0.30	2.50	3.10	16.40	<0.01	0.08	<0.2	0.012	0.05	0.36	10	0.15	1.59	173	<0.5	SD18197526
2018KTS031	1.14	0.27	17.30	<0.02	<10	80	0.11	1.52	0.17	0.65	8.47	2.90	8.0	0.37	63.30	0.55	2.15	<0.05	<0.02	0.25	0.169	0.04	4.30	1.20	0.04	63	0.69	0.01	0.32	27.00	490	107.00	2.50	0.003	0.06	0.94	0.40	1.70	2.50	14.70	<0.01	0.07	<0.2	0.018	0.05	0.29	12	0.14	1.02	73	<0.5	SD18197526
2018KTS032	1.89	0.37	31.90	<0.02	<10	60	0.18	1.21	0.32	0.81	9.27	5.70	8.0	0.21	45.10	0.60	1.61	0.06	<0.02	0.50	0.098	0.05	4.60	1.30	0.07	63	0.74	0.01	0.30	27.60	790	74.90	2.50	0.002	0.15	1.35	0.60	2.30	2.00	24.40	<0.01	0.07	0.2	0.014	0.04	0.21	10	0.14	1.42	105	0.5	SD18197526
2018KTS034	2.94	0.35	19.00	<0.02	<10	210	0.25	1.73	0.51	1.80	12.35	12.20	9.0	0.39	58.90	0.62	1.76	0.05	<0.02	0.47	0.125	0.10	7.50	1.20	0.07	1020	0.78	0.01	0.22	33.70	1150	133.50	4.20	0.001	0.13	1.49	0.30	2.20	2.50	41.60	<0.01	0.10	<0.2	0.010	0.11	0.42	11	0.15	1.84	134	<0.5	SD18197526
2018KTS035	0.27	1.15	6.20	<0.02	<10	40	0.23	0.21	0.17	0.20	13.90	5.00	25.0	0.67	7.40	1.39	5.19	<0.05	<0.02	0.06	0.020	0.05	6.90	10.40	0.19	220	0.28	0.01	1.24	16.20	440	10.70	8.00	<0.001	0.02	0.18	1.30	0.40	0.60	15.60	<0.01	0.03	0.8	0.063	0.05	0.29	30	0.08	1.74	32	0.6	SD18197526
2018KTS036	1.12	0.36	16.60	<0.02	10	90	0.21	1.03	0.36	1.75	9.34	5.50	10.0	0.39	45.30	0.63	2.35	<0.05	<0.02	0.25	0.073	0.06	5.50	1.80	0.09	60	0.57	<0.01	0.33	31.40	670	61.70	3.50	0.003	0.08	0.95	0.40	1.50	1.80	33.50	<0.01	0.05	<0.2	0.018	0.04	0.25	16	0.10	1.41	86	<0.5	SD18197526
2018KTS037	2.14	0.25	47.80	<0.02	10	70	0.10	2.03	0.56	0.68	4.05	4.60	7.0	0.34	45.30	0.54	1.24	0.07	<0.02	1.09	0.164	0.09	2.30	1.00	0.07	261	1.04	<0.01	0.20	33.60	1100	87.30	3.90	0.003	0.16	2.94	0.50	3.30	3.80	18.10	<0.01	0.10	<0.2	0.009	0.06	0.20	8	0.17	0.67	78	<0.5	SD18197526
2018KTS103	0.32	1.08	11.70	<0.02	<10	40	0.36	0.35	0.18	0.56	39.90	4.80	38.0	1.15	45.50	1.15	3.56	0.10	<0.02	0.19	0.032	0.06	26.40	9.40	0.26	84	1.11	<0.01	0.66	23.60	960	23.10	8.00	<0.001	0.16	0.36	1.70	1.60	0.80	9.10	<0.01	0.03	<0.2	0.028	0.11	1.97	20	0.09	10.55	45	0.5	SD18197526
2018KTS104	0.32	0.99	9.80	<0.02	<10	30	0.38	0.21	0.38	0.41	36.50	7.60	35.0	0.64	34.60	1.40	3.11	0.09	0.02	0.08	0.021	0.04	22.60	9.80	0.33	161	0.50	0.01	0.70	23.30	810	12.60	5.00	0.002	0.08	0.17	2.30	1.40	0.50	12.80	<0.01	0.02	0.3	0.044	0.05	1.90	30	0.07	9.92	49	0.5	SD18197526
2018KTS106	0.66	0.31	26.00	<0.02	<10	20	0.14	0.77	1.04	0.63	14.00	3.30	13.0	0.24	36.10	0.92	1.19	0.08	0.02	0.34	0.048	0.04	9.70	1.20	0.10	19	1.91	<0.01	0.32	21.40	820	46.80	1.90	0.001	0.28	1.26	1.00	2.10	1.60	14.30	<0.01	0.08	<0.2	0.010	0.04	0.63	9	0.11	4.46	24	0.8	SD18197526
2018KTS105	0.33	1.01	9.70	<0.02	<10	30	0.37	0.21	0.38	0.39	37.50	7.50	35.0	0.63	35.20	1.37	3.14	0.08	<0.02	0.09	0.022	0.04	23.30	9.90	0.33	148	0.53	0.01	0.70	23.70	780	12.70	4.90	0.002	0.08	0.17	2.30	1.50	0.50	13.20	<0.01	0.02	0.4	0.044	0.05	2.00	30	0.07	10.30	48	0.5	SD18197526
2018KTS107	0.45	1.31	16.10	<0.02	<10	70	0.52	0.35	0.68	0.50	47.40	7.70	44.0	0.90	47.60	1.64	3.97	0.09	0.02	0.18	0.030	0.06	31.30	11.90	0.29	102	1.47	<0.01	1.00	27.40	500	20.70	6.40	0.001	0.14	0.33	4.00	2.00	0.80	14.20	<0.01	0.04	0.6	0.044	0.08	1.27	36	0.10	13.65	52	0.8	SD18197526
2018KTS108	1.17	0.24	10.30	<0.02	<10	130	0.19	1.47	0.63	2.29	7.67	3.40	7.0	0.23	61.80	0.36	1.50	0.06	<0.02	0.29	0.118	0.08	4.10	0.70	0.07	49	0.62	<0.01	0.20	31.20	620	158.50	2.20	0.002	0.08	0.83	0.50	2.60	2.40	26.40	<0.01	0.04	0.2	0.012	0.04	0.23	8	0.11	1.27	47	<0.5	SD18197526
2018KTS109	0.50	0.40	9.80	<0.02	<10	90	0.12	0.49	0.24	0.65	9.42	2.60	13.0	0.38	11.00	0.49	1.60	<0.05	<0.02	0.18	0.034	0.05	4.40	1.40	0.06	97	0.42	<0.01	0.42	18.90	590	31.90	8.20	<0.001	0.08	0.49	0.30	1.30	1.10	29.80	<0.01	0.05	<0.2	0.019	0.04	0.16	9	0.09	0.96	18	<0.5	SD18197526
2018KTS110	0.34	1.44	10.00	<0.02	<10	110	0.32	0.28	0.47	0.25	24.00	9.70	48.0	0.87	16.80	2.14	6.42	<0.05	0.03	0.08	0.027	0.11	10.60	16.00	0.46	358	0.39	0.01	1.45	28.90	620	19.90	18.20	<0.001	0.03	0.20	2.20	0.80	0.80	33.30	<0.01	0.05	0.9	0.095	0.06	0.35	47	0.13	2.52	58	1.1	SD18197526
2018KTS046	0.16	1.57	4.00	<0.02	<10	70	0.43	0.17	0.33	0.15	48.00	6.20	49.0	1.00	33.30	1.15	5.32	0.06	0.03	0.09	0.021	0.06	27.90	14.60	0.36	115	0.53	<0.01	1.00	23.40	400	10.00	8.10	<0.001	0.05	0.14	3.00	0.80	0.50	13.40	<0.01	0.01	0.5	0.052	0.09	1.64	27	0.05	10.40	32	0.7	SD18197526
2018KTS047	0.22	1.04	6.10	<0.02	<10	50	0.28	0.18	0.21	0.30	24.50	5.50	35.0	0.56	19.30	0.99	3.54	<0.05	<0.02	0.13	0.018	0.03	14.00	11.50	0.32	184	0.25	<0.01	0.66	18.50	620	23.30	4.40	<0.001	0.05	0.16	1.40	0.70	1.40	12.80	<0.01	0.01	0.2	0.040	0.05	1.28	20	0.07	5.44	51	<0.5	SD18197526
2018KTS048	0.36	0.39	15.10	<0.02	<10	30	0.10	0.98	0.08	0.97	9.28	2.00	15.0	0.53	56.90	0.71	2.04	0.06	<0.02	0.17	0.066	0.03	5.80	2.40	0.07	58	1.98	<0.01	0.34	17.60	760	64.70	3.10	0.001	0.11	0.66	0.40	1.70	1.70	6.10	<0.01	0.02	<0.2	0.014	0.05	0.59	9	0.11	1.49	29	<0.5	SD18197526
2018KTS049	0.53	0.28	7.80	<0.02	<10	100	0.08	0.51	0.35	0.89	7.07	2.80	8.0	0.29	19.90	0.36	1.74	<0.05	<0.02	0.16	0.039	0.05	3.70	1.40	0.08	61	0.32	<0.01	0.29	16.90	400	30.90	3.60	0.001	0.07	0.50	0.40	0.70	1.10	31.70	<0.01	0.02	0.2	0.020	0.03	0.18	9	0.07	0.88	35	<0.5	SD18197526
2018KTS050	0.39	1.93	4.90	<0.02	10	90	0.38	0.23	0.74	0.79	16.50	7.90	47.0	0.80	24.90	1.24	6.84	<0.05	0.03	0.07	0.025	0.16	9.40	15.90	0.37	166	0.39	<0.01	1.39	29.30	520	15.40	18.90	<0.001	0.07	0.18	2.10	0.60	0.70	28.60	<0.01	0.02	0.9	0.054	0.09	0.98	25	0.07	1.97	65	1.1	SD18197526
2018KTS051	0.10	0.85	3.20	<0.02	<10	30	0.21	0.12	0.12	0.09	11.35	3.80	19.0	0.37	4.40	1.08	3.71	<0.05	<0.02	0.04	0.012	0.03	5.40	7.80	0.14	122	0.19	<0.01	0.88	10.60	510	6.00	4.60	<0.001	0.02	0.10	0.80	0.30	0.40	9.50	0.01	<0.01	0.5	0.047	0.03	0.22	24	0.06	1.28	25	<0.5	SD18197526
2018KTS052	0.40	0.94	11.70	<0.02	<10	70	0.20	0.33	0.33	0.30	11.85	6.00	22.0	0.72	11.20	1.47	4.68	<0.05	<0.02	0.11	0.024	0.05	6.50	9.80	0.16	338	0.50	<0.01	1.06	14.70	510	16.50	7.50	<0.001	0.03	0.31	1.00	0.50	0.70	19.90	<0.01	0.03	1.0	0.057	0.05	0.27	33	0.10	1.34	72	<0.5	SD18197526
2018KTS054	0.42	0.98	11.00	<0.02	<10	60	0.23	0.35	0.20	0.25	15.10	6.10	27.0	0.71	12.50	1.70	5.27	<0.05	<0.02	0.10	0.027	0.04	8.20	8.80	0.15	193	0.52	<0.01	1.22	16.10	550	17.10	5.90	<0.001	0.03	0.32	1.10	0.60	0.80	14.20	<0.01	0.02	1.0	0.060	0.05	0.30	39	0.12	1.55	54	0.5	SD18197526
2018KTS055	0.82	0.87	12.10	<0.02	<10	90	0.21	0.50	0.42	0.58	11.05	9.70	24.0	0.60	17.10	1.50	4.98	<0.05	<0.02	0.12	0.032	0.08	6.20	8.10	0.18	562	0.53	<0.01	0.87	18.70	820	23.90	11.70	0.001	0.05	0.40	0.90	0.90	1.00	24.70	<0.01	0.04	0.3	0.051	0.07	0.28	35	0.11	1.35	87	0.5	SD18197526
2018KTS056	0.61	1.04	10.00	<0.02	<10	70	0.24	0.40	0.31	0.37	12.65	7.70	28.0	0.57	12.80	1.71	5.49	<0.05	0.02	0.13	0.031	0.07	7.20	10.60	0.21	392	0.45	<0.01	1.14	17.40	740	20.80	8.80	<0.001	0.04	0.35	1.20	0.50	0.90	19.90	<0.01	0.04	0.7	0.063	0.06	0.33	39	0.11	1.63	72	0.6	SD18197526
2018KTS057	0.94	0.66	18.70	<0.02	<10	140	0.22	0.82	0.33	1.03	13.40	12.90	25.0	0.68	31.60	1.46	4.32	<0.05	<0.02	0.16	0.063	0.05	8.00	4.80	0.17	2060	0.74	<0.01	0.60	22.40	590	54.90	7.00	0.001	0.04	0.68	1.00	1.50	1.40	19.80	<0.01	0.07	0.2	0.047	0.08	0.32	41	0.12	1.97	63	<0.5	SD18197526
2018KTS058	1.01	0.45	11.20	<0.02	<10	90	0.16	0.78	0.24	0.60	11.15	4.40	11.0	0.33	23.90	0.62	2.95	<0.05	<0.02	0.19	0.056	0.08	7.10	2.20	0.08	277	0.45	<0.01	0.33	18.30	590	47.00	5.10	0.001	0.06	0.64	0.40	0.70	1.50	17.40	<0.01	0.02	<0.2	0.021	0.05	0.21	16	0.08	1.43	29	<0.5	SD18197526
2018KTS059	1.41	0.30	17.00	<0.02	10	140	0.19	1.32	0.56	1.09	6.48	5.20	6.0	0.26	40.90	0.53	1.72	<0.05	<0.02	0.34	0.104	0.09	4.40	1.00	0.09	112	0.71	<0.01	0.25	33.50	890	92.00	3.60	0.002	0.13	1.40	0.50	2.40	2.30	31.70	<0.01	0.04	0.2	0.014	0.05	0.21	10	0.14	1.22	63	<0.5	SD18197526
2018KTS060	1.28	0.30	16.20	<0.02	<10	130	0.17	1.18	0.55	1.00	6.37	4.70	7.0	0.23	37.50	0.50	1.76	<0.05	<0.02	0.33	0.093	0.08	4.30	0.90	0.09	90	0.67	<0.01	0.25	31.50	810	83.00	3.30	0.002	0.12	1.29	0.50	2.20	2.00	31.40	<0.01	0.04	<0.2	0.015	0.04	0.20	10	0.13	1.23	55	<0.5	SD18197526
2018KTS061	0.41	0.41	7.60	<0.02	<10	40	0.09	0.32	0.21	0.31	8.12	2.60	13.0	0.24	9.00	0.84	3.17	<0.05	<0.02	0.08	0.024	0.04	4.70	2.80	0.08	127	0.29	<0.01	0.69	8.30	380	17.20	3.90	<0.001	0.03	0.35	0.50	0.40	0.80	14.30	<0.01	0.02	0.5	0.041	0.03	0.18	24	0.07	0.82	34	<0.5	SD18197526
2018KTS062	0.56	0.28	7.00	<0.02	<10	20	0.05	0.39	0.11	0.17	7.68	2.00	7.0	0.17	9.30	0.47	2.21	<0.05	<0.02	0.08	0.025	0.03	4.30	1.60	0.04	153	0.27	<0.01	0.40	7.20	270	18.80	2.30	<0.001	0.02	0.37	0.30	0.40	0.80	7.80	<0.01	0.01	0.4	0.021	0.04	0.17	12	0.05	0.69	24	<0.5	SD18197526
2018KTS063	2.15	0.22	11.10	<0.02	<10	100	0.13	1.15	0.32	1.13	6.50	5.60	5.0	0.34	42.30	0.45	1.32	<0.05	<0.02	0.29	0.092	0.07	4.70	0.70	0.04	587	0.63	<0.01	0.19	22.10	810	71.40	3.60	0.002	0.07	0.95	0.30	1.50	1.90	20.80	<0.01	0.03	<0.2	0.011	0.05	0.18	7	0.12	1.25	69	<0.5	SD18197526
2018KTS064	1.37	0.25	26.40	<0.02	<10	240	0.08	1.49	0.40	0.84	7.74	4.10	7.0	0.30	68.50	0.51	1.32	0.05	<0.02	0.35	0.170	0.07	5.60	1.10	0.08	78	0.76	<0.01	0.32	33.50	600	99.90	3.80	0.002	0.16	1.21	0.50	2.80	2.50	56.80	<0.01	0.07	0.4	0.015	0.09	0.18	11	0.20	0.86	162	0.6	SD18197526
2018KTS065	1.63	0.18	10.40	<0.02	10	140	0.08	1.04	1.10	2.02	4.35	7.00	4.0	0.20	68.10	0.41	0.93	<0.05	<0.02	0.28	0.117	0.10	2.50	0.80	0.11	305	0.60	<0.01	0.16	24.40	1150	61.80	2.90	0.001	0.17	0.85	0.40	1.80	1.70	64.00	<0.01	0.04	0.2	0.008	0.06	0.15	5	0.14	0.76	229	<0.5	SD18197526
2018KTS066	0.76	0.67	8.80	<0.02	<10	50	0.13	0.32	0.37	0.48	10.00	3.80	22.0	0.45	29.80	1.17	3.23	<0.05	<0.02	0.18	0.044	0.07	5.20	6.00	0.18	148	0.36	<0.01	0.89	15.80	920	16.30	5.60	0.001	0.11	0.29	0.70	0.80	1.00	17.70	<0.01	0.03	0.3	0.039	0.04	0.22	25	0.10	1.11	96	<0.5	SD18197526
2018KTS067	0.26	0.70	6.30	<0.02	<10	30	0.10	0.25	0.37	0.41	13.15	3.90	21.0	0.60	16.10	0.83	4.32	<0.05	0.03	0.09	0.036	0.03	6.90	10.90	0.23	73	0.20	<0.01	0.80	14.50	210	24.10	5.70	<0.001	0.06	0.29	1.30	0.50	0.70	13.10	<0.01	0.01	1.4	0.056	0.05	0.40	19	<0.05	1.65	49	1.1	SD18197526
2018KTS068	0.41	0.64	11.30	<0.02	<10	80	0.17	0.38	0.50	0.22	10.85	4.50	21.0	0.59	15.70	1.44	4.27	<0.05	<0.02	0.14	0.032	0.05	6.30	6.00	0.16	215	0.52	<0.01	0.94	14.50	720	22.00	9.10	0.001	0.05	0.33	0.90	0.60	0.80	28.60	<0.01	0.02	0.3	0.051	0.05	0.37	34	0.09	1.53	84	<0.5	SD18197526
2018KTS069	0.57	0.80	11.30	<0.02	<10	60	0.32	0.49	0.72	1.02	14.40	13.10	14.0	0.56	46.00	1.36	3.67	<0.05	<0.02	0.13	0.036	0.06	7.10	13.60	0.42	495	0.42	<0.01	0.49	19.80	720	32.10	6.30	<0.001	0.08	0.40	1.20	0.80	0.80	29.80	<0.01	0.04	0.2	0.030	0.06	0.25	35	0.08	2.86	124	<0.5	SD18197526
2018KTS102	1.06	0.48	19.80	<0.02	<10	50	0.10	1.17	0.26	1.26	5.52	3.00	8.0	0.45	59.70	0.71	2.93	<0.05	<0.02	0.23	0.125	0.05	2.60	1.00	0.05	55	0.67	<0.01	0.30	27.90	560	74.70	4.10	0.001	0.10	0.80	0.60	1.70	2.30	13.20	<0.01	0.09	<0.2	0.018	0.06	0.17	25	0.16	1.08	72	<0.5	SD18197526
2018KTS038	0.88	2.91	20.60	<0.02	<10	200	1.79	0.63	0.68	1.17	81.60	62.30	47.0	0.91	94.90	2.84	7.30	0.10	0.02	0.20	0.055	0.07	43.20	24.30	0.33	5210	1.12	<0.01	1.06	57.40	710	35.00	7.10	<0.001	0.07	0.55	3.60	1.70	1.00	33.00	<0.01	0.07	0.7	0.047	0.17	1.40	66	0.14	19.70	86	<0.5	SD18197526
2018KTS039	0.16	1.02	6.80	<0.02	10	70	0.31	0.35	0.49	0.69	17.45	12.70	19.0	0.44	45.40	1.60	2.77	<0.05	<0.02	0.12	0.031	0.07	5.70	13.30	0.69	882	0.70	<0.01	0.54	24.90	780	24.80	6.30	<0.001	0.10	0.25	1.30	0.90	0.50	24.20	<0.01	0.04	0.3	0.029	0.06	0.27	29	0.11	2.39	105	0.5	SD18197526
2018KBS185	2.43	0.41	29.60	<0.02	<10	140	0.17	1.91	0.31	1.27	7.19	7.20	17.0	0.42	66.00	0.67	2.02	0.05	<0.02	0.27	0.144	0.06	4.40	1.70	0.07	65	0.78	0.01	0.35	51.10	680	138.50	4.30	0.001	0.10	1.03	0.30	3.30	3.70	24.80	<0.01	0.07	<0.2	0.016	0.07	0.24	15	0.21	0.96	105	<0.5	SD18197526
2018KBS186	0.58	0.24	12.50	<0.02	<10	90	0.11	0.61	0.34	0.47	7.14	3.00	13.0	0.17	19.30	0.52	1.39	<0.05	<0.02	0.11	0.036	0.04	4.00	1.10	0.06	72	0.25	<0.01	0.40	18.60	360	37.30	2.20	0.001	0.07	0.40	0.40	0.90	1.00	27.30	<0.01	0.04	0.2	0.023	0.03	0.15	12	0.09	0.75	48	<0.5	SD18197526
2018KBS187	0.87	0.27	9.10	<0.02	<10	270	0.20	1.80	0.32	1.12	8.86	6.20	8.0	0.21	55.90	0.42	1.54	<0.05	<0.02	0.21	0.108	0.05	7.10	0.70	0.04	63	0.39	<0.01	0.19	36.80	400	111.50	2.60	0.003	0.06	0.62	0.20	2.00	3.00	47.90	<0.01	0.05	<0.2	0.009	0.02	0.18	7	0.09	1.64	35	<0.5	SD18197526
2018KBS188	0.87	0.15	8.70	<0.02	<10	70	0.07	0.72	0.17	0.62	4.87	2.30	6.0	0.24	22.30	0.32	1.20	<0.05	<0.02	0.12	0.049	0.03	3.70	0.80	0.03	82	0.31	<0.01	0.22	18.10	310	47.30	2.50	<0.001	0.04	0.53	0.30	0.80	1.40	16.80	<0.01	0.04	<0.2	0.013	0.02	0.12	8	0.07	0.70	27	<0.5	SD18197526
2018KBS189	0.57	0.23	11.10	<0.02	<10	110	0.11	1.16	0.19	1.06	6.27	2.40	7.0	0.26	37.90	0.32	1.43	<0.05	<0.02	0.17	0.084	0.04	5.10	0.70	0.03	34	0.37	<0.01	0.20	21.50	340	81.20	2.60	0.003	0.06	0.65	0.20	1.10	1.70	27.20	<0.01	0.05	<0.2	0.012	0.02	0.15	7	0.08	1.14	25	<0.5	SD18197526
2018KBS190	0.29	0.23	9.90	<0.02	<10	70	0.09	0.96	0.18	0.97	6.03	2.30	12.0	0.25	25.30	0.43	1.65	<0.05	<0.02	0.16	0.069	0.03	4.00	0.80	0.03	74	0.47	<0.01	0.26	23.80	310	67.60	2.50	0.002	0.05	0.61	0.30	0.80	1.60	19.60	<0.01	0.04	<0.2	0.015	0.03	0.17	10	0.09	0.90	31	<0.5	SD18197526
2018KBS191	1.08	0.38	34.70	<0.02	10	60	0.11	2.00	0.19	0.90	6.84	4.00	16.0	0.39	50.40	0.68	2.41	<0.05	<0.02	0.38	0.136	0.08	4.70	1.50	0.05	53	0.85	<0.01	0.39	46.20	680	120.50	5.00	0.003	0.12	1.45	0.40	2.20	3.20	15.30	<0.01	0.09	<0.2	0.018	0.04	0.23	16	0.16	1.17	54	<0.5	SD18197526
2018KBS192	0.34	0.19	8.50	<0.02	<10	60	0.07	0.81	0.15	0.38	6.89	1.40	7.0	0.29	13.10	0.35	1.18	<0.05	<0.02	0.12	0.055	0.03	3.30	0.70	0.02	50	0.35	<0.01	0.15	17.90	310	62.40	3.00	0.001	0.04	0.54	0.10	0.80	1.50	12.90	<0.01	0.04	<0.2	0.009	0.03	0.14	7	0.07	0.73	18	<0.5	SD18197526
2018KBS199	0.18	0.37	13.90	<0.02	<10	40	0.11	0.25	0.07	0.36	6.70	1.80	9.0	0.14	11.90	0.96	1.70	<0.05	<0.02	0.17	0.016	0.02	3.50	0.70	0.02	10	0.38	<0.01	0.32	8.80	330	38.10	1.40	0.002	0.08	0.33	0.30	0.80	0.50	14.80	<0.01	0.05	<0.2	0.017	<0.02	0.23	11	0.05	0.97	8	<0.5	SD18197526
2018KBS200	0.18	0.41	13.20	<0.02	<10	40	0.13	0.28	0.09	0.38	7.25	1.90	7.0	0.19	14.30	0.86	1.53	<0.05	<0.02	0.20	0.021	0.02	3.70	0.70	0.02	11	0.36	<0.01	0.28	9.80	370	43.10	1.80	0.003	0.10	0.40	0.40	1.00	0.70	17.40	<0.01	0.06	<0.2	0.014	0.02	0.24	9	0.05	1.08	11	<0.5	SD18197526
2018KBS194	1.03	0.17	13.10	<0.02	<10	70	0.11	1.06	0.18	0.93	5.94	2.50	9.0	0.36	30.40	0.46	1.29	<0.05	<0.02	0.19	0.068	0.04	4.90	0.70	0.03	28	0.37	<0.01	0.22	24.50	300	71.70	3.40	0.002	0.05	0.58	0.40	1.20	1.90	21.70	<0.01	0.04	0.2	0.015	0.03	0.15	11	0.09	0.94	36	<0.5	SD18197526
2018KBS195	0.78	0.17	7.00	<0.02	<10	80	0.09	0.91	0.27	0.88	8.75	4.40	6.0	0.20	29.90	0.34	1.16	<0.05	<0.02	0.12	0.063	0.04	6.80	0.70	0.04	51	0.26	<0.01	0.15	23.30	310	62.30	3.00	<0.001	0.04	0.51	0.40	0.70	1.80	17.20	<0.01	0.02	0.3	0.009	0.04	0.14	7	0.08	1.35	21	<0.5	SD18197526
2018KBS196	1.23	0.12	6.90	<0.02	<10	80	0.07	0.71	0.16	0.72	4.39	2.60	4.0	0.20	22.30	0.25	0.92	<0.05	<0.02	0.12	0.051	0.03	3.40	0.50	0.02	26	0.28	<0.01	0.12	17.90	300	47.40	2.10	0.001	0.04	0.48	0.30	0.90	1.50	15.60	<0.01	0.03	0.2	0.008	0.03	0.11	5	0.07	0.56	53	<0.5	SD18197526
2018KBS197	1.31	0.75	12.80	<0.02	<10	70	0.62	1.03	0.54	0.56	39.60	26.90	11.0	0.52	36.20	0.32	2.85	0.06	<0.02	0.45	0.058	0.08	33.60	2.80	0.09	44	0.56	0.01	0.31	49.00	1270	60.10	5.70	0.002	0.34	0.69	0.60	1.20	1.80	26.70	<0.01	0.02	<0.2	0.007	0.10	0.83	7	0.06	7.87	24	<0.5	SD18197526
2018KBS198	0.99	0.25	17.70	<0.02	<10	90	0.12	1.10	0.17	1.00	8.61	2.90	7.0	0.26	38.10	0.38	1.42	<0.05	<0.02	0.25	0.077	0.03	5.50	0.80	0.03	25	0.46	<0.01	0.22	25.90	320	65.90	3.60	0.001	0.05	0.85	0.50	1.20	1.70	18.80	<0.01	0.05	0.5	0.013	0.05	0.21	9	0.10	1.07	44	<0.5	SD18197526
2018KBS201	0.60	0.29	13.50	<0.02	<10	100	0.18	2.45	0.23	0.96	9.52	5.70	11.0	0.34	70.10	0.57	2.23	<0.05	<0.02	0.14	0.184	0.07	5.80	1.10	0.05	49	0.53	<0.01	0.30	25.40	460	199.00	3.50	0.003	0.05	0.84	0.30	2.40	3.70	27.80	<0.01	0.05	<0.2	0.016	0.03	0.31	14	0.13	1.28	70	<0.5	SD18197526
2018KBS202	1.02	0.51	27.70	<0.02	<10	130	0.18	1.40	0.36	1.34	9.20	5.70	15.0	0.44	42.80	1.13	3.96	<0.05	<0.02	0.20	0.092	0.09	5.50	4.90	0.10	1080	0.69	<0.01	0.69	37.70	900	88.80	5.70	0.001	0.06	0.95	0.60	1.50	2.60	24.20	<0.01	0.11	<0.2	0.036	0.06	0.27	25	0.20	1.12	71	<0.5	SD18197526
2018KBS203	0.93	0.64	13.50	<0.02	<10	170	0.42	1.22	0.26	1.49	17.60	4.70	14.0	0.39	51.40	0.70	2.84	<0.05	<0.02	0.26	0.106	0.06	12.10	2.10	0.07	133	0.54	<0.01	0.31	23.00	700	123.00	4.70	0.001	0.06	0.66	0.20	2.30	1.90	23.40	<0.01	0.08	<0.2	0.011	0.04	0.44	14	0.10	3.10	52	<0.5	SD18197526
2018KBS204	1.35	0.23	13.20	<0.02	10	90	0.11	1.09	0.30	1.06	7.42	4.90	9.0	0.21	40.80	0.46	1.67	<0.05	<0.02	0.20	0.078	0.05	4.30	0.80	0.05	54	0.44	<0.01	0.27	28.30	460	69.10	2.90	0.001	0.07	0.86	0.50	1.20	2.00	24.00	<0.01	0.05	0.4	0.015	0.03	0.21	12	0.11	0.82	66	<0.5	SD18197526
2018KBS205	1.22	0.55	19.80	<0.02	<10	60	0.40	1.02	0.48	0.53	13.00	4.30	9.0	0.28	23.90	0.95	3.85	<0.05	<0.02	0.37	0.064	0.04	7.60	1.50	0.06	55	0.96	<0.01	0.70	18.50	600	61.70	2.70	0.001	0.09	1.01	0.70	1.60	1.80	27.90	<0.01	0.08	<0.2	0.033	0.04	0.36	31	0.12	2.00	36	<0.5	SD18197526
2018KBS206	0.90	0.38	10.30	<0.02	<10	270	0.21	0.95	0.37	1.50	12.25	6.60	11.0	0.30	37.00	0.54	1.88	<0.05	<0.02	0.27	0.073	0.04	7.70	1.00	0.06	451	0.47	<0.01	0.22	19.50	590	73.70	3.50	0.002	0.07	0.66	0.30	1.60	1.30	33.90	<0.01	0.05	<0.2	0.011	0.04	0.52	13	0.10	1.91	84	<0.5	SD18197526
2018KBS207	1.67	0.23	11.90	<0.02	<10	120	0.14	0.83	0.40	0.90	7.69	3.40	6.0	0.24	29.90	0.37	1.67	<0.05	<0.02	0.23	0.056	0.05	6.90	0.90	0.05	65	0.48	<0.01	0.31	19.30	530	59.90	3.30	0.002	0.08	0.89	0.50	1.00	1.40	32.00	<0.01	0.07	0.2	0.017	0.04	0.17	10	0.10	1.37	39	<0.5	SD18197526
2018KBS208	1.17	0.58	18.70	<0.02	<10	60	0.12	0.71	0.21	0.62	7.60	4.70	16.0	0.53	29.10	0.88	2.52	<0.05	<0.02	0.22	0.054	0.06	4.00	4.30	0.12	61	0.53	<0.01	0.65	25.00	700	37.90	5.50	0.002	0.11	0.61	0.50	1.30	1.50	17.80	<0.01	0.06	<0.2	0.028	0.05	0.22	21	0.14	0.93	89	<0.5	SD18197526
2018KBS209	1.05	0.25	14.10	<0.02	<10	130	0.16	1.28	0.32	1.14	8.01	3.90	8.0	0.24	42.10	0.44	1.67	<0.05	<0.02	0.24	0.086	0.06	7.40	0.80	0.05	39	0.54	<0.01	0.22	25.30	560	92.30	3.50	0.001	0.10	0.73	0.30	1.50	2.10	35.00	<0.01	0.04	<0.2	0.012	0.05	0.19	10	0.10	1.62	34	<0.5	SD18197526
2018KBS210	0.67	0.38	25.50	<0.02	10	70	0.12	1.08	0.40	0.93	9.72	3.00	11.0	0.41	24.20	0.66	2.43	<0.05	<0.02	0.31	0.081	0.06	5.40	1.80	0.06	338	0.67	<0.01	0.49	22.50	680	65.10	4.50	0.003	0.09	0.96	0.40	1.30	1.70	17.40	<0.01	0.05	<0.2	0.025	0.06	0.22	16	0.14	1.08	63	<0.5	SD18197526
2018KBS211	1.63	0.54	21.70	<0.02	<10	210	0.25	2.74	0.42	2.44	13.25	7.70	15.0	0.40	84.20	0.76	2.84	<0.05	<0.02	0.38	0.201	0.07	7.90	1.70	0.08	116	0.78	<0.01	0.35	50.60	770	185.50	4.50	0.003	0.10	1.46	0.30	3.00	4.30	24.60	<0.01	0.07	<0.2	0.015	0.04	0.34	15	0.15	2.02	77	<0.5	SD18197526
2018KBS212	0.91	0.29	27.40	<0.02	10	160	0.12	2.23	0.51	1.16	8.73	5.20	8.0	0.34	66.60	0.51	1.60	0.07	0.02	0.40	0.182	0.09	5.70	0.90	0.07	35	0.97	<0.01	0.26	51.90	840	157.00	3.50	0.004	0.16	1.84	0.60	2.40	3.70	42.20	<0.01	0.08	0.3	0.011	0.04	0.26	9	0.22	1.22	113	0.6	SD18197526
2018KTS040	0.59	0.69	8.60	<0.02	<10	90	0.22	0.40	0.30	0.54	10.60	4.40	21.0	0.39	14.00	1.15	3.54	<0.05	<0.02	0.11	0.027	0.06	4.90	5.50	0.14	385	0.29	<0.01	0.75	15.90	750	21.20	6.80	0.001	0.05	0.31	0.60	0.60	0.90	25.40	<0.01	0.03	0.2	0.042	0.04	0.23	28	0.08	1.30	58	<0.5	SD18197526
2018KTS041	0.67	0.68	9.90	<0.02	<10	80	0.19	0.44	0.28	0.55	10.40	4.40	20.0	0.38	13.40	1.13	3.52	<0.05	<0.02	0.12	0.029	0.06	5.00	5.30	0.13	347	0.32	<0.01	0.72	15.80	740	23.20	6.10	0.001	0.06	0.35	0.60	0.70	0.90	24.10	<0.01	0.02	0.2	0.041	0.04	0.22	28	0.09	1.21	53	<0.5	SD18197526
2018KTS042	0.24	0.62	5.30	<0.02	<10	70	0.15	0.19	0.33	0.30	13.75	4.10	22.0	0.36	7.50	1.31	3.12	<0.05	0.02	0.06	0.015	0.04	6.70	6.60	0.16	522	0.23	<0.01	0.91	11.70	580	10.10	4.60	<0.001	0.03	0.16	0.80	0.20	0.50	21.20	<0.01	0.02	1.2	0.056	0.04	0.24	35	0.08	1.34	58	<0.5	SD18197526
2018KTS043	0.33	0.71	9.80	<0.02	<10	90	0.18	0.37	0.32	0.32	14.70	5.50	22.0	0.50	13.10	1.36	4.25	<0.05	<0.02	0.08	0.032	0.05	7.50	8.20	0.18	366	0.46	<0.01	0.87	15.20	480	21.00	9.00	<0.001	0.02	0.30	1.00	0.40	0.80	20.80	<0.01	0.03	1.0	0.061	0.05	0.28	36	0.09	1.54	60	0.5	SD18197526
2018KTS044	0.22	0.27	6.00	<0.02	<10	20	0.06	0.22	0.12	0.08	11.00	2.30	14.0	0.20	6.30	0.72	2.12	<0.05	0.02	0.05	0.014	0.02	5.20	2.90	0.11	51	0.18	<0.01	0.60	7.60	200	11.90	2.40	<0.001	0.01	0.20	0.70	0.30	0.50	8.60	<0.01	0.01	1.2	0.042	0.02	0.20	22	0.05	1.21	12	0.5	SD18197526
2018KTS045	0.39	1.27	14.60	<0.02	<10	60	0.32	0.32	0.23	0.26	14.40	8.20	30.0	0.81	14.40	1.95	5.54	<0.05	<0.02	0.10	0.031	0.05	6.90	13.50	0.22	301	0.51	<0.01	1.25	20.60	660	17.70	6.60	<0.001	0.04	0.35	1.30	0.70	0.70	15.60	<0.01	0.01	0.7	0.061	0.06	0.37	37	0.11	1.76	63	<0.5	SD18197526
2018KTS070	0.06	0.69	1.30	<0.02	<10	60	0.18	0.10	0.39	0.13	12.30	4.60	21.0	0.31	7.20	0.95	2.21	<0.05	<0.02	0.04	0.010	0.03	5.20	5.60	0.22	250	0.12	<0.01	0.76	13.40	530	7.50	4.10	<0.001	0.04	0.09	0.80	0.20	0.30	27.00	<0.01	0.01	0.8	0.045	0.02	0.26	23	0.06	1.71	41	<0.5	SD18197526
2018KTS071	0.33	0.68	8.30	<0.02	<10	60	0.17	0.27	0.19	0.19	11.40	5.50	22.0	0.38	8.60	1.25	3.98	<0.05	<0.02	0.06	0.019	0.04	6.10	5.50	0.17	395	0.27	<0.01	0.86	12.60	410	13.10	7.00	<0.001	0.02	0.24	0.90	0.50	0.60	24.10	<0.01	0.01	0.7	0.055	0.05	0.23	32	0.08	1.37	27	<0.5	SD18197526
2018KTS072	0.31	0.76	6.00	<0.02	<10	60	0.16	0.26	0.32	0.31	11.05	4.20	17.0	0.46	8.70	1.02	4.26	<0.05	<0.02	0.10	0.017	0.04	6.00	6.10	0.13	315	0.30	<0.01	0.81	11.80	470	11.50	7.30	<0.001	0.04	0.23	0.70	0.40	0.60	20.30	<0.01	0.02	0.4	0.041	0.05	0.23	25	0.07	1.24	51	<0.5	SD18197526

2018 Soil Sample Results

Sample ID	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm
2018KTS074	1.66	0.40	14.90	<0.02	<10	70	0.15	0.85	0.27	0.75	7.25	4.10	10.0	0.28	29.00	0.69	2.40	<0.05	<0.02	0.25	0.075	0.06	5.40	2.30	0.07	75
2018KTS075	1.96	0.52	15.10	<0.02	<10	130	0.28	0.85	0.45	1.34	11.55	14.30	16.0	0.49	34.70	1.12	2.53	<0.05	<0.02	0.21	0.065	0.06	6.70	3.90	0.13	463
2018KTS076	0.42	0.58	7.50	<0.02	<10	60	0.15	0.31	0.23	0.37	12.75	3.60	19.0	0.44	11.60	1.16	3.92	<0.05	<0.02	0.07	0.023	0.04	7.80	4.60	0.11	214
2018KTS077	0.79	0.40	8.70	<0.02	<10	50	0.14	0.58	0.21	0.50	9.48	3.90	17.0	0.33	17.10	0.87	2.30	0.05	<0.02	0.13	0.046	0.04	4.30	3.30	0.13	110
2018KTS078	2.14	0.39	16.70	<0.02	<10	150	0.20	1.13	0.30	1.10	10.80	8.80	11.0	0.48	38.80	0.77	2.12	0.05	<0.02	0.27	0.088	0.08	5.80	2.00	0.08	401
2018KTS079	1.60	0.19	10.40	<0.02	<10	80	0.08	0.63	0.32	0.64	4.37	2.50	4.0	0.23	19.70	0.27	1.30	<0.05	<0.02	0.23	0.059	0.06	2.90	1.00	0.04	252
2018KTS080	1.43	0.19	8.70	<0.02	<10	110	0.09	0.83	0.27	0.77	5.75	2.10	4.0	0.26	27.20	0.30	1.41	<0.05	<0.02	0.21	0.063	0.04	3.50	1.00	0.04	134
2018KTS081	1.57	0.21	15.20	<0.02	<10	90	0.09	1.01	0.20	0.64	5.01	3.30	6.0	0.22	30.50	0.45	1.47	0.05	<0.02	0.29	0.080	0.10	3.70	1.00	0.05	243
2018KTS082	1.52	0.24	10.60	<0.02	<10	80	0.14	1.37	0.25	1.12	8.05	3.90	6.0	0.30	45.20	0.38	1.78	0.05	<0.02	0.25	0.103	0.07	4.40	0.60	0.04	86
2018KTS083	2.79	0.27	11.50	<0.02	<10	160	0.19	1.43	0.28	1.50	6.89	6.00	4.0	0.27	41.00	0.47	1.53	0.05	<0.02	0.48	0.108	0.11	3.60	0.70	0.04	506
2018KTS084	0.26	0.80	5.80	<0.02	<10	40	0.17	0.19	0.12	0.17	10.30	3.90	14.0	0.38	5.40	0.98	4.45	<0.05	<0.02	0.07	0.015	0.04	5.70	6.90	0.08	334
2018KTS085	0.71	0.80	10.10	<0.02	<10	130	0.25	0.40	0.58	0.64	16.25	9.00	25.0	0.65	20.40	1.56	4.46	<0.05	<0.02	0.11	0.028	0.07	6.80	7.60	0.21	585
2018KNS002	0.40	0.55	8.70	<0.02	<10	50	0.13	0.26	0.21	0.30	10.00	4.00	20.0	0.40	9.00	1.35	3.86	<0.05	0.02	0.06	0.018	0.04	4.40	4.20	0.13	316
2018KNS003	0.36	0.35	6.90	<0.02	<10	30	0.06	0.26	0.10	0.14	9.67	2.00	10.0	0.36	5.70	0.59	2.77	<0.05	<0.02	0.05	0.016	0.02	4.60	2.50	0.07	117
2018KNS004	0.29	0.50	9.70	<0.02	<10	30	0.11	0.27	0.08	0.12	9.63	4.50	16.0	0.38	7.20	1.12	3.38	<0.05	<0.02	0.06	0.018	0.03	5.30	3.40	0.07	432
2018KNS005	0.33	0.79	8.30	<0.02	<10	40	0.20	0.28	0.12	0.10	15.05	8.50	22.0	0.65	10.10	1.32	3.92	<0.05	<0.02	0.06	0.019	0.04	8.00	7.10	0.20	671
2018KNS006	0.28	0.19	6.70	<0.02	<10	60	0.05	0.36	0.14	0.46	6.31	1.90	10.0	0.24	11.60	0.58	1.66	<0.05	<0.02	0.06	0.023	0.03	3.20	1.00	0.03	91
2018KNS007	0.49	0.23	13.40	<0.02	<10	30	0.05	0.54	0.13	0.18	8.67	1.90	6.0	0.21	15.90	0.45	1.75	<0.05	<0.02	0.14	0.037	0.02	4.20	1.10	0.04	35
2018KNS008	0.96	0.63	11.80	<0.02	<10	100	0.20	0.48	0.29	0.59	12.85	11.20	17.0	0.55	25.90	0.92	2.66	<0.05	<0.02	0.15	0.035	0.05	6.70	4.00	0.12	714
2018KNS009	0.30	1.62	5.60	<0.02	<10	90	0.58	0.18	0.22	0.16	74.70	7.40	35.0	0.75	26.20	1.28	3.80	0.08	0.02	0.13	0.019	0.05	24.60	8.80	0.24	1340
2018KNS010	0.84	0.25	10.60	<0.02	<10	50	0.10	0.69	0.15	0.77	7.77	2.80	12.0	0.24	20.60	0.68	1.80	<0.05	<0.02	0.10	0.049	0.02	4.00	1.80	0.05	97
2018KNS011	0.67	0.33	12.30	<0.02	<10	70	0.14	0.64	0.12	0.27	7.67	1.40	13.0	0.17	13.60	0.68	2.88	<0.05	<0.02	0.07	0.044	0.03	6.20	1.20	0.03	55
2018KNS012	0.65	0.43	27.40	<0.02	<10	100	0.15	1.51	0.19	1.28	7.81	3.40	15.0	0.33	42.50	0.78	2.74	<0.05	<0.02	0.24	0.114	0.05	5.10	2.50	0.06	62
2018KNS014	1.71	0.53	21.30	<0.02	<10	70	0.17	1.07	0.37	0.93	6.87	6.00	23.0	0.39	30.30	1.21	3.36	<0.05	<0.02	0.28	0.075	0.07	4.20	3.50	0.13	141
2018KNS015	0.74	0.25	18.70	<0.02	<10	100	0.12	1.39	0.34	1.34	5.05	3.90	7.0	0.22	44.20	0.41	1.19	0.05	<0.02	0.34	0.100	0.06	3.50	0.60	0.04	36
2018KNS016	0.81	0.22	18.10	<0.02	<10	60	0.08	1.15	0.15	0.79	4.83	3.50	6.0	0.25	32.30	0.41	1.53	0.09	<0.02	0.28	0.095	0.06	3.00	0.80	0.05	36
2018KNS017	0.26	0.20	7.60	<0.02	<10	120	0.11	0.87	0.19	1.17	6.34	2.30	7.0	0.19	26.90	0.35	1.10	0.09	<0.02	0.12	0.066	0.03	6.40	0.30	0.02	27
2018KNS018	2.57	0.27	13.60	<0.02	<10	160	0.21	1.36	0.33	0.53	8.39	3.20	6.0	0.35	35.30	0.39	1.89	0.10	<0.02	0.36	0.101	0.05	8.70	0.90	0.04	135
2018KNS019	1.87	0.16	14.70	<0.02	<10	90	0.10	1.01	0.51	1.45	3.47	4.90	6.0	0.21	28.60	0.35	1.05	0.10	<0.02	0.28	0.073	0.11	2.90	0.80	0.06	365
2018KNS020	2.13	0.15	16.10	<0.02	<10	100	0.12	1.02	0.54	1.47	2.90	5.00	5.0	0.20	26.90	0.32	0.96	0.11	<0.02	0.30	0.073	0.11	2.60	0.70	0.06	439
2018KNS021	0.35	0.94	104.50	<0.02	<10	40	0.37	0.27	0.23	0.14	32.50	39.60	22.0	0.55	18.20	0.93	2.99	0.12	<0.02	0.11	0.018	0.03	18.00	8.60	0.21	207
2018KNS022	1.84	0.33	14.40	<0.02	<10	100	0.14	1.64	0.35	1.06	6.21	21.20	6.0	0.62	50.90	0.78	1.67	0.09	<0.02	0.31	0.141	0.12	3.60	1.30	0.09	1280
2018KNS023	1.21	0.30	8.90	<0.02	<10	180	0.12	0.91	0.53	1.54	6.00	12.40	9.0	0.45	25.40	0.56	1.88	0.08	<0.02	0.25	0.058	0.10	3.00	2.20	0.10	6490
2018KNS024	0.30	0.47	7.30	<0.02	<10	50	0.15	0.25	0.13	0.20	10.90	3.70	15.0	0.53	7.50	1.18	3.98	0.08	<0.02	0.07	0.018	0.03	5.80	4.90	0.09	438
2018KNS025	0.70	0.25	9.10	<0.02	<10	90	0.12	0.83	0.20	0.71	7.95	2.50	7.0	0.20	22.50	0.41	1.77	0.09	<0.02	0.11	0.058	0.05	7.40	1.20	0.04	147
2018KNS026	0.33	0.98	9.40	<0.02	<10	40	0.20	0.29	0.10	0.14	18.45	5.70	28.0	0.68	8.50	1.66	6.31	0.09	0.02	0.08	0.027	0.03	8.00	8.90	0.18	287
2018KNS027	2.10	0.17	12.80	<0.02	<10	150	0.12	1.24	0.26	0.93	3.90	3.20	5.0	0.18	32.00	0.36	1.15	0.11	<0.02	0.32	0.090	0.06	2.50	0.60	0.04	95
2018KNS028	1.45	0.27	23.80	<0.02	<10	130	0.13	2.02	0.25	1.71	8.65	4.30	6.0	0.33	51.50	0.66	2.01	0.11	<0.02	0.44	0.176	0.10	5.00	0.60	0.04	649
2018KNS029	1.30	0.32	17.00	0.06	<10	150	0.18	2.24	0.26	1.30	7.44	10.40	9.0	0.38	52.00	0.62	1.89	0.10	<0.02	0.46	0.144	0.08	4.10	2.00	0.07	1120
2018KNS030	0.80	0.31	19.10	<0.02	<10	150	0.15	1.94	0.31	1.60	7.79	4.20	8.0	0.29	51.90	0.58	1.78	0.11	<0.02	0.39	0.134	0.06	3.90	1.20	0.05	196
2018KNS031	0.67	0.36	16.80	<0.02	<10	30	0.08	0.78	0.14	0.22	10.85	2.50	11.0	0.36	13.20	0.75	3.32	0.07	<0.02	0.11	0.045	0.03	6.10	2.60	0.06	95
2018KNS032	0.50	0.16	14.80	<0.02	<10	140	0.10	1.00	0.26	0.58	7.44	2.90	6.0	0.22	23.30	0.40	1.51	0.09	<0.02	0.21	0.067	0.03	3.90	0.70	0.04	94
2018KNS034	1.96	0.35	36.70	<0.02	<10	220	0.18	2.01	0.58	2.90	8.75	6.90	14.0	0.52	79.50	0.87	2.43	0.11	<0.02	0.47	0.150	0.07	4.40	1.70	0.07	211
2018KNS035	0.40	0.70	15.90	<0.02	<10	30	0.11	0.30	0.20	0.22	10.15	3.30	20.0	0.37	11.50	1.29	3.93	0.08	<0.02	0.10	0.025	0.02	4.90	6.20	0.13	112
2018KNS039	0.19	0.62	5.70	<0.02	<10	40	0.14	0.20	0.14	0.17	8.73	2.90	15.0	0.32	5.50	1.10	4.61	0.07	<0.02	0.05	0.016	0.03	4.20	5.70	0.09	182
2018KNS040	0.19	0.61	5.30	<0.02	<10	30	0.14	0.19	0.13	0.15	8.81	2.80	14.0	0.32	5.00	1.07	4.57	0.07	<0.02	0.05	0.014	0.03	4.20	5.70	0.08	165
2018KNS036	0.33	0.62	6.90	<0.02	<10	30	0.14	0.21	0.15	0.18	12.45	4.30	18.0	0.34	7.70	1.01	3.09	0.08	<0.02	0.06	0.016	0.02	6.20	4.80	0.11	208
2018KNS037	1.12	0.38	16.90	<0.02	<10	140	0.28	1.72	0.31	1.70	13.60	4.40	14.0	0.36	55.40	0.65	2.25	0.10	<0.02	0.28	0.131	0.06	8.80	1.60	0.06	64
2018KNS038	0.46	0.88	11.10	<0.02	<10	60	0.22	0.31	0.27	0.35	13.20	6.10	26.0	0.61	13.70	1.67	4.71	0.09	<0.02	0.09	0.027	0.05	7.30	8.10	0.15	554
2018KNS041	1.87	0.38	31.80	<0.02	<10	210	0.21	3.01	0.50	3.82	8.93	5.10	9.0	0.36	50.70	0.71	2.05	0.11	<0.02	0.55	0.259	0.09	4.80	1.20	0.06	213
2018KNS042	2.10	0.30	34.30	<0.02	<10	130	0.12	1.82	0.45	0.86	6.68	5.70	5.0	0.26	46.90	0.47	1.30	0.12	<0.02	0.61	0.128	0.10	6.10	0.80	0.05	148
2018KNS043	2.66	0.34	22.80	<0.02	<10	80	0.21	1.47	0.53	1.45	9.18	4.40	6.0	0.29	45.80	0.51	1.53	0.10	<0.02	0.47	0.091	0.06	8.00	0.80	0.05	94
2018KNS044	3.42	0.26	22.30	<0.02	<10	100	0.16	1.83	0.66	1.74	7.68	4.60	6.0	0.31	55.20	0.40	1.10	0.11	<0.02	0.57	0.123	0.07	4.30	0.80	0.07	216
2018KNS045	1.80	0.21	21.30	<0.02	<10	40	0.06	1.46	0.23	0.45	10.75	3.20	6.0	0.29	28.50	0.40	1.51	0.11	<0.02	0.42	0.088	0.04	6.10	0.60	0.03	59
2018KNS046	3.26	0.22	30.80	<0.02	<10	210	0.12	2.96	0.83	2.46	6.60	7.80	4.0	0.27	80.70	0.44	1.28	0.13	<0.02	0.83	0.186	0.11	4.50	0.70	0.06	492
2018KNS047	1.22	0.22	17.70	<0.02	<10	130	0.17	1.00	0.47	0.75	8.51	4.50	5.0	0.24	30.20	0.34	1.55	0.09	<0.02	0.25	0.063	0.07	7.40	0.60	0.05	136
2018KNS048	1.48	0.26	22.10	<0.02	<10	130	0.13	1.57	0.26	1.34	7.73	3.90	7.0	0.23	35.10	0.45	1.94	0.10	<0.02	0.28	0.090	0.05	4.90	1.10	0.04	136
2018KNS049	2.23	0.20	24.70	<0.02	<10	80	0.12	1.35	0.47	0.95	6.32	3.40	6.0	0.21	33.90	0.43	1.53	0.10	<0.02	0.32	0.090	0.06	5.00	0.80	0.04	211
2018KNS050	2.27	0.17	18.30	<0.02	<10	130	0.11	1.70	0.50	0.98	4.58	4.00	4.0	0.24	48.70	0.35	1.03	0.11	<0.02	0.36	0.112	0.06	3.90	0.50	0.06	82
2018KNS051	1.48	0.23	29.40	<0.02	<10	130	0.15	1.62	0.39	1.43	8.53	8.60	7.0	0.25	53.50	0.49	1.60	0.10	<0.02	0.25	0.106	0.07	6.50	0.70	0.05	110
2018KNS052	1.85	0.24	12.50	<0.02	<10	210	0.12	1.28	0.59	0.93	7.79	3.50	9.0	0.28	34.00	0.37	1.46	0.09	<0.02	0.29	0.082	0.08	4.80	1.00	0.11	194
2018KNS054	2.78	0.27	18.10	<0.02	<10	150	0.15	1.63	0.41	1.54	6.99	13.90	6.0	0.49	34.30	0.55	2.00	<0.05	<0.02	0.32	0.096	0.09	4.20	1.30	0.07	2860
2018KNS055	1.93	0.26	13.40	<0.02	<10	130	0.15	1.38	0.71	1.80	7.83	9.20	7.0	0.35	29.70	0.45	1.87	<0.05	<0.02	0.34	0.078	0.05	3.90	1.40	0.08	1100
2018KNS056	3.01	0.25	24.00	<0.02	<10	50	0.13	1.45	0.53	0.44	9.05	5.30	8.0	0.46	36.50	0.56	2.02	<0.05	0.02	0.42	0.094	0.05	5.10	1.40	0.06	299
2018KTS086	0.97	0.42	12.80	<0.02	<10	150	0.17	0.58	0.55	1.44	7.68	3.60	11.0	0.39	30.40	0.76	2.27	<0.05	<0.02	0.25	0.054	0.07	3.90	2.50	0.11	77
2018KTS087	0.71	0.57	10.80	<0.02	<10	90	0.15	0.43	0.44	0.79	13.00	5.00	19.0	0.54	18.10	1.06	3.41	<0.05	<0.02	0.12	0.034	0.07	6.50	4.50	0.14	413
2018KTS088	1.07	0.60	11.40	<0.02	<10	60	0.43	0.68	0.18	0.67	18.40	5.50	10.0	0.48	29.60	1.02	4.40	<0.05	<0.02	0.22	0.056	0.05	9.00	1.80	0.12	233
2018KTS089	2.89	0.57	43.40	<0.02	<10	70	0.15	1.95	0.40	2.32	5.46	6.40	12.0	0.49	85.40	1.17	3.42	0.07	<0.02	0.38	0.151	0.08	2.90	2.30	0.16	68
2018KTS090	1.24	0.15	6.60	<0.02	<10	70	0.06	0.76	0.17	0.17	6.27	2.00	4.0	0.23	23.10	0.23	0.94	<0.05	<0.02	0.23	0.063	0.04	3.40	0.50	0.04	53
2018KTS091	0.92	0.47	8.00	<0.02	<10	160	0.17	0.74	0.31	1.21	9.84	4.10	11.0	0.35	51.40	0.54	2.55	<0.05	<0.02	0.19	0.061	0.04	5.80	0.60	0.04	252
2018KTS092	1.31	0.21	31.70	<0.02	<10	60	0.13	1.31	0.25	0.63	4.49	3.60	7.0	0.19	40.70	0.37	1.26	0.05	<0.02	0.43	0.108	0.03	2.80	0.80	0.05	21
2018KTS094	0.52	1.37	3.90	<0.02	<10	90	1.03	0.23	1.53	0.98	115.00	3.80	19.0	0.40	51.40	0.47	3.41	0.16	0.02	0.43	0.030	0.04	88.40	5.50	0.20	81
2018KTS095	1.33	0.19	18.50	<0.02	<10	110	0.08	1.11	0.21	0.87	5.30	2.70	9.0	0.29	44.20	0.50	1.46	0.05	<0.02	0.25	0.096	0.04	2.80	1.00	0.05	56
2018KTS096	0.74	0.27	8.90	<0.02	<10	100	0.14	0.81	0.21	0.33	5.63	3.10	4.0	0.24	30.60	0.29	1.41	<0.05	<0.02	0.30	0.073	0.05	3.10	0.50	0.04	82
2018KTS097	1.50	0.37	24.30	<0.02	<10	110	0.16	1.18	0.11	0.88	10.30	3.10	8.0	0.31	37.70	0.73	2.64	0.05	<0.02	0.35	0.084	0.06	5.30	1.70	0.05	62
2018KTS098	4.10	0.21	11.80	<0.02	<10	90	0.10	0.97	0.18	0.64	4.35	3.90	8.0	0.24	28.30	0.50	1.39	0.06	<0.02	0.34	0.075	0.08	2.80	1.40	0.05	107
2018KTS099	2.02	0.35	15.90	<0.02	<10	120	0.15	1.06	0.20	0.59	6.27	3.30	9.0	0.29	27.10	0.65	2.39	<0.05	<0.02	0.28	0.077	0.08	3.90	1.70	0.06	208
2018KTS100	1.84	0.31	12.60	<0.02	<10	100	0.12	0.81	0.18	0.51	6.54	2.80	10.0	0.27	23.00	0.57	2.39	<0.05	<0.02	0.26	0.060	0.07	4.00	1.40	0.05	140
2018KTS101	0.56	0.97	11.30	<0.02	<10	110	0.25	0.37	0.72	0.61	14.70	7.90	28.0	0.72	17.60	1.85	4.84	<0.05	<0.02	0.12	0.028	0.08	7.50	9.60	0.23	617
2018KBS219	1.70	0.22	28.80	<0.02	<10	40	0.11	1.14	0.63	0.90	3.45	4.30	6.0	0.19	34.80	0.38	1.48	<0.05	0.02	0.47	0.091	0.05	2.70	0.90	0.05	30
2018KBS220	1.54	0.21	28.80	<0.02	10	30	0.11	1.10	0.67	0.87	3.30	4.20	7.0	0.19	34.30	0.39	1.47	<0.05	0.02	0.48	0.093	0.04	2.50	1.00	0.05	23
2018KBS214	1.69	0.23	13.00	<0.02	<10	80	0.14	1.30	0.24	0.62	8.29	4.70	8.0	0.29	34.90	0.42	1.63	<0.05	<0.02	0.23	0.077	0.05	7.10	0.80	0.03	125
2018KBS215	2.98	0.39	31.60	<0.02	<10	220	0.18	2.12	0.25	1.44	11.05	16.10	16.0	0.41	55.00	0.98	2.63	<0.05	<0.02	0.21	0.118	0.06	8.00	2.50	0.08	2140
2018KBS216	0.92	0.32	17.40	<0.02	<10	340	0.17	1.74	0.24	1.32	9.41	4.80	11.0	0.33	42.60	0.56	2.41	<0.05	<0.02	0.16	0.129	0.04	5.40	1.40	0.06	558
2018KBS217	3.15	0.29	18.00	<0.02	<10	130	0.18	1.57	0.31	1.33	7.59	6.50	7.0	0.23	43.90	0.47	1.79	0.05	<0.02	0.31	0.115	0.05	7.40	1.10	0.04	72
2018KBS218	1.20	0.71	51.40	<0.02	<10	30	0.15	0.86	0.12	0.49	8.52	4.60	21.0	0.47	24.30	1.58	4.62	<0.05	<0.02	0.16	0.050	0.04	4.40	5.70	0.13	73
2018KBS221	2.48	0.42	44.30	<0.02	<10	80	0.17	1.17	0.26	0.72	7.06	7.20	14.0	0.41	33.60	0.79	2.17	<0.05	<0.02	0.31	0.063	0.05	3.20	2.80	0.10	214
2018KBS222	2.41	0.30	40.00	<0.02	10	110	0.11	1.78	0.45	0.79	6.98	5.80	9.0	0.38	61.10	0.61	2.05	0.05	<0.02	0.33	0.101	0.06	4.70	1.80	0.08	41
2018KBS223	3.37	0.29	41.20	0.02	10	170	0.20	2.08	0.51	1.93	8.29	8.20	8.0	0.31	96.20	0.55	1.59	0.05	<0.02	0.47	0.130	0.06	5.20	0.80	0.06	62
2018KBS224	2.72	0.22	19.50	<0.02	<10	80	0.13	1.41	0.20	1.25	4.96	4.10	8.0	0.44	40.00	0.48	1.77	<0.05	<0.02	0.39	0.095	0.07	2.90	0.80	0.05	52
2018KNS001	0.32	0.53	4.50	<0.02	<10	70	0.10	0.20	0.34	0.85	8.40	3.40	18.0	0.47	12.60	0.93	2.19	<0.05	<0.02	0.07	0.013	0.07	4.20	4.50	0.13	253
2018KBS184	0.78	0.24	11.80	<0.02	<10	100	0.09	1.04	0.18	0.90	9.81	2.30	8.0	0.32	31.00	0.34	1.68	<0.05	<0.02	0.15	0.072	0.04	6.70	0.90	0.03	22
2018KBS183	0.93	0.23	8.90	<0.02	<10	130	0.13	1.30	0.18	0.94	7.98	2.60	11.0	0.20	36.00	0.38	1.54	<0.05	<0.02	0.16	0.080	0.04	7.20	0.80	0.04	61
2018KBS181	0.67	0.16	5.90	<0.02	<10	110	0.13	0.83	0.32	1.38	5.62	2.00	6.0	0.19	37.50	0.30	0.98	<0.05	<0.02	0.11	0.067	0.02	4.70	0.50	0.03	59
2018KBS182	1.51	0.16	7.50	<0.02	<10	60	0.07	0.61	0.20	0.69	5.26	2.70	10.0	0.19	21.60	0.46	1.26	<0.05	<0.02	0.16	0.041	0.04	3.00	1.00	0.04	72
2018KBS178	0.24	3.23	7.10	<0.02	<10	160	0.91	0.21	0.54	0.22	86.60	11.20	72.0	1.45	63.60	2.42	9.19	0.11	0.07	0.18	0.032	0.11	46.60	31.70	0.59	157
2018KBS179	0.98	0.95	25.20	<0.02	<10	90	0.27	0.76	0.86	0.97	17.95	11.10	31.0	0.82	35.40	1.50	4.07	<0.05	0.02	0.32	0.057	0.05	9.20	16.50	0.34	523
2018KBS180	0.50	0.88	18.60	<0.02	<10	50	0.21	0.38	0.59	0.50	19.35	6.60	29.0	0.79	21.20	1.38	3.90	<0.05	0.02	0.23	0.031	0.04	9.70	11.90	0.27	207

Sample ID	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	Certificate
2018KTS074	0.46	<0.01	0.38	23.40	650	58.90	3.10	0.003	0.07	0.66	0.50	1.50	1.70	23.30	<0.01	0.05	<0.2	0.022	0.04	0.16	16	0.11	1.13	76	<0.5	SD18197526
2018KTS075	0.57	<0.01	0.47	22.80	770	73.50	4.40	0.002	0.08	0.61	0.60	1.70	1.50	28.00	<0.01	0.05	<0.2	0.032	0.07	0.22	26	0.13	1.39	142	<0.5	SD18197526
2018KTS076	0.29	<0.01	0.80	12.10	370	19.50	7.40	<0.001	0.01	0.25	0.90	0.60	0.70	27.90	<0.01	0.03	0.8	0.060	0.04	0.25	30	0.08	1.45	25	<0.5	SD18197526
2018KTS077	0.37	<0.01	0.53	18.90	420	38.90	3.90	0.001	0.04	0.39	0.70	1.10	1.70	18.80	<0.01	0.02	0.2	0.038	0.05	0.19	21	0.10	1.30	50	<0.5	SD18197526
2018KTS078	0.60	<0.01	0.33	23.10	830	103.50	4.60	0.001	0.08	0.88	0.40	2.50	2.20	23.60	<0.01	0.06	<0.2	0.019	0.08	0.22	18	0.13	1.34	88	<0.5	SD18197526
2018KTS079	0.40	<0.01	0.21	13.70	520	42.00	3.00	<0.001	0.07	0.58	0.40	1.10	1.30	18.30	<0.01	0.02	0.3	0.013	0.05	0.11	6	0.07	0.58	48	<0.5	SD18197526
2018KTS080	0.37	<0.01	0.19	14.50	400	51.90	2.60	0.001	0.04	0.57	0.40	1.20	1.60	17.00	<0.01	0.04	0.2	0.013	0.03	0.13	6	0.07	0.70	42	<0.5	SD18197526
2018KTS081	0.62	<0.01	0.22	29.90	720	59.50	4.20	0.002	0.07	0.87	0.50	2.00	4.70	18.40	<0.01	0.05	0.2	0.014	0.03	0.18	9	0.12	0.84	70	<0.5	SD18197526
2018KTS082	0.62	<0.01	0.23	22.80	640	99.70	3.00	0.002	0.06	0.89	0.40	2.10	2.50	22.00	<0.01	0.05	<0.2	0.013	0.03	0.23	8	0.10	1.05	84	<0.5	SD18197526
2018KTS083	0.84	<0.01	0.14	28.60	1370	98.40	4.60	0.002	0.10	1.38	0.30	2.50	2.80	22.30	<0.01	0.05	<0.2	0.008	0.07	0.26	8	0.12	1.33	77	<0.5	SD18197526
2018KTS084	0.30	<0.01	0.83	9.00	340	9.80	5.50	<0.001	0.01	0.19	0.80	0.50	0.60	10.50	<0.01	0.02	0.6	0.044	0.04	0.18	25	0.05	1.10	27	<0.5	SD18197526
2018KTS085	0.44	0.01	0.81	19.30	830	25.60	9.60	<0.001	0.06	0.29	1.10	0.80	0.90	34.40	<0.01	0.05	0.5	0.056	0.05	0.27	39	0.09	1.69	91	0.5	SD18197526
2018KNS002	0.28	<0.01	0.89	11.00	660	14.90	6.70	<0.001	0.03	0.20	0.90	0.60	0.70	13.60	<0.01	0.03	0.8	0.063	0.04	0.28	35	0.07	1.24	42	0.5	SD18197526
2018KNS003	0.22	<0.01	0.65	6.40	280	15.40	4.40	<0.001	0.02	0.21	0.60	0.50	0.70	8.40	<0.01	0.01	0.4	0.037	0.04	0.19	16	0.05	0.88	13	<0.5	SD18197526
2018KNS004	0.26	<0.01	0.81	9.40	320	14.60	4.40	<0.001	0.02	0.24	0.70	0.40	0.60	6.80	<0.01	0.03	0.7	0.048	0.04	0.18	27	0.07	0.95	23	<0.5	SD18197526
2018KNS005	0.27	<0.01	0.92	14.40	310	11.50	6.50	<0.001	0.02	0.19	1.20	0.50	0.60	10.10	<0.01	0.03	0.8	0.053	0.05	0.29	27	0.07	1.87	36	<0.5	SD18197526
2018KNS006	0.21	<0.01	0.36	9.10	170	24.30	3.10	<0.001	0.03	0.27	0.40	0.40	0.80	11.20	<0.01	0.02	0.5	0.025	0.03	0.13	19	0.05	0.61	30	<0.5	SD18197526
2018KNS007	0.37	<0.01	0.43	13.90	260	32.90	1.50	0.001	0.05	0.58	0.40	1.10	1.00	10.10	<0.01	0.02	0.8	0.025	0.03	0.18	14	0.08	0.79	16	<0.5	SD18197526
2018KNS008	0.53	<0.01	0.41	16.40	370	34.80	4.10	0.001	0.05	0.46	0.80	1.10	0.90	18.30	<0.01	0.04	0.2	0.023	0.05	0.31	23	0.09	1.68	46	<0.5	SD18197526
2018KNS009	0.58	<0.01	0.67	23.90	400	7.70	5.20	0.001	0.03	0.13	2.30	0.60	0.40	13.30	<0.01	0.03	0.5	0.039	0.09	0.97	30	0.08	9.04	20	<0.5	SD18197526
2018KNS010	0.36	<0.01	0.39	14.40	290	43.70	2.60	<0.001	0.04	0.45	0.60	0.80	1.40	13.20	<0.01	0.04	0.4	0.027	0.04	0.15	19	0.11	0.86	28	<0.5	SD18197526
2018KNS011	0.33	<0.01	0.27	9.10	310	40.50	2.10	<0.001	0.02	0.45	0.40	0.80	1.20	17.60	<0.01	0.03	<0.2	0.028	0.05	0.15	21	0.09	1.31	15	<0.5	SD18197526
2018KNS012	0.57	<0.01	0.38	30.60	550	91.60	5.00	0.001	0.06	0.95	0.50	1.70	2.30	20.50	<0.01	0.05	<0.2	0.026	0.06	0.21	18	0.13	1.10	74	<0.5	SD18197526
2018KNS014	0.66	<0.01	0.61	26.30	720	71.60	5.40	0.001	0.08	1.08	0.90	1.60	1.90	25.10	<0.01	0.06	0.2	0.041	0.06	0.22	35	0.17	1.13	60	<0.5	SD18197526
2018KNS015	0.71	<0.01	0.21	33.90	780	90.40	3.10	0.004	0.14	1.19	0.60	2.50	2.80	29.60	<0.01	0.05	0.2	0.010	0.03	0.19	8	0.15	1.01	57	<0.5	SD18197526
2018KNS016	0.67	0.01	0.26	34.80	650	57.80	4.10	0.001	0.11	0.93	0.40	2.10	2.00	20.10	<0.01	0.04	0.2	0.014	0.03	0.15	9	0.13	0.76	35	<0.5	SD18197526
2018KNS017	0.30	0.01	0.15	19.30	290	59.80	1.90	<0.001	0.04	0.49	0.30	1.40	1.40	29.10	<0.01	0.03	<0.2	0.011	0.02	0.15	7	0.08	1.39	18	<0.5	SD18197526
2018KNS018	0.56	0.01	0.21	24.50	590	112.50	3.80	0.001	0.07	0.95	0.30	1.90	2.30	45.30	<0.01	0.05	<0.2	0.013	0.04	0.21	8	0.10	1.62	37	<0.5	SD18197526
2018KNS019	0.54	0.01	0.20	32.20	860	51.50	4.40	0.001	0.16	0.94	0.30	2.20	2.30	38.30	<0.01	0.05	0.2	0.011	0.06	0.14	7	0.14	0.60	67	<0.5	SD18197526
2018KNS020	0.55	0.01	0.17	32.30	930	50.20	4.50	<0.001	0.17	1.07	0.30	2.20	2.30	40.20	<0.01	0.05	<0.2	0.009	0.06	0.13	6	0.14	0.55	73	<0.5	SD18197526
2018KNS021	0.29	0.01	0.59	26.50	350	10.50	3.80	0.002	0.04	0.15	1.30	0.60	0.40	11.80	<0.01	0.02	0.3	0.034	0.06	0.59	20	0.07	6.02	19	<0.5	SD18197526
2018KNS022	1.03	0.01	0.20	57.40	1350	132.50	11.00	0.001	0.16	1.18	0.50	2.30	3.30	21.90	<0.01	0.07	<0.2	0.012	0.12	0.21	21	0.25	1.20	82	<0.5	SD18197526
2018KNS023	0.54	0.01	0.27	32.20	970	76.00	6.90	<0.001	0.12	0.64	0.40	1.60	2.10	28.00	<0.01	0.06	<0.2	0.016	0.14	0.16	12	0.13	0.71	140	<0.5	SD18197526
2018KNS024	0.39	0.01	0.72	8.90	370	14.20	5.80	<0.001	0.02	0.24	0.80	0.50	0.60	10.30	<0.01	0.02	0.8	0.051	0.04	0.25	32	0.08	1.09	30	<0.5	SD18197526
2018KNS025	0.31	0.01	0.27	20.40	430	58.50	2.70	0.001	0.05	0.42	0.30	1.20	1.50	20.30	<0.01	0.02	<0.2	0.017	0.03	0.16	9	0.08	0.97	24	<0.5	SD18197526
2018KNS026	0.35	0.01	1.58	15.80	340	14.30	8.00	<0.001	0.02	0.27	1.40	0.60	0.80	9.80	<0.01	0.04	1.6	0.083	0.06	0.30	39	0.09	1.57	23	0.8	SD18197526
2018KNS027	0.52	0.01	0.16	26.20	830	81.40	2.80	0.001	0.11	1.02	0.30	2.50	2.40	22.90	<0.01	0.04	<0.2	0.009	0.05	0.15	7	0.12	0.64	93	<0.5	SD18197526
2018KNS028	0.86	0.01	0.20	27.90	1110	104.00	3.30	0.003	0.11	1.45	0.10	2.10	3.30	13.60	<0.01	0.08	<0.2	0.006	0.09	0.32	9	0.12	1.81	87	<0.5	SD18197526
2018KNS029	0.81	0.01	0.25	39.90	770	145.50	5.80	0.002	0.09	1.78	0.50	2.90	3.20	22.10	<0.01	0.07	0.2	0.015	0.07	0.26	13	0.20	1.09	56	<0.5	SD18197526
2018KNS030	0.73	0.01	0.24	34.60	580	122.50	4.40	0.003	0.07	1.28	0.40	2.20	2.70	22.40	<0.01	0.08	<0.2	0.014	0.04	0.26	11	0.16	1.20	44	<0.5	SD18197526
2018KNS031	0.57	0.01	0.67	12.60	250	42.70	3.20	<0.001	0.03	0.62	0.70	0.90	1.30	10.50	<0.01	0.05	0.7	0.035	0.06	0.25	25	0.12	0.98	14	<0.5	SD18197526
2018KNS032	0.57	0.01	0.28	20.80	370	69.60	2.90	0.001	0.05	0.75	0.50	1.40	1.70	22.70	<0.01	0.05	0.4	0.017	0.03	0.18	11	0.11	0.86	30	<0.5	SD18197526
2018KNS034	0.83	0.01	0.48	50.90	670	135.00	5.90	0.003	0.13	1.56	0.70	2.90	3.00	43.30	<0.01	0.08	0.2	0.029	0.05	0.26	24	0.19	1.40	91	<0.5	SD18197526
2018KNS035	0.50	0.01	1.17	13.30	270	15.40	2.90	<0.001	0.05	0.39	0.90	0.90	0.70	13.00	<0.01	0.04	0.8	0.067	0.05	0.29	35	0.11	1.10	19	0.6	SD18197526
2018KNS039	0.26	0.01	0.97	8.20	210	9.80	5.20	<0.001	0.02	0.15	0.70	0.40	0.50	11.20	<0.01	0.02	0.6	0.057	0.04	0.18	29	0.06	0.91	30	<0.5	SD18197526
2018KNS040	0.26	0.01	1.01	8.10	190	9.10	5.10	<0.001	0.02	0.15	0.70	0.30	0.50	11.00	<0.01	0.01	1.3	0.057	0.04	0.21	28	0.06	0.97	28	<0.5	SD18197526
2018KNS036	0.21	0.01	0.72	10.80	270	11.40	4.00	<0.001	0.02	0.19	0.80	0.40	0.50	10.10	<0.01	0.02	0.7	0.044	0.04	0.23	26	0.06	1.28	22	<0.5	SD18197526
2018KNS037	0.56	0.01	0.32	29.60	570	123.00	3.50	0.002	0.07	0.79	0.30	2.20	2.70	32.10	<0.01	0.05	<0.2	0.017	0.03	0.29	14	0.12	1.79	79	<0.5	SD18197526
2018KNS038	0.57	0.01	0.82	15.10	450	17.30	8.50	<0.001	0.04	0.29	1.20	0.50	0.70	14.90	<0.01	0.04	0.6	0.056	0.05	0.28	42	0.08	1.37	55	<0.5	SD18197526
2018KNS041	0.92	0.01	0.23	62.70	630	188.00	4.10	0.004	0.08	2.10	0.30	3.90	3.90	19.30	<0.01	0.12	<0.2	0.012	0.05	0.30	13	0.22	1.67	97	<0.5	SD18197526
2018KNS042	1.03	0.02	0.19	49.50	1190	96.10	4.10	0.002	0.20	1.96	0.40	2.90	2.90	26.80	<0.01	0.08	<0.2	0.006	0.06	0.26	7	0.19	1.13	119	<0.5	SD18197526
2018KNS043	0.75	0.02	0.19	32.60	710	93.60	4.20	0.004	0.12	1.19	0.40	2.60	2.00	24.50	<0.01	0.06	<0.2	0.011	0.03	0.26	9	0.12	1.61	53	<0.5	SD18197526
2018KNS044	0.72	0.01	0.15	37.70	870	124.50	3.40	0.002	0.13	1.61	0.60	3.40	2.50	19.80	<0.01	0.08	0.3	0.007	0.06	0.28	6	0.15	1.14	79	<0.5	SD18197526
2018KNS045	0.67	0.01	0.22	35.90	530	71.80	2.80	0.001	0.07	1.40	0.50	2.00	2.30	14.10	<0.01	0.02	0.4	0.012	0.05	0.23	9	0.13	0.96	27	<0.5	SD18197526
2018KNS046	0.87	0.02	0.15	55.80	1080	172.00	4.80	0.002	0.15	3.13	0.60	3.90	3.30	41.80	<0.01	0.08	0.2	0.008	0.11	0.28	8	0.17	1.45	69	<0.5	SD18197526
2018KNS047	0.57	0.01	0.24	26.20	570	69.60	3.20	0.002	0.09	0.98	0.50	1.90	1.50	36.80	<0.01	0.03	0.2	0.013	0.05	0.16	8	0.10	1.55	24	<0.5	SD18197526
2018KNS048	0.65	0.01	0.30	23.10	600	104.00	3.30	0.002	0.09	1.27	0.30	2.10	2.20	26.60	<0.01	0.05	<0.2	0.015	0.04	0.21	11	0.15	1.00	61	<0.5	SD18197526
2018KNS049	0.62	0.01	0.24	29.10	690	85.90	3.20	0.002	0.11	1.25	0.40	2.00	2.40	33.50	<0.01	0.06	0.2	0.012	0.04	0.22	10	0.14	0.87	40	<0.5	SD18197526
2018KNS050	0.67	0.01	0.14	38.60	680	109.00	2.60	0.004	0.12	1.41	0.50	2.80	2.70	36.80	<0.01	0.06	0.3	0.008	0.04	0.19	6	0.14	0.85	55	<0.5	SD18197526
2018KNS051	0.52	0.01	0.21	40.80	470	107.50	3.20	0.002	0.09	0.82	0.50	1.90	2.10	25.50	<0.01	0.06	0.3	0.013	0.04	0.22	12	0.12	1.27	39	<0.5	SD18197526
2018KNS052	0.40	0.01	0.19	32.00	580	77.50	4.70	0.002	0.08	1.02	0.60	2.00	1.70	30.20	<0.01	0.06	0.2	0.014	0.04	0.17	8	0.10	1.01	86	<0.5	SD18197526
2018KNS054	0.89	0.01	0.21	32.10	1090	118.00	6.40	0.001	0.11	1.17	0.20	1.50	2.70	25.40	<0.01	0.08	<0.2	0.009	0.17	0.20	11	0.18	1.14	134	<0.5	SD18197526
2018KNS055	0.56	0.01	0.31	19.10	580	104.50	3.70	0.001	0.07	1.01	0.40	2.30	1.80	31.60	<0.01	0.07	0.2	0.016	0.07	0.21	12	0.13	1.27	99	<0.5	SD18197526
2018KNS056	0.75	0.01	0.37	31.80	610	83.80	3.70	0.001	0.10	1.63	0.60	2.20	2.60	28.80	<0.01	0.06	0.3	0.018	0.05	0.28	15	0.18	1.01	71	0.5	SD18197526
2018KTS086	0.46	<0.01	0.39	23.20	800	39.50	3.90	0.002	0.07	0.53	0.60	1.50	1.10	36.20	<0.01	0.06	<0.2	0.025	<0.02	0.18	18	0.08	1.21	120	<0.5	SD18197526
2018KTS087	0.42	<0.01	0.76	16.00	610	33.60	5.60	0.001	0.05	0.31	0.90	0.90	1.00	25.90	<0.01	0.03	0.3	0.048	0.05	0.23	26	0.10	1.26	92	<0.5	SD18197526
2018KTS088	0.55	<0.01	0.20	16.10	1120	32.00	5.40	0.001	0.07	0.46	0.20	1.00	1.80	9.70	<0.01	0.03	<0.2	0.005	0.04	0.25	10	0.08	3.16	80	<0.5	SD18197526
2018KTS089	0.87	0.01	0.34	49.50	710	120.00	5.30	0.002	0.10	1.27	0.70	2.70	3.80	15.00	<0.01	0.15	<0.2	0.024	0.09	0.24	36	0.24	1.17	123	<0.5	SD18197526
2018KTS090	0.44	<0.01	0.16	16.40	380	55.00	2.70	0.001	0.05	0.85	0.40	1.40	1.50	16.00	<0.01	0.06	0.3	0.010	0.04	0.15	6	0.08	0.60	28	<0.5	SD18197526
2018KTS091	0.40	<0.01	0.13	18.00	460	57.00	3.30	0.001	0.03	0.39	0.30	1.20	1.10	19.40	<0.01	0.03	<0.2	0.010	0.04	0.22	15	0.06	1.54	32	<0.5	SD18197526
2018KTS092	0.80	<0.01	0.29	26.90	480	93.70	2.20	0.004	0.12	1.47	0.50	3.10	2.50	26.70	<0.01	0.07	0.2	0.015	0.05	0.17	11	0.15	0.73	53	<0.5	SD18197526
2018KTS094	0.54	<0.01	0.44	19.80	1370	19.30	2.60	0.007	0.42	0.42	1.40	1.10	0.60	47.80	<0.01	0.03	<0.2	0.014	0.05	2.63	15	0.09	24.50	27	<0.5	SD18197526
2018KTS095	0.59	<0.01	0.32	25.30	370	84.00	2.80	0.001	0.04	0.99	0.60	2.50	2.60	17.80	<0.01	0.06	0.3	0.019	0.05	0.20	13	0.14	0.67	56	<0.5	SD18197526
2018KTS096	0.52	<0.01	0.20	18.40	680	91.40	2.60	0.004	0.11	0.67	0.30	2.00	1.50	21.30	<0.01	0.03	<0.2	0.010	0.05	0.17	7	0.09	0.99	44	<0.5	SD18197526
2018KTS097	0.70	<0.01	0.36	16.70	590	99.40	3.70	0.002	0.04	1.01	0.40	2.60	2.30	13.00	<0.01	0.06	<0.2	0.021	0.04	0.25	19	0.13	1.46	35	<0.5	SD18197526
2018KTS098	0.65	<0.01	0.30	31.40	830	65.10	3.20	0.001	0.09	0.89	0.50	2.60	2.90	18.90	<0.01	0.04	<0.2	0.018	0.07	0.16	11	0.15	0.64	66	<0.5	SD18197526
2018KTS099	0.61	<0.01	0.32	25.60	870	69.20	4.40	0.001	0.07	0.84	0.30	1.60	2.40	23.20	<0.01	0.06	<0.2	0.018	0.05	0.18	14	0.12	0.91	47	<0.5	SD18197526
2018KTS100	0.53	<0.01	0.31	21.80	760	55.70	3.90	0.001	0.07	0.69	0.30	1.50	1.90	22.40	<0.01	0.04	<0.2	0.019	0.04	0.17	14	0.10	0.86	41	<0.5	SD18197526
2018KTS101	0.47	<0.01	1.03	21.10	780	21.70	10.50	<0.001	0.05	0.32	1.20	0.60	0.90	43.60	<0.01	0.05	0.5	0.063	0.05	0.28	41	0.12	1.61	81	0.5	SD18197526
2018KBS219	0.89	<0.01	0.22	29.00	800	66.60	2.50	0.002	0.18	1.60	0.40	3.00	2.00	25.60	<0.01	0.05	<0.2	0.011	0.04	0.15	9	0.15	0.85	27	0.6	SD18197526
2018KBS220	0.88	<0.01	0.23	29.50	760	64.10	2.40	0.002	0.20	1.40	0.40	2.90	2.00	28.20	<0.01	0.06	<0.2	0.012	0.04	0.14	10	0.13	0.76	28	0.6	SD18197526
2018KBS214	0.61	<0.01	0.18	28.70	450	80.50	3.40	0.002	0.05	0.95	0.30	1.30	2.60	23.60	<0.01	0.05	<0.2	0.010	0.04	0.22	9	0.11	1.22	58	<0.5	SD18197526
2018KBS215	0.66	<0.01	0.40	48.00	660	135.50	5.00	0.001	0.07	1.23	0.50	2.20	3.30	20.50	<0.01	0.11	<0.2	0.024	0.11	0.26	23	0.17	1.57	94	<0.5	SD18197526
2018KBS216	0.54	<0.01	0.30	22.40	580	170.50	3.10	0.002	0.06	0.70	0.30	3.50	3.00	28.80	<0.01	0.05	<0.2	0.013	0.06	0.24	14	0.15	1.09	79	<0.5	SD18197526
2018KBS217	0.50	<0.01	0.22	37.20	590	104.50	2.60	0.001	0.08	1.46	0.30	2.10	2.90	25.70	<0.01	0.06	<0.2	0.012	0.04	0.17	9	0.11	1.43	70	<0.5	SD18197526
2018KBS218	0.73	<0.01	0.62	23.20	400	38.90	5.70	0.001	0.05	0.82	0.70	1.30	1.60	9.10	<0.01	0.14	<0.2	0.041	0.07	0.23	38	0.14	1.14	24	<0.5	SD18197526
2018KBS221	0.56	<0.01	0.46	61.10	570	46.00	4.10	0.001	0.08	1.21	0.70	1.50	2.20	19.90	<0.01	0.07	0.2	0.024	0.05	0.19	16	0.16	0.83	74	<0.5	SD18197526
2018KBS222	0.62	<0.01	0.34	58.90	510	90.10	3.80	0.003	0.08	2.00	0.70	2.70	2.90	30.00	<0.01	0.10	0.2	0.018	0.04	0.21	14	0.15	0.90	70	<0.5	SD18197526
2018KBS223	0.66	<0.01	0.20	88.70	590	105.00	3.10	0.003	0.12	1.76	0.60	3.00	2.70	32.60	<0.01	0.11	0.2	0.011	0.09	0.24	9	0.16	1.34	96	<0.5	SD18197526
2018KBS224	0.66	<0.01	0.21	35.60	760	85.80	5.70	0.001	0.09	1.23	0.40	2.50	2.80	18.90	<0.01	0.07	<0.2	0.012	0.04	0.18	13	0.15	0.71	76	<0.5	SD18197526
2018KNS001	0.22	0.01	0.77	14.40	630	10.70	6.40	0.001	0.08	0.17	0.70	0.80	0.50	29.40	<0.01	0.03	0.5	0.040	0.04	0.16	24	0.08	0.99	39	0.5	SD18197526
2018KBS184	0.45	<0.01	0.23	22.90	410	69.80	3.60	0.001	0.05	0.70	0.30	1.30	1.80	20.30	<0.01	0.03	0.3	0.013	0.04	0.19	8	0.07	1.21	31	<0.5	SD18197526
2018KBS183	0.44	<0.01	0.22	24.10	430	93.80	2.70	0.001	0.05	0.58	0.20	1.60	2.20	35.60	<0.01	0.05	<0.2	0.012	0.04	0.17	9	0.11	1.27	43	<0.5	SD18197526
2018KBS181	0.30	<0.01	0.13	16.90	310	72.60	1.50	0.001	0.04	0.38	0.20	1.20	1.40	44.50	<0.01	0.03	<0.2	0.009	0.02	0.13	6	0.05	1.00	46	<0.5	SD18197526
2018KBS182	0.34	<0.01	0.24	20.90	430	29.70	2.20	0.001	0.06	0.61	0.30	1.00	1.50	17.50	<0.01	0.02	<0.2	0.017	0.03	0.15	11	0.07	0.69	49	<0.5	SD18197526
2018KBS178	0.57	0.01	1.67	43.90	680	12.50	13.80	0.001	0.07	0.16	5.50	1.10	0.70	23.90	<0.01	0.03	1.6	0.063	0.16	4.36	47	0.08	15.15	43	2.2	SD18197526
2018KBS179	0.81	0.01	0.88	35.00	550	47.70	6.60	0.001	0.09	0.75	1.80	1.30	1.50	32.90	<0.01	0.09	0.7	0.046	0.06	0.58	32	0.12	2.70	77	0.8	SD18197526
2018KBS180	0.97	<0.01	0.89	21.70	400	23.10	6.10	<0.001	0.07	0.47	1.80	0.80	0.80	25.80	<0.01	0.05	1.0	0.050	0.06	0.70	30	0.10	2.82	39	0.7	SD18197526

2018 Rock Sample Results

Sample ID	Date	East N83 Z17	North N83 Z17	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
2018KBP031	9-Aug-18	595757	5244887	0.014	0.003	0.019	0.0005	<0.005	0.001	1.1	SD18196580
2018KBP032	9-Aug-18	595767	5244889	0.007	0.008	0.001	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP033	9-Aug-18	595767	5244889	0.424	0.001	0.030	0.0290	<0.005	0.001	0.1	SD18196580
2018KBP034	9-Aug-18	595767	5244889	0.825	0.001	0.046	0.0340	<0.005	0.000	0.1	SD18196580
2018KBP035	9-Aug-18	595580	5245920	0.006	0.016	0.008	0.0040	<0.005	0.000	0.1	SD18196580
2018KBP036	9-Aug-18	595580	5245920	0.004	0.005	0.001	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP037	9-Aug-18	595580	5245920	0.191	0.002	0.019	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP038	8-Aug-18	595840	5245955	0.004	0.018	0.007	0.0010	0.013	0.008	0.1	SD18196580
2018KBP039	8-Aug-18	595840	5245955	0.005	0.014	0.012	0.0005	0.010	0.008	0.1	SD18196580
2018KBP040	8-Aug-18	595943	5246018	2.020	0.022	0.158	0.0350	<0.005	0.001	13.1	SD18196580
2018KBP041	8-Aug-18	595943	5246018	0.070	0.011	0.011	0.0100	<0.005	0.000	1.3	SD18196580
2018KBP042	8-Aug-18	595943	5246018	0.611	0.010	0.095	0.0260	<0.005	0.000	4.1	SD18196580
2018KBP043	8-Aug-18	596471	5245268	0.017	0.002	0.001	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP044	8-Aug-18	596471	5245268	0.007	0.003	0.001	0.0005	<0.005	0.000	0.1	SD18196580
2018KBP045	10-Aug-18	595943	5246018	0.009	0.053	0.009	0.0005	<0.005	0.001	0.6	SD18196580
2018KBP046	10-Aug-18	595943	5246018	0.007	0.041	0.009	0.0005	<0.005	0.001	0.2	SD18196580
2018KBP047	10-Aug-18	595642	5245917	0.005	0.043	0.008	0.0005	0.009	0.009	0.1	SD18196580
2018KBP048	10-Aug-18	595642	5245917	0.001	0.010	0.002	0.0005	<0.005	0.000	0.1	SD18196580
2018KBP049	8-Aug-18	596063	5245917	0.037	0.009	0.005	0.0005	<0.005	0.000	0.1	SD18196580
2018KBP050	8-Aug-18	596063	5245917	0.030	0.018	0.006	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP051	8-Aug-18	596063	5245917	0.065	0.025	0.010	0.0005	<0.005	0.001	0.2	SD18196580
2018KBP052	8-Aug-18	596063	5245917	0.035	0.015	0.010	0.0010	<0.005	0.000	0.2	SD18196580
2018KBP053	9-Aug-18	596248	5245448	0.005	0.016	0.005	0.0005	<0.005	0.000	0.1	SD18196580
2018KBP054	9-Aug-18	596248	5245448	0.001	0.002	0.001	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP055	8-Aug-18	596083	5245907	0.001	0.009	0.001	0.0005	<0.005	0.000	0.2	SD18196580
2018KBP056	8-Aug-18	596083	5245907	0.007	0.004	0.001	0.0005	<0.005	0.000	0.1	SD18196580
2018KBP057	8-Aug-18	596083	5245907	0.007	0.033	0.003	0.0005	<0.005	0.000	0.1	SD18196580
2018KBP058	9-Aug-18	595708	5244890	0.006	0.043	0.005	0.0005	<0.005	0.001	0.2	SD18196580
2018KBP059	9-Aug-18	595708	5244890	0.001	0.047	0.002	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP060	9-Aug-18	595708	5244890	0.005	0.007	0.009	0.0005	<0.005	0.001	0.1	SD18196580
2018KBP061	9-Aug-18	595767	5244889	0.006	0.012	0.004	0.3660	<0.005	0.001	0.1	SD18196580

2018 Rock Sample Results

Sample ID	Date	East N83 Z17	North N83 Z17	Al2O3 %	As %	CaO %	Co %	Cr %	Cu %	Fe %	Fe2O3 %	K %	MgO %	MnO %	Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18KRP601	2-Oct-18	596248	5245439	15.85	0.27	8.09	0.190	<0.01	0.002	0.86	1.23	0.3	0.33	0.07	0.018	<0.01	0.48	58.8	0.58	<0.002	<0.001	<0.005	<0.001	<0.2	SD18249803
18KRP602	2-Oct-18	596240	5245454	13.10	0.04	12.60	0.031	<0.01	0.004	2.30	3.28	0.4	3.11	0.70	0.010	<0.01	0.26	46.8	0.68	<0.002	<0.001	<0.005	<0.001	<0.2	SD18249803
18KRP603	3-Oct-18	596024	5245928	15.60	0.03	1.72	0.018	<0.01	0.006	1.34	1.91	0.8	2.19	0.07	0.003	<0.01	0.05	67.8	0.61	<0.002	<0.001	<0.005	<0.001	0.7	SD18249803
18KRP604	3-Oct-18	596082	5245900	13.75	0.01	8.83	0.016	<0.01	0.107	1.78	2.54	0.9	3.59	0.46	<0.002	<0.01	0.35	50.5	0.38	0.002	0.004	<0.005	<0.001	0.5	SD18249803
18KRP605	3-Oct-18	595956	5245990	14.60	0.04	11.20	0.039	<0.01	0.004	0.64	0.92	0.3	0.52	0.13	0.005	<0.01	0.47	53.9	0.41	<0.002	0.004	<0.005	0.001	0.3	SD18249803
18KRP606	3-Oct-18	595577	5242908	10.65	0.03	0.25	0.012	0.01	0.062	12.15	17.40	0.4	6.65	0.34	0.005	<0.01	0.09	56.7	0.68	0.003	0.038	<0.005	<0.001	<0.2	SD18249803
18KRP607	3-Oct-18	595809	5246087	11.65	<0.01	16.35	0.015	<0.01	0.003	0.95	1.35	1.2	0.92	0.12	<0.002	<0.01	0.30	50.9	0.33	<0.002	0.001	<0.005	<0.001	<0.2	SD18249803
18MAP075	2-Oct-18	596240	5245441	15.30	0.56	7.08	0.401	<0.01	0.002	1.14	1.63	0.4	0.12	0.06	0.044	<0.01	1.20	60.5	0.48	<0.002	0.004	<0.005	<0.001	0.4	SD18249803
18MAP076	2-Oct-18	596244	5245451	16.40	0.02	6.88	0.026	<0.01	0.004	0.74	1.05	0.2	0.23	0.11	<0.002	<0.01	0.30	59.0	0.44	<0.002	0.001	<0.005	<0.001	<0.2	SD18249803
18MAP077	2-Oct-18	596060	5245915	15.15	0.06	7.95	0.036	<0.01	0.026	0.69	0.99	0.6	0.86	0.08	0.003	<0.01	0.18	59.5	0.43	<0.002	<0.001	<0.005	<0.001	0.2	SD18249803
18MAP078	3-Oct-18	595640	5245907	15.30	0.01	10.95	0.004	<0.01	<0.002	0.97	1.39	0.2	0.69	0.12	<0.002	<0.01	0.02	55.4	0.61	<0.002	<0.001	<0.005	<0.001	<0.2	SD18249803
18MAP079	3-Oct-18	595581	5245888	10.80	0.01	0.46	0.002	<0.01	0.004	0.74	1.05	0.3	0.40	0.02	<0.002	<0.01	0.02	80.4	0.30	<0.002	<0.001	<0.005	<0.001	<0.2	SD18249803

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC01	S886001	5.12	7	1.88		0.009	0.015	0.006	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886002	7	9	2		0.007	0.012	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886003	9	11	2		0.004	0.012	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886004	11	13	2		0.006	0.011	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886005				Std	0.097	0.303	0.017	NSS	NSS	NSS	0.2	SD19009890
18HC01	S886006	13	14	1		0.007	0.013	0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC01	S886007	14	16	2		0.007	0.016	0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC01	S886008	18	20	2		0.006	0.007	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886009	20	21	1		0.006	0.006	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886010				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886011	21	22	1		0.005	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886012	22	23	1		0.007	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886013	23	24	1		0.008	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886014	24	25	1		0.011	0.002	0.006	0.003	<0.005	<0.001	<0.2	SD19009890
18HC01	S886015	25	26	1		0.006	0.003	0.006	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886016	26	27	1		0.005	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886017	26	27	1	Dup	0.006	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886018	27	28	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886019	28	29	1		0.005	0.002	<0.002	<0.001	<0.005	<0.001	0.4	SD19009890
18HC01	S886020	29	30	1		0.007	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886021	30	32	2		0.003	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886022	32	34	2		0.006	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886023	34	35	1		0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886024	35	36	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886025				Std	0.100	0.306	0.013	0.039	<0.005	<0.001	<0.2	SD19009890
18HC01	S886026	36	37.1	1.1		0.007	<0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886027	37.1	39	1.9		0.004	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886028	47.8	49.8	2		0.003	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886029	49.8	51.8	2		0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886030				Blank	0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC01	S886031	51.8	52.8	1		0.004	<0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886032	52.8	53.8	1		0.002	0.009	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886033	53.8	54.8	1		0.004	0.003	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886034	54.8	55.8	1		0.003	0.005	<0.002	<0.001	<0.005	<0.001	0.3	SD19009890
18HC01	S886035	55.8	56.8	1		0.005	0.007	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886036	56.8	58.8	2		0.002	0.005	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886037	56.8	58.8	2	Dup	<0.002	0.004	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886038	63	65	2		0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886039	65	66	1		<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886040	66	67	1		0.006	0.011	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886041	67	68	1		<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886042	68	69	1		<0.002	0.006	0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886043	69	71	2		<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886044	73	75	2		0.005	0.002	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC01	S886045				Std	0.097	0.312	0.019	0.049	<0.005	0.003	0.3	SD19009890
18HC01	S886046	75	76	1		<0.002	0.019	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886047	76	77	1		<0.002	0.010	0.005	<0.001	<0.005	0.001	<0.2	SD19009890
18HC01	S886048	77	79	2		0.003	0.003	<0.002	<0.001	<0.005	0.002	<0.2	SD19009890
18HC02	S886049	3.3	3.8	0.5		0.004	0.017	0.005	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886050	5.45	5.95	0.5		0.006	0.010	0.005	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886051	14.5	16.5	2		0.004	0.011	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886052	16.5	17.5	1		0.003	0.013	<0.002	<0.001	0.008	0.001	<0.2	SD19009890
18HC02	S886053	17.5	18.5	1		0.002	0.012	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886054	18.5	19.5	1		0.003	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886055	18.5	19.5	1	Dup	0.003	0.006	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886056	19.5	20.5	1		0.005	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886057	20.5	21.5	1		0.006	0.004	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886058	21.5	22.5	1		0.005	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886059	22.5	23.5	1		0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886060	23.5	24.5	1		0.004	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC02	S886061	24.5	25.5	1		0.006	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886062	25.5	26.5	1		0.004	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886063	26.5	27.5	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886064	27.5	28.5	1		0.005	0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886065				Std	0.103	0.308	0.019	0.035	0.018	0.001	0.3	SD19009890
18HC02	S886066	28.5	29.5	1		0.004	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886067	29.5	30.5	1		0.003	0.005	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886068	30.5	31.5	1		0.004	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886069	31.5	32.5	1		0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886070				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886071	32.5	33.5	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886072	33.5	35.5	2		<0.002	0.002	<0.002	0.004	<0.005	<0.001	<0.2	SD19009890
18HC02	S886073	35.5	36	0.5		0.002	0.009	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886074	46	48	2		0.005	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886075	46	48	2	Dup	0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886076	48	49	1		<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886077	49	50	1		0.003	<0.002	<0.002	<0.001	<0.005	0.002	<0.2	SD19009890
18HC02	S886078	50	51	1		0.005	<0.002	0.006	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886079	51	52	1		0.005	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886080				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886081	52	53	1		0.004	0.003	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886082	53	54	1		0.003	0.009	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886083	54	56	2		0.005	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886084	66	67	1		0.005	0.005	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886085				Std	0.105	0.307	0.017	0.035	<0.005	0.006	0.2	SD19009890
18HC02	S886086	67	68	1		0.006	0.004	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886087	68	69	1		0.006	0.004	0.020	<0.001	<0.005	0.001	<0.2	SD19009890
18HC02	S886088	83.45	84.45	1		0.031	0.006	0.005	0.002	<0.005	<0.001	<0.2	SD19009890
18HC02	S886089	89.45	91.45	2		0.011	0.011	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC02	S886090				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC02	S886091	94.33	95.02	0.69		0.013	0.015	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886092	9	9.6	0.6		0.007	0.016	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886093	11.8	13	1.2		0.003	0.016	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886094	13	15	2		0.002	0.017	0.006	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886095	13	15	2	Dup	0.005	0.015	0.005	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886096	15	16	1		0.004	0.013	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886097	16	17	1		0.002	0.014	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886098	17	18	1		0.003	0.006	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886099	18	19	1		<0.002	0.006	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886100	19	20	1		0.003	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886101	20	21	1		0.002	0.007	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886102	21	22	1		0.003	0.002	<0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886103	22	23	1		<0.002	0.002	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886104	23	24	1		0.003	0.002	<0.002	0.004	<0.005	0.001	<0.2	SD19009890
18HC03	S886105				Std	0.096	0.298	0.016	0.055	<0.005	0.007	0.2	SD19009890
18HC03	S886106	24	25	1		<0.002	0.003	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886107	25	26	1		0.002	<0.002	0.003	0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886108	26	27	1		<0.002	0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886109	27	28	1		0.003	0.002	0.005	0.002	<0.005	0.001	<0.2	SD19009890
18HC03	S886110	28	29	1		<0.002	0.007	<0.002	<0.001	<0.005	0.001	0.2	SD19009890
18HC03	S886111	29	30	1		<0.002	0.002	0.003	<0.001	<0.005	0.001	0.2	SD19009890
18HC03	S886112	30	31	1		<0.002	0.003	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886113	31	32	1		0.002	0.006	<0.002	0.002	<0.005	0.001	<0.2	SD19009890
18HC03	S886114	31	33	2		<0.002	0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886115	33	34	1		<0.002	0.002	0.002	0.002	<0.005	<0.001	<0.2	SD19009890
18HC03	S886116	33	34	1	Dup	<0.002	0.002	<0.002	0.002	<0.005	<0.001	<0.2	SD19009890
18HC03	S886117	34	35	1		<0.002	0.008	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886118	35	36	1		<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886119	36	37	1		<0.002	<0.002	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886120	37	38	1		<0.002	0.002	0.005	<0.001	<0.005	0.002	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC03	S886121	38	39	1		0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886122	39	40	1		<0.002	0.003	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886123	40	41	1		0.002	0.003	<0.002	0.001	<0.005	0.003	<0.2	SD19009890
18HC03	S886124	41	42	1		<0.002	0.003	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886125				Std	0.098	0.299	0.019	0.050	<0.005	0.008	0.2	SD19009890
18HC03	S886126	42	43	1		0.002	0.002	<0.002	0.002	<0.005	0.001	<0.2	SD19009890
18HC03	S886127	43	44	1		<0.002	0.003	<0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886128	44	45	1		0.002	0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886129	45	47	2		0.003	0.002	0.004	<0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886130				Blank	<0.002	<0.002	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC03	S886131	54	55.1	1.1		0.002	0.004	0.005	<0.001	<0.005	0.001	<0.2	SD19009890
18HC03	S886132	89.1	89.6	0.5		0.013	0.024	<0.002	0.005	<0.005	0.001	<0.2	SD19009890
18HC03	S886133	93.4	94.45	1.05		0.009	0.023	0.005	0.001	<0.005	0.002	<0.2	SD19009890
18HC03	S886134	94.45	95.5	1.05		0.009	0.037	0.002	0.001	<0.005	0.002	<0.2	SD19009890
18HC04	S886135	7	8	1		0.005	0.017	0.007	<0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886136	7	8	1	Dup	<0.002	0.016	0.008	<0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886137	12.5	13.5	1		0.004	0.007	0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC04	S886138	16	17	1		0.003	0.006	0.002	0.002	<0.005	0.001	<0.2	SD19009890
18HC04	S886139	17	18	1		0.004	0.007	0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC04	S886140				Blank	<0.002	<0.002	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886141	18	19	1		0.004	0.005	0.003	0.002	<0.005	0.001	<0.2	SD19009890
18HC04	S886142	19	20	1		0.002	0.004	0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC04	S886143	20	21	1		<0.002	0.003	<0.002	0.002	<0.005	<0.001	<0.2	SD19009890
18HC04	S886144	21	22	1		0.006	0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886145				Std	0.098	0.300	0.019	0.045	<0.005	0.005	<0.2	SD19009890
18HC04	S886146	22	24	2		0.002	<0.002	<0.002	0.002	<0.005	<0.001	<0.2	SD19009890
18HC04	S886147	29.15	30.15	1		<0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886148	36	37	1		0.003	<0.002	0.003	0.002	<0.005	0.002	<0.2	SD19009890
18HC04	S886149	37	38	1		0.004	0.003	0.002	0.008	<0.005	0.001	0.3	SD19009890
18HC04	S886150				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC04	S886151	38	39	1		<0.002	<0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886152	41.75	42.75	1		0.003	0.006	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886153	42.75	43.75	1		<0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886154	43.75	44.75	1		0.005	<0.002	0.002	0.001	<0.005	0.002	<0.2	SD19009890
18HC04	S886155	43.75	44.75	1	Dup	0.003	<0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886156	44.75	45.75	1		<0.002	<0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886157	51.35	52.35	1		0.002	0.004	0.002	<0.001	<0.005	0.002	<0.2	SD19009890
18HC04	S886158	52.35	53.93	1.58		0.003	<0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886159	53.93	55.5	1.57		0.004	0.004	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886160	55.5	56.5	1		0.007	0.005	0.004	0.004	<0.005	0.001	<0.2	SD19009890
18HC04	S886161	56.5	57.5	1		0.002	0.004	0.004	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886162	57.5	59.5	2		0.003	0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886163	63	64	1		0.006	0.005	0.004	0.001	<0.005	0.001	<0.2	SD19009890
18HC04	S886164	85.05	85.55	0.5		0.007	0.012	0.005	0.002	<0.005	<0.001	<0.2	SD19009890
18HC04	S886165				Std	0.098	0.302	0.019	0.059	<0.005	0.007	0.2	SD19009890
18HC04	S886166	92	93	1		0.008	0.041	0.009	0.001	<0.005	0.002	0.3	SD19009890
18HC05	S886167	12	14	2		0.007	0.005	0.013	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886168	14	15	1		0.004	0.004	0.004	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886169	15	16	1		0.002	0.006	0.005	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886170				Blank	<0.002	<0.002	0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886171	16	17	1		0.005	0.003	0.003	0.001	<0.005	0.002	<0.2	SD19009890
18HC05	S886172	17	18	1		0.004	0.002	<0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC05	S886173	18	19	1		0.005	0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886174	19	20	1		0.006	0.003	0.005	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886175	19	20	1	Dup	0.002	0.002	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886176	20	21	1		0.004	<0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886177	21	22	1		0.002	0.002	0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC05	S886178	22	23	1		0.003	0.002	0.004	<0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886179	23	24	1		0.003	0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886180	24	26	2		0.002	<0.002	0.004	0.001	<0.005	0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC05	S886181	26	27	1		<0.002	0.002	0.006	0.001	<0.005	0.001	0.3	SD19009890
18HC05	S886182	27	28	1		<0.002	0.008	0.004	0.002	<0.005	0.001	<0.2	SD19009890
18HC05	S886183	28	29	1		0.003	0.010	0.006	0.003	<0.005	0.001	<0.2	SD19009890
18HC05	S886184	29	30	1		<0.002	<0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886185				Std	0.097	0.302	0.022	0.045	<0.005	0.007	0.2	SD19009890
18HC05	S886186	30	30.8	0.8		<0.002	0.005	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886187	30.8	31.3	0.5		0.004	0.023	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886188	31.3	33	1.7		0.005	0.002	0.004	0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886189	36	37	1		<0.002	0.002	0.002	<0.001	<0.005	0.002	<0.2	SD19009890
18HC05	S886190				Blank	<0.002	<0.002	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC05	S886191	37	38	1		0.003	0.009	0.002	<0.001	<0.005	0.001	0.2	SD19009890
18HC05	S886192	38	39	1		0.002	0.002	0.002	0.001	<0.005	0.002	<0.2	SD19009890
18HC05	S886193	39	40	1		<0.002	0.006	<0.002	0.002	<0.005	0.001	<0.2	SD19009890
18HC05	S886194	40	41	1		0.005	0.002	<0.002	0.003	<0.005	0.001	0.2	SD19009890
18HC05	S886195	40	41	1	Dup	0.007	0.004	0.004	0.003	<0.005	0.001	0.3	SD19009890
18HC05	S886196	41	42	1		0.004	0.002	0.002	0.003	<0.005	0.001	0.3	SD19009890
18HC05	S886197	42	43	1		0.003	0.002	0.003	0.005	<0.005	0.001	0.3	SD19009890
18HC05	S886198	60.9	61.9	1		0.005	0.004	0.003	0.002	<0.005	0.001	<0.2	SD19009890
18HC05	S886199	65.8	66.3	0.5		0.006	0.013	0.003	0.005	<0.005	0.001	<0.2	SD19009890
18HC05	S886200	68.2	68.7	0.5		0.003	0.005	0.004	<0.001	<0.005	0.001	<0.2	SD19009890
18HC05	S886201	69.4	69.9	0.5		0.004	0.019	0.004	0.003	<0.005	0.001	<0.2	SD19009890
18HC05	S886202	83.95	84.5	0.55		0.004	0.011	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886203	10.5	12.5	2		0.005	0.021	0.002	0.005	<0.005	<0.001	<0.2	SD19009890
18HC06	S886204	12.5	13.5	1		0.002	0.016	<0.002	0.001	<0.005	<0.001	0.2	SD19009890
18HC06	S886205				Std	0.095	0.297	0.019	0.045	<0.005	<0.001	0.2	SD19009890
18HC06	S886206	13.5	14.5	1		0.003	0.012	0.004	0.002	<0.005	0.001	<0.2	SD19009890
18HC06	S886207	14.5	15.5	1		0.006	0.011	<0.002	0.001	<0.005	<0.001	0.3	SD19009890
18HC06	S886208	15.5	16.5	1		0.002	0.003	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886209	16.5	17.5	1		0.003	0.005	0.004	0.001	<0.005	<0.001	<0.2	SD19009890
18HC06	S886210				Blank	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC06	S886211	17.5	18.5	1		<0.002	0.004	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886212	18.5	19.5	1		<0.002	0.002	<0.002	<0.001	<0.005	0.001	0.2	SD19009890
18HC06	S886213	19.5	20.5	1		<0.002	0.003	<0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC06	S886214	20.5	22.5	2		<0.002	<0.002	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886215	20.5	22.5	2	Dup	<0.002	<0.002	<0.002	0.001	<0.005	0.001	0.2	SD19009890
18HC06	S886216	25.5	26.5	1		<0.002	<0.002	0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886217	26.5	27.5	1		<0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886218	27.5	28.5	1		<0.002	<0.002	0.004	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886219	42.8	43.3	0.5		<0.002	<0.002	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886220	45.1	45.6	0.5		<0.002	<0.002	0.004	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886221	49	50	1		<0.002	0.004	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886222	50	51	1		0.005	0.065	0.004	<0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886223	51	52	1		0.002	0.009	0.004	<0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886224	52	53	1		<0.002	0.002	<0.002	<0.001	<0.005	0.002	<0.2	SD19009890
18HC06	S886225				Std	0.097	0.301	0.018	0.043	<0.005	0.008	0.3	SD19009890
18HC06	S886226	68.1	68.6	0.5		0.004	0.010	0.003	0.001	<0.005	0.002	<0.2	SD19009890
18HC06	S886227	72.75	73.75	1		0.003	0.013	0.003	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886228	77.2	77.7	0.5		0.004	0.011	0.005	0.001	<0.005	0.001	<0.2	SD19009890
18HC06	S886229	86	86.5	0.5		0.005	0.013	0.005	0.002	<0.005	<0.001	<0.2	SD19009890
18HC06	S886230				Blank	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886231	4	4.5	0.5		0.003	0.011	0.004	0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886232	10.7	11.7	1		0.005	0.004	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886233	11.7	12.7	1		0.002	0.002	0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886234	12.7	13.7	1		<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886235	13.7	14.7	1		0.002	<0.002	<0.002	0.001	<0.005	<0.001	0.2	SD19009890
18HC07	S886236	14.7	15.7	1		0.004	0.003	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886237	14.7	15.7	1	Dup	0.003	0.002	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886238	15.7	16.7	1		0.006	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886239	16.7	17.7	1		0.003	0.003	<0.002	0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886240	17.7	18.7	1		0.003	0.005	<0.002	0.001	<0.005	0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC07	S886241	18.7	19.7	1		0.003	0.004	0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886242	19.7	20.7	1		0.002	0.003	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886243	20.7	21.7	1		<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC07	S886244	21.7	22.7	1		<0.002	<0.002	<0.002	0.002	<0.005	0.001	<0.2	SD19009890
18HC07	S886245				Std	0.098	0.298	0.016	0.046	<0.005	0.003	0.3	SD19009890
18HC07	S886246	22.7	23.7	1		0.004	<0.002	<0.002	0.001	<0.005	<0.001	0.3	SD19009890
18HC07	S886247	23.7	24.7	1		<0.002	<0.002	<0.002	0.001	<0.005	0.001	0.2	SD19009890
18HC07	S886248	24.7	26.7	2		<0.002	0.002	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886249	29	31	2		<0.002	0.003	<0.002	0.001	<0.005	0.002	<0.2	SD19009890
18HC07	S886250	31	32	1		<0.002	0.007	<0.002	0.003	<0.005	<0.001	<0.2	SD19009890
18HC07	S886251	32	33	1		0.004	0.011	<0.002	0.002	<0.005	0.001	<0.2	SD19009890
18HC07	S886252	33	34	1		<0.002	0.005	<0.002	0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886253	48	49	1		0.006	0.002	0.004	0.010	<0.005	<0.001	0.3	SD19009890
18HC07	S886254	53	54	1		<0.002	0.003	<0.002	<0.001	<0.005	<0.001	0.3	SD19009890
18HC07	S886255	60.5	61.5	1		<0.002	0.004	<0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC07	S886256	60.5	61.5	1	Dup	0.004	0.004	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC07	S886257	61.5	62.5	1		<0.002	0.007	0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC08	S886258	72.85	73.35	0.5		0.002	0.002	<0.002	<0.001	<0.005	0.001	0.2	SD19009890
18HC08	S886259	5	7	2		0.004	0.007	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886260				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886261	7	8	1		0.004	0.003	0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC08	S886262	8	9	1		0.006	0.004	0.005	0.037	<0.005	<0.001	1.3	SD19009890
18HC08	S886263	9	10	1		0.002	0.005	0.006	<0.001	<0.005	<0.001	0.4	SD19009890
18HC08	S886264	10	11	1		0.002	0.002	<0.002	<0.001	<0.005	<0.001	0.3	SD19009890
18HC08	S886265				Std	0.098	0.307	0.016	0.032	<0.005	<0.001	0.3	SD19009890
18HC08	S886266	11	12	1		0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886267	12	13	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886268	13	14	1		0.003	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886269	14	15	1		<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886270	15	16	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC08	S886271	16	17	1		<0.002	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886272	17	18	1		<0.002	0.016	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC08	S886273	18	19	1		0.011	0.009	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886274	19	20	1		0.008	0.007	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886275	20	21	1		0.010	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886276	21	22	1		<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886277	22	23	1		<0.002	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886278	23	24	1		<0.002	0.050	<0.002	<0.001	<0.005	0.001	0.3	SD19009890
18HC08	S886279	24	26	2		<0.002	0.007	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886280	24	26	2	Dup	<0.002	0.008	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886281	31.5	32	0.5		<0.002	0.017	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC08	S886282	32.7	33.2	0.5		<0.002	0.023	<0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC09	S886283	4.7	6.35	1.65		0.005	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886284	6.35	8	1.65		0.004	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886285				Std	0.098	0.306	0.013	0.041	<0.005	0.003	0.2	SD19009890
18HC09	S886286	8	9	1		0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886287	9	10	1		<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886288	10	11	1		0.004	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886289	11	12	1		<0.002	0.004	<0.002	<0.001	<0.005	<0.001	0.3	SD19009890
18HC09	S886290				Blank	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886291	12	13	1		<0.002	0.003	<0.002	0.005	<0.005	<0.001	<0.2	SD19009890
18HC09	S886292	13	14	1		0.009	0.002	0.003	0.006	<0.005	<0.001	0.3	SD19009890
18HC09	S886293	14	15	1		0.007	0.004	0.003	0.010	<0.005	<0.001	0.3	SD19009890
18HC09	S886294	15	16	1		<0.002	0.013	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886295	15	16	1	Dup	<0.002	0.009	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886296	16	17	1		<0.002	0.004	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886297	17	18	1		0.002	0.005	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886298	18	19	1		0.002	0.142	<0.002	<0.001	<0.005	<0.001	0.2	SD19009890
18HC09	S886299	19	20	1		<0.002	0.013	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886300	20	21	1		<0.002	0.012	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC09	S886401	21	22	1		0.003	0.052	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886402	22	23	1		<0.002	0.017	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886403	23	25	2		<0.002	0.006	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886404	42.5	43.5	1		<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886405				Std	0.100	0.309	0.017	0.044	<0.005	<0.001	0.4	SD19009890
18HC09	S886406	47.5	48.5	1		0.007	<0.002	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC09	S886407	55.3	55.8	0.5		0.003	0.012	0.005	<0.001	<0.005	0.001	<0.2	SD19009890
18HC09	S886408	74.15	74.65	0.5		0.012	0.005	0.006	0.021	<0.005	<0.001	<0.2	SD19009890
18HC10	S886409	7.6	8.1	0.5		0.004	0.008	0.007	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886410				Blank	<0.002	<0.002	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886411	9	11	2		0.004	0.006	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886412	11	12	1		0.003	0.002	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886413	12	13	1		0.002	0.003	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886414	13	14	1		<0.002	0.003	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886415	13	14	1	Dup	0.004	0.003	<0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886416	14	15	1		0.004	0.004	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886417	15	16	1		0.011	<0.002	0.003	0.033	<0.005	<0.001	<0.2	SD19009890
18HC10	S886418	16	17	1		0.006	0.004	0.005	0.004	<0.005	<0.001	<0.2	SD19009890
18HC10	S886419	17	18	1		0.004	0.005	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886420	18	19	1		<0.002	0.012	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886421	19	20	1		0.002	0.056	0.004	<0.001	<0.005	<0.001	0.5	SD19009890
18HC10	S886422	20	21	1		<0.002	0.017	0.005	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886423	21	22	1		<0.002	0.004	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886424	22	23	1		<0.002	0.008	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886425				Std	0.099	0.309	0.019	0.041	<0.005	0.001	0.2	SD19009890
18HC10	S886426	23	24	1		<0.002	0.003	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886427	24	25	1		<0.002	0.007	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886428	25	26	1		<0.002	0.003	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886429	26	27	1		<0.002	0.007	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886430				Std	0.099	0.308	0.023	0.042	<0.005	0.001	0.3	SD19009890

2018 Drill Hole Sample Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Co %	Cu %	Ni %	Au ppm	Pt ppm	Pd ppm	Ag ppm	Certificate
18HC10	S886431	27	28	1		0.002	0.004	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886432	28	29	1		<0.002	0.007	0.003	0.004	<0.005	<0.001	<0.2	SD19009890
18HC10	S886433	29	30	1		<0.002	0.003	0.003	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886434	29	30	1	Dup	<0.002	0.004	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886435	30	31	1		<0.002	0.008	0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886436	31	32	1		<0.002	0.016	0.005	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886437	32	33	1		0.002	0.006	0.002	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886438	33	34	1		0.002	0.003	0.004	<0.001	<0.005	<0.001	<0.2	SD19009890
18HC10	S886439	34	35	1		<0.002	<0.002	0.005	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886440	35	36	1		0.002	0.005	0.003	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886441	36	37	1		<0.002	0.009	0.007	<0.001	<0.005	0.001	<0.2	SD19009890
18HC10	S886442	37	39	2		0.002	0.002	0.002	<0.001	<0.005	<0.001	<0.2	SD19009890

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282580
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 04, 2018
PAGES (INCLUDING COVER):	18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
A1 (8893689)		0.24	5.79	0.9	541	1.17	0.06	1.45	0.03	17.4	6.46	39.8	1.05	3.3	1.22
A2 (8893690)		0.15	6.47	0.8	524	1.27	0.07	1.37	0.05	19.2	7.99	47.5	1.14	2.5	1.86
A3 (8893691)		0.17	6.37	0.7	521	1.32	0.07	1.33	0.05	28.8	10.6	48.8	1.19	6.0	1.71
A4 (8893692)		0.16	6.75	2.8	452	1.14	0.08	1.15	0.08	15.2	7.64	50.1	1.16	3.9	2.30
A5 (8893693)		0.13	5.31	0.7	480	0.98	0.07	1.08	0.02	18.0	4.28	34.3	0.99	1.5	1.20
A6 (8893694)		0.31	6.69	3.8	424	1.35	0.16	1.21	0.10	42.5	19.1	74.5	1.71	22.1	2.97
A7 (8893695)		0.27	6.79	3.1	391	1.33	0.26	1.14	0.10	23.8	17.4	67.0	1.99	15.1	3.35
A8 (8893696)		0.26	6.62	2.4	496	1.26	0.14	1.46	0.09	27.5	13.7	51.8	1.50	11.8	2.37
A9 (8893697)		0.16	5.99	3.9	476	1.29	0.12	1.67	0.07	34.7	12.5	50.0	1.23	17.0	2.04
A10 (8893698)		0.14	6.44	3.9	529	1.40	0.10	1.61	0.06	39.8	11.4	57.2	1.06	13.6	2.16
A11 (8893699)		0.18	6.70	6.7	506	1.46	0.15	1.56	0.08	40.2	15.6	66.7	1.55	32.5	2.26
A12 (8893700)		0.17	6.30	8.6	432	1.37	0.34	1.47	0.06	65.5	15.8	77.1	1.60	72.8	2.94
A13 (8893701)		0.25	6.46	9.6	457	1.70	0.36	1.48	0.18	87.5	21.4	67.6	1.86	66.8	2.82
A14 (8893702)		0.20	6.28	5.3	497	1.36	0.17	1.58	0.12	39.7	10.1	57.4	1.19	18.4	2.06
A15 (8893703)		0.16	6.22	5.1	488	1.43	0.41	1.55	0.06	31.8	14.3	53.6	1.28	40.8	2.06
A16 (8893704)		0.16	6.27	1.2	506	1.22	0.11	1.54	0.04	28.3	9.11	35.8	0.97	17.0	1.84
A17 (8893705)		0.40	6.66	2.6	489	1.38	0.09	1.43	0.07	34.9	12.0	45.2	1.04	18.5	2.13
A18 (8893706)		0.32	6.41	4.7	480	1.61	0.23	1.56	0.08	41.7	16.2	60.0	1.24	20.7	2.79
A19 (8893707)		0.21	6.34	1.2	491	1.41	0.08	1.61	0.08	23.5	12.7	57.0	0.98	4.8	2.16
A20 (8893708)		0.15	6.40	1.5	535	1.44	0.09	1.43	0.04	28.8	9.92	43.0	1.02	10.0	2.23
A21 (8893709)		0.43	6.26	2.7	484	1.28	0.10	1.42	0.15	28.1	14.0	60.5	1.46	8.3	2.26
B3 (8893710)		0.25	6.43	1.7	535	1.37	0.09	1.85	0.07	60.0	12.4	74.0	1.43	18.0	2.26
B4 (8893711)		0.17	6.73	2.7	556	1.65	0.12	1.93	0.13	39.2	16.5	73.8	1.62	36.9	2.36
B5 (8893712)		0.18	6.53	3.1	503	1.49	0.10	2.01	0.05	36.6	15.4	58.4	1.11	16.8	2.95
B6 (8893713)		0.17	6.47	4.0	535	1.46	0.09	1.86	<0.02	42.6	13.2	54.8	1.61	19.1	2.37
B7 (8893714)		0.15	6.48	2.5	479	1.43	0.10	2.22	0.05	46.7	13.1	65.3	1.08	6.1	2.82
B8 (8893715)		0.21	6.51	4.4	434	1.22	0.22	1.27	0.09	34.3	19.2	79.0	2.04	31.0	3.20
B9 (8893716)		0.31	6.08	6.3	430	1.30	0.15	1.51	0.07	35.6	15.9	75.1	1.52	22.1	2.88
B10 (8893717)		0.25	7.07	6.1	481	1.31	0.13	1.37	0.12	46.3	22.4	79.9	1.62	37.1	2.80
B11 (8893718)		0.16	6.85	27.0	491	1.38	0.14	1.46	0.09	33.4	20.0	71.8	1.38	25.3	3.19
B12 (8893719)		0.37	9.34	3.1	595	1.74	0.15	1.84	0.10	38.5	24.0	96.3	2.18	41.5	3.67
B13 (8893720)		0.18	6.48	8.0	530	1.51	0.19	1.54	0.07	20.9	9.76	46.2	1.16	14.4	1.67

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
B14 (8893721)		0.22	6.51	8.3	467	1.48	2.55	1.50	0.09	36.9	20.1	68.1	1.89	68.5	2.81
B15 (8893722)		0.34	5.64	3.4	461	1.14	0.18	1.34	0.12	41.9	7.02	57.4	1.30	10.7	2.00
B16 (8893723)		0.21	5.72	4.5	441	1.00	0.19	1.34	0.15	35.6	8.67	55.4	1.88	11.8	2.27
B17 (8893724)		0.09	6.17	0.7	501	1.34	0.09	1.52	0.05	27.8	8.86	45.7	0.95	10.2	1.42
B18 (8893725)		0.12	6.27	0.9	466	1.28	0.07	1.54	0.06	25.6	8.86	50.6	0.96	4.5	1.46
B19 (8893726)		0.18	7.85	2.5	399	1.55	0.13	1.36	0.09	32.1	9.88	76.7	1.37	7.6	1.65
B20 (8893727)		0.27	7.74	4.3	332	1.57	0.14	1.08	0.14	16.2	12.4	90.3	1.09	10.7	3.19
B21 (8893728)		0.15	7.76	2.6	473	1.68	0.12	1.50	0.06	42.1	14.0	49.5	1.21	20.0	1.80
B22 (8893729)		0.34	7.70	6.9	403	1.52	0.16	1.24	0.17	45.1	20.5	111	1.70	17.0	4.50
B23 (8893730)		0.35	7.15	7.4	402	1.48	0.23	1.30	0.11	35.5	31.5	81.6	2.31	37.7	4.00
C1 (8893731)		0.28	7.16	3.1	449	1.37	0.12	1.12	0.09	25.1	13.2	69.0	1.54	12.0	2.34
C2 (8893732)		0.21	6.18	5.9	444	1.14	0.16	1.11	0.10	19.8	20.1	74.8	2.23	13.2	3.57
C3 (8893733)		0.21	6.66	3.4	503	1.32	0.12	1.55	0.07	34.3	15.6	77.7	1.64	18.9	2.64
C4 (8893734)		0.35	8.23	5.0	603	1.59	0.17	1.33	0.11	35.1	28.2	113	2.76	38.0	3.90
C5 (8893735)		0.26	5.73	6.1	542	1.01	0.27	1.22	0.08	28.8	10.4	63.2	2.15	8.2	2.35
C6 (8893736)		0.23	6.52	3.3	523	1.27	0.15	1.32	0.13	32.0	16.4	80.8	2.19	15.9	2.84
C7 (8893737)		0.26	6.50	3.4	505	1.37	0.14	1.47	0.19	31.3	20.2	84.6	1.98	19.5	3.00
C8 (8893738)		0.43	6.10	6.0	468	1.33	0.19	1.49	0.15	31.7	20.0	87.7	2.35	20.0	3.67
C9 (8893739)		0.28	6.76	7.5	555	1.16	0.15	1.71	0.12	31.6	18.3	86.5	2.36	12.1	2.78
C10 (8893740)		0.24	6.66	4.6	519	1.21	0.13	1.68	0.13	32.1	19.0	94.5	2.21	19.0	3.24
C11 (8893741)		0.30	7.68	7.1	521	1.29	0.17	1.61	0.12	22.5	33.7	123	3.40	9.1	4.79
C12 (8893742)		0.32	7.00	4.1	541	1.62	0.16	1.21	0.16	29.6	23.1	95.5	2.63	17.9	3.64
C13 (8893743)		0.46	6.59	4.6	527	1.31	0.18	1.35	0.18	45.8	16.3	86.0	2.14	15.1	3.34
C14 (8893744)		0.74	7.11	6.7	402	1.62	0.17	0.86	0.26	44.2	40.1	208	2.33	51.4	4.92
C15 (8893745)		0.38	8.13	5.6	559	1.68	0.23	1.10	0.19	36.4	39.9	106	3.26	40.6	4.08
C16 (8893746)		0.22	6.55	2.5	505	1.32	0.11	1.26	0.10	33.9	16.4	84.4	1.89	13.8	2.79
C17 (8893747)		0.22	6.71	1.9	524	1.38	0.11	1.30	0.11	47.9	14.7	85.0	1.88	12.8	2.54
C18 (8893748)		0.27	6.73	2.0	509	1.44	0.11	1.52	0.11	39.8	16.5	85.4	1.62	8.2	3.10
C19 (8893749)		0.17	5.82	2.5	532	1.25	0.08	1.48	0.11	32.2	9.26	50.5	1.67	4.1	1.58
C20 (8893750)		0.24	6.25	2.9	492	1.18	0.10	1.33	0.08	28.0	11.6	69.8	1.74	7.7	2.22
C21 (8893751)		0.24	6.30	1.6	522	1.35	0.13	1.28	0.11	29.4	18.1	77.3	2.46	15.1	3.05
C22 (8893752)		0.24	6.54	2.7	548	1.45	0.12	1.44	0.11	40.0	16.8	73.8	2.39	9.4	2.11

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
C23 (8893753)		0.12	5.61	1.5	451	1.11	0.07	1.44	0.06	14.3	8.74	44.3	1.65	2.3	1.51
C24 (8893754)		0.14	5.86	2.3	458	1.34	0.09	1.70	0.08	46.7	11.8	71.7	1.36	15.1	1.99
C25 (8893755)		0.20	7.21	2.5	552	1.67	0.17	1.34	0.06	54.1	19.5	103	2.96	24.7	3.01
C26 (8893756)		0.14	7.64	2.7	543	1.62	0.11	1.66	0.03	39.9	20.7	72.8	1.93	10.5	3.22
D1 (8893757)		0.39	7.21	3.3	529	1.27	0.13	1.23	0.14	26.9	19.1	85.1	2.29	14.3	3.28
D2 (8893758)		0.26	7.04	3.2	470	1.41	0.15	1.49	0.10	27.6	26.0	95.3	2.14	16.8	4.09
D3 (8893759)		0.15	7.02	1.5	565	1.62	0.10	1.31	0.08	28.3	14.3	73.1	1.68	16.4	2.29
D4 (8893760)		0.38	6.52	6.8	423	1.35	0.43	1.19	0.13	28.7	16.9	96.4	2.63	27.0	5.36

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
A1 (8893689)	13.8	0.23	1.8	0.019	1.72	8.5	9.3	0.52	250	0.31	2.27	4.4	16.2	228
A2 (8893690)	15.7	0.48	2.3	0.026	1.70	9.3	12.9	0.52	242	0.43	2.19	6.7	17.2	178
A3 (8893691)	15.0	0.23	2.2	0.022	1.73	11.7	12.1	0.60	240	0.38	2.16	5.3	22.9	233
A4 (8893692)	16.1	0.43	1.3	0.029	1.43	7.3	14.4	0.43	207	0.56	1.89	5.7	17.8	322
A5 (8893693)	14.2	0.38	1.9	0.022	1.53	8.8	9.4	0.36	188	0.51	1.82	4.6	10.9	204
A6 (8893694)	15.3	0.35	2.1	0.036	1.51	12.2	26.1	0.83	351	0.84	1.77	7.2	36.7	424
A7 (8893695)	15.8	0.35	2.4	0.042	1.40	11.6	26.6	0.72	336	0.93	1.61	7.8	32.5	1140
A8 (8893696)	15.0	0.33	3.0	0.029	1.69	11.4	15.2	0.69	334	0.59	2.02	6.9	28.8	460
A9 (8893697)	13.8	0.35	3.2	0.026	1.54	12.9	16.1	0.71	381	0.38	2.18	6.2	26.1	233
A10 (8893698)	14.4	0.39	1.9	0.023	1.65	12.5	13.9	0.64	336	0.46	2.34	5.3	26.7	339
A11 (8893699)	16.7	0.36	2.5	0.031	1.65	18.1	14.2	0.74	335	0.63	2.16	6.6	32.5	307
A12 (8893700)	15.5	0.39	2.9	0.032	1.50	21.0	17.3	0.89	486	0.56	2.04	6.7	34.7	441
A13 (8893701)	16.3	0.42	2.9	0.036	1.62	26.7	20.4	0.85	486	0.74	2.03	7.3	35.3	449
A14 (8893702)	15.3	0.40	2.3	0.027	1.61	16.0	14.6	0.65	365	0.58	2.29	5.4	22.4	196
A15 (8893703)	15.3	0.41	2.8	0.026	1.58	12.8	16.0	0.71	383	0.83	2.20	6.1	25.3	199
A16 (8893704)	14.2	0.40	2.1	0.023	1.66	11.6	10.2	0.63	299	0.48	2.31	4.9	20.6	337
A17 (8893705)	14.2	0.45	2.0	0.026	1.60	13.7	13.6	0.59	268	0.67	2.13	6.1	26.3	343
A18 (8893706)	15.8	0.51	3.5	0.032	1.58	14.8	14.1	0.71	367	0.90	2.10	7.3	27.7	415
A19 (8893707)	14.3	0.55	1.9	0.024	1.59	9.9	10.8	0.64	353	0.39	2.25	5.7	24.6	620
A20 (8893708)	15.5	0.57	1.6	0.025	1.73	11.7	11.8	0.56	276	0.57	2.30	5.4	20.7	370
A21 (8893709)	15.4	0.59	3.1	0.032	1.58	13.7	13.9	0.57	696	0.69	1.95	7.4	21.2	512
B3 (8893710)	15.3	0.65	2.4	0.027	1.80	29.1	16.5	0.92	359	0.45	2.32	6.2	31.3	550
B4 (8893711)	16.4	0.54	2.1	0.029	1.86	19.7	19.7	1.04	361	0.35	2.44	6.3	33.7	533
B5 (8893712)	15.2	0.57	2.2	0.031	1.66	16.8	15.8	1.10	457	0.55	2.50	11.7	32.1	594
B6 (8893713)	16.3	0.57	2.5	0.023	1.81	21.0	18.0	0.98	365	0.49	2.29	7.9	31.7	515
B7 (8893714)	15.9	0.61	3.5	0.034	1.61	21.5	13.5	1.11	482	0.36	2.39	7.1	28.3	666
B8 (8893715)	15.5	0.66	2.6	0.033	1.54	12.2	23.9	0.94	435	0.61	1.83	7.6	43.0	389
B9 (8893716)	15.0	0.62	3.3	0.034	1.55	16.5	19.3	0.86	455	0.49	2.02	8.5	31.8	301
B10 (8893717)	15.3	0.62	2.7	0.032	1.61	14.3	23.6	0.83	345	0.68	1.91	8.0	43.0	441
B11 (8893718)	15.9	0.62	3.7	0.034	1.63	16.0	21.4	0.78	332	1.71	1.97	7.9	36.2	268
B12 (8893719)	20.6	0.39	3.9	0.044	2.12	18.0	27.7	1.16	506	0.94	2.80	10.4	46.6	462
B13 (8893720)	15.0	0.53	1.9	0.024	1.74	9.6	13.6	0.60	298	0.58	2.44	4.3	20.4	207

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
B14 (8893721)	17.9	0.57	3.3	0.039	1.60	19.8	20.8	0.91	454	0.68	2.00	8.5	36.0	255
B15 (8893722)	17.5	0.62	2.8	0.029	1.49	20.7	13.1	0.49	324	0.62	1.86	14.6	15.5	316
B16 (8893723)	17.8	0.62	3.3	0.029	1.54	17.6	12.8	0.64	349	0.89	1.79	9.2	19.2	194
B17 (8893724)	13.3	0.60	2.4	0.021	1.69	13.0	10.1	0.63	289	0.31	2.27	5.0	21.9	173
B18 (8893725)	13.8	0.60	2.2	0.023	1.57	12.2	12.0	0.64	287	0.29	2.19	5.6	22.0	321
B19 (8893726)	16.9	0.61	2.6	0.040	1.31	16.8	24.0	0.67	281	0.58	1.68	9.1	24.2	389
B20 (8893727)	14.1	0.69	2.5	0.040	1.06	7.6	20.7	0.55	260	0.74	1.40	6.4	29.5	586
B21 (8893728)	16.2	0.69	2.1	0.027	1.45	18.9	18.5	0.67	285	0.53	2.07	7.6	36.4	403
B22 (8893729)	16.4	0.72	3.3	0.045	1.35	21.7	31.1	0.78	418	0.94	1.51	15.8	46.2	612
B23 (8893730)	17.5	0.66	2.7	0.046	1.46	15.2	28.3	1.04	453	0.99	1.77	8.1	61.1	503
C1 (8893731)	15.0	0.69	2.4	0.037	1.50	12.0	23.6	0.58	250	0.81	1.61	8.0	34.4	571
C2 (8893732)	18.1	0.64	2.5	0.037	1.54	10.1	25.4	0.76	515	1.40	1.74	8.3	31.0	346
C3 (8893733)	15.2	0.65	3.1	0.030	1.70	16.4	20.8	0.88	388	0.54	2.05	8.6	38.1	263
C4 (8893734)	19.0	0.71	2.9	0.043	1.83	14.1	29.5	1.23	430	0.79	1.55	17.5	62.5	428
C5 (8893735)	17.0	0.14	3.0	0.028	1.93	14.3	23.7	0.65	256	1.01	1.62	10.1	26.2	203
C6 (8893736)	17.0	0.13	3.0	0.038	1.85	14.9	23.7	0.82	337	0.91	1.69	10.6	37.0	259
C7 (8893737)	16.8	0.18	3.1	0.036	1.76	14.7	22.0	0.90	398	0.83	1.71	10.2	41.7	211
C8 (8893738)	18.9	0.19	3.2	0.039	1.61	15.0	26.0	0.86	438	1.10	1.63	11.0	38.9	279
C9 (8893739)	17.4	0.15	3.2	0.037	1.93	15.4	37.4	1.08	420	0.51	1.89	10.2	40.6	170
C10 (8893740)	16.7	0.14	3.1	0.039	1.74	15.3	43.3	1.10	467	0.73	1.79	10.1	44.3	205
C11 (8893741)	23.1	0.09	3.4	0.052	1.64	10.8	65.0	2.07	711	0.62	1.63	11.0	64.6	252
C12 (8893742)	19.7	<0.05	2.7	0.059	1.94	14.6	36.9	1.05	339	1.16	1.59	10.9	48.3	386
C13 (8893743)	17.6	0.11	3.2	0.039	1.79	22.5	25.1	0.86	384	0.81	1.69	10.0	38.4	630
C14 (8893744)	18.2	0.22	2.5	0.053	1.29	20.7	38.6	3.08	409	1.09	0.97	43.5	95.9	940
C15 (8893745)	20.9	0.12	2.2	0.046	1.82	14.5	35.7	1.10	392	1.08	1.44	11.4	67.1	1650
C16 (8893746)	16.1	0.23	3.3	0.035	1.71	16.1	19.9	0.88	379	0.55	1.63	9.1	43.3	653
C17 (8893747)	15.3	0.17	3.2	0.030	1.85	22.0	18.4	0.88	361	0.48	1.75	9.3	40.4	748
C18 (8893748)	15.9	0.06	3.9	0.034	1.63	18.3	18.2	0.78	394	0.57	1.94	15.6	35.4	706
C19 (8893749)	17.1	<0.05	2.7	0.028	1.74	16.0	19.4	0.64	330	0.36	2.09	7.8	19.8	163
C20 (8893750)	16.5	0.17	3.6	0.031	1.65	13.5	18.7	0.63	325	0.55	1.77	10.6	26.1	276
C21 (8893751)	17.6	<0.05	2.8	0.036	1.71	13.9	24.4	0.76	314	1.09	1.63	9.6	34.0	558
C22 (8893752)	19.8	<0.05	3.1	0.036	1.75	19.0	34.0	0.88	370	0.40	1.92	10.3	37.7	213

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
C23 (8893753)		15.4	<0.05	2.2	0.026	1.55	7.0	17.5	0.63	315	0.36	2.02	5.1	17.9	69
C24 (8893754)		14.4	<0.05	2.3	0.029	1.55	21.9	15.3	0.91	356	0.71	2.01	7.2	29.6	492
C25 (8893755)		19.4	0.11	3.0	0.039	1.84	28.2	34.3	1.10	385	0.29	1.74	10.7	46.3	234
C26 (8893756)		19.4	0.39	3.8	0.039	2.03	18.8	27.3	1.26	512	0.32	2.26	10.2	43.6	102
D1 (8893757)		17.4	0.11	2.8	0.039	1.69	13.1	27.5	0.82	339	0.74	1.61	10.0	46.1	580
D2 (8893758)		19.0	<0.05	3.5	0.039	1.65	12.6	30.3	0.97	494	0.69	1.72	10.2	48.9	897
D3 (8893759)		15.5	<0.05	1.9	0.029	1.83	11.3	18.0	0.78	306	0.39	2.01	6.6	36.8	335
D4 (8893760)		20.0	0.22	2.9	0.046	1.46	14.6	34.4	0.71	361	1.51	1.45	11.6	35.3	2060

Certified By:

Results relate only to the items tested and to all the items tested

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
A1 (8893689)	11.1	55.0	<0.002	0.02	0.11	6.1	0.6	1.0	336	0.20	<0.01	2.4	0.19	0.25
A2 (8893690)	11.5	53.7	<0.002	0.03	0.10	7.0	0.8	1.1	325	0.45	<0.01	2.5	0.23	0.26
A3 (8893691)	11.4	58.9	<0.002	0.04	0.13	6.6	0.9	0.9	323	0.24	<0.01	4.9	0.19	0.27
A4 (8893692)	11.7	49.4	<0.002	0.05	0.15	6.2	0.9	1.1	281	0.26	<0.01	2.1	0.21	0.25
A5 (8893693)	11.2	47.7	<0.002	0.03	0.07	5.3	0.6	0.9	276	0.17	<0.01	2.3	0.19	0.23
A6 (8893694)	11.8	57.2	<0.002	0.05	0.29	9.5	1.3	1.3	208	0.36	0.02	4.1	0.28	0.25
A7 (8893695)	11.8	54.8	<0.002	0.05	0.35	9.6	1.4	1.6	198	0.38	<0.01	4.2	0.27	0.26
A8 (8893696)	11.3	54.8	<0.002	0.03	0.17	8.7	1.0	1.2	287	0.34	0.01	3.7	0.28	0.26
A9 (8893697)	11.0	54.0	<0.002	0.03	0.23	8.6	1.0	1.1	318	0.31	0.02	3.6	0.25	0.23
A10 (8893698)	12.1	52.8	<0.002	0.03	0.15	7.6	1.0	1.1	351	0.25	0.02	6.1	0.22	0.25
A11 (8893699)	14.2	62.0	<0.002	0.03	0.22	9.2	0.8	1.3	322	0.29	<0.01	5.0	0.24	0.29
A12 (8893700)	14.1	55.4	<0.002	0.03	0.27	11.2	1.2	1.3	258	0.32	0.02	7.6	0.31	0.25
A13 (8893701)	19.6	58.8	<0.002	0.03	0.31	10.8	1.4	1.3	269	0.36	0.04	7.8	0.30	0.28
A14 (8893702)	11.6	55.1	<0.002	0.03	0.17	8.7	0.6	1.0	347	0.26	<0.01	4.0	0.25	0.24
A15 (8893703)	12.1	54.6	<0.002	0.03	0.16	8.6	0.7	1.0	332	0.27	<0.01	3.3	0.25	0.26
A16 (8893704)	13.5	51.8	<0.002	0.03	0.16	7.8	1.3	1.2	350	0.23	<0.01	3.5	0.21	0.24
A17 (8893705)	11.7	50.6	<0.002	0.04	0.11	7.7	1.0	0.9	323	0.29	<0.01	4.2	0.21	0.24
A18 (8893706)	18.4	50.6	<0.002	0.04	0.19	9.2	1.2	1.3	312	0.37	0.02	4.4	0.30	0.25
A19 (8893707)	11.0	53.1	<0.002	0.03	0.13	7.8	0.7	1.0	340	0.26	<0.01	2.1	0.24	0.23
A20 (8893708)	11.8	56.5	<0.002	0.03	0.14	6.5	0.7	1.0	361	0.24	<0.01	2.7	0.22	0.27
A21 (8893709)	12.0	54.0	<0.002	0.04	0.22	7.9	0.7	1.2	288	0.34	<0.01	5.4	0.27	0.25
B3 (8893710)	15.0	63.2	<0.002	0.09	0.31	9.3	1.3	1.4	343	0.28	<0.01	8.7	0.24	0.30
B4 (8893711)	12.9	68.5	<0.002	0.05	0.14	10.0	1.2	1.0	352	0.28	<0.01	4.0	0.25	0.31
B5 (8893712)	11.3	56.0	<0.002	0.12	0.14	11.6	<0.5	1.1	356	0.32	<0.01	3.8	0.31	0.27
B6 (8893713)	13.1	67.9	<0.002	0.28	0.11	9.4	0.9	13.7	334	0.40	<0.01	5.8	0.25	0.31
B7 (8893714)	14.4	57.1	<0.002	0.09	0.16	12.1	1.0	1.2	373	0.32	<0.01	4.5	0.31	0.24
B8 (8893715)	15.4	59.8	<0.002	0.03	0.35	10.4	0.6	1.4	203	0.38	<0.01	4.0	0.32	0.26
B9 (8893716)	12.8	55.3	<0.002	0.03	0.26	10.0	0.8	1.3	256	0.37	<0.01	5.2	0.37	0.24
B10 (8893717)	13.2	54.8	<0.002	0.04	0.28	9.5	1.3	1.2	261	0.38	<0.01	4.8	0.30	0.27
B11 (8893718)	14.7	51.8	<0.002	0.04	0.29	8.6	0.7	1.2	292	0.38	0.03	5.5	0.31	0.27
B12 (8893719)	15.6	77.5	<0.002	0.05	0.40	13.5	1.4	1.8	334	0.68	0.02	6.7	0.38	0.35
B13 (8893720)	14.8	56.4	<0.002	0.03	0.23	7.1	0.8	1.0	371	0.27	0.04	2.6	0.19	0.28

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
B14 (8893721)		13.7	61.4	<0.002	0.03	0.37	10.0	1.1	1.5	273	0.41	0.01	5.4	0.33	0.29
B15 (8893722)		17.5	51.2	<0.002	0.03	0.23	8.2	0.9	1.6	263	0.74	0.01	9.3	0.34	0.26
B16 (8893723)		16.7	61.8	<0.002	0.03	0.30	9.2	1.0	1.5	234	0.46	0.05	7.0	0.39	0.29
B17 (8893724)		11.1	53.6	<0.002	0.03	0.09	7.4	0.7	0.8	330	0.22	<0.01	4.4	0.21	0.24
B18 (8893725)		10.9	50.5	<0.002	0.03	0.13	7.7	0.8	0.9	314	0.30	0.01	2.9	0.23	0.22
B19 (8893726)		14.2	46.3	<0.002	0.10	0.19	10.9	1.2	1.3	234	0.45	<0.01	6.1	0.39	0.25
B20 (8893727)		12.9	35.8	<0.002	0.06	0.18	8.7	1.1	1.1	210	0.29	0.01	3.2	0.26	0.17
B21 (8893728)		13.7	49.6	<0.002	0.04	0.11	9.0	0.9	1.1	309	0.43	0.01	5.6	0.26	0.24
B22 (8893729)		14.9	48.2	<0.002	0.06	0.28	10.6	1.2	1.4	228	1.89	0.04	9.1	0.40	0.23
B23 (8893730)		12.4	59.8	<0.002	0.04	0.43	11.6	1.2	1.6	201	0.41	0.03	4.7	0.33	0.27
C1 (8893731)		12.8	47.7	<0.002	0.06	0.38	8.1	1.3	1.6	237	0.38	<0.01	3.5	0.26	0.24
C2 (8893732)		14.2	58.7	<0.002	0.03	0.37	8.1	1.2	1.4	231	0.43	0.09	3.5	0.31	0.28
C3 (8893733)		16.4	56.1	<0.002	0.03	0.21	9.9	0.8	1.4	299	0.35	<0.01	5.4	0.32	0.28
C4 (8893734)		20.3	70.9	<0.002	0.04	0.36	10.8	1.0	1.7	230	1.34	0.02	6.0	0.44	0.36
C5 (8893735)		16.8	73.8	<0.002	0.03	0.28	8.0	1.4	1.6	248	0.42	0.02	3.9	0.30	0.32
C6 (8893736)		17.2	69.7	<0.002	0.03	0.32	9.4	1.4	1.6	254	0.49	0.01	4.5	0.34	0.33
C7 (8893737)		19.9	68.0	<0.002	0.03	0.46	9.5	1.1	1.6	252	0.46	0.02	4.5	0.34	0.30
C8 (8893738)		20.3	70.0	<0.002	0.03	0.39	10.1	1.4	1.8	243	0.49	0.08	5.5	0.42	0.29
C9 (8893739)		18.9	71.5	<0.002	0.04	0.27	10.7	0.9	1.4	275	0.44	<0.01	4.5	0.40	0.29
C10 (8893740)		15.7	63.0	<0.002	0.04	0.27	11.0	0.9	1.4	257	0.45	0.04	5.7	0.45	0.27
C11 (8893741)		19.6	73.4	<0.002	0.07	0.64	16.8	1.5	2.1	195	0.61	0.05	5.4	0.52	0.37
C12 (8893742)		19.9	75.5	0.022	0.03	0.36	9.9	1.2	1.6	231	0.58	0.07	3.7	0.34	0.37
C13 (8893743)		21.4	69.6	<0.002	0.04	0.61	9.2	1.2	1.7	250	0.60	0.06	9.4	0.35	0.31
C14 (8893744)		19.8	55.1	<0.002	0.05	0.43	11.4	2.3	1.5	149	1.95	0.07	7.0	0.55	0.23
C15 (8893745)		26.0	79.2	<0.002	0.05	0.47	11.0	1.6	1.8	202	0.51	0.05	5.3	0.31	0.35
C16 (8893746)		13.9	61.7	<0.002	0.04	0.25	9.2	1.0	1.3	240	0.44	0.01	4.7	0.29	0.29
C17 (8893747)		14.2	63.4	<0.002	0.03	0.23	9.2	1.1	1.3	246	0.39	0.03	8.2	0.29	0.31
C18 (8893748)		14.1	59.0	<0.002	0.04	0.20	9.3	1.2	1.4	288	1.52	<0.01	6.6	0.33	0.25
C19 (8893749)		17.4	69.2	<0.002	0.03	0.27	8.0	1.1	1.4	310	0.30	<0.01	6.3	0.33	0.28
C20 (8893750)		14.8	59.0	<0.002	0.03	0.80	8.4	0.8	1.3	262	0.61	<0.01	5.3	0.34	0.26
C21 (8893751)		18.1	69.7	<0.002	0.03	0.27	9.1	1.2	1.3	245	0.45	0.03	4.0	0.35	0.30
C22 (8893752)		18.6	70.5	<0.002	0.04	0.31	9.3	0.9	1.5	281	0.47	0.05	7.2	0.35	0.31

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
C23 (8893753)		11.5	60.5	<0.002	0.03	0.19	8.2	0.5	1.0	266	0.18	<0.01	2.2	0.31	0.25
C24 (8893754)		11.3	58.0	<0.002	0.12	0.18	10.1	0.9	1.0	304	0.32	0.01	5.0	0.28	0.25
C25 (8893755)		15.3	79.7	<0.002	0.03	0.41	13.2	1.0	1.6	233	0.54	0.03	7.8	0.34	0.43
C26 (8893756)		13.5	72.7	<0.002	0.03	0.26	13.5	1.0	1.8	309	0.49	<0.01	6.3	0.41	0.36
D1 (8893757)		15.4	65.1	<0.002	0.04	0.29	9.3	1.2	1.5	235	0.47	0.03	4.3	0.34	0.30
D2 (8893758)		15.0	68.8	<0.002	0.04	0.31	11.1	1.9	1.5	262	0.45	0.05	4.2	0.42	0.27
D3 (8893759)		13.9	67.0	<0.002	0.03	0.15	7.7	0.6	1.0	307	0.29	0.02	5.1	0.24	0.30
D4 (8893760)		16.5	60.5	<0.002	0.05	0.34	9.8	1.7	1.7	209	0.54	0.36	5.0	0.44	0.25

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
A1 (8893689)	0.520	35.5	0.1	8.4	20.5	99.5
A2 (8893690)	0.620	51.1	0.1	9.0	23.1	126
A3 (8893691)	0.632	44.5	0.1	9.6	23.1	124
A4 (8893692)	0.520	53.4	0.1	7.6	25.5	71.0
A5 (8893693)	0.614	38.2	<0.1	6.8	16.7	98.8
A6 (8893694)	1.10	68.0	0.4	12.3	34.5	116
A7 (8893695)	1.26	69.9	0.4	13.7	60.8	129
A8 (8893696)	0.907	60.9	0.3	11.3	47.6	159
A9 (8893697)	0.799	57.7	0.2	13.4	30.3	155
A10 (8893698)	0.669	58.2	0.2	11.6	30.7	97.0
A11 (8893699)	0.971	59.7	0.2	14.6	40.2	129
A12 (8893700)	1.39	76.2	0.3	20.4	44.9	153
A13 (8893701)	1.52	70.2	0.3	26.8	204	159
A14 (8893702)	0.968	55.1	0.2	16.9	33.2	128
A15 (8893703)	0.848	55.3	0.2	13.5	39.1	149
A16 (8893704)	0.678	49.4	0.1	12.5	26.4	115
A17 (8893705)	0.811	50.4	0.1	11.1	33.6	105
A18 (8893706)	1.12	70.5	0.4	13.9	43.8	197
A19 (8893707)	0.626	61.1	0.1	11.4	52.9	105
A20 (8893708)	0.566	55.5	0.1	9.5	30.8	88.8
A21 (8893709)	1.00	59.4	0.4	11.2	64.8	162
B3 (8893710)	1.90	65.0	0.4	16.5	47.8	133
B4 (8893711)	1.06	57.9	0.5	17.3	40.6	119
B5 (8893712)	0.872	98.0	0.3	16.5	41.2	121
B6 (8893713)	0.896	57.5	0.2	16.0	39.9	136
B7 (8893714)	0.933	81.3	0.2	20.9	38.5	198
B8 (8893715)	1.21	84.3	0.6	14.1	51.0	138
B9 (8893716)	1.01	77.4	0.3	15.5	37.5	195
B10 (8893717)	1.03	68.7	0.3	13.1	48.3	143
B11 (8893718)	1.14	81.0	0.2	12.1	50.1	210
B12 (8893719)	1.63	88.7	0.5	19.0	49.6	222
B13 (8893720)	0.660	49.7	0.2	9.8	33.8	91.2

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
B14 (8893721)		1.16	75.1	0.3	16.5	54.3	184
B15 (8893722)		1.28	65.1	0.4	14.7	56.2	154
B16 (8893723)		1.26	88.9	0.4	12.1	41.5	177
B17 (8893724)		0.747	40.4	0.1	10.9	22.8	128
B18 (8893725)		0.660	44.0	0.2	10.9	24.4	125
B19 (8893726)		1.38	62.7	0.3	13.3	34.7	145
B20 (8893727)		0.823	84.3	0.2	9.4	33.8	128
B21 (8893728)		1.01	51.5	0.2	13.3	29.8	116
B22 (8893729)		1.27	99.7	0.4	14.6	57.8	179
B23 (8893730)		1.39	91.8	0.5	18.3	72.2	157
C1 (8893731)		0.846	53.5	0.3	9.6	64.6	131
C2 (8893732)		0.946	83.9	0.4	9.4	57.3	142
C3 (8893733)		1.02	70.2	0.3	13.3	42.0	183
C4 (8893734)		1.04	92.2	0.4	12.4	63.5	148
C5 (8893735)		0.922	66.0	0.4	10.9	45.8	177
C6 (8893736)		1.03	76.3	0.4	12.6	48.7	167
C7 (8893737)		1.01	80.1	0.3	12.9	56.7	176
C8 (8893738)		1.02	105	0.4	13.8	56.0	189
C9 (8893739)		1.01	76.1	0.3	13.4	68.4	186
C10 (8893740)		1.03	82.4	0.3	13.9	53.0	173
C11 (8893741)		1.61	121	0.7	16.5	73.0	171
C12 (8893742)		1.05	80.2	0.5	12.7	63.6	144
C13 (8893743)		1.23	78.5	0.4	12.9	74.7	178
C14 (8893744)		1.36	99.1	1.1	12.0	85.3	139
C15 (8893745)		1.20	87.4	0.5	13.0	105	115
C16 (8893746)		1.02	68.5	0.4	12.6	74.3	174
C17 (8893747)		1.08	62.8	0.3	13.1	65.5	185
C18 (8893748)		1.20	75.8	0.5	15.3	61.3	220
C19 (8893749)		0.805	46.5	0.2	11.7	43.0	159
C20 (8893750)		0.960	65.9	0.3	11.4	32.8	209
C21 (8893751)		1.03	76.8	0.4	13.1	66.2	161
C22 (8893752)		0.953	58.4	0.3	14.1	53.9	170

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
C23 (8893753)		0.747	48.2	0.1	9.9	30.1	122
C24 (8893754)		1.05	64.0	0.2	19.1	34.6	133
C25 (8893755)		1.96	86.4	0.6	22.1	45.1	170
C26 (8893756)		1.47	92.5	0.4	20.4	42.9	228
D1 (8893757)		0.963	74.6	0.4	12.3	65.1	155
D2 (8893758)		1.08	104	0.3	16.6	49.1	197
D3 (8893759)		0.663	56.8	0.2	9.2	33.6	103
D4 (8893760)		1.17	121	0.5	12.9	106	159

Comments: RDL - Reported Detection Limit

8893689-8893760 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893689	0.24	0.11		8893709	0.43	0.45	4.5%	8893729	0.338	0.285	17.0%	8893750	0.24	0.24	0.0%
Al	8893689	5.79	5.87	1.4%	8893709	6.26	6.19	1.1%	8893729	7.70	7.58	1.6%	8893750	6.25	6.42	2.7%
As	8893689	0.9	0.8	11.8%	8893709	2.7	2.1	25.0%	8893729	6.88	5.11	29.5%	8893750	2.9	2.4	18.9%
Ba	8893689	541	533	1.5%	8893709	484	479	1.0%	8893729	403	382	5.4%	8893750	492	513	4.2%
Be	8893689	1.17	1.09	7.1%	8893709	1.28	1.34	4.6%	8893729	1.52	1.42	6.8%	8893750	1.18	1.39	16.3%
Bi	8893689	0.063	0.055	13.6%	8893709	0.10	0.10	0.0%	8893729	0.16	0.16	0.0%	8893750	0.103	0.108	4.7%
Ca	8893689	1.45	1.45	0.0%	8893709	1.42	1.39	2.1%	8893729	1.24	1.21	2.4%	8893750	1.33	1.37	3.0%
Cd	8893689	0.028	0.036	25.0%	8893709	0.145	0.137	5.7%	8893729	0.171	0.165	3.6%	8893750	0.079	0.095	18.4%
Ce	8893689	17.4	16.9	2.9%	8893709	28.1	25.5	9.7%	8893729	45.1	39.1	14.3%	8893750	28.0	33.2	17.0%
Co	8893689	6.46	6.65	2.9%	8893709	14.0	13.5	3.6%	8893729	20.5	19.3	6.0%	8893750	11.6	12.3	5.9%
Cr	8893689	39.8	40.8	2.5%	8893709	60.5	55.5	8.6%	8893729	111	103	7.5%	8893750	69.8	74.1	6.0%
Cs	8893689	1.05	1.07	1.9%	8893709	1.46	1.50	2.7%	8893729	1.70	1.60	6.1%	8893750	1.74	1.85	6.1%
Cu	8893689	3.3	2.9	12.9%	8893709	8.3	8.2	1.2%	8893729	17.0	16.7	1.8%	8893750	7.72	8.22	6.3%
Fe	8893689	1.22	1.24	1.6%	8893709	2.26	2.23	1.3%	8893729	4.50	4.43	1.6%	8893750	2.22	2.27	2.2%
Ga	8893689	13.8	14.7	6.3%	8893709	15.4	15.2	1.3%	8893729	16.4	15.3	6.9%	8893750	16.5	17.3	4.7%
Ge	8893689	0.229	0.256	11.1%	8893709	0.591	0.541	8.8%	8893729	0.72	0.72	0.0%	8893750	0.17	0.15	12.5%
Hf	8893689	1.83	1.86	1.6%	8893709	3.10	2.61	17.2%	8893729	3.32	3.72	11.4%	8893750	3.61	3.12	14.6%
In	8893689	0.0193	0.0201	4.1%	8893709	0.032	0.032	0.0%	8893729	0.0449	0.0445	0.9%	8893750	0.031	0.031	0.0%
K	8893689	1.72	1.71	0.6%	8893709	1.58	1.57	0.6%	8893729	1.35	1.28	5.3%	8893750	1.65	1.69	2.4%
La	8893689	8.5	8.1	4.8%	8893709	13.7	12.2	11.6%	8893729	21.7	18.9	13.8%	8893750	13.5	16.4	19.4%
Li	8893689	9.3	9.3	0.0%	8893709	13.9	13.8	0.7%	8893729	31.1	30.1	3.3%	8893750	18.7	19.3	3.2%
Mg	8893689	0.522	0.526	0.8%	8893709	0.57	0.57	0.0%	8893729	0.775	0.754	2.7%	8893750	0.63	0.65	3.1%
Mn	8893689	250	253	1.2%	8893709	696	667	4.3%	8893729	418	415	0.7%	8893750	325	325	0.0%
Mo	8893689	0.31	0.31	0.0%	8893709	0.69	0.72	4.3%	8893729	0.94	0.89	5.5%	8893750	0.553	0.641	14.7%
Na	8893689	2.27	2.28	0.4%	8893709	1.95	1.90	2.6%	8893729	1.51	1.46	3.4%	8893750	1.77	1.83	3.3%
Nb	8893689	4.44	5.03	12.5%	8893709	7.42	8.16	9.5%	8893729	15.8	14.0	12.1%	8893750	10.6	10.0	5.8%
Ni	8893689	16.2	16.2	0.0%	8893709	21.2	21.2	0.0%	8893729	46.2	41.2	11.4%	8893750	26.1	27.3	4.5%
P	8893689	228	208	9.2%	8893709	512	517	1.0%	8893729	612	594	3.0%	8893750	276	292	5.6%
Pb	8893689	11.1	11.1	0.0%	8893709	12.0	11.5	4.3%	8893729	14.9	14.0	6.2%	8893750	14.8	15.8	6.5%
Rb	8893689	55.0	55.8	1.4%	8893709	54.0	56.6	4.7%	8893729	48.2	45.0	6.9%	8893750	59.0	63.9	8.0%
Re	8893689	< 0.002	< 0.002	0.0%	8893709	< 0.002	< 0.002	0.0%	8893729	< 0.002	< 0.002	0.0%	8893750	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893689	0.02	0.02	0.0%	8893709	0.04	0.04	0.0%	8893729	0.06	0.06	0.0%	8893750	0.03	0.03	0.0%
Sb	8893689	0.110	0.084	26.8%	8893709	0.224	0.241	7.3%	8893729	0.278	0.260	6.7%	8893750	0.80	0.50	
Sc	8893689	6.14	6.27	2.1%	8893709	7.9	7.9	0.0%	8893729	10.6	10.4	1.9%	8893750	8.4	8.6	2.4%
Se	8893689	0.6	0.8	28.6%	8893709	0.7	1.2		8893729	1.2	1.3	8.0%	8893750	0.85	1.02	18.2%
Sn	8893689	1.0	1.2	18.2%	8893709	1.21	1.35	10.9%	8893729	1.41	1.33	5.8%	8893750	1.3	1.5	14.3%
Sr	8893689	336	346	2.9%	8893709	288	288	0.0%	8893729	228	227	0.4%	8893750	262	275	4.8%
Ta	8893689	0.20	0.23	14.0%	8893709	0.343	0.351	2.3%	8893729	1.89	1.51	22.4%	8893750	0.61	0.50	19.8%
Te	8893689	< 0.01	< 0.01	0.0%	8893709	< 0.01	0.01		8893729	0.04	0.03		8893750	< 0.01	0.02	
Th	8893689	2.4	2.1	13.3%	8893709	5.4	4.6	16.0%	8893729	9.1	7.7	16.7%	8893750	5.3	6.2	15.7%
Ti	8893689	0.19	0.19	0.0%	8893709	0.272	0.277	1.8%	8893729	0.40	0.40	0.0%	8893750	0.339	0.333	1.8%
Tl	8893689	0.25	0.26	3.9%	8893709	0.25	0.25	0.0%	8893729	0.23	0.22	4.4%	8893750	0.26	0.28	7.4%
U	8893689	0.520	0.525	1.0%	8893709	1.00	0.838	17.6%	8893729	1.27	1.10	14.3%	8893750	0.960	0.955	0.5%
V	8893689	35.5	36.4	2.5%	8893709	59.4	61.5	3.5%	8893729	99.7	95.9	3.9%	8893750	65.9	67.0	1.7%
W	8893689	0.1	0.1	0.0%	8893709	0.4	0.2		8893729	0.4	0.4	0.0%	8893750	0.3	0.3	0.0%
Y	8893689	8.4	9.1	8.0%	8893709	11.2	10.8	3.6%	8893729	14.6	13.6	7.1%	8893750	11.4	12.6	10.0%
Zn	8893689	20.5	19.3	6.0%	8893709	64.8	64.0	1.2%	8893729	57.8	55.8	3.5%	8893750	32.8	36.7	11.2%
Zr	8893689	99.5	96.9	2.6%	8893709	162	152	6.4%	8893729	179	186	3.8%	8893750	209	186	11.6%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.4	95%	90% - 110%	6.96	6.91	99%	90% - 110%								
As					124	124	100%	90% - 110%								
Ba	340	323	95%	90% - 110%	186	185	100%	90% - 110%								
Be	2.6	2.8	107%	90% - 110%												
Ca	5.72	5.39	94%	90% - 110%	4.01	4	100%	90% - 110%								
Ce	122	127	104%	90% - 110%	24	24	100%	90% - 110%								
Co	2.8	3	107%	90% - 110%	22.1	24.1	109%	90% - 110%					2.8	3.0	107%	90% - 110%
Cs	1.5	1.7	113%	90% - 110%												
Cu	7	5	73%	90% - 110%	88.6	85.7	97%	90% - 110%								
Fe	4.34	3.77	86%	90% - 110%	7.56	7	93%	90% - 110%								
Ga	35	38	108%	90% - 110%												
K	1.37	1.35	98%	90% - 110%	2.021	2.031	101%	90% - 110%								
La	58	60	103%	90% - 110%												
Li	37	37	101%	90% - 110%												
Mg	0.325	0.291	90%	90% - 110%	2.412	2.436	101%	90% - 110%								
Mn					1510	1402	93%	90% - 110%								
Na	5.267	5.213	99%	90% - 110%	0.617	0.635	103%	90% - 110%								
Ni	9	7	79%	90% - 110%	77.1	71.1	92%	90% - 110%								
P					892	938	105%	90% - 110%								
Pb	10	10	97%	90% - 110%												
Rb	55	57.9	105%	90% - 110%												
S					0.348	0.378	108%	90% - 110%								
Sr	1191	1161	97%	90% - 110%	92.8	90.2	97%	90% - 110%								
Ta	0.9	1	109%	90% - 110%												
Th	1.4	1.3	95%	90% - 110%												
Ti	0.172	0.155	90%	90% - 110%												
V	8	6	81%	90% - 110%					77	77	100%	90% - 110%	8	6	79%	90% - 110%
Zn	93	86	93%	90% - 110%	208	202	97%	90% - 110%								
	CRM #5 (ref.Till-2)				CRM #6 (ref.GTS-2A)				CRM #7 (ref.SY-4)				CRM #8 (ref.GTS-2A)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	8.17	8.26	101%	90% - 110%					10.95	10.33	94%	90% - 110%	6.96	7.05	101%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

As	26	24.4	94%	90% - 110%									124	128	103%	90% - 110%
Ba	540	533	99%	90% - 110%					340	319	94%	90% - 110%	186	188	101%	90% - 110%
Be	4.0	4.2	106%	90% - 110%					2.6	2.9	111%	90% - 110%				
Ca	0.907	0.929	102%	90% - 110%					5.72	5.39	94%	90% - 110%	4.01	4.14	103%	90% - 110%
Ce	98	103	105%	90% - 110%					122	118	96%	90% - 110%	24	24	98%	90% - 110%
Co					22.1	23.8	107%	90% - 110%								
Cr	60.3	59.5	99%	90% - 110%												
Cs	12	12	103%	90% - 110%					1.5	1.7	115%	90% - 110%				
Cu	150	147	98%	90% - 110%									88.6	87.4	99%	90% - 110%
Fe	3.77	3.58	95%	90% - 110%					4.34	3.78	87%	90% - 110%	7.56	7.32	97%	90% - 110%
Ga									35	37	105%	90% - 110%				
K									1.37	1.29	94%	90% - 110%	2.021	2.072	103%	90% - 110%
La	44	46	104%	90% - 110%					58	54	93%	90% - 110%				
Li	47	46	97%	90% - 110%					37	36	98%	90% - 110%				
Mg	1.10	1.07	98%	90% - 110%					0.325	0.286	88%	90% - 110%	2.412	2.483	103%	90% - 110%
Mn	780	729	93%	90% - 110%									1510	1455	96%	90% - 110%
Mo	14	15	107%	90% - 110%												
Na	1.624	1.685	104%	90% - 110%					5.267	5.054	96%	90% - 110%	0.617	0.655	106%	90% - 110%
Nb	20	21	107%	90% - 110%												
Ni	32	33	104%	90% - 110%					9	7	83%	90% - 110%	77.1	72.8	94%	90% - 110%
P													892	923	103%	90% - 110%
Pb	31	31	99%	90% - 110%					10	10	96%	90% - 110%				
Rb	143	132	92%	90% - 110%					55	57.2	104%	90% - 110%				
S													0.348	0.38	109%	90% - 110%
Sc	12	12	104%	90% - 110%												
Sr	144	146	101%	90% - 110%					1191	1141	96%	90% - 110%	92.8	93.1	100%	90% - 110%
Ta	1.9	1.7	89%	90% - 110%					0.9	1	113%	90% - 110%				
Th	18.4	17.6	95%	90% - 110%					1.4	1.2	85%	90% - 110%				
Ti	0.53	0.43	81%	90% - 110%					0.172	0.152	88%	90% - 110%				
U	5.7	4.5	79%	90% - 110%					0.8	0.7	82%	90% - 110%				
V									8	8	99%	90% - 110%				
W	5	5	91%	90% - 110%												
Y	40	31	78%	90% - 110%												
Zn	130	121	93%	90% - 110%					93	88	94%	90% - 110%	208	206	99%	90% - 110%

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
AGAT WORK ORDER: 17T282580
PROJECT:
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLING SITE:
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282581
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 02, 2018
PAGES (INCLUDING COVER):	19

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
D5 (8893776)	0.54	6.79	8.8	421	1.30	0.27	1.28	0.12	37.6	17.4	100	1.71	180	4.24
D6 (8893777)	0.32	6.95	4.9	554	1.43	0.15	1.41	0.07	43.3	12.1	67.7	1.65	27.3	2.30
D7 (8893778)	0.31	7.36	3.4	565	1.33	0.11	1.41	0.09	37.4	11.5	68.3	1.87	19.1	2.36
D8 (8893779)	0.35	7.15	4.9	531	1.38	0.15	1.57	0.11	38.2	13.7	82.3	2.04	32.4	3.08
D9 (8893780)	0.36	6.64	3.7	479	1.31	0.12	1.44	0.07	30.4	12.7	73.4	1.80	23.3	2.83
D10 (8893781)	0.35	7.49	4.4	548	1.24	0.12	1.62	0.10	32.8	11.5	70.6	1.64	19.6	2.87
D11 (8893782)	0.25	7.80	2.9	542	1.39	0.13	1.49	0.10	36.1	13.9	84.5	2.25	24.1	3.62
D12 (8893783)	0.44	7.57	3.4	517	1.42	0.12	1.39	0.09	37.0	15.6	87.6	1.97	19.6	3.30
D13 (8893784)	0.25	7.26	1.7	593	1.35	0.10	1.35	0.05	37.7	11.6	70.0	1.91	11.6	2.31
D14 (8893785)	0.33	8.11	2.6	602	1.32	0.10	1.46	0.07	27.7	12.3	87.6	2.05	19.0	3.18
D15 (8893786)	0.31	8.55	4.8	539	1.38	0.14	1.38	0.12	28.3	17.2	95.6	2.47	31.3	3.77
D16 (8893787)	0.31	8.03	6.1	493	1.33	0.15	1.25	0.13	25.2	15.5	90.4	2.41	43.6	4.42
D17 (8893788)	0.37	6.15	3.6	515	1.00	0.12	1.53	0.09	30.8	8.65	64.6	2.28	17.6	2.25
D18 (8893789)	0.49	7.81	5.6	391	1.18	0.16	1.23	0.13	25.7	18.2	77.7	2.23	64.7	4.47
D19 (8893790)	0.34	6.63	7.2	544	1.09	0.14	1.39	0.13	24.1	14.7	55.7	1.79	22.4	2.61
D20 (8893791)	0.26	7.33	5.5	477	1.25	0.14	1.39	0.06	22.5	23.9	66.5	1.66	27.9	3.01
D21 (8893792)	0.32	7.98	3.0	515	1.34	0.16	1.52	0.11	26.3	22.7	69.0	1.78	42.0	3.33
D22 (8893793)	0.20	7.56	6.3	478	1.41	0.18	1.44	0.10	27.5	16.5	71.1	1.84	44.2	3.22
D23 (8893794)	0.24	6.35	6.3	424	1.01	0.19	1.28	0.12	29.7	7.62	57.5	1.79	30.5	3.43
D24 (8893795)	0.31	7.34	3.3	512	1.44	0.11	1.45	0.08	29.8	17.1	76.6	1.99	15.6	3.06
D25 (8893796)	0.45	7.45	3.9	569	1.52	0.14	1.40	0.06	39.7	14.3	79.7	2.59	18.9	3.02
D26 (8893797)	0.36	8.54	8.9	521	1.75	0.24	1.42	0.07	49.0	27.8	128	2.78	75.8	5.95
D27 (8893798)	0.62	7.63	9.6	434	1.50	0.17	1.32	0.13	26.3	17.7	98.6	2.16	27.3	4.15
D28 (8893799)	0.41	7.63	7.4	532	1.41	0.14	1.49	0.13	28.6	23.0	70.8	2.12	21.5	3.19
E1 (8893800)	0.22	7.04	3.0	593	1.20	0.08	1.53	0.05	25.0	10.7	70.9	1.94	11.9	2.62
E2 (8893801)	0.26	6.68	2.2	551	1.24	0.09	1.30	0.10	33.8	11.3	71.4	1.99	11.4	2.46
E3 (8893802)	0.24	6.64	3.9	518	1.25	0.11	1.62	0.07	34.7	13.8	74.1	1.94	14.6	2.78
E4 (8893803)	0.24	6.47	4.6	509	1.30	0.09	1.89	0.07	38.5	13.5	104	1.53	11.0	2.85
E5 (8893804)	0.18	7.28	3.8	590	1.65	0.12	1.76	0.04	53.6	18.7	81.9	2.41	22.9	3.09
E6 (8893805)	0.23	6.68	11.6	541	1.31	0.11	1.72	0.09	31.8	17.4	81.2	2.29	17.1	2.96
E7 (8893806)	0.23	7.60	3.9	610	1.35	0.15	1.49	0.06	31.0	16.9	92.4	2.17	24.8	2.92
E8 (8893807)	0.27	6.68	3.6	608	1.14	0.11	1.42	0.06	29.1	12.3	67.5	2.37	7.9	2.37

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
E9 (8893808)		0.29	6.60	1.2	494	1.32	0.10	1.42	0.06	23.8	11.3	66.3	1.77	6.5	3.04
E10 (8893809)		0.56	7.05	6.1	504	1.37	0.14	1.41	0.10	17.2	14.3	85.3	1.86	11.7	4.11
E11 (8893810)		0.32	7.48	3.0	538	1.37	0.12	1.57	0.07	36.1	15.5	104	1.48	19.9	4.51
E12 (8893811)		0.25	8.41	4.2	573	1.40	0.13	1.63	0.10	20.7	19.6	88.2	1.98	15.2	4.34
E13 (8893812)		0.30	8.02	4.5	564	1.22	0.12	1.69	0.06	27.1	18.5	89.3	1.85	14.8	4.65
E14 (8893813)		0.29	8.45	4.7	580	1.36	0.15	1.65	0.10	27.7	14.9	111	1.87	24.5	4.80
E15 (8893814)		0.40	8.34	8.9	576	1.40	0.20	1.28	0.11	27.0	19.9	94.5	2.37	57.3	5.06
E16 (8893815)		0.33	7.74	3.6	559	1.32	0.10	1.61	0.07	35.2	12.4	73.6	1.67	14.5	2.83
E17 (8893816)		0.44	7.09	7.6	558	1.19	0.17	1.43	0.10	27.3	10.9	81.5	2.26	12.1	3.27
E18 (8893817)		0.31	7.13	3.8	514	1.10	0.10	1.35	0.07	25.3	9.98	72.4	1.74	10.2	2.81
E19 (8893818)		0.34	8.41	2.9	596	1.32	0.11	1.61	0.08	35.8	12.6	85.3	2.41	14.7	3.55
E20 (8893819)		0.33	8.08	3.0	579	1.51	0.10	1.53	0.10	37.8	14.3	88.2	1.78	27.9	3.33
E21 (8893820)		0.27	7.04	2.3	492	1.30	0.09	1.71	0.07	25.2	13.3	88.3	1.48	8.5	3.55
E22 (8893821)		0.27	7.77	6.0	514	1.22	0.13	1.58	0.09	26.1	14.9	72.3	1.90	36.4	3.43
E23 (8893822)		0.19	7.30	5.1	548	1.29	0.11	1.61	0.03	53.1	10.6	77.4	1.42	44.1	2.71
E24 (8893823)		0.27	5.67	4.1	388	0.91	0.14	1.38	0.11	18.5	8.46	98.4	1.41	16.0	2.60
E25 (8893824)		0.28	5.92	8.6	478	1.01	0.14	1.36	0.06	18.4	7.27	50.4	1.46	13.9	2.04
E26 (8893825)		0.21	7.21	4.2	442	1.11	0.14	1.42	0.11	25.2	14.1	60.6	1.66	70.1	3.78
E27 (8893826)		0.21	7.07	6.8	457	1.25	0.16	1.42	0.06	22.1	14.8	63.7	1.80	56.6	3.71
E28 (8893827)		0.19	5.87	3.5	486	1.17	0.10	1.34	0.04	18.9	9.52	42.7	1.24	27.7	1.88
E29 (8893828)		0.27	7.28	5.4	526	1.08	0.10	1.42	0.05	21.9	10.1	57.9	1.37	16.6	2.60
E30 (8893829)		0.27	7.86	9.9	532	1.36	0.17	1.82	0.07	47.4	15.4	73.7	1.38	94.7	3.43
E31 (8893830)		0.20	7.92	7.5	451	1.32	0.18	1.53	0.06	25.7	17.9	69.1	1.57	33.3	3.39
E32 (8893831)		0.28	5.90	2.1	508	0.91	0.13	1.31	0.06	22.0	5.27	45.3	1.15	6.8	2.22
E33 (8893832)		0.19	6.80	2.5	514	1.20	0.08	1.71	0.07	16.5	9.11	57.1	1.11	4.5	2.51
E34 (8893833)		0.17	7.00	1.6	546	1.46	0.07	1.65	0.07	18.8	9.34	56.0	1.19	5.4	2.13
E35 (8893834)		0.20	7.09	0.8	527	1.27	0.08	1.59	0.06	26.0	11.1	66.8	1.45	5.8	2.45
E36 (8893835)		0.44	7.37	5.9	483	1.33	0.14	1.35	0.09	25.1	16.5	75.7	2.14	17.0	3.41
E37 (8893836)		0.29	6.82	4.5	498	1.21	0.11	1.48	0.06	38.3	11.8	74.7	1.76	12.2	2.96
E38 (8893837)		0.20	7.12	4.4	557	1.29	0.09	1.43	0.05	40.5	10.2	65.5	1.42	13.9	2.31
E39 (8893838)		0.18	6.81	1.9	500	1.28	0.08	1.37	0.05	22.6	10.6	58.8	1.40	6.7	2.15
E40 (8893839)		0.16	8.23	1.7	690	1.39	0.07	1.80	0.03	21.3	9.63	53.1	1.20	5.9	2.25

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
E41 (8893840)		0.24	7.81	3.6	531	1.20	0.09	1.67	0.05	22.4	13.3	112	1.20	6.3	3.17
E42 (8893841)		0.30	6.90	7.2	444	1.48	0.12	1.90	0.09	25.4	19.8	135	1.87	17.4	4.32
E43 (8893842)		0.21	7.40	3.4	515	1.34	0.10	1.56	0.10	17.0	10.7	64.7	1.43	5.3	3.29
E44 (8893843)		0.25	6.71	4.7	477	1.13	0.12	1.30	0.11	22.3	7.86	65.8	1.81	10.2	3.43
E45 (8893844)		0.36	6.59	4.6	484	1.50	0.12	1.37	0.10	29.1	13.4	71.6	2.21	11.2	2.93
F1 (8893845)		0.18	6.53	3.5	497	1.42	0.07	1.25	0.07	21.7	11.0	50.4	1.47	4.9	2.05
F2 (8893846)		0.15	6.19	2.0	520	1.37	0.07	1.34	0.06	14.4	8.44	42.7	1.28	4.2	1.85
F3 (8893847)		0.19	6.51	2.9	446	1.40	0.08	1.46	0.06	31.7	12.1	72.1	1.40	6.8	2.82

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 02, 2018 SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
D5 (8893776)	17.3	0.38	3.2	0.034	1.41	18.0	23.1	0.72	451	0.76	1.61	6.9	61.5	751
D6 (8893777)	19.6	0.08	3.2	0.024	1.94	17.0	15.3	0.82	322	0.35	2.06	6.7	36.6	284
D7 (8893778)	18.7	0.34	3.1	0.026	2.08	14.5	19.5	0.77	335	0.44	2.00	6.7	35.8	343
D8 (8893779)	19.0	0.33	3.6	0.026	1.79	17.8	20.2	0.78	418	0.56	1.96	6.9	38.5	525
D9 (8893780)	16.8	0.48	3.1	0.026	1.66	13.6	18.7	0.72	378	0.56	1.80	6.4	35.5	496
D10 (8893781)	16.7	0.76	3.3	0.026	1.90	14.3	18.5	0.78	405	0.50	2.12	6.4	34.2	397
D11 (8893782)	19.8	0.81	3.7	0.030	1.81	16.5	28.5	0.84	407	0.75	1.91	7.0	42.4	639
D12 (8893783)	18.6	0.77	3.0	0.029	1.76	17.0	24.9	0.86	373	0.71	1.81	6.9	46.2	686
D13 (8893784)	19.3	0.57	3.0	0.023	2.11	14.9	18.9	0.80	304	0.36	2.02	6.8	35.6	207
D14 (8893785)	17.4	0.72	2.7	0.022	2.07	13.9	23.7	0.93	376	0.40	1.97	6.2	44.3	577
D15 (8893786)	21.3	0.45	2.8	0.031	1.94	13.9	29.8	1.03	416	0.71	1.84	6.9	51.1	1000
D16 (8893787)	20.0	0.74	2.3	0.028	1.71	12.3	32.7	0.82	403	0.71	1.57	6.3	45.4	1050
D17 (8893788)	18.3	0.22	3.3	0.021	1.95	14.7	19.2	0.73	362	0.47	1.82	6.2	23.5	230
D18 (8893789)	19.4	0.56	2.7	0.033	1.42	12.3	78.1	1.13	316	1.04	1.38	5.5	50.5	882
D19 (8893790)	19.1	0.29	3.8	0.024	1.84	11.4	23.2	0.64	323	0.63	1.87	6.8	33.6	269
D20 (8893791)	17.7	0.55	2.5	0.026	1.57	10.6	25.7	0.76	326	0.54	1.91	5.5	42.9	274
D21 (8893792)	18.6	<0.05	3.0	0.029	1.70	11.5	26.8	0.79	345	0.61	2.04	5.7	41.6	347
D22 (8893793)	18.9	<0.05	2.9	0.025	1.58	11.7	21.8	0.77	360	0.57	2.06	4.9	35.3	317
D23 (8893794)	20.0	0.24	3.2	0.028	1.40	14.0	18.4	0.55	298	0.91	1.61	6.0	18.4	989
D24 (8893795)	18.3	0.08	3.1	0.025	1.76	13.6	22.2	0.76	358	0.52	1.95	6.0	41.9	465
D25 (8893796)	21.7	<0.05	3.0	0.025	1.87	19.2	28.0	0.83	386	0.51	1.83	7.5	46.3	505
D26 (8893797)	20.3	1.31	3.3	0.035	1.79	20.4	36.8	1.18	622	1.28	1.62	8.6	68.1	1440
D27 (8893798)	17.9	0.64	2.5	0.033	1.51	12.1	28.8	0.81	488	0.82	1.64	5.7	45.6	1170
D28 (8893799)	19.8	0.44	2.6	0.028	1.77	12.0	26.9	0.76	355	0.79	1.95	6.6	46.9	619
E1 (8893800)	18.6	0.37	2.4	0.020	2.19	12.3	21.3	1.01	407	0.31	2.17	5.9	33.4	221
E2 (8893801)	19.9	0.33	2.4	0.023	2.04	15.3	19.7	0.93	333	0.31	2.00	6.0	33.7	195
E3 (8893802)	19.4	0.38	2.2	0.024	1.87	16.6	25.1	1.12	521	0.38	2.08	6.6	35.3	305
E4 (8893803)	19.0	0.27	2.6	0.023	1.79	18.5	19.0	1.10	555	0.46	2.24	6.2	36.2	467
E5 (8893804)	22.6	<0.05	2.6	0.027	2.15	23.0	24.1	1.28	588	0.41	2.21	7.0	41.8	523
E6 (8893805)	21.0	<0.05	2.7	0.025	1.97	14.0	28.1	1.13	475	0.44	2.10	6.9	38.8	212
E7 (8893806)	19.4	0.40	2.4	0.023	2.20	14.1	23.5	1.22	459	0.29	2.11	7.0	50.5	275
E8 (8893807)	20.7	<0.05	2.9	0.023	2.25	14.3	21.5	0.94	359	0.33	1.94	7.1	33.2	189

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
E9 (8893808)	22.0	<0.05	2.6	0.025	1.69	11.5	19.8	0.69	312	0.60	1.96	6.0	27.6	257
E10 (8893809)	20.6	0.58	1.9	0.028	1.59	8.0	30.4	0.82	356	0.75	1.91	5.7	39.0	532
E11 (8893810)	16.4	0.62	3.8	0.023	1.72	14.8	23.2	0.91	574	0.39	1.91	6.1	42.4	572
E12 (8893811)	18.1	0.43	2.4	0.024	2.11	9.6	32.5	1.20	505	0.39	2.01	5.2	50.2	773
E13 (8893812)	18.6	0.50	2.3	0.028	2.02	13.3	32.0	1.10	536	0.44	1.99	5.5	51.0	726
E14 (8893813)	17.3	0.63	2.2	0.028	1.95	12.3	36.7	1.17	621	0.37	2.04	5.1	55.9	2570
E15 (8893814)	17.7	0.48	2.2	0.030	1.93	11.9	37.8	1.14	541	0.66	1.48	6.8	59.4	3140
E16 (8893815)	17.5	0.20	3.4	0.021	1.97	15.9	19.6	0.86	404	0.42	2.13	6.1	36.4	590
E17 (8893816)	19.4	<0.05	3.2	0.028	1.90	14.1	26.8	0.72	560	0.50	1.82	7.1	33.5	797
E18 (8893817)	15.8	0.14	3.0	0.020	1.77	12.4	24.8	0.77	353	0.42	1.73	5.8	39.2	600
E19 (8893818)	16.9	0.17	3.3	0.031	2.13	16.5	25.6	0.98	453	0.53	2.11	10.5	42.6	910
E20 (8893819)	17.4	0.27	2.9	0.025	1.96	15.4	20.7	0.97	415	0.39	2.05	6.1	44.4	730
E21 (8893820)	18.6	<0.05	3.9	0.023	1.60	11.4	17.1	0.82	543	0.43	2.04	6.6	34.0	622
E22 (8893821)	17.8	<0.05	2.7	0.024	1.92	11.2	28.2	0.98	417	0.45	2.00	5.4	39.3	684
E23 (8893822)	16.6	<0.05	2.7	0.022	2.03	14.2	22.5	0.92	433	0.32	2.21	5.4	38.6	207
E24 (8893823)	17.7	<0.05	2.1	0.024	1.30	8.7	17.7	0.75	495	0.44	1.70	5.2	31.0	1010
E25 (8893824)	19.5	<0.05	2.6	0.022	1.67	9.0	12.3	0.59	283	0.53	2.05	5.4	21.0	177
E26 (8893825)	17.8	<0.05	2.8	0.031	1.58	11.7	26.9	0.79	359	0.58	1.80	5.2	32.2	448
E27 (8893826)	19.8	<0.05	2.6	0.029	1.55	10.9	32.3	0.70	315	0.80	1.95	5.3	36.4	280
E28 (8893827)	18.2	<0.05	2.2	0.017	1.58	8.0	16.1	0.54	252	0.43	2.16	3.9	24.7	176
E29 (8893828)	18.5	<0.05	2.6	0.022	1.73	11.0	19.3	0.58	289	0.52	2.14	4.9	26.5	269
E30 (8893829)	16.6	<0.05	2.7	0.023	1.80	14.4	25.0	0.90	463	0.45	2.54	4.0	41.1	397
E31 (8893830)	18.1	<0.05	2.6	0.030	1.56	11.4	22.8	0.86	396	0.60	2.09	4.8	35.1	362
E32 (8893831)	19.7	<0.05	3.7	0.019	1.59	10.7	11.1	0.45	294	0.55	1.95	7.2	14.5	216
E33 (8893832)	17.0	<0.05	1.7	0.018	1.72	6.9	14.3	0.67	461	0.29	2.49	3.4	22.3	605
E34 (8893833)	17.5	<0.05	1.4	0.018	1.80	8.6	12.5	0.71	346	0.28	2.59	4.7	25.3	386
E35 (8893834)	18.4	<0.05	2.6	0.020	1.76	11.0	15.0	0.75	370	0.33	2.31	4.6	28.7	414
E36 (8893835)	18.8	<0.05	2.5	0.028	1.68	11.1	25.5	0.81	400	0.63	1.76	5.8	45.8	764
E37 (8893836)	17.5	<0.05	3.1	0.021	1.72	17.6	17.4	0.71	372	0.45	1.98	5.5	34.0	348
E38 (8893837)	16.7	<0.05	2.8	0.020	2.06	12.0	14.6	0.78	321	0.24	2.32	4.6	29.4	265
E39 (8893838)	16.9	<0.05	2.4	0.018	1.67	9.6	15.4	0.64	296	0.40	2.05	4.3	33.1	332
E40 (8893839)	17.7	<0.05	2.4	0.017	2.21	7.7	13.8	0.78	335	0.26	2.99	3.9	25.5	177

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
E41 (8893840)		15.3	0.32	2.7	0.021	1.76	10.7	19.0	0.74	401	0.66	2.35	4.7	46.9	459
E42 (8893841)		17.4	0.13	2.4	0.033	1.34	12.7	30.2	1.66	550	0.68	1.77	5.2	49.0	747
E43 (8893842)		18.5	<0.05	1.9	0.021	1.73	8.2	17.8	0.66	405	0.43	2.28	4.4	24.0	1410
E44 (8893843)		18.5	0.05	2.4	0.025	1.57	10.7	21.8	0.56	342	0.67	1.73	5.1	20.9	1120
E45 (8893844)		21.1	<0.05	3.3	0.029	1.61	13.8	20.2	0.68	370	0.70	1.84	6.8	36.3	843
F1 (8893845)		17.9	<0.05	2.1	0.024	1.61	9.6	16.2	0.58	247	0.32	1.98	4.1	26.3	246
F2 (8893846)		18.3	<0.05	1.5	0.016	1.68	6.1	11.2	0.51	241	0.26	2.21	3.5	20.3	274
F3 (8893847)		18.5	<0.05	2.5	0.021	1.49	15.1	17.1	0.67	358	0.30	2.06	4.8	27.2	512

Certified By:

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282581

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 02, 2018 SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
D5 (8893776)	14.2	53.0	<0.002	0.06	0.25	11.0	1.7	1.6	261	0.50	0.24	6.3	0.40	0.21
D6 (8893777)	12.8	72.0	<0.002	0.03	0.12	11.2	1.0	1.1	310	0.51	0.08	5.4	0.29	0.31
D7 (8893778)	12.3	71.2	<0.002	0.03	0.13	10.7	1.2	1.0	306	0.52	0.05	4.1	0.32	0.31
D8 (8893779)	13.8	65.4	<0.002	0.04	0.15	11.1	1.2	1.1	301	0.54	0.09	5.4	0.39	0.26
D9 (8893780)	12.5	60.3	<0.002	0.03	0.13	10.6	1.1	1.5	279	0.48	0.05	4.2	0.35	0.24
D10 (8893781)	11.8	59.0	<0.002	0.04	0.17	10.3	0.9	1.0	320	0.50	0.04	4.4	0.37	0.25
D11 (8893782)	14.0	66.1	<0.002	0.07	0.14	11.6	1.1	1.2	303	0.53	0.06	5.5	0.39	0.27
D12 (8893783)	14.7	62.2	<0.002	0.05	0.13	11.4	1.3	1.1	280	0.50	0.03	4.7	0.34	0.27
D13 (8893784)	12.3	77.3	<0.002	0.03	0.12	11.1	0.8	1.2	296	0.50	0.04	3.9	0.32	0.31
D14 (8893785)	12.1	69.7	<0.002	0.04	0.14	10.7	1.0	1.0	297	0.45	0.04	3.6	0.35	0.28
D15 (8893786)	14.1	70.6	<0.002	0.06	0.21	12.1	1.2	1.2	283	0.53	0.06	3.9	0.35	0.29
D16 (8893787)	30.3	66.3	<0.002	0.07	0.21	11.2	1.6	1.2	245	0.47	0.07	3.7	0.36	0.28
D17 (8893788)	10.7	77.1	<0.002	0.03	0.17	11.3	1.2	1.2	279	0.47	0.05	5.2	0.39	0.28
D18 (8893789)	11.0	53.1	<0.002	0.05	0.15	13.8	1.0	1.1	218	0.41	0.04	4.1	0.32	0.21
D19 (8893790)	15.6	68.5	<0.002	0.03	0.33	10.2	1.1	1.2	291	0.62	0.08	4.3	0.36	0.28
D20 (8893791)	12.4	58.9	<0.002	0.04	0.21	10.6	1.2	1.2	285	0.51	0.05	3.9	0.30	0.23
D21 (8893792)	14.6	60.6	<0.002	0.06	0.16	13.1	1.1	1.0	307	0.52	0.04	4.2	0.34	0.25
D22 (8893793)	13.9	58.9	<0.002	0.07	0.17	11.8	0.8	1.0	297	0.46	0.02	5.0	0.31	0.24
D23 (8893794)	15.1	49.0	<0.002	0.05	0.25	11.6	1.4	1.4	243	0.48	0.05	4.9	0.35	0.21
D24 (8893795)	13.9	61.8	<0.002	0.04	0.14	10.7	1.2	1.1	307	0.49	0.04	4.1	0.32	0.25
D25 (8893796)	15.9	76.5	<0.002	0.03	0.18	11.3	1.0	1.4	279	0.63	0.06	7.4	0.37	0.30
D26 (8893797)	19.2	66.9	<0.002	0.05	0.32	14.5	1.3	1.4	257	0.65	0.12	9.0	0.64	0.26
D27 (8893798)	17.0	57.4	<0.002	0.06	0.24	11.0	1.2	1.3	263	0.45	0.04	4.2	0.36	0.22
D28 (8893799)	16.0	62.8	<0.002	0.04	0.27	10.4	1.3	1.9	305	0.49	0.05	3.4	0.35	0.25
E1 (8893800)	10.9	81.0	<0.002	0.03	0.10	10.4	1.0	1.0	329	0.44	0.04	3.5	0.34	0.30
E2 (8893801)	12.1	81.2	<0.002	0.03	0.11	10.7	0.6	1.1	285	0.47	0.02	9.2	0.31	0.30
E3 (8893802)	11.3	70.9	<0.002	0.03	0.12	12.8	0.7	1.0	320	0.51	0.02	4.6	0.40	0.28
E4 (8893803)	15.3	70.1	<0.002	0.04	0.19	13.4	1.1	1.2	350	0.47	0.06	5.3	0.42	0.26
E5 (8893804)	13.6	87.7	<0.002	0.03	0.17	14.7	0.9	1.2	320	0.54	0.04	7.6	0.36	0.37
E6 (8893805)	13.6	81.3	<0.002	0.03	0.19	12.9	0.7	1.1	304	0.51	0.02	3.7	0.41	0.32
E7 (8893806)	12.3	80.5	<0.002	0.03	0.12	12.4	0.9	1.1	286	0.53	0.11	4.5	0.33	0.33
E8 (8893807)	12.7	92.9	<0.002	0.03	0.14	11.1	0.7	1.1	281	0.55	0.03	3.8	0.35	0.38

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
E9 (8893808)		11.7	67.4	<0.002	0.04	0.11	10.8	0.9	1.1	296	0.47	0.04	3.6	0.33	0.28
E10 (8893809)		10.5	65.1	<0.002	0.05	0.17	10.7	1.2	1.0	292	0.42	0.05	2.7	0.38	0.24
E11 (8893810)		10.1	56.0	<0.002	0.04	0.23	11.3	1.1	1.0	302	0.59	0.09	8.0	0.43	0.25
E12 (8893811)		10.6	67.9	<0.002	0.05	0.25	11.9	1.1	1.0	313	0.46	0.07	3.1	0.40	0.25
E13 (8893812)		9.8	62.6	<0.002	0.04	0.21	11.3	1.1	1.0	314	0.46	0.07	5.4	0.49	0.23
E14 (8893813)		10.2	61.5	<0.002	0.05	0.26	10.5	1.0	0.9	336	0.42	0.07	4.7	0.38	0.24
E15 (8893814)		11.5	55.2	<0.002	0.07	0.22	11.1	1.5	0.9	242	0.48	0.11	4.0	0.44	0.22
E16 (8893815)		10.9	63.4	<0.002	0.04	0.12	10.4	1.1	0.9	323	0.49	0.04	5.2	0.36	0.26
E17 (8893816)		11.9	68.8	<0.002	0.04	0.24	10.1	1.3	1.5	277	0.54	0.04	4.3	0.42	0.29
E18 (8893817)		9.2	56.2	<0.002	0.04	0.12	8.6	0.9	1.0	263	0.46	0.03	3.6	0.34	0.25
E19 (8893818)		12.0	77.0	<0.002	0.05	0.19	9.4	0.7	1.9	372	0.71	0.03	6.8	0.39	0.26
E20 (8893819)		12.4	63.1	<0.002	0.04	0.10	11.4	1.3	1.0	303	0.44	0.04	6.2	0.36	0.26
E21 (8893820)		10.5	58.1	<0.002	0.04	0.11	11.2	1.3	1.0	331	0.63	0.05	4.2	0.43	0.25
E22 (8893821)		10.2	61.1	<0.002	0.04	0.13	11.4	1.5	0.9	299	0.49	0.03	3.6	0.36	0.25
E23 (8893822)		10.6	57.2	<0.002	0.03	0.10	10.8	0.6	0.9	335	0.46	0.02	3.9	0.34	0.25
E24 (8893823)		13.4	42.8	<0.002	0.04	0.13	9.4	0.8	0.9	227	0.42	0.03	2.5	0.34	0.19
E25 (8893824)		13.6	62.9	<0.002	0.03	0.26	9.1	0.8	0.8	311	0.47	0.07	2.5	0.28	0.27
E26 (8893825)		9.8	47.5	<0.002	0.04	0.20	10.0	1.3	1.7	261	0.44	0.06	4.0	0.36	0.21
E27 (8893826)		11.3	52.4	<0.002	0.04	0.16	9.8	0.9	0.9	285	0.48	0.06	3.3	0.35	0.23
E28 (8893827)		10.4	58.8	<0.002	0.02	0.09	7.4	0.6	0.7	320	0.32	0.04	2.2	0.21	0.25
E29 (8893828)		11.0	54.0	<0.002	0.04	0.37	7.9	1.0	0.8	334	0.42	0.04	3.8	0.31	0.24
E30 (8893829)		12.7	54.4	<0.002	0.04	0.15	11.6	1.0	0.8	355	0.35	0.02	4.2	0.34	0.23
E31 (8893830)		12.9	51.1	<0.002	0.05	0.14	11.3	1.3	0.8	298	0.44	0.01	8.5	0.33	0.24
E32 (8893831)		10.8	51.7	<0.002	0.03	0.32	8.2	1.0	1.1	286	0.67	0.09	4.3	0.38	0.26
E33 (8893832)		9.2	57.1	<0.002	0.03	0.19	8.3	0.9	0.8	379	0.38	0.03	2.4	0.26	0.24
E34 (8893833)		9.5	61.0	<0.002	0.03	0.23	8.2	0.8	0.8	383	0.48	0.04	2.4	0.23	0.24
E35 (8893834)		10.1	62.8	<0.002	0.03	0.11	9.7	0.9	1.1	340	0.43	0.03	4.3	0.28	0.25
E36 (8893835)		10.5	59.2	<0.002	0.06	0.16	10.1	1.3	0.9	269	0.50	0.05	3.9	0.33	0.24
E37 (8893836)		11.6	56.2	<0.002	0.04	0.11	9.3	0.8	1.0	300	0.50	0.05	6.6	0.33	0.26
E38 (8893837)		10.5	65.2	<0.002	0.03	0.10	8.5	0.8	0.8	321	0.41	0.03	4.3	0.27	0.28
E39 (8893838)		9.5	56.8	<0.002	0.03	0.15	8.2	0.7	0.7	301	0.38	0.03	2.8	0.25	0.25
E40 (8893839)		10.2	64.7	<0.002	0.04	0.06	8.8	0.8	0.7	446	0.38	0.03	2.7	0.27	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
E41 (8893840)		10.2	47.3	<0.002	0.04	0.11	9.2	1.1	0.8	355	0.47	<0.01	3.7	0.34	0.21
E42 (8893841)		10.2	45.3	<0.002	0.05	0.25	13.3	1.4	0.9	282	0.41	0.05	4.4	0.39	0.19
E43 (8893842)		10.0	53.7	<0.002	0.04	0.17	8.5	1.2	0.9	354	0.35	0.04	2.1	0.31	0.23
E44 (8893843)		11.3	51.3	<0.002	0.06	0.19	9.1	1.0	0.9	267	0.42	0.04	3.6	0.34	0.24
E45 (8893844)		13.5	67.8	<0.002	0.04	0.15	10.9	1.5	1.0	281	0.51	0.04	4.8	0.32	0.27
F1 (8893845)		11.0	64.0	<0.002	0.03	0.09	8.3	1.0	0.8	289	0.35	0.03	3.7	0.21	0.25
F2 (8893846)		10.3	66.6	<0.002	0.02	0.06	7.7	0.5	0.9	333	0.31	<0.01	2.0	0.20	0.26
F3 (8893847)		11.1	61.8	<0.002	0.03	0.10	10.6	0.8	0.7	321	0.43	0.01	5.1	0.28	0.25

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
D5 (8893776)	1.07	116	0.5	10.0	55.4	133
D6 (8893777)	0.851	73.8	0.4	9.2	29.5	130
D7 (8893778)	0.864	70.4	0.4	8.6	47.4	125
D8 (8893779)	0.993	94.8	0.5	10.4	59.9	150
D9 (8893780)	0.870	77.9	0.4	9.3	54.2	132
D10 (8893781)	0.871	72.2	0.4	8.2	67.8	140
D11 (8893782)	1.13	90.6	0.6	10.0	89.5	147
D12 (8893783)	0.942	83.0	0.5	8.8	56.3	123
D13 (8893784)	0.796	67.6	0.4	9.1	35.7	125
D14 (8893785)	0.820	73.2	0.4	8.1	62.9	110
D15 (8893786)	0.990	100	0.7	9.1	66.3	114
D16 (8893787)	0.911	93.7	0.5	8.8	112	91.6
D17 (8893788)	0.910	81.0	0.6	9.2	46.1	139
D18 (8893789)	0.799	131	0.5	7.1	100	109
D19 (8893790)	0.818	82.0	0.6	7.6	67.3	146
D20 (8893791)	0.796	84.1	0.5	7.5	45.7	98.5
D21 (8893792)	0.915	90.7	0.5	8.8	60.4	116
D22 (8893793)	0.951	94.4	0.5	8.3	44.6	116
D23 (8893794)	1.12	99.8	0.5	9.3	46.1	127
D24 (8893795)	0.853	81.6	0.4	8.3	63.0	127
D25 (8893796)	0.948	84.6	0.5	9.1	94.9	123
D26 (8893797)	1.42	150	0.7	11.3	83.8	141
D27 (8893798)	0.959	103	0.5	8.8	96.6	103
D28 (8893799)	0.967	88.9	0.4	8.9	113	108
E1 (8893800)	0.702	80.6	0.4	7.5	37.5	96.0
E2 (8893801)	0.848	74.3	0.4	8.4	36.0	97.2
E3 (8893802)	0.884	86.9	0.4	10.1	43.1	85.4
E4 (8893803)	0.905	97.7	0.4	11.0	37.9	105
E5 (8893804)	1.15	101	0.4	12.5	43.3	100
E6 (8893805)	0.874	101	0.5	10.0	51.3	108
E7 (8893806)	0.771	86.0	0.5	8.0	45.8	92.1
E8 (8893807)	0.845	80.1	0.5	8.3	37.5	109

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
E9 (8893808)		0.780	92.0	0.4	8.6	27.0	100
E10 (8893809)		0.684	106	0.5	7.0	45.9	78.5
E11 (8893810)		0.802	104	0.4	8.9	41.3	139
E12 (8893811)		0.749	98.9	0.6	8.4	53.8	88.5
E13 (8893812)		0.760	110	0.4	8.3	63.6	93.2
E14 (8893813)		0.708	90.7	0.4	7.6	75.0	69.8
E15 (8893814)		0.932	99.4	1.0	8.3	122	84.8
E16 (8893815)		0.869	78.3	0.4	8.9	52.6	137
E17 (8893816)		0.981	81.9	0.5	8.7	124	128
E18 (8893817)		0.811	68.7	0.4	7.2	112	118
E19 (8893818)		1.19	90.5	0.4	13.3	96.7	193
E20 (8893819)		0.892	83.8	0.5	9.0	45.5	123
E21 (8893820)		0.841	118	0.4	11.0	43.7	157
E22 (8893821)		0.860	97.3	0.4	8.5	78.5	109
E23 (8893822)		0.823	79.2	0.3	11.0	30.7	105
E24 (8893823)		0.685	82.6	0.4	7.5	63.7	83.7
E25 (8893824)		0.647	73.5	0.4	7.2	22.3	102
E26 (8893825)		0.822	99.8	0.4	7.8	38.2	104
E27 (8893826)		0.818	107	0.4	7.8	35.3	103
E28 (8893827)		0.602	75.7	0.2	6.5	18.2	86.4
E29 (8893828)		0.688	77.5	0.3	6.4	25.6	103
E30 (8893829)		0.842	93.7	0.4	10.6	31.9	104
E31 (8893830)		0.965	93.1	0.4	9.0	31.7	98.0
E32 (8893831)		0.910	78.9	0.6	7.1	29.3	139
E33 (8893832)		0.558	70.8	0.9	6.5	40.1	69.0
E34 (8893833)		1.50	66.1	0.3	7.5	24.8	54.6
E35 (8893834)		0.693	77.8	0.3	8.0	29.2	107
E36 (8893835)		0.847	85.1	0.4	7.8	51.3	101
E37 (8893836)		0.871	85.0	0.5	8.0	43.5	120
E38 (8893837)		0.747	68.6	0.4	7.3	24.1	117
E39 (8893838)		0.666	62.2	0.3	6.7	38.8	90.3
E40 (8893839)		0.544	61.9	0.4	6.1	24.9	95.1

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
E41 (8893840)		0.663	76.5	1.4	7.2	38.1	104
E42 (8893841)		0.780	122	0.3	8.1	96.5	99.1
E43 (8893842)		0.587	75.0	0.3	6.6	87.9	79.9
E44 (8893843)		0.819	86.7	0.4	7.4	118	95.4
E45 (8893844)		0.983	103	0.5	9.4	94.7	131
F1 (8893845)		0.691	62.4	0.3	6.4	22.4	84.4
F2 (8893846)		0.439	66.6	0.2	5.9	17.0	57.6
F3 (8893847)		0.680	92.5	0.3	9.1	25.0	93.8

Comments: RDL - Reported Detection Limit

8893776-8893847 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.   ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893776	0.54	0.54	0.0%	8893795	0.31	0.34	9.2%	8893815	0.33	0.35	5.9%	8893835	0.442	0.497	11.7%
Al	8893776	6.79	7.15	5.2%	8893795	7.34	7.47	1.8%	8893815	7.74	7.61	1.7%	8893835	7.37	7.07	4.2%
As	8893776	8.8	6.8	25.6%	8893795	3.3	3.2	3.1%	8893815	3.6	3.1	14.9%	8893835	5.9	6.0	1.7%
Ba	8893776	421	434	3.0%	8893795	512	511	0.2%	8893815	559	553	1.1%	8893835	483	468	3.2%
Be	8893776	1.30	1.38	6.0%	8893795	1.44	1.52	5.4%	8893815	1.32	1.48	11.4%	8893835	1.33	1.43	7.2%
Bi	8893776	0.27	0.21	25.0%	8893795	0.11	0.12	8.7%	8893815	0.10	0.11	9.5%	8893835	0.14	0.14	0.0%
Ca	8893776	1.28	1.32	3.1%	8893795	1.45	1.47	1.4%	8893815	1.61	1.58	1.9%	8893835	1.35	1.30	3.8%
Cd	8893776	0.122	0.103	16.9%	8893795	0.08	0.08	0.0%	8893815	0.07	0.08	13.3%	8893835	0.09	0.09	0.0%
Ce	8893776	37.6	41.0	8.7%	8893795	29.8	31.7	6.2%	8893815	35.2	40.3	13.5%	8893835	25.1	31.4	22.3%
Co	8893776	17.4	16.4	5.9%	8893795	17.1	17.7	3.4%	8893815	12.4	13.5	8.5%	8893835	16.5	17.6	6.5%
Cr	8893776	100	92.7	7.6%	8893795	76.6	70.3	8.6%	8893815	73.6	76.0	3.2%	8893835	75.7	77.1	1.8%
Cs	8893776	1.71	1.64	4.2%	8893795	1.99	2.36	17.0%	8893815	1.67	1.82	8.6%	8893835	2.14	2.26	5.5%
Cu	8893776	180	70.9		8893795	15.6	14.6	6.6%	8893815	14.5	15.2	4.7%	8893835	17.0	17.1	0.6%
Fe	8893776	4.24	4.36	2.8%	8893795	3.06	3.00	2.0%	8893815	2.83	2.77	2.1%	8893835	3.41	3.25	4.8%
Ga	8893776	17.3	16.3	6.0%	8893795	18.3	19.5	6.3%	8893815	17.5	19.3	9.8%	8893835	18.8	20.3	7.7%
Ge	8893776	0.38	0.73		8893795	0.08	0.10	22.2%	8893815	0.20	0.21	4.9%	8893835	< 0.05	< 0.05	0.0%
Hf	8893776	3.2	3.7	14.5%	8893795	3.1	3.7	17.6%	8893815	3.4	3.8	11.1%	8893835	2.5	2.8	11.3%
In	8893776	0.0337	0.0261	25.4%	8893795	0.025	0.031		8893815	0.021	0.03	35.3%	8893835	0.028	0.028	0.0%
K	8893776	1.41	1.48	4.8%	8893795	1.76	1.74	1.1%	8893815	1.97	1.94	1.5%	8893835	1.68	1.56	7.4%
La	8893776	18.0	19.3	7.0%	8893795	13.6	14.6	7.1%	8893815	15.9	18.4	14.6%	8893835	11.1	13.6	20.2%
Li	8893776	23.1	23.4	1.3%	8893795	22.2	22.2	0.0%	8893815	19.6	19.3	1.5%	8893835	25.5	24.6	3.6%
Mg	8893776	0.72	0.74	2.7%	8893795	0.76	0.75	1.3%	8893815	0.865	0.845	2.3%	8893835	0.806	0.759	6.0%
Mn	8893776	451	452	0.2%	8893795	358	356	0.6%	8893815	404	390	3.5%	8893835	400	379	5.4%
Mo	8893776	0.76	0.96	23.3%	8893795	0.52	0.61	15.9%	8893815	0.42	0.47	11.2%	8893835	0.634	0.667	5.1%
Na	8893776	1.61	1.69	4.8%	8893795	1.95	1.99	2.0%	8893815	2.13	2.10	1.4%	8893835	1.76	1.69	4.1%
Nb	8893776	6.86	6.30	8.5%	8893795	6.0	6.8	12.5%	8893815	6.1	6.6	7.9%	8893835	5.8	6.1	5.0%
Ni	8893776	61.5	47.5	25.7%	8893795	41.9	39.8	5.1%	8893815	36.4	37.9	4.0%	8893835	45.8	46.6	1.7%
P	8893776	751	751	0.0%	8893795	465	455	2.2%	8893815	590	635	7.3%	8893835	764	800	4.6%
Pb	8893776	14.2	13.5	5.1%	8893795	13.9	15.6	11.5%	8893815	10.9	11.4	4.5%	8893835	10.5	11.6	10.0%
Rb	8893776	53.0	50.2	5.4%	8893795	61.8	69.6	11.9%	8893815	63.4	65.6	3.4%	8893835	59.2	64.7	8.9%
Re	8893776	< 0.002	0.005		8893795	< 0.002	< 0.002	0.0%	8893815	< 0.002	< 0.002	0.0%	8893835	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893776	0.06	0.05	18.2%	8893795	0.04	0.04	0.0%	8893815	0.04	0.04	0.0%	8893835	0.055	0.054	1.8%
Sb	8893776	0.25	0.26	3.9%	8893795	0.14	0.15	6.9%	8893815	0.12	0.13	8.0%	8893835	0.164	0.197	18.3%
Sc	8893776	11.0	10.7	2.8%	8893795	10.7	11.2	4.6%	8893815	10.4	11.1	6.5%	8893835	10.1	10.8	6.7%
Se	8893776	1.7	1.1		8893795	1.2	1.5	22.2%	8893815	1.1	1.3	16.7%	8893835	1.33	1.55	15.3%
Sn	8893776	1.6	1.3	20.7%	8893795	1.1	1.3	16.7%	8893815	0.9	1.0	10.5%	8893835	0.9	1.0	10.5%
Sr	8893776	261	265	1.5%	8893795	307	311	1.3%	8893815	323	318	1.6%	8893835	269	256	5.0%
Ta	8893776	0.504	0.594	16.4%	8893795	0.49	0.50	2.0%	8893815	0.49	0.52	5.9%	8893835	0.501	0.539	7.3%
Te	8893776	0.24	0.14		8893795	0.04	0.03	28.6%	8893815	0.04	0.05		8893835	0.05	0.05	0.0%
Th	8893776	6.28	7.36	15.8%	8893795	4.1	4.6	11.5%	8893815	5.2	4.9	5.9%	8893835	3.9	5.1	26.7%
Ti	8893776	0.40	0.40	0.0%	8893795	0.32	0.32	0.0%	8893815	0.36	0.35	2.8%	8893835	0.326	0.317	2.8%
Tl	8893776	0.21	0.21	0.0%	8893795	0.25	0.29	14.8%	8893815	0.26	0.28	7.4%	8893835	0.241	0.259	7.2%
U	8893776	1.07	1.27	17.1%	8893795	0.853	0.94	9.7%	8893815	0.869	0.889	2.3%	8893835	0.847	1.09	25.1%
V	8893776	116	107	8.1%	8893795	81.6	93.8	13.9%	8893815	78.3	80.6	2.9%	8893835	85.1	98.8	14.9%
W	8893776	0.5	0.5	0.0%	8893795	0.4	0.3		8893815	0.4	0.5	22.2%	8893835	0.4	0.5	22.2%
Y	8893776	10.0	10.4	3.9%	8893795	8.3	9.3	11.4%	8893815	8.9	9.6	7.6%	8893835	7.82	8.71	10.8%
Zn	8893776	55.4	52.8	4.8%	8893795	63.0	63.0	0.0%	8893815	52.6	52.0	1.1%	8893835	51.3	53.1	3.4%
Zr	8893776	133	149	11.3%	8893795	127	131	3.1%	8893815	137	151	9.7%	8893835	101	108	6.7%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	11.37	104%	90% - 110%	6.96	7.34	106%	90% - 110%								
As					124	133	107%	90% - 110%								
Ba	340	346	102%	90% - 110%	186	191	102%	90% - 110%								
Be	2.6	3.0	115%	90% - 110%												
Ca	5.72	5.9	103%	90% - 110%	4.01	4.25	106%	90% - 110%								
Ce	122	118	96%	90% - 110%	24	21.8	91%	90% - 110%								
Co	2.8	2.7	96%	90% - 110%	22.1	24.3	109%	90% - 110%								
Cs	1.5	1.7	113%	90% - 110%												
Cu	7	8	108%	90% - 110%	88.6	96.9	109%	90% - 110%								
Fe	4.34	4.25	98%	90% - 110%	7.56	7.73	102%	90% - 110%								
Ga	35	38	108%	90% - 110%												
K	1.37	1.5	109%	90% - 110%	2.021	2.147	106%	90% - 110%								
La	58	52.2	90%	90% - 110%												
Li	37	40	108%	90% - 110%												
Mg	0.325	0.325	100%	90% - 110%	2.412	2.575	107%	90% - 110%								
Mn					1510	1556	103%	90% - 110%								
Na	5.267	5.693	108%	90% - 110%	0.617	0.674	109%	90% - 110%								
Nb	13	13	99%	90% - 110%												
Ni	9	7	80%	90% - 110%	77.1	73.7	96%	90% - 110%								
P					892	935	104%	90% - 110%								
Pb	10	9	90%	90% - 110%												
Rb	55	60	109%	90% - 110%												
S					0.348	0.382	109%	90% - 110%								
Sc	1.1	1.2	109%	90% - 110%												
Sr	1191	1282	107%	90% - 110%	92.8	99.5	107%	90% - 110%								
Ta	0.9	0.9	100%	90% - 110%												
Th	1.4	1.2	85%	90% - 110%												
Ti	0.172	0.179	104%	90% - 110%												
V	8	7	83%	90% - 110%					77	85	110%	90% - 110%	8	8	96%	90% - 110%
Y	119	126	105%	90% - 110%												
Zn	93	87	93%	90% - 110%	208	208	100%	90% - 110%								

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282581

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

	CRM #5 (ref.Till-2)				CRM #6 (ref.SY-4)				CRM #7 (ref.GTS-2A)							
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits				
Al	8.17	8.9	109%	90% - 110%	10.95	10.59	97%	90% - 110%	6.96	6.77	97%	90% - 110%				
Ba	540	556	103%	90% - 110%	340	328	97%	90% - 110%	186	180	97%	90% - 110%				
Be	4.0	3.9	97%	90% - 110%	2.6	2.9	112%	90% - 110%								
Ca	0.907	1.001	110%	90% - 110%	5.72	5.4	94%	90% - 110%	4.01	3.92	98%	90% - 110%				
Ce	98	98.6	101%	90% - 110%	122	111	91%	90% - 110%	24	21.6	90%	90% - 110%				
Co					2.8	2.5	89%	90% - 110%	22.1	24	108%	90% - 110%				
Cr	60.3	60.4	100%	90% - 110%												
Cs	12	14	116%	90% - 110%	1.5	1.7	113%	90% - 110%								
Cu	150	162	108%	90% - 110%					88.6	88.4	100%	90% - 110%				
Fe	3.77	4.02	107%	90% - 110%	4.34	4.1	94%	90% - 110%	7.56	7.15	95%	90% - 110%				
Ga					35	39	111%	90% - 110%								
K					1.37	1.39	101%	90% - 110%	2.021	2.005	99%	90% - 110%				
La	44	40.1	91%	90% - 110%	58	45.6	79%	90% - 110%								
Li	47	50	107%	90% - 110%	37	40	108%	90% - 110%								
Mg	1.10	1.15	104%	90% - 110%	0.325	0.298	92%	90% - 110%	2.412	2.375	98%	90% - 110%				
Mn	780	799	102%	90% - 110%					1510	1453	96%	90% - 110%				
Mo	14	12	85%	90% - 110%												
Na	1.624	1.733	106%	90% - 110%	5.267	5.547	105%	90% - 110%	0.617	0.624	101%	90% - 110%				
Nb	20	18	90%	90% - 110%	13	12	89%	90% - 110%								
Ni	32	33	103%	90% - 110%	9	7	78%	90% - 110%	77.1	69.1	90%	90% - 110%				
P									892	966	108%	90% - 110%				
Pb	31	27	89%	90% - 110%	10	8	81%	90% - 110%								
Rb					55	61	110%	90% - 110%								
S									0.348	0.379	109%	90% - 110%				
Sb	0.8	0.8	100%	90% - 110%												
Sc	12	14	116%	90% - 110%	1.1	0.9	86%	90% - 110%								
Sr	144	157	109%	90% - 110%	1191	1250	105%	90% - 110%	92.8	92.3	99%	90% - 110%				
Ta	1.9	1.4	73%	90% - 110%	0.9	1	106%	90% - 110%								
Th	18.4	16.4	89%	90% - 110%												
Ti	0.53	0.5	95%	90% - 110%	0.172	0.167	97%	90% - 110%								
U	5.7	4.1	72%	90% - 110%												
V					8	7	81%	90% - 110%								

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

W	5	4	88%	90% - 110%												
Y					119	98	82%	90% - 110%								
Zn	130	122	94%	90% - 110%	93	83	89%	90% - 110%	208	199	96%	90% - 110%				

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
AGAT WORK ORDER: 17T282581
PROJECT:
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLING SITE:
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282583
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 08, 2018
PAGES (INCLUDING COVER):	18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
F4 (8893859)		0.17	6.20	1.7	478	1.12	0.10	1.64	0.04	20.6	9.79	48.2	1.19	23.5	2.20
F5 (8893860)		0.13	6.52	3.2	539	1.27	0.11	1.68	0.03	35.6	11.7	55.2	1.45	35.6	2.40
F6 (8893861)		0.18	5.70	3.4	435	1.17	0.11	1.59	0.03	23.7	9.17	44.6	0.95	54.1	2.21
F7 (8893862)		0.14	6.58	2.8	498	1.26	0.09	1.42	0.04	19.8	10.6	44.3	1.21	14.8	2.39
F8 (8893863)		0.24	6.37	1.9	505	1.49	0.09	1.40	0.05	21.3	9.44	38.0	1.21	9.8	2.26
F9 (8893864)		0.21	6.55	2.5	480	1.33	0.10	1.47	0.07	21.3	10.9	71.2	1.39	8.8	3.01
F10 (8893865)		0.31	8.59	2.7	563	1.42	0.13	1.88	0.11	50.4	16.0	94.1	1.74	11.9	3.85
F11 (8893866)		0.31	7.24	2.0	469	1.30	0.10	1.41	0.09	25.9	12.7	79.3	1.46	15.4	3.31
F12 (8893867)		0.36	7.12	2.8	442	1.10	0.14	1.36	0.07	19.5	11.7	80.3	1.47	14.5	3.87
F13 (8893868)		0.29	6.92	3.6	449	1.33	0.11	1.41	0.06	21.4	12.7	71.5	1.56	15.1	3.21
F14 (8893869)		0.22	6.34	1.8	423	1.13	0.11	1.37	0.07	27.4	9.43	60.5	1.24	9.3	2.95
F15 (8893870)		0.40	6.72	2.4	431	1.23	0.09	1.36	0.05	17.3	9.35	65.1	1.26	10.0	2.89
F16 (8893871)		0.17	6.41	2.5	441	1.22	0.08	1.44	0.05	39.0	10.3	54.0	1.03	8.1	2.79
F17 (8893872)		0.15	6.14	1.7	424	1.11	0.10	1.62	0.07	27.9	10.7	81.6	0.93	7.5	3.41
F18 (8893873)		0.21	6.50	2.7	521	1.23	0.12	1.36	0.04	21.3	8.96	43.7	0.95	7.9	2.10
F19 (8893874)		0.44	5.99	4.0	419	1.09	0.12	1.33	0.09	21.1	9.39	57.5	1.15	10.9	2.64
F20 (8893875)		0.23	7.19	4.4	575	1.31	0.15	1.67	0.07	29.9	10.6	53.5	1.59	26.9	2.51
F21 (8893876)		0.14	6.06	1.8	499	1.15	0.08	1.53	0.05	16.8	8.18	40.6	0.86	7.0	2.25
F22 (8893877)		0.27	6.59	2.5	429	1.12	0.12	1.49	0.08	20.5	11.0	64.1	0.99	9.7	3.07
F23 (8893878)		0.25	6.48	3.2	499	1.22	0.13	1.44	0.06	25.7	10.2	52.3	1.26	28.1	2.43
F24 (8893879)		0.38	5.45	5.7	434	0.99	0.27	1.21	0.09	23.4	8.79	44.5	1.34	46.3	2.38
F25 (8893880)		0.36	6.19	4.1	431	1.13	0.20	1.25	0.08	24.9	10.9	57.3	1.51	18.2	3.28
F26 (8893881)		0.27	7.71	6.7	577	1.37	0.18	1.79	0.07	38.4	13.7	62.5	1.66	72.7	3.31
F27 (8893882)		0.33	6.59	13.1	477	1.21	0.11	1.48	0.06	25.3	12.4	48.0	1.09	15.6	2.61
F28 (8893883)		0.76	6.33	4.9	418	1.10	0.15	1.27	0.10	25.0	11.5	62.1	1.62	18.7	3.08
F29 (8893884)		0.21	6.63	3.2	451	1.01	0.17	1.30	0.06	19.8	9.49	42.5	1.05	6.7	2.37
F30 (8893885)		0.55	7.09	7.3	354	1.18	0.21	1.09	0.09	23.9	13.0	70.4	1.84	24.3	4.69
F31 (8893886)		0.28	6.36	4.3	452	1.29	0.10	1.47	0.06	55.1	10.9	53.9	1.18	20.2	2.51
F32 (8893887)		0.30	6.14	1.7	478	1.05	0.10	1.36	0.07	24.1	7.63	48.0	1.18	7.6	2.13
F33 (8893888)		0.17	6.32	2.0	490	1.19	0.09	1.32	0.02	21.5	7.51	39.6	1.01	6.0	2.19
F34 (8893889)		0.26	7.16	1.8	451	1.23	0.10	1.28	0.07	23.2	9.48	60.1	1.18	6.4	3.12
F35 (8893890)		0.34	6.32	2.2	480	1.08	0.10	1.55	0.07	23.6	8.12	53.1	1.11	5.8	2.65

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
F36 (8893891)		0.22	6.69	1.6	489	1.15	0.10	1.31	0.08	27.6	10.1	71.0	1.47	8.6	2.46
F37 (8893892)		0.28	6.43	2.1	460	1.14	0.14	1.21	0.08	22.9	12.3	75.2	1.63	8.4	3.09
F38 (8893893)		0.23	6.59	2.7	497	1.10	0.12	1.44	<0.02	41.4	11.5	58.4	1.20	9.7	2.75
F39 (8893894)		1.28	6.65	2.3	482	1.15	0.11	1.37	0.07	22.7	11.3	69.9	1.29	11.1	2.79
F40 (8893895)		0.21	6.14	1.7	460	1.13	0.09	1.39	0.07	26.1	8.87	76.7	1.24	6.3	2.59
F41 (8893896)		0.26	5.58	1.8	346	0.88	0.11	1.04	0.07	22.3	10.5	49.6	1.34	9.9	2.68
F42 (8893897)		0.32	6.94	4.2	458	1.13	0.15	1.28	0.08	28.9	13.0	83.7	1.72	19.3	3.93
F43 (8893898)		0.30	7.40	5.5	408	1.26	0.21	1.19	0.26	27.1	14.4	80.4	1.90	16.5	3.98
F44 (8893899)		0.35	6.47	6.5	518	1.28	0.16	1.40	0.12	29.4	9.76	63.7	1.77	8.2	2.66
F45 (8893900)		0.34	5.64	5.0	435	1.01	0.15	1.29	0.07	24.2	11.4	69.7	1.46	11.5	3.60
F46 (8893901)		0.24	6.29	14.4	514	1.08	0.20	1.40	0.20	29.5	11.4	67.4	2.00	12.5	3.51
G1 (8893902)		0.09	6.31	1.5	494	1.05	0.07	1.59	0.04	34.7	8.78	71.9	1.06	11.3	2.71
G2 (8893903)		0.14	6.12	2.2	487	0.99	0.09	1.44	0.07	30.1	8.70	63.9	1.21	6.4	2.86
G3 (8893904)		0.20	6.42	2.9	472	1.12	0.08	1.50	0.05	19.7	9.21	55.4	1.00	6.5	2.37
G4 (8893905)		0.17	6.49	1.4	465	1.26	0.07	1.53	0.07	22.2	8.40	49.2	0.95	5.3	2.35
G5 (8893906)		0.24	6.32	1.8	470	1.14	0.08	1.55	0.06	28.8	9.44	79.1	1.09	6.3	2.77
G6 (8893907)		0.27	6.61	0.9	476	1.10	0.11	1.52	0.09	19.7	7.51	61.6	1.15	6.6	3.07
G7 (8893908)		0.15	6.54	1.3	474	1.18	0.08	1.39	0.07	24.9	8.20	55.3	1.08	6.6	2.29
G8 (8893909)		0.12	6.65	1.8	495	1.05	0.09	1.32	0.07	22.7	7.14	48.3	1.15	4.0	2.41
G9 (8893910)		0.26	6.47	3.1	461	1.24	0.09	1.40	0.07	20.3	9.65	52.0	1.12	6.8	2.16
G10 (8893911)		0.27	6.20	3.7	430	1.18	0.10	1.52	0.09	26.2	10.7	66.4	1.11	9.3	3.23
G11 (8893912)		0.17	6.68	1.8	475	1.26	0.08	1.51	0.09	36.3	8.85	59.5	1.13	5.7	2.48
G12 (8893913)		0.14	6.01	1.1	493	1.25	0.08	1.56	0.04	37.6	7.70	54.9	1.17	7.5	2.00
G13 (8893914)		2.23	6.06	1.6	495	1.16	0.08	1.46	0.04	23.7	5.58	56.9	1.15	3.3	2.13
G14 (8893915)		0.10	6.31	2.9	476	1.24	0.06	1.45	0.04	20.3	8.23	54.7	0.94	5.0	2.06
G15 (8893916)		0.67	6.63	4.9	490	1.29	0.13	1.52	0.06	42.9	11.6	69.1	1.46	19.9	2.61
G16 (8893917)		0.14	6.49	3.3	493	1.30	0.09	1.49	0.05	28.8	11.7	49.9	1.13	10.0	2.32
G17 (8893918)		0.16	6.47	2.2	499	1.17	0.10	1.35	0.06	20.0	12.3	50.8	1.30	7.5	2.72
G18 (8893919)		0.13	6.38	3.8	478	1.15	0.16	1.42	0.06	26.1	11.8	65.3	1.52	16.4	3.38
G19 (8893920)		0.23	6.12	4.7	429	1.33	0.13	1.33	0.06	48.6	13.6	61.9	1.24	28.2	2.58
G20 (8893921)		0.34	6.47	3.3	475	1.12	0.12	1.44	0.09	27.4	10.3	57.4	1.55	6.8	2.60
G21 (8893922)		0.17	6.06	2.4	462	1.11	0.12	1.25	0.06	26.9	7.02	59.3	1.06	5.0	2.77

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
G22 (8893923)		0.18	6.44	6.0	454	1.48	0.16	1.41	0.06	36.8	14.5	65.3	1.33	21.1	2.31
G23 (8893924)		0.15	6.47	2.1	450	1.33	0.08	1.52	0.06	27.5	9.10	55.4	0.93	5.4	2.47
G24 (8893925)		0.26	5.80	4.5	367	0.95	0.20	0.98	0.21	20.1	7.16	60.5	1.37	14.4	3.91
G25 (8893926)		0.11	6.08	2.4	504	1.23	0.08	1.55	0.02	25.1	8.59	31.6	1.00	10.7	1.75
G26 (8893927)		0.26	6.38	3.6	474	1.27	0.08	1.53	0.05	31.4	9.99	60.9	1.05	6.5	2.31
G27 (8893928)		0.23	6.74	3.5	483	1.33	0.08	1.47	0.07	23.7	10.9	49.3	1.05	5.0	2.31
G28 (8893929)		0.17	6.48	2.0	487	1.25	0.10	1.55	0.05	18.5	9.46	49.3	1.15	3.5	2.60
G29 (8893930)		0.17	6.48	3.2	447	1.33	0.15	1.34	0.05	48.9	17.1	70.0	1.48	17.1	2.98

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
F4 (8893859)	15.1	<0.05	1.9	0.027	1.57	10.2	18.0	0.84	346	0.33	2.12	5.6	31.6	371
F5 (8893860)	16.5	<0.05	2.6	0.024	1.88	18.8	19.6	1.00	355	0.32	2.17	7.3	35.8	411
F6 (8893861)	12.7	<0.05	2.0	0.025	1.37	10.7	15.7	0.80	358	0.33	2.04	4.5	34.6	364
F7 (8893862)	14.4	<0.05	2.2	0.023	1.52	8.4	17.5	0.66	275	0.51	2.07	5.3	33.8	327
F8 (8893863)	14.2	<0.05	1.6	0.022	1.61	10.1	15.4	0.59	284	0.33	2.15	4.5	27.8	606
F9 (8893864)	15.3	<0.05	2.3	0.029	1.50	9.4	16.8	0.74	424	0.41	1.94	6.2	32.3	608
F10 (8893865)	19.3	<0.05	2.5	0.036	1.79	25.2	27.9	1.01	555	0.47	2.47	8.1	44.7	3250
F11 (8893866)	16.0	<0.05	2.5	0.030	1.44	12.9	21.2	0.72	344	0.53	1.83	6.4	40.1	977
F12 (8893867)	16.2	<0.05	3.4	0.033	1.34	9.3	26.0	0.70	390	0.66	1.77	7.1	38.1	936
F13 (8893868)	15.9	<0.05	3.1	0.032	1.40	10.6	21.5	0.81	438	0.50	1.85	7.8	39.6	865
F14 (8893869)	14.9	<0.05	2.1	0.026	1.32	13.4	17.4	0.64	376	0.48	1.85	6.2	31.5	637
F15 (8893870)	14.7	<0.05	2.6	0.030	1.37	8.5	18.9	0.62	309	0.47	1.87	5.6	29.7	660
F16 (8893871)	14.6	<0.05	2.1	0.026	1.41	18.7	15.7	0.69	330	0.48	2.00	5.1	29.5	467
F17 (8893872)	14.5	<0.05	4.4	0.025	1.37	12.7	12.3	0.68	467	0.37	1.97	6.5	30.5	723
F18 (8893873)	14.5	<0.05	2.4	0.022	1.66	9.2	12.5	0.56	270	0.35	2.11	4.3	26.8	312
F19 (8893874)	12.7	<0.05	3.0	0.029	1.28	10.2	14.8	0.61	305	0.52	1.72	5.7	26.7	528
F20 (8893875)	17.0	<0.05	2.5	0.030	1.77	13.3	19.5	0.83	374	0.56	2.45	6.4	35.4	391
F21 (8893876)	13.9	<0.05	1.9	0.020	1.54	7.0	11.8	0.58	330	0.38	2.25	4.6	22.4	370
F22 (8893877)	13.4	<0.05	2.0	0.030	1.30	9.8	14.4	0.71	373	0.56	1.94	5.0	30.4	558
F23 (8893878)	16.1	<0.05	3.1	0.030	1.55	11.5	15.2	0.61	294	0.63	2.08	6.5	26.7	250
F24 (8893879)	15.4	<0.05	2.8	0.034	1.35	11.0	18.4	0.53	346	0.81	1.63	7.3	26.6	266
F25 (8893880)	16.9	<0.05	3.0	0.033	1.37	12.1	22.2	0.57	301	0.73	1.71	7.4	27.0	366
F26 (8893881)	19.2	<0.05	3.7	0.036	1.83	19.3	20.8	0.89	367	0.77	2.37	8.4	42.5	277
F27 (8893882)	14.5	<0.05	2.7	0.028	1.48	10.3	14.7	0.68	313	0.56	2.12	5.5	29.4	263
F28 (8893883)	14.7	<0.05	3.2	0.034	1.36	11.2	18.4	0.65	322	0.79	1.74	6.6	31.0	387
F29 (8893884)	15.1	<0.05	2.7	0.026	1.42	10.3	14.9	0.53	262	0.70	1.90	6.3	23.6	350
F30 (8893885)	15.7	<0.05	2.5	0.048	1.29	11.5	24.5	0.74	397	1.24	1.49	6.6	32.7	1100
F31 (8893886)	14.8	<0.05	2.9	0.026	1.51	17.6	13.2	0.71	332	0.55	2.03	6.5	29.4	544
F32 (8893887)	13.8	<0.05	2.7	0.027	1.54	11.4	12.7	0.56	270	0.57	1.89	6.4	24.6	340
F33 (8893888)	14.8	<0.05	2.3	0.023	1.14	10.0	12.7	0.51	281	0.40	2.03	5.2	22.7	329
F34 (8893889)	15.3	<0.05	2.5	0.034	1.34	11.5	19.4	0.60	327	0.59	1.75	7.2	29.0	669
F35 (8893890)	15.4	<0.05	4.1	0.026	1.48	10.9	12.9	0.62	351	0.41	2.14	18.3	23.2	571

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
F36 (8893891)		14.6	<0.05	2.2	0.027	1.54	13.5	17.4	0.72	330	0.47	1.85	5.3	33.9	538
F37 (8893892)		17.1	<0.05	2.3	0.033	1.49	11.6	22.8	0.65	317	0.71	1.61	6.8	34.8	608
F38 (8893893)		14.1	<0.05	3.1	0.025	1.55	20.2	14.4	0.73	357	1.45	1.96	5.6	36.2	455
F39 (8893894)		14.8	<0.05	2.6	0.030	1.55	10.2	17.7	0.71	332	0.51	1.84	5.9	33.9	524
F40 (8893895)		13.9	<0.05	2.8	0.025	1.45	11.8	13.5	0.64	349	0.49	1.88	5.3	27.6	517
F41 (8893896)		12.8	<0.05	0.6	0.029	1.12	10.9	18.1	0.57	244	0.62	1.17	2.3	31.0	813
F42 (8893897)		16.3	<0.05	2.8	0.036	1.46	14.4	24.0	0.73	352	0.80	1.63	7.2	43.6	892
F43 (8893898)		15.5	<0.05	2.6	0.042	1.28	13.9	23.7	0.69	382	0.97	1.46	7.2	33.1	2070
F44 (8893899)		15.3	<0.05	2.9	0.035	1.68	14.7	17.3	0.67	425	0.71	1.83	6.7	32.5	1480
F45 (8893900)		15.0	<0.05	2.0	0.030	1.33	11.9	18.0	0.63	371	0.72	1.75	5.8	27.1	965
F46 (8893901)		17.3	<0.05	2.5	0.036	1.64	13.0	24.6	0.76	471	0.66	1.77	7.9	34.1	2000
G1 (8893902)		14.0	<0.05	1.6	0.023	1.51	13.2	12.5	0.80	397	0.25	2.15	3.9	28.7	390
G2 (8893903)		16.4	<0.05	2.3	0.028	1.49	12.8	14.5	0.66	390	0.35	2.01	5.8	27.1	608
G3 (8893904)		13.8	<0.05	1.5	0.020	1.47	9.0	15.3	0.68	352	0.28	2.13	4.2	32.6	666
G4 (8893905)		14.0	<0.05	1.7	0.021	1.44	11.2	12.6	0.66	343	0.31	2.19	4.1	26.7	521
G5 (8893906)		14.5	<0.05	2.3	0.026	1.50	12.5	14.1	0.67	378	0.34	2.11	5.4	26.9	633
G6 (8893907)		17.5	<0.05	2.4	0.025	1.50	8.8	14.8	0.65	382	0.36	2.08	19.4	23.5	1210
G7 (8893908)		14.3	<0.05	2.1	0.023	1.52	12.3	14.8	0.57	286	0.37	2.00	4.7	27.8	732
G8 (8893909)		14.7	<0.05	2.2	0.027	1.56	11.2	16.3	0.55	296	0.46	1.94	4.9	25.3	422
G9 (8893910)		13.8	<0.05	1.6	0.023	1.47	10.0	14.6	0.62	300	0.35	2.02	4.7	29.1	468
G10 (8893911)		16.1	<0.05	2.3	0.028	1.34	12.0	15.3	0.71	473	0.46	1.93	5.6	28.0	1150
G11 (8893912)		15.4	<0.05	1.9	0.025	1.47	18.8	14.9	0.64	372	0.41	2.10	4.4	29.8	732
G12 (8893913)		14.2	<0.05	2.0	0.022	1.57	14.3	11.3	0.64	505	0.28	2.19	4.6	22.1	235
G13 (8893914)		15.8	<0.05	2.1	0.023	1.51	12.0	12.7	0.47	277	0.57	2.20	5.2	15.8	204
G14 (8893915)		13.7	<0.05	1.5	0.021	1.51	8.7	11.5	0.58	291	0.34	2.14	3.6	25.2	411
G15 (8893916)		14.9	<0.05	2.5	0.030	1.49	23.5	22.2	0.69	427	0.56	1.92	7.1	34.5	373
G16 (8893917)		14.5	<0.05	2.1	0.025	1.60	9.4	12.8	0.67	329	0.40	2.13	4.5	30.1	359
G17 (8893918)		15.3	<0.05	2.6	0.027	1.53	9.7	20.7	0.59	275	0.62	1.88	6.2	31.4	282
G18 (8893919)		17.3	<0.05	2.8	0.030	1.56	10.3	18.7	0.75	351	0.51	2.00	7.4	31.2	239
G19 (8893920)		14.2	<0.05	2.2	0.026	1.46	11.4	14.5	0.72	344	0.44	1.91	4.3	30.5	346
G20 (8893921)		16.1	<0.05	3.0	0.030	1.52	13.3	17.4	0.64	329	0.64	1.85	7.3	27.2	349
G21 (8893922)		19.0	<0.05	2.2	0.022	1.38	15.7	12.5	0.47	273	0.94	2.09	5.6	15.8	209

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
G22 (8893923)		14.8	<0.05	2.2	0.029	1.40	18.3	14.8	0.59	314	0.66	1.92	6.1	34.3	377
G23 (8893924)		13.9	<0.05	1.9	0.023	1.42	10.5	11.4	0.66	322	0.36	2.17	4.7	24.3	349
G24 (8893925)		18.0	<0.05	2.8	0.038	1.12	9.9	21.5	0.45	259	1.16	1.37	6.9	18.4	413
G25 (8893926)		15.5	<0.05	2.5	0.021	1.55	12.9	11.5	0.66	283	0.31	2.27	4.6	24.0	149
G26 (8893927)		14.8	<0.05	2.2	0.025	1.46	12.1	11.3	0.65	305	0.43	2.11	4.6	26.4	379
G27 (8893928)		14.5	<0.05	1.9	0.026	1.49	10.2	13.2	0.58	295	0.41	2.18	4.1	24.9	467
G28 (8893929)		16.0	<0.05	1.9	0.025	1.51	8.7	14.0	0.64	355	0.49	2.14	5.2	27.4	652
G29 (8893930)		15.3	<0.05	3.0	0.031	1.50	13.6	17.8	0.77	380	0.51	1.87	6.8	36.6	525

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
F4 (8893859)		11.6	60.6	<0.002	0.03	0.11	8.2	0.5	1.2	374	0.39	0.02	2.4	0.28	0.26
F5 (8893860)		13.3	63.3	<0.002	0.03	0.15	9.6	0.8	1.1	285	0.46	0.04	5.6	0.31	0.35
F6 (8893861)		10.1	45.2	<0.002	0.03	0.11	8.9	0.6	0.9	279	0.30	0.07	2.0	0.25	0.22
F7 (8893862)		11.6	53.0	<0.002	0.03	0.13	7.2	0.6	1.0	280	0.37	<0.01	2.3	0.24	0.25
F8 (8893863)		11.8	54.0	<0.002	0.03	0.18	6.9	0.8	1.3	273	0.32	0.02	3.2	0.22	0.28
F9 (8893864)		11.5	52.4	<0.002	0.04	0.14	9.4	0.8	1.1	259	0.42	0.01	3.6	0.32	0.26
F10 (8893865)		14.9	63.7	<0.002	0.04	0.21	11.3	0.7	1.5	336	0.56	0.02	13.7	0.38	0.30
F11 (8893866)		11.8	49.5	<0.002	0.05	0.20	9.6	1.0	1.4	240	0.47	0.04	6.9	0.31	0.26
F12 (8893867)		12.0	46.0	<0.002	0.04	0.28	9.2	1.1	1.3	232	0.54	0.06	4.0	0.33	0.26
F13 (8893868)		11.1	49.0	<0.002	0.05	0.28	9.2	0.8	1.5	248	0.57	0.07	5.5	0.30	0.27
F14 (8893869)		11.0	46.3	<0.002	0.04	0.14	8.1	0.9	1.1	245	0.44	0.01	12.2	0.30	0.24
F15 (8893870)		10.9	47.1	<0.002	0.04	0.14	8.3	0.8	1.0	248	0.42	0.01	2.7	0.26	0.24
F16 (8893871)		11.5	48.6	<0.002	0.03	0.15	8.1	0.7	1.0	273	0.36	<0.01	9.5	0.25	0.24
F17 (8893872)		12.1	45.0	<0.002	0.04	0.11	9.5	0.9	1.2	275	0.47	0.02	6.3	0.35	0.22
F18 (8893873)		11.2	49.3	<0.002	0.03	0.14	7.1	0.6	1.3	281	0.32	0.03	3.0	0.22	0.26
F19 (8893874)		10.4	39.3	<0.002	0.04	0.18	7.7	0.8	1.2	227	0.37	0.04	3.2	0.28	0.21
F20 (8893875)		12.7	57.0	<0.002	0.04	0.16	9.0	0.9	1.6	317	0.45	0.02	4.2	0.29	0.37
F21 (8893876)		10.8	47.3	<0.002	0.03	0.10	7.3	<0.5	0.9	292	0.33	<0.01	1.8	0.23	0.24
F22 (8893877)		11.2	40.8	<0.002	0.05	0.18	8.8	0.9	1.8	259	0.37	0.03	3.4	0.28	0.22
F23 (8893878)		12.0	47.3	<0.002	0.04	0.18	8.5	0.9	1.2	264	0.43	0.03	3.3	0.30	0.28
F24 (8893879)		13.5	41.7	<0.002	0.04	0.32	7.3	0.8	9.2	206	0.48	0.20	3.3	0.30	0.26
F25 (8893880)		12.3	46.8	<0.002	0.05	0.22	9.1	0.8	1.9	206	0.57	0.02	4.8	0.34	0.26
F26 (8893881)		15.4	55.5	<0.002	0.04	0.26	9.8	0.9	3.9	304	0.62	0.02	8.2	0.35	0.35
F27 (8893882)		12.0	46.2	<0.002	0.05	0.18	8.2	0.6	1.1	269	0.42	0.02	3.5	0.26	0.25
F28 (8893883)		12.8	45.9	<0.002	0.04	0.26	8.9	0.8	1.4	209	0.51	<0.01	4.1	0.31	0.27
F29 (8893884)		11.7	42.0	<0.002	0.04	0.19	7.2	0.9	1.1	253	0.41	0.01	3.3	0.26	0.27
F30 (8893885)		12.1	41.6	<0.002	0.07	0.41	10.7	1.3	1.3	161	0.54	0.04	4.4	0.33	0.26
F31 (8893886)		11.7	47.5	<0.002	0.04	0.15	9.2	0.6	1.0	260	0.47	<0.01	5.0	0.27	0.25
F32 (8893887)		11.6	45.0	0.002	0.04	0.16	7.7	0.8	1.3	245	0.47	0.02	3.8	0.26	0.24
F33 (8893888)		11.3	26.5	<0.002	0.03	0.15	7.2	0.7	1.2	270	0.41	0.03	4.1	0.24	0.26
F34 (8893889)		10.4	42.4	<0.002	0.04	0.17	8.4	0.9	1.2	222	0.62	0.04	3.9	0.31	0.24
F35 (8893890)		11.9	46.9	<0.002	0.04	0.23	8.4	0.8	1.3	284	0.73	0.04	4.6	0.30	0.28

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
F36 (8893891)		11.4	49.3	<0.002	0.04	0.18	8.1	0.9	1.1	247	0.31	0.05	5.7	0.24	0.28
F37 (8893892)		11.8	48.9	<0.002	0.04	0.17	8.4	0.9	1.4	211	0.39	0.01	3.9	0.31	0.27
F38 (8893893)		11.6	45.4	<0.002	0.04	0.13	8.3	0.7	30.9	259	0.40	0.02	9.2	0.29	0.25
F39 (8893894)		10.8	45.7	<0.002	0.03	0.16	9.0	0.8	1.0	245	0.32	0.01	3.6	0.29	0.26
F40 (8893895)		11.1	46.6	<0.002	0.03	0.14	8.6	0.9	1.3	251	0.30	0.01	4.3	0.28	0.25
F41 (8893896)		9.5	35.8	<0.002	0.04	0.16	7.7	0.8	0.9	157	<0.05	0.01	3.2	0.18	0.21
F42 (8893897)		13.2	44.3	<0.002	0.06	0.36	9.1	0.9	2.6	210	0.43	0.03	4.7	0.34	0.26
F43 (8893898)		13.1	40.6	<0.002	0.07	0.35	9.1	1.4	1.6	192	0.52	0.04	4.8	0.38	0.23
F44 (8893899)		14.9	50.1	<0.002	0.04	0.31	8.3	0.7	2.6	237	0.38	0.03	5.4	0.30	0.28
F45 (8893900)		12.6	42.2	<0.002	0.03	0.22	7.7	0.6	1.1	233	0.33	0.03	4.0	0.30	0.23
F46 (8893901)		13.6	50.7	<0.002	0.04	0.34	8.5	0.9	1.6	229	0.42	0.08	3.9	0.32	0.27
G1 (8893902)		10.9	46.3	<0.002	0.03	0.10	8.6	<0.5	1.0	289	0.21	<0.01	5.8	0.24	0.25
G2 (8893903)		11.8	49.3	<0.002	0.03	0.37	8.1	0.5	1.1	269	0.33	0.03	5.3	0.30	0.26
G3 (8893904)		11.8	44.3	<0.002	0.03	0.17	7.5	0.5	9.3	278	0.26	0.01	3.7	0.22	0.24
G4 (8893905)		11.0	46.0	<0.002	0.03	0.12	7.7	0.6	1.1	286	0.25	<0.01	3.6	0.23	0.26
G5 (8893906)		11.4	46.1	<0.002	0.03	0.10	8.5	0.6	1.0	276	0.32	<0.01	4.8	0.27	0.26
G6 (8893907)		13.0	48.6	<0.002	0.04	0.14	8.7	0.6	1.0	265	2.76	0.02	2.8	0.31	0.26
G7 (8893908)		11.6	46.1	<0.002	0.04	0.15	7.2	0.7	0.9	266	0.26	<0.01	4.3	0.21	0.26
G8 (8893909)		12.2	44.9	<0.002	0.03	0.37	7.2	0.9	1.0	251	0.31	0.03	5.6	0.24	0.28
G9 (8893910)		10.9	50.0	<0.002	0.04	0.18	7.4	0.8	0.8	260	0.28	0.01	3.9	0.21	0.25
G10 (8893911)		10.8	47.5	<0.002	0.04	0.14	8.9	0.9	1.1	258	0.32	<0.01	4.6	0.30	0.24
G11 (8893912)		11.9	49.9	<0.002	0.04	0.15	7.8	0.9	0.9	266	0.25	0.02	9.6	0.23	0.25
G12 (8893913)		10.5	52.0	<0.002	0.03	0.10	7.4	0.5	0.9	291	0.23	<0.01	5.5	0.23	0.26
G13 (8893914)		10.9	53.7	<0.002	0.03	0.13	7.2	<0.5	1.0	278	0.27	<0.01	3.4	0.28	0.26
G14 (8893915)		10.7	49.9	<0.002	0.03	0.10	6.9	0.7	0.7	273	0.19	<0.01	2.4	0.19	0.25
G15 (8893916)		13.3	49.0	<0.002	0.04	0.18	9.6	1.0	4.2	255	0.30	0.02	7.4	0.27	0.28
G16 (8893917)		11.8	50.5	<0.002	0.03	0.14	8.0	0.8	1.0	278	0.26	<0.01	3.2	0.23	0.26
G17 (8893918)		11.2	49.0	<0.002	0.03	0.13	7.9	0.5	1.1	240	0.32	0.02	3.2	0.28	0.25
G18 (8893919)		12.5	54.4	<0.002	0.04	0.16	9.6	0.6	1.2	248	0.35	0.01	3.9	0.31	0.29
G19 (8893920)		12.6	48.5	<0.002	0.03	0.18	8.6	0.8	0.9	231	0.26	0.03	4.3	0.25	0.27
G20 (8893921)		11.3	51.0	<0.002	0.03	0.18	8.8	0.9	1.3	242	0.42	0.03	4.8	0.32	0.28
G21 (8893922)		11.6	46.8	<0.002	0.04	0.15	7.5	0.9	1.2	262	0.32	0.03	3.8	0.30	0.29

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
G22 (8893923)		10.4	48.5	<0.002	0.04	0.15	9.0	1.0	1.1	253	0.33	0.01	4.2	0.24	0.28
G23 (8893924)		11.0	47.2	<0.002	0.04	0.11	8.0	0.9	1.1	287	0.28	<0.01	3.6	0.24	0.25
G24 (8893925)		12.8	39.9	<0.002	0.05	0.27	7.8	1.0	1.4	165	0.41	0.04	4.0	0.34	0.26
G25 (8893926)		11.7	53.1	<0.002	0.03	0.11	7.6	0.9	1.0	292	0.25	<0.01	3.4	0.23	0.30
G26 (8893927)		11.4	50.6	<0.002	0.03	0.11	8.0	0.7	1.0	276	0.24	0.01	4.3	0.23	0.25
G27 (8893928)		10.7	49.0	<0.002	0.04	0.13	7.2	0.6	1.0	284	0.22	0.01	3.1	0.21	0.24
G28 (8893929)		10.8	51.4	<0.002	0.03	0.16	8.0	0.7	1.1	283	0.30	0.01	2.1	0.27	0.26
G29 (8893930)		13.0	53.5	<0.002	0.04	0.18	9.7	1.1	1.1	224	0.37	0.03	5.5	0.30	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
F4 (8893859)	0.609	55.8	0.3	9.5	35.1	82.5
F5 (8893860)	0.811	64.4	0.3	11.5	37.7	110
F6 (8893861)	0.561	59.9	0.2	10.6	27.1	89.0
F7 (8893862)	0.627	57.7	0.3	8.5	24.9	97.0
F8 (8893863)	0.599	54.0	0.3	7.2	40.6	65.9
F9 (8893864)	0.757	75.1	0.3	9.4	44.7	97.7
F10 (8893865)	1.15	90.9	0.4	13.2	63.2	110
F11 (8893866)	0.813	76.1	0.4	9.5	65.5	106
F12 (8893867)	0.905	86.4	0.5	9.0	85.2	136
F13 (8893868)	1.07	74.5	0.5	9.2	54.6	125
F14 (8893869)	1.06	70.8	0.5	8.8	53.5	89.2
F15 (8893870)	0.772	66.3	0.3	8.1	40.2	107
F16 (8893871)	1.15	68.2	0.3	10.1	27.9	98.3
F17 (8893872)	0.990	85.7	0.3	11.7	34.4	198
F18 (8893873)	0.614	51.2	0.4	7.3	29.6	99.5
F19 (8893874)	0.807	63.3	0.5	7.8	35.8	126
F20 (8893875)	0.950	63.2	0.6	10.9	36.0	111
F21 (8893876)	0.534	56.4	0.2	7.8	31.6	75.8
F22 (8893877)	0.744	72.5	0.4	8.6	35.1	88.2
F23 (8893878)	0.963	67.1	0.4	9.9	30.6	140
F24 (8893879)	0.949	67.8	5.3	8.3	55.8	128
F25 (8893880)	1.06	83.2	0.5	9.6	58.6	132
F26 (8893881)	1.22	77.7	0.7	11.5	52.1	158
F27 (8893882)	0.800	61.6	0.4	8.9	29.3	113
F28 (8893883)	1.09	71.8	0.6	8.9	43.4	128
F29 (8893884)	19.3	55.6	0.6	7.3	76.9	115
F30 (8893885)	1.35	95.7	0.6	10.1	49.4	105
F31 (8893886)	1.03	62.1	0.4	12.9	36.8	136
F32 (8893887)	0.828	53.7	0.4	8.1	51.2	109
F33 (8893888)	0.708	55.3	0.3	7.2	27.3	97.9
F34 (8893889)	0.960	69.3	0.5	8.2	46.7	102
F35 (8893890)	0.937	66.9	0.5	9.7	38.9	158

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)		U	V	W	Y	Zn	Zr
	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
F36 (8893891)		0.829	58.1	0.4	7.4	43.6	78.7
F37 (8893892)		0.852	73.9	0.4	8.2	58.2	96.6
F38 (8893893)		0.962	68.4	0.3	8.8	36.7	131
F39 (8893894)		0.866	70.2	0.3	8.2	41.8	107
F40 (8893895)		0.789	68.5	0.3	8.2	36.6	124
F41 (8893896)		0.643	62.6	<0.1	6.9	57.6	26.7
F42 (8893897)		0.970	84.8	0.7	9.1	108	108
F43 (8893898)		1.04	88.4	0.6	8.5	83.8	102
F44 (8893899)		0.886	64.1	0.3	8.4	91.7	123
F45 (8893900)		0.734	81.5	0.4	7.5	70.5	82.8
F46 (8893901)		0.895	73.4	0.4	7.5	147	98.5
G1 (8893902)		0.632	69.8	0.1	7.9	28.7	61.2
G2 (8893903)		0.759	74.6	0.3	8.1	47.5	95.5
G3 (8893904)		0.644	58.8	0.2	7.0	53.2	61.9
G4 (8893905)		0.579	60.2	0.2	8.1	27.2	67.3
G5 (8893906)		0.898	68.7	0.2	9.2	35.9	87.2
G6 (8893907)		0.681	78.9	0.3	8.7	39.3	94.1
G7 (8893908)		0.672	54.2	0.3	6.9	44.1	79.4
G8 (8893909)		0.877	58.9	0.5	7.1	36.4	80.2
G9 (8893910)		0.624	52.5	0.2	7.0	34.1	63.7
G10 (8893911)		0.713	79.0	0.3	9.6	40.7	97.2
G11 (8893912)		0.752	58.6	0.2	8.9	63.1	85.8
G12 (8893913)		0.658	51.8	0.2	8.9	31.9	84.2
G13 (8893914)		0.727	59.3	0.2	7.5	31.0	95.8
G14 (8893915)		0.519	49.1	0.2	7.2	22.2	63.4
G15 (8893916)		1.70	69.2	0.3	15.7	32.2	111
G16 (8893917)		0.696	58.6	0.2	8.6	28.0	91.3
G17 (8893918)		0.743	68.3	0.3	7.7	39.8	113
G18 (8893919)		0.917	89.2	0.3	9.1	39.5	123
G19 (8893920)		0.945	69.0	0.3	9.7	28.2	89.7
G20 (8893921)		0.961	68.5	0.4	9.7	59.3	132
G21 (8893922)		0.926	84.2	0.3	10.0	21.7	97.3

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
G22 (8893923)		1.06	61.6	0.4	12.1	32.6	92.2
G23 (8893924)		0.677	58.3	0.2	8.9	23.3	77.1
G24 (8893925)		1.19	97.0	0.5	7.8	41.3	120
G25 (8893926)		0.672	50.8	0.2	9.2	23.0	112
G26 (8893927)		0.860	58.5	0.2	10.2	23.1	100
G27 (8893928)		0.609	53.8	0.3	8.4	27.8	82.0
G28 (8893929)		0.617	65.1	0.2	8.8	40.6	81.5
G29 (8893930)		1.16	75.6	0.4	10.9	36.0	137

Comments: RDL - Reported Detection Limit

8893859-8893930 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893859	0.17	0.12		8893878	0.252	0.298	16.7%	8893898	0.301	0.361	18.1%	8893919	0.13	0.23	
Al	8893859	6.20	6.17	0.5%	8893878	6.48	6.13	5.6%	8893898	7.40	7.27	1.8%	8893919	6.38	6.29	1.4%
As	8893859	1.7	1.2		8893878	3.22	3.98	21.1%	8893898	5.49	5.58	1.6%	8893919	3.8	4.6	19.0%
Ba	8893859	478	490	2.5%	8893878	499	465	7.1%	8893898	408	407	0.2%	8893919	478	468	2.1%
Be	8893859	1.12	1.17	4.4%	8893878	1.22	1.06	14.0%	8893898	1.26	1.12	11.8%	8893919	1.15	1.33	14.5%
Bi	8893859	0.10	0.10	0.0%	8893878	0.126	0.113	10.9%	8893898	0.21	0.22	4.7%	8893919	0.16	0.16	0.0%
Ca	8893859	1.64	1.60	2.5%	8893878	1.44	1.38	4.3%	8893898	1.19	1.14	4.3%	8893919	1.42	1.39	2.1%
Cd	8893859	0.04	0.04	0.0%	8893878	0.06	0.05	18.2%	8893898	0.26	0.27	3.8%	8893919	0.06	0.07	15.4%
Ce	8893859	20.6	21.2	2.9%	8893878	25.7	27.2	5.7%	8893898	27.1	28.9	6.4%	8893919	26.1	27.2	4.1%
Co	8893859	9.79	10.5	7.0%	8893878	10.2	9.00	12.5%	8893898	14.4	13.6	5.7%	8893919	11.8	11.4	3.4%
Cr	8893859	48.2	44.4	8.2%	8893878	52.3	43.8	17.7%	8893898	80.4	77.1	4.2%	8893919	65.3	65.8	0.8%
Cs	8893859	1.19	1.22	2.5%	8893878	1.26	1.17	7.4%	8893898	1.90	1.93	1.6%	8893919	1.52	1.48	2.7%
Cu	8893859	23.5	25.8	9.3%	8893878	28.1	23.3	18.7%	8893898	16.5	16.1	2.5%	8893919	16.4	15.6	5.0%
Fe	8893859	2.20	2.18	0.9%	8893878	2.43	2.29	5.9%	8893898	3.98	3.87	2.8%	8893919	3.38	3.27	3.3%
Ga	8893859	15.1	15.2	0.7%	8893878	16.1	14.1	13.2%	8893898	15.5	15.2	2.0%	8893919	17.3	16.6	4.1%
Ge	8893859	< 0.05	< 0.05	0.0%	8893878	< 0.05	< 0.05	0.0%	8893898	< 0.05	< 0.05	0.0%	8893919	< 0.05	< 0.05	0.0%
Hf	8893859	1.9	1.9	0.0%	8893878	3.1	3.1	0.0%	8893898	2.6	2.6	0.0%	8893919	2.8	2.8	0.0%
In	8893859	0.027	0.025	7.7%	8893878	0.030	0.025	18.2%	8893898	0.0416	0.0397	4.7%	8893919	0.030	0.028	6.9%
K	8893859	1.57	1.57	0.0%	8893878	1.55	1.47	5.3%	8893898	1.28	1.26	1.6%	8893919	1.56	1.53	1.9%
La	8893859	10.2	10.3	1.0%	8893878	11.5	12.2	5.9%	8893898	13.9	15.8	12.8%	8893919	10.3	11.3	9.3%
Li	8893859	18.0	17.9	0.6%	8893878	15.2	14.4	5.4%	8893898	23.7	23.4	1.3%	8893919	18.7	18.4	1.6%
Mg	8893859	0.840	0.814	3.1%	8893878	0.611	0.573	6.4%	8893898	0.69	0.67	2.9%	8893919	0.75	0.73	2.7%
Mn	8893859	346	359	3.7%	8893878	294	279	5.2%	8893898	382	363	5.1%	8893919	351	352	0.3%
Mo	8893859	0.33	0.38	14.1%	8893878	0.63	0.56	11.8%	8893898	0.973	1.05	7.6%	8893919	0.51	0.50	2.0%
Na	8893859	2.12	2.11	0.5%	8893878	2.08	1.99	4.4%	8893898	1.46	1.42	2.8%	8893919	2.00	1.97	1.5%
Nb	8893859	5.6	5.6	0.0%	8893878	6.5	5.9	9.7%	8893898	7.2	7.4	2.7%	8893919	7.4	6.0	20.9%
Ni	8893859	31.6	32.0	1.3%	8893878	26.7	26.6	0.4%	8893898	33.1	32.6	1.5%	8893919	31.2	30.2	3.3%
P	8893859	371	366	1.4%	8893878	250	240	4.1%	8893898	2070	2150	3.8%	8893919	239	235	1.7%
Pb	8893859	11.6	12.1	4.2%	8893878	12.0	11.4	5.1%	8893898	13.1	13.2	0.8%	8893919	12.5	11.9	4.9%
Rb	8893859	60.6	61.3	1.1%	8893878	47.3	43.6	8.1%	8893898	40.6	40.1	1.2%	8893919	54.4	51.3	5.9%
Re	8893859	< 0.002	< 0.002	0.0%	8893878	< 0.002	< 0.002	0.0%	8893898	< 0.002	< 0.002	0.0%	8893919	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893859	0.03	0.03	0.0%	8893878	0.04	0.04	0.0%	8893898	0.07	0.07	0.0%	8893919	0.04	0.04	0.0%
Sb	8893859	0.111	0.105	5.6%	8893878	0.181	0.191	5.4%	8893898	0.35	0.40	13.3%	8893919	0.16	0.20	22.2%
Sc	8893859	8.2	8.5	3.6%	8893878	8.5	8.2	3.6%	8893898	9.1	9.0	1.1%	8893919	9.59	9.11	5.1%
Se	8893859	0.5	0.5	0.0%	8893878	0.9	0.8	11.8%	8893898	1.40	1.49	6.2%	8893919	0.6	0.9	
Sn	8893859	1.2	1.1	8.7%	8893878	1.2	1.2	0.0%	8893898	1.6	1.1		8893919	1.24	1.15	7.5%
Sr	8893859	374	377	0.8%	8893878	264	247	6.7%	8893898	192	182	5.3%	8893919	248	251	1.2%
Ta	8893859	0.39	0.36	8.0%	8893878	0.433	0.449	3.6%	8893898	0.52	0.47	10.1%	8893919	0.35	0.32	9.0%
Te	8893859	0.02	0.02	0.0%	8893878	0.028	0.025	11.3%	8893898	0.042	0.050	17.4%	8893919	0.01	0.06	
Th	8893859	2.43	3.00	21.0%	8893878	3.34	3.70	10.2%	8893898	4.84	5.72	16.7%	8893919	3.9	4.3	9.8%
Ti	8893859	0.28	0.28	0.0%	8893878	0.297	0.290	2.4%	8893898	0.375	0.350	6.9%	8893919	0.31	0.30	3.3%
Tl	8893859	0.265	0.270	1.9%	8893878	0.278	0.271	2.6%	8893898	0.23	0.23	0.0%	8893919	0.29	0.27	7.1%
U	8893859	0.609	0.612	0.5%	8893878	0.963	0.931	3.4%	8893898	1.04	1.13	8.3%	8893919	0.917	0.870	5.3%
V	8893859	55.8	57.6	3.2%	8893878	67.1	63.4	5.7%	8893898	88.4	81.3	8.4%	8893919	89.2	84.3	5.6%
W	8893859	0.3	0.5		8893878	0.45	0.46	2.2%	8893898	0.6	0.5	18.2%	8893919	0.34	0.36	5.7%
Y	8893859	9.50	9.58	0.8%	8893878	9.93	9.33	6.2%	8893898	8.5	8.7	2.3%	8893919	9.11	9.36	2.7%
Zn	8893859	35.1	29.9	16.0%	8893878	30.6	33.0	7.5%	8893898	83.8	85.8	2.4%	8893919	39.5	38.8	1.8%
Zr	8893859	82.5	82.2	0.4%	8893878	140	130	7.4%	8893898	102	102	0.0%	8893919	123	124	0.8%

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.Till-2)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	11.02	100%	90% - 110%	6.96	6.68	95%	90% - 110%					8.17	7.99	97%	90% - 110%
As					124	123	99%	90% - 110%					26	28.3	108%	90% - 110%
Ba	340	338	99%	90% - 110%	186	179	96%	90% - 110%					540	519	96%	90% - 110%
Be	2.6	2.83	108%	90% - 110%									4.0	3.41	85%	90% - 110%
Ca	5.72	5.65	98%	90% - 110%	4.01	3.75	93%	90% - 110%					0.907	0.882	97%	90% - 110%
Ce	122	115	94%	90% - 110%	24	22	91%	90% - 110%					98	95.1	97%	90% - 110%
Co	2.8	2.64	94%	90% - 110%	22.1	21.3	96%	90% - 110%								
Cr													60.3	61	101%	90% - 110%
Cs	1.5	1.62	108%	90% - 110%									12	11.8	98%	90% - 110%
Cu					88.6	98.2	110%	90% - 110%					150	144	96%	90% - 110%
Fe	4.34	4.25	97%	90% - 110%	7.56	7.13	94%	90% - 110%					3.77	3.71	98%	90% - 110%
Ga	35	37.5	107%	90% - 110%												
Hf													11	3.59		90% - 110%
K	1.37	1.4	102%	90% - 110%	2.021	1.909	94%	90% - 110%								
La	58	53.0	91%	90% - 110%									44	41.4	94%	90% - 110%
Li	37	38	102%	90% - 110%									47	44	93%	90% - 110%
Mg	0.325	0.313	96%	90% - 110%	2.412	2.353	97%	90% - 110%					1.10	1.05	95%	90% - 110%
Mn					1510	1382	91%	90% - 110%					780	719	92%	90% - 110%
Mo													14	13.6	97%	90% - 110%
Na	5.267	5.258	99%	90% - 110%	0.617	0.603	97%	90% - 110%					1.624	1.621	99%	90% - 110%
Nb	13	14.3	110%	90% - 110%									20	16.3	81%	90% - 110%
Ni	9	9	100%	90% - 110%	77.1	69.5	90%	90% - 110%					32	32	100%	90% - 110%
P					892	976	109%	90% - 110%								
Pb	10	10.8	108%	90% - 110%									31	29.3	94%	90% - 110%
Rb	55	54.6	99%	90% - 110%					143	142	99%	90% - 110%	143	157	109%	90% - 110%
S					0.348	0.383	110%	90% - 110%								
Sb													0.8	0.841	105%	90% - 110%
Sc	1.1	0.8	72%	90% - 110%									12	12	100%	90% - 110%
Sr	1191	1113	93%	90% - 110%									144	123	85%	90% - 110%
Ta	0.9	0.9	100%	90% - 110%												
Th	1.4	1.11	79%	90% - 110%									18.4	17.0	92%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Ti	0.172	0.174	101%	90% - 110%									0.53	0.45	84%	90% - 110%
U													5.7	4.33	75%	90% - 110%
V	8	7	87%	90% - 110%									77	76	98%	90% - 110%
W													5	4.30	86%	90% - 110%
Y	119	131	110%	90% - 110%												
Zn	93	98	105%	90% - 110%	208	203	97%	90% - 110%					130	119	91%	90% - 110%
	CRM #5 (ref.GTS-2A)															
Parameter	Expect	Actual	Recovery	Limits												
Al	6.96	6.72	96%	90% - 110%												
As	124	130	104%	90% - 110%												
Ba	186	180	96%	90% - 110%												
Ca	4.01	3.78	94%	90% - 110%												
Ce	24	22	91%	90% - 110%												
Co	22.1	21.6	97%	90% - 110%												
Cu	88.6	82.9	93%	90% - 110%												
Fe	7.56	7.23	95%	90% - 110%												
K	2.021	1.937	95%	90% - 110%												
Mg	2.412	2.37	98%	90% - 110%												
Mn	1510	1403	92%	90% - 110%												
Na	0.617	0.608	98%	90% - 110%												
Ni	77.1	71.8	93%	90% - 110%												
P	892	994	111%	90% - 110%												
S	0.348	0.376	108%	90% - 110%												
Zn	208	197	94%	90% - 110%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 17T282583
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282584
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 18, 2018
PAGES (INCLUDING COVER):	19

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Results relate only to the items tested and to all the items tested

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
G30 (8893940)	0.19	6.98	4.1	509	1.29	0.10	1.47	0.08	36.1	10.7	60.4	1.29	3.6	2.37
G31 (8893941)	0.21	7.74	3.0	430	1.30	0.12	1.36	0.08	32.4	13.2	79.1	1.51	5.8	3.42
G32 (8893942)	0.36	6.92	1.4	497	1.17	0.09	1.38	0.09	41.7	12.7	71.0	1.77	9.9	2.40
G33 (8893943)	0.17	6.91	2.2	466	1.31	0.09	1.62	0.06	21.9	15.3	75.6	1.25	5.5	2.74
G34 (8893944)	0.24	6.91	2.0	498	1.23	0.08	1.68	0.07	52.0	14.1	81.0	1.42	8.9	3.20
G35 (8893945)	0.24	6.85	2.1	479	1.18	0.09	1.36	0.07	21.3	14.6	60.6	1.38	6.2	2.39
G36 (8893946)	0.35	7.41	3.2	509	1.17	0.12	1.43	0.07	26.6	17.0	70.5	1.63	6.9	2.63
G37 (8893947)	0.31	7.51	3.6	493	1.33	0.15	1.50	0.09	27.5	18.3	80.5	1.90	8.3	3.49
G38 (8893948)	0.26	7.35	2.9	553	1.26	0.09	1.52	0.08	31.2	15.4	73.8	1.89	9.4	2.51
G39 (8893949)	0.18	6.93	3.1	525	1.28	0.09	1.37	0.05	41.5	14.2	68.5	1.60	13.4	2.24
G40 (8893950)	0.25	7.11	1.7	560	1.27	0.09	1.31	0.06	27.1	11.9	59.0	1.94	6.0	2.22
G41 (8893951)	0.27	7.17	2.4	512	1.30	0.12	1.41	0.09	30.2	14.8	69.7	2.10	5.9	3.02
G42 (8893952)	0.32	6.94	4.0	507	1.25	0.11	1.43	0.11	29.4	16.6	66.2	2.10	13.8	2.81
G43 (8893953)	0.24	7.40	4.1	513	1.31	0.11	1.54	0.08	26.6	18.7	68.4	1.59	7.9	2.63
G44 (8893954)	0.51	8.07	15.7	446	1.78	0.30	1.40	0.18	51.1	38.6	88.2	2.60	44.3	3.58
G45 (8893955)	0.37	6.66	6.8	529	1.18	0.17	1.50	0.17	28.0	16.1	69.5	2.92	12.7	2.97
H1 (8893956)	0.19	6.50	2.5	527	1.13	0.08	1.24	0.05	13.9	8.69	41.2	1.53	4.4	1.91
H2 (8893957)	0.14	6.87	2.4	476	1.36	0.09	1.50	0.05	16.3	13.3	53.8	1.48	5.0	2.24
H3 (8893958)	0.12	6.46	4.2	539	1.38	0.08	1.47	0.02	37.4	10.3	44.1	1.26	15.5	1.57
H4 (8893959)	0.13	6.46	2.3	517	1.28	0.06	1.32	0.04	12.4	10.2	35.5	1.24	3.9	1.54
H5 (8893960)	0.14	6.60	4.0	492	1.28	0.07	1.48	0.06	18.5	12.5	44.0	1.22	3.9	1.84
H6 (8893961)	0.19	7.16	2.5	486	1.20	0.11	1.32	0.08	20.0	11.9	54.7	1.38	4.6	2.42
H7 (8893962)	0.15	6.55	3.3	500	1.35	0.08	1.46	0.07	31.7	14.0	54.7	1.40	7.6	2.00
H8 (8893963)	0.25	6.95	3.9	504	1.31	0.11	1.35	0.05	28.6	12.9	55.8	1.72	6.1	2.45
H9 (8893964)	0.27	6.80	78.2	453	1.23	0.19	1.27	0.06	29.2	16.7	66.7	2.17	12.6	3.30
H10 (8893965)	0.21	6.60	4.4	466	1.30	0.13	1.54	0.08	30.8	18.8	76.1	1.68	16.6	3.72
H11 (8893966)	0.19	6.67	2.4	491	1.38	0.11	1.39	0.06	33.0	14.1	52.3	1.60	13.3	2.17
H12 (8893967)	0.13	6.26	2.4	476	1.33	0.07	1.40	0.03	23.3	12.5	41.6	1.13	4.6	1.74
H13 (8893968)	0.18	6.46	1.6	511	1.12	0.09	1.49	0.04	24.3	10.3	50.2	1.40	9.5	1.96
H14 (8893969)	0.15	6.69	3.6	500	1.38	0.08	1.67	0.05	32.4	15.8	57.3	1.14	4.4	2.14
H15 (8893970)	0.21	6.48	2.1	475	1.33	0.12	1.44	0.05	28.5	14.5	56.5	2.01	11.5	2.46
H16 (8893971)	0.22	6.59	3.1	439	1.21	0.15	1.37	0.05	28.2	18.0	63.7	2.16	18.7	2.84

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
H17 (8893972)		0.31	7.18	7.7	390	1.48	0.22	1.16	0.11	25.9	24.4	77.4	2.52	19.1	4.31
H18 (8893973)		0.14	6.78	2.5	535	1.31	0.07	1.84	0.02	32.5	10.4	50.3	1.23	3.7	1.88
H19 (8893974)		0.25	6.87	6.6	425	1.32	0.17	1.43	0.09	29.3	19.1	74.0	2.03	16.3	3.41
H20 (8893975)		0.14	6.45	1.4	531	1.13	0.07	1.57	0.05	18.2	9.67	45.5	1.30	3.7	1.51
H21 (8893976)		0.37	6.80	8.3	359	1.27	0.29	1.07	0.10	25.8	19.7	80.1	2.49	20.2	5.45
H22 (8893977)		0.34	6.70	1.8	513	1.19	0.12	1.28	0.05	25.5	11.1	53.9	1.66	4.1	2.46
H23 (8893978)		0.18	6.73	8.9	479	1.54	0.28	1.45	0.07	30.9	23.4	51.5	1.45	23.9	2.81
H24 (8893979)		0.20	6.50	2.8	502	1.18	0.12	1.35	0.06	18.7	9.58	48.9	1.36	7.5	2.29
H25 (8893980)		0.14	7.01	3.3	469	1.41	0.08	1.59	0.04	29.7	16.3	59.2	1.21	3.7	2.58
H26 (8893981)		0.19	6.98	2.6	471	1.32	0.16	1.50	0.08	30.1	14.3	59.3	1.44	4.3	2.53
H27 (8893982)		0.28	5.60	3.8	464	0.88	0.15	1.08	0.07	28.5	7.38	44.5	1.46	13.8	2.14
H28 (8893983)		0.29	6.00	3.9	496	1.12	0.13	1.30	0.07	29.0	9.56	46.1	1.23	7.8	1.85
H29 (8893984)		0.33	6.94	2.0	488	1.35	0.08	1.45	0.07	19.0	13.7	62.7	1.50	4.4	2.41
H30 (8893985)		0.18	6.83	4.2	474	1.39	0.09	1.53	0.05	30.2	15.3	65.1	1.37	5.2	2.38
H31 (8893986)		0.26	7.06	2.1	523	1.38	0.08	1.55	0.06	31.7	14.3	64.1	1.60	4.8	2.23
H32 (8893987)		0.30	7.09	2.5	476	1.18	0.12	1.39	0.07	22.8	20.7	75.8	1.70	7.5	3.08
H33 (8893988)		0.29	6.68	3.3	475	1.26	0.11	1.44	0.09	36.9	17.6	81.1	1.67	7.4	3.05
H34 (8893989)		0.39	7.04	3.2	467	1.32	0.15	1.55	0.07	33.2	22.9	87.9	1.84	12.2	3.45
H35 (8893990)		0.47	7.22	5.5	472	1.38	0.16	1.43	0.13	34.6	23.2	92.3	2.03	21.2	3.60
H36 (8893991)		0.51	7.81	7.4	474	1.55	0.18	1.26	0.08	29.9	24.4	84.9	2.35	14.2	3.62
H37 (8893992)		0.46	7.13	6.5	491	1.36	0.16	1.49	0.13	24.6	16.8	77.4	1.75	7.0	3.69
H38 (8893993)		0.43	7.32	5.8	464	1.32	0.13	1.45	0.09	22.2	23.1	94.6	1.98	14.0	3.91
H39 (8893994)		0.32	7.06	2.4	494	1.49	0.10	1.58	0.08	37.6	18.5	74.7	1.73	5.1	2.80
H40 (8893995)		0.19	6.56	1.8	500	1.50	0.09	1.48	0.05	28.1	15.0	53.9	1.40	4.0	2.18
H41 (8893996)		0.21	6.68	2.7	507	1.45	0.09	1.45	0.06	23.8	16.2	69.2	1.75	7.2	2.20
H42 (8893997)		0.27	7.07	4.0	497	1.48	0.11	1.55	0.07	33.3	23.5	73.6	1.70	6.1	2.79
H43 (8893998)		0.70	7.50	17.3	412	1.75	0.27	1.37	0.17	41.2	43.1	88.2	3.35	68.1	4.48
I1 (8893999)		0.23	6.68	2.2	499	1.31	0.07	1.40	0.04	17.1	12.2	51.7	1.44	3.0	1.92
I2 (8894000)		0.51	6.60	3.8	514	1.26	0.10	1.41	0.07	25.7	12.1	49.0	1.38	3.0	2.13
I3 (8894001)		0.35	6.69	3.8	516	1.28	0.14	1.35	0.05	20.9	12.4	51.1	1.64	5.3	2.08
I4 (8894002)		0.24	6.82	6.0	437	1.46	0.17	1.23	0.06	71.9	23.0	70.1	2.44	38.4	2.86
I5 (8894003)		0.22	7.22	3.8	454	1.34	0.14	1.23	0.07	21.8	19.5	63.4	1.84	6.2	2.81

Certified By:

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282584

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
I6 (8894004)		0.20	7.04	5.5	476	1.46	0.16	1.31	0.04	28.5	21.2	67.5	1.83	16.2	2.59
I7 (8894005)		0.28	6.66	3.0	471	1.33	0.14	1.34	0.08	29.1	18.3	66.6	2.01	12.9	2.77
I8 (8894006)		0.25	7.39	7.4	476	1.36	0.17	1.22	0.07	27.0	19.4	71.1	2.21	19.5	3.19
I9 (8894007)		0.24	7.14	8.6	406	1.38	0.21	1.17	0.09	27.9	25.5	77.5	2.49	21.9	3.94
I10 (8894008)		0.40	7.75	6.0	490	1.68	0.12	1.46	0.06	116	36.4	78.1	1.57	30.5	2.77
I11 (8894009)		0.30	6.94	4.8	440	1.28	0.16	1.33	0.08	36.4	18.1	75.7	1.78	20.1	2.88
I12 (8894010)		0.27	7.09	4.3	497	1.16	0.10	1.43	0.05	26.5	14.0	56.9	1.41	7.1	2.34
I13 (8894011)		0.17	6.75	2.8	519	1.29	0.09	1.45	0.06	25.8	14.2	53.2	1.49	8.3	2.08

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
G30 (8893940)	19.5	<0.05	3.5	0.031	1.62	16.9	14.7	0.59	342	0.59	2.07	9.0	22.9	466
G31 (8893941)	20.1	<0.05	3.0	0.041	1.36	16.2	19.7	0.66	383	0.84	1.79	8.8	29.0	746
G32 (8893942)	19.0	<0.05	3.1	0.033	1.66	19.9	17.3	0.67	314	0.61	1.91	9.1	31.1	578
G33 (8893943)	18.7	<0.05	2.2	0.030	1.51	9.9	14.7	0.82	467	0.50	2.18	7.2	31.0	491
G34 (8893944)	18.3	<0.05	3.8	0.031	1.60	25.0	14.2	0.82	474	0.48	2.15	11.4	32.7	458
G35 (8893945)	17.2	<0.05	3.0	0.025	1.52	10.6	17.3	0.62	325	0.63	1.98	6.9	36.4	469
G36 (8893946)	18.6	<0.05	3.1	0.032	1.62	13.2	20.5	0.69	362	0.77	1.82	8.6	38.3	460
G37 (8893947)	21.3	<0.05	3.3	0.041	1.57	13.2	22.8	0.80	383	0.80	1.78	9.5	40.5	856
G38 (8893948)	19.6	<0.05	3.1	0.029	1.79	13.6	18.2	0.90	371	0.52	1.98	9.2	36.3	420
G39 (8893949)	18.5	<0.05	2.3	0.025	1.82	14.3	15.1	0.84	340	0.44	1.97	7.9	35.6	407
G40 (8893950)	19.2	<0.05	3.6	0.031	1.93	12.7	17.6	0.73	302	0.55	1.96	10.4	28.4	347
G41 (8893951)	21.8	<0.05	3.0	0.032	1.64	14.6	23.9	0.74	402	0.61	1.90	9.3	32.9	938
G42 (8893952)	20.3	<0.05	3.2	0.036	1.62	13.9	17.3	0.70	355	0.98	1.82	10.4	32.5	756
G43 (8893953)	18.4	<0.05	3.3	0.028	1.64	12.4	17.4	0.76	342	0.75	2.00	7.9	37.4	413
G44 (8893954)	19.2	<0.05	2.0	0.046	1.51	20.6	23.6	1.02	633	1.73	1.61	8.7	59.0	1290
G45 (8893955)	22.0	<0.05	3.6	0.038	1.75	13.5	26.8	0.76	473	1.07	1.77	10.1	29.9	954
H1 (8893956)	20.2	<0.05	1.7	0.020	1.66	6.8	12.1	0.47	257	0.41	2.10	5.6	19.6	531
H2 (8893957)	19.2	<0.05	2.2	0.027	1.57	7.9	14.9	0.69	344	0.45	2.14	5.5	28.5	507
H3 (8893958)	19.6	<0.05	2.3	0.020	1.68	11.8	10.9	0.58	391	0.44	2.31	4.8	21.9	137
H4 (8893959)	17.5	<0.05	1.4	0.015	1.63	5.7	11.1	0.53	226	0.29	2.24	4.1	22.5	236
H5 (8893960)	19.2	<0.05	1.6	0.021	1.59	8.3	12.9	0.60	323	0.37	2.25	4.8	24.0	327
H6 (8893961)	19.8	<0.05	2.5	0.031	1.59	9.6	16.2	0.54	274	0.69	1.98	6.5	23.6	369
H7 (8893962)	18.5	<0.05	2.7	0.022	1.60	10.9	11.7	0.64	336	0.52	2.10	6.7	27.5	391
H8 (8893963)	21.3	<0.05	3.6	0.027	1.67	13.1	17.0	0.60	282	0.80	1.89	7.9	24.9	410
H9 (8893964)	23.1	<0.05	3.6	0.036	1.55	13.9	27.3	0.68	334	1.15	1.69	9.6	27.4	270
H10 (8893965)	21.4	<0.05	3.6	0.032	1.47	10.7	16.3	0.74	460	0.75	2.04	8.0	33.1	421
H11 (8893966)	21.3	<0.05	2.7	0.026	1.53	14.8	14.8	0.53	294	0.81	2.03	6.8	22.3	277
H12 (8893967)	18.3	<0.05	1.6	0.019	1.50	7.6	10.2	0.55	259	0.44	2.21	4.5	20.5	342
H13 (8893968)	20.5	<0.05	3.4	0.024	1.57	12.0	12.6	0.59	321	0.70	2.14	7.4	21.5	181
H14 (8893969)	19.4	<0.05	2.4	0.023	1.57	13.8	10.3	0.67	392	0.50	2.33	5.4	23.7	522
H15 (8893970)	22.7	<0.05	3.8	0.029	1.52	14.4	17.6	0.65	328	0.92	2.00	7.6	24.4	203
H16 (8893971)	21.1	<0.05	3.3	0.030	1.54	12.8	20.6	0.87	425	0.65	1.91	7.9	32.4	207

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
H17 (8893972)		22.4	<0.05	4.0	0.044	1.32	12.0	26.8	0.77	404	1.27	1.56	9.8	36.5	530
H18 (8893973)		19.7	<0.05	3.5	0.023	1.73	15.5	10.9	0.78	395	0.36	2.45	7.0	20.8	136
H19 (8893974)		21.0	<0.05	3.7	0.038	1.40	13.3	21.8	0.73	366	0.91	1.76	8.2	31.0	398
H20 (8893975)		21.4	<0.05	2.7	0.018	1.68	9.0	11.7	0.66	317	0.38	2.36	6.4	18.9	170
H21 (8893976)		26.9	<0.05	3.6	0.048	1.27	12.7	29.8	0.78	363	2.14	1.41	10.0	32.2	513
H22 (8893977)		27.9	<0.05	3.3	0.026	1.63	11.8	15.3	0.47	263	0.96	1.87	8.9	16.7	257
H23 (8893978)		22.2	<0.05	2.3	0.040	1.50	14.0	15.4	0.61	343	0.72	2.10	7.1	26.9	482
H24 (8893979)		21.5	<0.05	2.8	0.023	1.54	8.7	12.4	0.52	282	0.70	2.08	6.0	16.8	156
H25 (8893980)		19.6	<0.05	2.4	0.027	1.46	13.0	12.2	0.70	354	0.43	2.17	5.9	27.8	327
H26 (8893981)		19.8	<0.05	2.7	0.028	1.46	14.2	14.3	0.62	350	0.60	2.07	6.7	25.2	433
H27 (8893982)		23.7	<0.05	3.9	0.029	1.41	13.4	12.8	0.41	283	0.96	1.44	10.1	14.0	467
H28 (8893983)		19.7	<0.05	3.3	0.024	1.50	13.6	11.5	0.46	298	0.60	1.91	7.2	17.3	262
H29 (8893984)		20.1	<0.05	2.9	0.029	1.56	8.2	15.1	0.65	344	0.57	2.08	13.3	25.9	575
H30 (8893985)		21.1	<0.05	2.7	0.024	1.51	14.0	13.1	0.71	375	0.49	2.15	6.1	31.3	526
H31 (8893986)		20.8	<0.05	3.3	0.027	1.69	12.8	13.5	0.71	343	0.52	2.14	7.7	29.5	351
H32 (8893987)		20.2	<0.05	3.5	0.028	1.52	11.0	20.1	0.72	380	0.69	1.80	8.1	42.8	513
H33 (8893988)		20.5	<0.05	3.5	0.029	1.58	17.5	15.7	0.77	414	0.61	1.87	7.8	34.1	403
H34 (8893989)		21.3	<0.05	3.9	0.033	1.57	14.8	17.6	0.90	541	0.62	1.85	10.3	42.0	614
H35 (8893990)		22.2	<0.05	3.8	0.038	1.62	15.3	19.4	0.87	504	0.73	1.76	9.0	40.3	814
H36 (8893991)		22.4	<0.05	4.1	0.040	1.57	15.2	26.6	0.81	386	1.18	1.51	11.0	45.9	1040
H37 (8893992)		24.5	<0.05	3.1	0.038	1.58	11.7	23.5	0.71	476	0.74	1.89	9.0	28.1	1210
H38 (8893993)		21.1	<0.05	2.5	0.035	1.57	10.4	21.9	0.89	595	0.83	1.73	9.3	44.8	889
H39 (8893994)		22.1	<0.05	3.8	0.032	1.60	17.8	16.8	0.77	406	0.52	2.01	8.8	37.0	538
H40 (8893995)		22.7	<0.05	3.1	0.023	1.58	12.9	12.7	0.62	314	0.44	2.17	6.3	26.5	701
H41 (8893996)		19.9	<0.05	2.4	0.027	1.61	10.6	13.0	0.69	328	0.57	2.07	7.0	30.0	469
H42 (8893997)		22.2	<0.05	4.0	0.033	1.49	15.2	14.9	0.73	352	0.71	2.00	8.2	36.0	497
H43 (8893998)		23.6	<0.05	3.2	0.052	1.37	18.3	32.2	0.86	506	1.56	1.38	11.0	61.6	1850
I1 (8893999)		20.1	<0.05	1.9	0.019	1.57	8.1	12.1	0.56	278	0.40	2.15	6.2	23.4	456
I2 (8894000)		22.6	<0.05	2.7	0.025	1.60	11.9	12.5	0.53	303	1.38	2.05	6.5	21.2	782
I3 (8894001)		20.4	<0.05	3.0	0.027	1.68	10.6	13.6	0.47	286	0.55	1.95	7.5	21.5	391
I4 (8894002)		21.1	<0.05	3.0	0.031	1.58	14.1	19.8	0.78	384	0.77	1.80	7.2	34.6	499
I5 (8894003)		19.3	<0.05	2.8	0.028	1.43	11.1	22.9	0.59	305	0.91	1.74	6.8	31.7	446

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
I6 (8894004)		20.9	<0.05	2.5	0.028	1.49	10.3	16.8	0.72	337	0.73	1.94	6.2	36.4	427
I7 (8894005)		21.5	<0.05	3.9	0.030	1.57	12.4	18.9	0.70	345	0.75	1.89	7.2	30.6	528
I8 (8894006)		23.1	<0.05	2.7	0.036	1.53	12.6	26.1	0.64	309	1.14	1.71	8.5	33.4	499
I9 (8894007)		21.3	<0.05	2.9	0.032	1.35	12.4	25.3	0.75	384	1.06	1.59	7.8	37.2	522
I10 (8894008)		20.3	<0.05	3.5	0.033	1.44	21.6	19.5	0.69	379	0.63	1.96	7.2	49.4	486
I11 (8894009)		19.2	<0.05	3.4	0.031	1.45	14.1	18.9	0.76	390	0.67	1.88	6.4	32.1	397
I12 (8894010)		20.1	<0.05	3.4	0.025	1.60	12.4	16.0	0.60	298	0.76	2.04	7.0	22.8	221
I13 (8894011)		20.0	<0.05	2.2	0.023	1.65	8.7	12.9	0.61	296	0.51	2.19	5.3	24.8	375

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
G30 (8893940)	12.3	55.5	<0.002	0.04	0.16	8.3	0.9	2.0	320	0.84	0.03	5.8	0.28	0.27
G31 (8893941)	11.8	49.8	<0.002	0.05	0.27	9.1	1.2	2.3	264	0.78	0.02	4.9	0.33	0.24
G32 (8893942)	11.6	61.9	<0.002	0.05	0.23	10.0	1.6	1.7	276	0.71	0.02	4.3	0.28	0.29
G33 (8893943)	11.1	55.2	<0.002	0.04	0.13	9.6	1.0	1.8	333	0.58	<0.01	2.5	0.30	0.27
G34 (8893944)	11.7	57.8	<0.002	0.03	0.16	9.9	1.0	1.8	323	0.96	0.03	10.1	0.37	0.25
G35 (8893945)	10.4	54.4	<0.002	0.04	0.15	7.7	1.2	1.4	280	0.52	0.02	3.7	0.25	0.26
G36 (8893946)	10.5	54.8	<0.002	0.04	0.24	9.1	1.4	2.1	269	0.62	0.03	3.5	0.31	0.26
G37 (8893947)	11.6	57.5	<0.002	0.05	0.26	9.8	1.8	2.0	264	0.72	0.04	3.6	0.31	0.27
G38 (8893948)	12.3	64.4	<0.002	0.04	0.20	9.1	1.0	2.4	292	0.60	0.02	3.9	0.28	0.30
G39 (8893949)	11.5	68.5	<0.002	0.03	0.18	8.2	1.3	1.6	292	0.55	0.03	4.2	0.24	0.29
G40 (8893950)	11.5	58.4	<0.002	0.04	0.26	8.3	1.3	2.0	284	0.92	0.06	4.5	0.27	0.34
G41 (8893951)	12.4	54.6	<0.002	0.04	0.21	8.7	1.0	2.1	288	0.76	0.03	4.1	0.31	0.31
G42 (8893952)	12.3	48.3	<0.002	0.04	0.21	8.8	1.5	1.9	266	0.74	0.03	3.8	0.38	0.28
G43 (8893953)	11.5	44.1	<0.002	0.04	0.18	8.9	1.2	1.6	297	0.62	0.02	3.4	0.28	0.26
G44 (8893954)	19.4	43.4	<0.002	0.08	0.57	9.8	1.9	2.4	248	0.64	0.12	8.6	0.35	0.25
G45 (8893955)	15.9	57.2	<0.002	0.04	0.44	9.4	1.7	2.4	270	0.67	0.08	3.5	0.34	0.29
H1 (8893956)	11.6	52.8	<0.002	0.03	0.18	5.8	1.3	1.6	306	0.45	0.03	1.7	0.20	0.28
H2 (8893957)	11.3	51.0	<0.002	0.03	0.15	7.6	1.5	1.4	322	0.48	0.04	2.1	0.21	0.26
H3 (8893958)	11.1	52.7	<0.002	0.02	0.10	6.8	1.0	1.2	337	0.38	0.01	4.1	0.17	0.29
H4 (8893959)	10.7	51.5	<0.002	0.03	0.07	5.7	0.8	1.0	314	0.36	0.02	2.9	0.14	0.26
H5 (8893960)	11.1	51.1	<0.002	0.03	0.17	6.7	1.6	1.3	326	0.39	0.05	2.6	0.19	0.27
H6 (8893961)	12.1	45.0	<0.002	0.04	0.24	7.1	1.1	1.4	292	0.48	0.04	2.5	0.24	0.26
H7 (8893962)	11.4	50.8	<0.002	0.03	0.15	7.5	1.4	1.3	302	0.76	0.02	3.1	0.23	0.27
H8 (8893963)	12.6	49.8	<0.002	0.04	0.14	7.9	1.6	1.7	288	0.55	0.06	3.7	0.27	0.28
H9 (8893964)	12.6	50.6	<0.002	0.04	0.23	9.6	1.9	2.1	232	0.65	0.06	4.7	0.35	0.29
H10 (8893965)	12.0	47.6	<0.002	0.04	0.18	8.8	1.4	1.8	290	0.56	0.02	3.2	0.32	0.24
H11 (8893966)	11.7	46.4	<0.002	0.04	0.14	7.6	1.7	1.5	300	0.47	0.05	6.0	0.25	0.27
H12 (8893967)	10.3	49.8	<0.002	0.03	0.10	6.3	1.4	1.1	312	0.34	0.03	1.7	0.17	0.26
H13 (8893968)	11.3	49.4	<0.002	0.03	0.14	7.7	1.2	1.6	311	0.64	0.03	3.9	0.27	0.27
H14 (8893969)	11.1	49.6	<0.002	0.03	0.12	7.9	1.3	1.3	345	0.41	0.03	4.3	0.22	0.24
H15 (8893970)	12.4	48.9	<0.002	0.03	0.16	8.3	1.4	1.7	283	0.51	0.03	4.7	0.28	0.28
H16 (8893971)	10.7	51.4	<0.002	0.03	0.22	10.1	1.5	1.7	246	0.55	0.03	4.4	0.34	0.28

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
H17 (8893972)	13.1	46.9	<0.002	0.06	0.47	10.5	2.0	2.3	192	1.01	0.15	5.8	0.34	0.31
H18 (8893973)	10.8	49.6	<0.002	0.03	0.14	8.9	1.3	1.6	364	0.66	0.04	4.8	0.27	0.27
H19 (8893974)	13.4	46.2	<0.002	0.05	0.24	9.4	1.8	1.8	245	0.63	0.06	5.8	0.30	0.27
H20 (8893975)	11.0	49.5	<0.002	0.03	0.12	7.4	1.2	1.4	336	0.51	0.04	2.4	0.26	0.30
H21 (8893976)	14.0	44.7	<0.002	0.06	0.33	10.2	2.4	2.3	182	0.68	0.07	4.7	0.37	0.28
H22 (8893977)	13.6	52.7	<0.002	0.04	0.14	7.5	2.0	2.0	275	0.60	0.02	3.6	0.33	0.29
H23 (8893978)	12.2	46.7	<0.002	0.04	0.18	8.1	2.1	1.7	302	0.77	0.04	4.9	0.22	0.25
H24 (8893979)	11.9	46.9	<0.002	0.07	0.09	7.5	1.4	1.4	309	0.46	0.04	2.9	0.24	0.27
H25 (8893980)	11.4	43.8	<0.002	0.03	0.10	8.3	1.4	1.6	331	0.47	0.02	4.5	0.26	0.23
H26 (8893981)	11.4	46.5	<0.002	0.04	0.10	8.2	1.7	1.4	301	0.49	0.03	6.5	0.27	0.25
H27 (8893982)	13.5	43.2	<0.002	0.04	0.30	7.0	2.1	2.2	212	0.61	0.06	4.5	0.35	0.25
H28 (8893983)	11.1	44.2	<0.002	0.03	0.17	7.3	1.4	1.5	282	0.45	<0.01	5.1	0.28	0.26
H29 (8893984)	10.5	47.9	<0.002	0.04	0.11	8.3	1.5	1.4	304	0.46	0.03	2.6	0.25	0.26
H30 (8893985)	11.7	50.3	<0.002	0.03	0.09	8.6	1.8	1.3	323	0.46	<0.01	5.6	0.25	0.26
H31 (8893986)	11.9	52.0	<0.002	0.03	0.11	8.7	1.6	1.5	314	0.51	0.01	4.0	0.27	0.28
H32 (8893987)	11.1	46.0	<0.002	0.04	0.16	9.1	1.8	1.5	267	0.58	0.03	3.1	0.32	0.27
H33 (8893988)	12.2	48.7	<0.002	0.03	0.13	9.6	1.6	1.5	276	0.54	0.03	5.9	0.34	0.26
H34 (8893989)	12.3	50.4	<0.002	0.04	0.16	10.5	2.0	2.6	273	1.39	0.04	6.6	0.41	0.25
H35 (8893990)	12.9	50.9	<0.002	0.04	0.21	11.1	1.9	1.8	260	0.58	0.05	5.2	0.39	0.28
H36 (8893991)	12.0	50.6	<0.002	0.06	0.40	10.0	2.0	2.1	224	1.04	0.17	6.7	0.36	0.29
H37 (8893992)	12.6	51.5	<0.002	0.05	0.34	10.0	2.0	2.0	268	0.66	0.09	4.0	0.37	0.26
H38 (8893993)	11.3	49.6	<0.002	0.05	0.17	10.4	1.9	1.7	266	0.65	0.03	3.5	0.42	0.26
H39 (8893994)	12.2	53.9	<0.002	0.04	0.12	9.5	1.6	1.7	303	0.64	0.04	5.5	0.31	0.29
H40 (8893995)	12.1	53.3	<0.002	0.03	0.14	7.7	1.3	1.3	312	0.59	0.03	5.1	0.22	0.28
H41 (8893996)	11.5	51.7	<0.002	0.03	0.13	7.7	1.4	1.4	301	0.56	0.02	3.3	0.26	0.26
H42 (8893997)	12.7	45.6	<0.002	0.04	0.13	9.3	1.5	1.7	293	0.73	0.04	5.8	0.29	0.26
H43 (8893998)	20.7	48.3	<0.002	0.07	0.43	9.8	2.3	2.5	215	0.73	0.13	7.2	0.48	0.24
I1 (8893999)	11.0	49.1	<0.002	0.04	0.10	7.0	1.4	1.3	310	0.43	0.02	2.1	0.20	0.27
I2 (8894000)	15.2	49.8	<0.002	0.03	0.16	7.0	1.4	1.6	305	0.44	0.03	3.8	0.24	0.26
I3 (8894001)	12.3	49.7	<0.002	0.03	0.15	7.5	1.3	1.6	291	0.56	0.03	3.0	0.27	0.26
I4 (8894002)	13.5	57.3	<0.002	0.03	0.27	10.7	1.5	1.7	221	0.54	0.03	5.3	0.29	0.31
I5 (8894003)	12.9	46.0	<0.002	0.04	0.20	8.8	1.8	1.7	234	0.53	0.03	3.4	0.27	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
I6 (8894004)		12.3	51.3	<0.002	0.03	0.17	8.7	1.7	1.5	274	0.46	0.04	3.1	0.24	0.28
I7 (8894005)		12.5	52.5	<0.002	0.03	0.15	9.4	1.3	1.6	258	0.51	0.04	4.4	0.29	0.28
I8 (8894006)		13.1	50.9	<0.002	0.05	0.27	8.7	1.8	1.8	256	0.54	0.03	4.1	0.31	0.30
I9 (8894007)		13.6	49.7	<0.002	0.05	0.26	10.4	2.1	1.8	200	0.53	0.05	4.9	0.32	0.29
I10 (8894008)		13.9	43.7	<0.002	0.05	0.17	11.6	1.8	1.4	287	0.48	0.04	5.0	0.26	0.28
I11 (8894009)		12.8	47.6	<0.002	0.05	0.19	9.7	1.7	1.4	248	0.48	0.03	6.4	0.28	0.28
I12 (8894010)		12.4	43.8	<0.002	0.04	0.20	8.5	1.4	1.6	296	0.46	0.03	4.3	0.28	0.26
I13 (8894011)		11.3	51.8	<0.002	0.03	0.13	7.5	1.2	1.3	324	0.37	0.01	13.5	0.22	0.26

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
G30 (8893940)		0.860	62.4	0.5	13.5	43.7	172
G31 (8893941)		0.832	83.1	0.6	12.7	42.1	159
G32 (8893942)		0.946	62.3	0.5	16.3	39.0	163
G33 (8893943)		0.620	74.0	0.4	14.2	32.2	122
G34 (8893944)		0.841	82.6	0.4	14.1	35.6	206
G35 (8893945)		0.679	59.4	0.3	10.3	38.8	153
G36 (8893946)		0.895	65.5	0.5	12.4	63.5	174
G37 (8893947)		0.906	78.0	0.5	13.6	88.8	173
G38 (8893948)		0.767	60.7	0.4	12.0	43.9	173
G39 (8893949)		0.734	54.9	0.4	11.4	31.0	128
G40 (8893950)		0.763	53.1	0.5	11.9	35.9	164
G41 (8893951)		0.817	72.8	0.5	12.4	50.1	159
G42 (8893952)		0.894	71.1	0.5	13.1	93.3	174
G43 (8893953)		0.800	63.7	0.4	12.7	64.7	178
G44 (8893954)		1.11	85.7	0.5	16.0	66.6	108
G45 (8893955)		0.999	69.5	0.6	13.7	139	202
H1 (8893956)		0.444	49.9	0.5	7.7	32.3	88.0
H2 (8893957)		0.543	55.5	0.3	10.2	28.7	121
H3 (8893958)		0.713	41.3	0.2	12.3	23.0	127
H4 (8893959)		0.392	39.6	0.2	7.1	23.4	73.1
H5 (8893960)		0.433	46.0	0.2	10.7	27.8	82.9
H6 (8893961)		0.594	58.6	0.3	9.2	33.3	131
H7 (8893962)		0.642	53.0	0.3	11.1	40.7	150
H8 (8893963)		0.899	60.2	0.4	11.7	40.6	189
H9 (8893964)		1.26	82.7	0.7	13.9	41.8	196
H10 (8893965)		0.879	85.0	0.4	15.4	33.6	192
H11 (8893966)		0.974	53.8	0.4	13.6	37.1	144
H12 (8893967)		0.500	42.9	0.2	9.7	18.8	75.8
H13 (8893968)		0.838	53.4	0.4	12.2	25.4	186
H14 (8893969)		0.658	56.4	0.3	13.8	26.4	136
H15 (8893970)		1.00	63.9	0.4	13.3	36.2	217
H16 (8893971)		1.12	77.1	0.5	14.5	35.9	184

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
H17 (8893972)		1.37	92.5	0.8	15.9	45.0	186
H18 (8893973)		0.996	53.1	0.3	14.8	27.1	187
H19 (8893974)		1.11	71.9	0.5	14.8	45.7	195
H20 (8893975)		0.621	47.3	0.3	10.7	23.6	146
H21 (8893976)		1.39	110	0.8	14.4	46.7	188
H22 (8893977)		0.870	69.6	0.4	11.6	38.9	181
H23 (8893978)		0.878	58.5	0.3	15.0	43.6	129
H24 (8893979)		0.686	59.7	0.3	9.5	28.0	141
H25 (8893980)		0.611	65.6	0.2	12.0	29.0	127
H26 (8893981)		0.811	63.0	0.3	12.6	38.2	142
H27 (8893982)		1.12	64.2	0.6	10.9	40.7	217
H28 (8893983)		0.853	55.8	0.4	10.2	37.3	177
H29 (8893984)		0.664	60.7	0.3	11.2	44.6	161
H30 (8893985)		0.746	66.7	0.3	12.9	30.5	137
H31 (8893986)		0.824	59.2	0.4	12.7	34.9	172
H32 (8893987)		0.809	77.2	0.4	12.4	49.5	183
H33 (8893988)		0.863	86.0	0.4	14.6	34.5	192
H34 (8893989)		0.979	92.0	0.4	16.7	46.8	194
H35 (8893990)		1.09	93.6	0.5	16.3	59.2	206
H36 (8893991)		1.20	87.3	0.8	14.0	78.7	188
H37 (8893992)		0.996	91.8	0.5	13.4	99.0	174
H38 (8893993)		0.831	105	0.5	14.4	51.0	130
H39 (8893994)		0.954	70.1	0.4	16.4	43.0	198
H40 (8893995)		0.796	58.3	0.4	13.2	25.7	163
H41 (8893996)		0.689	55.8	0.3	10.7	51.7	131
H42 (8893997)		0.856	72.7	0.4	14.3	41.0	230
H43 (8893998)		1.30	107	0.6	16.7	85.1	167
I1 (8893999)		0.510	49.8	0.3	9.8	36.3	98.6
I2 (8894000)		0.635	54.8	0.4	10.7	39.9	139
I3 (8894001)		0.725	54.1	0.4	11.1	39.7	153
I4 (8894002)		1.27	74.6	0.6	15.9	48.6	155
I5 (8894003)		0.915	66.9	0.5	11.3	41.7	147

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
I6 (8894004)		0.774	64.6	0.4	12.1	34.2	134
I7 (8894005)		1.04	70.7	0.5	12.3	41.1	200
I8 (8894006)		1.02	76.8	0.5	11.5	53.8	142
I9 (8894007)		1.19	86.7	0.9	13.7	53.4	157
I10 (8894008)		1.20	70.5	0.4	25.0	43.5	175
I11 (8894009)		1.04	74.1	0.4	11.5	44.1	175
I12 (8894010)		0.884	61.8	0.4	10.6	31.5	174
I13 (8894011)		0.767	54.1	0.3	11.8	32.5	116

Comments: RDL - Reported Detection Limit
8893940-8894011 As, Sb values may be low due to digestion losses.

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893940	0.19	0.17	11.1%	8893957	0.14	0.12	15.4%	8893974	0.25	0.24	4.1%	8893991	0.507	0.469	7.8%
Al	8893940	6.98	6.94	0.6%	8893957	6.87	6.84	0.4%	8893974	6.87	6.90	0.4%	8893991	7.81	7.34	6.2%
As	8893940	4.1	3.1		8893957	2.4	1.1		8893974	6.6	7.0	5.9%	8893991	7.4	4.5	
Ba	8893940	509	513	0.8%	8893957	476	498	4.5%	8893974	425	430	1.2%	8893991	474	452	4.8%
Be	8893940	1.29	1.16	10.6%	8893957	1.36	1.30	4.5%	8893974	1.32	1.35	2.2%	8893991	1.55	1.44	7.4%
Bi	8893940	0.099	0.091	8.4%	8893957	0.085	0.070	19.4%	8893974	0.173	0.155	11.0%	8893991	0.177	0.171	3.4%
Ca	8893940	1.47	1.47	0.0%	8893957	1.50	1.43	4.8%	8893974	1.43	1.42	0.7%	8893991	1.26	1.25	0.8%
Cd	8893940	0.08	0.08	0.0%	8893957	0.05	0.05	0.0%	8893974	0.09	0.09	0.0%	8893991	0.083	0.093	11.4%
Ce	8893940	36.1	31.3	14.2%	8893957	16.3	14.7	10.3%	8893974	29.3	25.9	12.3%	8893991	29.9	24.0	21.9%
Co	8893940	10.7	10.3	3.8%	8893957	13.3	11.4	15.4%	8893974	19.1	18.4	3.7%	8893991	24.4	23.7	2.9%
Cr	8893940	60.4	57.9	4.2%	8893957	53.8	44.6	18.7%	8893974	74.0	74.1	0.1%	8893991	84.9	81.4	4.2%
Cs	8893940	1.29	1.23	4.8%	8893957	1.48	1.37	7.7%	8893974	2.03	1.97	3.0%	8893991	2.35	2.24	4.8%
Cu	8893940	3.61	3.54	2.0%	8893957	4.96	4.74	4.5%	8893974	16.3	16.1	1.2%	8893991	14.2	12.9	9.6%
Fe	8893940	2.37	2.35	0.8%	8893957	2.24	1.89	16.9%	8893974	3.41	3.43	0.6%	8893991	3.62	3.46	4.5%
Ga	8893940	19.5	18.5	5.3%	8893957	19.2	18.9	1.6%	8893974	21.0	20.3	3.4%	8893991	22.4	22.0	1.8%
Ge	8893940	< 0.05	< 0.05	0.0%	8893957	< 0.05	< 0.05	0.0%	8893974	< 0.05	< 0.05	0.0%	8893991	< 0.05	< 0.05	0.0%
Hf	8893940	3.5	3.2	9.0%	8893957	2.2	1.6		8893974	3.7	3.4	8.5%	8893991	4.1	3.4	
In	8893940	0.0307	0.0301	2.0%	8893957	0.0268	0.0221	19.2%	8893974	0.038	0.034	11.1%	8893991	0.040	0.040	0.0%
K	8893940	1.62	1.61	0.6%	8893957	1.57	1.64	4.4%	8893974	1.40	1.41	0.7%	8893991	1.57	1.47	6.6%
La	8893940	16.9	14.2	17.4%	8893957	7.92	7.24	9.0%	8893974	13.3	11.7	12.8%	8893991	15.2	12.1	22.7%
Li	8893940	14.7	14.9	1.4%	8893957	14.9	14.0	6.2%	8893974	21.8	21.7	0.5%	8893991	26.6	25.4	4.6%
Mg	8893940	0.59	0.58	1.7%	8893957	0.686	0.647	5.9%	8893974	0.73	0.73	0.0%	8893991	0.811	0.792	2.4%
Mn	8893940	342	332	3.0%	8893957	344	285	18.8%	8893974	366	367	0.3%	8893991	386	392	1.5%
Mo	8893940	0.587	0.550	6.5%	8893957	0.45	0.39	14.3%	8893974	0.91	0.88	3.4%	8893991	1.18	1.00	16.5%
Na	8893940	2.07	2.09	1.0%	8893957	2.14	2.23	4.1%	8893974	1.76	1.77	0.6%	8893991	1.51	1.48	2.0%
Nb	8893940	9.0	8.0	11.8%	8893957	5.5	5.0	9.5%	8893974	8.21	7.52	8.8%	8893991	11.0	11.0	0.0%
Ni	8893940	22.9	22.0	4.0%	8893957	28.5	25.7	10.3%	8893974	31.0	31.7	2.2%	8893991	45.9	44.6	2.9%
P	8893940	466	463	0.6%	8893957	507	441	13.9%	8893974	398	428	7.3%	8893991	1040	981	5.8%
Pb	8893940	12.3	11.9	3.3%	8893957	11.3	10.8	4.5%	8893974	13.4	12.9	3.8%	8893991	12.0	11.0	8.7%
Rb	8893940	55.5	52.8	5.0%	8893957	51.0	51.0	0.0%	8893974	46.2	44.7	3.3%	8893991	50.6	47.0	7.4%
Re	8893940	< 0.002	< 0.002	0.0%	8893957	< 0.002	< 0.002	0.0%	8893974	< 0.002	< 0.002	0.0%	8893991	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.   ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893940	0.04	0.04	0.0%	8893957	0.03	0.03	0.0%	8893974	0.05	0.05	0.0%	8893991	0.058	0.053	9.0%
Sb	8893940	0.16	0.16	0.0%	8893957	0.148	0.122	19.3%	8893974	0.24	0.24	0.0%	8893991	0.40	0.36	10.5%
Sc	8893940	8.3	8.2	1.2%	8893957	7.59	6.54	14.9%	8893974	9.4	9.6	2.1%	8893991	10.0	10.2	2.0%
Se	8893940	0.92	0.98	6.3%	8893957	1.46	1.10	28.1%	8893974	1.84	1.54	17.8%	8893991	2.03	2.12	4.3%
Sn	8893940	2.0	1.7	16.2%	8893957	1.4	1.3	7.4%	8893974	1.8	1.7	5.7%	8893991	2.1	2.0	4.9%
Sr	8893940	320	311	2.9%	8893957	322	337	4.6%	8893974	245	242	1.2%	8893991	224	222	0.9%
Ta	8893940	0.84	0.65	25.5%	8893957	0.48	0.43	11.0%	8893974	0.626	0.609	2.8%	8893991	1.04	1.20	14.3%
Te	8893940	0.026	0.025	3.9%	8893957	0.04	0.02		8893974	0.06	0.04		8893991	0.17	0.12	
Th	8893940	5.8	4.8	18.9%	8893957	2.1	1.7	21.1%	8893974	5.8	5.0	14.8%	8893991	6.7	5.9	12.7%
Ti	8893940	0.280	0.274	2.2%	8893957	0.21	0.18	15.4%	8893974	0.30	0.30	0.0%	8893991	0.356	0.347	2.6%
Tl	8893940	0.27	0.27	0.0%	8893957	0.261	0.266	1.9%	8893974	0.27	0.27	0.0%	8893991	0.290	0.255	12.8%
U	8893940	0.860	0.752	13.4%	8893957	0.543	0.471	14.2%	8893974	1.11	1.07	3.7%	8893991	1.20	1.13	6.0%
V	8893940	62.4	62.0	0.6%	8893957	55.5	47.2	16.2%	8893974	71.9	75.0	4.2%	8893991	87.3	85.0	2.7%
W	8893940	0.46	0.42	9.1%	8893957	0.30	0.26	14.3%	8893974	0.5	0.5	0.0%	8893991	0.76	0.69	9.7%
Y	8893940	13.5	11.5	16.0%	8893957	10.2	8.63	16.7%	8893974	14.8	13.1	12.2%	8893991	14.0	13.6	2.9%
Zn	8893940	43.7	43.2	1.2%	8893957	28.7	25.1	13.4%	8893974	45.7	46.6	2.0%	8893991	78.7	73.4	7.0%
Zr	8893940	172	161	6.6%	8893957	121	55.5		8893974	195	179	8.6%	8893991	188	148	23.8%
	REPLICATE #5															
Parameter	Sample ID	Original	Replicate	RPD												
Ag	8894008	0.40	0.25													
Al	8894008	7.75	7.59	2.1%												
As	8894008	5.96	5.41	9.7%												
Ba	8894008	490	487	0.6%												
Be	8894008	1.68	1.70	1.2%												
Bi	8894008	0.12	0.12	0.0%												
Ca	8894008	1.46	1.44	1.4%												
Cd	8894008	0.06	0.06	0.0%												
Ce	8894008	116	119	2.6%												
Co	8894008	36.4	35.4	2.8%												
Cr	8894008	78.1	81.1	3.8%												
Cs	8894008	1.57	1.54	1.9%												
Cu	8894008	30.5	29.8	2.3%												
Fe	8894008	2.77	2.78	0.4%												
Ga	8894008	20.3	20.2	0.5%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

Ge	8894008	< 0.05	< 0.05	0.0%												
Hf	8894008	3.50	3.23	8.0%												
In	8894008	0.033	0.030	9.5%												
K	8894008	1.44	1.45	0.7%												
La	8894008	21.6	23.8	9.7%												
Li	8894008	19.5	18.6	4.7%												
Mg	8894008	0.690	0.697	1.0%												
Mn	8894008	379	379	0.0%												
Mo	8894008	0.63	0.62	1.6%												
Na	8894008	1.96	1.94	1.0%												
Nb	8894008	7.2	6.9	4.3%												
Ni	8894008	49.4	48.1	2.7%												
P	8894008	486	474	2.5%												
Pb	8894008	13.9	13.7	1.4%												
Rb	8894008	43.7	44.0	0.7%												
Re	8894008	< 0.002	< 0.002	0.0%												
S	8894008	0.05	0.05	0.0%												
Sb	8894008	0.17	0.14	19.4%												
Sc	8894008	11.6	11.4	1.7%												
Se	8894008	1.78	2.26	23.8%												
Sn	8894008	1.43	1.48	3.4%												
Sr	8894008	287	297	3.4%												
Ta	8894008	0.48	0.52	8.0%												
Te	8894008	0.04	0.02													
Th	8894008	5.0	7.6													
Ti	8894008	0.26	0.26	0.0%												
Tl	8894008	0.28	0.27	3.6%												
U	8894008	1.20	1.26	4.9%												
V	8894008	70.5	69.0	2.2%												
W	8894008	0.4	0.4	0.0%												
Y	8894008	25.0	25.3	1.2%												
Zn	8894008	43.5	42.8	1.6%												
Zr	8894008	175	158	10.2%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.98	100%	90% - 110%	6.96	6.86	99%	90% - 110%	8.17	8.8	108%	90% - 110%	10.95	10.77	98%	90% - 110%
As					124	132	106%	90% - 110%	26	28	107%	90% - 110%				
Ba	340	329	97%	90% - 110%	186	177	95%	90% - 110%	540	542	100%	90% - 110%	340	327	96%	90% - 110%
Be	2.6	2.8	107%	90% - 110%					4.0	4	99%	90% - 110%	2.6	2.8	107%	90% - 110%
Ca	5.72	5.51	96%	90% - 110%	4.01	3.85	96%	90% - 110%	0.907	0.95	105%	90% - 110%	5.72	5.29	92%	90% - 110%
Ce	122	135	110%	90% - 110%	24	24	102%	90% - 110%	98	107	109%	90% - 110%	122	123	100%	90% - 110%
Co	2.8	3.1	110%	90% - 110%									2.8	3.1	110%	90% - 110%
Cr									60.3	61.3	102%	90% - 110%				
Cs	1.5	1.7	113%	90% - 110%					12	14	116%	90% - 110%				
Cu	7	6	80%	90% - 110%	88.6	83.1	94%	90% - 110%	150	154	103%	90% - 110%				
Fe	4.34	4	92%	90% - 110%	7.56	7.06	93%	90% - 110%	3.77	3.83	101%	90% - 110%	4.34	3.96	91%	90% - 110%
Ga	35	38	108%	90% - 110%												
K	1.37	1.36	99%	90% - 110%	2.021	1.918	95%	90% - 110%					1.37	1.38	101%	90% - 110%
La	58	62	106%	90% - 110%					44	43	97%	90% - 110%	58	59	102%	90% - 110%
Li	37	38	102%	90% - 110%					47	48	101%	90% - 110%	37	40	108%	90% - 110%
Mg	0.325	0.311	96%	90% - 110%	2.412	2.427	101%	90% - 110%	1.10	1.16	106%	90% - 110%	0.325	0.312	96%	90% - 110%
Mn					1510	1513	100%	90% - 110%	780	804	103%	90% - 110%				
Na	5.267	5.151	98%	90% - 110%	0.617	0.596	97%	90% - 110%	1.624	1.699	105%	90% - 110%	5.267	5.139	98%	90% - 110%
Nb									20	22	111%	90% - 110%				
Ni	9	8	91%	90% - 110%	77.1	70.9	92%	90% - 110%	32	34	105%	90% - 110%	9	8	85%	90% - 110%
P					892	937	105%	90% - 110%								
Pb	10	10	100%	90% - 110%					31	30	95%	90% - 110%	10	9	92%	90% - 110%
Rb	55	55	100%	90% - 110%					143	159	111%	90% - 110%	55	54	99%	90% - 110%
S					0.348	0.38	109%	90% - 110%								
Sb									0.8	0.9	116%	90% - 110%				
Sc	1.1	0.8	73%	90% - 110%					12	13	107%	90% - 110%				
Sr	1191	1181	99%	90% - 110%	92.8	84.6	91%	90% - 110%	144	149	104%	90% - 110%	1191	1167	98%	90% - 110%
Ta									1.9	1.8	93%	90% - 110%				
Th									18.4	17.6	95%	90% - 110%	1.4	1.2	85%	90% - 110%
Ti	0.172	0.164	95%	90% - 110%					0.53	0.47	88%	90% - 110%	0.172	0.167	97%	90% - 110%
U									5.7	4.4	77%	90% - 110%				

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

V	8	7	88%	90% - 110%					77	79	102%	90% - 110%	8	7	89%	90% - 110%
W									5	5	100%	90% - 110%				
Y									40	33	83%	90% - 110%				
Zn	93	90	97%	90% - 110%	208	198	95%	90% - 110%	130	126	97%	90% - 110%	93	88	95%	90% - 110%
	CRM #5 (ref.GTS-2A)															
Parameter	Expect	Actual	Recovery	Limits												
Al	6.96	7.22	104%	90% - 110%												
As	124	134	108%	90% - 110%												
Ba	186	185	99%	90% - 110%												
Ca	4.01	4.01	100%	90% - 110%												
Ce	24	18	76%	90% - 110%												
Cu	88.6	89.3	101%	90% - 110%												
Fe	7.56	7.36	97%	90% - 110%												
K	2.021	2.01	99%	90% - 110%												
Mg	2.412	2.553	106%	90% - 110%												
Mn	1510	1583	105%	90% - 110%												
Na	0.617	0.621	101%	90% - 110%												
Ni	77.1	72.6	94%	90% - 110%												
P	892	961	108%	90% - 110%												
S	0.348	0.383	110%	90% - 110%												
Sr	92.8	85.3	92%	90% - 110%												
Zn	208	208	100%	90% - 110%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP. AGAT WORK ORDER: 17T282584
PROJECT: ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282585
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 08, 2018
PAGES (INCLUDING COVER):	18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.   ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017   DATE RECEIVED: Nov 10, 2017   DATE REPORTED: Jan 08, 2018   SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
I14 (8894013)		0.23	6.68	2.9	496	1.19	0.09	1.39	0.07	29.1	11.4	57.4	1.17	11.4	2.26
I15 (8894014)		0.31	6.67	3.6	462	1.27	0.13	1.31	0.07	23.5	15.2	66.9	1.42	14.1	2.95
I16 (8894015)		0.23	6.44	3.4	459	1.11	0.11	1.27	0.05	25.3	9.76	59.1	1.31	9.5	2.57
I17 (8894016)		0.18	6.60	7.3	455	1.33	0.14	1.36	0.06	27.5	14.5	61.4	1.28	9.8	2.77
I18 (8894017)		0.20	6.55	10.2	435	1.21	0.20	1.25	0.12	31.9	14.9	70.1	1.69	27.8	3.19
I19 (8894018)		0.20	6.40	6.6	398	1.27	0.15	1.21	0.12	21.0	12.6	69.8	1.47	28.9	3.60
I20 (8894019)		0.23	6.80	4.7	438	1.24	0.15	1.25	0.09	24.3	10.9	65.3	1.38	10.2	2.90
I21 (8894020)		0.20	6.54	7.1	419	1.16	0.15	1.30	0.12	31.8	11.0	70.9	1.39	21.8	3.68
I22 (8894021)		0.19	5.92	3.5	492	1.14	0.86	1.39	0.06	22.4	7.56	40.6	0.92	7.4	1.85
I23 (8894022)		0.18	6.66	3.4	479	1.19	0.08	1.45	0.05	27.4	10.9	53.3	1.04	8.3	2.38
I24 (8894023)		0.21	6.25	3.4	508	1.11	0.09	1.43	0.08	17.5	8.50	51.5	1.13	5.7	2.29
I25 (8894024)		0.31	6.17	4.9	436	0.96	0.15	1.09	0.08	20.0	5.16	48.4	1.10	8.8	2.45
I26 (8894025)		0.18	6.47	2.3	490	1.17	0.09	1.40	0.07	20.9	9.42	59.1	1.22	4.0	2.60
I27 (8894026)		0.20	6.27	1.9	444	1.07	0.07	1.47	0.05	14.2	8.61	58.1	0.95	3.8	2.69
I28 (8894027)		0.20	6.58	4.3	467	1.27	0.09	1.48	0.05	23.9	11.3	65.1	1.13	4.0	2.82
I29 (8894028)		0.17	6.57	2.3	463	1.15	0.08	1.55	0.06	22.3	11.5	69.2	1.10	7.9	2.91
I30 (8894029)		0.24	5.63	1.1	514	0.93	0.08	1.34	0.05	19.4	4.80	40.8	1.04	2.6	1.75
I31 (8894030)		0.13	6.53	2.5	513	1.11	0.08	1.50	0.07	21.6	7.16	54.6	1.02	3.2	2.31
I32 (8894031)		0.21	6.56	1.3	528	1.17	0.08	1.40	0.06	20.6	8.92	54.0	1.17	4.0	2.40
I33 (8894032)		0.23	6.36	1.1	527	1.17	0.07	1.37	0.04	15.0	7.89	47.1	1.05	3.6	1.95
I34 (8894033)		0.19	6.42	1.9	514	1.13	0.07	1.40	0.04	17.6	9.26	46.9	0.93	7.5	1.97
I35 (8894034)		0.28	5.91	2.2	461	0.90	0.11	1.21	0.07	30.3	9.07	55.3	1.53	10.1	2.56
I36 (8894035)		0.26	6.43	4.4	489	1.15	0.16	1.36	0.13	23.7	13.0	67.5	2.00	11.2	3.17
I37 (8894036)		0.15	6.00	2.3	569	1.05	0.09	1.28	0.04	14.5	5.59	33.6	1.00	2.9	1.65
I38 (8894037)		0.44	5.66	6.1	532	0.91	0.14	1.34	0.09	21.6	6.17	43.3	1.34	6.1	2.04
I39 (8894038)		0.27	6.43	4.5	517	1.12	0.12	1.42	0.10	22.3	9.36	58.4	1.25	4.8	2.48
I40 (8894039)		0.61	6.35	22.5	408	1.51	0.39	1.44	0.21	43.9	26.8	81.7	2.63	69.7	5.47
J1 (8894040)		1.22	7.38	2.0	467	1.25	2.92	1.23	0.04	17.8	9.59	56.0	1.18	4.4	2.52
J2 (8894041)		0.17	6.35	2.4	521	1.23	0.07	1.40	0.03	20.6	8.80	47.1	1.03	4.6	2.01
J3 (8894042)		0.19	6.66	2.0	513	1.22	0.09	1.39	0.07	21.8	9.43	55.6	1.25	3.2	2.16
J4 (8894043)		0.20	6.48	2.1	497	1.21	0.09	1.43	0.06	21.6	10.4	58.0	1.18	3.8	2.38
J5 (8894044)		0.24	7.10	3.9	458	1.28	0.10	1.41	0.06	31.8	8.39	65.0	1.04	12.8	2.76

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
J6 (8894045)		0.18	6.25	2.1	514	1.13	0.08	1.46	0.07	20.0	7.41	47.3	1.03	2.9	2.03
J7 (8894046)		0.22	6.40	2.1	499	1.23	0.09	1.35	0.06	25.8	8.04	51.3	1.08	3.2	2.40
J8 (8894047)		0.21	6.33	3.0	481	1.05	0.08	1.38	0.10	22.3	10.1	54.2	1.06	5.6	2.18
J9 (8894048)		0.19	6.11	3.9	452	1.04	0.16	1.27	0.06	24.9	9.56	51.5	1.48	11.7	2.70
J10 (8894049)		0.26	7.12	1.9	483	1.20	0.09	1.48	0.05	21.0	10.8	63.9	1.13	5.5	2.57
J11 (8894050)		0.15	6.20	2.7	503	1.18	0.08	1.37	0.05	16.6	7.35	45.1	1.06	3.7	1.92
J12 (8894051)		0.14	6.49	2.4	513	1.23	0.08	1.36	0.06	19.6	8.72	55.6	1.07	3.5	2.26
J13 (8894052)		0.23	6.81	2.1	507	1.20	0.08	1.57	0.05	21.1	9.67	65.8	1.15	3.6	2.24
J14 (8894053)		0.12	6.48	3.4	547	1.26	0.10	1.35	0.04	24.1	8.66	54.3	1.12	12.0	2.12
J15 (8894054)		0.13	6.20	5.4	501	1.36	0.11	1.53	0.07	38.4	7.70	56.6	1.22	20.3	2.03
J16 (8894055)		0.14	6.62	4.9	514	1.31	0.10	1.49	0.05	29.3	13.1	62.0	1.13	11.2	2.52
J17 (8894056)		0.21	6.26	2.7	505	1.31	0.09	1.47	0.06	39.1	8.30	55.0	1.08	12.2	2.11
J18 (8894057)		0.25	6.83	4.9	448	1.30	0.15	1.26	0.08	19.3	11.6	74.6	1.58	11.1	4.01
J19 (8894058)		0.21	6.27	0.7	504	1.19	0.08	1.37	0.07	19.3	7.72	48.6	1.00	2.5	1.97
J20 (8894059)		0.11	6.44	1.2	504	1.15	0.07	1.38	0.06	16.3	7.91	45.3	0.97	3.7	2.03
J21 (8894060)		0.21	5.98	5.5	440	1.33	0.12	1.52	0.10	33.8	9.67	76.3	1.17	4.8	3.67
J22 (8894061)		0.14	6.56	1.5	492	1.20	0.09	1.45	0.05	17.5	8.54	60.4	1.06	5.2	2.84
J23 (8894062)		0.13	6.59	2.1	529	1.34	0.08	1.35	0.06	18.2	8.60	50.5	1.13	5.2	2.10
J24 (8894063)		0.41	6.64	1.7	497	1.20	0.10	1.41	0.06	19.0	8.64	56.8	1.14	4.2	2.43
J25 (8894064)		0.16	6.50	3.1	459	1.22	0.09	1.75	0.06	37.4	10.5	77.1	1.01	7.3	3.13
J26 (8894065)		0.18	6.71	1.9	505	1.26	0.09	1.34	0.06	22.2	10.5	76.0	1.36	7.6	2.55
J27 (8894066)		0.20	7.00	2.5	491	1.22	0.09	1.28	0.07	25.2	11.1	76.0	1.37	7.9	2.84
J28 (8894067)		0.21	6.56	1.9	491	1.15	0.09	1.46	0.06	22.1	9.82	61.3	1.21	7.9	2.80
J29 (8894068)		0.28	6.98	1.7	407	1.29	0.10	1.74	0.10	27.6	11.0	104	1.06	7.3	4.07
J30 (8894069)		0.14	6.70	1.8	482	1.26	0.08	1.45	0.05	18.0	9.61	48.7	1.03	4.3	2.30
J31 (8894070)		0.14	6.54	2.7	479	1.30	0.08	1.61	0.05	17.1	10.7	58.1	1.06	5.3	2.62
J32 (8894071)		0.24	6.36	1.5	500	1.23	0.08	1.56	0.08	19.1	8.76	63.1	1.08	4.6	2.43
J33 (8894072)		0.16	6.80	1.6	468	1.38	0.09	1.54	0.06	21.4	10.2	71.8	1.10	4.5	3.04
K1 (8894073)		0.19	6.59	1.7	505	1.27	0.08	1.55	0.08	21.3	9.72	54.7	1.14	3.9	2.37
K2 (8894074)		0.16	6.59	2.5	530	1.22	0.09	1.49	0.09	20.4	9.27	49.3	1.37	6.3	2.52
K3 (8894075)		0.25	6.25	2.3	516	1.13	0.09	1.43	0.13	23.9	9.12	57.1	1.34	3.7	2.21
K4 (8894076)		0.19	6.81	3.0	437	1.32	0.10	1.56	0.11	32.5	12.1	88.8	1.15	4.9	3.78

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
K5 (8894077)		0.24	6.00	1.0	491	1.22	0.07	1.44	0.10	18.7	7.58	52.4	1.17	3.6	2.13
K6 (8894078)		0.56	7.00	2.8	482	1.19	0.11	1.41	0.11	26.8	11.1	67.4	1.48	8.9	3.03
K7 (8894079)		0.12	5.90	2.8	453	1.13	0.09	1.54	0.06	28.1	13.9	75.5	1.11	4.9	3.24
K8 (8894080)		0.09	5.97	2.6	479	1.24	0.15	1.51	0.05	16.8	7.31	49.0	1.03	5.9	2.42
K9 (8894081)		0.17	6.19	1.5	529	1.24	0.10	1.11	0.04	31.0	8.08	51.7	1.51	8.1	2.17
K10 (8894082)		0.32	7.54	15.3	433	1.64	0.38	1.07	0.15	79.0	32.9	124	3.02	81.3	5.22
K11 (8894083)		0.26	7.01	3.5	483	1.27	0.12	1.37	0.07	23.0	13.2	67.5	1.53	6.2	3.06
K12 (8894084)		0.30	7.19	2.3	512	1.42	0.10	1.30	0.08	30.4	12.6	81.4	1.52	8.7	2.64

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
I14 (8894013)		14.5	<0.05	2.7	0.024	1.53	11.6	13.5	0.67	278	0.46	1.99	5.4	30.5	348
I15 (8894014)		14.5	<0.05	2.3	0.032	1.40	10.1	20.7	0.68	331	0.76	1.83	5.4	39.2	374
I16 (8894015)		14.5	<0.05	2.8	0.028	1.48	12.3	18.4	0.53	260	0.69	1.74	6.0	25.2	444
I17 (8894016)		14.1	<0.05	2.7	0.030	1.43	12.4	20.0	0.59	325	0.61	1.85	5.8	33.1	464
I18 (8894017)		14.3	<0.05	2.2	0.032	1.42	12.1	21.7	0.81	419	0.50	1.82	4.9	39.0	533
I19 (8894018)		14.1	<0.05	2.7	0.038	1.32	9.8	24.2	0.69	337	0.79	1.62	5.7	32.5	709
I20 (8894019)		15.1	<0.05	2.8	0.033	1.36	11.8	21.8	0.55	272	0.70	1.74	5.7	30.3	855
I21 (8894020)		14.8	<0.05	2.7	0.036	1.34	16.7	19.7	0.65	309	0.89	1.70	6.0	31.1	546
I22 (8894021)		13.3	<0.05	2.0	0.019	1.53	9.4	9.6	0.55	293	0.34	2.18	4.1	21.0	368
I23 (8894022)		13.9	<0.05	1.9	0.024	1.53	11.4	13.5	0.63	318	0.45	2.14	4.3	27.7	455
I24 (8894023)		14.4	<0.05	1.8	0.025	1.51	8.4	14.2	0.54	307	0.48	2.07	4.5	21.7	505
I25 (8894024)		15.5	<0.05	2.8	0.031	1.31	10.0	18.9	0.41	234	0.67	1.52	6.6	14.9	573
I26 (8894025)		14.3	<0.05	2.5	0.028	1.51	9.9	15.6	0.56	416	0.52	1.98	5.2	21.6	878
I27 (8894026)		13.9	<0.05	1.4	0.024	1.39	6.7	13.0	0.64	363	0.38	2.06	4.6	26.2	546
I28 (8894027)		14.9	<0.05	2.3	0.033	1.46	11.5	15.8	0.68	355	0.48	2.00	5.8	29.1	523
I29 (8894028)		13.8	<0.05	3.0	0.026	1.49	10.0	14.4	0.79	423	0.43	1.98	5.3	35.2	499
I30 (8894029)		13.8	<0.05	2.6	0.020	1.55	9.6	9.6	0.45	285	0.38	1.99	4.9	14.7	210
I31 (8894030)		14.8	<0.05	2.4	0.026	1.51	11.2	12.5	0.55	324	0.35	2.13	5.1	22.1	398
I32 (8894031)		14.6	<0.05	2.6	0.024	1.63	10.2	14.6	0.56	301	0.56	2.02	5.2	25.7	387
I33 (8894032)		14.2	<0.05	1.6	0.021	1.57	7.0	12.1	0.58	255	0.32	2.16	4.0	25.7	263
I34 (8894033)		13.3	<0.05	1.9	0.022	1.57	7.8	11.9	0.61	285	0.53	2.21	4.5	28.6	376
I35 (8894034)		14.2	<0.05	2.1	0.027	1.42	15.0	21.0	0.58	283	0.62	1.69	5.4	26.4	585
I36 (8894035)		15.5	<0.05	2.3	0.034	1.57	10.2	24.8	0.68	415	0.76	1.67	6.1	34.9	1240
I37 (8894036)		14.9	<0.05	1.9	0.017	1.72	6.9	9.7	0.41	244	0.28	2.25	3.7	13.8	562
I38 (8894037)		15.0	<0.05	2.8	0.026	1.69	10.6	13.9	0.49	294	0.60	1.88	5.7	17.4	522
I39 (8894038)		15.5	<0.05	2.5	0.026	1.50	10.7	16.3	0.64	325	0.56	1.89	6.3	30.4	535
I40 (8894039)		15.2	<0.05	2.4	0.062	1.41	18.5	31.5	1.00	703	1.23	1.43	9.2	55.9	2300
J1 (8894040)		14.3	<0.05	2.8	0.030	1.49	8.6	16.9	0.50	233	0.53	1.85	5.4	24.0	347
J2 (8894041)		13.5	<0.05	2.2	0.021	1.63	8.7	12.2	0.58	287	0.29	2.14	4.0	27.2	414
J3 (8894042)		14.3	<0.05	2.8	0.027	1.62	9.6	14.5	0.60	275	0.41	2.01	5.7	27.7	489
J4 (8894043)		14.6	<0.05	2.9	0.024	1.59	10.1	13.0	0.64	354	0.43	2.03	5.5	27.6	567
J5 (8894044)		13.8	<0.05	2.7	0.030	1.44	14.3	14.0	0.60	299	0.74	1.93	5.1	24.9	909

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
J6 (8894045)	14.0	<0.05	3.0	0.021	1.63	9.8	11.8	0.53	313	0.33	2.13	4.6	21.8	486
J7 (8894046)	15.7	<0.05	2.1	0.024	1.59	11.9	12.7	0.52	302	0.43	2.02	5.1	21.6	494
J8 (8894047)	13.3	<0.05	2.1	0.025	1.56	9.2	12.3	0.66	333	0.37	2.00	4.8	25.7	558
J9 (8894048)	15.5	<0.05	2.9	0.027	1.47	10.6	18.9	0.60	343	0.56	1.77	5.7	24.9	822
J10 (8894049)	14.7	<0.05	2.2	0.025	1.50	10.6	16.1	0.71	311	0.53	2.06	6.1	33.9	477
J11 (8894050)	14.2	<0.05	2.0	0.021	1.60	7.5	10.9	0.57	264	0.39	2.14	3.8	22.1	344
J12 (8894051)	14.5	<0.05	1.7	0.021	1.56	10.4	14.1	0.56	310	0.39	2.07	4.1	26.6	491
J13 (8894052)	14.5	<0.05	2.4	0.023	1.60	9.3	12.2	0.69	317	0.45	2.22	5.6	27.4	303
J14 (8894053)	14.7	<0.05	1.6	0.020	1.64	9.9	13.4	0.62	289	0.41	2.28	3.6	26.4	247
J15 (8894054)	14.9	<0.05	2.9	0.026	1.64	33.6	12.9	0.66	366	0.40	2.16	4.7	24.1	297
J16 (8894055)	14.6	<0.05	2.1	0.026	1.59	9.4	14.0	0.65	326	0.47	2.16	4.7	31.5	408
J17 (8894056)	14.8	<0.05	2.3	0.021	1.64	22.6	10.6	0.62	373	0.45	2.22	4.4	24.3	372
J18 (8894057)	16.2	<0.05	2.4	0.036	1.43	9.7	22.4	0.69	337	0.82	1.80	6.2	31.5	571
J19 (8894058)	14.3	<0.05	1.8	0.019	1.58	8.0	10.7	0.56	253	0.39	2.18	3.8	20.6	248
J20 (8894059)	13.8	<0.05	1.4	0.020	1.55	7.1	11.7	0.55	244	0.34	2.19	3.5	22.7	457
J21 (8894060)	16.6	<0.05	3.0	0.034	1.39	16.5	15.4	0.66	459	0.50	1.94	6.5	21.6	839
J22 (8894061)	16.1	<0.05	1.5	0.026	1.59	8.2	13.0	0.63	397	0.32	2.13	4.5	21.5	2410
J23 (8894062)	14.5	<0.05	1.9	0.019	1.67	8.7	12.8	0.64	272	0.31	2.16	5.7	27.9	362
J24 (8894063)	15.1	<0.05	1.6	0.024	1.52	9.3	16.5	0.63	314	0.38	2.08	4.5	27.0	563
J25 (8894064)	14.8	<0.05	3.0	0.028	1.46	17.3	14.5	0.81	501	0.45	2.17	6.3	34.4	726
J26 (8894065)	15.1	<0.05	2.3	0.027	1.60	10.5	17.9	0.69	305	0.52	1.93	5.8	34.8	380
J27 (8894066)	15.1	<0.05	1.8	0.028	1.59	11.0	18.7	0.75	331	0.44	1.87	5.7	38.5	494
J28 (8894067)	15.2	<0.05	2.6	0.027	1.55	10.1	15.3	0.69	353	0.37	2.04	5.1	31.6	558
J29 (8894068)	14.6	<0.05	3.2	0.030	1.24	12.7	17.4	0.77	564	0.51	1.90	6.6	29.0	1020
J30 (8894069)	14.6	<0.05	1.6	0.023	1.49	8.5	13.9	0.65	308	0.36	2.18	4.7	26.9	534
J31 (8894070)	15.0	<0.05	1.9	0.026	1.46	7.7	13.8	0.71	370	0.31	2.22	4.3	30.2	529
J32 (8894071)	14.4	<0.05	2.3	0.023	1.54	8.8	12.9	0.66	332	0.35	2.23	4.8	25.5	509
J33 (8894072)	14.9	<0.05	2.5	0.026	1.48	9.8	15.8	0.71	389	0.36	2.12	5.3	27.3	471
K1 (8894073)	15.2	<0.05	2.3	0.026	1.56	10.2	13.4	0.70	345	0.46	2.11	5.3	30.8	541
K2 (8894074)	15.6	<0.05	2.4	0.023	1.65	9.7	15.0	0.67	342	0.44	2.09	5.3	29.5	556
K3 (8894075)	15.6	<0.05	2.4	0.027	1.68	10.8	12.5	0.62	392	0.39	1.98	6.2	24.8	310
K4 (8894076)	15.6	<0.05	4.1	0.035	1.42	15.0	15.7	0.73	510	0.61	1.85	7.2	30.5	1000

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
K5 (8894077)		14.9	<0.05	2.6	0.022	1.55	8.9	10.4	0.60	339	0.42	2.04	4.6	21.2	278
K6 (8894078)		15.4	<0.05	3.2	0.033	1.53	13.0	18.5	0.63	369	0.67	1.82	7.1	29.1	579
K7 (8894079)		15.8	<0.05	1.7	0.026	1.49	12.4	11.7	0.66	676	0.41	2.07	5.9	21.2	1260
K8 (8894080)		14.6	<0.05	1.8	0.022	1.54	7.8	11.6	0.66	362	0.44	2.19	4.8	21.0	301
K9 (8894081)		16.1	<0.05	2.6	0.025	1.80	14.3	16.2	0.58	232	0.59	1.72	6.5	25.7	274
K10 (8894082)		15.3	<0.05	2.6	0.053	1.80	13.2	31.7	1.10	704	1.52	1.12	8.7	72.8	1470
K11 (8894083)		16.1	<0.05	2.4	0.033	1.54	11.4	20.2	0.69	351	0.69	1.78	7.2	37.1	538
K12 (8894084)		15.4	<0.05	2.5	0.029	1.73	14.1	20.5	0.79	294	0.40	1.88	6.9	44.0	584

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
I14 (8894013)	12.1	44.0	<0.002	0.04	0.13	8.6	0.9	0.9	263	0.40	<0.01	3.3	0.24	0.26
I15 (8894014)	12.4	45.7	<0.002	0.03	0.22	8.7	0.9	1.1	229	0.38	0.01	4.1	0.27	0.24
I16 (8894015)	11.8	43.9	<0.002	0.04	0.19	8.0	0.7	1.0	217	0.42	0.02	3.9	0.28	0.25
I17 (8894016)	12.6	44.5	<0.002	0.04	0.40	8.3	0.8	1.1	236	0.38	0.03	4.4	0.26	0.23
I18 (8894017)	12.4	48.9	<0.002	0.04	0.32	9.5	0.8	1.1	196	0.37	0.02	4.9	0.27	0.25
I19 (8894018)	11.4	40.7	<0.002	0.05	0.28	9.3	0.8	1.1	194	0.39	0.02	4.3	0.27	0.24
I20 (8894019)	12.2	41.9	<0.002	0.05	0.23	8.1	0.8	1.2	218	0.39	0.03	4.4	0.27	0.24
I21 (8894020)	12.4	40.6	<0.002	0.05	0.27	9.7	1.0	1.1	209	0.43	0.03	5.3	0.30	0.24
I22 (8894021)	10.8	47.1	<0.002	0.03	0.16	6.9	0.6	0.9	270	0.29	<0.01	2.8	0.20	0.25
I23 (8894022)	11.0	45.7	<0.002	0.03	0.62	8.2	0.6	0.9	283	0.29	<0.01	3.0	0.24	0.24
I24 (8894023)	10.8	45.8	<0.002	0.03	0.26	7.5	0.6	0.9	270	0.31	<0.01	2.6	0.24	0.23
I25 (8894024)	12.9	39.0	<0.002	0.05	0.27	7.4	0.8	1.3	187	0.42	0.04	3.7	0.31	0.23
I26 (8894025)	11.3	46.1	<0.002	0.04	0.13	7.7	0.8	0.9	255	0.36	<0.01	3.1	0.27	0.24
I27 (8894026)	9.8	43.2	<0.002	0.04	0.11	7.9	0.6	0.8	272	0.33	<0.01	3.6	0.25	0.22
I28 (8894027)	11.0	45.6	<0.002	0.04	0.21	8.8	0.7	1.0	266	0.40	0.01	5.3	0.28	0.24
I29 (8894028)	10.2	45.5	<0.002	0.03	0.12	9.1	0.6	1.0	263	0.35	0.01	3.5	0.30	0.22
I30 (8894029)	10.5	47.6	<0.002	0.02	0.15	7.0	0.7	1.0	258	0.36	<0.01	3.3	0.27	0.25
I31 (8894030)	11.2	46.4	<0.002	0.04	0.12	7.7	0.8	0.9	287	0.36	<0.01	3.0	0.26	0.24
I32 (8894031)	10.9	48.5	<0.002	0.03	0.15	7.8	0.7	1.2	270	0.36	<0.01	3.2	0.27	0.24
I33 (8894032)	10.9	49.3	<0.002	0.03	0.13	6.7	0.6	0.9	279	0.28	<0.01	2.3	0.20	0.24
I34 (8894033)	10.7	47.6	<0.002	0.03	0.18	7.0	0.6	1.5	297	0.38	0.05	2.6	0.20	0.25
I35 (8894034)	13.5	45.0	<0.002	0.04	0.21	7.1	1.0	1.0	218	0.38	0.03	8.8	0.26	0.25
I36 (8894035)	13.6	48.7	<0.002	0.05	0.34	8.1	0.8	1.1	228	0.40	0.03	3.3	0.29	0.24
I37 (8894036)	11.9	56.5	<0.002	0.03	0.15	5.4	<0.5	0.8	297	0.28	0.01	2.2	0.19	0.28
I38 (8894037)	14.2	50.0	<0.002	0.03	0.29	6.9	0.8	1.1	252	0.37	0.03	3.5	0.27	0.26
I39 (8894038)	11.9	45.2	<0.002	0.03	0.25	7.9	0.5	1.5	254	0.43	0.01	3.1	0.28	0.23
I40 (8894039)	24.8	39.0	<0.002	0.08	0.64	10.6	1.0	1.2	192	0.50	0.11	7.1	0.62	0.19
J1 (8894040)	28.4	45.6	<0.002	0.09	0.13	7.7	0.9	1.0	243	0.35	<0.01	3.5	0.24	0.26
J2 (8894041)	10.8	50.1	<0.002	0.03	0.16	6.9	<0.5	0.8	285	0.31	<0.01	3.1	0.20	0.24
J3 (8894042)	11.3	49.6	<0.002	0.04	0.15	8.0	0.5	1.0	255	0.40	0.03	3.2	0.26	0.26
J4 (8894043)	11.5	51.2	<0.002	0.04	0.15	7.8	<0.5	1.0	274	0.36	<0.01	3.2	0.25	0.25
J5 (8894044)	12.2	40.2	<0.002	0.05	0.19	8.6	1.1	0.8	259	0.35	<0.01	5.3	0.25	0.23

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
J6 (8894045)	10.5	48.2	<0.002	0.03	0.16	7.1	0.7	0.9	279	0.32	<0.01	7.4	0.24	0.25
J7 (8894046)	11.7	50.6	<0.002	0.03	0.23	7.2	0.7	1.0	270	0.34	<0.01	4.5	0.26	0.25
J8 (8894047)	10.3	48.3	<0.002	0.03	0.13	7.6	0.5	0.8	265	0.30	0.01	2.7	0.23	0.23
J9 (8894048)	11.8	50.1	<0.002	0.04	0.26	8.7	0.6	1.2	208	0.35	0.01	4.3	0.29	0.27
J10 (8894049)	10.7	45.9	<0.002	0.04	0.15	8.5	0.8	0.9	269	0.35	<0.01	3.2	0.25	0.25
J11 (8894050)	10.4	50.1	<0.002	0.03	0.12	6.7	<0.5	0.8	279	0.21	<0.01	2.2	0.19	0.26
J12 (8894051)	10.8	47.9	<0.002	0.03	0.12	6.8	0.6	0.8	272	0.23	<0.01	4.8	0.21	0.25
J13 (8894052)	17.0	50.1	<0.002	0.03	0.12	8.2	0.6	0.9	280	0.45	<0.01	2.8	0.25	0.25
J14 (8894053)	11.0	51.9	<0.002	0.03	0.12	6.8	<0.5	0.7	285	0.21	0.01	2.8	0.20	0.27
J15 (8894054)	12.2	50.3	<0.002	0.03	0.16	8.8	0.7	0.9	288	0.28	<0.01	9.7	0.26	0.29
J16 (8894055)	11.3	49.9	<0.002	0.03	0.15	7.9	0.7	0.9	282	0.25	0.02	3.0	0.24	0.26
J17 (8894056)	11.4	50.2	<0.002	0.03	0.13	8.9	0.9	1.1	296	0.31	0.01	7.2	0.23	0.27
J18 (8894057)	12.0	49.4	<0.002	0.05	0.23	9.0	0.9	1.1	212	0.35	0.03	3.2	0.31	0.26
J19 (8894058)	11.1	48.6	<0.002	0.03	0.10	6.9	<0.5	0.8	285	0.21	0.02	2.6	0.20	0.26
J20 (8894059)	10.4	48.0	<0.002	0.03	0.14	6.4	0.6	0.9	293	0.20	<0.01	1.6	0.18	0.25
J21 (8894060)	10.8	47.6	<0.002	0.04	0.19	9.1	0.7	1.1	258	0.32	<0.01	6.8	0.34	0.23
J22 (8894061)	10.9	52.7	<0.002	0.03	0.18	7.6	0.5	0.8	287	0.27	<0.01	2.5	0.24	0.24
J23 (8894062)	10.7	52.8	<0.002	0.03	0.12	7.1	0.5	0.8	282	0.23	0.02	2.7	0.20	0.27
J24 (8894063)	11.6	48.5	<0.002	0.04	0.12	7.7	0.7	0.9	273	0.27	<0.01	2.8	0.23	0.26
J25 (8894064)	11.0	48.7	<0.002	0.03	0.11	9.9	0.6	1.0	298	0.29	<0.01	9.2	0.33	0.24
J26 (8894065)	11.3	54.5	<0.002	0.04	0.20	8.5	0.8	1.1	241	0.31	<0.01	3.5	0.28	0.26
J27 (8894066)	11.3	52.5	<0.002	0.04	0.18	8.3	1.1	2.4	243	0.33	<0.01	9.5	0.27	0.28
J28 (8894067)	11.0	51.9	<0.002	0.04	0.11	8.4	0.7	0.9	269	0.31	<0.01	3.9	0.27	0.26
J29 (8894068)	10.7	40.9	<0.002	0.05	0.18	11.2	1.0	1.1	257	0.39	0.02	4.8	0.42	0.23
J30 (8894069)	10.9	49.2	<0.002	0.04	0.12	7.8	0.7	0.9	285	0.24	0.01	2.9	0.21	0.25
J31 (8894070)	10.7	49.2	<0.002	0.03	0.12	8.3	0.7	0.9	296	0.23	<0.01	4.2	0.26	0.25
J32 (8894071)	11.1	51.1	<0.002	0.03	0.10	7.9	<0.5	0.9	293	0.25	0.01	3.1	0.25	0.25
J33 (8894072)	10.9	48.9	<0.002	0.04	0.13	8.9	0.7	0.9	293	0.30	<0.01	4.0	0.29	0.24
K1 (8894073)	10.6	51.6	<0.002	0.03	0.20	8.4	0.7	1.0	279	0.29	0.01	3.5	0.25	0.25
K2 (8894074)	11.2	56.3	<0.002	0.03	0.12	8.1	0.7	1.0	278	0.29	<0.01	2.8	0.26	0.26
K3 (8894075)	11.3	57.8	<0.002	0.03	0.12	8.3	0.7	1.0	266	0.30	<0.01	3.1	0.29	0.28
K4 (8894076)	11.4	47.1	<0.002	0.05	0.27	10.1	1.1	1.1	256	0.40	0.05	5.2	0.38	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
K5 (8894077)		10.5	51.9	<0.002	0.03	0.15	7.8	0.6	1.4	269	0.25	<0.01	2.8	0.25	0.27
K6 (8894078)		11.8	48.8	<0.002	0.05	0.18	8.8	0.7	1.1	233	0.40	0.02	4.5	0.32	0.26
K7 (8894079)		12.0	50.7	<0.002	0.04	0.16	8.7	0.6	1.0	277	0.30	<0.01	4.7	0.31	0.25
K8 (8894080)		10.3	50.3	<0.002	0.05	0.15	7.8	0.7	0.8	286	0.29	0.02	1.9	0.26	0.24
K9 (8894081)		11.7	60.6	<0.002	0.04	0.16	7.6	0.6	1.1	219	0.37	0.01	4.6	0.28	0.31
K10 (8894082)		21.7	53.4	<0.002	0.08	0.49	11.7	1.2	1.2	144	0.46	0.10	7.8	0.50	0.27
K11 (8894083)		11.7	50.3	<0.002	0.05	0.17	8.9	1.0	1.2	233	0.40	0.02	3.5	0.32	0.27
K12 (8894084)		11.6	56.0	<0.002	0.04	0.21	9.0	0.9	1.0	235	0.42	0.02	5.3	0.28	0.30

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
I14 (8894013)		0.792	54.4	0.4	8.7	34.1	107
I15 (8894014)		0.831	68.1	0.4	8.4	37.5	92.6
I16 (8894015)		0.959	59.5	0.4	8.2	41.0	115
I17 (8894016)		2.42	61.8	0.3	8.6	44.7	118
I18 (8894017)		1.09	69.1	0.4	9.0	53.7	89.4
I19 (8894018)		1.18	74.0	0.5	8.1	57.4	112
I20 (8894019)		0.994	62.4	0.4	8.3	67.9	117
I21 (8894020)		1.12	79.2	0.4	10.5	46.6	113
I22 (8894021)		0.607	47.9	0.3	7.5	27.4	81.7
I23 (8894022)		0.654	57.8	0.3	8.4	27.2	78.2
I24 (8894023)		0.667	54.1	0.3	7.0	71.5	74.0
I25 (8894024)		1.03	66.9	0.5	7.0	61.9	114
I26 (8894025)		0.812	59.6	0.3	7.4	48.8	105
I27 (8894026)		0.533	65.9	0.2	7.5	30.2	59.2
I28 (8894027)		0.771	68.7	0.3	9.3	37.1	97.4
I29 (8894028)		0.883	73.2	0.3	9.1	33.7	127
I30 (8894029)		0.752	48.9	0.3	7.1	28.0	110
I31 (8894030)		0.681	58.5	0.3	7.8	40.0	101
I32 (8894031)		0.758	59.4	0.3	7.6	34.4	116
I33 (8894032)		0.520	49.2	0.4	6.0	35.9	63.8
I34 (8894033)		0.562	49.3	0.3	6.6	25.9	68.2
I35 (8894034)		0.901	56.4	0.3	7.4	58.6	84.2
I36 (8894035)		0.846	69.9	0.4	7.5	117	95.2
I37 (8894036)		0.541	41.4	0.2	5.4	35.4	77.0
I38 (8894037)		0.787	52.8	0.3	7.2	53.1	116
I39 (8894038)		0.781	60.6	0.4	7.9	88.8	107
I40 (8894039)		1.36	119	0.6	10.7	94.1	99.1
J1 (8894040)		0.813	52.8	0.3	7.2	23.8	118
J2 (8894041)		0.713	47.3	0.2	7.0	25.7	93.6
J3 (8894042)		0.711	53.1	0.4	7.5	35.7	115
J4 (8894043)		0.793	58.1	0.3	8.2	36.1	123
J5 (8894044)		1.08	60.0	0.3	9.0	42.6	108

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
J6 (8894045)	0.795	50.0	0.2	7.5	41.8	125
J7 (8894046)	0.759	59.4	0.3	7.6	33.0	87.3
J8 (8894047)	0.671	52.5	0.2	7.4	35.2	90.0
J9 (8894048)	1.10	66.4	0.5	8.6	48.3	123
J10 (8894049)	0.733	60.3	0.2	8.0	33.6	99.0
J11 (8894050)	0.573	48.9	0.2	6.6	26.7	85.8
J12 (8894051)	0.694	54.3	0.2	7.5	43.1	71.6
J13 (8894052)	0.696	57.3	0.2	8.4	31.4	102
J14 (8894053)	0.634	50.0	0.2	8.0	31.4	64.3
J15 (8894054)	1.35	56.7	0.2	14.9	28.4	125
J16 (8894055)	0.664	61.9	5.4	8.3	31.5	86.5
J17 (8894056)	1.41	55.2	0.3	16.6	28.6	103
J18 (8894057)	0.999	77.8	0.4	9.1	43.9	103
J19 (8894058)	0.580	50.5	0.2	6.9	25.7	75.0
J20 (8894059)	0.469	50.5	0.2	6.4	37.4	59.1
J21 (8894060)	1.09	84.0	0.3	11.8	53.4	136
J22 (8894061)	0.584	65.2	0.2	7.6	41.3	59.7
J23 (8894062)	0.591	51.2	0.2	6.7	28.3	80.4
J24 (8894063)	0.612	58.5	0.2	7.4	44.7	62.9
J25 (8894064)	1.02	82.5	0.2	12.0	35.5	125
J26 (8894065)	0.793	62.1	0.4	8.6	32.2	105
J27 (8894066)	0.758	66.5	0.3	8.6	30.8	80.9
J28 (8894067)	0.800	68.4	0.2	9.6	33.7	103
J29 (8894068)	0.990	102	0.3	11.8	47.5	126
J30 (8894069)	0.610	56.1	0.3	7.5	37.8	68.3
J31 (8894070)	0.582	66.7	0.2	8.4	35.9	78.8
J32 (8894071)	0.661	62.9	0.2	8.4	37.1	93.1
J33 (8894072)	0.727	75.0	0.2	9.3	29.5	115
K1 (8894073)	0.664	61.0	0.2	9.1	52.0	108
K2 (8894074)	0.774	63.4	0.3	8.9	52.3	110
K3 (8894075)	0.748	60.4	0.3	8.4	44.1	110
K4 (8894076)	1.16	91.0	0.4	12.9	56.7	175

Certified By:

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
K5 (8894077)		0.667	57.0	0.2	7.9	41.2	109
K6 (8894078)		0.942	68.6	0.3	9.7	84.3	136
K7 (8894079)		0.796	77.9	0.2	10.6	35.2	76.0
K8 (8894080)		0.682	59.9	0.2	8.3	25.9	77.2
K9 (8894081)		1.08	56.8	0.3	8.8	27.3	114
K10 (8894082)		1.52	113	0.6	10.8	75.0	105
K11 (8894083)		0.862	70.2	0.4	9.1	57.4	103
K12 (8894084)		0.891	59.9	0.4	8.7	44.2	106

Comments: RDL - Reported Detection Limit
8894013-8894084 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8894013	0.23	0.29	23.1%	8894033	0.19	0.12		8894053	0.12	0.47		8894074	0.16	0.27	
Al	8894013	6.68	6.61	1.1%	8894033	6.42	6.91	7.4%	8894053	6.48	6.38	1.6%	8894074	6.59	6.43	2.5%
As	8894013	2.9	1.9		8894033	1.9	2.1	10.0%	8894053	3.42	4.12	18.6%	8894074	2.5	2.0	22.2%
Ba	8894013	496	494	0.4%	8894033	514	546	6.0%	8894053	547	535	2.2%	8894074	530	505	4.8%
Be	8894013	1.19	1.07	10.6%	8894033	1.13	1.46	25.5%	8894053	1.26	1.39	9.8%	8894074	1.22	1.25	2.4%
Bi	8894013	0.092	0.109	16.9%	8894033	0.07	0.07	0.0%	8894053	0.10	0.10	0.0%	8894074	0.09	0.09	0.0%
Ca	8894013	1.39	1.41	1.4%	8894033	1.40	1.56	10.8%	8894053	1.35	1.34	0.7%	8894074	1.49	1.46	2.0%
Cd	8894013	0.07	0.08	13.3%	8894033	0.04	0.05	22.2%	8894053	0.04	0.04	0.0%	8894074	0.088	0.075	16.0%
Ce	8894013	29.1	36.2	21.7%	8894033	17.6	20.6	15.7%	8894053	24.1	24.7	2.5%	8894074	20.4	19.2	6.1%
Co	8894013	11.4	11.6	1.7%	8894033	9.26	9.25	0.1%	8894053	8.66	8.47	2.2%	8894074	9.27	8.99	3.1%
Cr	8894013	57.4	57.0	0.7%	8894033	46.9	51.7	9.7%	8894053	54.3	52.9	2.6%	8894074	49.3	54.5	10.0%
Cs	8894013	1.17	1.17	0.0%	8894033	0.930	0.966	3.8%	8894053	1.12	1.13	0.9%	8894074	1.37	1.26	8.4%
Cu	8894013	11.4	11.6	1.7%	8894033	7.5	8.2	8.9%	8894053	12.0	11.8	1.7%	8894074	6.3	6.6	4.7%
Fe	8894013	2.26	2.26	0.0%	8894033	1.97	2.19	10.6%	8894053	2.12	2.04	3.8%	8894074	2.52	2.51	0.4%
Ga	8894013	14.5	14.0	3.5%	8894033	13.3	13.2	0.8%	8894053	14.7	14.9	1.4%	8894074	15.6	15.8	1.3%
Ge	8894013	< 0.05	< 0.05	0.0%	8894033	< 0.05	< 0.05	0.0%	8894053	< 0.05	< 0.05	0.0%	8894074	< 0.05	< 0.05	0.0%
Hf	8894013	2.7	2.7	0.0%	8894033	1.9	1.5	23.5%	8894053	1.6	1.6	0.0%	8894074	2.4	2.5	4.1%
In	8894013	0.0242	0.0262	7.9%	8894033	0.0220	0.0191	14.1%	8894053	0.020	0.021	4.9%	8894074	0.0233	0.0260	11.0%
K	8894013	1.53	1.51	1.3%	8894033	1.57	1.69	7.4%	8894053	1.64	1.62	1.2%	8894074	1.65	1.59	3.7%
La	8894013	11.6	15.4	28.1%	8894033	7.8	9.1	15.4%	8894053	9.9	9.7	2.0%	8894074	9.7	9.0	7.5%
Li	8894013	13.5	13.5	0.0%	8894033	11.9	12.6	5.7%	8894053	13.4	13.1	2.3%	8894074	15.0	15.0	0.0%
Mg	8894013	0.672	0.665	1.0%	8894033	0.613	0.687	11.4%	8894053	0.62	0.61	1.6%	8894074	0.668	0.655	2.0%
Mn	8894013	278	283	1.8%	8894033	285	316	10.3%	8894053	289	283	2.1%	8894074	342	342	0.0%
Mo	8894013	0.456	0.465	2.0%	8894033	0.53	0.31		8894053	0.413	0.417	1.0%	8894074	0.438	0.445	1.6%
Na	8894013	1.99	1.99	0.0%	8894033	2.21	2.40	8.2%	8894053	2.28	2.25	1.3%	8894074	2.09	2.05	1.9%
Nb	8894013	5.4	5.3	1.9%	8894033	4.5	4.0	11.8%	8894053	3.6	3.8	5.4%	8894074	5.33	5.37	0.7%
Ni	8894013	30.5	29.9	2.0%	8894033	28.6	30.4	6.1%	8894053	26.4	26.6	0.8%	8894074	29.5	29.3	0.7%
P	8894013	348	344	1.2%	8894033	376	426	12.5%	8894053	247	260	5.1%	8894074	556	532	4.4%
Pb	8894013	12.1	12.6	4.0%	8894033	10.7	10.4	2.8%	8894053	11.0	11.1	0.9%	8894074	11.2	11.2	0.0%
Rb	8894013	44.0	42.3	3.9%	8894033	47.6	47.4	0.4%	8894053	51.9	52.0	0.2%	8894074	56.3	52.3	7.4%
Re	8894013	< 0.002	< 0.002	0.0%	8894033	< 0.002	< 0.002	0.0%	8894053	< 0.002	< 0.002	0.0%	8894074	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8894013	0.04	0.04	0.0%	8894033	0.03	0.03	0.0%	8894053	0.03	0.03	0.0%	8894074	0.03	0.03	0.0%
Sb	8894013	0.13	0.13	0.0%	8894033	0.18	0.14	25.0%	8894053	0.12	0.14	15.4%	8894074	0.121	0.114	6.0%
Sc	8894013	8.6	8.6	0.0%	8894033	7.0	7.4	5.6%	8894053	6.8	6.8	0.0%	8894074	8.1	7.8	3.8%
Se	8894013	0.9	0.9	0.0%	8894033	0.6	0.6	0.0%	8894053	< 0.5	0.6		8894074	0.7	< 0.5	
Sn	8894013	0.9	0.9	0.0%	8894033	1.5	0.8		8894053	0.7	0.8	13.3%	8894074	0.95	0.92	3.2%
Sr	8894013	263	258	1.9%	8894033	297	310	4.3%	8894053	285	292	2.4%	8894074	278	272	2.2%
Ta	8894013	0.40	0.40	0.0%	8894033	0.38	0.33	14.1%	8894053	0.21	0.21	0.0%	8894074	0.292	0.307	5.0%
Te	8894013	< 0.01	0.02		8894033	0.05	0.02		8894053	0.01	< 0.01		8894074	< 0.01	< 0.01	0.0%
Th	8894013	3.33	4.50	29.9%	8894033	2.6	3.0	14.3%	8894053	2.8	3.2	13.3%	8894074	2.8	2.7	3.6%
Ti	8894013	0.24	0.24	0.0%	8894033	0.20	0.22	9.5%	8894053	0.195	0.191	2.1%	8894074	0.261	0.276	5.6%
Tl	8894013	0.256	0.249	2.8%	8894033	0.25	0.24	4.1%	8894053	0.27	0.27	0.0%	8894074	0.257	0.265	3.1%
U	8894013	0.792	1.09		8894033	0.562	0.655	15.3%	8894053	0.634	0.660	4.0%	8894074	0.774	0.740	4.5%
V	8894013	54.4	53.7	1.3%	8894033	49.3	51.8	4.9%	8894053	50.0	50.8	1.6%	8894074	63.4	63.9	0.8%
W	8894013	0.36	0.32	11.8%	8894033	0.28	0.22	24.0%	8894053	0.2	0.2	0.0%	8894074	0.3	0.3	0.0%
Y	8894013	8.69	8.88	2.2%	8894033	6.63	6.93	4.4%	8894053	7.99	8.46	5.7%	8894074	8.9	8.9	0.0%
Zn	8894013	34.1	33.3	2.4%	8894033	25.9	28.0	7.8%	8894053	31.4	31.2	0.6%	8894074	52.3	52.9	1.1%
Zr	8894013	107	105	1.9%	8894033	68.2	59.3	14.0%	8894053	64.3	67.8	5.3%	8894074	110	107	2.8%

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.2	93%	90% - 110%	6.96	6.71	96%	90% - 110%								
As					124	124	100%	90% - 110%								
Ba	340	313	92%	90% - 110%	186	182	97%	90% - 110%								
Be	2.6	2.8	107%	90% - 110%												
Ca	5.72	5.26	91%	90% - 110%	4.01	3.86	96%	90% - 110%								
Ce	122	114	93%	90% - 110%	24	22	91%	90% - 110%								
Co	2.8	2.5	89%	90% - 110%	22.1	20.9	94%	90% - 110%								
Cs	1.5	1.4	93%	90% - 110%												
Cu					88.6	83.5	94%	90% - 110%								
Fe	4.34	3.97	91%	90% - 110%	7.56	7.32	96%	90% - 110%								
Ga	35	35	100%	90% - 110%												
Hf	10.6	1.1		90% - 110%												
K	1.37	1.29	94%	90% - 110%	2.021	1.929	95%	90% - 110%								
La	58	53	91%	90% - 110%												
Li	37	36	97%	90% - 110%												
Mg	0.325	0.316	97%	90% - 110%	2.412	2.38	98%	90% - 110%								
Mn					1510	1396	92%	90% - 110%								
Na	5.267	4.981	94%	90% - 110%	0.617	0.609	98%	90% - 110%								
Nb	13	14	107%	90% - 110%												
Ni	9	7	77%	90% - 110%	77.1	69.9	90%	90% - 110%								
P					892	983	110%	90% - 110%								
Pb	10	9	90%	90% - 110%												
Rb	55	50	90%	90% - 110%					143	140	97%	90% - 110%	55	55	100%	90% - 110%
S					0.348	0.388	111%	90% - 110%								
Sr	1191	1081	90%	90% - 110%												
Ta	0.9	1	111%	90% - 110%												
Th	1.4	1.2	85%	90% - 110%												
Ti	0.172	0.154	89%	90% - 110%												
V	8	6	75%	90% - 110%												
Y	119	118	99%	90% - 110%												
Zn	93	84	90%	90% - 110%	208	199	95%	90% - 110%								

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282585

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

	CRM #5 (ref.Till-2)				CRM #6 (ref.SY-4)											
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits								
Al	8.17	7.97	97%	90% - 110%	10.95	10.61	96%	90% - 110%								
As	26	27	103%	90% - 110%												
Ba	540	518	95%	90% - 110%	340	329	96%	90% - 110%								
Be	4.0	3.6	90%	90% - 110%	2.6	2.8	107%	90% - 110%								
Ca	0.907	0.895	98%	90% - 110%	5.72	5.47	95%	90% - 110%								
Ce	98	91	92%	90% - 110%	122	114	93%	90% - 110%								
Co					2.8	2.5	89%	90% - 110%								
Cr	60.3	54.5	90%	90% - 110%												
Cs	12	11	91%	90% - 110%	1.5	1.6	106%	90% - 110%								
Cu	150	140	93%	90% - 110%												
Fe	3.77	3.68	97%	90% - 110%	4.34	4.16	95%	90% - 110%								
Ga					35	37	105%	90% - 110%								
Hf					10.6	1.1		90% - 110%								
K					1.37	1.33	97%	90% - 110%								
La	44	40	90%	90% - 110%	58	53	91%	90% - 110%								
Li	47	43	91%	90% - 110%	37	36	97%	90% - 110%								
Mg	1.10	1.06	96%	90% - 110%	0.325	0.296	91%	90% - 110%								
Mn	780	715	91%	90% - 110%												
Mo	14	13	92%	90% - 110%												
Na	1.624	1.619	99%	90% - 110%	5.267	5.18	98%	90% - 110%								
Nb					13	14	107%	90% - 110%								
Ni	32	32	100%	90% - 110%	9	8	88%	90% - 110%								
Pb	31	29	93%	90% - 110%	10	9	90%	90% - 110%								
Rb					55	60	109%	90% - 110%								
Sb	0.8	0.8	100%	90% - 110%												
Sc	12	12	100%	90% - 110%												
Ta					0.9	0.8	88%	90% - 110%								
Th	18.4	17.2	93%	90% - 110%	1.4	1.4	100%	90% - 110%								
Ti					0.172	0.161	93%	90% - 110%								
V	77	72	93%	90% - 110%												
Y					119	130	109%	90% - 110%								
Zn	130	120	92%	90% - 110%	93	87	93%	90% - 110%								

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 17T282585
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
P.O BOX 10112 1470-701 W. GEORGIA ST
VANCOUVER, BC V7Y 1C6
604-646-6908

ATTENTION TO: Jason Gigliotti, Jim Nelson

PROJECT:

AGAT WORK ORDER: 17T282586

SOLID ANALYSIS REVIEWED BY: Kevin Motomura, Data Review Supervisor

DATE REPORTED: Jan 03, 2018

PAGES (INCLUDING COVER): 18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Results relate only to the items tested and to all the items tested

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
K13 (8894159)	0.25	7.03	1.6	515	1.56	0.10	1.36	0.07	33.8	16.3	71.7	1.84	8.2	2.35
K14 (8894160)	0.38	6.44	2.0	515	1.45	0.09	1.51	0.04	30.1	11.5	57.2	1.49	6.2	2.28
K15 (8894161)	0.36	7.09	4.1	492	1.65	0.13	1.57	0.08	29.6	16.4	83.4	2.04	9.5	3.36
K16 (8894162)	0.35	5.86	2.6	462	1.39	0.08	1.44	0.05	30.8	10.4	54.0	1.22	5.2	1.99
K17 (8894163)	0.25	5.98	2.2	479	1.34	0.08	1.35	0.05	19.3	10.2	53.0	1.50	4.3	2.25
K18 (8894164)	0.52	7.42	4.8	472	1.68	0.19	1.56	0.13	24.3	31.7	82.9	2.77	14.0	4.69
K19 (8894165)	0.17	6.19	0.4	495	1.44	0.08	1.41	0.05	21.1	9.58	43.9	1.29	3.1	2.02
L1 (8894166)	0.22	7.48	2.2	452	1.52	0.10	1.24	<0.02	24.1	11.7	53.6	1.42	3.0	2.40
L2 (8894167)	0.22	6.09	1.2	494	1.31	0.08	1.40	0.08	28.4	9.00	51.1	1.49	1.6	1.72
L3 (8894168)	0.26	6.89	1.8	493	1.60	0.08	1.53	0.07	34.4	13.8	63.4	1.43	2.6	2.15
L4 (8894169)	0.20	6.44	2.2	502	1.47	0.09	1.58	0.06	27.4	11.8	52.7	1.24	3.4	2.07
L5 (8894170)	0.19	6.59	1.1	499	1.44	0.07	1.48	0.06	22.7	10.8	51.6	1.37	2.9	2.06
L6 (8894171)	0.88	6.23	1.2	500	1.39	0.08	1.37	0.07	17.1	9.21	44.4	1.41	1.4	1.96
L7 (8894172)	0.26	6.05	1.8	505	1.78	0.06	1.39	0.03	23.2	8.76	46.0	1.22	3.3	1.70
L8 (8894173)	0.20	6.73	1.5	523	1.48	0.08	1.57	0.05	22.7	11.3	61.1	1.41	3.2	2.46
L9 (8894174)	0.19	5.43	1.7	522	1.07	0.08	1.15	0.06	19.0	4.35	31.2	1.27	0.9	1.30
L10 (8894175)	0.18	6.34	2.3	486	1.42	0.07	1.40	0.06	17.0	9.29	44.0	1.22	3.9	1.84
L11 (8894176)	0.17	6.97	3.3	499	1.58	0.07	1.55	0.05	17.9	11.5	55.6	1.38	4.0	2.23
L12 (8894177)	0.23	6.78	2.9	453	1.55	0.10	1.52	0.06	26.0	14.4	77.0	1.61	6.2	2.89
L13 (8894178)	0.17	6.05	2.3	479	1.40	0.08	1.50	0.04	32.7	12.0	72.2	1.36	9.1	2.47
L14 (8894179)	0.22	6.74	3.1	503	1.56	0.10	1.48	0.10	32.1	16.7	74.8	1.60	10.9	2.69
L15 (8894180)	0.32	6.73	0.9	410	1.59	0.11	1.45	0.09	20.1	16.5	87.7	1.76	8.0	3.22
L16 (8894181)	0.23	6.08	0.9	504	1.34	0.07	1.29	0.05	19.5	7.91	38.3	1.43	2.2	1.76
L17 (8894182)	0.27	6.60	1.3	505	1.47	0.08	1.30	0.06	24.2	12.6	53.1	1.41	4.2	2.02
L18 (8894183)	0.23	6.01	6.6	482	1.43	0.12	1.80	0.24	36.9	11.4	58.8	1.38	19.9	1.98
L19 (8894184)	0.31	7.75	3.5	597	1.96	0.17	1.19	0.03	52.0	22.5	119	3.87	26.1	4.09
L20 (8894185)	0.30	6.94	4.0	489	1.39	0.15	1.60	0.06	36.7	22.7	92.5	3.02	18.5	3.35
L21 (8894186)	0.32	6.28	2.7	541	1.34	0.09	1.40	0.08	24.9	12.1	81.1	2.07	8.6	2.50
M1 (8894187)	0.25	6.18	6.4	509	1.63	0.19	1.51	0.09	39.7	10.2	54.0	1.61	16.8	2.06
M2 (8894188)	0.19	6.01	2.1	500	1.40	0.10	1.49	0.08	28.7	12.9	62.0	1.68	11.6	2.14
M3 (8894189)	0.33	5.91	1.8	478	1.32	0.08	1.35	0.05	30.8	8.94	44.1	1.39	7.6	1.70
M4 (8894190)	0.35	6.63	6.3	497	1.73	0.11	1.55	0.14	34.6	21.2	61.6	1.67	8.7	2.53

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
M5 (8894191)	0.61	6.54	12.9	461	1.50	3.19	1.52	0.07	40.4	18.3	76.9	2.21	65.9	2.83
M6 (8894192)	0.26	6.12	14.2	477	1.40	0.40	1.62	0.04	52.0	16.3	71.9	2.26	26.1	2.59
M8 (8894194)	0.46	7.22	6.5	516	1.57	0.19	1.27	0.15	26.0	27.1	87.5	3.09	32.9	3.50
M9 (8894195)	0.94	7.28	6.6	420	1.59	0.20	0.95	0.18	39.3	30.7	165	2.70	36.4	4.75
M10 (8894196)	0.41	6.81	2.6	532	1.32	0.13	1.39	0.11	32.8	13.5	78.2	2.45	9.7	2.46
M11 (8894197)	0.38	7.21	3.4	516	1.66	0.13	1.30	0.10	43.3	21.0	93.3	2.55	27.3	3.16
M12 (8894198)	0.31	6.44	4.8	451	1.58	0.15	1.21	0.11	37.5	14.9	73.1	2.10	12.5	3.12
M13 (8894199)	0.36	7.16	3.2	547	1.39	0.11	1.32	0.07	35.6	13.5	81.1	2.51	13.0	2.75
M14 (8894200)	1.88	6.59	2.6	522	1.45	0.10	1.48	0.05	28.9	10.8	55.8	1.63	9.6	2.11
M15 (8894201)	0.32	6.70	5.7	441	1.44	0.21	1.49	0.07	29.8	22.2	63.4	2.11	57.5	3.31
M16 (8894202)	0.18	6.60	4.2	529	1.42	0.10	1.57	0.03	26.3	11.9	54.0	1.35	18.3	2.11
M17 (8894203)	0.19	6.33	4.5	494	1.42	0.10	1.41	0.05	24.4	11.8	49.8	1.31	36.9	2.17
M18 (8894204)	0.21	6.38	4.7	466	1.33	0.15	1.44	0.08	33.2	19.1	58.8	1.47	26.0	2.61
M19 (8894205)	0.32	7.24	9.4	419	1.54	0.21	1.35	0.09	24.2	24.6	70.6	2.30	35.3	4.21
M20 (8894206)	0.19	6.76	3.9	485	1.52	0.10	1.52	0.06	33.2	17.8	60.8	1.51	11.6	2.33
M21 (8894207)	0.28	6.64	4.9	423	1.38	0.14	1.33	0.07	41.1	14.8	67.9	2.21	14.9	3.10
M22 (8894208)	0.23	6.56	3.9	432	1.37	0.14	1.33	0.08	29.0	15.8	73.5	2.11	22.8	2.91
M23 (8894209)	0.25	6.80	3.1	464	1.49	0.11	1.50	0.05	48.1	12.5	64.3	1.51	17.0	2.37
M24 (8894210)	0.25	6.58	4.0	439	1.44	0.15	1.30	0.06	30.8	15.3	68.8	2.27	13.2	3.36
M25 (8894211)	0.24	6.77	5.6	442	1.47	0.14	1.42	0.03	52.3	21.4	75.8	1.84	15.7	2.97
M26 (8894212)	0.43	6.46	3.2	463	1.43	0.15	1.34	0.08	25.1	10.2	60.5	2.21	12.9	2.67
M27 (8894213)	0.20	6.62	1.7	503	1.39	0.07	1.50	0.04	24.4	12.9	53.7	1.40	2.5	2.13
M28 (8894214)	0.26	6.91	1.5	499	1.51	0.10	1.49	0.05	26.8	14.6	61.4	1.59	3.8	2.55
M29 (8894215)	0.35	5.79	2.2	504	1.26	0.14	1.35	0.06	29.6	9.11	45.8	1.33	6.2	1.79
M30 (8894216)	0.19	6.36	2.4	473	1.62	0.08	1.42	0.06	20.1	11.6	57.4	1.43	3.7	2.29
M31 (8894217)	0.23	6.43	1.4	474	1.53	0.52	1.63	0.06	31.8	12.4	67.3	1.27	3.8	2.36
M32 (8894218)	0.23	6.45	2.9	475	1.45	0.09	1.57	<0.02	32.2	12.0	68.5	1.41	3.7	2.48
M33 (8894219)	0.25	6.73	2.1	474	1.45	0.09	1.60	0.05	24.3	15.9	67.3	1.47	3.2	2.69
M34 (8894220)	0.26	6.67	1.7	488	1.55	0.10	1.63	<0.02	34.6	12.4	73.9	1.48	3.7	2.77
M35 (8894221)	0.30	6.46	2.5	466	1.40	0.10	1.53	0.07	23.7	11.7	77.1	1.36	4.0	3.06
M36 (8894222)	0.33	6.71	1.6	474	1.55	0.10	1.58	0.07	40.5	13.1	80.4	1.62	8.0	2.86
M37 (8894223)	0.29	6.74	2.8	487	1.50	0.09	1.48	0.05	27.0	13.2	72.7	1.53	7.8	2.74

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 03, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
M38 (8894224)		0.27	7.05	2.6	495	1.55	0.09	1.52	0.05	30.6	13.8	65.7	1.44	5.6	2.69
M39 (8894225)		0.29	7.38	3.9	535	1.50	0.12	1.46	0.06	30.5	20.6	75.1	2.45	12.4	2.94
M40 (8894226)		0.26	6.54	1.3	507	1.55	0.08	1.65	0.06	30.5	12.9	64.5	1.42	3.0	2.42
M41 (8894227)		0.23	6.48	1.9	516	1.51	0.09	1.44	0.06	22.4	11.3	58.5	1.69	3.1	2.43

Certified By:

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
K13 (8894159)		18.2	<0.05	3.3	0.034	1.80	13.5	18.3	0.75	317	0.54	1.96	7.9	39.5	481
K14 (8894160)		17.2	<0.05	3.2	0.024	1.66	14.1	13.3	0.64	341	0.42	2.12	6.0	27.1	579
K15 (8894161)		19.6	<0.05	4.0	0.033	1.57	13.6	19.5	0.78	422	0.86	1.98	9.1	37.3	670
K16 (8894162)		14.9	0.07	2.3	0.023	1.49	14.1	11.4	0.58	312	0.43	1.96	5.6	23.6	348
K17 (8894163)		16.6	0.06	2.1	0.023	1.51	8.8	14.9	0.52	277	0.59	1.98	5.7	23.5	466
K18 (8894164)		22.7	0.18	2.5	0.044	1.41	11.4	34.2	1.08	483	1.12	1.54	11.7	53.5	731
K19 (8894165)		16.8	<0.05	2.4	0.021	1.60	9.3	11.4	0.54	253	0.35	2.18	4.7	22.1	526
L1 (8894166)		16.7	<0.05	2.6	0.021	1.48	11.7	16.6	0.47	235	0.60	1.86	5.9	22.5	345
L2 (8894167)		17.0	0.06	3.0	0.025	1.64	12.5	10.4	0.54	270	0.45	2.01	5.8	21.5	342
L3 (8894168)		17.4	<0.05	2.7	0.027	1.59	14.7	13.3	0.59	304	0.43	2.14	6.0	29.7	526
L4 (8894169)		16.5	<0.05	2.8	0.024	1.63	11.2	12.6	0.62	306	0.51	2.25	5.4	27.2	514
L5 (8894170)		16.9	0.19	2.3	0.023	1.62	10.3	12.5	0.57	281	0.32	2.19	5.2	24.4	518
L6 (8894171)		18.0	0.17	2.2	0.024	1.64	8.0	12.6	0.47	285	0.39	2.12	5.4	17.7	610
L7 (8894172)		15.9	0.10	1.9	0.019	1.66	9.3	10.3	0.56	261	0.26	2.26	4.1	21.9	310
L8 (8894173)		18.1	0.17	2.9	0.028	1.66	11.5	15.0	0.63	336	0.42	2.29	5.7	27.2	447
L9 (8894174)		15.0	0.21	1.5	0.017	1.64	9.4	8.1	0.32	241	0.26	2.08	4.0	12.7	322
L10 (8894175)		15.6	0.09	1.7	0.023	1.54	7.9	12.8	0.55	270	0.32	2.19	3.6	23.7	421
L11 (8894176)		17.6	<0.05	1.6	0.022	1.62	8.9	15.0	0.64	329	0.34	2.32	4.6	28.6	559
L12 (8894177)		19.4	<0.05	2.2	0.029	1.47	12.6	18.7	0.71	378	0.35	2.06	6.2	33.9	821
L13 (8894178)		15.9	<0.05	3.0	0.025	1.47	13.0	12.8	0.75	399	0.24	2.12	5.1	30.2	391
L14 (8894179)		17.2	<0.05	2.4	0.026	1.56	14.5	17.6	0.77	380	0.33	2.05	5.7	40.4	522
L15 (8894180)		17.2	0.13	2.1	0.031	1.36	9.3	22.6	0.84	414	0.43	1.80	11.1	40.8	643
L16 (8894181)		16.6	<0.05	2.1	0.018	1.62	9.1	11.1	0.42	238	0.28	2.10	4.8	16.4	556
L17 (8894182)		16.0	<0.05	2.7	0.024	1.59	11.3	15.2	0.61	254	0.40	2.01	5.3	29.2	275
L18 (8894183)		16.8	<0.05	2.2	0.028	1.59	18.0	12.9	0.79	362	0.35	2.32	4.8	26.3	553
L19 (8894184)		22.9	0.11	3.2	0.032	2.04	24.5	35.9	1.27	300	0.33	1.71	11.9	57.2	138
L20 (8894185)		21.7	<0.05	2.8	0.040	1.77	18.2	34.1	1.35	466	0.42	2.03	8.8	47.4	173
L21 (8894186)		18.2	0.07	2.1	0.028	2.01	12.1	20.7	1.00	377	0.32	1.96	10.5	35.9	236
M1 (8894187)		18.9	<0.05	2.4	0.025	1.64	16.6	15.2	0.62	357	0.59	2.27	5.7	23.1	215
M2 (8894188)		17.4	<0.05	2.2	0.023	1.63	10.5	13.6	0.73	396	0.36	2.14	5.4	28.6	282
M3 (8894189)		16.6	<0.05	2.5	0.022	1.59	10.5	9.8	0.47	269	0.48	2.08	5.6	18.7	185
M4 (8894190)		19.2	<0.05	3.0	0.032	1.68	15.5	14.8	0.65	330	0.57	2.16	6.8	30.9	532

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 03, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
M5 (8894191)		20.3	<0.05	3.8	0.032	1.63	20.7	20.6	0.91	433	0.54	2.04	7.4	35.7	243
M6 (8894192)		16.5	0.16	3.4	0.036	1.64	28.4	22.3	0.86	491	0.52	2.02	7.6	31.6	219
M8 (8894194)		19.7	0.22	2.3	0.041	1.67	11.3	43.5	0.99	354	1.03	1.56	8.9	58.4	445
M9 (8894195)		20.3	0.23	2.5	0.044	1.40	17.9	39.1	2.37	383	0.94	1.15	30.2	83.7	916
M10 (8894196)		20.0	<0.05	3.0	0.032	1.89	16.0	27.8	0.77	295	0.59	1.79	8.7	34.7	909
M11 (8894197)		19.2	0.19	2.9	0.039	1.76	17.9	21.5	0.98	383	0.64	1.65	11.2	50.3	1220
M12 (8894198)		18.7	<0.05	3.2	0.033	1.52	17.6	21.6	0.67	335	0.89	1.58	8.0	36.5	846
M13 (8894199)		18.4	<0.05	3.3	0.028	1.87	17.7	20.8	0.83	338	0.49	1.80	7.8	39.9	552
M14 (8894200)		18.1	<0.05	2.4	0.025	1.71	11.0	15.0	0.63	328	0.46	2.19	5.7	27.5	389
M15 (8894201)		19.6	<0.05	3.1	0.042	1.59	12.6	22.9	0.90	421	0.59	1.90	7.1	38.6	360
M16 (8894202)		18.2	<0.05	3.0	0.026	1.68	12.9	14.2	0.68	303	0.45	2.31	5.8	29.4	222
M17 (8894203)		17.9	<0.05	2.6	0.026	1.62	10.5	19.4	0.66	279	0.48	2.15	5.1	31.2	215
M18 (8894204)		18.3	<0.05	3.1	0.029	1.54	10.2	16.2	0.69	326	0.51	2.08	5.9	34.6	333
M19 (8894205)		20.5	0.07	2.8	0.045	1.41	11.7	28.9	0.79	355	0.95	1.89	6.9	41.2	381
M20 (8894206)		17.2	<0.05	2.8	0.025	1.58	12.0	14.9	0.68	324	0.40	2.22	5.5	30.9	267
M21 (8894207)		17.7	<0.05	3.3	0.032	1.46	19.6	19.7	0.66	339	0.74	1.87	7.4	28.0	416
M22 (8894208)		17.3	<0.05	3.3	0.030	1.52	13.0	18.5	0.77	367	0.56	1.85	6.8	31.5	375
M23 (8894209)		18.5	<0.05	3.6	0.029	1.53	21.3	14.4	0.66	304	0.63	2.05	7.6	26.4	379
M24 (8894210)		21.0	<0.05	2.8	0.033	1.55	14.7	22.0	0.77	355	0.70	1.85	7.1	30.5	431
M25 (8894211)		18.3	<0.05	3.6	0.030	1.55	15.8	19.2	0.77	407	0.54	1.95	7.1	37.7	536
M26 (8894212)		19.5	<0.05	3.6	0.030	1.57	12.2	17.9	0.60	326	0.68	1.76	7.4	23.7	945
M27 (8894213)		17.5	<0.05	2.1	0.022	1.62	11.2	13.4	0.59	300	0.42	2.28	4.4	25.7	465
M28 (8894214)		18.3	<0.05	2.8	0.027	1.57	12.9	16.2	0.64	331	0.45	2.13	5.6	30.9	448
M29 (8894215)		19.1	<0.05	3.3	0.025	1.56	14.4	11.0	0.44	277	0.52	2.02	6.3	17.8	264
M30 (8894216)		18.4	<0.05	1.9	0.023	1.49	8.4	13.2	0.58	375	0.46	2.16	5.2	23.3	561
M31 (8894217)		17.1	<0.05	2.2	0.130	1.50	14.5	12.5	0.69	367	0.30	2.28	5.8	27.9	515
M32 (8894218)		17.5	<0.05	2.7	0.023	1.55	14.7	13.6	0.67	364	0.39	2.15	5.9	28.0	529
M33 (8894219)		18.3	<0.05	2.7	0.034	1.55	11.3	15.4	0.71	391	0.49	2.16	6.7	30.8	497
M34 (8894220)		18.1	<0.05	3.0	0.028	1.55	15.9	15.5	0.67	387	0.42	2.19	6.1	29.2	680
M35 (8894221)		17.9	<0.05	3.4	0.029	1.44	10.7	16.6	0.67	417	0.46	2.06	6.9	29.5	551
M36 (8894222)		18.1	<0.05	4.0	0.029	1.60	19.1	14.6	0.72	406	0.44	2.09	6.6	32.1	613
M37 (8894223)		18.5	<0.05	2.4	0.029	1.59	11.9	16.9	0.67	346	0.39	2.08	6.0	34.1	599

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
M38 (8894224)		18.2	<0.05	2.1	0.027	1.59	14.3	17.3	0.72	339	0.44	2.19	5.6	33.0	518
M39 (8894225)		19.6	<0.05	2.8	0.033	1.74	14.1	24.5	0.80	333	0.74	1.96	7.2	45.7	464
M40 (8894226)		17.7	<0.05	2.6	0.026	1.61	13.7	11.9	0.71	372	0.37	2.27	5.9	27.3	413
M41 (8894227)		19.1	<0.05	2.8	0.026	1.64	10.5	16.4	0.56	304	0.57	2.13	6.1	24.8	452

Certified By:

Certificate of Analysis

AGAT Laboratories

AGAT WORK ORDER: 17T282586

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 03, 2018 SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
K13 (8894159)	12.2	60.7	<0.002	0.05	0.22	9.0	0.8	1.5	282	0.57	<0.01	4.1	0.28	0.28
K14 (8894160)	11.6	52.3	<0.002	0.03	0.10	8.0	<0.5	4.4	326	0.46	<0.01	5.0	0.28	0.25
K15 (8894161)	12.3	48.3	<0.002	0.05	0.35	10.0	0.8	1.9	307	0.95	0.06	4.7	0.38	0.27
K16 (8894162)	17.9	43.8	<0.002	0.03	0.24	7.7	<0.5	1.3	304	0.47	<0.01	5.1	0.24	0.23
K17 (8894163)	11.1	47.7	<0.002	0.03	0.27	7.3	0.7	1.5	310	0.46	<0.01	2.5	0.24	0.23
K18 (8894164)	17.2	45.1	<0.002	0.05	0.32	10.3	1.1	2.0	256	0.85	0.02	3.9	0.59	0.23
K19 (8894165)	10.9	50.6	<0.002	0.03	0.15	6.8	0.7	1.5	338	0.33	<0.01	2.8	0.20	0.25
L1 (8894166)	11.9	45.5	<0.002	0.08	0.09	7.4	1.0	16.6	278	0.48	<0.01	4.0	0.24	0.24
L2 (8894167)	11.7	51.4	<0.002	0.03	0.13	7.7	0.6	1.3	306	0.40	<0.01	3.9	0.23	0.26
L3 (8894168)	11.3	50.7	<0.002	0.04	0.07	8.4	1.0	1.2	322	0.43	<0.01	4.4	0.25	0.24
L4 (8894169)	11.2	49.8	<0.002	0.04	0.10	7.6	<0.5	1.1	332	0.41	<0.01	3.2	0.23	0.25
L5 (8894170)	11.0	49.2	<0.002	0.05	0.08	7.5	<0.5	1.2	335	0.43	<0.01	3.2	0.22	0.23
L6 (8894171)	11.5	52.9	<0.002	0.03	0.14	6.8	<0.5	1.2	325	0.38	<0.01	1.8	0.23	0.25
L7 (8894172)	10.6	50.8	<0.002	0.03	0.05	6.5	<0.5	1.7	342	0.33	<0.01	2.9	0.18	0.25
L8 (8894173)	11.7	52.8	<0.002	0.04	0.08	7.8	0.7	1.1	348	0.43	<0.01	3.4	0.26	0.25
L9 (8894174)	11.0	48.8	<0.002	0.02	0.16	4.7	<0.5	1.1	307	0.29	<0.01	3.4	0.18	0.24
L10 (8894175)	10.7	47.6	<0.002	0.03	0.12	6.6	<0.5	1.9	320	0.29	<0.01	2.2	0.18	0.23
L11 (8894176)	11.5	52.2	<0.002	0.03	0.11	7.3	0.6	1.1	353	0.37	<0.01	2.5	0.21	0.25
L12 (8894177)	12.6	51.0	<0.002	0.04	0.10	8.8	0.6	2.5	316	0.45	<0.01	3.5	0.28	0.25
L13 (8894178)	10.9	49.3	<0.002	0.03	0.11	8.2	0.6	1.2	321	0.38	<0.01	6.4	0.27	0.23
L14 (8894179)	11.7	53.9	<0.002	0.03	0.13	8.3	0.8	1.1	316	0.41	<0.01	6.0	0.27	0.26
L15 (8894180)	11.6	49.1	<0.002	0.04	0.11	9.6	0.6	1.3	281	0.93	<0.01	2.7	0.31	0.23
L16 (8894181)	10.8	52.7	<0.002	0.03	0.11	5.9	<0.5	1.2	312	0.33	<0.01	3.0	0.21	0.24
L17 (8894182)	11.8	49.4	<0.002	0.03	0.10	7.3	0.7	1.0	302	0.39	<0.01	2.9	0.21	0.24
L18 (8894183)	15.4	51.0	<0.002	0.07	0.19	9.4	1.1	1.1	331	0.35	<0.01	4.3	0.26	0.26
L19 (8894184)	16.9	72.8	<0.002	0.02	0.30	13.6	0.6	2.0	247	1.17	0.07	11.0	0.35	0.48
L20 (8894185)	13.1	66.0	<0.002	0.03	0.29	13.0	0.8	1.8	259	0.81	0.03	4.8	0.43	0.35
L21 (8894186)	11.9	64.9	<0.002	0.03	0.13	9.3	<0.5	1.5	289	1.12	<0.01	3.2	0.30	0.30
M1 (8894187)	12.4	55.5	<0.002	0.03	0.15	8.6	0.9	1.2	341	0.45	<0.01	4.3	0.26	0.26
M2 (8894188)	11.4	54.9	<0.002	0.03	0.14	8.4	0.5	1.1	304	0.47	<0.01	2.6	0.24	0.26
M3 (8894189)	11.0	51.1	<0.002	0.03	0.13	7.1	0.8	1.6	318	0.42	<0.01	2.9	0.24	0.24
M4 (8894190)	14.2	57.1	<0.002	0.04	0.24	8.3	1.0	1.6	327	0.52	<0.01	4.1	0.29	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
M5 (8894191)		12.4	57.2	<0.002	0.03	0.25	10.0	1.0	1.6	287	0.60	<0.01	7.1	0.34	0.30
M6 (8894192)		12.9	52.7	<0.002	0.03	0.16	10.6	0.6	2.3	296	0.53	<0.01	10.5	0.37	0.28
M8 (8894194)		16.1	60.8	<0.002	0.05	0.30	9.8	0.8	1.6	234	0.57	0.02	3.8	0.37	0.29
M9 (8894195)		14.3	50.2	<0.002	0.06	0.29	11.3	1.6	2.2	173	1.92	0.03	5.8	0.52	0.23
M10 (8894196)		13.4	61.8	<0.002	0.05	0.20	9.2	0.9	1.6	262	0.62	<0.01	4.6	0.32	0.29
M11 (8894197)		13.7	57.7	<0.002	0.05	0.29	10.2	1.2	1.5	242	0.80	<0.01	6.0	0.35	0.29
M12 (8894198)		13.3	50.1	<0.002	0.05	0.24	8.5	1.1	1.5	232	0.57	<0.01	6.6	0.31	0.27
M13 (8894199)		13.0	60.3	<0.002	0.04	0.19	9.4	0.8	4.6	254	0.55	<0.01	5.6	0.31	0.30
M14 (8894200)		11.2	53.9	<0.002	0.03	0.17	8.2	0.7	2.1	313	0.60	<0.01	3.4	0.26	0.25
M15 (8894201)		12.3	56.0	<0.002	0.04	0.36	10.8	0.9	1.5	255	0.48	<0.01	4.3	0.34	0.25
M16 (8894202)		11.7	50.9	<0.002	0.03	0.11	8.4	0.8	1.2	341	0.42	<0.01	3.2	0.26	0.25
M17 (8894203)		11.5	49.4	<0.002	0.02	0.11	7.8	<0.5	1.1	320	0.36	<0.01	2.9	0.23	0.23
M18 (8894204)		12.3	51.4	<0.002	0.03	0.18	8.5	0.9	1.3	299	0.41	<0.01	4.9	0.29	0.24
M19 (8894205)		11.9	49.6	<0.002	0.05	0.32	10.4	1.2	1.6	242	0.52	<0.01	4.0	0.34	0.26
M20 (8894206)		11.9	49.1	<0.002	0.04	0.13	8.4	0.9	1.5	316	0.41	<0.01	4.2	0.26	0.24
M21 (8894207)		12.7	48.5	<0.002	0.04	0.37	9.3	1.1	1.5	259	0.86	0.07	9.7	0.31	0.27
M22 (8894208)		12.5	50.3	<0.002	0.04	0.26	10.0	1.0	1.5	245	0.57	0.02	4.7	0.32	0.28
M23 (8894209)		13.0	47.1	<0.002	0.04	0.16	8.8	1.0	2.2	303	0.58	<0.01	10.3	0.29	0.25
M24 (8894210)		11.2	53.5	<0.002	0.04	0.24	9.9	1.3	1.6	244	0.55	0.02	4.8	0.33	0.27
M25 (8894211)		12.7	52.9	<0.002	0.04	0.30	10.2	1.0	1.6	274	0.60	0.03	6.1	0.33	0.25
M26 (8894212)		11.9	52.8	<0.002	0.05	0.24	8.8	1.0	1.5	262	0.81	<0.01	4.1	0.30	0.25
M27 (8894213)		10.7	51.9	<0.002	0.04	0.11	7.3	1.0	1.3	339	0.34	<0.01	3.3	0.23	0.24
M28 (8894214)		11.4	49.9	<0.002	0.04	0.10	8.4	1.1	1.6	324	0.52	0.01	3.7	0.27	0.23
M29 (8894215)		11.6	52.5	<0.002	0.03	0.18	7.3	0.5	1.4	299	0.48	<0.01	4.8	0.27	0.26
M30 (8894216)		10.5	50.2	<0.002	0.04	0.82	7.7	0.7	1.2	329	0.37	<0.01	2.3	0.24	0.23
M31 (8894217)		11.5	50.2	<0.002	0.03	0.14	8.4	0.5	1.2	341	0.41	<0.01	6.3	0.25	0.22
M32 (8894218)		11.0	50.6	<0.002	0.03	0.15	8.7	0.8	10.6	314	0.43	<0.01	5.0	0.27	0.23
M33 (8894219)		11.0	51.0	<0.002	0.04	0.12	9.0	0.8	1.3	326	0.47	<0.01	4.0	0.30	0.23
M34 (8894220)		12.0	50.9	<0.002	0.04	0.10	8.8	<0.5	16.2	330	0.44	<0.01	5.7	0.31	0.25
M35 (8894221)		10.6	46.8	<0.002	0.04	0.16	9.2	0.8	1.3	303	0.55	0.02	3.9	0.34	0.22
M36 (8894222)		12.1	52.4	<0.002	0.04	0.23	9.3	1.2	1.3	315	0.48	<0.01	11.1	0.32	0.25
M37 (8894223)		10.9	54.0	<0.002	0.04	0.10	8.8	0.7	1.2	304	0.44	<0.01	4.0	0.28	0.24

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
M38 (8894224)		11.1	50.7	<0.002	0.04	0.09	8.5	0.8	1.2	321	0.46	<0.01	6.9	0.28	0.24
M39 (8894225)		13.3	57.9	<0.002	0.04	0.17	9.0	1.1	1.4	291	0.49	<0.01	5.2	0.30	0.27
M40 (8894226)		11.4	54.0	<0.002	0.03	0.10	8.5	0.9	1.2	347	0.41	<0.01	3.2	0.28	0.26
M41 (8894227)		11.6	53.8	<0.002	0.03	0.15	7.6	0.7	1.2	315	0.44	<0.01	3.7	0.27	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
K13 (8894159)	0.913	57.5	0.5	12.2	40.7	165
K14 (8894160)	0.850	58.9	0.3	11.3	45.7	150
K15 (8894161)	1.00	85.3	0.6	12.7	64.9	169
K16 (8894162)	0.835	53.8	0.3	10.2	42.2	105
K17 (8894163)	0.629	59.0	0.3	9.8	56.0	101
K18 (8894164)	0.969	117	0.7	11.2	102	125
K19 (8894165)	0.602	52.6	0.2	9.2	26.3	115
L1 (8894166)	0.783	51.8	0.2	9.4	23.9	122
L2 (8894167)	0.737	48.8	0.2	9.9	36.5	141
L3 (8894168)	0.753	57.3	0.2	11.1	48.1	129
L4 (8894169)	0.664	53.1	0.2	10.6	39.7	135
L5 (8894170)	0.634	53.1	0.1	9.6	36.3	110
L6 (8894171)	0.536	50.6	0.2	8.5	52.8	101
L7 (8894172)	0.519	45.9	<0.1	8.6	23.7	90.4
L8 (8894173)	0.661	62.8	0.2	10.7	33.3	133
L9 (8894174)	0.571	38.2	0.1	5.9	28.3	69.5
L10 (8894175)	0.562	47.0	<0.1	7.6	38.6	76.1
L11 (8894176)	0.475	54.7	0.2	9.3	36.0	73.2
L12 (8894177)	0.683	75.0	0.2	11.0	36.2	99.5
L13 (8894178)	0.802	65.5	0.2	10.5	29.7	141
L14 (8894179)	0.677	67.3	0.2	11.2	46.7	115
L15 (8894180)	0.730	79.7	0.4	12.3	39.0	90.8
L16 (8894181)	0.571	43.1	0.1	8.7	20.9	100
L17 (8894182)	0.690	46.9	0.2	8.8	25.4	127
L18 (8894183)	1.24	54.9	0.2	14.1	55.5	90.9
L19 (8894184)	1.35	89.3	0.7	12.7	51.7	126
L20 (8894185)	1.19	95.4	0.6	13.7	47.2	128
L21 (8894186)	0.710	67.7	0.3	9.4	40.5	98.2
M1 (8894187)	0.950	57.0	0.2	15.4	34.4	113
M2 (8894188)	0.664	56.9	0.2	11.2	62.1	105
M3 (8894189)	0.696	49.5	0.2	9.6	23.5	121
M4 (8894190)	0.843	62.3	0.3	12.5	41.9	136

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
M5 (8894191)		1.31	74.6	0.4	15.4	52.4	182
M6 (8894192)		1.18	77.4	0.3	15.2	37.7	167
M8 (8894194)		1.01	81.7	0.6	10.1	63.6	109
M9 (8894195)		1.26	96.7	1.0	10.6	84.5	113
M10 (8894196)		1.05	60.7	0.4	12.0	80.4	138
M11 (8894197)		1.14	74.4	0.4	13.6	65.3	132
M12 (8894198)		1.19	72.0	0.5	12.0	79.9	145
M13 (8894199)		1.01	65.0	0.3	11.2	62.7	153
M14 (8894200)		0.752	54.3	0.2	10.1	50.2	110
M15 (8894201)		0.994	90.8	0.4	12.6	57.6	149
M16 (8894202)		0.727	59.5	0.2	11.3	28.2	137
M17 (8894203)		0.727	65.2	0.2	9.6	24.5	116
M18 (8894204)		0.964	71.2	0.3	11.2	33.1	127
M19 (8894205)		1.14	95.7	0.5	12.2	39.4	128
M20 (8894206)		0.782	60.4	0.2	10.7	29.1	132
M21 (8894207)		1.17	76.9	0.5	11.6	41.4	139
M22 (8894208)		1.10	80.2	0.4	11.4	42.3	149
M23 (8894209)		1.13	61.4	0.3	12.9	36.0	160
M24 (8894210)		1.08	79.6	0.4	13.2	54.6	130
M25 (8894211)		1.20	77.2	0.4	14.2	37.5	174
M26 (8894212)		1.14	65.3	0.4	11.3	78.0	170
M27 (8894213)		0.630	54.7	0.1	9.1	31.1	97.0
M28 (8894214)		0.763	64.4	0.2	10.7	39.7	126
M29 (8894215)		0.889	57.1	0.3	10.0	35.3	159
M30 (8894216)		0.599	58.3	0.2	10.0	44.9	92.6
M31 (8894217)		0.737	64.5	0.1	11.5	29.0	95.5
M32 (8894218)		0.768	67.0	0.2	11.5	33.4	125
M33 (8894219)		0.788	72.2	0.4	11.6	35.6	122
M34 (8894220)		0.854	73.9	0.2	12.4	48.5	133
M35 (8894221)		0.825	83.9	0.3	12.1	49.6	161
M36 (8894222)		1.08	76.6	0.3	13.3	34.8	169
M37 (8894223)		0.805	68.9	0.2	11.2	35.7	114

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
M38 (8894224)		0.716	67.4	0.2	10.3	37.4	98.2
M39 (8894225)		0.923	69.1	0.3	11.5	53.3	126
M40 (8894226)		0.802	65.8	0.2	12.4	34.0	119
M41 (8894227)		0.752	62.3	0.2	10.1	60.9	130

Comments: RDL - Reported Detection Limit
8894159-8894227 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Replicate

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8894159	0.25	0.29	14.8%	8894179	0.220	0.225	2.2%	8894200	1.88	1.02		8894221	0.30	0.27	10.5%
Al	8894159	7.03	7.05	0.3%	8894179	6.74	6.67	1.0%	8894200	6.59	6.34	3.9%	8894221	6.46	6.81	5.3%
As	8894159	1.63	1.67	2.4%	8894179	3.1	3.8	20.3%	8894200	2.6	1.8		8894221	2.5	3.7	
Ba	8894159	515	525	1.9%	8894179	503	508	1.0%	8894200	522	501	4.1%	8894221	466	476	2.1%
Be	8894159	1.56	1.56	0.0%	8894179	1.56	1.59	1.9%	8894200	1.45	1.29	11.7%	8894221	1.40	1.41	0.7%
Bi	8894159	0.103	0.109	5.7%	8894179	0.10	0.16		8894200	0.097	0.091	6.4%	8894221	0.10	0.10	0.0%
Ca	8894159	1.36	1.36	0.0%	8894179	1.48	1.50	1.3%	8894200	1.48	1.40	5.6%	8894221	1.53	1.58	3.2%
Cd	8894159	0.074	0.087	16.1%	8894179	0.10	0.09	10.5%	8894200	0.05	0.07		8894221	0.07	0.09	25.0%
Ce	8894159	33.8	34.4	1.8%	8894179	32.1	18.3		8894200	28.9	32.1	10.5%	8894221	23.7	27.6	15.2%
Co	8894159	16.3	16.8	3.0%	8894179	16.7	16.4	1.8%	8894200	10.8	10.5	2.8%	8894221	11.7	12.6	7.4%
Cr	8894159	71.7	72.1	0.6%	8894179	74.8	74.2	0.8%	8894200	55.8	54.3	2.7%	8894221	77.1	78.9	2.3%
Cs	8894159	1.84	1.86	1.1%	8894179	1.60	1.66	3.7%	8894200	1.63	1.56	4.4%	8894221	1.36	1.49	9.1%
Cu	8894159	8.2	12.9		8894179	10.9	10.7	1.9%	8894200	9.57	7.85	19.7%	8894221	4.0	4.0	0.0%
Fe	8894159	2.35	2.36	0.4%	8894179	2.69	2.67	0.7%	8894200	2.11	2.04	3.4%	8894221	3.06	3.21	4.8%
Ga	8894159	18.2	19.1	4.8%	8894179	17.2	18.1	5.1%	8894200	18.1	17.3	4.5%	8894221	17.9	19.3	7.5%
Ge	8894159	< 0.05	< 0.05	0.0%	8894179	< 0.05	< 0.05	0.0%	8894200	< 0.05	< 0.05	0.0%	8894221	< 0.05	< 0.05	0.0%
Hf	8894159	3.3	3.3	0.0%	8894179	2.4	2.4	0.0%	8894200	2.4	2.6	8.0%	8894221	3.4	3.7	8.5%
In	8894159	0.034	0.033	3.0%	8894179	0.026	0.030	14.3%	8894200	0.0252	0.0223	12.2%	8894221	0.029	0.030	3.4%
K	8894159	1.80	1.80	0.0%	8894179	1.56	1.54	1.3%	8894200	1.71	1.68	1.8%	8894221	1.44	1.51	4.7%
La	8894159	13.5	13.8	2.2%	8894179	14.5	8.1		8894200	11.0	12.6	13.6%	8894221	10.7	12.8	17.9%
Li	8894159	18.3	18.4	0.5%	8894179	17.6	17.2	2.3%	8894200	15.0	14.3	4.8%	8894221	16.6	17.8	7.0%
Mg	8894159	0.75	0.75	0.0%	8894179	0.768	0.751	2.2%	8894200	0.63	0.61	3.2%	8894221	0.67	0.70	4.4%
Mn	8894159	317	313	1.3%	8894179	380	392	3.1%	8894200	328	318	3.1%	8894221	417	437	4.7%
Mo	8894159	0.540	0.648	18.2%	8894179	0.33	0.33	0.0%	8894200	0.46	0.41	11.5%	8894221	0.46	0.46	0.0%
Na	8894159	1.96	1.98	1.0%	8894179	2.05	2.08	1.5%	8894200	2.19	2.07	5.6%	8894221	2.06	2.08	1.0%
Nb	8894159	7.90	7.72	2.3%	8894179	5.70	6.39	11.4%	8894200	5.71	5.63	1.4%	8894221	6.86	6.82	0.6%
Ni	8894159	39.5	41.5	4.9%	8894179	40.4	39.3	2.8%	8894200	27.5	27.1	1.5%	8894221	29.5	29.5	0.0%
P	8894159	481	497	3.3%	8894179	522	490	6.3%	8894200	389	403	3.5%	8894221	551	566	2.7%
Pb	8894159	12.2	13.6	10.9%	8894179	11.7	11.9	1.7%	8894200	11.2	11.3	0.9%	8894221	10.6	10.7	0.9%
Rb	8894159	60.7	62.4	2.8%	8894179	53.9	56.8	5.2%	8894200	53.9	53.3	1.1%	8894221	46.8	49.9	6.4%
Re	8894159	< 0.002	< 0.002	0.0%	8894179	< 0.002	< 0.002	0.0%	8894200	< 0.002	< 0.002	0.0%	8894221	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8894159	0.05	0.05	0.0%	8894179	0.03	0.03	0.0%	8894200	0.03	0.03	0.0%	8894221	0.04	0.04	0.0%
Sb	8894159	0.224	0.254	12.6%	8894179	0.13	0.13	0.0%	8894200	0.17	0.12		8894221	0.16	0.15	6.5%
Sc	8894159	9.03	9.10	0.8%	8894179	8.3	8.2	1.2%	8894200	8.2	8.1	1.2%	8894221	9.2	9.4	2.2%
Se	8894159	0.8	0.8	0.0%	8894179	0.8	0.5		8894200	0.7	0.7	0.0%	8894221	0.84	1.05	22.2%
Sn	8894159	1.5	1.5	0.0%	8894179	1.15	1.21	5.1%	8894200	2.13	2.40	11.9%	8894221	1.31	1.39	5.9%
Sr	8894159	282	287	1.8%	8894179	316	311	1.6%	8894200	313	309	1.3%	8894221	303	319	5.1%
Ta	8894159	0.57	0.61	6.8%	8894179	0.413	0.473	13.5%	8894200	0.60	0.40		8894221	0.548	0.499	9.4%
Te	8894159	< 0.01	< 0.01	0.0%	8894179	< 0.01	< 0.01	0.0%	8894200	< 0.01	< 0.01	0.0%	8894221	0.02	< 0.01	
Th	8894159	4.11	4.75	14.4%	8894179	6.0	2.5		8894200	3.43	3.76	9.2%	8894221	3.9	3.9	0.0%
Ti	8894159	0.283	0.273	3.6%	8894179	0.27	0.28	3.6%	8894200	0.26	0.25	3.9%	8894221	0.34	0.34	0.0%
Tl	8894159	0.280	0.298	6.2%	8894179	0.26	0.27	3.8%	8894200	0.25	0.25	0.0%	8894221	0.22	0.23	4.4%
U	8894159	0.913	0.979	7.0%	8894179	0.677	0.603	11.6%	8894200	0.752	0.774	2.9%	8894221	0.825	0.929	11.9%
V	8894159	57.5	58.0	0.9%	8894179	67.3	65.2	3.2%	8894200	54.3	53.9	0.7%	8894221	83.9	82.5	1.7%
W	8894159	0.5	0.5	0.0%	8894179	0.2	0.2	0.0%	8894200	0.2	0.2	0.0%	8894221	0.3	0.3	0.0%
Y	8894159	12.2	11.3	7.7%	8894179	11.2	10.8	3.6%	8894200	10.1	10.1	0.0%	8894221	12.1	12.3	1.6%
Zn	8894159	40.7	44.3	8.5%	8894179	46.7	48.1	3.0%	8894200	50.2	43.4	14.5%	8894221	49.6	51.8	4.3%
Zr	8894159	165	149	10.2%	8894179	115	114	0.9%	8894200	110	114	3.6%	8894221	161	161	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.76	98%	90% - 110%	6.96	6.52	94%	90% - 110%	8.17	8.5	104%	90% - 110%	10.95	10.96	100%	90% - 110%
As					124	124	100%	90% - 110%	26	28	107%	90% - 110%				
Ba	340	336	99%	90% - 110%	186	174	93%	90% - 110%	540	550	101%	90% - 110%	340	342	100%	90% - 110%
Be									4.0	4.2	105%	90% - 110%				
Ca	5.72	5.68	99%	90% - 110%	4.01	3.76	94%	90% - 110%	0.907	0.959	106%	90% - 110%	5.72	5.73	100%	90% - 110%
Ce	122	130	107%	90% - 110%	24	22	92%	90% - 110%	98	107	110%	90% - 110%	122	122	100%	90% - 110%
Co	2.8	3.0	107%	90% - 110%	22.1	24.2	109%	90% - 110%					2.8	3.0	107%	90% - 110%
Cr									60.3	59.3	98%	90% - 110%				
Cu	7	7	95%	90% - 110%	88.6	81.6	92%	90% - 110%	150	153	102%	90% - 110%				
Fe	4.34	3.98	92%	90% - 110%	7.56	6.85	90%	90% - 110%	3.77	3.72	99%	90% - 110%	4.34	4.05	93%	90% - 110%
Ga	35	40	114%	90% - 110%									35	39	111%	90% - 110%
K	1.37	1.39	101%	90% - 110%	2.021	1.941	96%	90% - 110%					1.37	1.42	104%	90% - 110%
La	58	60	104%	90% - 110%					44	47	106%	90% - 110%	58	55	95%	90% - 110%
Li	37	39	105%	90% - 110%					47	48	103%	90% - 110%	37	39	105%	90% - 110%
Mg	0.325	0.303	93%	90% - 110%	2.412	2.305	96%	90% - 110%	1.10	1.11	101%	90% - 110%	0.325	0.313	96%	90% - 110%
Mn					1510	1360	90%	90% - 110%	780	753	97%	90% - 110%				
Mo									14	14	103%	90% - 110%				
Na	5.267	5.464	104%	90% - 110%	0.617	0.6	97%	90% - 110%	1.624	1.781	110%	90% - 110%	5.267	5.512	105%	90% - 110%
Nb									20	19	95%	90% - 110%	13	15	115%	90% - 110%
Ni	9	9	95%	90% - 110%	77.1	69.8	91%	90% - 110%	32	34	105%	90% - 110%	9	7	82%	90% - 110%
P					892	968	109%	90% - 110%								
Pb	10	10	102%	90% - 110%					31	33	107%	90% - 110%	10	9	95%	90% - 110%
Rb	55	57	103%	90% - 110%					143	155	108%	90% - 110%	55	55	99%	90% - 110%
S					0.348	0.375	108%	90% - 110%								
Sc									12	12	104%	90% - 110%	1.1	0.8	74%	90% - 110%
Sr	1191	1231	103%	90% - 110%	92.8	88.7	96%	90% - 110%	144	155	107%	90% - 110%	1191	1246	105%	90% - 110%
Ta	0.9	1	106%	90% - 110%					1.9	1.7	89%	90% - 110%	0.9	1.1	122%	90% - 110%
Th	1.4	1.2	87%	90% - 110%					18.4	18.6	101%	90% - 110%	1.4	1.2	83%	90% - 110%
Ti	0.172	0.163	95%	90% - 110%					0.53	0.48	90%	90% - 110%	0.172	0.168	98%	90% - 110%
U	0.8	0.6	71%	90% - 110%					5.7	5.2	91%	90% - 110%				
V	8	7	82%	90% - 110%					77	76	98%	90% - 110%	8	7	89%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

W									5	5	100%	90% - 110%				
Y									40	37	92%	90% - 110%				
Zn	93	92	99%	90% - 110%	208	192	92%	90% - 110%	130	127	98%	90% - 110%	93	88	95%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 17T282586
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

CERTIFICATE SD18197526

Project: 99421

This report is for 203 Soil samples submitted to our lab in Sudbury, ON, Canada on 10-AUG-2018.

The following have access to data associated with this certificate:

K. RAFFLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-MS41	Ultra Trace Aqua Regia ICP-MS

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05
2018KNS001		0.06	0.32	0.53	4.5	<0.02	<10	70	0.10	0.20	0.34	0.85	8.40	3.4	18	0.47
2018KNS002		0.26	0.40	0.55	8.7	<0.02	<10	50	0.13	0.26	0.21	0.30	10.00	4.0	20	0.40
2018KNS003		0.24	0.36	0.35	6.9	<0.02	<10	30	0.06	0.26	0.10	0.14	9.67	2.0	10	0.36
2018KNS004		0.26	0.29	0.50	9.7	<0.02	<10	30	0.11	0.27	0.08	0.12	9.63	4.5	16	0.38
2018KNS005		0.25	0.33	0.79	8.3	<0.02	<10	40	0.20	0.28	0.12	0.10	15.05	8.5	22	0.65
2018KNS006		0.16	0.28	0.19	6.7	<0.02	<10	60	0.05	0.36	0.14	0.46	6.31	1.9	10	0.24
2018KNS007		0.08	0.49	0.23	13.4	<0.02	<10	30	0.05	0.54	0.13	0.18	8.67	1.9	6	0.21
2018KNS008		0.15	0.96	0.63	11.8	<0.02	<10	100	0.20	0.48	0.29	0.59	12.85	11.2	17	0.55
2018KNS009		0.27	0.30	1.62	5.6	<0.02	<10	90	0.58	0.18	0.22	0.16	74.7	7.4	35	0.75
2018KNS010		0.16	0.84	0.25	10.6	<0.02	<10	50	0.10	0.69	0.15	0.77	7.77	2.8	12	0.24
2018KNS011		0.16	0.67	0.33	12.3	<0.02	<10	70	0.14	0.64	0.12	0.27	7.67	1.4	13	0.17
2018KNS012		0.08	0.65	0.43	27.4	<0.02	<10	100	0.15	1.51	0.19	1.28	7.81	3.4	15	0.33
2018KNS014		0.10	1.71	0.53	21.3	<0.02	<10	70	0.17	1.07	0.37	0.93	6.87	6.0	23	0.39
2018KNS015		0.07	0.74	0.25	18.7	<0.02	<10	100	0.12	1.39	0.34	1.34	5.05	3.9	7	0.22
2018KNS016		0.07	0.81	0.22	18.1	<0.02	<10	60	0.08	1.15	0.15	0.79	4.83	3.5	6	0.25
2018KNS017		0.16	0.26	0.20	7.6	<0.02	<10	120	0.11	0.87	0.19	1.17	6.34	2.3	7	0.19
2018KNS018		0.09	2.57	0.27	13.6	<0.02	<10	160	0.21	1.36	0.33	0.53	8.39	3.2	6	0.35
2018KNS019		0.08	1.87	0.16	14.7	<0.02	<10	90	0.10	1.01	0.51	1.45	3.47	4.9	6	0.21
2018KNS020		0.08	2.13	0.15	16.1	<0.02	<10	100	0.12	1.02	0.54	1.47	2.90	5.0	5	0.20
2018KNS021		0.28	0.35	0.94	104.5	<0.02	<10	40	0.37	0.27	0.23	0.14	32.5	39.6	22	0.55
2018KNS022		0.06	1.84	0.33	14.4	<0.02	<10	100	0.14	1.64	0.35	1.06	6.21	21.2	6	0.62
2018KNS023		0.06	1.21	0.30	8.9	<0.02	<10	180	0.12	0.91	0.53	1.54	6.00	12.4	9	0.45
2018KNS024		0.24	0.30	0.47	7.3	<0.02	<10	50	0.15	0.25	0.13	0.20	10.90	3.7	15	0.53
2018KNS025		0.07	0.70	0.25	9.1	<0.02	<10	90	0.12	0.83	0.20	0.71	7.95	2.5	7	0.20
2018KNS026		0.36	0.33	0.98	9.4	<0.02	<10	40	0.20	0.29	0.10	0.14	18.45	5.7	28	0.68
2018KNS027		0.06	2.10	0.17	12.8	<0.02	<10	150	0.12	1.24	0.26	0.93	3.90	3.2	5	0.18
2018KNS028		0.08	1.45	0.27	23.8	<0.02	<10	130	0.13	2.02	0.25	1.71	8.65	4.3	6	0.33
2018KNS029		0.06	1.30	0.32	17.0	0.06	<10	150	0.18	2.24	0.26	1.30	7.44	10.4	9	0.38
2018KNS030		0.07	0.80	0.31	19.1	<0.02	<10	150	0.15	1.94	0.31	1.60	7.79	4.2	8	0.29
2018KNS031		0.13	0.67	0.36	16.8	<0.02	<10	30	0.08	0.78	0.14	0.22	10.85	2.5	11	0.36
2018KNS032		0.09	0.50	0.16	14.8	<0.02	<10	140	0.10	1.00	0.26	0.58	7.44	2.9	6	0.22
2018KNS034		0.11	1.96	0.35	36.7	<0.02	<10	220	0.18	2.01	0.58	2.90	8.75	6.9	14	0.52
2018KNS035		0.22	0.40	0.70	15.9	<0.02	<10	30	0.11	0.30	0.20	0.22	10.15	3.3	20	0.37
2018KNS036		0.29	0.33	0.62	6.9	<0.02	<10	30	0.14	0.21	0.15	0.18	12.45	4.3	18	0.34
2018KNS037		0.08	1.12	0.38	16.9	<0.02	<10	140	0.28	1.72	0.31	1.70	13.60	4.4	14	0.36
2018KNS038		0.19	0.46	0.88	11.1	<0.02	<10	60	0.22	0.31	0.27	0.35	13.20	6.1	26	0.61
2018KNS039		0.23	0.19	0.62	5.7	<0.02	<10	40	0.14	0.20	0.14	0.17	8.73	2.9	15	0.32
2018KNS040		0.26	0.19	0.61	5.3	<0.02	<10	30	0.14	0.19	0.13	0.15	8.81	2.8	14	0.32
2018KNS041		0.08	1.87	0.38	31.8	<0.02	<10	210	0.21	3.01	0.50	3.82	8.93	5.1	9	0.36
2018KNS042		0.07	2.10	0.30	34.3	<0.02	<10	130	0.12	1.82	0.45	0.86	6.68	5.7	5	0.26

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05
2018KNS001		12.6	0.93	2.19	<0.05	<0.02	0.07	0.013	0.07	4.2	4.5	0.13	253	0.22	0.01	0.77
2018KNS002		9.0	1.35	3.86	<0.05	0.02	0.06	0.018	0.04	4.4	4.2	0.13	316	0.28	<0.01	0.89
2018KNS003		5.7	0.59	2.77	<0.05	<0.02	0.05	0.016	0.02	4.6	2.5	0.07	117	0.22	<0.01	0.65
2018KNS004		7.2	1.12	3.38	<0.05	<0.02	0.06	0.018	0.03	5.3	3.4	0.07	432	0.26	<0.01	0.81
2018KNS005		10.1	1.32	3.92	<0.05	<0.02	0.06	0.019	0.04	8.0	7.1	0.20	671	0.27	<0.01	0.92
2018KNS006		11.6	0.58	1.66	<0.05	<0.02	0.06	0.023	0.03	3.2	1.0	0.03	91	0.21	<0.01	0.36
2018KNS007		15.9	0.45	1.75	<0.05	<0.02	0.14	0.037	0.02	4.2	1.1	0.04	35	0.37	<0.01	0.43
2018KNS008		25.9	0.92	2.66	<0.05	<0.02	0.15	0.035	0.05	6.7	4.0	0.12	714	0.53	<0.01	0.41
2018KNS009		26.2	1.28	3.80	0.08	0.02	0.13	0.019	0.05	24.6	8.8	0.24	1340	0.58	<0.01	0.67
2018KNS010		20.6	0.68	1.80	<0.05	<0.02	0.10	0.049	0.02	4.0	1.8	0.05	97	0.36	<0.01	0.39
2018KNS011		13.6	0.68	2.88	<0.05	<0.02	0.07	0.044	0.03	6.2	1.2	0.03	55	0.33	<0.01	0.27
2018KNS012		42.5	0.78	2.74	<0.05	<0.02	0.24	0.114	0.05	5.1	2.5	0.06	62	0.57	<0.01	0.38
2018KNS014		30.3	1.21	3.36	<0.05	<0.02	0.28	0.075	0.07	4.2	3.5	0.13	141	0.66	<0.01	0.61
2018KNS015		44.2	0.41	1.19	0.05	<0.02	0.34	0.100	0.06	3.5	0.6	0.04	36	0.71	<0.01	0.21
2018KNS016		32.3	0.41	1.53	0.09	<0.02	0.28	0.095	0.06	3.0	0.8	0.05	36	0.67	0.01	0.26
2018KNS017		26.9	0.35	1.10	0.09	<0.02	0.12	0.066	0.03	6.4	0.3	0.02	27	0.30	0.01	0.15
2018KNS018		35.3	0.39	1.89	0.10	<0.02	0.36	0.101	0.05	8.7	0.9	0.04	135	0.56	0.01	0.21
2018KNS019		28.6	0.35	1.05	0.10	<0.02	0.28	0.073	0.11	2.9	0.8	0.06	365	0.54	0.01	0.20
2018KNS020		26.9	0.32	0.96	0.11	<0.02	0.30	0.073	0.11	2.6	0.7	0.06	439	0.55	0.01	0.17
2018KNS021		18.2	0.93	2.99	0.12	<0.02	0.11	0.018	0.03	18.0	8.6	0.21	207	0.29	0.01	0.59
2018KNS022		50.9	0.78	1.67	0.09	<0.02	0.31	0.141	0.12	3.6	1.3	0.09	1280	1.03	0.01	0.20
2018KNS023		25.4	0.56	1.88	0.08	<0.02	0.25	0.058	0.10	3.0	2.2	0.10	6490	0.54	0.01	0.27
2018KNS024		7.5	1.18	3.98	0.08	<0.02	0.07	0.018	0.03	5.8	4.9	0.09	438	0.39	0.01	0.72
2018KNS025		22.5	0.41	1.77	0.09	<0.02	0.11	0.058	0.05	7.4	1.2	0.04	147	0.31	0.01	0.27
2018KNS026		8.5	1.66	6.31	0.09	0.02	0.08	0.027	0.03	8.0	8.9	0.18	287	0.35	0.01	1.58
2018KNS027		32.0	0.36	1.15	0.11	<0.02	0.32	0.090	0.06	2.5	0.6	0.04	95	0.52	0.01	0.16
2018KNS028		51.5	0.66	2.01	0.11	<0.02	0.44	0.176	0.10	5.0	0.6	0.04	649	0.86	0.01	0.20
2018KNS029		52.0	0.62	1.89	0.10	<0.02	0.46	0.144	0.08	4.1	2.0	0.07	1120	0.81	0.01	0.25
2018KNS030		51.9	0.58	1.78	0.11	<0.02	0.39	0.134	0.06	3.9	1.2	0.05	196	0.73	0.01	0.24
2018KNS031		13.2	0.75	3.32	0.07	<0.02	0.11	0.045	0.03	6.1	2.6	0.06	95	0.57	0.01	0.67
2018KNS032		23.3	0.40	1.51	0.09	<0.02	0.21	0.067	0.03	3.9	0.7	0.04	94	0.57	0.01	0.28
2018KNS034		79.5	0.87	2.43	0.11	<0.02	0.47	0.150	0.07	4.4	1.7	0.07	211	0.83	0.01	0.48
2018KNS035		11.5	1.29	3.93	0.08	<0.02	0.10	0.025	0.02	4.9	6.2	0.13	112	0.50	0.01	1.17
2018KNS036		7.7	1.01	3.09	0.08	<0.02	0.06	0.016	0.02	6.2	4.8	0.11	208	0.21	0.01	0.72
2018KNS037		55.4	0.65	2.25	0.10	<0.02	0.28	0.131	0.06	8.8	1.6	0.06	64	0.56	0.01	0.32
2018KNS038		13.7	1.67	4.71	0.09	<0.02	0.09	0.027	0.05	7.3	8.1	0.15	554	0.57	0.01	0.82
2018KNS039		5.5	1.10	4.61	0.07	<0.02	0.05	0.016	0.03	4.2	5.7	0.09	182	0.26	0.01	0.97
2018KNS040		5.0	1.07	4.57	0.07	<0.02	0.05	0.014	0.03	4.2	5.7	0.08	165	0.26	0.01	1.01
2018KNS041		50.7	0.71	2.05	0.11	<0.02	0.55	0.259	0.09	4.8	1.2	0.06	213	0.92	0.01	0.23
2018KNS042		46.9	0.47	1.30	0.12	<0.02	0.61	0.128	0.10	6.1	0.8	0.05	148	1.03	0.02	0.19

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
2018KNS001		14.4	630	10.7	6.4	0.001	0.08	0.17	0.7	0.8	0.5	29.4	<0.01	0.03	0.5	0.040
2018KNS002		11.0	660	14.9	6.7	<0.001	0.03	0.20	0.9	0.6	0.7	13.6	<0.01	0.03	0.8	0.063
2018KNS003		6.4	280	15.4	4.4	<0.001	0.02	0.21	0.6	0.5	0.7	8.4	<0.01	0.01	0.4	0.037
2018KNS004		9.4	320	14.6	4.4	<0.001	0.02	0.24	0.7	0.4	0.6	6.8	<0.01	0.03	0.7	0.048
2018KNS005		14.4	310	11.5	6.5	<0.001	0.02	0.19	1.2	0.5	0.6	10.1	<0.01	0.03	0.8	0.053
2018KNS006		9.1	170	24.3	3.1	<0.001	0.03	0.27	0.4	0.4	0.8	11.2	<0.01	0.02	0.5	0.025
2018KNS007		13.9	260	32.9	1.5	0.001	0.05	0.58	0.4	1.1	1.0	10.1	<0.01	0.02	0.8	0.025
2018KNS008		16.4	370	34.8	4.1	0.001	0.05	0.46	0.8	1.1	0.9	18.3	<0.01	0.04	0.2	0.023
2018KNS009		23.9	400	7.7	5.2	0.001	0.03	0.13	2.3	0.6	0.4	13.3	<0.01	0.03	0.5	0.039
2018KNS010		14.4	290	43.7	2.6	<0.001	0.04	0.45	0.6	0.8	1.4	13.2	<0.01	0.04	0.4	0.027
2018KNS011		9.1	310	40.5	2.1	<0.001	0.02	0.45	0.4	0.8	1.2	17.6	<0.01	0.03	<0.2	0.028
2018KNS012		30.6	550	91.6	5.0	0.001	0.06	0.95	0.5	1.7	2.3	20.5	<0.01	0.05	<0.2	0.026
2018KNS014		26.3	720	71.6	5.4	0.001	0.08	1.08	0.9	1.6	1.9	25.1	<0.01	0.06	0.2	0.041
2018KNS015		33.9	780	90.4	3.1	0.004	0.14	1.19	0.6	2.5	2.8	29.6	<0.01	0.05	0.2	0.010
2018KNS016		34.8	650	57.8	4.1	0.001	0.11	0.93	0.4	2.1	2.0	20.1	<0.01	0.04	0.2	0.014
2018KNS017		19.3	290	59.8	1.9	<0.001	0.04	0.49	0.3	1.4	1.4	29.1	<0.01	0.03	<0.2	0.011
2018KNS018		24.5	590	112.5	3.8	0.001	0.07	0.95	0.3	1.9	2.3	45.3	<0.01	0.05	<0.2	0.013
2018KNS019		32.2	860	51.5	4.4	0.001	0.16	0.94	0.3	2.2	2.3	38.3	<0.01	0.05	0.2	0.011
2018KNS020		32.3	930	50.2	4.5	<0.001	0.17	1.07	0.3	2.2	2.3	40.2	<0.01	0.05	<0.2	0.009
2018KNS021		26.5	350	10.5	3.8	0.002	0.04	0.15	1.3	0.6	0.4	11.8	<0.01	0.02	0.3	0.034
2018KNS022		57.4	1350	132.5	11.0	0.001	0.16	1.18	0.5	2.3	3.3	21.9	<0.01	0.07	<0.2	0.012
2018KNS023		32.2	970	76.0	6.9	<0.001	0.12	0.64	0.4	1.6	2.1	28.0	<0.01	0.06	<0.2	0.016
2018KNS024		8.9	370	14.2	5.8	<0.001	0.02	0.24	0.8	0.5	0.6	10.3	<0.01	0.02	0.8	0.051
2018KNS025		20.4	430	58.5	2.7	0.001	0.05	0.42	0.3	1.2	1.5	20.3	<0.01	0.02	<0.2	0.017
2018KNS026		15.8	340	14.3	8.0	<0.001	0.02	0.27	1.4	0.6	0.8	9.8	<0.01	0.04	1.6	0.083
2018KNS027		26.2	830	81.4	2.8	0.001	0.11	1.02	0.3	2.5	2.4	22.9	<0.01	0.04	<0.2	0.009
2018KNS028		27.9	1110	104.0	3.3	0.003	0.11	1.45	0.1	2.1	3.3	13.6	<0.01	0.08	<0.2	0.006
2018KNS029		39.9	770	145.5	5.8	0.002	0.09	1.78	0.5	2.9	3.2	22.1	<0.01	0.07	0.2	0.015
2018KNS030		34.6	580	122.5	4.4	0.003	0.07	1.28	0.4	2.2	2.7	22.4	<0.01	0.08	<0.2	0.014
2018KNS031		12.6	250	42.7	3.2	<0.001	0.03	0.62	0.7	0.9	1.3	10.5	<0.01	0.05	0.7	0.035
2018KNS032		20.8	370	69.6	2.9	0.001	0.05	0.75	0.5	1.4	1.7	22.7	<0.01	0.05	0.4	0.017
2018KNS034		50.9	670	135.0	5.9	0.003	0.13	1.56	0.7	2.9	3.0	43.3	<0.01	0.08	0.2	0.029
2018KNS035		13.3	270	15.4	2.9	<0.001	0.05	0.39	0.9	0.9	0.7	13.0	<0.01	0.04	0.8	0.067
2018KNS036		10.8	270	11.4	4.0	<0.001	0.02	0.19	0.8	0.4	0.5	10.1	<0.01	0.02	0.7	0.044
2018KNS037		29.6	570	123.0	3.5	0.002	0.07	0.79	0.3	2.2	2.7	32.1	<0.01	0.05	<0.2	0.017
2018KNS038		15.1	450	17.3	8.5	<0.001	0.04	0.29	1.2	0.5	0.7	14.9	<0.01	0.04	0.6	0.056
2018KNS039		8.2	210	9.8	5.2	<0.001	0.02	0.15	0.7	0.4	0.5	11.2	<0.01	0.02	0.6	0.057
2018KNS040		8.1	190	9.1	5.1	<0.001	0.02	0.15	0.7	0.3	0.5	11.0	<0.01	0.01	1.3	0.057
2018KNS041		62.7	630	188.0	4.1	0.004	0.08	2.10	0.3	3.9	3.9	19.3	<0.01	0.12	<0.2	0.012
2018KNS042		49.5	1190	96.1	4.1	0.002	0.20	1.96	0.4	2.9	2.9	26.8	<0.01	0.08	<0.2	0.006

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
2018KNS001		0.04	0.16	24	0.08	0.99	39	0.5
2018KNS002		0.04	0.28	35	0.07	1.24	42	0.5
2018KNS003		0.04	0.19	16	0.05	0.88	13	<0.5
2018KNS004		0.04	0.18	27	0.07	0.95	23	<0.5
2018KNS005		0.05	0.29	27	0.07	1.87	36	<0.5
2018KNS006		0.03	0.13	19	0.05	0.61	30	<0.5
2018KNS007		0.03	0.18	14	0.08	0.79	16	<0.5
2018KNS008		0.05	0.31	23	0.09	1.68	46	<0.5
2018KNS009		0.09	0.97	30	0.08	9.04	20	<0.5
2018KNS010		0.04	0.15	19	0.11	0.86	28	<0.5
2018KNS011		0.05	0.15	21	0.09	1.31	15	<0.5
2018KNS012		0.06	0.21	18	0.13	1.10	74	<0.5
2018KNS014		0.06	0.22	35	0.17	1.13	60	<0.5
2018KNS015		0.03	0.19	8	0.15	1.01	57	<0.5
2018KNS016		0.03	0.15	9	0.13	0.76	35	<0.5
2018KNS017		0.02	0.15	7	0.08	1.39	18	<0.5
2018KNS018		0.04	0.21	8	0.10	1.62	37	<0.5
2018KNS019		0.06	0.14	7	0.14	0.60	67	<0.5
2018KNS020		0.06	0.13	6	0.14	0.55	73	<0.5
2018KNS021		0.06	0.59	20	0.07	6.02	19	<0.5
2018KNS022		0.12	0.21	21	0.25	1.20	82	<0.5
2018KNS023		0.14	0.16	12	0.13	0.71	140	<0.5
2018KNS024		0.04	0.25	32	0.08	1.09	30	<0.5
2018KNS025		0.03	0.16	9	0.08	0.97	24	<0.5
2018KNS026		0.06	0.30	39	0.09	1.57	23	0.8
2018KNS027		0.05	0.15	7	0.12	0.64	93	<0.5
2018KNS028		0.09	0.32	9	0.12	1.81	87	<0.5
2018KNS029		0.07	0.26	13	0.20	1.09	56	<0.5
2018KNS030		0.04	0.26	11	0.16	1.20	44	<0.5
2018KNS031		0.06	0.25	25	0.12	0.98	14	<0.5
2018KNS032		0.03	0.18	11	0.11	0.86	30	<0.5
2018KNS034		0.05	0.26	24	0.19	1.40	91	<0.5
2018KNS035		0.05	0.29	35	0.11	1.10	19	0.6
2018KNS036		0.04	0.23	26	0.06	1.28	22	<0.5
2018KNS037		0.03	0.29	14	0.12	1.79	79	<0.5
2018KNS038		0.05	0.28	42	0.08	1.37	55	<0.5
2018KNS039		0.04	0.18	29	0.06	0.91	30	<0.5
2018KNS040		0.04	0.21	28	0.06	0.97	28	<0.5
2018KNS041		0.05	0.30	13	0.22	1.67	97	<0.5
2018KNS042		0.06	0.26	7	0.19	1.13	119	<0.5

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05
2018KNS043		0.07	2.66	0.34	22.8	<0.02	<10	80	0.21	1.47	0.53	1.45	9.18	4.4	6	0.29
2018KNS044		0.10	3.42	0.26	22.3	<0.02	<10	100	0.16	1.83	0.66	1.74	7.68	4.6	6	0.31
2018KNS045		0.09	1.80	0.21	21.3	<0.02	<10	40	0.06	1.46	0.23	0.45	10.75	3.2	6	0.29
2018KNS046		0.08	3.26	0.22	30.8	<0.02	<10	210	0.12	2.96	0.83	2.46	6.60	7.8	4	0.27
2018KNS047		0.05	1.22	0.22	17.7	<0.02	<10	130	0.17	1.00	0.47	0.75	8.51	4.5	5	0.24
2018KNS048		0.08	1.48	0.26	22.1	<0.02	<10	130	0.13	1.57	0.26	1.34	7.73	3.9	7	0.23
2018KNS049		0.08	2.23	0.20	24.7	<0.02	<10	80	0.12	1.35	0.47	0.95	6.32	3.4	6	0.21
2018KNS050		0.08	2.27	0.17	18.3	<0.02	<10	130	0.11	1.70	0.50	0.98	4.58	4.0	4	0.24
2018KNS051		0.10	1.48	0.23	29.4	<0.02	<10	130	0.15	1.62	0.39	1.43	8.53	8.6	7	0.25
2018KNS052		0.07	1.85	0.24	12.5	<0.02	<10	210	0.12	1.28	0.59	0.93	7.79	3.5	9	0.28
2018KNS054		0.07	2.78	0.27	18.1	<0.02	<10	150	0.15	1.63	0.41	1.54	6.99	13.9	6	0.49
2018KNS055		0.12	1.93	0.26	13.4	<0.02	<10	130	0.15	1.38	0.71	1.80	7.83	9.2	7	0.35
2018KNS056		0.10	3.01	0.25	24.0	<0.02	<10	50	0.13	1.45	0.53	0.44	9.05	5.3	8	0.46
2018KTS001		0.24	0.27	1.18	7.5	<0.02	<10	40	0.52	0.25	0.81	1.30	44.0	3.0	19	0.26
2018KTS002		0.26	2.37	0.39	14.8	<0.02	<10	90	0.35	1.71	0.56	1.70	25.9	8.2	8	0.55
2018KTS003		0.28	0.83	0.33	16.1	<0.02	<10	20	0.11	0.69	0.13	0.74	16.55	2.6	6	0.27
2018KTS004		0.16	0.19	1.13	7.3	<0.02	<10	40	0.51	0.17	0.88	0.76	53.6	4.2	25	0.56
2018KTS005		0.22	0.70	0.33	23.3	<0.02	<10	60	0.12	1.13	0.22	1.62	8.73	4.5	9	0.28
2018KTS006		0.18	1.11	0.18	15.8	<0.02	<10	50	0.09	1.01	0.27	1.23	6.83	3.2	4	0.29
2018KTS007		0.30	0.47	0.35	10.7	<0.02	<10	30	0.08	0.23	0.23	0.18	5.71	2.2	8	0.20
2018KTS008		0.29	0.80	1.54	13.1	<0.02	<10	70	0.40	0.71	0.31	0.69	22.4	11.7	29	0.81
2018KTS009		0.20	0.32	0.84	290	<0.02	<10	40	0.33	0.33	0.32	0.27	23.9	98.2	22	0.56
2018KTS010		0.27	0.50	0.90	9.9	<0.02	<10	40	0.22	0.28	0.24	0.24	21.8	6.4	26	0.82
2018KTS011		0.27	0.66	0.91	12.0	<0.02	<10	40	0.38	0.48	0.92	1.30	38.2	5.5	24	0.49
2018KTS012		0.33	0.89	0.35	29.5	<0.02	10	350	0.19	0.50	2.55	1.69	6.91	8.3	13	0.24
2018KTS014		0.28	0.76	0.15	45.0	<0.02	<10	50	0.08	1.55	0.98	1.29	3.56	3.6	4	0.17
2018KTS015		0.23	0.71	0.16	22.6	<0.02	<10	50	0.08	1.06	0.54	1.20	3.19	3.6	2	0.10
2018KTS016		0.21	1.11	0.23	33.3	<0.02	<10	80	0.07	1.66	0.15	1.73	3.72	4.8	4	0.24
2018KTS017		0.31	0.68	0.67	91.2	<0.02	<10	50	0.56	0.61	1.40	1.24	63.9	14.5	21	0.31
2018KTS018		0.28	1.19	0.22	30.1	<0.02	<10	40	0.10	0.73	3.06	0.78	5.71	11.1	8	0.14
2018KTS019		0.23	1.75	0.75	19.8	<0.02	<10	70	0.16	1.82	0.14	2.16	9.17	3.8	38	0.67
2018KTS020		0.31	1.63	0.73	18.8	<0.02	<10	70	0.18	1.85	0.14	2.10	9.39	4.0	38	0.64
2018KTS021		0.16	2.21	0.39	21.7	<0.02	<10	80	0.23	1.59	0.35	1.61	10.90	4.9	14	0.43
2018KTS022		0.12	2.18	0.29	15.4	<0.02	<10	130	0.13	1.48	0.53	0.98	7.00	4.6	10	0.31
2018KTS023		0.13	1.02	0.27	12.0	<0.02	<10	70	0.12	0.77	0.27	0.74	9.20	2.4	7	0.19
2018KTS024		0.09	1.42	0.21	7.0	<0.02	<10	80	0.09	0.52	0.78	1.13	3.86	4.3	6	0.20
2018KTS025		0.15	3.26	0.27	21.3	<0.02	<10	200	0.12	1.34	1.16	2.91	4.53	5.9	6	0.37
2018KTS026		0.14	3.06	0.39	34.7	<0.02	<10	120	0.13	1.62	0.35	0.95	7.19	6.0	7	0.31
2018KTS027		0.11	5.48	0.29	24.7	<0.02	<10	60	0.11	1.16	0.72	1.73	4.20	8.5	10	0.36
2018KTS028		0.09	2.50	0.17	24.9	<0.02	<10	60	0.07	1.25	0.57	1.32	3.58	4.0	7	0.30

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05
2018KNS043		45.8	0.51	1.53	0.10	<0.02	0.47	0.091	0.06	8.0	0.8	0.05	94	0.75	0.02	0.19
2018KNS044		55.2	0.40	1.10	0.11	<0.02	0.57	0.123	0.07	4.3	0.8	0.07	216	0.72	0.01	0.15
2018KNS045		28.5	0.40	1.51	0.11	<0.02	0.42	0.088	0.04	6.1	0.6	0.03	59	0.67	0.01	0.22
2018KNS046		80.7	0.44	1.28	0.13	<0.02	0.83	0.186	0.11	4.5	0.7	0.06	492	0.87	0.02	0.15
2018KNS047		30.2	0.34	1.55	0.09	<0.02	0.25	0.063	0.07	7.4	0.6	0.05	136	0.57	0.01	0.24
2018KNS048		35.1	0.45	1.94	0.10	<0.02	0.28	0.090	0.05	4.9	1.1	0.04	136	0.65	0.01	0.30
2018KNS049		33.9	0.43	1.53	0.10	<0.02	0.32	0.090	0.06	5.0	0.8	0.04	211	0.62	0.01	0.24
2018KNS050		48.7	0.35	1.03	0.11	<0.02	0.36	0.112	0.06	3.9	0.5	0.06	82	0.67	0.01	0.14
2018KNS051		53.5	0.49	1.60	0.10	<0.02	0.25	0.106	0.07	6.5	0.7	0.05	110	0.52	0.01	0.21
2018KNS052		34.0	0.37	1.46	0.09	<0.02	0.29	0.082	0.08	4.8	1.0	0.11	194	0.40	0.01	0.19
2018KNS054		34.3	0.55	2.00	<0.05	<0.02	0.32	0.096	0.09	4.2	1.3	0.07	2860	0.89	0.01	0.21
2018KNS055		29.7	0.45	1.87	<0.05	<0.02	0.34	0.078	0.05	3.9	1.4	0.08	1100	0.56	0.01	0.31
2018KNS056		36.5	0.56	2.02	<0.05	0.02	0.42	0.094	0.05	5.1	1.4	0.06	299	0.75	0.01	0.37
2018KTS001		27.4	1.82	1.84	0.06	0.02	0.21	0.039	0.02	25.3	2.0	0.09	35	0.49	0.02	0.49
2018KTS002		64.9	0.58	2.45	0.07	<0.02	0.50	0.153	0.06	18.6	1.9	0.07	187	0.63	0.01	0.20
2018KTS003		27.6	0.66	1.39	0.06	<0.02	0.30	0.042	0.03	12.7	0.9	0.03	13	0.62	0.02	0.28
2018KTS004		21.7	1.22	3.25	0.07	0.03	0.20	0.023	0.02	28.3	7.6	0.24	80	0.69	0.02	0.68
2018KTS005		54.7	0.55	1.77	<0.05	0.02	0.35	0.119	0.03	4.6	1.8	0.07	40	0.73	0.02	0.27
2018KTS006		33.0	0.27	1.04	<0.05	<0.02	0.49	0.085	0.04	4.0	0.5	0.03	56	0.54	0.01	0.14
2018KTS007		10.9	0.54	1.64	<0.05	<0.02	0.15	0.021	0.03	2.6	1.5	0.05	63	0.28	0.01	0.34
2018KTS008		41.4	0.96	5.00	0.06	0.02	0.24	0.042	0.07	19.1	11.3	0.22	79	0.65	0.02	0.91
2018KTS009		32.1	1.12	3.27	0.05	0.02	0.08	0.025	0.03	17.0	9.8	0.26	376	0.80	0.01	0.66
2018KTS010		17.0	1.38	4.95	<0.05	0.02	0.11	0.027	0.04	9.9	10.4	0.25	172	0.42	0.01	1.21
2018KTS011		41.2	1.02	2.56	0.07	0.02	0.21	0.039	0.03	24.2	6.7	0.23	97	0.44	0.02	0.55
2018KTS012		36.4	3.36	0.90	0.05	0.08	0.56	0.045	0.02	4.5	1.3	0.19	7600	3.81	0.02	0.21
2018KTS014		50.0	0.30	0.94	0.06	0.02	0.54	0.091	0.03	1.6	0.5	0.08	47	1.09	0.01	0.15
2018KTS015		30.2	0.21	0.82	0.05	<0.02	0.52	0.064	0.03	1.6	0.3	0.03	21	0.92	0.01	0.11
2018KTS016		42.3	0.31	1.16	0.05	<0.02	0.61	0.104	0.06	1.8	0.6	0.06	25	0.75	0.02	0.20
2018KTS017		133.5	2.53	2.33	0.17	0.03	0.39	0.038	0.02	66.3	1.4	0.13	386	1.35	0.02	0.40
2018KTS018		19.0	0.74	0.87	<0.05	0.04	0.42	0.054	0.02	2.6	0.5	0.23	507	0.69	0.02	0.16
2018KTS019		64.1	0.90	3.40	<0.05	<0.02	0.36	0.174	0.05	4.4	0.8	0.06	95	0.88	0.02	0.20
2018KTS020		64.9	0.89	3.25	<0.05	<0.02	0.30	0.174	0.05	4.4	0.8	0.06	95	0.80	0.02	0.19
2018KTS021		51.6	0.66	1.76	0.05	<0.02	0.58	0.167	0.06	4.7	1.2	0.08	32	0.95	0.01	0.37
2018KTS022		41.8	0.55	1.93	<0.05	<0.02	0.41	0.118	0.07	3.6	1.7	0.06	274	0.69	0.01	0.36
2018KTS023		26.2	0.44	2.15	<0.05	<0.02	0.22	0.064	0.04	5.1	1.1	0.04	48	0.51	0.01	0.29
2018KTS024		26.1	0.39	1.04	<0.05	0.02	0.23	0.043	0.09	2.9	1.4	0.08	112	0.46	0.01	0.30
2018KTS025		74.9	0.58	1.49	0.06	<0.02	0.52	0.215	0.08	3.5	1.1	0.07	880	0.76	0.02	0.24
2018KTS026		95.3	0.95	2.65	<0.05	<0.02	0.47	0.216	0.05	4.9	1.5	0.05	153	1.31	0.01	0.33
2018KTS027		114.0	0.72	1.97	0.07	<0.02	0.66	0.193	0.07	2.9	2.0	0.09	189	0.93	0.01	0.42
2018KTS028		240	0.66	1.03	0.07	<0.02	0.53	0.296	0.06	2.0	0.7	0.05	73	1.19	0.02	0.20

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

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOD	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
2018KNS043		32.6	710	93.6	4.2	0.004	0.12	1.19	0.4	2.6	2.0	24.5	<0.01	0.06	<0.2	0.011
2018KNS044		37.7	870	124.5	3.4	0.002	0.13	1.61	0.6	3.4	2.5	19.8	<0.01	0.08	0.3	0.007
2018KNS045		35.9	530	71.8	2.8	0.001	0.07	1.40	0.5	2.0	2.3	14.1	<0.01	0.02	0.4	0.012
2018KNS046		55.8	1080	172.0	4.8	0.002	0.15	3.13	0.6	3.9	3.3	41.8	<0.01	0.08	0.2	0.008
2018KNS047		26.2	570	69.6	3.2	0.002	0.09	0.98	0.5	1.9	1.5	36.8	<0.01	0.03	0.2	0.013
2018KNS048		23.1	600	104.0	3.3	0.002	0.09	1.27	0.3	2.1	2.2	26.6	<0.01	0.05	<0.2	0.015
2018KNS049		29.1	690	85.9	3.2	0.002	0.11	1.25	0.4	2.0	2.4	33.5	<0.01	0.06	0.2	0.012
2018KNS050		38.6	680	109.0	2.6	0.004	0.12	1.41	0.5	2.8	2.7	36.8	<0.01	0.06	0.3	0.008
2018KNS051		40.8	470	107.5	3.2	0.002	0.09	0.82	0.5	1.9	2.1	25.5	<0.01	0.06	0.3	0.013
2018KNS052		32.0	580	77.5	4.7	0.002	0.08	1.02	0.6	2.0	1.7	30.2	<0.01	0.06	0.2	0.014
2018KNS054		32.1	1090	118.0	6.4	0.001	0.11	1.17	0.2	1.5	2.7	25.4	<0.01	0.08	<0.2	0.009
2018KNS055		19.1	580	104.5	3.7	0.001	0.07	1.01	0.4	2.3	1.8	31.6	<0.01	0.07	0.2	0.016
2018KNS056		31.8	610	83.8	3.7	0.001	0.10	1.63	0.6	2.2	2.6	28.8	<0.01	0.06	0.3	0.018
2018KTS001		12.3	590	18.1	1.8	0.006	0.38	0.28	1.8	1.0	0.5	26.1	0.01	0.04	0.3	0.017
2018KTS002		23.3	880	163.5	4.5	0.001	0.08	1.20	0.3	2.2	3.0	40.2	<0.01	0.05	<0.2	0.009
2018KTS003		13.3	480	29.5	2.1	0.001	0.15	0.75	0.6	1.2	1.4	13.8	<0.01	0.05	<0.2	0.011
2018KTS004		17.6	370	16.7	3.0	0.005	0.45	0.60	1.9	0.8	0.4	37.2	<0.01	0.04	0.3	0.027
2018KTS005		28.6	440	80.8	2.4	0.002	0.12	1.39	0.7	1.6	1.7	24.0	<0.01	0.09	0.4	0.017
2018KTS006		16.6	550	73.2	1.8	0.004	0.09	1.25	0.3	1.4	1.7	21.0	<0.01	0.06	0.2	0.008
2018KTS007		8.8	500	13.4	1.9	0.003	0.06	0.34	0.2	0.6	0.4	19.5	<0.01	0.03	<0.2	0.018
2018KTS008		31.5	930	25.5	5.7	0.001	0.21	0.51	1.2	1.2	1.0	20.5	<0.01	0.04	<0.2	0.036
2018KTS009		46.9	450	15.3	4.7	0.001	0.03	0.62	1.4	0.5	0.5	17.4	<0.01	0.03	0.3	0.034
2018KTS010		17.9	350	14.3	7.8	<0.001	0.03	0.31	1.4	0.4	0.7	16.2	<0.01	0.04	1.2	0.064
2018KTS011		21.0	710	39.1	2.3	0.007	0.29	0.42	1.1	2.4	1.0	23.5	<0.01	0.06	<0.2	0.023
2018KTS012		20.3	1660	35.2	1.6	0.010	0.38	0.69	0.9	3.7	0.8	40.9	<0.01	0.20	0.4	0.006
2018KTS014		37.3	620	74.9	1.3	0.002	0.21	2.28	0.4	2.7	2.1	24.4	<0.01	0.07	0.2	0.005
2018KTS015		22.8	560	60.0	1.2	0.005	0.16	1.61	0.3	1.7	1.5	20.9	<0.01	0.06	<0.2	<0.005
2018KTS016		38.7	610	76.6	3.2	0.004	0.18	1.92	0.4	2.7	2.0	40.0	<0.01	0.12	0.2	0.009
2018KTS017		18.5	1290	39.1	1.5	0.019	0.45	0.67	1.6	2.6	0.8	46.0	<0.01	0.31	<0.2	0.011
2018KTS018		15.4	910	51.8	0.9	0.011	0.31	0.98	0.5	2.5	1.1	54.4	<0.01	0.14	0.2	0.005
2018KTS019		37.0	950	120.5	4.3	0.001	0.10	1.03	0.2	1.9	3.3	7.1	<0.01	0.05	<0.2	0.008
2018KTS020		38.0	940	123.0	4.3	0.001	0.10	1.05	0.2	2.2	3.3	6.8	<0.01	0.07	<0.2	0.009
2018KTS021		28.0	890	124.5	3.3	0.002	0.13	1.33	0.5	2.6	2.2	25.6	<0.01	0.11	<0.2	0.015
2018KTS022		31.0	870	118.0	2.7	0.001	0.11	1.14	0.3	1.7	19.5	21.7	<0.01	0.05	<0.2	0.016
2018KTS023		16.4	470	49.7	1.8	0.001	0.06	0.69	0.4	1.1	1.4	20.2	<0.01	0.04	<0.2	0.016
2018KTS024		22.8	970	22.9	2.4	0.002	0.16	0.46	0.4	2.1	1.2	47.9	<0.01	0.03	0.2	0.013
2018KTS025		28.2	1200	94.7	3.8	0.001	0.19	1.59	0.3	2.6	2.6	48.6	<0.01	0.05	<0.2	0.011
2018KTS026		34.0	800	95.5	3.2	0.003	0.10	1.34	0.5	1.8	3.3	19.8	<0.01	0.08	<0.2	0.010
2018KTS027		39.3	1040	70.0	3.2	0.003	0.16	1.33	0.5	3.3	2.6	32.8	<0.01	0.08	<0.2	0.022
2018KTS028		42.1	630	75.4	3.1	0.002	0.16	1.53	0.4	2.8	2.6	24.9	<0.01	0.09	<0.2	0.009

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
2018KNS043		0.03	0.26	9	0.12	1.61	53	<0.5
2018KNS044		0.06	0.28	6	0.15	1.14	79	<0.5
2018KNS045		0.05	0.23	9	0.13	0.96	27	<0.5
2018KNS046		0.11	0.28	8	0.17	1.45	69	<0.5
2018KNS047		0.05	0.16	8	0.10	1.55	24	<0.5
2018KNS048		0.04	0.21	11	0.15	1.00	61	<0.5
2018KNS049		0.04	0.22	10	0.14	0.87	40	<0.5
2018KNS050		0.04	0.19	6	0.14	0.85	55	<0.5
2018KNS051		0.04	0.22	12	0.12	1.27	39	<0.5
2018KNS052		0.04	0.17	8	0.10	1.01	86	<0.5
2018KNS054		0.17	0.20	11	0.18	1.14	134	<0.5
2018KNS055		0.07	0.21	12	0.13	1.27	99	<0.5
2018KNS056		0.05	0.28	15	0.18	1.01	71	0.5
2018KTS001		0.03	1.00	39	0.10	7.85	71	0.9
2018KTS002		0.08	0.55	9	0.13	4.45	107	<0.5
2018KTS003		0.03	0.44	7	0.11	3.88	24	<0.5
2018KTS004		0.08	0.99	43	0.10	9.74	96	1.1
2018KTS005		0.04	0.29	11	0.13	1.51	71	0.7
2018KTS006		0.03	0.22	6	0.10	0.88	114	<0.5
2018KTS007		0.02	0.13	12	0.06	0.83	45	<0.5
2018KTS008		0.08	0.70	24	0.12	6.59	71	0.6
2018KTS009		0.05	0.41	21	0.09	4.66	44	0.5
2018KTS010		0.05	0.42	32	0.11	2.26	45	0.8
2018KTS011		0.08	3.31	27	0.08	9.69	70	0.7
2018KTS012		0.13	0.58	9	0.29	4.14	96	2.7
2018KTS014		0.06	0.17	4	0.15	1.00	108	0.7
2018KTS015		0.03	0.13	4	0.10	0.84	28	<0.5
2018KTS016		0.07	0.16	5	0.18	0.82	53	<0.5
2018KTS017		0.07	3.52	68	0.12	28.4	43	0.5
2018KTS018		0.06	0.70	12	0.09	1.99	12	1.0
2018KTS019		0.06	0.24	21	0.12	2.36	61	<0.5
2018KTS020		0.06	0.24	20	0.13	2.38	63	<0.5
2018KTS021		0.03	0.31	12	0.15	1.54	71	<0.5
2018KTS022		0.06	0.21	9	0.15	1.01	86	<0.5
2018KTS023		0.03	0.21	10	0.09	1.01	70	<0.5
2018KTS024		0.04	0.13	7	0.11	0.58	161	0.5
2018KTS025		0.11	0.19	9	0.15	0.80	328	<0.5
2018KTS026		0.06	0.26	12	0.18	1.25	153	<0.5
2018KTS027		0.05	0.17	15	0.46	0.75	242	<0.5
2018KTS028		0.06	0.17	9	0.17	0.62	295	<0.5

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

ALS Canada Ltd.

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

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05
2018KTS029		0.09	1.89	0.33	19.5	<0.02	<10	100	0.10	1.37	0.22	1.68	8.58	3.6	9	0.31
2018KTS030		0.18	2.62	0.30	16.0	<0.02	<10	80	0.25	1.66	0.17	1.08	9.10	5.3	6	0.29
2018KTS031		0.16	1.14	0.27	17.3	<0.02	<10	80	0.11	1.52	0.17	0.65	8.47	2.9	8	0.37
2018KTS032		0.17	1.89	0.37	31.9	<0.02	<10	60	0.18	1.21	0.32	0.81	9.27	5.7	8	0.21
2018KTS034		0.17	2.94	0.35	19.0	<0.02	<10	210	0.25	1.73	0.51	1.80	12.35	12.2	9	0.39
2018KTS035		0.35	0.27	1.15	6.2	<0.02	<10	40	0.23	0.21	0.17	0.20	13.90	5.0	25	0.67
2018KTS036		0.11	1.12	0.36	16.6	<0.02	10	90	0.21	1.03	0.36	1.75	9.34	5.5	10	0.39
2018KTS037		0.18	2.14	0.25	47.8	<0.02	10	70	0.10	2.03	0.56	0.68	4.05	4.6	7	0.34
2018KTS038		0.17	0.88	2.91	20.6	<0.02	<10	200	1.79	0.63	0.68	1.17	81.6	62.3	47	0.91
2018KTS039		0.18	0.16	1.02	6.8	<0.02	10	70	0.31	0.35	0.49	0.69	17.45	12.7	19	0.44
2018KTS040		0.16	0.59	0.69	8.6	<0.02	<10	90	0.22	0.40	0.30	0.54	10.60	4.4	21	0.39
2018KTS041		0.17	0.67	0.68	9.9	<0.02	<10	80	0.19	0.44	0.28	0.55	10.40	4.4	20	0.38
2018KTS042		0.21	0.24	0.62	5.3	<0.02	<10	70	0.15	0.19	0.33	0.30	13.75	4.1	22	0.36
2018KTS043		0.33	0.33	0.71	9.8	<0.02	<10	90	0.18	0.37	0.32	0.32	14.70	5.5	22	0.50
2018KTS044		0.29	0.22	0.27	6.0	<0.02	<10	20	0.06	0.22	0.12	0.08	11.00	2.3	14	0.20
2018KTS045		0.26	0.39	1.27	14.6	<0.02	<10	60	0.32	0.32	0.23	0.26	14.40	8.2	30	0.81
2018KTS046		0.27	0.16	1.57	4.0	<0.02	<10	70	0.43	0.17	0.33	0.15	48.0	6.2	49	1.00
2018KTS047		0.41	0.22	1.04	6.1	<0.02	<10	50	0.28	0.18	0.21	0.30	24.5	5.5	35	0.56
2018KTS048		0.16	0.36	0.39	15.1	<0.02	<10	30	0.10	0.98	0.08	0.97	9.28	2.0	15	0.53
2018KTS049		0.18	0.53	0.28	7.8	<0.02	<10	100	0.08	0.51	0.35	0.89	7.07	2.8	8	0.29
2018KTS050		0.32	0.39	1.93	4.9	<0.02	10	90	0.38	0.23	0.74	0.79	16.50	7.9	47	0.80
2018KTS051		0.23	0.10	0.85	3.2	<0.02	<10	30	0.21	0.12	0.12	0.09	11.35	3.8	19	0.37
2018KTS052		0.19	0.40	0.94	11.7	<0.02	<10	70	0.20	0.33	0.33	0.30	11.85	6.0	22	0.72
2018KTS054		0.28	0.42	0.98	11.0	<0.02	<10	60	0.23	0.35	0.20	0.25	15.10	6.1	27	0.71
2018KTS055		0.25	0.82	0.87	12.1	<0.02	<10	90	0.21	0.50	0.42	0.58	11.05	9.7	24	0.60
2018KTS056		0.20	0.61	1.04	10.0	<0.02	<10	70	0.24	0.40	0.31	0.37	12.65	7.7	28	0.57
2018KTS057		0.33	0.94	0.66	18.7	<0.02	<10	140	0.22	0.82	0.33	1.03	13.40	12.9	25	0.68
2018KTS058		0.33	1.01	0.45	11.2	<0.02	<10	90	0.16	0.78	0.24	0.60	11.15	4.4	11	0.33
2018KTS059		0.10	1.41	0.30	17.0	<0.02	10	140	0.19	1.32	0.56	1.09	6.48	5.2	6	0.26
2018KTS060		0.08	1.28	0.30	16.2	<0.02	<10	130	0.17	1.18	0.55	1.00	6.37	4.7	7	0.23
2018KTS061		0.23	0.41	0.41	7.6	<0.02	<10	40	0.09	0.32	0.21	0.31	8.12	2.6	13	0.24
2018KTS062		0.27	0.56	0.28	7.0	<0.02	<10	20	0.05	0.39	0.11	0.17	7.68	2.0	7	0.17
2018KTS063		0.19	2.15	0.22	11.1	<0.02	<10	100	0.13	1.15	0.32	1.13	6.50	5.6	5	0.34
2018KTS064		0.23	1.37	0.25	26.4	<0.02	<10	240	0.08	1.49	0.40	0.84	7.74	4.1	7	0.30
2018KTS065		0.14	1.63	0.18	10.4	<0.02	10	140	0.08	1.04	1.10	2.02	4.35	7.0	4	0.20
2018KTS066		0.05	0.76	0.67	8.8	<0.02	<10	50	0.13	0.32	0.37	0.48	10.00	3.8	22	0.45
2018KTS067		0.29	0.26	0.70	6.3	<0.02	<10	30	0.10	0.25	0.37	0.41	13.15	3.9	21	0.60
2018KTS068		0.20	0.41	0.64	11.3	<0.02	<10	80	0.17	0.38	0.50	0.22	10.85	4.5	21	0.59
2018KTS069		0.18	0.57	0.80	11.3	<0.02	<10	60	0.32	0.49	0.72	1.02	14.40	13.1	14	0.56
2018KTS070		0.26	0.06	0.69	1.3	<0.02	<10	60	0.18	0.10	0.39	0.13	12.30	4.6	21	0.31

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05
2018KTS029		96.3	0.72	1.96	<0.05	<0.02	0.41	0.222	0.06	4.4	1.3	0.04	38	0.82	0.01	0.33
2018KTS030		94.7	0.58	2.15	<0.05	<0.02	0.38	0.227	0.06	4.9	0.8	0.03	61	0.84	0.01	0.25
2018KTS031		63.3	0.55	2.15	<0.05	<0.02	0.25	0.169	0.04	4.3	1.2	0.04	63	0.69	0.01	0.32
2018KTS032		45.1	0.60	1.61	0.06	<0.02	0.50	0.098	0.05	4.6	1.3	0.07	63	0.74	0.01	0.30
2018KTS034		58.9	0.62	1.76	0.05	<0.02	0.47	0.125	0.10	7.5	1.2	0.07	1020	0.78	0.01	0.22
2018KTS035		7.4	1.39	5.19	<0.05	<0.02	0.06	0.020	0.05	6.9	10.4	0.19	220	0.28	0.01	1.24
2018KTS036		45.3	0.63	2.35	<0.05	<0.02	0.25	0.073	0.06	5.5	1.8	0.09	60	0.57	<0.01	0.33
2018KTS037		45.3	0.54	1.24	0.07	<0.02	1.09	0.164	0.09	2.3	1.0	0.07	261	1.04	<0.01	0.20
2018KTS038		94.9	2.84	7.30	0.10	0.02	0.20	0.055	0.07	43.2	24.3	0.33	5210	1.12	<0.01	1.06
2018KTS039		45.4	1.60	2.77	<0.05	<0.02	0.12	0.031	0.07	5.7	13.3	0.69	882	0.70	<0.01	0.54
2018KTS040		14.0	1.15	3.54	<0.05	<0.02	0.11	0.027	0.06	4.9	5.5	0.14	385	0.29	<0.01	0.75
2018KTS041		13.4	1.13	3.52	<0.05	<0.02	0.12	0.029	0.06	5.0	5.3	0.13	347	0.32	<0.01	0.72
2018KTS042		7.5	1.31	3.12	<0.05	0.02	0.06	0.015	0.04	6.7	6.6	0.16	522	0.23	<0.01	0.91
2018KTS043		13.1	1.36	4.25	<0.05	<0.02	0.08	0.032	0.05	7.5	8.2	0.18	366	0.46	<0.01	0.87
2018KTS044		6.3	0.72	2.12	<0.05	0.02	0.05	0.014	0.02	5.2	2.9	0.11	51	0.18	<0.01	0.60
2018KTS045		14.4	1.95	5.54	<0.05	<0.02	0.10	0.031	0.05	6.9	13.5	0.22	301	0.51	<0.01	1.25
2018KTS046		33.3	1.15	5.32	0.06	0.03	0.09	0.021	0.06	27.9	14.6	0.36	115	0.53	<0.01	1.00
2018KTS047		19.3	0.99	3.54	<0.05	<0.02	0.13	0.018	0.03	14.0	11.5	0.32	184	0.25	<0.01	0.66
2018KTS048		56.9	0.71	2.04	0.06	<0.02	0.17	0.066	0.03	5.8	2.4	0.07	58	1.98	<0.01	0.34
2018KTS049		19.9	0.36	1.74	<0.05	<0.02	0.16	0.039	0.05	3.7	1.4	0.08	61	0.32	<0.01	0.29
2018KTS050		24.9	1.24	6.84	<0.05	0.03	0.07	0.025	0.16	9.4	15.9	0.37	166	0.39	<0.01	1.39
2018KTS051		4.4	1.08	3.71	<0.05	<0.02	0.04	0.012	0.03	5.4	7.8	0.14	122	0.19	<0.01	0.88
2018KTS052		11.2	1.47	4.68	<0.05	<0.02	0.11	0.024	0.05	6.5	9.8	0.16	338	0.50	<0.01	1.06
2018KTS054		12.5	1.70	5.27	<0.05	<0.02	0.10	0.027	0.04	8.2	8.8	0.15	193	0.52	<0.01	1.22
2018KTS055		17.1	1.50	4.98	<0.05	<0.02	0.12	0.032	0.08	6.2	8.1	0.18	562	0.53	<0.01	0.87
2018KTS056		12.8	1.71	5.49	<0.05	0.02	0.13	0.031	0.07	7.2	10.6	0.21	392	0.45	<0.01	1.14
2018KTS057		31.6	1.46	4.32	<0.05	<0.02	0.16	0.063	0.05	8.0	4.8	0.17	2060	0.74	<0.01	0.60
2018KTS058		23.9	0.62	2.95	<0.05	<0.02	0.19	0.056	0.08	7.1	2.2	0.08	277	0.45	<0.01	0.33
2018KTS059		40.9	0.53	1.72	<0.05	<0.02	0.34	0.104	0.09	4.4	1.0	0.09	112	0.71	<0.01	0.25
2018KTS060		37.5	0.50	1.76	<0.05	<0.02	0.33	0.093	0.08	4.3	0.9	0.09	90	0.67	<0.01	0.25
2018KTS061		9.0	0.84	3.17	<0.05	<0.02	0.08	0.024	0.04	4.7	2.8	0.08	127	0.29	<0.01	0.69
2018KTS062		9.3	0.47	2.21	<0.05	<0.02	0.08	0.025	0.03	4.3	1.6	0.04	153	0.27	<0.01	0.40
2018KTS063		42.3	0.45	1.32	<0.05	<0.02	0.29	0.092	0.07	4.7	0.7	0.04	587	0.63	<0.01	0.19
2018KTS064		68.5	0.51	1.32	0.05	<0.02	0.35	0.170	0.07	5.6	1.1	0.08	78	0.76	<0.01	0.32
2018KTS065		68.1	0.41	0.93	<0.05	<0.02	0.28	0.117	0.10	2.5	0.8	0.11	305	0.60	<0.01	0.16
2018KTS066		29.8	1.17	3.23	<0.05	<0.02	0.18	0.044	0.07	5.2	6.0	0.18	148	0.36	<0.01	0.89
2018KTS067		16.1	0.83	4.32	<0.05	0.03	0.09	0.036	0.03	6.9	10.9	0.23	73	0.20	<0.01	0.80
2018KTS068		15.7	1.44	4.27	<0.05	<0.02	0.14	0.032	0.05	6.3	6.0	0.16	215	0.52	<0.01	0.94
2018KTS069		46.0	1.36	3.67	<0.05	<0.02	0.13	0.036	0.06	7.1	13.6	0.42	495	0.42	<0.01	0.49
2018KTS070		7.2	0.95	2.21	<0.05	0.02	0.04	0.010	0.03	5.2	5.6	0.22	250	0.12	<0.01	0.76

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

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
2018KTS029		30.1	490	86.5	3.3	0.003	0.07	1.03	0.6	2.3	2.1	15.9	<0.01	0.09	0.2	0.018
2018KTS030		33.2	680	180.5	2.5	0.004	0.08	1.00	0.3	2.5	3.1	16.4	<0.01	0.08	<0.2	0.012
2018KTS031		27.0	490	107.0	2.5	0.003	0.06	0.94	0.4	1.7	2.5	14.7	<0.01	0.07	<0.2	0.018
2018KTS032		27.6	790	74.9	2.5	0.002	0.15	1.35	0.6	2.3	2.0	24.4	<0.01	0.07	0.2	0.014
2018KTS034		33.7	1150	133.5	4.2	0.001	0.13	1.49	0.3	2.2	2.5	41.6	<0.01	0.10	<0.2	0.010
2018KTS035		16.2	440	10.7	8.0	<0.001	0.02	0.18	1.3	0.4	0.6	15.6	<0.01	0.03	0.8	0.063
2018KTS036		31.4	670	61.7	3.5	0.003	0.08	0.95	0.4	1.5	1.8	33.5	<0.01	0.05	<0.2	0.018
2018KTS037		33.6	1100	87.3	3.9	0.003	0.16	2.94	0.5	3.3	3.8	18.1	<0.01	0.10	<0.2	0.009
2018KTS038		57.4	710	35.0	7.1	<0.001	0.07	0.55	3.6	1.7	1.0	33.0	<0.01	0.07	0.7	0.047
2018KTS039		24.9	780	24.8	6.3	<0.001	0.10	0.25	1.3	0.9	0.5	24.2	<0.01	0.04	0.3	0.029
2018KTS040		15.9	750	21.2	6.8	0.001	0.05	0.31	0.6	0.6	0.9	25.4	<0.01	0.03	0.2	0.042
2018KTS041		15.8	740	23.2	6.1	0.001	0.06	0.35	0.6	0.7	0.9	24.1	<0.01	0.02	0.2	0.041
2018KTS042		11.7	580	10.1	4.6	<0.001	0.03	0.16	0.8	0.2	0.5	21.2	<0.01	0.02	1.2	0.056
2018KTS043		15.2	480	21.0	9.0	<0.001	0.02	0.30	1.0	0.4	0.8	20.8	<0.01	0.03	1.0	0.061
2018KTS044		7.6	200	11.9	2.4	<0.001	0.01	0.20	0.7	0.3	0.5	8.6	<0.01	0.01	1.2	0.042
2018KTS045		20.6	660	17.7	6.6	<0.001	0.03	0.35	1.3	0.7	0.7	15.6	<0.01	0.05	0.7	0.061
2018KTS046		23.4	400	10.0	8.1	<0.001	0.05	0.14	3.0	0.8	0.5	13.4	<0.01	0.01	0.5	0.052
2018KTS047		18.5	620	23.3	4.4	<0.001	0.05	0.16	1.4	0.7	1.4	12.8	<0.01	0.01	0.2	0.040
2018KTS048		17.6	760	64.7	3.1	0.001	0.11	0.66	0.4	1.7	1.7	6.1	<0.01	0.02	<0.2	0.014
2018KTS049		16.9	400	30.9	3.6	0.001	0.07	0.50	0.4	0.7	1.1	31.7	<0.01	0.02	0.2	0.020
2018KTS050		29.3	520	15.4	18.9	<0.001	0.07	0.18	2.1	0.6	0.7	28.6	<0.01	0.02	0.9	0.054
2018KTS051		10.6	510	6.0	4.6	<0.001	0.02	0.10	0.8	0.3	0.4	9.5	0.01	<0.01	0.5	0.047
2018KTS052		14.7	510	16.5	7.5	<0.001	0.03	0.31	1.0	0.5	0.7	19.9	<0.01	0.03	1.0	0.057
2018KTS054		16.1	550	17.1	5.9	<0.001	0.03	0.32	1.1	0.6	0.8	14.2	<0.01	0.02	1.0	0.060
2018KTS055		18.7	820	23.9	11.7	0.001	0.05	0.40	0.9	0.9	1.0	24.7	<0.01	0.04	0.3	0.051
2018KTS056		17.4	740	20.8	8.8	<0.001	0.04	0.35	1.2	0.5	0.9	19.9	<0.01	0.04	0.7	0.063
2018KTS057		22.4	590	54.9	7.0	0.001	0.04	0.68	1.0	1.5	1.4	19.8	<0.01	0.07	0.2	0.047
2018KTS058		18.3	590	47.0	5.1	0.001	0.06	0.64	0.4	0.7	1.5	17.4	<0.01	0.02	<0.2	0.021
2018KTS059		33.5	890	92.0	3.6	0.002	0.13	1.40	0.5	2.4	2.3	31.7	<0.01	0.04	0.2	0.014
2018KTS060		31.5	810	83.0	3.3	0.002	0.12	1.29	0.5	2.2	2.0	31.4	<0.01	0.04	<0.2	0.015
2018KTS061		8.3	380	17.2	3.9	<0.001	0.03	0.35	0.5	0.4	0.8	14.3	<0.01	0.02	0.5	0.041
2018KTS062		7.2	270	18.8	2.3	<0.001	0.02	0.37	0.3	0.4	0.8	7.8	<0.01	0.01	0.4	0.021
2018KTS063		22.1	810	71.4	3.6	0.002	0.07	0.95	0.3	1.5	1.9	20.8	<0.01	0.03	<0.2	0.011
2018KTS064		33.5	600	99.9	3.8	0.002	0.16	1.21	0.5	2.8	2.5	56.8	<0.01	0.07	0.4	0.015
2018KTS065		24.4	1150	61.8	2.9	0.001	0.17	0.85	0.4	1.8	1.7	64.0	<0.01	0.04	0.2	0.008
2018KTS066		15.8	920	16.3	5.6	0.001	0.11	0.29	0.7	0.8	1.0	17.7	<0.01	0.03	0.3	0.039
2018KTS067		14.5	210	24.1	5.7	<0.001	0.06	0.29	1.3	0.5	0.7	13.1	<0.01	0.01	1.4	0.056
2018KTS068		14.5	720	22.0	9.1	0.001	0.05	0.33	0.9	0.6	0.8	28.6	<0.01	0.02	0.3	0.051
2018KTS069		19.8	720	32.1	6.3	<0.001	0.08	0.40	1.2	0.8	0.8	29.8	<0.01	0.04	0.2	0.030
2018KTS070		13.4	530	7.5	4.1	<0.001	0.04	0.09	0.8	0.2	0.3	27.0	<0.01	0.01	0.8	0.045

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
2018KTS029		0.07	0.23	12	0.18	1.25	154	<0.5
2018KTS030		0.05	0.36	10	0.15	1.59	173	<0.5
2018KTS031		0.05	0.29	12	0.14	1.02	73	<0.5
2018KTS032		0.04	0.21	10	0.14	1.42	105	0.5
2018KTS034		0.11	0.42	11	0.15	1.84	134	<0.5
2018KTS035		0.05	0.29	30	0.08	1.74	32	0.6
2018KTS036		0.04	0.25	16	0.10	1.41	86	<0.5
2018KTS037		0.06	0.20	8	0.17	0.67	78	<0.5
2018KTS038		0.17	1.40	66	0.14	19.70	86	<0.5
2018KTS039		0.06	0.27	29	0.11	2.39	105	0.5
2018KTS040		0.04	0.23	28	0.08	1.30	58	<0.5
2018KTS041		0.04	0.22	28	0.09	1.21	53	<0.5
2018KTS042		0.04	0.24	35	0.08	1.34	58	<0.5
2018KTS043		0.05	0.28	36	0.09	1.54	60	0.5
2018KTS044		0.02	0.20	22	0.05	1.21	12	0.5
2018KTS045		0.06	0.31	37	0.11	1.76	63	<0.5
2018KTS046		0.09	1.64	27	0.05	10.40	32	0.7
2018KTS047		0.05	1.28	20	0.07	5.44	51	<0.5
2018KTS048		0.05	0.59	9	0.11	1.49	29	<0.5
2018KTS049		0.03	0.18	9	0.07	0.88	35	<0.5
2018KTS050		0.09	0.98	25	0.07	1.97	65	1.1
2018KTS051		0.03	0.22	24	0.06	1.28	25	<0.5
2018KTS052		0.05	0.27	33	0.10	1.34	72	<0.5
2018KTS054		0.05	0.30	39	0.12	1.55	54	0.5
2018KTS055		0.07	0.28	35	0.11	1.35	87	0.5
2018KTS056		0.06	0.33	39	0.11	1.63	72	0.6
2018KTS057		0.08	0.32	41	0.12	1.97	63	<0.5
2018KTS058		0.05	0.21	16	0.08	1.43	29	<0.5
2018KTS059		0.05	0.21	10	0.14	1.22	63	<0.5
2018KTS060		0.04	0.20	10	0.13	1.23	55	<0.5
2018KTS061		0.03	0.18	24	0.07	0.82	34	<0.5
2018KTS062		0.04	0.17	12	0.05	0.69	24	<0.5
2018KTS063		0.05	0.18	7	0.12	1.25	69	<0.5
2018KTS064		0.09	0.18	11	0.20	0.86	162	0.6
2018KTS065		0.06	0.15	5	0.14	0.76	229	<0.5
2018KTS066		0.04	0.22	25	0.10	1.11	96	<0.5
2018KTS067		0.05	0.40	19	<0.05	1.65	49	1.1
2018KTS068		0.05	0.37	34	0.09	1.53	84	<0.5
2018KTS069		0.06	0.25	35	0.08	2.86	124	<0.5
2018KTS070		0.02	0.26	23	0.06	1.71	41	<0.5

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05
2018KTS071		0.36	0.33	0.68	8.3	<0.02	<10	40	0.12	0.27	0.19	0.19	11.40	5.5	22	0.46
2018KTS072		0.23	0.31	0.76	6.0	<0.02	<10	60	0.16	0.26	0.32	0.31	11.05	4.2	17	0.46
2018KTS074		0.23	1.66	0.40	14.9	<0.02	<10	70	0.15	0.85	0.27	0.75	7.25	4.1	10	0.28
2018KTS075		0.26	1.96	0.52	15.1	<0.02	<10	130	0.28	0.85	0.45	1.34	11.55	14.3	16	0.49
2018KTS076		0.36	0.42	0.58	7.5	<0.02	<10	60	0.15	0.31	0.23	0.37	12.75	3.6	19	0.44
2018KTS077		0.29	0.79	0.40	8.7	<0.02	<10	50	0.14	0.58	0.21	0.50	9.48	3.9	17	0.33
2018KTS078		0.15	2.14	0.39	16.7	<0.02	<10	150	0.20	1.13	0.30	1.10	10.80	8.8	11	0.48
2018KTS079		0.12	1.60	0.19	10.4	<0.02	<10	80	0.08	0.63	0.32	0.64	4.37	2.5	4	0.23
2018KTS080		0.13	1.43	0.19	8.7	<0.02	<10	110	0.09	0.83	0.27	0.77	5.75	2.1	4	0.26
2018KTS081		0.15	1.57	0.21	15.2	<0.02	<10	90	0.09	1.01	0.20	0.64	5.01	3.3	6	0.22
2018KTS082		0.21	1.52	0.24	10.6	<0.02	<10	80	0.14	1.37	0.25	1.12	8.05	3.9	6	0.30
2018KTS083		0.20	2.79	0.27	11.5	<0.02	<10	160	0.19	1.43	0.28	1.50	6.89	6.0	4	0.27
2018KTS084		0.37	0.26	0.80	5.8	<0.02	<10	40	0.17	0.19	0.12	0.17	10.30	3.9	14	0.38
2018KTS085		0.24	0.71	0.80	10.1	<0.02	<10	130	0.25	0.40	0.58	0.64	16.25	9.0	25	0.65
2018KTS086		0.16	0.97	0.42	12.8	<0.02	<10	150	0.17	0.58	0.55	1.44	7.68	3.6	11	0.39
2018KTS087		0.19	0.71	0.57	10.8	<0.02	<10	90	0.15	0.43	0.44	0.79	13.00	5.0	19	0.54
2018KTS088		0.32	1.07	0.60	11.4	<0.02	<10	60	0.43	0.68	0.18	0.67	18.40	5.5	10	0.48
2018KTS089		0.16	2.89	0.57	43.4	<0.02	<10	70	0.15	1.95	0.40	2.32	5.46	6.4	12	0.49
2018KTS090		0.27	1.24	0.15	6.6	<0.02	<10	70	0.06	0.76	0.17	0.17	6.27	2.0	4	0.23
2018KTS091		0.29	0.92	0.47	8.0	<0.02	<10	160	0.17	0.74	0.31	1.21	9.84	4.1	11	0.35
2018KTS092		0.30	1.31	0.21	31.7	<0.02	<10	60	0.13	1.31	0.25	0.63	4.49	3.6	7	0.19
2018KTS094		0.41	0.52	1.37	3.9	<0.02	<10	90	1.03	0.23	1.53	0.98	115.0	3.8	19	0.40
2018KTS095		0.19	1.33	0.19	18.5	<0.02	<10	110	0.08	1.11	0.21	0.87	5.30	2.7	9	0.29
2018KTS096		0.27	0.74	0.27	8.9	<0.02	<10	100	0.14	0.81	0.21	0.33	5.63	3.1	4	0.24
2018KTS097		0.17	1.50	0.37	24.3	<0.02	<10	110	0.16	1.18	0.11	0.88	10.30	3.1	8	0.31
2018KTS098		0.08	4.10	0.21	11.8	<0.02	<10	90	0.10	0.97	0.18	0.64	4.35	3.9	8	0.24
2018KTS099		0.11	2.02	0.35	15.9	<0.02	<10	120	0.15	1.06	0.20	0.59	6.27	3.3	9	0.29
2018KTS100		0.05	1.84	0.31	12.6	<0.02	<10	100	0.12	0.81	0.18	0.51	6.54	2.8	10	0.27
2018KTS101		0.46	0.56	0.97	11.3	<0.02	<10	110	0.25	0.37	0.72	0.61	14.70	7.9	28	0.72
2018KTS102		0.15	1.06	0.48	19.8	<0.02	<10	50	0.10	1.17	0.26	1.26	5.52	3.0	8	0.45
2018KTS103		0.07	0.32	1.08	11.7	<0.02	<10	40	0.36	0.35	0.18	0.56	39.9	4.8	38	1.15
2018KTS104		0.20	0.32	0.99	9.8	<0.02	<10	30	0.38	0.21	0.38	0.41	36.5	7.6	35	0.64
2018KTS105		0.15	0.33	1.01	9.7	<0.02	<10	30	0.37	0.21	0.38	0.39	37.5	7.5	35	0.63
2018KTS106		0.18	0.66	0.31	26.0	<0.02	<10	20	0.14	0.77	1.04	0.63	14.00	3.3	13	0.24
2018KTS107		0.22	0.45	1.31	16.1	<0.02	<10	70	0.52	0.35	0.68	0.50	47.4	7.7	44	0.90
2018KTS108		0.20	1.17	0.24	10.3	<0.02	<10	130	0.19	1.47	0.63	2.29	7.67	3.4	7	0.23
2018KTS109		0.12	0.50	0.40	9.8	<0.02	<10	90	0.12	0.49	0.24	0.65	9.42	2.6	13	0.38
2018KTS110		0.26	0.34	1.44	10.0	<0.02	<10	110	0.32	0.28	0.47	0.25	24.0	9.7	48	0.87
2018KBS178		0.23	0.24	3.23	7.1	<0.02	<10	160	0.91	0.21	0.54	0.22	86.6	11.2	72	1.45
2018KBS179		0.19	0.98	0.95	25.2	<0.02	<10	90	0.27	0.76	0.86	0.97	17.95	11.1	31	0.82

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05
2018KTS071		8.6	1.25	3.98	<0.05	<0.02	0.06	0.019	0.04	6.1	5.5	0.17	395	0.27	<0.01	0.86
2018KTS072		8.7	1.02	4.26	<0.05	<0.02	0.10	0.017	0.04	6.0	6.1	0.13	315	0.30	<0.01	0.81
2018KTS074		29.0	0.69	2.40	<0.05	<0.02	0.25	0.075	0.06	5.4	2.3	0.07	75	0.46	<0.01	0.38
2018KTS075		34.7	1.12	2.53	<0.05	<0.02	0.21	0.065	0.06	6.7	3.9	0.13	463	0.57	<0.01	0.47
2018KTS076		11.6	1.16	3.92	<0.05	<0.02	0.07	0.023	0.04	7.8	4.6	0.11	214	0.29	<0.01	0.80
2018KTS077		17.1	0.87	2.30	0.05	<0.02	0.13	0.046	0.04	4.3	3.3	0.13	110	0.37	<0.01	0.53
2018KTS078		38.8	0.77	2.12	0.05	<0.02	0.27	0.088	0.08	5.8	2.0	0.08	401	0.60	<0.01	0.33
2018KTS079		19.7	0.27	1.30	<0.05	<0.02	0.23	0.059	0.06	2.9	1.0	0.04	252	0.40	<0.01	0.21
2018KTS080		27.2	0.30	1.41	<0.05	<0.02	0.21	0.063	0.04	3.5	1.0	0.04	134	0.37	<0.01	0.19
2018KTS081		30.5	0.45	1.47	0.05	<0.02	0.29	0.080	0.10	3.7	1.0	0.05	243	0.62	<0.01	0.22
2018KTS082		45.2	0.38	1.78	0.05	<0.02	0.25	0.103	0.07	4.4	0.6	0.04	86	0.62	<0.01	0.23
2018KTS083		41.0	0.47	1.53	0.05	<0.02	0.48	0.108	0.11	3.6	0.7	0.04	506	0.84	<0.01	0.14
2018KTS084		5.4	0.98	4.45	<0.05	<0.02	0.07	0.015	0.04	5.7	6.9	0.08	334	0.30	<0.01	0.83
2018KTS085		20.4	1.56	4.46	<0.05	<0.02	0.11	0.028	0.07	6.8	7.6	0.21	585	0.44	0.01	0.81
2018KTS086		30.4	0.76	2.27	<0.05	<0.02	0.25	0.054	0.07	3.9	2.5	0.11	77	0.46	<0.01	0.39
2018KTS087		18.1	1.06	3.41	<0.05	<0.02	0.12	0.034	0.07	6.5	4.5	0.14	413	0.42	<0.01	0.76
2018KTS088		29.6	1.02	4.40	<0.05	<0.02	0.22	0.056	0.05	9.0	1.8	0.12	233	0.55	<0.01	0.20
2018KTS089		85.4	1.17	3.42	0.07	<0.02	0.38	0.151	0.08	2.9	2.3	0.16	68	0.87	0.01	0.34
2018KTS090		23.1	0.23	0.94	<0.05	<0.02	0.23	0.063	0.04	3.4	0.5	0.04	53	0.44	<0.01	0.16
2018KTS091		51.4	0.54	2.55	<0.05	<0.02	0.19	0.061	0.04	5.8	0.6	0.04	252	0.40	<0.01	0.13
2018KTS092		40.7	0.37	1.26	0.05	<0.02	0.43	0.108	0.03	2.8	0.8	0.05	21	0.80	<0.01	0.29
2018KTS094		51.4	0.47	3.41	0.16	0.02	0.43	0.030	0.04	88.4	5.5	0.20	81	0.54	<0.01	0.44
2018KTS095		44.2	0.50	1.46	0.05	<0.02	0.25	0.096	0.04	2.8	1.0	0.05	56	0.59	<0.01	0.32
2018KTS096		30.6	0.29	1.41	<0.05	<0.02	0.30	0.073	0.05	3.1	0.5	0.04	82	0.52	<0.01	0.20
2018KTS097		37.7	0.73	2.64	0.05	<0.02	0.35	0.084	0.06	5.3	1.7	0.05	62	0.70	<0.01	0.36
2018KTS098		28.3	0.50	1.39	0.06	<0.02	0.34	0.075	0.08	2.8	1.4	0.05	107	0.65	<0.01	0.30
2018KTS099		27.1	0.65	2.39	<0.05	<0.02	0.28	0.077	0.08	3.9	1.7	0.06	208	0.61	<0.01	0.32
2018KTS100		23.0	0.57	2.39	<0.05	<0.02	0.26	0.060	0.07	4.0	1.4	0.05	140	0.53	<0.01	0.31
2018KTS101		17.6	1.85	4.84	<0.05	<0.02	0.12	0.028	0.08	7.5	9.6	0.23	617	0.47	<0.01	1.03
2018KTS102		59.7	0.71	2.93	<0.05	<0.02	0.23	0.125	0.05	2.6	1.0	0.05	55	0.67	<0.01	0.30
2018KTS103		45.5	1.15	3.56	0.10	<0.02	0.19	0.032	0.06	26.4	9.4	0.26	84	1.11	<0.01	0.66
2018KTS104		34.6	1.40	3.11	0.09	0.02	0.08	0.021	0.04	22.6	9.8	0.33	161	0.50	0.01	0.70
2018KTS105		35.2	1.37	3.14	0.08	<0.02	0.09	0.022	0.04	23.3	9.9	0.33	148	0.53	0.01	0.70
2018KTS106		36.1	0.92	1.19	0.08	0.02	0.34	0.048	0.04	9.7	1.2	0.10	19	1.91	<0.01	0.32
2018KTS107		47.6	1.64	3.97	0.09	0.02	0.18	0.030	0.06	31.3	11.9	0.29	102	1.47	<0.01	1.00
2018KTS108		61.8	0.36	1.50	0.06	<0.02	0.29	0.118	0.08	4.1	0.7	0.07	49	0.62	<0.01	0.20
2018KTS109		11.0	0.49	1.60	<0.05	<0.02	0.18	0.034	0.05	4.4	1.4	0.06	97	0.42	<0.01	0.42
2018KTS110		16.8	2.14	6.42	<0.05	0.03	0.08	0.027	0.11	10.6	16.0	0.46	358	0.39	0.01	1.45
2018KBS178		63.6	2.42	9.19	0.11	0.07	0.18	0.032	0.11	46.6	31.7	0.59	157	0.57	0.01	1.67
2018KBS179		35.4	1.50	4.07	<0.05	0.02	0.32	0.057	0.05	9.2	16.5	0.34	523	0.81	0.01	0.88

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
2018KTS071		12.6	410	13.1	7.0	<0.001	0.02	0.24	0.9	0.5	0.6	13.0	<0.01	0.02	0.7	0.055
2018KTS072		11.8	470	11.5	7.3	<0.001	0.04	0.23	0.7	0.4	0.6	20.3	<0.01	0.02	0.4	0.041
2018KTS074		23.4	650	58.9	3.1	0.003	0.07	0.66	0.5	1.5	1.7	23.3	<0.01	0.05	<0.2	0.022
2018KTS075		22.8	770	73.5	4.4	0.002	0.08	0.61	0.6	1.7	1.5	28.0	<0.01	0.05	<0.2	0.032
2018KTS076		12.1	370	19.5	7.4	<0.001	0.01	0.25	0.9	0.6	0.7	27.9	<0.01	0.03	0.8	0.060
2018KTS077		18.9	420	38.9	3.9	0.001	0.04	0.39	0.7	1.1	1.7	18.8	<0.01	0.02	0.2	0.038
2018KTS078		23.1	830	103.5	4.6	0.001	0.08	0.88	0.4	2.5	2.2	23.6	<0.01	0.06	<0.2	0.019
2018KTS079		13.7	520	42.0	3.0	<0.001	0.07	0.58	0.4	1.1	1.3	18.3	<0.01	0.02	0.3	0.013
2018KTS080		14.5	400	51.9	2.6	0.001	0.04	0.57	0.4	1.2	1.6	17.0	<0.01	0.04	0.2	0.013
2018KTS081		29.9	720	59.5	4.2	0.002	0.07	0.87	0.5	2.0	4.7	18.4	<0.01	0.05	0.2	0.014
2018KTS082		22.8	640	99.7	3.0	0.002	0.06	0.89	0.4	2.1	2.5	22.0	<0.01	0.05	<0.2	0.013
2018KTS083		28.6	1370	98.4	4.6	0.002	0.10	1.38	0.3	2.5	2.8	22.3	<0.01	0.05	<0.2	0.008
2018KTS084		9.0	340	9.8	5.5	<0.001	0.01	0.19	0.8	0.5	0.6	10.5	<0.01	0.02	0.6	0.044
2018KTS085		19.3	830	25.6	9.6	<0.001	0.06	0.29	1.1	0.8	0.9	34.4	<0.01	0.05	0.5	0.056
2018KTS086		23.2	800	39.5	3.9	0.002	0.07	0.53	0.6	1.5	1.1	36.2	<0.01	0.06	<0.2	0.025
2018KTS087		16.0	610	33.6	5.6	0.001	0.05	0.31	0.9	0.9	1.0	25.9	<0.01	0.03	0.3	0.048
2018KTS088		16.1	1120	32.0	5.4	0.001	0.07	0.46	0.2	1.0	1.8	9.7	<0.01	0.03	<0.2	0.005
2018KTS089		49.5	710	120.0	5.3	0.002	0.10	1.27	0.7	2.7	3.8	15.0	<0.01	0.15	<0.2	0.024
2018KTS090		16.4	380	55.0	2.7	0.001	0.05	0.85	0.4	1.4	1.5	16.0	<0.01	0.06	0.3	0.010
2018KTS091		18.0	460	57.0	3.3	0.001	0.03	0.39	0.3	1.2	1.1	19.4	<0.01	0.03	<0.2	0.010
2018KTS092		26.9	480	93.7	2.2	0.004	0.12	1.47	0.5	3.1	2.5	26.7	<0.01	0.07	0.2	0.015
2018KTS094		19.8	1370	19.3	2.6	0.007	0.42	0.42	1.4	1.1	0.6	47.8	<0.01	0.03	<0.2	0.014
2018KTS095		25.3	370	84.0	2.8	0.001	0.04	0.99	0.6	2.5	2.6	17.8	<0.01	0.06	0.3	0.019
2018KTS096		18.4	680	91.4	2.6	0.004	0.11	0.67	0.3	2.0	1.5	21.3	<0.01	0.03	<0.2	0.010
2018KTS097		16.7	590	99.4	3.7	0.002	0.04	1.01	0.4	2.6	2.3	13.0	<0.01	0.06	<0.2	0.021
2018KTS098		31.4	830	65.1	3.2	0.001	0.09	0.89	0.5	2.6	2.9	18.9	<0.01	0.04	<0.2	0.018
2018KTS099		25.6	870	69.2	4.4	0.001	0.07	0.84	0.3	1.6	2.4	23.2	<0.01	0.06	<0.2	0.018
2018KTS100		21.8	760	55.7	3.9	0.001	0.07	0.69	0.3	1.5	1.9	22.4	<0.01	0.04	<0.2	0.019
2018KTS101		21.1	780	21.7	10.5	<0.001	0.05	0.32	1.2	0.6	0.9	43.6	<0.01	0.05	0.5	0.063
2018KTS102		27.9	560	74.7	4.1	0.001	0.10	0.80	0.6	1.7	2.3	13.2	<0.01	0.09	<0.2	0.018
2018KTS103		23.6	960	23.1	8.0	<0.001	0.16	0.36	1.7	1.6	0.8	9.1	<0.01	0.03	<0.2	0.028
2018KTS104		23.3	810	12.6	5.0	0.002	0.08	0.17	2.3	1.4	0.5	12.8	<0.01	0.02	0.3	0.044
2018KTS105		23.7	780	12.7	4.9	0.002	0.08	0.17	2.3	1.5	0.5	13.2	<0.01	0.02	0.4	0.044
2018KTS106		21.4	820	46.8	1.9	0.001	0.28	1.26	1.0	2.1	1.6	14.3	<0.01	0.08	<0.2	0.010
2018KTS107		27.4	500	20.7	6.4	0.001	0.14	0.33	4.0	2.0	0.8	14.2	<0.01	0.04	0.6	0.044
2018KTS108		31.2	620	158.5	2.2	0.002	0.08	0.83	0.5	2.6	2.4	26.4	<0.01	0.04	0.2	0.012
2018KTS109		18.9	590	31.9	8.2	<0.001	0.08	0.49	0.3	1.3	1.1	29.8	<0.01	0.05	<0.2	0.019
2018KTS110		28.9	620	19.9	18.2	<0.001	0.03	0.20	2.2	0.8	0.8	33.3	<0.01	0.05	0.9	0.095
2018KBS178		43.9	680	12.5	13.8	0.001	0.07	0.16	5.5	1.1	0.7	23.9	<0.01	0.03	1.6	0.063
2018KBS179		35.0	550	47.7	6.6	0.001	0.09	0.75	1.8	1.3	1.5	32.9	<0.01	0.09	0.7	0.046

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

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
2018KTS071		0.05	0.23	32	0.08	1.37	27	<0.5
2018KTS072		0.05	0.23	25	0.07	1.24	51	<0.5
2018KTS074		0.04	0.16	16	0.11	1.13	76	<0.5
2018KTS075		0.07	0.22	26	0.13	1.39	142	<0.5
2018KTS076		0.04	0.25	30	0.08	1.45	25	<0.5
2018KTS077		0.05	0.19	21	0.10	1.30	50	<0.5
2018KTS078		0.08	0.22	18	0.13	1.34	88	<0.5
2018KTS079		0.05	0.11	6	0.07	0.58	48	<0.5
2018KTS080		0.03	0.13	6	0.07	0.70	42	<0.5
2018KTS081		0.03	0.18	9	0.12	0.84	70	<0.5
2018KTS082		0.03	0.23	8	0.10	1.05	84	<0.5
2018KTS083		0.07	0.26	8	0.12	1.33	77	<0.5
2018KTS084		0.04	0.18	25	0.05	1.10	27	<0.5
2018KTS085		0.05	0.27	39	0.09	1.69	91	0.5
2018KTS086		<0.02	0.18	18	0.08	1.21	120	<0.5
2018KTS087		0.05	0.23	26	0.10	1.26	92	<0.5
2018KTS088		0.04	0.25	10	0.08	3.16	80	<0.5
2018KTS089		0.09	0.24	36	0.24	1.17	123	<0.5
2018KTS090		0.04	0.15	6	0.08	0.60	28	<0.5
2018KTS091		0.04	0.22	15	0.06	1.54	32	<0.5
2018KTS092		0.05	0.17	11	0.15	0.73	53	<0.5
2018KTS094		0.05	2.63	15	0.09	24.5	27	<0.5
2018KTS095		0.05	0.20	13	0.14	0.67	56	<0.5
2018KTS096		0.05	0.17	7	0.09	0.99	44	<0.5
2018KTS097		0.04	0.25	19	0.13	1.46	35	<0.5
2018KTS098		0.07	0.16	11	0.15	0.64	66	<0.5
2018KTS099		0.05	0.18	14	0.12	0.91	47	<0.5
2018KTS100		0.04	0.17	14	0.10	0.86	41	<0.5
2018KTS101		0.05	0.28	41	0.12	1.61	81	0.5
2018KTS102		0.06	0.17	25	0.16	1.08	72	<0.5
2018KTS103		0.11	1.97	20	0.09	10.55	45	0.5
2018KTS104		0.05	1.90	30	0.07	9.92	49	0.5
2018KTS105		0.05	2.00	30	0.07	10.30	48	0.5
2018KTS106		0.04	0.63	9	0.11	4.46	24	0.8
2018KTS107		0.08	1.27	36	0.10	13.65	52	0.8
2018KTS108		0.04	0.23	8	0.11	1.27	47	<0.5
2018KTS109		0.04	0.16	9	0.09	0.96	18	<0.5
2018KTS110		0.06	0.35	47	0.13	2.52	58	1.1
2018KBS178		0.16	4.36	47	0.08	15.15	43	2.2
2018KBS179		0.06	0.58	32	0.12	2.70	77	0.8

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05
2018KBS180		0.20	0.50	0.88	18.6	<0.02	<10	50	0.21	0.38	0.59	0.50	19.35	6.6	29	0.79
2018KBS181		0.09	0.67	0.16	5.9	<0.02	<10	110	0.13	0.83	0.32	1.38	5.62	2.0	6	0.19
2018KBS182		0.08	1.51	0.16	7.5	<0.02	<10	60	0.07	0.61	0.20	0.69	5.26	2.7	10	0.19
2018KBS183		0.05	0.93	0.23	8.9	<0.02	<10	130	0.13	1.30	0.18	0.94	7.98	2.6	11	0.20
2018KBS184		0.09	0.78	0.24	11.8	<0.02	<10	100	0.09	1.04	0.18	0.90	9.81	2.3	8	0.32
2018KBS185		0.06	2.43	0.41	29.6	<0.02	<10	140	0.17	1.91	0.31	1.27	7.19	7.2	17	0.42
2018KBS186		0.08	0.58	0.24	12.5	<0.02	<10	90	0.11	0.61	0.34	0.47	7.14	3.0	13	0.17
2018KBS187		0.08	0.87	0.27	9.1	<0.02	<10	270	0.20	1.80	0.32	1.12	8.86	6.2	8	0.21
2018KBS188		0.11	0.87	0.15	8.7	<0.02	<10	70	0.07	0.72	0.17	0.62	4.87	2.3	6	0.24
2018KBS189		0.10	0.57	0.23	11.1	<0.02	<10	110	0.11	1.16	0.19	1.06	6.27	2.4	7	0.26
2018KBS190		0.11	0.29	0.23	9.9	<0.02	<10	70	0.09	0.96	0.18	0.97	6.03	2.3	12	0.25
2018KBS191		0.08	1.08	0.38	34.7	<0.02	10	60	0.11	2.00	0.19	0.90	6.84	4.0	16	0.39
2018KBS192		0.09	0.34	0.19	8.5	<0.02	<10	60	0.07	0.81	0.15	0.38	6.89	1.4	7	0.29
2018KBS194		0.06	1.03	0.17	13.1	<0.02	<10	70	0.11	1.06	0.18	0.93	5.94	2.5	9	0.36
2018KBS195		0.09	0.78	0.17	7.0	<0.02	<10	80	0.09	0.91	0.27	0.88	8.75	4.4	6	0.20
2018KBS196		0.06	1.23	0.12	6.9	<0.02	<10	80	0.07	0.71	0.16	0.72	4.39	2.6	4	0.20
2018KBS197		0.06	1.31	0.75	12.8	<0.02	<10	70	0.62	1.03	0.54	0.56	39.6	26.9	11	0.52
2018KBS198		0.08	0.99	0.25	17.7	<0.02	<10	90	0.12	1.10	0.17	1.00	8.61	2.9	7	0.26
2018KBS199		0.19	0.18	0.37	13.9	<0.02	<10	40	0.11	0.25	0.07	0.36	6.70	1.8	9	0.14
2018KBS200		0.15	0.18	0.41	13.2	<0.02	<10	40	0.13	0.28	0.09	0.38	7.25	1.9	7	0.19
2018KBS201		0.05	0.60	0.29	13.5	<0.02	<10	100	0.18	2.45	0.23	0.96	9.52	5.7	11	0.34
2018KBS202		0.05	1.02	0.51	27.7	<0.02	<10	130	0.18	1.40	0.36	1.34	9.20	5.7	15	0.44
2018KBS203		0.17	0.93	0.64	13.5	<0.02	<10	170	0.42	1.22	0.26	1.49	17.60	4.7	14	0.39
2018KBS204		0.10	1.35	0.23	13.2	<0.02	10	90	0.11	1.09	0.30	1.06	7.42	4.9	9	0.21
2018KBS205		0.11	1.22	0.55	19.8	<0.02	<10	60	0.40	1.02	0.48	0.53	13.00	4.3	9	0.28
2018KBS206		0.19	0.90	0.38	10.3	<0.02	<10	270	0.21	0.95	0.37	1.50	12.25	6.6	11	0.30
2018KBS207		0.10	1.67	0.23	11.9	<0.02	<10	120	0.14	0.83	0.40	0.90	7.69	3.4	6	0.24
2018KBS208		0.07	1.17	0.58	18.7	<0.02	<10	60	0.12	0.71	0.21	0.62	7.60	4.7	16	0.53
2018KBS209		0.12	1.05	0.25	14.1	<0.02	<10	130	0.16	1.28	0.32	1.14	8.01	3.9	8	0.24
2018KBS210		0.12	0.67	0.38	25.5	<0.02	10	70	0.12	1.08	0.40	0.93	9.72	3.0	11	0.41
2018KBS211		0.11	1.63	0.54	21.7	<0.02	<10	210	0.25	2.74	0.42	2.44	13.25	7.7	15	0.40
2018KBS212		0.11	0.91	0.29	27.4	<0.02	10	160	0.12	2.23	0.51	1.16	8.73	5.2	8	0.34
2018KBS214		0.11	1.69	0.23	13.0	<0.02	<10	80	0.14	1.30	0.24	0.62	8.29	4.7	8	0.29
2018KBS215		0.09	2.98	0.39	31.6	<0.02	<10	220	0.18	2.12	0.25	1.44	11.05	16.1	16	0.41
2018KBS216		0.15	0.92	0.32	17.4	<0.02	<10	340	0.17	1.74	0.24	1.32	9.41	4.8	11	0.33
2018KBS217		0.11	3.15	0.29	18.0	<0.02	<10	130	0.18	1.57	0.31	1.33	7.59	6.5	7	0.23
2018KBS218		0.17	1.20	0.71	51.4	<0.02	<10	30	0.15	0.86	0.12	0.49	8.52	4.6	21	0.47
2018KBS219		0.16	1.70	0.22	28.8	<0.02	<10	40	0.11	1.14	0.63	0.90	3.45	4.3	6	0.19
2018KBS220		0.10	1.54	0.21	28.8	<0.02	10	30	0.11	1.10	0.67	0.87	3.30	4.2	7	0.19
2018KBS221		0.05	2.48	0.42	44.3	<0.02	<10	80	0.17	1.17	0.26	0.72	7.06	7.2	14	0.41

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05
2018KBS180		21.2	1.38	3.90	<0.05	0.02	0.23	0.031	0.04	9.7	11.9	0.27	207	0.97	<0.01	0.89
2018KBS181		37.5	0.30	0.98	<0.05	<0.02	0.11	0.067	0.02	4.7	0.5	0.03	59	0.30	<0.01	0.13
2018KBS182		21.6	0.46	1.26	<0.05	<0.02	0.16	0.041	0.04	3.0	1.0	0.04	72	0.34	<0.01	0.24
2018KBS183		36.0	0.38	1.54	<0.05	<0.02	0.16	0.080	0.04	7.2	0.8	0.04	61	0.44	<0.01	0.22
2018KBS184		31.0	0.34	1.68	<0.05	<0.02	0.15	0.072	0.04	6.7	0.9	0.03	22	0.45	<0.01	0.23
2018KBS185		66.0	0.67	2.02	0.05	<0.02	0.27	0.144	0.06	4.4	1.7	0.07	65	0.78	0.01	0.35
2018KBS186		19.3	0.52	1.39	<0.05	<0.02	0.11	0.036	0.04	4.0	1.1	0.06	72	0.25	<0.01	0.40
2018KBS187		55.9	0.42	1.54	<0.05	<0.02	0.21	0.108	0.05	7.1	0.7	0.04	63	0.39	<0.01	0.19
2018KBS188		22.3	0.32	1.20	<0.05	<0.02	0.12	0.049	0.03	3.7	0.8	0.03	82	0.31	<0.01	0.22
2018KBS189		37.9	0.32	1.43	<0.05	<0.02	0.17	0.084	0.04	5.1	0.7	0.03	34	0.37	<0.01	0.20
2018KBS190		25.3	0.43	1.65	<0.05	<0.02	0.16	0.069	0.03	4.0	0.8	0.03	74	0.47	<0.01	0.26
2018KBS191		50.4	0.68	2.41	<0.05	<0.02	0.38	0.136	0.08	4.7	1.5	0.05	53	0.85	<0.01	0.39
2018KBS192		13.1	0.35	1.18	<0.05	<0.02	0.12	0.055	0.03	3.3	0.7	0.02	50	0.35	<0.01	0.15
2018KBS194		30.4	0.46	1.29	<0.05	<0.02	0.19	0.068	0.04	4.9	0.7	0.03	28	0.37	<0.01	0.22
2018KBS195		29.9	0.34	1.16	<0.05	<0.02	0.12	0.063	0.04	6.8	0.7	0.04	51	0.26	<0.01	0.15
2018KBS196		22.3	0.25	0.92	<0.05	<0.02	0.12	0.051	0.03	3.4	0.5	0.02	26	0.28	<0.01	0.12
2018KBS197		36.2	0.32	2.85	0.06	<0.02	0.45	0.058	0.08	33.6	2.8	0.09	44	0.56	0.01	0.31
2018KBS198		38.1	0.38	1.42	<0.05	<0.02	0.25	0.077	0.03	5.5	0.8	0.03	25	0.46	<0.01	0.22
2018KBS199		11.9	0.96	1.70	<0.05	<0.02	0.17	0.016	0.02	3.5	0.7	0.02	10	0.38	<0.01	0.32
2018KBS200		14.3	0.86	1.53	<0.05	<0.02	0.20	0.021	0.02	3.7	0.7	0.02	11	0.36	<0.01	0.28
2018KBS201		70.1	0.57	2.23	<0.05	<0.02	0.14	0.184	0.07	5.8	1.1	0.05	49	0.53	<0.01	0.30
2018KBS202		42.8	1.13	3.96	<0.05	<0.02	0.20	0.092	0.09	5.5	4.9	0.10	1080	0.69	<0.01	0.69
2018KBS203		51.4	0.70	2.84	<0.05	<0.02	0.26	0.106	0.06	12.1	2.1	0.07	133	0.54	<0.01	0.31
2018KBS204		40.8	0.46	1.67	<0.05	<0.02	0.20	0.078	0.05	4.3	0.8	0.05	54	0.44	<0.01	0.27
2018KBS205		23.9	0.95	3.85	<0.05	<0.02	0.37	0.064	0.04	7.6	1.5	0.06	55	0.96	<0.01	0.70
2018KBS206		37.0	0.54	1.88	<0.05	<0.02	0.27	0.073	0.04	7.7	1.0	0.06	451	0.47	<0.01	0.22
2018KBS207		29.9	0.37	1.67	<0.05	<0.02	0.23	0.056	0.05	6.9	0.9	0.05	65	0.48	<0.01	0.31
2018KBS208		29.1	0.88	2.52	<0.05	<0.02	0.22	0.054	0.06	4.0	4.3	0.12	61	0.53	<0.01	0.65
2018KBS209		42.1	0.44	1.67	<0.05	<0.02	0.24	0.086	0.06	7.4	0.8	0.05	39	0.54	<0.01	0.22
2018KBS210		24.2	0.66	2.43	<0.05	<0.02	0.31	0.081	0.06	5.4	1.8	0.06	338	0.67	<0.01	0.49
2018KBS211		84.2	0.76	2.84	<0.05	<0.02	0.38	0.201	0.07	7.9	1.7	0.08	116	0.78	<0.01	0.35
2018KBS212		66.6	0.51	1.60	0.07	0.02	0.40	0.182	0.09	5.7	0.9	0.07	35	0.97	<0.01	0.26
2018KBS214		34.9	0.42	1.63	<0.05	<0.02	0.23	0.077	0.05	7.1	0.8	0.03	125	0.61	<0.01	0.18
2018KBS215		55.0	0.98	2.63	<0.05	<0.02	0.21	0.118	0.06	8.0	2.5	0.08	2140	0.66	<0.01	0.40
2018KBS216		42.6	0.56	2.41	<0.05	<0.02	0.16	0.129	0.04	5.4	1.4	0.06	558	0.54	<0.01	0.30
2018KBS217		43.9	0.47	1.79	0.05	<0.02	0.31	0.115	0.05	7.4	1.1	0.04	72	0.50	<0.01	0.22
2018KBS218		24.3	1.58	4.62	<0.05	<0.02	0.16	0.050	0.04	4.4	5.7	0.13	73	0.73	<0.01	0.62
2018KBS219		34.8	0.38	1.48	<0.05	0.02	0.47	0.091	0.05	2.7	0.9	0.05	30	0.89	<0.01	0.22
2018KBS220		34.3	0.39	1.47	<0.05	0.02	0.48	0.093	0.04	2.5	1.0	0.05	23	0.88	<0.01	0.23
2018KBS221		33.6	0.79	2.17	<0.05	<0.02	0.31	0.063	0.05	3.2	2.8	0.10	214	0.56	<0.01	0.46

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
2018KBS180		21.7	400	23.1	6.1	<0.001	0.07	0.47	1.8	0.8	0.8	25.8	<0.01	0.05	1.0	0.050
2018KBS181		16.9	310	72.6	1.5	0.001	0.04	0.38	0.2	1.2	1.4	44.5	<0.01	0.03	<0.2	0.009
2018KBS182		20.9	430	29.7	2.2	0.001	0.06	0.61	0.3	1.0	1.5	17.5	<0.01	0.02	<0.2	0.017
2018KBS183		24.1	430	93.8	2.7	0.001	0.05	0.58	0.2	1.6	2.2	35.6	<0.01	0.05	<0.2	0.012
2018KBS184		22.9	410	69.8	3.6	0.001	0.05	0.70	0.3	1.3	1.8	20.3	<0.01	0.03	0.3	0.013
2018KBS185		51.1	680	138.5	4.3	0.001	0.10	1.03	0.3	3.3	3.7	24.8	<0.01	0.07	<0.2	0.016
2018KBS186		18.6	360	37.3	2.2	0.001	0.07	0.40	0.4	0.9	1.0	27.3	<0.01	0.04	0.2	0.023
2018KBS187		36.8	400	111.5	2.6	0.003	0.06	0.62	0.2	2.0	3.0	47.9	<0.01	0.05	<0.2	0.009
2018KBS188		18.1	310	47.3	2.5	<0.001	0.04	0.53	0.3	0.8	1.4	16.8	<0.01	0.04	<0.2	0.013
2018KBS189		21.5	340	81.2	2.6	0.003	0.06	0.65	0.2	1.1	1.7	27.2	<0.01	0.05	<0.2	0.012
2018KBS190		23.8	310	67.6	2.5	0.002	0.05	0.61	0.3	0.8	1.6	19.6	<0.01	0.04	<0.2	0.015
2018KBS191		46.2	680	120.5	5.0	0.003	0.12	1.45	0.4	2.2	3.2	15.3	<0.01	0.09	<0.2	0.018
2018KBS192		17.9	310	62.4	3.0	0.001	0.04	0.54	0.1	0.8	1.5	12.9	<0.01	0.04	<0.2	0.009
2018KBS194		24.5	300	71.7	3.4	0.002	0.05	0.58	0.4	1.2	1.9	21.7	<0.01	0.04	0.2	0.015
2018KBS195		23.3	310	62.3	3.0	<0.001	0.04	0.51	0.4	0.7	1.8	17.2	<0.01	0.02	0.3	0.009
2018KBS196		17.9	300	47.4	2.1	0.001	0.04	0.48	0.3	0.9	1.5	15.6	<0.01	0.03	0.2	0.008
2018KBS197		49.0	1270	60.1	5.7	0.002	0.34	0.69	0.6	1.2	1.8	26.7	<0.01	0.02	<0.2	0.007
2018KBS198		25.9	320	65.9	3.6	0.001	0.05	0.85	0.5	1.2	1.7	18.8	<0.01	0.05	0.5	0.013
2018KBS199		8.8	330	38.1	1.4	0.002	0.08	0.33	0.3	0.8	0.5	14.8	<0.01	0.05	<0.2	0.017
2018KBS200		9.8	370	43.1	1.8	0.003	0.10	0.40	0.4	1.0	0.7	17.4	<0.01	0.06	<0.2	0.014
2018KBS201		25.4	460	199.0	3.5	0.003	0.05	0.84	0.3	2.4	3.7	27.8	<0.01	0.05	<0.2	0.016
2018KBS202		37.7	900	88.8	5.7	0.001	0.06	0.95	0.6	1.5	2.6	24.2	<0.01	0.11	<0.2	0.036
2018KBS203		23.0	700	123.0	4.7	0.001	0.06	0.66	0.2	2.3	1.9	23.4	<0.01	0.08	<0.2	0.011
2018KBS204		28.3	460	69.1	2.9	0.001	0.07	0.86	0.5	1.2	2.0	24.0	<0.01	0.05	0.4	0.015
2018KBS205		18.5	600	61.7	2.7	0.001	0.09	1.01	0.7	1.6	1.8	27.9	<0.01	0.08	<0.2	0.033
2018KBS206		19.5	590	73.7	3.5	0.002	0.07	0.66	0.3	1.6	1.3	33.9	<0.01	0.05	<0.2	0.011
2018KBS207		19.3	530	59.9	3.3	0.002	0.08	0.89	0.5	1.0	1.4	32.0	<0.01	0.07	0.2	0.017
2018KBS208		25.0	700	37.9	5.5	0.002	0.11	0.61	0.5	1.3	1.5	17.8	<0.01	0.06	<0.2	0.028
2018KBS209		25.3	560	92.3	3.5	0.001	0.10	0.73	0.3	1.5	2.1	35.0	<0.01	0.04	<0.2	0.012
2018KBS210		22.5	680	65.1	4.5	0.003	0.09	0.96	0.4	1.3	1.7	17.4	<0.01	0.05	<0.2	0.025
2018KBS211		50.6	770	185.5	4.5	0.003	0.10	1.46	0.3	3.0	4.3	24.6	<0.01	0.07	<0.2	0.015
2018KBS212		51.9	840	157.0	3.5	0.004	0.16	1.84	0.6	2.4	3.7	42.2	<0.01	0.08	0.3	0.011
2018KBS214		28.7	450	80.5	3.4	0.002	0.05	0.95	0.3	1.3	2.6	23.6	<0.01	0.05	<0.2	0.010
2018KBS215		48.0	660	135.5	5.0	0.001	0.07	1.23	0.5	2.2	3.3	20.5	<0.01	0.11	<0.2	0.024
2018KBS216		22.4	580	170.5	3.1	0.002	0.06	0.70	0.3	3.5	3.0	28.8	<0.01	0.05	<0.2	0.013
2018KBS217		37.2	590	104.5	2.6	0.001	0.08	1.46	0.3	2.1	2.9	25.7	<0.01	0.06	<0.2	0.012
2018KBS218		23.2	400	38.9	5.7	0.001	0.05	0.82	0.7	1.3	1.6	9.1	<0.01	0.14	<0.2	0.041
2018KBS219		29.0	800	66.6	2.5	0.002	0.18	1.60	0.4	3.0	2.0	25.6	<0.01	0.05	<0.2	0.011
2018KBS220		29.5	760	64.1	2.4	0.002	0.20	1.40	0.4	2.9	2.0	28.2	<0.01	0.06	<0.2	0.012
2018KBS221		61.1	570	46.0	4.1	0.001	0.08	1.21	0.7	1.5	2.2	19.9	<0.01	0.07	0.2	0.024

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
2018KBS180		0.06	0.70	30	0.10	2.82	39	0.7
2018KBS181		0.02	0.13	6	0.05	1.00	46	<0.5
2018KBS182		0.03	0.15	11	0.07	0.69	49	<0.5
2018KBS183		0.04	0.17	9	0.11	1.27	43	<0.5
2018KBS184		0.04	0.19	8	0.07	1.21	31	<0.5
2018KBS185		0.07	0.24	15	0.21	0.96	105	<0.5
2018KBS186		0.03	0.15	12	0.09	0.75	48	<0.5
2018KBS187		0.02	0.18	7	0.09	1.64	35	<0.5
2018KBS188		0.02	0.12	8	0.07	0.70	27	<0.5
2018KBS189		0.02	0.15	7	0.08	1.14	25	<0.5
2018KBS190		0.03	0.17	10	0.09	0.90	31	<0.5
2018KBS191		0.04	0.23	16	0.16	1.17	54	<0.5
2018KBS192		0.03	0.14	7	0.07	0.73	18	<0.5
2018KBS194		0.03	0.15	11	0.09	0.94	36	<0.5
2018KBS195		0.04	0.14	7	0.08	1.35	21	<0.5
2018KBS196		0.03	0.11	5	0.07	0.56	53	<0.5
2018KBS197		0.10	0.83	7	0.06	7.87	24	<0.5
2018KBS198		0.05	0.21	9	0.10	1.07	44	<0.5
2018KBS199		<0.02	0.23	11	0.05	0.97	8	<0.5
2018KBS200		0.02	0.24	9	0.05	1.08	11	<0.5
2018KBS201		0.03	0.31	14	0.13	1.28	70	<0.5
2018KBS202		0.06	0.27	25	0.20	1.12	71	<0.5
2018KBS203		0.04	0.44	14	0.10	3.10	52	<0.5
2018KBS204		0.03	0.21	12	0.11	0.82	66	<0.5
2018KBS205		0.04	0.36	31	0.12	2.00	36	<0.5
2018KBS206		0.04	0.52	13	0.10	1.91	84	<0.5
2018KBS207		0.04	0.17	10	0.10	1.37	39	<0.5
2018KBS208		0.05	0.22	21	0.14	0.93	89	<0.5
2018KBS209		0.05	0.19	10	0.10	1.62	34	<0.5
2018KBS210		0.06	0.22	16	0.14	1.08	63	<0.5
2018KBS211		0.04	0.34	15	0.15	2.02	77	<0.5
2018KBS212		0.04	0.26	9	0.22	1.22	113	0.6
2018KBS214		0.04	0.22	9	0.11	1.22	58	<0.5
2018KBS215		0.11	0.26	23	0.17	1.57	94	<0.5
2018KBS216		0.06	0.24	14	0.15	1.09	79	<0.5
2018KBS217		0.04	0.17	9	0.11	1.43	70	<0.5
2018KBS218		0.07	0.23	38	0.14	1.14	24	<0.5
2018KBS219		0.04	0.15	9	0.15	0.85	27	0.6
2018KBS220		0.04	0.14	10	0.13	0.76	28	0.6
2018KBS221		0.05	0.19	16	0.16	0.83	74	<0.5

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method	WEI-21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
2018KBS222		0.08	2.41	0.30	40.0	<0.02	10	110	0.11	1.78	0.45	0.79	6.98	5.8	9	0.38
2018KBS223		0.07	3.37	0.29	41.2	0.02	10	170	0.20	2.08	0.51	1.93	8.29	8.2	8	0.31
2018KBS224		0.09	2.72	0.22	19.5	<0.02	<10	80	0.13	1.41	0.20	1.25	4.96	4.1	8	0.44

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05
2018KBS222		61.1	0.61	2.05	0.05	<0.02	0.33	0.101	0.06	4.7	1.8	0.08	41	0.62	<0.01	0.34
2018KBS223		96.2	0.55	1.59	0.05	<0.02	0.47	0.130	0.06	5.2	0.8	0.06	62	0.66	<0.01	0.20
2018KBS224		40.0	0.48	1.77	<0.05	<0.02	0.39	0.095	0.07	2.9	0.8	0.05	52	0.66	<0.01	0.21

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
2018KBS222		58.9	510	90.1	3.8	0.003	0.08	2.00	0.7	2.7	2.9	30.0	<0.01	0.10	0.2	0.018
2018KBS223		88.7	590	105.0	3.1	0.003	0.12	1.76	0.6	3.0	2.7	32.6	<0.01	0.11	0.2	0.011
2018KBS224		35.6	760	85.8	5.7	0.001	0.09	1.23	0.4	2.5	2.8	18.9	<0.01	0.07	<0.2	0.012

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
2018KBS222		0.04	0.21	14	0.15	0.90	70	<0.5
2018KBS223		0.09	0.24	9	0.16	1.34	96	<0.5
2018KBS224		0.04	0.18	13	0.15	0.71	76	<0.5

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

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18197526

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).

Applies to Method: ME-MS41

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method: LOG-22 SCR-41 WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method: ME-MS41

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

QC CERTIFICATE SD18197526

Project: 99421

This report is for 203 Soil samples submitted to our lab in Sudbury, ON, Canada on 10-AUG-2018.

The following have access to data associated with this certificate:

K. RAFFLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-MS41	Ultra Trace Aqua Regia ICP-MS

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
Units	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
LOD	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2
STANDARDS															
MRGeo08	4.39	2.57	35.1	<0.02	<10	430	0.84	0.68	1.05	2.32	75.4	19.2	87	11.10	610
MRGeo08	4.41	2.56	34.6	<0.02	<10	440	0.82	0.69	1.08	2.21	73.7	18.9	89	10.80	622
MRGeo08	4.35	2.60	34.2	<0.02	<10	440	0.87	0.68	1.09	2.17	73.8	18.9	90	10.50	618
MRGeo08	4.24	2.57	31.7	<0.02	<10	420	0.87	0.65	1.04	2.21	72.2	17.9	85	10.50	619
Target Range - Lower Bound	4.00	2.44	29.6	<0.02	<10	370	0.67	0.60	1.00	2.01	66.2	17.0	81	9.40	587
Upper Bound	4.92	3.00	36.4	0.04	20	530	0.95	0.76	1.24	2.47	81.0	21.0	102	11.60	675
OGGeo08	20.7	2.15	122.5	0.07	<10	50	0.74	10.50	0.86	19.45	58.6	94.5	79	10.40	8370
OGGeo08	18.75	2.14	119.5	0.07	<10	60	0.73	10.30	0.88	18.45	61.7	97.5	77	8.93	8130
OGGeo08	21.1	2.14	123.0	0.08	<10	60	0.78	10.85	0.86	19.20	58.3	93.1	77	9.51	8010
OGGeo08	21.3	2.13	123.5	0.07	<10	50	0.79	10.65	0.88	19.50	60.6	94.8	79	10.10	8270
OGGeo08	19.40	2.34	124.0	0.07	10	60	0.77	11.15	0.95	20.2	63.3	98.1	85	10.20	8620
Target Range - Lower Bound	18.15	2.05	107.0	0.03	<10	60	0.61	9.44	0.82	16.75	56.7	87.2	75	8.68	7800
Upper Bound	22.2	2.53	131.0	0.11	30	110	0.89	11.55	1.02	20.5	69.3	107.0	93	10.70	8980
OREAS 905	0.51	0.75	33.1	0.39	<10	230	0.88	5.76	0.32	0.35	78.9	13.7	16	1.19	1490
OREAS 905	0.51	0.74	33.7	0.39	<10	230	0.99	5.91	0.32	0.34	76.4	13.9	17	1.12	1480
OREAS 905	0.50	0.80	32.9	0.39	<10	240	0.89	5.76	0.33	0.33	77.8	13.5	17	1.20	1515
OREAS 905	0.50	0.77	31.4	0.39	<10	230	0.96	5.61	0.33	0.33	77.7	12.8	16	1.22	1520
Target Range - Lower Bound	0.45	0.73	28.4	0.33	<10	200	0.78	5.16	0.29	0.30	69.7	12.4	15	1.05	1450
Upper Bound	0.58	0.91	35.0	0.45	20	300	1.08	6.32	0.38	0.38	85.3	15.4	20	1.39	1670
OREAS 920	0.09	2.36	4.5	<0.02	<10	80	0.68	0.67	0.31	0.07	74.4	15.0	40	1.83	111.0
OREAS 920	0.09	2.40	4.9	<0.02	<10	80	0.77	0.55	0.32	0.06	73.4	14.6	44	2.04	108.5
OREAS 920	0.10	2.24	4.4	<0.02	<10	70	0.68	0.69	0.30	0.07	71.8	14.4	40	1.85	111.0
OREAS 920	0.10	2.47	5.1	<0.02	<10	80	0.71	1.11	0.33	0.07	74.1	13.7	43	1.85	112.0
Target Range - Lower Bound	0.07	2.18	4.2	<0.02	<10	50	0.59	0.60	0.28	0.04	64.8	13.4	37	1.84	102.0
Upper Bound	0.12	2.68	5.3	0.04	20	110	0.87	0.76	0.37	0.08	79.2	16.6	48	2.36	118.0
BLANKS															
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	0.4
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	0.01	<0.01	0.01	<0.02	<0.1	<1	<0.05	0.2
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	0.01	<0.01	0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	0.2
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK	<0.01	<0.01	0.2	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
Target Range - Lower Bound	<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
Upper Bound	0.02	0.02	0.2	0.04	20	20	0.10	0.02	0.02	0.02	0.04	0.2	2	0.10	0.4

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS41 Nb ppm 0.05	ME-MS41 Ni ppm 0.2
STANDARDS															
MRGeo08	3.52	9.54	0.21	0.66	0.06	0.154	1.25	37.8	34.0	1.10	396	14.15	0.34	0.92	688
MRGeo08	3.52	9.92	0.14	0.70	0.06	0.157	1.25	37.5	32.0	1.12	405	13.75	0.32	0.68	694
MRGeo08	3.52	9.23	0.13	0.67	0.06	0.148	1.25	36.5	36.0	1.13	406	13.85	0.33	0.64	695
MRGeo08	3.48	9.04	0.17	0.65	0.06	0.154	1.22	36.4	31.3	1.08	388	13.80	0.33	0.66	675
Target Range - Lower Bound	3.22	8.73	0.07	0.64	0.04	0.137	1.12	33.2	29.6	1.03	378	13.10	0.30	0.79	622
Upper Bound	3.96	10.80	0.29	0.83	0.10	0.179	1.40	41.0	36.4	1.29	473	16.10	0.39	1.09	760
OGGeo08	5.06	7.84	0.21	0.82	0.49	1.415	1.05	28.2	29.4	0.92	374	859	0.29	0.93	8790
OGGeo08	4.92	8.32	0.14	0.90	0.50	1.340	1.04	27.3	29.6	0.91	373	852	0.30	0.95	8610
OGGeo08	4.95	8.12	0.22	0.73	0.49	1.400	1.03	28.4	30.1	0.90	365	836	0.29	0.99	8560
OGGeo08	4.94	8.02	0.13	0.73	0.48	1.410	1.03	29.0	27.3	0.92	374	862	0.28	0.91	8670
OGGeo08	5.19	8.19	0.16	0.87	0.49	1.450	1.09	30.2	28.8	0.99	406	918	0.31	0.92	9040
Target Range - Lower Bound	4.51	7.69	0.21	0.72	0.41	1.335	0.94	26.7	28.4	0.84	350	811	0.26	0.97	7760
Upper Bound	5.53	9.51	0.45	0.92	0.57	1.645	1.18	33.1	35.0	1.05	438	991	0.34	1.29	9480
OREAS 905	3.31	5.92	0.15	1.14	0.02	0.585	0.30	39.8	4.3	0.14	329	2.75	0.10	0.29	8.5
OREAS 905	3.28	6.06	0.09	1.07	0.01	0.577	0.29	39.1	4.8	0.14	324	2.92	0.08	0.25	9.8
OREAS 905	3.36	5.96	0.08	1.10	0.02	0.569	0.32	39.1	4.4	0.14	335	2.78	0.08	0.28	8.4
OREAS 905	3.30	5.83	0.11	1.12	0.01	0.571	0.30	39.8	4.5	0.14	324	2.84	0.08	0.30	8.2
Target Range - Lower Bound	3.14	5.45	<0.05	1.02	<0.01	0.517	0.28	34.7	4.0	0.13	310	2.65	0.07	0.19	7.8
Upper Bound	3.86	6.77	0.22	1.29	0.04	0.643	0.36	42.9	5.2	0.19	390	3.35	0.12	0.43	10.0
OREAS 920	3.56	6.65	0.09	0.39	<0.01	0.031	0.41	34.9	20.3	1.04	497	0.32	0.03	0.27	39.1
OREAS 920	3.60	6.59	0.11	0.49	0.01	0.033	0.44	37.1	21.0	1.04	498	0.36	0.02	0.36	39.4
OREAS 920	3.42	6.32	0.06	0.48	<0.01	0.031	0.39	36.0	19.2	1.01	486	0.35	0.02	0.29	37.9
OREAS 920	3.63	6.19	0.08	0.39	<0.01	0.029	0.42	36.7	20.2	1.10	528	0.34	0.02	0.24	36.0
Target Range - Lower Bound	3.26	6.12	<0.05	0.48	<0.01	0.019	0.37	33.3	19.0	0.93	454	0.26	<0.01	0.22	34.4
Upper Bound	4.00	7.60	0.22	0.63	0.02	0.043	0.47	41.1	23.4	1.15	566	0.50	0.02	0.46	42.4
BLANKS															
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
Target Range - Lower Bound	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
Upper Bound	0.02	0.10	0.10	0.04	0.02	0.010	0.02	0.4	0.2	0.02	10	0.10	0.02	0.10	0.4

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005	ME-MS41 Tl ppm 0.02
STANDARDS																
MRGeo08		960	1060	145.0	0.008	0.30	2.94	7.4	1.0	3.4	81.2	0.01	0.02	22.0	0.357	0.83
MRGeo08		990	1075	142.0	0.008	0.30	2.89	7.4	0.8	3.3	80.8	0.01	0.02	21.2	0.363	0.79
MRGeo08		990	1075	142.0	0.006	0.30	2.83	7.5	0.7	3.2	80.4	0.01	0.03	21.8	0.371	0.80
MRGeo08		980	1015	137.0	0.006	0.31	2.83	6.8	1.2	3.2	80.9	0.01	0.02	20.5	0.358	0.77
Target Range - Lower Bound		900	959	132.0	0.006	0.27	2.80	6.7	0.6	2.8	72.1	<0.01	<0.01	19.1	0.338	0.64
Upper Bound		1130	1175	162.0	0.010	0.35	3.90	8.4	1.5	4.0	88.5	0.03	0.04	23.7	0.424	0.92
OGGeo08		770	7050	119.5	1.325	2.68	17.85	6.0	10.7	13.1	63.0	0.01	0.15	15.2	0.307	1.26
OGGeo08		760	7080	115.5	1.350	2.65	18.25	6.3	9.9	12.3	62.5	<0.01	0.16	15.9	0.295	1.40
OGGeo08		750	6850	118.5	1.360	2.60	18.50	6.0	10.1	12.8	63.8	<0.01	0.14	15.9	0.297	1.32
OGGeo08		760	7130	119.5	1.390	2.67	19.05	5.8	10.6	12.8	63.4	<0.01	0.15	16.4	0.304	1.27
OGGeo08		810	7310	120.5	1.410	2.92	18.40	5.8	10.1	13.4	66.6	0.01	0.15	16.7	0.318	1.37
Target Range - Lower Bound		700	6520	109.5	1.295	2.51	17.70	5.6	9.7	12.0	59.6	<0.01	0.14	14.8	0.279	1.14
Upper Bound		880	7970	134.5	1.585	3.09	24.1	7.0	12.3	15.1	73.2	0.03	0.20	18.6	0.353	1.58
OREAS 905		230	16.0	18.0	<0.001	0.07	0.95	1.7	2.4	1.2	12.5	<0.01	0.05	8.5	0.019	0.11
OREAS 905		220	17.0	17.1	<0.001	0.06	0.94	1.6	2.2	1.2	12.4	<0.01	0.07	8.9	0.018	0.11
OREAS 905		230	16.1	18.3	<0.001	0.07	0.93	1.6	2.4	1.2	12.3	<0.01	0.07	8.9	0.020	0.10
OREAS 905		240	16.3	17.9	<0.001	0.06	0.95	1.6	2.3	1.2	13.2	<0.01	0.05	8.3	0.020	0.11
Target Range - Lower Bound			14.4	16.3	<0.001	0.04	0.83	1.5	1.8	0.8	10.9	<0.01	0.04	7.4	0.008	0.06
Upper Bound			18.0	20.1	0.002	0.09	1.23	2.0	2.8	1.7	13.7	0.02	0.09	9.4	0.030	0.16
OREAS 920		700	20.4	23.1	<0.001	0.03	0.51	2.9	0.2	1.0	16.6	0.01	0.02	15.5	0.115	0.14
OREAS 920		690	20.4	25.2	0.001	0.02	0.49	2.9	0.4	1.1	16.9	0.01	0.02	15.2	0.138	0.16
OREAS 920		670	20.2	22.6	<0.001	0.03	0.50	2.6	0.4	1.0	16.7	0.01	0.02	15.1	0.108	0.14
OREAS 920		730	20.1	22.6	<0.001	0.03	0.52	2.6	0.4	1.0	16.5	0.01	0.02	15.2	0.122	0.15
Target Range - Lower Bound			19.2	22.2	<0.001	<0.01	0.45	2.5	<0.2	0.6	15.0	<0.01	<0.01	13.6	0.106	0.09
Upper Bound			23.9	27.4	0.002	0.05	0.77	3.3	0.7	1.6	18.8	0.02	0.04	17.0	0.140	0.20
BLANKS																
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
Target Range - Lower Bound		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
Upper Bound		20	0.4	0.2	0.002	0.02	0.10	0.2	0.4	0.4	0.4	0.02	0.02	0.4	0.010	0.04

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
STANDARDS							
MRGeo08		5.47	96	2.58	19.70	747	22.0
MRGeo08		5.47	98	2.47	19.65	771	22.0
MRGeo08		5.61	98	2.58	19.10	771	21.5
MRGeo08		5.21	95	2.60	18.80	758	20.5
Target Range - Lower Bound		4.93	90	2.44	17.50	708	18.1
Upper Bound		6.13	112	3.42	21.5	870	25.7
OGGeo08		4.68	77	2.91	16.10	6750	23.1
OGGeo08		4.97	76	2.89	16.35	6870	24.7
OGGeo08		4.46	76	2.82	16.25	6560	24.0
OGGeo08		4.54	77	2.78	16.45	6790	23.4
OGGeo08		4.90	83	2.77	17.00	7340	25.7
Target Range - Lower Bound		4.45	70	2.58	15.35	6500	19.5
Upper Bound		5.55	88	3.60	18.85	7950	27.5
OREAS 905		2.23	5	0.52	7.30	61	44.7
OREAS 905		2.26	5	0.47	7.07	63	43.4
OREAS 905		2.31	5	0.49	7.27	64	43.8
OREAS 905		2.27	5	0.58	6.77	64	42.8
Target Range - Lower Bound		1.92	4	0.41	6.32	56	39.9
Upper Bound		2.46	8	0.73	7.84	72	55.1
OREAS 920		2.18	24	0.46	17.90	102	15.2
OREAS 920		1.95	25	0.41	18.50	101	21.3
OREAS 920		1.89	23	0.44	16.90	99	20.0
OREAS 920		2.01	26	0.40	17.00	113	15.0
Target Range - Lower Bound		1.89	21	0.31	15.80	93	17.6
Upper Bound		2.42	28	0.61	19.40	119	25.0
BLANKS							
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5
Target Range - Lower Bound		<0.05	<1	<0.05	<0.05	<2	<0.5
Upper Bound		0.10	2	0.10	0.10	4	1.0

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method / Analyte / Units / LOD	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05	ME-MS41 Cu ppm 0.2
							DUPLICATES									
2018KNS025		0.70	0.25	9.1	<0.02	<10	90	0.12	0.83	0.20	0.71	7.95	2.5	7	0.20	22.5
DUP		0.74	0.25	10.1	<0.02	<10	90	0.13	0.88	0.21	0.73	8.71	2.7	7	0.22	23.8
Target Range - Lower Bound		0.67	0.23	9.0	<0.02	<10	70	0.07	0.80	0.18	0.67	7.89	2.4	6	0.15	22.1
Upper Bound		0.77	0.27	10.2	0.04	20	110	0.18	0.91	0.23	0.77	8.77	2.8	8	0.27	24.2
2018KTS007		0.47	0.35	10.7	<0.02	<10	30	0.08	0.23	0.23	0.18	5.71	2.2	8	0.20	10.9
DUP		0.49	0.36	11.0	<0.02	<10	30	0.08	0.25	0.24	0.18	6.05	2.3	8	0.21	11.5
Target Range - Lower Bound		0.45	0.33	10.2	<0.02	<10	20	<0.05	0.22	0.21	0.16	5.57	2.0	7	0.14	10.6
Upper Bound		0.51	0.38	11.5	0.04	20	40	0.10	0.26	0.26	0.20	6.19	2.5	9	0.27	11.8
2018KTS045		0.39	1.27	14.6	<0.02	<10	60	0.32	0.32	0.23	0.26	14.40	8.2	30	0.81	14.4
DUP		0.39	1.26	14.1	<0.02	<10	60	0.25	0.31	0.24	0.26	14.90	8.0	30	0.83	14.4
Target Range - Lower Bound		0.36	1.19	13.5	<0.02	<10	50	0.22	0.29	0.21	0.24	13.90	7.6	28	0.73	13.7
Upper Bound		0.42	1.34	15.2	0.04	20	70	0.35	0.34	0.26	0.28	15.40	8.6	33	0.91	15.1
2018KTS083		2.79	0.27	11.5	<0.02	<10	160	0.19	1.43	0.28	1.50	6.89	6.0	4	0.27	41.0
DUP		2.74	0.28	11.1	<0.02	<10	160	0.16	1.43	0.28	1.45	6.90	6.0	4	0.28	41.8
Target Range - Lower Bound		2.62	0.25	10.6	<0.02	<10	140	0.12	1.35	0.26	1.39	6.53	5.6	3	0.21	39.8
Upper Bound		2.91	0.30	12.0	0.04	20	180	0.23	1.51	0.30	1.56	7.26	6.4	5	0.34	43.0
2018KTS106		0.66	0.31	26.0	<0.02	<10	20	0.14	0.77	1.04	0.63	14.00	3.3	13	0.24	36.1
DUP		0.66	0.31	26.0	<0.02	<10	20	0.14	0.78	1.06	0.67	14.10	3.3	13	0.25	35.7
Target Range - Lower Bound		0.62	0.28	24.6	<0.02	<10	<10	0.08	0.73	0.99	0.61	13.35	3.0	11	0.18	34.4
Upper Bound		0.70	0.34	27.4	0.04	20	30	0.20	0.82	1.11	0.69	14.75	3.6	15	0.31	37.4
2018KBS187		0.87	0.27	9.1	<0.02	<10	270	0.20	1.80	0.32	1.12	8.86	6.2	8	0.21	55.9
DUP		0.86	0.27	9.0	<0.02	<10	260	0.20	1.78	0.32	1.14	9.04	6.3	8	0.21	56.3
Target Range - Lower Bound		0.81	0.25	8.5	<0.02	<10	240	0.14	1.69	0.29	1.06	8.48	5.8	7	0.15	53.9
Upper Bound		0.92	0.29	9.6	0.04	20	290	0.26	1.89	0.35	1.20	9.42	6.7	9	0.27	58.3
ORIGINAL		0.50	1.55	8.3	0.27	<10	190	0.30	0.17	2.12	0.06	16.75	11.2	4	1.41	2180
DUP		0.47	1.56	8.3	0.16	<10	190	0.25	0.17	2.11	0.06	16.40	10.9	4	1.39	2170
Target Range - Lower Bound		0.45	1.47	7.8	0.18	<10	170	0.21	0.15	2.00	0.05	15.75	10.4	3	1.28	2100
Upper Bound		0.52	1.64	8.8	0.25	20	210	0.34	0.19	2.23	0.07	17.40	11.7	5	1.52	2250
ORIGINAL		6.65	0.36	128.0	0.87	<10	30	0.06	35.9	0.15	1.96	22.6	6.8	268	0.89	208
DUP		6.65	0.37	129.0	1.00	<10	10	<0.05	37.0	0.15	1.89	22.4	6.2	273	0.87	211
Target Range - Lower Bound		6.31	0.34	122.0	0.87	<10	<10	<0.05	34.6	0.13	1.82	21.4	6.1	256	0.79	202
Upper Bound		6.99	0.39	135.0	1.00	20	30	0.10	38.3	0.17	2.03	23.6	6.9	285	0.97	217

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOD	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
DUPLICATES																
2018KNS025		0.41	1.77	0.09	<0.02	0.11	0.058	0.05	7.4	1.2	0.04	147	0.31	0.01	0.27	20.4
DUP		0.41	1.92	0.10	<0.02	0.13	0.063	0.05	8.2	1.2	0.04	145	0.38	0.01	0.30	22.1
Target Range - Lower Bound		0.38	1.70	<0.05	<0.02	0.10	0.052	0.04	7.2	1.0	0.03	134	0.28	<0.01	0.22	20.0
Upper Bound		0.44	1.99	0.10	0.04	0.14	0.069	0.06	8.4	1.4	0.05	158	0.41	0.02	0.35	22.5
2018KTS007		0.54	1.64	<0.05	<0.02	0.15	0.021	0.03	2.6	1.5	0.05	63	0.28	0.01	0.34	8.8
DUP		0.57	1.70	<0.05	<0.02	0.14	0.020	0.03	2.7	1.5	0.05	66	0.30	0.01	0.36	9.1
Target Range - Lower Bound		0.52	1.54	<0.05	<0.02	0.12	0.014	0.02	2.3	1.3	0.04	56	0.23	<0.01	0.28	8.3
Upper Bound		0.59	1.80	0.10	0.04	0.17	0.027	0.04	3.0	1.7	0.06	73	0.35	0.02	0.42	9.6
2018KTS045		1.95	5.54	<0.05	<0.02	0.10	0.031	0.05	6.9	13.5	0.22	301	0.51	<0.01	1.25	20.6
DUP		1.96	5.62	<0.05	<0.02	0.10	0.029	0.05	6.9	11.4	0.22	295	0.51	<0.01	1.28	20.2
Target Range - Lower Bound		1.85	5.25	<0.05	<0.02	0.08	0.024	0.04	6.4	11.7	0.20	278	0.43	<0.01	1.15	19.2
Upper Bound		2.06	5.91	0.10	0.04	0.12	0.037	0.06	7.4	13.2	0.24	318	0.59	0.02	1.38	21.6
2018KTS083		0.47	1.53	0.05	<0.02	0.48	0.108	0.11	3.6	0.7	0.04	506	0.84	<0.01	0.14	28.6
DUP		0.47	1.52	0.05	<0.02	0.46	0.102	0.11	3.7	0.7	0.05	489	0.84	<0.01	0.13	28.6
Target Range - Lower Bound		0.44	1.40	<0.05	<0.02	0.42	0.095	0.09	3.3	0.6	0.03	468	0.75	<0.01	0.08	27.0
Upper Bound		0.50	1.65	0.10	0.04	0.52	0.115	0.13	4.0	0.8	0.06	527	0.93	0.02	0.19	30.2
2018KTS106		0.92	1.19	0.08	0.02	0.34	0.048	0.04	9.7	1.2	0.10	19	1.91	<0.01	0.32	21.4
DUP		0.94	1.19	0.07	0.02	0.35	0.049	0.04	9.7	1.2	0.10	19	1.95	<0.01	0.34	21.7
Target Range - Lower Bound		0.87	1.08	<0.05	<0.02	0.31	0.041	0.03	9.0	1.0	0.09	13	1.78	<0.01	0.26	20.3
Upper Bound		0.99	1.30	0.10	0.04	0.38	0.056	0.05	10.4	1.4	0.12	25	2.08	0.02	0.40	22.8
2018KBS187		0.42	1.54	<0.05	<0.02	0.21	0.108	0.05	7.1	0.7	0.04	63	0.39	<0.01	0.19	36.8
DUP		0.42	1.56	<0.05	<0.02	0.23	0.113	0.05	7.3	0.6	0.04	66	0.38	<0.01	0.19	36.5
Target Range - Lower Bound		0.39	1.42	<0.05	<0.02	0.19	0.100	0.04	6.6	0.5	0.03	56	0.32	<0.01	0.13	34.6
Upper Bound		0.45	1.68	0.10	0.04	0.25	0.121	0.06	7.8	0.8	0.05	73	0.45	0.02	0.25	38.7
ORIGINAL		3.53	6.06	0.08	0.07	0.04	0.048	0.32	9.6	8.8	1.04	889	6.51	0.02	<0.05	5.6
DUP		3.53	5.87	0.08	0.07	0.03	0.043	0.33	9.5	9.0	1.04	888	7.25	0.02	<0.05	5.4
Target Range - Lower Bound		3.34	5.62	<0.05	0.05	0.02	0.038	0.30	8.9	8.4	0.98	839	6.49	<0.01	<0.05	5.0
Upper Bound		3.72	6.31	0.10	0.09	0.05	0.053	0.35	10.2	9.4	1.10	938	7.27	0.03	0.10	6.0
ORIGINAL		10.90	1.48	0.14	0.24	0.01	0.329	0.11	11.3	2.2	0.10	205	1.90	0.02	0.17	9.8
DUP		11.25	1.32	0.12	0.25	0.02	0.326	0.11	10.8	2.0	0.10	212	1.88	0.02	0.15	8.7
Target Range - Lower Bound		10.50	1.28	0.07	0.21	<0.01	0.306	0.09	10.3	1.9	0.09	193	1.75	<0.01	0.10	8.6
Upper Bound		11.65	1.52	0.19	0.28	0.02	0.349	0.13	11.8	2.3	0.12	224	2.03	0.03	0.22	9.9

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

ALS

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005	ME-MS41 Tl ppm 0.02
DUPLICATES																
2018KNS025		430	58.5	2.7	0.001	0.05	0.42	0.3	1.2	1.5	20.3	<0.01	0.02	<0.2	0.017	0.03
DUP		450	61.6	2.9	0.001	0.05	0.48	0.3	1.3	1.6	22.0	<0.01	0.03	<0.2	0.018	0.04
Target Range - Lower Bound		410	56.8	2.6	<0.001	0.04	0.37	0.2	1.0	1.3	19.9	<0.01	<0.01	<0.2	0.012	<0.02
Upper Bound		470	63.3	3.0	0.002	0.06	0.53	0.4	1.5	1.8	22.4	0.02	0.04	0.4	0.023	0.04
2018KTS007		500	13.4	1.9	0.003	0.06	0.34	0.2	0.6	0.4	19.5	<0.01	0.03	<0.2	0.018	0.02
DUP		520	14.0	2.0	0.002	0.07	0.36	0.2	0.8	0.4	20.1	<0.01	0.03	<0.2	0.018	0.02
Target Range - Lower Bound		470	12.8	1.8	<0.001	0.05	0.27	<0.1	0.5	<0.2	18.6	<0.01	0.02	<0.2	0.012	<0.02
Upper Bound		550	14.6	2.1	0.004	0.08	0.43	0.3	0.9	0.6	21.0	0.02	0.04	0.4	0.024	0.04
2018KTS045		660	17.7	6.6	<0.001	0.03	0.35	1.3	0.7	0.7	15.6	<0.01	0.05	0.7	0.061	0.06
DUP		670	17.3	6.7	<0.001	0.03	0.34	1.3	0.6	0.7	16.0	<0.01	0.05	0.8	0.064	0.06
Target Range - Lower Bound		620	16.4	6.2	<0.001	0.02	0.27	1.1	0.4	0.5	14.8	<0.01	0.04	0.5	0.054	0.04
Upper Bound		710	18.6	7.1	0.002	0.04	0.42	1.5	0.9	0.9	16.8	0.02	0.06	1.0	0.071	0.08
2018KTS083		1370	98.4	4.6	0.002	0.10	1.38	0.3	2.5	2.8	22.3	<0.01	0.05	<0.2	0.008	0.07
DUP		1350	98.4	4.7	0.002	0.10	1.31	0.2	2.6	2.8	22.4	<0.01	0.06	<0.2	0.008	0.07
Target Range - Lower Bound		1280	93.3	4.3	<0.001	0.09	1.19	<0.1	2.2	2.5	21.0	<0.01	0.04	<0.2	<0.005	0.04
Upper Bound		1440	103.5	5.0	0.003	0.12	1.50	0.4	2.9	3.1	23.7	0.02	0.07	0.4	0.010	0.10
2018KTS106		820	46.8	1.9	0.001	0.28	1.26	1.0	2.1	1.6	14.3	<0.01	0.08	<0.2	0.010	0.04
DUP		840	47.3	1.9	0.001	0.28	1.29	1.1	2.4	1.6	14.6	<0.01	0.08	<0.2	0.011	0.04
Target Range - Lower Bound		780	44.5	1.7	<0.001	0.26	1.13	0.9	1.9	1.3	13.5	<0.01	0.07	<0.2	<0.005	<0.02
Upper Bound		880	49.6	2.1	0.002	0.30	1.42	1.2	2.6	1.9	15.4	0.02	0.09	0.4	0.016	0.06
2018KBS187		400	111.5	2.6	0.003	0.06	0.62	0.2	2.0	3.0	47.9	<0.01	0.05	<0.2	0.009	0.02
DUP		400	110.5	2.6	0.003	0.06	0.62	0.3	1.9	2.9	48.2	<0.01	0.04	<0.2	0.009	0.02
Target Range - Lower Bound		370	105.5	2.4	0.002	0.05	0.52	<0.1	1.7	2.6	45.4	<0.01	0.03	<0.2	<0.005	<0.02
Upper Bound		430	117.0	2.8	0.004	0.07	0.72	0.4	2.2	3.3	50.7	0.02	0.06	0.4	0.010	0.04
ORIGINAL		1260	4.0	17.2	0.028	0.48	1.11	5.9	5.4	0.3	149.0	<0.01	0.06	2.1	0.006	0.15
DUP		1270	3.8	17.1	0.035	0.48	1.08	5.8	5.1	0.3	147.5	<0.01	0.05	2.0	0.007	0.14
Target Range - Lower Bound		1190	3.5	16.2	0.029	0.45	0.96	5.5	4.8	<0.2	140.5	<0.01	0.04	1.7	<0.005	0.11
Upper Bound		1340	4.3	18.1	0.034	0.51	1.23	6.2	5.7	0.4	156.0	0.02	0.07	2.4	0.010	0.18
ORIGINAL		260	193.0	4.0	0.002	>10.0	2.66	1.1	27.1	2.2	8.2	<0.01	12.10	2.8	0.008	0.98
DUP		270	228	3.8	0.002	>10.0	2.66	1.0	25.6	2.2	8.1	<0.01	11.70	2.8	0.008	1.01
Target Range - Lower Bound		240	200.0	3.6	<0.001	9.49	2.41	0.9	24.8	1.9	7.5	<0.01	11.30	2.5	<0.005	0.90
Upper Bound		290	221	4.2	0.003	10.00	2.91	1.2	27.9	2.5	8.8	0.02	12.50	3.1	0.010	1.09

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

Sample Description	Method Analyte Units LOD	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
DUPLICATES							
2018KNS025		0.16	9	0.08	0.97	24	<0.5
DUP		0.17	10	0.08	1.03	25	<0.5
Target Range - Lower Bound		0.11	8	<0.05	0.90	21	<0.5
Upper Bound		0.22	11	0.10	1.10	28	1.0
2018KTS007		0.13	12	0.06	0.83	45	<0.5
DUP		0.15	12	0.06	0.86	48	<0.5
Target Range - Lower Bound		0.08	10	<0.05	0.75	42	<0.5
Upper Bound		0.20	14	0.10	0.94	51	1.0
2018KTS045		0.31	37	0.11	1.76	63	<0.5
DUP		0.30	38	0.10	1.88	64	<0.5
Target Range - Lower Bound		0.24	35	<0.05	1.68	58	<0.5
Upper Bound		0.37	40	0.16	1.96	69	1.0
2018KTS083		0.26	8	0.12	1.33	77	<0.5
DUP		0.24	8	0.12	1.32	76	<0.5
Target Range - Lower Bound		0.19	7	0.06	1.21	71	<0.5
Upper Bound		0.31	9	0.18	1.44	82	1.0
2018KTS106		0.63	9	0.11	4.46	24	0.8
DUP		0.63	9	0.11	4.51	24	0.8
Target Range - Lower Bound		0.55	8	<0.05	4.21	21	<0.5
Upper Bound		0.71	10	0.17	4.76	27	1.0
2018KBS187		0.18	7	0.09	1.64	35	<0.5
DUP		0.20	7	0.09	1.64	35	<0.5
Target Range - Lower Bound		0.13	6	<0.05	1.51	31	<0.5
Upper Bound		0.25	8	0.10	1.77	39	1.0
ORIGINAL		0.64	77	0.24	7.73	38	1.4
DUP		0.64	77	0.23	7.57	38	1.4
Target Range - Lower Bound		0.56	72	0.17	7.22	34	0.8
Upper Bound		0.72	82	0.30	8.08	42	2.0
ORIGINAL		0.58	3	4.94	2.86	557	11.0
DUP		0.62	3	4.93	2.72	568	10.7
Target Range - Lower Bound		0.52	2	4.51	2.60	532	9.5
Upper Bound		0.68	4	5.36	2.98	593	12.2

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 31-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18197526

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
Applies to Method: ME-MS41

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.
Applies to Method: LOG-22 SCR-41 WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Applies to Method: ME-MS41

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

CERTIFICATE SD18196580

Project: 99421

This report is for 31 Rock samples submitted to our lab in Sudbury, ON, Canada on 10-AUG-2018.

The following have access to data associated with this certificate:

KRIS RAFFLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18196580

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
2018KBP031		1.33	0.014	0.003	0.019	<0.001	<0.005	0.001	1.1	80.5	91.6
2018KBP032		0.21	0.007	0.008	<0.002	<0.001	<0.005	0.001	<0.2		87.7
2018KBP033		0.11	0.424	<0.002	0.030	0.029	<0.005	0.001	<0.2		
2018KBP034		0.02	0.825	<0.002	0.046	0.034	<0.005	<0.001	<0.2		
2018KBP035		1.67	0.006	0.016	0.008	0.004	<0.005	<0.001	<0.2		
2018KBP036		1.10	0.004	0.005	<0.002	<0.001	<0.005	0.001	<0.2		
2018KBP037		3.44	0.191	0.002	0.019	<0.001	<0.005	0.001	<0.2		
2018KBP038		0.18	0.004	0.018	0.007	0.001	0.013	0.008	<0.2		
2018KBP039		0.62	0.005	0.014	0.012	<0.001	0.010	0.008	<0.2		
2018KBP040		1.95	2.02	0.022	0.158	0.035	<0.005	0.001	13.1		
2018KBP041		0.31	0.070	0.011	0.011	0.010	<0.005	<0.001	1.3		
2018KBP042		0.11	0.611	0.010	0.095	0.026	<0.005	<0.001	4.1		
2018KBP043		0.09	0.017	0.002	<0.002	<0.001	<0.005	0.001	<0.2		
2018KBP044		1.70	0.007	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
2018KBP045		1.09	0.009	0.053	0.009	<0.001	<0.005	0.001	0.6		
2018KBP046		0.41	0.007	0.041	0.009	<0.001	<0.005	0.001	0.2		
2018KBP047		1.71	0.005	0.043	0.008	<0.001	0.009	0.009	<0.2		
2018KBP048		0.46	<0.002	0.010	0.002	<0.001	<0.005	<0.001	<0.2		
2018KBP049		1.40	0.037	0.009	0.005	<0.001	<0.005	<0.001	<0.2		
2018KBP050		0.18	0.030	0.018	0.006	<0.001	<0.005	0.001	<0.2		
2018KBP051		0.86	0.065	0.025	0.010	<0.001	<0.005	0.001	0.2		
2018KBP052		0.74	0.035	0.015	0.010	0.001	<0.005	<0.001	0.2		
2018KBP053		1.38	0.005	0.016	0.005	<0.001	<0.005	<0.001	<0.2		
2018KBP054		0.10	<0.002	0.002	<0.002	<0.001	<0.005	0.001	<0.2		
2018KBP055		0.12	<0.002	0.009	<0.002	<0.001	<0.005	<0.001	0.2		
2018KBP056		0.16	0.007	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
2018KBP057		0.18	0.007	0.033	0.003	<0.001	<0.005	<0.001	<0.2		
2018KBP058		1.68	0.006	0.043	0.005	<0.001	<0.005	0.001	0.2		
2018KBP059		0.10	<0.002	0.047	0.002	<0.001	<0.005	0.001	<0.2		
2018KBP060		1.19	0.005	0.007	0.009	<0.001	<0.005	0.001	<0.2		
2018KBP061		3.35	0.006	0.012	0.004	0.366	<0.005	0.001	<0.2		

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18196580

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:	CRU-31	CRU-QC	LOG-22	PUL-31
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Ag-AA45	ME-ICP81	PGM-ICP23

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

QC CERTIFICATE SD18196580

Project: 99421

This report is for 31 Rock samples submitted to our lab in Sudbury, ON, Canada on 10-AUG-2018.

The following have access to data associated with this certificate:

KRIS RAFFLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18196580

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
				STANDARDS				
AMIS0324		0.324	3.11	5.42				
AMIS0324		0.310	3.02	5.33				
Target Range - Lower Bound		0.304	3.02	5.30				
Upper Bound		0.341	3.34	5.87				
GBM906-1								22.3
Target Range - Lower Bound								20.8
Upper Bound								24.4
GPP-14					0.909	0.501	0.483	
Target Range - Lower Bound					0.853	0.468	0.451	
Upper Bound					0.965	0.538	0.511	
JK-17					2.01	<0.005	0.002	
Target Range - Lower Bound					1.875			
Upper Bound					2.12			
MRGeo08								4.3
Target Range - Lower Bound								3.9
Upper Bound								5.0
OGGeo08								20.0
Target Range - Lower Bound								18.6
Upper Bound								21.8
OREAS 503c					0.705	<0.005	0.009	
Target Range - Lower Bound								
Upper Bound								
OREAS-132a								54.6
Target Range - Lower Bound								51.5
Upper Bound								59.7
PK2					4.95	4.75	5.97	
Target Range - Lower Bound					4.50	4.46	5.56	
Upper Bound					5.07	5.04	6.27	
SU-1b		0.067	1.180	1.995				
SU-1b		0.065	1.155	1.955				
Target Range - Lower Bound		0.062	1.125	1.855				
Upper Bound		0.073	1.245	2.05				

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18196580

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
BLANKS								
BLANK								<0.2
BLANK								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4
BLANK		0.002	<0.002	<0.002				
BLANK		<0.002	0.003	<0.002				
Target Range - Lower Bound		<0.002	<0.002	<0.002				
Upper Bound		0.004	0.004	0.004				
BLANK					0.002	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
DUPLICATES								
ORIGINAL					0.042	0.084	0.151	
DUP					0.040	0.100	0.146	
Target Range - Lower Bound					0.038	0.082	0.140	
Upper Bound					0.044	0.102	0.157	
ORIGINAL		0.005	0.051	0.028				
DUP		0.004	0.052	0.028				
Target Range - Lower Bound		<0.002	0.048	0.025				
Upper Bound		0.007	0.055	0.031				
ORIGINAL					<0.001	<0.005	0.002	
DUP					<0.001	0.005	0.004	
Target Range - Lower Bound					<0.001	<0.005	0.002	
Upper Bound					0.002	0.010	0.004	
2018KBP044		0.007	0.003	<0.002				
DUP		0.008	0.010	<0.002				
Target Range - Lower Bound		0.005	0.004	<0.002				
Upper Bound		0.010	0.009	0.004				
2018KBP047					<0.001	0.009	0.009	
DUP					0.001	0.008	0.009	
Target Range - Lower Bound					<0.001	<0.005	0.008	
Upper Bound					0.002	0.010	0.010	

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18196580

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
					DUPLICATES			
2018KBP051								0.2
DUP								0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4
ORIGINAL								13.7
DUP								12.1
Target Range - Lower Bound								12.1
Upper Bound								13.7

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 29-AUG-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18196580

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:	CRU-31	CRU-QC	LOG-22	PUL-31
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Ag-AA45	ME-ICP81	PGM-ICP23

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

CERTIFICATE SD18249803

Project: 99421

P.O. No.: 99421

This report is for 12 Rock samples submitted to our lab in Sudbury, ON, Canada on 5-OCT-2018.

The following have access to data associated with this certificate:

KRIS RAFFLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18249803

Sample Description	WEI-21	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
Method / Analyte	Recvd Wt.	Al2O3	As	CaO	Co	Cr	Cu	Fe	Fe2O3	K	MgO	MnO	Ni	Pb	S
Units	kg	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LOD	0.02	0.01	0.01	0.05	0.002	0.01	0.002	0.05	0.05	0.1	0.01	0.01	0.002	0.01	0.01
18KRP601	0.55	15.85	0.27	8.09	0.190	<0.01	0.002	0.86	1.23	0.3	0.33	0.07	0.018	<0.01	0.48
18KRP602	0.66	13.10	0.04	12.60	0.031	<0.01	0.004	2.30	3.28	0.4	3.11	0.70	0.010	<0.01	0.26
18KRP603	0.89	15.60	0.03	1.72	0.018	<0.01	0.006	1.34	1.91	0.8	2.19	0.07	0.003	<0.01	0.05
18KRP604	0.89	13.75	0.01	8.83	0.016	<0.01	0.107	1.78	2.54	0.9	3.59	0.46	<0.002	<0.01	0.35
18KRP605	0.64	14.60	0.04	11.20	0.039	<0.01	0.004	0.64	0.92	0.3	0.52	0.13	0.005	<0.01	0.47
18KRP606	0.76	10.65	0.03	0.25	0.012	0.01	0.062	12.15	17.40	0.4	6.65	0.34	0.005	<0.01	0.09
18KRP607	1.21	11.65	<0.01	16.35	0.015	<0.01	0.003	0.95	1.35	1.2	0.92	0.12	<0.002	<0.01	0.30
18MAP075	0.60	15.30	0.56	7.08	0.401	<0.01	0.002	1.14	1.63	0.4	0.12	0.06	0.044	<0.01	1.20
18MAP076	1.22	16.40	0.02	6.88	0.026	<0.01	0.004	0.74	1.05	0.2	0.23	0.11	<0.002	<0.01	0.30
18MAP077	1.23	15.15	0.06	7.95	0.036	<0.01	0.026	0.69	0.99	0.6	0.86	0.08	0.003	<0.01	0.18
18MAP078	1.12	15.30	0.01	10.95	0.004	<0.01	<0.002	0.97	1.39	0.2	0.69	0.12	<0.002	<0.01	0.02
18MAP079	0.90	10.80	0.01	0.46	0.002	<0.01	0.004	0.74	1.05	0.3	0.40	0.02	<0.002	<0.01	0.02

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18249803

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 SiO2 % 0.2	ME-ICP81 TiO2 % 0.01	ME-ICP81 Zn % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
18KRP601		58.8	0.58	<0.002	<0.001	<0.005	<0.001	<0.2	86.4	93.8
18KRP602		46.8	0.68	<0.002	<0.001	<0.005	<0.001	<0.2		91.6
18KRP603		67.8	0.61	<0.002	<0.001	<0.005	<0.001	0.7		
18KRP604		50.5	0.38	0.002	0.004	<0.005	<0.001	0.5		
18KRP605		53.9	0.41	<0.002	0.004	<0.005	0.001	0.3		
18KRP606		56.7	0.68	0.003	0.038	<0.005	<0.001	<0.2		
18KRP607		50.9	0.33	<0.002	0.001	<0.005	<0.001	<0.2		
18MAP075		60.5	0.48	<0.002	0.004	<0.005	<0.001	0.4		
18MAP076		59.0	0.44	<0.002	0.001	<0.005	<0.001	<0.2		
18MAP077		59.5	0.43	<0.002	<0.001	<0.005	<0.001	0.2		
18MAP078		55.4	0.61	<0.002	<0.001	<0.005	<0.001	<0.2		
18MAP079		80.4	0.30	<0.002	<0.001	<0.005	<0.001	<0.2		

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

CERTIFICATE OF ANALYSIS SD18249803

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:	CRU-31	CRU-QC	LOG-22	PUL-31
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Ag-AA45	ME-ICP81	PGM-ICP23

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

QC CERTIFICATE SD18249803

Project: 99421

P.O. No.: 99421

This report is for 12 Rock samples submitted to our lab in Sudbury, ON, Canada on 5-OCT-2018.

The following have access to data associated with this certificate:

KRIS RAFFLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18249803

Sample Description / Method	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
Analyte	Al2O3	As	CaO	Co	Cr	Cu	Fe	Fe2O3	K	MgO	MnO	Ni	Pb	S	SiO2
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LOD	0.01	0.01	0.05	0.002	0.01	0.002	0.05	0.05	0.1	0.01	0.01	0.002	0.01	0.01	0.2
STANDARDS															
AMIS0324	1.04	0.07	1.04	0.315	0.28	3.09	25.7	36.8	0.1	6.91	0.04	5.38	0.02	25.9	15.6
Target Range - Lower Bound	0.98	0.04	0.98	0.304	0.26	3.02	24.6	35.2	<0.1	6.67	0.02	5.30	<0.01	25.4	14.5
Upper Bound	1.15	0.09	1.23	0.341	0.32	3.34	28.4	40.6	0.3	7.69	0.06	5.87	0.05	29.2	17.1
AMIS0486															
Target Range - Lower Bound															
Upper Bound															
JK-17															
Target Range - Lower Bound															
Upper Bound															
MRGeo08															
Target Range - Lower Bound															
Upper Bound															
OREAS 503c															
Target Range - Lower Bound															
Upper Bound															
PK2															
Target Range - Lower Bound															
Upper Bound															
SU-1b	7.90	<0.01	2.98	0.064	0.03	1.140	24.2	34.6	0.6	2.77	0.09	1.885	<0.01	13.70	32.5
Target Range - Lower Bound	7.55	<0.01	2.83	0.062	<0.01	1.125	23.7	33.9	0.4	2.75	0.07	1.855	<0.01	13.15	30.1
Upper Bound	8.70	0.02	3.36	0.073	0.05	1.245	27.4	39.1	0.8	3.19	0.11	2.05	0.03	15.15	35.1
BLANKS															
BLANK															
Target Range - Lower Bound															
Upper Bound															
BLANK	<0.02	0.01	<0.07	<0.002	<0.01	<0.002	<0.05	0.05	<0.1	<0.01	<0.01	<0.002	<0.01	<0.01	<0.2
Target Range - Lower Bound	<0.01	<0.01	<0.05	<0.002	<0.01	<0.002	<0.05	<0.05	<0.1	<0.01	<0.01	<0.002	<0.01	<0.01	<0.2
Upper Bound	0.02	0.02	0.11	0.004	0.02	0.004	0.10	0.10	0.2	0.02	0.02	0.004	0.02	0.02	0.6
BLANK															
Target Range - Lower Bound															
Upper Bound															

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

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18249803

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 TiO2 % 0.01	ME-ICP81 Zn % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
STANDARDS							
AMIS0324		0.08	0.038				
Target Range - Lower Bound		0.05	0.036				
Upper Bound		0.09	0.046				
AMIS0486				0.243	2.48	1.395	
Target Range - Lower Bound				0.215	2.23	1.285	
Upper Bound				0.245	2.53	1.455	
JK-17				1.975	<0.005	0.002	
Target Range - Lower Bound				1.875			
Upper Bound				2.12			
MRGeo08							4.2
Target Range - Lower Bound							3.9
Upper Bound							5.0
OREAS 503c				0.694	<0.005	0.006	
Target Range - Lower Bound							
Upper Bound							
PK2				4.86	4.82	5.98	
Target Range - Lower Bound				4.50	4.46	5.56	
Upper Bound				5.07	5.04	6.27	
SU-1b		0.37	0.023				
Target Range - Lower Bound		0.33	0.022				
Upper Bound		0.41	0.032				
BLANKS							
BLANK							<0.2
Target Range - Lower Bound							<0.2
Upper Bound							0.4
BLANK		<0.01	<0.002				
Target Range - Lower Bound		<0.01	<0.002				
Upper Bound		0.02	0.004				
BLANK				0.001	<0.005	<0.001	
Target Range - Lower Bound				<0.001	<0.005	<0.001	
Upper Bound				0.002	0.010	0.002	

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

ALS Canada Ltd.

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

To: **APEX GEOSCIENCE LTD.**
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18249803

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Al2O3 % 0.01	ME-ICP81 As % 0.01	ME-ICP81 CaO % 0.05	ME-ICP81 Co % 0.002	ME-ICP81 Cr % 0.01	ME-ICP81 Cu % 0.002	ME-ICP81 Fe % 0.05	ME-ICP81 Fe2O3 % 0.05	ME-ICP81 K % 0.1	ME-ICP81 MgO % 0.01	ME-ICP81 MnO % 0.01	ME-ICP81 Ni % 0.002	ME-ICP81 Pb % 0.01	ME-ICP81 S % 0.01	ME-ICP81 SiO2 % 0.2
	DUPLICATES															
18KRP615																
DUP																
Target Range - Lower Bound																
Upper Bound																
18MAP080																
DUP																
Target Range - Lower Bound																
Upper Bound																
18KRP602		13.10	0.04	12.60	0.031	<0.01	0.004	2.30	3.28	0.4	3.11	0.70	0.010	<0.01	0.26	46.8
DUP		12.85	0.03	12.35	0.030	<0.01	0.005	2.21	3.16	0.4	3.01	0.68	0.011	<0.01	0.29	46.0
Target Range - Lower Bound		12.50	0.02	11.95	0.028	<0.01	<0.002	2.12	3.05	0.3	2.94	0.65	0.008	<0.01	0.25	44.5
Upper Bound		13.45	0.05	13.00	0.033	0.02	0.007	2.39	3.39	0.5	3.18	0.73	0.013	0.02	0.30	48.3
ORIGINAL																
DUP																
Target Range - Lower Bound																
Upper Bound																

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18249803

Sample Description	Method Analyte Units LOD	ME-ICP81 TiO2 % 0.01	ME-ICP81 Zn % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
				DUPLICATES			
18KRP615							<0.2
DUP							<0.2
Target Range - Lower Bound							<0.2
Upper Bound							0.4
18MAP080				<0.001	<0.005	0.001	
DUP				<0.001	<0.005	<0.001	
Target Range - Lower Bound				<0.001	<0.005	<0.001	
Upper Bound				0.002	0.010	0.002	
18KRP602		0.68	<0.002				
DUP		0.64	<0.002				
Target Range - Lower Bound		0.63	<0.002				
Upper Bound		0.69	0.004				
ORIGINAL				0.178	0.192	0.740	
DUP				0.203	0.188	0.718	
Target Range - Lower Bound				0.180	0.176	0.692	
Upper Bound				0.201	0.205	0.766	

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

ALS Canada Ltd.

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

To: APEX GEOSCIENCE LTD.
UNIT 110
8429-24 STREET NW
EDMONTON AB T6P 1L3

Finalized Date: 21-OCT-2018
Account: TTB

Project: 99421

QC CERTIFICATE OF ANALYSIS SD18249803

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:	CRU-31	CRU-QC	LOG-22	PUL-31
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Ag-AA45	ME-ICP81	PGM-ICP23

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
This copy reported on 21-JAN-2019
Account: CCCOQZOS

CERTIFICATE SD19009890

Project: 99421

This report is for 342 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 17-DEC-2018.

The following have access to data associated with this certificate:

SETH KAY	JIM NELSON	KRIS RAFFLE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886001		4.62	0.009	0.015	0.006	<0.001	<0.005	<0.001	<0.2	71.6	90.7
S886002		4.44	0.007	0.012	0.004	<0.001	<0.005	<0.001	<0.2		
S886003		4.85	0.004	0.012	<0.002	<0.001	<0.005	<0.001	<0.2		
S886004		5.02	0.006	0.011	0.002	<0.001	<0.005	<0.001	<0.2		
S886005		<0.02	0.097	0.303	0.017	NSS	NSS	NSS	0.2		
S886006		2.59	0.007	0.013	0.002	<0.001	<0.005	<0.001	0.2		
S886007		4.88	0.007	0.016	0.002	<0.001	<0.005	<0.001	0.2		
S886008		4.87	0.006	0.007	<0.002	<0.001	<0.005	<0.001	<0.2		
S886009		2.40	0.006	0.006	<0.002	<0.001	<0.005	<0.001	<0.2		
S886010		0.12	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886011		2.72	0.005	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886012		2.30	0.007	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886013		2.56	0.008	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886014		2.10	0.011	0.002	0.006	0.003	<0.005	<0.001	<0.2		
S886015		2.24	0.006	0.003	0.006	<0.001	<0.005	<0.001	<0.2		
S886016		1.07	0.005	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886017		1.07	0.006	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886018		2.41	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886019		2.10	0.005	0.002	<0.002	<0.001	<0.005	<0.001	0.4		
S886020		2.14	0.007	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886021		4.25	0.003	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886022		3.96	0.006	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886023		2.13	0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886024		2.10	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886025		<0.02	0.100	0.306	0.013	0.039	<0.005	<0.001	<0.2		
S886026		2.54	0.007	<0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886027		4.28	0.004	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886028		3.39	0.003	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886029		4.59	0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886030		0.13	0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886031		2.40	0.004	<0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886032		2.15	0.002	0.009	<0.002	<0.001	<0.005	<0.001	<0.2		
S886033		2.18	0.004	0.003	<0.002	<0.001	<0.005	0.001	<0.2		
S886034		2.31	0.003	0.005	<0.002	<0.001	<0.005	<0.001	0.3		
S886035		2.40	0.005	0.007	<0.002	<0.001	<0.005	<0.001	<0.2		
S886036		2.14	0.002	0.005	0.003	<0.001	<0.005	<0.001	<0.2		
S886037		2.11	<0.002	0.004	0.002	<0.001	<0.005	<0.001	<0.2		
S886038		4.90	0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886039		2.76	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886040		2.08	0.006	0.011	<0.002	<0.001	<0.005	0.001	<0.2	75.8	93.0

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886041		2.45	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886042		2.42	<0.002	0.006	0.002	<0.001	<0.005	0.001	<0.2		
S886043		4.64	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886044		4.76	0.005	0.002	0.004	<0.001	<0.005	<0.001	<0.2		
S886045		<0.02	0.097	0.312	0.019	0.049	<0.005	0.003	0.3		
S886046		2.03	<0.002	0.019	0.003	<0.001	<0.005	0.001	<0.2		
S886047		2.65	<0.002	0.010	0.005	<0.001	<0.005	0.001	<0.2		
S886048		4.78	0.003	0.003	<0.002	<0.001	<0.005	0.002	<0.2		
S886049		1.17	0.004	0.017	0.005	<0.001	<0.005	<0.001	<0.2		
S886050		1.23	0.006	0.010	0.005	<0.001	<0.005	0.001	<0.2		
S886051		4.54	0.004	0.011	0.002	<0.001	<0.005	<0.001	<0.2		
S886052		2.62	0.003	0.013	<0.002	<0.001	0.008	0.001	<0.2		
S886053		2.53	0.002	0.012	0.002	<0.001	<0.005	<0.001	<0.2		
S886054		2.15	0.003	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886055		1.17	0.003	0.006	<0.002	<0.001	<0.005	<0.001	<0.2		
S886056		1.17	0.005	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886057		2.11	0.006	0.004	<0.002	<0.001	<0.005	0.001	<0.2		
S886058		2.25	0.005	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886059		2.07	0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886060		2.47	0.004	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886061		2.12	0.006	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886062		2.67	0.004	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886063		2.26	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886064		2.18	0.005	0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886065		<0.02	0.103	0.308	0.019	0.035	0.018	0.001	0.3		
S886066		2.45	0.004	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886067		2.20	0.003	0.005	<0.002	<0.001	<0.005	0.001	<0.2		
S886068		2.22	0.004	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886069		2.54	0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886070		0.13	<0.002	<0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886071		2.38	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886072		4.67	<0.002	0.002	<0.002	0.004	<0.005	<0.001	<0.2		
S886073		0.98	0.002	0.009	<0.002	<0.001	<0.005	0.001	<0.2		
S886074		1.79	0.005	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886075		1.67	0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886076		2.32	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886077		2.27	0.003	<0.002	<0.002	<0.001	<0.005	0.002	<0.2		
S886078		2.27	0.005	<0.002	0.006	<0.001	<0.005	0.001	<0.2		
S886079		2.34	0.005	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886080		0.16	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886081		2.18	0.004	0.003	<0.002	<0.001	<0.005	0.001	<0.2	75.3	85.0
S886082		2.41	0.003	0.009	<0.002	<0.001	<0.005	<0.001	<0.2		
S886083		4.47	0.005	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886084		2.35	0.005	0.005	<0.002	<0.001	<0.005	0.001	<0.2		
S886085		<0.02	0.105	0.307	0.017	0.035	<0.005	0.006	0.2		
S886086		2.26	0.006	0.004	<0.002	<0.001	<0.005	0.001	<0.2		
S886087		2.40	0.006	0.004	0.020	<0.001	<0.005	0.001	<0.2		
S886088		2.55	0.031	0.006	0.005	0.002	<0.005	<0.001	<0.2		
S886089		5.35	0.011	0.011	0.002	<0.001	<0.005	<0.001	<0.2		
S886090		0.13	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886091		1.77	0.013	0.015	0.003	<0.001	<0.005	<0.001	<0.2		
S886092		1.38	0.007	0.016	0.004	<0.001	<0.005	<0.001	<0.2		
S886093		2.68	0.003	0.016	0.002	<0.001	<0.005	<0.001	<0.2		
S886094		2.34	0.002	0.017	0.006	<0.001	<0.005	<0.001	<0.2		
S886095		2.25	0.005	0.015	0.005	<0.001	<0.005	<0.001	<0.2		
S886096		2.59	0.004	0.013	0.003	<0.001	<0.005	<0.001	<0.2		
S886097		2.62	0.002	0.014	<0.002	<0.001	<0.005	<0.001	<0.2		
S886098		2.58	0.003	0.006	<0.002	<0.001	<0.005	<0.001	<0.2		
S886099		2.67	<0.002	0.006	0.002	<0.001	<0.005	<0.001	<0.2		
S886100		2.38	0.003	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886101		2.51	0.002	0.007	<0.002	0.001	<0.005	0.001	<0.2	84.7	
S886102		2.33	0.003	0.002	<0.002	0.001	<0.005	<0.001	<0.2		
S886103		2.50	<0.002	0.002	0.004	<0.001	<0.005	<0.001	<0.2		
S886104		2.48	0.003	0.002	<0.002	0.004	<0.005	0.001	<0.2		
S886105		<0.02	0.096	0.298	0.016	0.055	<0.005	0.007	0.2		
S886106		2.20	<0.002	0.003	<0.002	0.001	<0.005	0.001	<0.2		
S886107		2.40	0.002	<0.002	0.003	0.001	<0.005	<0.001	<0.2		
S886108		2.24	<0.002	0.002	0.002	0.001	<0.005	0.001	<0.2		
S886109		2.05	0.003	0.002	0.005	0.002	<0.005	0.001	<0.2		
S886110		1.77	<0.002	0.007	<0.002	<0.001	<0.005	0.001	0.2		
S886111		2.49	<0.002	0.002	0.003	<0.001	<0.005	0.001	0.2		
S886112		2.45	<0.002	0.003	0.002	0.001	<0.005	0.001	<0.2		
S886113		2.20	0.002	0.006	<0.002	0.002	<0.005	0.001	<0.2		
S886114		2.11	<0.002	0.002	0.002	0.001	<0.005	0.001	<0.2		
S886115		1.14	<0.002	0.002	0.002	0.002	<0.005	<0.001	<0.2		
S886116		1.51	<0.002	0.002	<0.002	0.002	<0.005	<0.001	<0.2		
S886117		2.45	<0.002	0.008	0.003	0.001	<0.005	0.001	<0.2		
S886118		2.69	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886119		2.56	<0.002	<0.002	0.003	<0.001	<0.005	0.001	<0.2		
S886120		2.13	<0.002	0.002	0.005	<0.001	<0.005	0.002	<0.2	82.6	91.7

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

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method	WEI-21	ME-ICP81	ME-ICP81	ME-ICP81	PGM-ICP23	PGM-ICP23	PGM-ICP23	Ag-AA45	CRU-QC	PUL-QC
	Analyte	Recvd Wt.	Co	Cu	Ni	Au	Pt	Pd	Ag	Pass2mm	Pass75um
	Units	kg	%	%	%	ppm	ppm	ppm	ppm	%	%
	LOD	0.02	0.002	0.002	0.002	0.001	0.005	0.001	0.2	0.01	0.01
S886121		2.46	0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2		
S886122		2.26	<0.002	0.003	<0.002	<0.001	<0.005	0.001	<0.2		
S886123		2.20	0.002	0.003	<0.002	0.001	<0.005	0.003	<0.2		
S886124		2.48	<0.002	0.003	0.003	<0.001	<0.005	0.001	<0.2		
S886125		<0.02	0.098	0.299	0.019	0.050	<0.005	0.008	0.2		
S886126		2.19	0.002	0.002	<0.002	0.002	<0.005	0.001	<0.2		
S886127		2.26	<0.002	0.003	<0.002	0.001	<0.005	<0.001	<0.2		
S886128		2.34	0.002	0.002	0.003	0.001	<0.005	0.001	<0.2		
S886129		4.64	0.003	0.002	0.004	<0.001	<0.005	0.001	<0.2		
S886130		0.15	<0.002	<0.002	0.003	<0.001	<0.005	<0.001	<0.2		
S886131		2.58	0.002	0.004	0.005	<0.001	<0.005	0.001	<0.2	73.8	
S886132		1.29	0.013	0.024	<0.002	0.005	<0.005	0.001	<0.2		
S886133		2.78	0.009	0.023	0.005	0.001	<0.005	0.002	<0.2		
S886134		2.70	0.009	0.037	0.002	0.001	<0.005	0.002	<0.2		
S886135		1.13	0.005	0.017	0.007	<0.001	<0.005	0.001	<0.2		
S886136		1.20	<0.002	0.016	0.008	<0.001	<0.005	0.001	<0.2		
S886137		2.33	0.004	0.007	0.002	0.001	<0.005	<0.001	<0.2		
S886138		2.12	0.003	0.006	0.002	0.002	<0.005	0.001	<0.2		
S886139		2.47	0.004	0.007	0.002	0.001	<0.005	<0.001	<0.2		
S886140		0.12	<0.002	<0.002	0.003	<0.001	<0.005	0.001	<0.2		
S886141		2.26	0.004	0.005	0.003	0.002	<0.005	0.001	<0.2		
S886142		2.31	0.002	0.004	0.002	0.001	<0.005	<0.001	<0.2		
S886143		2.33	<0.002	0.003	<0.002	0.002	<0.005	<0.001	<0.2		
S886144		2.14	0.006	0.002	0.003	0.001	<0.005	0.001	<0.2		
S886145		<0.02	0.098	0.300	0.019	0.045	<0.005	0.005	<0.2		
S886146		5.03	0.002	<0.002	<0.002	0.002	<0.005	<0.001	<0.2		
S886147		2.15	<0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2		
S886148		2.16	0.003	<0.002	0.003	0.002	<0.005	0.002	<0.2		
S886149		2.33	0.004	0.003	0.002	0.008	<0.005	0.001	0.3		
S886150		0.15	<0.002	<0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886151		2.38	<0.002	<0.002	0.002	0.001	<0.005	0.001	<0.2		
S886152		2.17	0.003	0.006	0.003	0.001	<0.005	0.001	<0.2		
S886153		2.14	<0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2		89.8
S886154		1.14	0.005	<0.002	0.002	0.001	<0.005	0.002	<0.2		
S886155		1.01	0.003	<0.002	0.003	0.001	<0.005	0.001	<0.2		
S886156		2.04	<0.002	<0.002	0.003	0.001	<0.005	0.001	<0.2		
S886157		2.15	0.002	0.004	0.002	<0.001	<0.005	0.002	<0.2		
S886158		3.82	0.003	<0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886159		3.69	0.004	0.004	0.003	0.001	<0.005	0.001	<0.2		
S886160		2.47	0.007	0.005	0.004	0.004	<0.005	0.001	<0.2	71.1	85.3

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886161		2.46	0.002	0.004	0.004	0.001	<0.005	0.001	<0.2		
S886162		4.69	0.003	0.002	0.003	0.001	<0.005	0.001	<0.2		
S886163		2.54	0.006	0.005	0.004	0.001	<0.005	0.001	<0.2		
S886164		1.14	0.007	0.012	0.005	0.002	<0.005	<0.001	<0.2		
S886165		<0.02	0.098	0.302	0.019	0.059	<0.005	0.007	0.2		
S886166		2.42	0.008	0.041	0.009	0.001	<0.005	0.002	0.3		
S886167		4.87	0.007	0.005	0.013	0.001	<0.005	0.001	<0.2		
S886168		2.32	0.004	0.004	0.004	0.001	<0.005	0.001	<0.2		
S886169		2.50	0.002	0.006	0.005	0.001	<0.005	0.001	<0.2		
S886170		0.15	<0.002	<0.002	0.002	<0.001	<0.005	0.001	<0.2		
S886171		2.34	0.005	0.003	0.003	0.001	<0.005	0.002	<0.2		
S886172		2.23	0.004	0.002	<0.002	0.001	<0.005	<0.001	<0.2		
S886173		2.26	0.005	0.002	0.003	0.001	<0.005	0.001	<0.2		
S886174		1.06	0.006	0.003	0.005	0.001	<0.005	0.001	<0.2		
S886175		1.00	0.002	0.002	<0.002	0.001	<0.005	0.001	<0.2		
S886176		2.43	0.004	<0.002	0.002	0.001	<0.005	0.001	<0.2		
S886177		2.30	0.002	0.002	0.002	0.001	<0.005	<0.001	<0.2		
S886178		2.20	0.003	0.002	0.004	<0.001	<0.005	0.001	<0.2		
S886179		2.23	0.003	0.002	0.002	0.001	<0.005	0.001	<0.2		
S886180		4.46	0.002	<0.002	0.004	0.001	<0.005	0.001	<0.2		
S886181		2.27	<0.002	0.002	0.006	0.001	<0.005	0.001	0.3		
S886182		2.21	<0.002	0.008	0.004	0.002	<0.005	0.001	<0.2		
S886183		2.23	0.003	0.010	0.006	0.003	<0.005	0.001	<0.2		
S886184		2.35	<0.002	<0.002	0.002	0.001	<0.005	0.001	<0.2		
S886185		<0.02	0.097	0.302	0.022	0.045	<0.005	0.007	0.2		
S886186		1.78	<0.002	0.005	0.003	<0.001	<0.005	0.001	<0.2		
S886187		0.94	0.004	0.023	0.003	0.001	<0.005	0.001	<0.2		
S886188		3.79	0.005	0.002	0.004	0.001	<0.005	0.001	<0.2		
S886189		2.22	<0.002	0.002	0.002	<0.001	<0.005	0.002	<0.2		
S886190		0.16	<0.002	<0.002	0.004	<0.001	<0.005	<0.001	<0.2		
S886191		2.30	0.003	0.009	0.002	<0.001	<0.005	0.001	0.2		
S886192		2.36	0.002	0.002	0.002	0.001	<0.005	0.002	<0.2		
S886193		2.28	<0.002	0.006	<0.002	0.002	<0.005	0.001	<0.2		
S886194		1.05	0.005	0.002	<0.002	0.003	<0.005	0.001	0.2		
S886195		1.04	0.007	0.004	0.004	0.003	<0.005	0.001	0.3		
S886196		2.28	0.004	0.002	0.002	0.003	<0.005	0.001	0.3		
S886197		2.23	0.003	0.002	0.003	0.005	<0.005	0.001	0.3		
S886198		2.13	0.005	0.004	0.003	0.002	<0.005	0.001	<0.2	83.7	
S886199		1.12	0.006	0.013	0.003	0.005	<0.005	0.001	<0.2		
S886200		1.12	0.003	0.005	0.004	<0.001	<0.005	0.001	<0.2	86.2	88.9

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method	WEI-21	ME-ICP81	ME-ICP81	ME-ICP81	PGM-ICP23	PGM-ICP23	PGM-ICP23	Ag-AA45	CRU-QC	PUL-QC
	Analyte	Recvd Wt.	Co	Cu	Ni	Au	Pt	Pd	Ag	Pass2mm	Pass75um
	Units	kg	%	%	%	ppm	ppm	ppm	ppm	%	%
	LOD	0.02	0.002	0.002	0.002	0.001	0.005	0.001	0.2	0.01	0.01
S886201		1.15	0.004	0.019	0.004	0.003	<0.005	0.001	<0.2		99.4
S886202		1.53	0.004	0.011	0.002	0.001	<0.005	0.001	<0.2		96.9
S886203		5.16	0.005	0.021	0.002	0.005	<0.005	<0.001	<0.2		
S886204		2.35	0.002	0.016	<0.002	0.001	<0.005	<0.001	0.2		
S886205		<0.02	0.095	0.297	0.019	0.045	<0.005	<0.001	0.2		
S886206		2.41	0.003	0.012	0.004	0.002	<0.005	0.001	<0.2		
S886207		2.71	0.006	0.011	<0.002	0.001	<0.005	<0.001	0.3		
S886208		2.09	0.002	0.003	<0.002	0.001	<0.005	0.001	<0.2		
S886209		2.32	0.003	0.005	0.004	0.001	<0.005	<0.001	<0.2		
S886210		0.15	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886211		2.35	<0.002	0.004	<0.002	0.001	<0.005	0.001	<0.2		
S886212		2.35	<0.002	0.002	<0.002	<0.001	<0.005	0.001	0.2		
S886213		2.35	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	0.2		
S886214		1.92	<0.002	<0.002	0.002	0.001	<0.005	0.001	<0.2		
S886215		2.16	<0.002	<0.002	<0.002	0.001	<0.005	0.001	0.2		
S886216		2.36	<0.002	<0.002	0.002	<0.001	<0.005	0.001	<0.2		
S886217		2.28	<0.002	<0.002	<0.002	0.001	<0.005	0.001	<0.2		
S886218		2.31	<0.002	<0.002	0.004	0.001	<0.005	0.001	<0.2		
S886219		1.14	<0.002	<0.002	0.003	0.001	<0.005	0.001	<0.2		
S886220		1.15	<0.002	<0.002	0.004	0.001	<0.005	0.001	<0.2		
S886221		2.42	<0.002	0.004	<0.002	0.001	<0.005	0.001	<0.2		
S886222		2.01	0.005	0.065	0.004	<0.001	<0.005	0.001	<0.2		
S886223		2.44	0.002	0.009	0.004	<0.001	<0.005	0.001	<0.2		
S886224		2.44	<0.002	0.002	<0.002	<0.001	<0.005	0.002	<0.2		
S886225		<0.02	0.097	0.301	0.018	0.043	<0.005	0.008	0.3		
S886226		1.36	0.004	0.010	0.003	0.001	<0.005	0.002	<0.2		
S886227		2.51	0.003	0.013	0.003	0.001	<0.005	0.001	<0.2		
S886228		1.15	0.004	0.011	0.005	0.001	<0.005	0.001	<0.2		
S886229		1.66	0.005	0.013	0.005	0.002	<0.005	<0.001	<0.2		
S886230		0.13	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886231		1.20	0.003	0.011	0.004	0.001	<0.005	<0.001	<0.2		
S886232		2.38	0.005	0.004	<0.002	<0.001	<0.005	0.001	<0.2		
S886233		2.44	0.002	0.002	0.002	0.001	<0.005	<0.001	<0.2		
S886234		1.09	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886235		1.12	0.002	<0.002	<0.002	0.001	<0.005	<0.001	0.2		
S886236		2.50	0.004	0.003	<0.002	0.001	<0.005	0.001	<0.2		
S886237		2.48	0.003	0.002	<0.002	<0.001	<0.005	0.001	<0.2		
S886238		2.49	0.006	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886239		2.45	0.003	0.003	<0.002	0.001	<0.005	<0.001	<0.2		
S886240		2.41	0.003	0.005	<0.002	0.001	<0.005	0.001	<0.2	83.4	98.0

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886241		2.34	0.003	0.004	0.002	0.001	<0.005	0.001	<0.2		
S886242		2.46	0.002	0.003	<0.002	<0.001	<0.005	0.001	<0.2		
S886243		2.31	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886244		2.22	<0.002	<0.002	<0.002	0.002	<0.005	0.001	<0.2		
S886245		<0.02	0.098	0.298	0.016	0.046	<0.005	0.003	0.3		
S886246		2.21	0.004	<0.002	<0.002	0.001	<0.005	<0.001	0.3		
S886247		2.24	<0.002	<0.002	<0.002	0.001	<0.005	0.001	0.2		
S886248		4.57	<0.002	0.002	<0.002	0.001	<0.005	0.001	<0.2		
S886249		4.51	<0.002	0.003	<0.002	0.001	<0.005	0.002	<0.2		
S886250		2.30	<0.002	0.007	<0.002	0.003	<0.005	<0.001	<0.2		
S886251		2.31	0.004	0.011	<0.002	0.002	<0.005	0.001	<0.2		
S886252		4.64	<0.002	0.005	<0.002	0.001	<0.005	0.001	<0.2		
S886253		2.23	0.006	0.002	0.004	0.010	<0.005	<0.001	0.3		
S886254		1.94	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	0.3		
S886255		1.04	<0.002	0.004	<0.002	<0.001	<0.005	<0.001	0.2		
S886256		1.08	0.004	0.004	<0.002	<0.001	<0.005	0.001	<0.2		
S886257		2.78	<0.002	0.007	0.002	<0.001	<0.005	<0.001	0.2		
S886258		1.24	0.002	0.002	<0.002	<0.001	<0.005	0.001	0.2		
S886259		4.71	0.004	0.007	<0.002	<0.001	<0.005	<0.001	<0.2		
S886260		0.14	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886261		2.35	0.004	0.003	0.002	<0.001	<0.005	<0.001	0.2		
S886262		2.37	0.006	0.004	0.005	0.037	<0.005	<0.001	1.3		
S886263		2.22	0.002	0.005	0.006	<0.001	<0.005	<0.001	0.4		
S886264		2.29	0.002	0.002	<0.002	<0.001	<0.005	<0.001	0.3		
S886265		<0.02	0.098	0.307	0.016	0.032	<0.005	<0.001	0.3		
S886266		2.37	0.003	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886267		2.31	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886268		2.33	0.003	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886269		2.20	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886270		2.87	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886271		2.37	<0.002	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886272		2.38	<0.002	0.016	<0.002	<0.001	<0.005	0.001	<0.2		
S886273		1.39	0.011	0.009	0.003	<0.001	<0.005	<0.001	<0.2	72.1	
S886274		1.77	0.008	0.007	0.003	<0.001	<0.005	<0.001	<0.2		
S886275		2.29	0.010	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886276		2.12	<0.002	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886277		2.20	<0.002	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886278		2.22	<0.002	0.050	<0.002	<0.001	<0.005	0.001	0.3		
S886279		2.05	<0.002	0.007	<0.002	<0.001	<0.005	<0.001	<0.2		
S886280		1.88	<0.002	0.008	<0.002	<0.001	<0.005	<0.001	<0.2	74.2	89.0

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886281		1.23	<0.002	0.017	<0.002	<0.001	<0.005	<0.001	<0.2		
S886282		1.11	<0.002	0.023	<0.002	<0.001	<0.005	0.001	<0.2		
S886283		3.92	0.005	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886284		4.28	0.004	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886285		<0.02	0.098	0.306	0.013	0.041	<0.005	0.003	0.2		
S886286		2.47	0.003	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886287		2.52	<0.002	0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886288		2.44	0.004	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886289		2.44	<0.002	0.004	<0.002	<0.001	<0.005	<0.001	0.3		
S886290		0.12	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886291		2.36	<0.002	0.003	<0.002	0.005	<0.005	<0.001	<0.2		
S886292		2.11	0.009	0.002	0.003	0.006	<0.005	<0.001	0.3		
S886293		2.38	0.007	0.004	0.003	0.010	<0.005	<0.001	0.3		
S886294		1.02	<0.002	0.013	<0.002	<0.001	<0.005	<0.001	<0.2		
S886295		0.95	<0.002	0.009	<0.002	<0.001	<0.005	<0.001	<0.2		
S886296		2.41	<0.002	0.004	<0.002	<0.001	<0.005	<0.001	<0.2		
S886297		1.41	0.002	0.005	<0.002	<0.001	<0.005	<0.001	<0.2		
S886298		1.99	0.002	0.142	<0.002	<0.001	<0.005	<0.001	0.2		
S886299		1.78	<0.002	0.013	<0.002	<0.001	<0.005	<0.001	<0.2		
S886300		2.29	<0.002	0.012	<0.002	<0.001	<0.005	<0.001	<0.2		
S886401		2.10	0.003	0.052	<0.002	<0.001	<0.005	<0.001	<0.2		
S886402		2.44	<0.002	0.017	<0.002	<0.001	<0.005	<0.001	<0.2		
S886403		4.61	<0.002	0.006	<0.002	<0.001	<0.005	<0.001	<0.2		
S886404		2.41	<0.002	<0.002	<0.002	<0.001	<0.005	<0.001	<0.2		
S886405		<0.02	0.100	0.309	0.017	0.044	<0.005	<0.001	0.4		
S886406		2.26	0.007	<0.002	0.004	<0.001	<0.005	<0.001	<0.2		
S886407		1.21	0.003	0.012	0.005	<0.001	<0.005	0.001	<0.2		
S886408		1.06	0.012	0.005	0.006	0.021	<0.005	<0.001	<0.2		
S886409		1.15	0.004	0.008	0.007	<0.001	<0.005	<0.001	<0.2		
S886410		0.15	<0.002	<0.002	0.002	<0.001	<0.005	<0.001	<0.2		
S886411		4.97	0.004	0.006	0.003	<0.001	<0.005	<0.001	<0.2		
S886412		2.41	0.003	0.002	0.002	<0.001	<0.005	<0.001	<0.2		
S886413		2.46	0.002	0.003	0.004	<0.001	<0.005	<0.001	<0.2		
S886414		1.10	<0.002	0.003	0.004	<0.001	<0.005	<0.001	<0.2	80.7	
S886415		1.12	0.004	0.003	<0.002	<0.001	<0.005	<0.001	<0.2		
S886416		2.37	0.004	0.004	0.003	<0.001	<0.005	<0.001	<0.2		
S886417		2.20	0.011	<0.002	0.003	0.033	<0.005	<0.001	<0.2		
S886418		2.42	0.006	0.004	0.005	0.004	<0.005	<0.001	<0.2		
S886419		2.24	0.004	0.005	0.002	<0.001	<0.005	<0.001	<0.2		
S886420		1.96	<0.002	0.012	0.002	<0.001	<0.005	<0.001	<0.2	82.3	87.4

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
S886421		1.80	0.002	0.056	0.004	<0.001	<0.005	<0.001	0.5		
S886422		2.37	<0.002	0.017	0.005	<0.001	<0.005	<0.001	<0.2		
S886423		2.21	<0.002	0.004	0.003	<0.001	<0.005	0.001	<0.2		
S886424		2.29	<0.002	0.008	0.004	<0.001	<0.005	<0.001	<0.2		
S886425		<0.02	0.099	0.309	0.019	0.041	<0.005	0.001	0.2		
S886426		2.26	<0.002	0.003	0.003	<0.001	<0.005	<0.001	<0.2		
S886427		2.21	<0.002	0.007	0.004	<0.001	<0.005	<0.001	<0.2		
S886428		2.27	<0.002	0.003	0.003	<0.001	<0.005	<0.001	<0.2		
S886429		2.18	<0.002	0.007	0.004	<0.001	<0.005	<0.001	<0.2		
S886430		<0.02	0.099	0.308	0.023	0.042	<0.005	0.001	0.3		
S886431		2.28	0.002	0.004	0.003	<0.001	<0.005	<0.001	<0.2		
S886432		2.23	<0.002	0.007	0.003	0.004	<0.005	<0.001	<0.2		
S886433		1.13	<0.002	0.003	0.003	<0.001	<0.005	<0.001	<0.2		
S886434		1.03	<0.002	0.004	0.004	<0.001	<0.005	<0.001	<0.2		
S886435		2.10	<0.002	0.008	0.002	<0.001	<0.005	0.001	<0.2		
S886436		2.27	<0.002	0.016	0.005	<0.001	<0.005	0.001	<0.2		
S886437		2.20	0.002	0.006	0.002	<0.001	<0.005	0.001	<0.2		
S886438		2.32	0.002	0.003	0.004	<0.001	<0.005	<0.001	<0.2		
S886439		2.12	<0.002	<0.002	0.005	<0.001	<0.005	0.001	<0.2		
S886440		2.35	0.002	0.005	0.003	<0.001	<0.005	0.001	<0.2		
S886441		2.37	<0.002	0.009	0.007	<0.001	<0.005	0.001	<0.2		
S886442		4.42	0.002	0.002	0.002	<0.001	<0.005	<0.001	<0.2		

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

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

To: CRUZ COBALT CORP.
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

CERTIFICATE OF ANALYSIS SD19009890

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

NSS is non-sufficient sample.

Applies to Method: ALL METHODS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:			
	Ag-AA45	ME-ICP81	PGM-ICP23

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
This copy reported on 21-JAN-2019
Account: CCCOQZOS

QC CERTIFICATE SD19009890

Project: 99421

This report is for 342 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 17-DEC-2018.

The following have access to data associated with this certificate:

SETH KAY	JIM NELSON	KRIS RAFFLE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
Ag-AA45	Trace Ag - aqua regia/AAS	AAS
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

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

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

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method Analyte Units LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
					STANDARDS			
AMIS0281		0.015	5.60	1.735				
AMIS0281		0.017	5.74	1.790				
AMIS0281		0.018	5.69	1.745				
AMIS0281		0.017	5.68	1.790				
AMIS0281		0.015	5.56	1.740				
Target Range - Lower Bound		0.013	5.27	1.650				
Upper Bound		0.021	5.83	1.830				
AMIS0324		0.320	3.13	5.37				
AMIS0324		0.322	3.11	5.38				
AMIS0324		0.322	3.11	5.38				
AMIS0324		0.323	3.14	5.44				
AMIS0324		0.312	3.07	5.28				
AMIS0324		0.317	3.09	5.38				
Target Range - Lower Bound		0.304	3.02	5.30				
Upper Bound		0.341	3.34	5.87				
AMIS0486					0.226	2.45	1.400	
AMIS0486					0.206	2.30	1.315	
AMIS0486					0.215	2.39	1.330	
AMIS0486					0.229	2.52	1.430	
Target Range - Lower Bound					0.215	2.23	1.285	
Upper Bound					0.245	2.53	1.455	
EMOG-17								65.1
EMOG-17								66.3
EMOG-17								64.4
EMOG-17								65.0
EMOG-17								66.1
EMOG-17								65.0
Target Range - Lower Bound								62.1
Upper Bound								71.9
GBM906-1								21.6
GBM906-1								22.8
GBM906-1								22.9
GBM906-1								23.4
GBM906-1								21.4
GBM906-1								21.9
GBM906-1								22.2
Target Range - Lower Bound								20.8
Upper Bound								24.4

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description / Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
STANDARDS							
GPP-14				0.926	0.508	0.489	
GPP-14				0.929	0.511	0.491	
GPP-14				0.903	0.511	0.486	
GPP-14				0.907	0.521	0.482	
GPP-14				0.916	0.491	0.486	
Target Range - Lower Bound				0.853	0.468	0.451	
Upper Bound				0.965	0.538	0.511	
MP-1b	<0.002	3.08	0.002				
MP-1b	0.002	3.05	0.004				
MP-1b	<0.002	3.10	<0.002				
MP-1b	<0.002	3.12	<0.002				
MP-1b	<0.002	3.15	0.003				
Target Range - Lower Bound	<0.002	2.91	<0.002				
Upper Bound	0.004	3.22	0.005				
MRGeo08							4.3
MRGeo08							4.2
MRGeo08							3.9
MRGeo08							4.5
MRGeo08							4.3
MRGeo08							4.3
MRGeo08							4.4
MRGeo08							4.1
Target Range - Lower Bound							3.9
Upper Bound							5.0
OREAS 684				0.252	3.90	1.760	
OREAS 684				0.253	4.01	1.750	
OREAS 684				0.257	3.96	1.760	
OREAS 684				0.252	3.93	1.760	
Target Range - Lower Bound				0.232	3.63	1.615	
Upper Bound				0.264	4.11	1.825	
OREAS-132a							55.3
OREAS-132a							52.3
OREAS-132a							53.4
OREAS-132a							52.2
OREAS-132a							53.1
OREAS-132a							55.8
Target Range - Lower Bound							51.5
Upper Bound							59.7

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

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method Analyte Units LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
STANDARDS								
PK2					4.83	4.75	5.96	
PK2					4.93	4.93	5.95	
PK2					4.95	4.90	6.13	
PK2					4.99	4.89	6.08	
Target Range - Lower Bound					4.50	4.46	5.56	
Upper Bound					5.07	5.04	6.27	
SU-1b		0.063	1.155	1.945				
SU-1b		0.067	1.170	1.975				
SU-1b		0.066	1.195	1.990				
SU-1b		0.068	1.175	1.945				
SU-1b		0.069	1.190	1.950				
SU-1b		0.068	1.145	1.935				
Target Range - Lower Bound		0.062	1.125	1.855				
Upper Bound		0.073	1.245	2.05				
BLANKS								
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
BLANK								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
BLANKS								
BLANK		<0.002	<0.002	<0.002				
BLANK		<0.002	<0.002	<0.002				
BLANK		0.004	<0.002	<0.002				
BLANK		<0.002	<0.002	<0.002				
BLANK		<0.002	<0.002	<0.002				
BLANK		<0.002	0.002	<0.002				
BLANK		<0.002	<0.002	<0.002				
BLANK		<0.002	0.002	0.002				
BLANK		<0.002	<0.002	<0.002				
BLANK		<0.002	<0.002	<0.002				
BLANK		<0.002	<0.002	<0.002				
Target Range - Lower Bound		<0.002	<0.002	<0.002				
Upper Bound		0.004	0.004	0.004				
BLANK					<0.001	<0.005	0.001	
BLANK					<0.001	<0.005	0.001	
BLANK					0.002	<0.005	0.001	
BLANK					0.001	<0.005	<0.001	
BLANK					0.002	<0.005	<0.001	
BLANK					<0.001	<0.005	<0.001	
BLANK					<0.001	<0.005	<0.001	
BLANK					0.026	<0.005	<0.001	
BLANK					<0.001	<0.005	<0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
DUPLICATES								
S886003								<0.2
DUP								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4

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

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description / Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
DUPLICATES							
S886009	0.006	0.006	<0.002				
DUP	0.007	0.006	0.002				
Target Range - Lower Bound	0.004	0.004	<0.002				
Upper Bound	0.009	0.008	0.004				
S886010							<0.2
DUP							<0.2
Target Range - Lower Bound							<0.2
Upper Bound							0.4
S886034				<0.001	<0.005	<0.001	
DUP				<0.001	<0.005	<0.001	
Target Range - Lower Bound				<0.001	<0.005	<0.001	
Upper Bound				0.002	0.010	0.002	
S886046							<0.2
DUP							<0.2
Target Range - Lower Bound							<0.2
Upper Bound							0.4
S886054				<0.001	<0.005	<0.001	
DUP				<0.001	<0.005	<0.001	
Target Range - Lower Bound				<0.001	<0.005	<0.001	
Upper Bound				0.002	0.010	0.002	
S886065	0.103	0.308	0.019				
DUP	0.102	0.309	0.016				
Target Range - Lower Bound	0.098	0.299	0.015				
Upper Bound	0.107	0.318	0.020				
S886074				<0.001	<0.005	<0.001	
DUP				<0.001	<0.005	<0.001	
Target Range - Lower Bound				<0.001	<0.005	<0.001	
Upper Bound				0.002	0.010	0.002	
S886082							<0.2
DUP							<0.2
Target Range - Lower Bound							<0.2
Upper Bound							0.4

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

ALS Canada Ltd.

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

To: CRUZ COBALT CORP.
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
				DUPLICATES				
S886099		<0.002	0.006	0.002				
DUP		0.002	0.006	<0.002				
Target Range - Lower Bound		<0.002	0.004	<0.002				
Upper Bound		0.004	0.008	0.004				
S886110					<0.001	<0.005	0.001	
DUP					0.002	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886118								<0.2
DUP								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4
S886130					<0.001	<0.005	<0.001	
DUP					<0.001	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886135		0.005	0.017	0.007				
DUP		0.008	0.017	0.004				
Target Range - Lower Bound		0.004	0.015	0.003				
Upper Bound		0.009	0.019	0.008				
S886150					<0.001	<0.005	0.001	
DUP					<0.001	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886154								<0.2
DUP								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4
S886171		0.005	0.003	0.003				
DUP		0.004	0.003	0.003				
Target Range - Lower Bound		<0.002	<0.002	<0.002				
Upper Bound		0.007	0.004	0.004				

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

ALS Canada Ltd.

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

To: CRUZ COBALT CORP.
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
DUPLICATES								
S886186					<0.001	<0.005	0.001	
DUP					<0.001	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886190								<0.2
DUP								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4
S886206					0.002	<0.005	0.001	
DUP					<0.001	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886207		0.006	0.011	<0.002				
DUP		0.004	0.010	<0.002				
Target Range - Lower Bound		0.003	0.008	<0.002				
Upper Bound		0.007	0.013	0.004				
S886226					0.001	<0.005	0.002	<0.2
DUP					<0.001	<0.005	0.001	<0.2
Target Range - Lower Bound					<0.001	<0.005	<0.001	<0.2
Upper Bound					0.002	0.010	0.002	0.4
S886243		<0.002	0.003	<0.002				
DUP		0.003	<0.002	<0.002				
Target Range - Lower Bound		<0.002	<0.002	<0.002				
Upper Bound		0.004	0.004	0.004				
S886262					0.037	<0.005	<0.001	1.3
DUP					0.037	<0.005	<0.001	1.4
Target Range - Lower Bound					0.034	<0.005	<0.001	1.1
Upper Bound					0.040	0.010	0.002	1.6
S886267					<0.001	<0.005	<0.001	
DUP					0.037	<0.005	<0.001	
Target Range - Lower Bound					0.017	<0.005	<0.001	
Upper Bound					0.021	0.010	0.002	

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

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

To: CRUZ COBALT CORP.
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
DUPLICATES								
S886279		<0.002	0.007	<0.002				
DUP		<0.002	0.007	<0.002				
Target Range - Lower Bound		<0.002	0.005	<0.002				
Upper Bound		0.004	0.009	0.004				
S886287					<0.001	<0.005	<0.001	
DUP					<0.001	<0.005	<0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886403								<0.2
DUP								<0.2
Target Range - Lower Bound								<0.2
Upper Bound								0.4
S886407					<0.001	<0.005	0.001	
DUP					<0.001	<0.005	<0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886415		0.004	0.003	<0.002				
DUP		0.003	0.003	0.003				
Target Range - Lower Bound		<0.002	<0.002	<0.002				
Upper Bound		0.004	0.004	0.004				
S886440					<0.001	<0.005	0.001	
DUP					<0.001	<0.005	<0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886441					<0.001	<0.005	0.001	
DUP					<0.001	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	
S886442					<0.001	<0.005	<0.001	
DUP					<0.001	<0.005	0.001	
Target Range - Lower Bound					<0.001	<0.005	<0.001	
Upper Bound					0.002	0.010	0.002	

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

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

Sample Description	Method / Analyte / Units / LOD	ME-ICP81 Co % 0.002	ME-ICP81 Cu % 0.002	ME-ICP81 Ni % 0.002	PGM-ICP23 Au ppm 0.001	PGM-ICP23 Pt ppm 0.005	PGM-ICP23 Pd ppm 0.001	Ag-AA45 Ag ppm 0.2
PREP DUPLICATES								
S886056		0.005	0.005	<0.002	<0.001	<0.005	<0.001	<0.2
S886056 PREP DUP		<0.002	0.006	<0.002	<0.001	<0.005	0.001	<0.2
S886112		<0.002	0.003	0.002	0.001	<0.005	0.001	<0.2
S886112 PREP DUP		<0.002	0.002	<0.002	<0.001	<0.005	0.001	<0.2
S886168		0.004	0.004	0.004	0.001	<0.005	0.001	<0.2
S886168 PREP DUP		<0.002	0.004	<0.002	<0.001	<0.005	0.001	<0.2
S886223		0.002	0.009	0.004	<0.001	<0.005	0.001	<0.2
S886223 PREP DUP		0.002	0.009	0.004	<0.001	<0.005	<0.001	<0.2
S886278		<0.002	0.050	<0.002	<0.001	<0.005	0.001	0.3
S886278 PREP DUP		<0.002	0.048	<0.002	<0.001	<0.005	<0.001	0.3
S886434		<0.002	0.004	0.004	<0.001	<0.005	<0.001	<0.2
S886434 PREP DUP		<0.002	0.005	0.003	<0.001	<0.005	0.001	<0.2

ALS Canada Ltd.

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

To: **CRUZ COBALT CORP.**
1470 - 701 WEST GEORGIA STREET
PO BOX 10112
VANCOUVER BC V7Y 1C6

Finalized Date: 15-JAN-2019
Account: CCCOQZOS

Project: 99421

QC CERTIFICATE OF ANALYSIS SD19009890

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

NSS is non-sufficient sample.

Applies to Method: ALL METHODS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:

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

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:

Ag-AA45	ME-ICP81	PGM-ICP23

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
P.O BOX 10112 1470-701 W. GEORGIA ST
VANCOUVER, BC V7Y 1C6
604-646-6908

ATTENTION TO: Jason Gigliotti, Jim Nelson

PROJECT:

AGAT WORK ORDER: 17T282580

SOLID ANALYSIS REVIEWED BY: Kevin Motomura, Data Review Supervisor

DATE REPORTED: Jan 04, 2018

PAGES (INCLUDING COVER): 18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
A1 (8893689)		0.24	5.79	0.9	541	1.17	0.06	1.45	0.03	17.4	6.46	39.8	1.05	3.3	1.22
A2 (8893690)		0.15	6.47	0.8	524	1.27	0.07	1.37	0.05	19.2	7.99	47.5	1.14	2.5	1.86
A3 (8893691)		0.17	6.37	0.7	521	1.32	0.07	1.33	0.05	28.8	10.6	48.8	1.19	6.0	1.71
A4 (8893692)		0.16	6.75	2.8	452	1.14	0.08	1.15	0.08	15.2	7.64	50.1	1.16	3.9	2.30
A5 (8893693)		0.13	5.31	0.7	480	0.98	0.07	1.08	0.02	18.0	4.28	34.3	0.99	1.5	1.20
A6 (8893694)		0.31	6.69	3.8	424	1.35	0.16	1.21	0.10	42.5	19.1	74.5	1.71	22.1	2.97
A7 (8893695)		0.27	6.79	3.1	391	1.33	0.26	1.14	0.10	23.8	17.4	67.0	1.99	15.1	3.35
A8 (8893696)		0.26	6.62	2.4	496	1.26	0.14	1.46	0.09	27.5	13.7	51.8	1.50	11.8	2.37
A9 (8893697)		0.16	5.99	3.9	476	1.29	0.12	1.67	0.07	34.7	12.5	50.0	1.23	17.0	2.04
A10 (8893698)		0.14	6.44	3.9	529	1.40	0.10	1.61	0.06	39.8	11.4	57.2	1.06	13.6	2.16
A11 (8893699)		0.18	6.70	6.7	506	1.46	0.15	1.56	0.08	40.2	15.6	66.7	1.55	32.5	2.26
A12 (8893700)		0.17	6.30	8.6	432	1.37	0.34	1.47	0.06	65.5	15.8	77.1	1.60	72.8	2.94
A13 (8893701)		0.25	6.46	9.6	457	1.70	0.36	1.48	0.18	87.5	21.4	67.6	1.86	66.8	2.82
A14 (8893702)		0.20	6.28	5.3	497	1.36	0.17	1.58	0.12	39.7	10.1	57.4	1.19	18.4	2.06
A15 (8893703)		0.16	6.22	5.1	488	1.43	0.41	1.55	0.06	31.8	14.3	53.6	1.28	40.8	2.06
A16 (8893704)		0.16	6.27	1.2	506	1.22	0.11	1.54	0.04	28.3	9.11	35.8	0.97	17.0	1.84
A17 (8893705)		0.40	6.66	2.6	489	1.38	0.09	1.43	0.07	34.9	12.0	45.2	1.04	18.5	2.13
A18 (8893706)		0.32	6.41	4.7	480	1.61	0.23	1.56	0.08	41.7	16.2	60.0	1.24	20.7	2.79
A19 (8893707)		0.21	6.34	1.2	491	1.41	0.08	1.61	0.08	23.5	12.7	57.0	0.98	4.8	2.16
A20 (8893708)		0.15	6.40	1.5	535	1.44	0.09	1.43	0.04	28.8	9.92	43.0	1.02	10.0	2.23
A21 (8893709)		0.43	6.26	2.7	484	1.28	0.10	1.42	0.15	28.1	14.0	60.5	1.46	8.3	2.26
B3 (8893710)		0.25	6.43	1.7	535	1.37	0.09	1.85	0.07	60.0	12.4	74.0	1.43	18.0	2.26
B4 (8893711)		0.17	6.73	2.7	556	1.65	0.12	1.93	0.13	39.2	16.5	73.8	1.62	36.9	2.36
B5 (8893712)		0.18	6.53	3.1	503	1.49	0.10	2.01	0.05	36.6	15.4	58.4	1.11	16.8	2.95
B6 (8893713)		0.17	6.47	4.0	535	1.46	0.09	1.86	<0.02	42.6	13.2	54.8	1.61	19.1	2.37
B7 (8893714)		0.15	6.48	2.5	479	1.43	0.10	2.22	0.05	46.7	13.1	65.3	1.08	6.1	2.82
B8 (8893715)		0.21	6.51	4.4	434	1.22	0.22	1.27	0.09	34.3	19.2	79.0	2.04	31.0	3.20
B9 (8893716)		0.31	6.08	6.3	430	1.30	0.15	1.51	0.07	35.6	15.9	75.1	1.52	22.1	2.88
B10 (8893717)		0.25	7.07	6.1	481	1.31	0.13	1.37	0.12	46.3	22.4	79.9	1.62	37.1	2.80
B11 (8893718)		0.16	6.85	27.0	491	1.38	0.14	1.46	0.09	33.4	20.0	71.8	1.38	25.3	3.19
B12 (8893719)		0.37	9.34	3.1	595	1.74	0.15	1.84	0.10	38.5	24.0	96.3	2.18	41.5	3.67
B13 (8893720)		0.18	6.48	8.0	530	1.51	0.19	1.54	0.07	20.9	9.76	46.2	1.16	14.4	1.67

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
B14 (8893721)		0.22	6.51	8.3	467	1.48	2.55	1.50	0.09	36.9	20.1	68.1	1.89	68.5	2.81
B15 (8893722)		0.34	5.64	3.4	461	1.14	0.18	1.34	0.12	41.9	7.02	57.4	1.30	10.7	2.00
B16 (8893723)		0.21	5.72	4.5	441	1.00	0.19	1.34	0.15	35.6	8.67	55.4	1.88	11.8	2.27
B17 (8893724)		0.09	6.17	0.7	501	1.34	0.09	1.52	0.05	27.8	8.86	45.7	0.95	10.2	1.42
B18 (8893725)		0.12	6.27	0.9	466	1.28	0.07	1.54	0.06	25.6	8.86	50.6	0.96	4.5	1.46
B19 (8893726)		0.18	7.85	2.5	399	1.55	0.13	1.36	0.09	32.1	9.88	76.7	1.37	7.6	1.65
B20 (8893727)		0.27	7.74	4.3	332	1.57	0.14	1.08	0.14	16.2	12.4	90.3	1.09	10.7	3.19
B21 (8893728)		0.15	7.76	2.6	473	1.68	0.12	1.50	0.06	42.1	14.0	49.5	1.21	20.0	1.80
B22 (8893729)		0.34	7.70	6.9	403	1.52	0.16	1.24	0.17	45.1	20.5	111	1.70	17.0	4.50
B23 (8893730)		0.35	7.15	7.4	402	1.48	0.23	1.30	0.11	35.5	31.5	81.6	2.31	37.7	4.00
C1 (8893731)		0.28	7.16	3.1	449	1.37	0.12	1.12	0.09	25.1	13.2	69.0	1.54	12.0	2.34
C2 (8893732)		0.21	6.18	5.9	444	1.14	0.16	1.11	0.10	19.8	20.1	74.8	2.23	13.2	3.57
C3 (8893733)		0.21	6.66	3.4	503	1.32	0.12	1.55	0.07	34.3	15.6	77.7	1.64	18.9	2.64
C4 (8893734)		0.35	8.23	5.0	603	1.59	0.17	1.33	0.11	35.1	28.2	113	2.76	38.0	3.90
C5 (8893735)		0.26	5.73	6.1	542	1.01	0.27	1.22	0.08	28.8	10.4	63.2	2.15	8.2	2.35
C6 (8893736)		0.23	6.52	3.3	523	1.27	0.15	1.32	0.13	32.0	16.4	80.8	2.19	15.9	2.84
C7 (8893737)		0.26	6.50	3.4	505	1.37	0.14	1.47	0.19	31.3	20.2	84.6	1.98	19.5	3.00
C8 (8893738)		0.43	6.10	6.0	468	1.33	0.19	1.49	0.15	31.7	20.0	87.7	2.35	20.0	3.67
C9 (8893739)		0.28	6.76	7.5	555	1.16	0.15	1.71	0.12	31.6	18.3	86.5	2.36	12.1	2.78
C10 (8893740)		0.24	6.66	4.6	519	1.21	0.13	1.68	0.13	32.1	19.0	94.5	2.21	19.0	3.24
C11 (8893741)		0.30	7.68	7.1	521	1.29	0.17	1.61	0.12	22.5	33.7	123	3.40	9.1	4.79
C12 (8893742)		0.32	7.00	4.1	541	1.62	0.16	1.21	0.16	29.6	23.1	95.5	2.63	17.9	3.64
C13 (8893743)		0.46	6.59	4.6	527	1.31	0.18	1.35	0.18	45.8	16.3	86.0	2.14	15.1	3.34
C14 (8893744)		0.74	7.11	6.7	402	1.62	0.17	0.86	0.26	44.2	40.1	208	2.33	51.4	4.92
C15 (8893745)		0.38	8.13	5.6	559	1.68	0.23	1.10	0.19	36.4	39.9	106	3.26	40.6	4.08
C16 (8893746)		0.22	6.55	2.5	505	1.32	0.11	1.26	0.10	33.9	16.4	84.4	1.89	13.8	2.79
C17 (8893747)		0.22	6.71	1.9	524	1.38	0.11	1.30	0.11	47.9	14.7	85.0	1.88	12.8	2.54
C18 (8893748)		0.27	6.73	2.0	509	1.44	0.11	1.52	0.11	39.8	16.5	85.4	1.62	8.2	3.10
C19 (8893749)		0.17	5.82	2.5	532	1.25	0.08	1.48	0.11	32.2	9.26	50.5	1.67	4.1	1.58
C20 (8893750)		0.24	6.25	2.9	492	1.18	0.10	1.33	0.08	28.0	11.6	69.8	1.74	7.7	2.22
C21 (8893751)		0.24	6.30	1.6	522	1.35	0.13	1.28	0.11	29.4	18.1	77.3	2.46	15.1	3.05
C22 (8893752)		0.24	6.54	2.7	548	1.45	0.12	1.44	0.11	40.0	16.8	73.8	2.39	9.4	2.11

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
C23 (8893753)		0.12	5.61	1.5	451	1.11	0.07	1.44	0.06	14.3	8.74	44.3	1.65	2.3	1.51
C24 (8893754)		0.14	5.86	2.3	458	1.34	0.09	1.70	0.08	46.7	11.8	71.7	1.36	15.1	1.99
C25 (8893755)		0.20	7.21	2.5	552	1.67	0.17	1.34	0.06	54.1	19.5	103	2.96	24.7	3.01
C26 (8893756)		0.14	7.64	2.7	543	1.62	0.11	1.66	0.03	39.9	20.7	72.8	1.93	10.5	3.22
D1 (8893757)		0.39	7.21	3.3	529	1.27	0.13	1.23	0.14	26.9	19.1	85.1	2.29	14.3	3.28
D2 (8893758)		0.26	7.04	3.2	470	1.41	0.15	1.49	0.10	27.6	26.0	95.3	2.14	16.8	4.09
D3 (8893759)		0.15	7.02	1.5	565	1.62	0.10	1.31	0.08	28.3	14.3	73.1	1.68	16.4	2.29
D4 (8893760)		0.38	6.52	6.8	423	1.35	0.43	1.19	0.13	28.7	16.9	96.4	2.63	27.0	5.36

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
A1 (8893689)		13.8	0.23	1.8	0.019	1.72	8.5	9.3	0.52	250	0.31	2.27	4.4	16.2	228
A2 (8893690)		15.7	0.48	2.3	0.026	1.70	9.3	12.9	0.52	242	0.43	2.19	6.7	17.2	178
A3 (8893691)		15.0	0.23	2.2	0.022	1.73	11.7	12.1	0.60	240	0.38	2.16	5.3	22.9	233
A4 (8893692)		16.1	0.43	1.3	0.029	1.43	7.3	14.4	0.43	207	0.56	1.89	5.7	17.8	322
A5 (8893693)		14.2	0.38	1.9	0.022	1.53	8.8	9.4	0.36	188	0.51	1.82	4.6	10.9	204
A6 (8893694)		15.3	0.35	2.1	0.036	1.51	12.2	26.1	0.83	351	0.84	1.77	7.2	36.7	424
A7 (8893695)		15.8	0.35	2.4	0.042	1.40	11.6	26.6	0.72	336	0.93	1.61	7.8	32.5	1140
A8 (8893696)		15.0	0.33	3.0	0.029	1.69	11.4	15.2	0.69	334	0.59	2.02	6.9	28.8	460
A9 (8893697)		13.8	0.35	3.2	0.026	1.54	12.9	16.1	0.71	381	0.38	2.18	6.2	26.1	233
A10 (8893698)		14.4	0.39	1.9	0.023	1.65	12.5	13.9	0.64	336	0.46	2.34	5.3	26.7	339
A11 (8893699)		16.7	0.36	2.5	0.031	1.65	18.1	14.2	0.74	335	0.63	2.16	6.6	32.5	307
A12 (8893700)		15.5	0.39	2.9	0.032	1.50	21.0	17.3	0.89	486	0.56	2.04	6.7	34.7	441
A13 (8893701)		16.3	0.42	2.9	0.036	1.62	26.7	20.4	0.85	486	0.74	2.03	7.3	35.3	449
A14 (8893702)		15.3	0.40	2.3	0.027	1.61	16.0	14.6	0.65	365	0.58	2.29	5.4	22.4	196
A15 (8893703)		15.3	0.41	2.8	0.026	1.58	12.8	16.0	0.71	383	0.83	2.20	6.1	25.3	199
A16 (8893704)		14.2	0.40	2.1	0.023	1.66	11.6	10.2	0.63	299	0.48	2.31	4.9	20.6	337
A17 (8893705)		14.2	0.45	2.0	0.026	1.60	13.7	13.6	0.59	268	0.67	2.13	6.1	26.3	343
A18 (8893706)		15.8	0.51	3.5	0.032	1.58	14.8	14.1	0.71	367	0.90	2.10	7.3	27.7	415
A19 (8893707)		14.3	0.55	1.9	0.024	1.59	9.9	10.8	0.64	353	0.39	2.25	5.7	24.6	620
A20 (8893708)		15.5	0.57	1.6	0.025	1.73	11.7	11.8	0.56	276	0.57	2.30	5.4	20.7	370
A21 (8893709)		15.4	0.59	3.1	0.032	1.58	13.7	13.9	0.57	696	0.69	1.95	7.4	21.2	512
B3 (8893710)		15.3	0.65	2.4	0.027	1.80	29.1	16.5	0.92	359	0.45	2.32	6.2	31.3	550
B4 (8893711)		16.4	0.54	2.1	0.029	1.86	19.7	19.7	1.04	361	0.35	2.44	6.3	33.7	533
B5 (8893712)		15.2	0.57	2.2	0.031	1.66	16.8	15.8	1.10	457	0.55	2.50	11.7	32.1	594
B6 (8893713)		16.3	0.57	2.5	0.023	1.81	21.0	18.0	0.98	365	0.49	2.29	7.9	31.7	515
B7 (8893714)		15.9	0.61	3.5	0.034	1.61	21.5	13.5	1.11	482	0.36	2.39	7.1	28.3	666
B8 (8893715)		15.5	0.66	2.6	0.033	1.54	12.2	23.9	0.94	435	0.61	1.83	7.6	43.0	389
B9 (8893716)		15.0	0.62	3.3	0.034	1.55	16.5	19.3	0.86	455	0.49	2.02	8.5	31.8	301
B10 (8893717)		15.3	0.62	2.7	0.032	1.61	14.3	23.6	0.83	345	0.68	1.91	8.0	43.0	441
B11 (8893718)		15.9	0.62	3.7	0.034	1.63	16.0	21.4	0.78	332	1.71	1.97	7.9	36.2	268
B12 (8893719)		20.6	0.39	3.9	0.044	2.12	18.0	27.7	1.16	506	0.94	2.80	10.4	46.6	462
B13 (8893720)		15.0	0.53	1.9	0.024	1.74	9.6	13.6	0.60	298	0.58	2.44	4.3	20.4	207

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte: / Unit: / RDL:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
B14 (8893721)		17.9	0.57	3.3	0.039	1.60	19.8	20.8	0.91	454	0.68	2.00	8.5	36.0	255
B15 (8893722)		17.5	0.62	2.8	0.029	1.49	20.7	13.1	0.49	324	0.62	1.86	14.6	15.5	316
B16 (8893723)		17.8	0.62	3.3	0.029	1.54	17.6	12.8	0.64	349	0.89	1.79	9.2	19.2	194
B17 (8893724)		13.3	0.60	2.4	0.021	1.69	13.0	10.1	0.63	289	0.31	2.27	5.0	21.9	173
B18 (8893725)		13.8	0.60	2.2	0.023	1.57	12.2	12.0	0.64	287	0.29	2.19	5.6	22.0	321
B19 (8893726)		16.9	0.61	2.6	0.040	1.31	16.8	24.0	0.67	281	0.58	1.68	9.1	24.2	389
B20 (8893727)		14.1	0.69	2.5	0.040	1.06	7.6	20.7	0.55	260	0.74	1.40	6.4	29.5	586
B21 (8893728)		16.2	0.69	2.1	0.027	1.45	18.9	18.5	0.67	285	0.53	2.07	7.6	36.4	403
B22 (8893729)		16.4	0.72	3.3	0.045	1.35	21.7	31.1	0.78	418	0.94	1.51	15.8	46.2	612
B23 (8893730)		17.5	0.66	2.7	0.046	1.46	15.2	28.3	1.04	453	0.99	1.77	8.1	61.1	503
C1 (8893731)		15.0	0.69	2.4	0.037	1.50	12.0	23.6	0.58	250	0.81	1.61	8.0	34.4	571
C2 (8893732)		18.1	0.64	2.5	0.037	1.54	10.1	25.4	0.76	515	1.40	1.74	8.3	31.0	346
C3 (8893733)		15.2	0.65	3.1	0.030	1.70	16.4	20.8	0.88	388	0.54	2.05	8.6	38.1	263
C4 (8893734)		19.0	0.71	2.9	0.043	1.83	14.1	29.5	1.23	430	0.79	1.55	17.5	62.5	428
C5 (8893735)		17.0	0.14	3.0	0.028	1.93	14.3	23.7	0.65	256	1.01	1.62	10.1	26.2	203
C6 (8893736)		17.0	0.13	3.0	0.038	1.85	14.9	23.7	0.82	337	0.91	1.69	10.6	37.0	259
C7 (8893737)		16.8	0.18	3.1	0.036	1.76	14.7	22.0	0.90	398	0.83	1.71	10.2	41.7	211
C8 (8893738)		18.9	0.19	3.2	0.039	1.61	15.0	26.0	0.86	438	1.10	1.63	11.0	38.9	279
C9 (8893739)		17.4	0.15	3.2	0.037	1.93	15.4	37.4	1.08	420	0.51	1.89	10.2	40.6	170
C10 (8893740)		16.7	0.14	3.1	0.039	1.74	15.3	43.3	1.10	467	0.73	1.79	10.1	44.3	205
C11 (8893741)		23.1	0.09	3.4	0.052	1.64	10.8	65.0	2.07	711	0.62	1.63	11.0	64.6	252
C12 (8893742)		19.7	<0.05	2.7	0.059	1.94	14.6	36.9	1.05	339	1.16	1.59	10.9	48.3	386
C13 (8893743)		17.6	0.11	3.2	0.039	1.79	22.5	25.1	0.86	384	0.81	1.69	10.0	38.4	630
C14 (8893744)		18.2	0.22	2.5	0.053	1.29	20.7	38.6	3.08	409	1.09	0.97	43.5	95.9	940
C15 (8893745)		20.9	0.12	2.2	0.046	1.82	14.5	35.7	1.10	392	1.08	1.44	11.4	67.1	1650
C16 (8893746)		16.1	0.23	3.3	0.035	1.71	16.1	19.9	0.88	379	0.55	1.63	9.1	43.3	653
C17 (8893747)		15.3	0.17	3.2	0.030	1.85	22.0	18.4	0.88	361	0.48	1.75	9.3	40.4	748
C18 (8893748)		15.9	0.06	3.9	0.034	1.63	18.3	18.2	0.78	394	0.57	1.94	15.6	35.4	706
C19 (8893749)		17.1	<0.05	2.7	0.028	1.74	16.0	19.4	0.64	330	0.36	2.09	7.8	19.8	163
C20 (8893750)		16.5	0.17	3.6	0.031	1.65	13.5	18.7	0.63	325	0.55	1.77	10.6	26.1	276
C21 (8893751)		17.6	<0.05	2.8	0.036	1.71	13.9	24.4	0.76	314	1.09	1.63	9.6	34.0	558
C22 (8893752)		19.8	<0.05	3.1	0.036	1.75	19.0	34.0	0.88	370	0.40	1.92	10.3	37.7	213

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
C23 (8893753)		15.4	<0.05	2.2	0.026	1.55	7.0	17.5	0.63	315	0.36	2.02	5.1	17.9	69
C24 (8893754)		14.4	<0.05	2.3	0.029	1.55	21.9	15.3	0.91	356	0.71	2.01	7.2	29.6	492
C25 (8893755)		19.4	0.11	3.0	0.039	1.84	28.2	34.3	1.10	385	0.29	1.74	10.7	46.3	234
C26 (8893756)		19.4	0.39	3.8	0.039	2.03	18.8	27.3	1.26	512	0.32	2.26	10.2	43.6	102
D1 (8893757)		17.4	0.11	2.8	0.039	1.69	13.1	27.5	0.82	339	0.74	1.61	10.0	46.1	580
D2 (8893758)		19.0	<0.05	3.5	0.039	1.65	12.6	30.3	0.97	494	0.69	1.72	10.2	48.9	897
D3 (8893759)		15.5	<0.05	1.9	0.029	1.83	11.3	18.0	0.78	306	0.39	2.01	6.6	36.8	335
D4 (8893760)		20.0	0.22	2.9	0.046	1.46	14.6	34.4	0.71	361	1.51	1.45	11.6	35.3	2060

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
A1 (8893689)		11.1	55.0	<0.002	0.02	0.11	6.1	0.6	1.0	336	0.20	<0.01	2.4	0.19	0.25
A2 (8893690)		11.5	53.7	<0.002	0.03	0.10	7.0	0.8	1.1	325	0.45	<0.01	2.5	0.23	0.26
A3 (8893691)		11.4	58.9	<0.002	0.04	0.13	6.6	0.9	0.9	323	0.24	<0.01	4.9	0.19	0.27
A4 (8893692)		11.7	49.4	<0.002	0.05	0.15	6.2	0.9	1.1	281	0.26	<0.01	2.1	0.21	0.25
A5 (8893693)		11.2	47.7	<0.002	0.03	0.07	5.3	0.6	0.9	276	0.17	<0.01	2.3	0.19	0.23
A6 (8893694)		11.8	57.2	<0.002	0.05	0.29	9.5	1.3	1.3	208	0.36	0.02	4.1	0.28	0.25
A7 (8893695)		11.8	54.8	<0.002	0.05	0.35	9.6	1.4	1.6	198	0.38	<0.01	4.2	0.27	0.26
A8 (8893696)		11.3	54.8	<0.002	0.03	0.17	8.7	1.0	1.2	287	0.34	0.01	3.7	0.28	0.26
A9 (8893697)		11.0	54.0	<0.002	0.03	0.23	8.6	1.0	1.1	318	0.31	0.02	3.6	0.25	0.23
A10 (8893698)		12.1	52.8	<0.002	0.03	0.15	7.6	1.0	1.1	351	0.25	0.02	6.1	0.22	0.25
A11 (8893699)		14.2	62.0	<0.002	0.03	0.22	9.2	0.8	1.3	322	0.29	<0.01	5.0	0.24	0.29
A12 (8893700)		14.1	55.4	<0.002	0.03	0.27	11.2	1.2	1.3	258	0.32	0.02	7.6	0.31	0.25
A13 (8893701)		19.6	58.8	<0.002	0.03	0.31	10.8	1.4	1.3	269	0.36	0.04	7.8	0.30	0.28
A14 (8893702)		11.6	55.1	<0.002	0.03	0.17	8.7	0.6	1.0	347	0.26	<0.01	4.0	0.25	0.24
A15 (8893703)		12.1	54.6	<0.002	0.03	0.16	8.6	0.7	1.0	332	0.27	<0.01	3.3	0.25	0.26
A16 (8893704)		13.5	51.8	<0.002	0.03	0.16	7.8	1.3	1.2	350	0.23	<0.01	3.5	0.21	0.24
A17 (8893705)		11.7	50.6	<0.002	0.04	0.11	7.7	1.0	0.9	323	0.29	<0.01	4.2	0.21	0.24
A18 (8893706)		18.4	50.6	<0.002	0.04	0.19	9.2	1.2	1.3	312	0.37	0.02	4.4	0.30	0.25
A19 (8893707)		11.0	53.1	<0.002	0.03	0.13	7.8	0.7	1.0	340	0.26	<0.01	2.1	0.24	0.23
A20 (8893708)		11.8	56.5	<0.002	0.03	0.14	6.5	0.7	1.0	361	0.24	<0.01	2.7	0.22	0.27
A21 (8893709)		12.0	54.0	<0.002	0.04	0.22	7.9	0.7	1.2	288	0.34	<0.01	5.4	0.27	0.25
B3 (8893710)		15.0	63.2	<0.002	0.09	0.31	9.3	1.3	1.4	343	0.28	<0.01	8.7	0.24	0.30
B4 (8893711)		12.9	68.5	<0.002	0.05	0.14	10.0	1.2	1.0	352	0.28	<0.01	4.0	0.25	0.31
B5 (8893712)		11.3	56.0	<0.002	0.12	0.14	11.6	<0.5	1.1	356	0.32	<0.01	3.8	0.31	0.27
B6 (8893713)		13.1	67.9	<0.002	0.28	0.11	9.4	0.9	13.7	334	0.40	<0.01	5.8	0.25	0.31
B7 (8893714)		14.4	57.1	<0.002	0.09	0.16	12.1	1.0	1.2	373	0.32	<0.01	4.5	0.31	0.24
B8 (8893715)		15.4	59.8	<0.002	0.03	0.35	10.4	0.6	1.4	203	0.38	<0.01	4.0	0.32	0.26
B9 (8893716)		12.8	55.3	<0.002	0.03	0.26	10.0	0.8	1.3	256	0.37	<0.01	5.2	0.37	0.24
B10 (8893717)		13.2	54.8	<0.002	0.04	0.28	9.5	1.3	1.2	261	0.38	<0.01	4.8	0.30	0.27
B11 (8893718)		14.7	51.8	<0.002	0.04	0.29	8.6	0.7	1.2	292	0.38	0.03	5.5	0.31	0.27
B12 (8893719)		15.6	77.5	<0.002	0.05	0.40	13.5	1.4	1.8	334	0.68	0.02	6.7	0.38	0.35
B13 (8893720)		14.8	56.4	<0.002	0.03	0.23	7.1	0.8	1.0	371	0.27	0.04	2.6	0.19	0.28

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
B14 (8893721)		13.7	61.4	<0.002	0.03	0.37	10.0	1.1	1.5	273	0.41	0.01	5.4	0.33	0.29
B15 (8893722)		17.5	51.2	<0.002	0.03	0.23	8.2	0.9	1.6	263	0.74	0.01	9.3	0.34	0.26
B16 (8893723)		16.7	61.8	<0.002	0.03	0.30	9.2	1.0	1.5	234	0.46	0.05	7.0	0.39	0.29
B17 (8893724)		11.1	53.6	<0.002	0.03	0.09	7.4	0.7	0.8	330	0.22	<0.01	4.4	0.21	0.24
B18 (8893725)		10.9	50.5	<0.002	0.03	0.13	7.7	0.8	0.9	314	0.30	0.01	2.9	0.23	0.22
B19 (8893726)		14.2	46.3	<0.002	0.10	0.19	10.9	1.2	1.3	234	0.45	<0.01	6.1	0.39	0.25
B20 (8893727)		12.9	35.8	<0.002	0.06	0.18	8.7	1.1	1.1	210	0.29	0.01	3.2	0.26	0.17
B21 (8893728)		13.7	49.6	<0.002	0.04	0.11	9.0	0.9	1.1	309	0.43	0.01	5.6	0.26	0.24
B22 (8893729)		14.9	48.2	<0.002	0.06	0.28	10.6	1.2	1.4	228	1.89	0.04	9.1	0.40	0.23
B23 (8893730)		12.4	59.8	<0.002	0.04	0.43	11.6	1.2	1.6	201	0.41	0.03	4.7	0.33	0.27
C1 (8893731)		12.8	47.7	<0.002	0.06	0.38	8.1	1.3	1.6	237	0.38	<0.01	3.5	0.26	0.24
C2 (8893732)		14.2	58.7	<0.002	0.03	0.37	8.1	1.2	1.4	231	0.43	0.09	3.5	0.31	0.28
C3 (8893733)		16.4	56.1	<0.002	0.03	0.21	9.9	0.8	1.4	299	0.35	<0.01	5.4	0.32	0.28
C4 (8893734)		20.3	70.9	<0.002	0.04	0.36	10.8	1.0	1.7	230	1.34	0.02	6.0	0.44	0.36
C5 (8893735)		16.8	73.8	<0.002	0.03	0.28	8.0	1.4	1.6	248	0.42	0.02	3.9	0.30	0.32
C6 (8893736)		17.2	69.7	<0.002	0.03	0.32	9.4	1.4	1.6	254	0.49	0.01	4.5	0.34	0.33
C7 (8893737)		19.9	68.0	<0.002	0.03	0.46	9.5	1.1	1.6	252	0.46	0.02	4.5	0.34	0.30
C8 (8893738)		20.3	70.0	<0.002	0.03	0.39	10.1	1.4	1.8	243	0.49	0.08	5.5	0.42	0.29
C9 (8893739)		18.9	71.5	<0.002	0.04	0.27	10.7	0.9	1.4	275	0.44	<0.01	4.5	0.40	0.29
C10 (8893740)		15.7	63.0	<0.002	0.04	0.27	11.0	0.9	1.4	257	0.45	0.04	5.7	0.45	0.27
C11 (8893741)		19.6	73.4	<0.002	0.07	0.64	16.8	1.5	2.1	195	0.61	0.05	5.4	0.52	0.37
C12 (8893742)		19.9	75.5	0.022	0.03	0.36	9.9	1.2	1.6	231	0.58	0.07	3.7	0.34	0.37
C13 (8893743)		21.4	69.6	<0.002	0.04	0.61	9.2	1.2	1.7	250	0.60	0.06	9.4	0.35	0.31
C14 (8893744)		19.8	55.1	<0.002	0.05	0.43	11.4	2.3	1.5	149	1.95	0.07	7.0	0.55	0.23
C15 (8893745)		26.0	79.2	<0.002	0.05	0.47	11.0	1.6	1.8	202	0.51	0.05	5.3	0.31	0.35
C16 (8893746)		13.9	61.7	<0.002	0.04	0.25	9.2	1.0	1.3	240	0.44	0.01	4.7	0.29	0.29
C17 (8893747)		14.2	63.4	<0.002	0.03	0.23	9.2	1.1	1.3	246	0.39	0.03	8.2	0.29	0.31
C18 (8893748)		14.1	59.0	<0.002	0.04	0.20	9.3	1.2	1.4	288	1.52	<0.01	6.6	0.33	0.25
C19 (8893749)		17.4	69.2	<0.002	0.03	0.27	8.0	1.1	1.4	310	0.30	<0.01	6.3	0.33	0.28
C20 (8893750)		14.8	59.0	<0.002	0.03	0.80	8.4	0.8	1.3	262	0.61	<0.01	5.3	0.34	0.26
C21 (8893751)		18.1	69.7	<0.002	0.03	0.27	9.1	1.2	1.3	245	0.45	0.03	4.0	0.35	0.30
C22 (8893752)		18.6	70.5	<0.002	0.04	0.31	9.3	0.9	1.5	281	0.47	0.05	7.2	0.35	0.31

Certified By:

Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
C23 (8893753)		11.5	60.5	<0.002	0.03	0.19	8.2	0.5	1.0	266	0.18	<0.01	2.2	0.31	0.25
C24 (8893754)		11.3	58.0	<0.002	0.12	0.18	10.1	0.9	1.0	304	0.32	0.01	5.0	0.28	0.25
C25 (8893755)		15.3	79.7	<0.002	0.03	0.41	13.2	1.0	1.6	233	0.54	0.03	7.8	0.34	0.43
C26 (8893756)		13.5	72.7	<0.002	0.03	0.26	13.5	1.0	1.8	309	0.49	<0.01	6.3	0.41	0.36
D1 (8893757)		15.4	65.1	<0.002	0.04	0.29	9.3	1.2	1.5	235	0.47	0.03	4.3	0.34	0.30
D2 (8893758)		15.0	68.8	<0.002	0.04	0.31	11.1	1.9	1.5	262	0.45	0.05	4.2	0.42	0.27
D3 (8893759)		13.9	67.0	<0.002	0.03	0.15	7.7	0.6	1.0	307	0.29	0.02	5.1	0.24	0.30
D4 (8893760)		16.5	60.5	<0.002	0.05	0.34	9.8	1.7	1.7	209	0.54	0.36	5.0	0.44	0.25

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 04, 2018 SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
A1 (8893689)		0.520	35.5	0.1	8.4	20.5	99.5
A2 (8893690)		0.620	51.1	0.1	9.0	23.1	126
A3 (8893691)		0.632	44.5	0.1	9.6	23.1	124
A4 (8893692)		0.520	53.4	0.1	7.6	25.5	71.0
A5 (8893693)		0.614	38.2	<0.1	6.8	16.7	98.8
A6 (8893694)		1.10	68.0	0.4	12.3	34.5	116
A7 (8893695)		1.26	69.9	0.4	13.7	60.8	129
A8 (8893696)		0.907	60.9	0.3	11.3	47.6	159
A9 (8893697)		0.799	57.7	0.2	13.4	30.3	155
A10 (8893698)		0.669	58.2	0.2	11.6	30.7	97.0
A11 (8893699)		0.971	59.7	0.2	14.6	40.2	129
A12 (8893700)		1.39	76.2	0.3	20.4	44.9	153
A13 (8893701)		1.52	70.2	0.3	26.8	204	159
A14 (8893702)		0.968	55.1	0.2	16.9	33.2	128
A15 (8893703)		0.848	55.3	0.2	13.5	39.1	149
A16 (8893704)		0.678	49.4	0.1	12.5	26.4	115
A17 (8893705)		0.811	50.4	0.1	11.1	33.6	105
A18 (8893706)		1.12	70.5	0.4	13.9	43.8	197
A19 (8893707)		0.626	61.1	0.1	11.4	52.9	105
A20 (8893708)		0.566	55.5	0.1	9.5	30.8	88.8
A21 (8893709)		1.00	59.4	0.4	11.2	64.8	162
B3 (8893710)		1.90	65.0	0.4	16.5	47.8	133
B4 (8893711)		1.06	57.9	0.5	17.3	40.6	119
B5 (8893712)		0.872	98.0	0.3	16.5	41.2	121
B6 (8893713)		0.896	57.5	0.2	16.0	39.9	136
B7 (8893714)		0.933	81.3	0.2	20.9	38.5	198
B8 (8893715)		1.21	84.3	0.6	14.1	51.0	138
B9 (8893716)		1.01	77.4	0.3	15.5	37.5	195
B10 (8893717)		1.03	68.7	0.3	13.1	48.3	143
B11 (8893718)		1.14	81.0	0.2	12.1	50.1	210
B12 (8893719)		1.63	88.7	0.5	19.0	49.6	222
B13 (8893720)		0.660	49.7	0.2	9.8	33.8	91.2

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282580

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
B14 (8893721)	1.16	75.1	0.3	16.5	54.3	184
B15 (8893722)	1.28	65.1	0.4	14.7	56.2	154
B16 (8893723)	1.26	88.9	0.4	12.1	41.5	177
B17 (8893724)	0.747	40.4	0.1	10.9	22.8	128
B18 (8893725)	0.660	44.0	0.2	10.9	24.4	125
B19 (8893726)	1.38	62.7	0.3	13.3	34.7	145
B20 (8893727)	0.823	84.3	0.2	9.4	33.8	128
B21 (8893728)	1.01	51.5	0.2	13.3	29.8	116
B22 (8893729)	1.27	99.7	0.4	14.6	57.8	179
B23 (8893730)	1.39	91.8	0.5	18.3	72.2	157
C1 (8893731)	0.846	53.5	0.3	9.6	64.6	131
C2 (8893732)	0.946	83.9	0.4	9.4	57.3	142
C3 (8893733)	1.02	70.2	0.3	13.3	42.0	183
C4 (8893734)	1.04	92.2	0.4	12.4	63.5	148
C5 (8893735)	0.922	66.0	0.4	10.9	45.8	177
C6 (8893736)	1.03	76.3	0.4	12.6	48.7	167
C7 (8893737)	1.01	80.1	0.3	12.9	56.7	176
C8 (8893738)	1.02	105	0.4	13.8	56.0	189
C9 (8893739)	1.01	76.1	0.3	13.4	68.4	186
C10 (8893740)	1.03	82.4	0.3	13.9	53.0	173
C11 (8893741)	1.61	121	0.7	16.5	73.0	171
C12 (8893742)	1.05	80.2	0.5	12.7	63.6	144
C13 (8893743)	1.23	78.5	0.4	12.9	74.7	178
C14 (8893744)	1.36	99.1	1.1	12.0	85.3	139
C15 (8893745)	1.20	87.4	0.5	13.0	105	115
C16 (8893746)	1.02	68.5	0.4	12.6	74.3	174
C17 (8893747)	1.08	62.8	0.3	13.1	65.5	185
C18 (8893748)	1.20	75.8	0.5	15.3	61.3	220
C19 (8893749)	0.805	46.5	0.2	11.7	43.0	159
C20 (8893750)	0.960	65.9	0.3	11.4	32.8	209
C21 (8893751)	1.03	76.8	0.4	13.1	66.2	161
C22 (8893752)	0.953	58.4	0.3	14.1	53.9	170

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282580
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 04, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
C23 (8893753)	0.747	48.2	0.1	9.9	30.1	122
C24 (8893754)	1.05	64.0	0.2	19.1	34.6	133
C25 (8893755)	1.96	86.4	0.6	22.1	45.1	170
C26 (8893756)	1.47	92.5	0.4	20.4	42.9	228
D1 (8893757)	0.963	74.6	0.4	12.3	65.1	155
D2 (8893758)	1.08	104	0.3	16.6	49.1	197
D3 (8893759)	0.663	56.8	0.2	9.2	33.6	103
D4 (8893760)	1.17	121	0.5	12.9	106	159

Comments: RDL - Reported Detection Limit

8893689-8893760 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893689	0.24	0.11		8893709	0.43	0.45	4.5%	8893729	0.338	0.285	17.0%	8893750	0.24	0.24	0.0%
Al	8893689	5.79	5.87	1.4%	8893709	6.26	6.19	1.1%	8893729	7.70	7.58	1.6%	8893750	6.25	6.42	2.7%
As	8893689	0.9	0.8	11.8%	8893709	2.7	2.1	25.0%	8893729	6.88	5.11	29.5%	8893750	2.9	2.4	18.9%
Ba	8893689	541	533	1.5%	8893709	484	479	1.0%	8893729	403	382	5.4%	8893750	492	513	4.2%
Be	8893689	1.17	1.09	7.1%	8893709	1.28	1.34	4.6%	8893729	1.52	1.42	6.8%	8893750	1.18	1.39	16.3%
Bi	8893689	0.063	0.055	13.6%	8893709	0.10	0.10	0.0%	8893729	0.16	0.16	0.0%	8893750	0.103	0.108	4.7%
Ca	8893689	1.45	1.45	0.0%	8893709	1.42	1.39	2.1%	8893729	1.24	1.21	2.4%	8893750	1.33	1.37	3.0%
Cd	8893689	0.028	0.036	25.0%	8893709	0.145	0.137	5.7%	8893729	0.171	0.165	3.6%	8893750	0.079	0.095	18.4%
Ce	8893689	17.4	16.9	2.9%	8893709	28.1	25.5	9.7%	8893729	45.1	39.1	14.3%	8893750	28.0	33.2	17.0%
Co	8893689	6.46	6.65	2.9%	8893709	14.0	13.5	3.6%	8893729	20.5	19.3	6.0%	8893750	11.6	12.3	5.9%
Cr	8893689	39.8	40.8	2.5%	8893709	60.5	55.5	8.6%	8893729	111	103	7.5%	8893750	69.8	74.1	6.0%
Cs	8893689	1.05	1.07	1.9%	8893709	1.46	1.50	2.7%	8893729	1.70	1.60	6.1%	8893750	1.74	1.85	6.1%
Cu	8893689	3.3	2.9	12.9%	8893709	8.3	8.2	1.2%	8893729	17.0	16.7	1.8%	8893750	7.72	8.22	6.3%
Fe	8893689	1.22	1.24	1.6%	8893709	2.26	2.23	1.3%	8893729	4.50	4.43	1.6%	8893750	2.22	2.27	2.2%
Ga	8893689	13.8	14.7	6.3%	8893709	15.4	15.2	1.3%	8893729	16.4	15.3	6.9%	8893750	16.5	17.3	4.7%
Ge	8893689	0.229	0.256	11.1%	8893709	0.591	0.541	8.8%	8893729	0.72	0.72	0.0%	8893750	0.17	0.15	12.5%
Hf	8893689	1.83	1.86	1.6%	8893709	3.10	2.61	17.2%	8893729	3.32	3.72	11.4%	8893750	3.61	3.12	14.6%
In	8893689	0.0193	0.0201	4.1%	8893709	0.032	0.032	0.0%	8893729	0.0449	0.0445	0.9%	8893750	0.031	0.031	0.0%
K	8893689	1.72	1.71	0.6%	8893709	1.58	1.57	0.6%	8893729	1.35	1.28	5.3%	8893750	1.65	1.69	2.4%
La	8893689	8.5	8.1	4.8%	8893709	13.7	12.2	11.6%	8893729	21.7	18.9	13.8%	8893750	13.5	16.4	19.4%
Li	8893689	9.3	9.3	0.0%	8893709	13.9	13.8	0.7%	8893729	31.1	30.1	3.3%	8893750	18.7	19.3	3.2%
Mg	8893689	0.522	0.526	0.8%	8893709	0.57	0.57	0.0%	8893729	0.775	0.754	2.7%	8893750	0.63	0.65	3.1%
Mn	8893689	250	253	1.2%	8893709	696	667	4.3%	8893729	418	415	0.7%	8893750	325	325	0.0%
Mo	8893689	0.31	0.31	0.0%	8893709	0.69	0.72	4.3%	8893729	0.94	0.89	5.5%	8893750	0.553	0.641	14.7%
Na	8893689	2.27	2.28	0.4%	8893709	1.95	1.90	2.6%	8893729	1.51	1.46	3.4%	8893750	1.77	1.83	3.3%
Nb	8893689	4.44	5.03	12.5%	8893709	7.42	8.16	9.5%	8893729	15.8	14.0	12.1%	8893750	10.6	10.0	5.8%
Ni	8893689	16.2	16.2	0.0%	8893709	21.2	21.2	0.0%	8893729	46.2	41.2	11.4%	8893750	26.1	27.3	4.5%
P	8893689	228	208	9.2%	8893709	512	517	1.0%	8893729	612	594	3.0%	8893750	276	292	5.6%
Pb	8893689	11.1	11.1	0.0%	8893709	12.0	11.5	4.3%	8893729	14.9	14.0	6.2%	8893750	14.8	15.8	6.5%
Rb	8893689	55.0	55.8	1.4%	8893709	54.0	56.6	4.7%	8893729	48.2	45.0	6.9%	8893750	59.0	63.9	8.0%
Re	8893689	< 0.002	< 0.002	0.0%	8893709	< 0.002	< 0.002	0.0%	8893729	< 0.002	< 0.002	0.0%	8893750	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893689	0.02	0.02	0.0%	8893709	0.04	0.04	0.0%	8893729	0.06	0.06	0.0%	8893750	0.03	0.03	0.0%
Sb	8893689	0.110	0.084	26.8%	8893709	0.224	0.241	7.3%	8893729	0.278	0.260	6.7%	8893750	0.80	0.50	
Sc	8893689	6.14	6.27	2.1%	8893709	7.9	7.9	0.0%	8893729	10.6	10.4	1.9%	8893750	8.4	8.6	2.4%
Se	8893689	0.6	0.8	28.6%	8893709	0.7	1.2		8893729	1.2	1.3	8.0%	8893750	0.85	1.02	18.2%
Sn	8893689	1.0	1.2	18.2%	8893709	1.21	1.35	10.9%	8893729	1.41	1.33	5.8%	8893750	1.3	1.5	14.3%
Sr	8893689	336	346	2.9%	8893709	288	288	0.0%	8893729	228	227	0.4%	8893750	262	275	4.8%
Ta	8893689	0.20	0.23	14.0%	8893709	0.343	0.351	2.3%	8893729	1.89	1.51	22.4%	8893750	0.61	0.50	19.8%
Te	8893689	< 0.01	< 0.01	0.0%	8893709	< 0.01	0.01		8893729	0.04	0.03		8893750	< 0.01	0.02	
Th	8893689	2.4	2.1	13.3%	8893709	5.4	4.6	16.0%	8893729	9.1	7.7	16.7%	8893750	5.3	6.2	15.7%
Ti	8893689	0.19	0.19	0.0%	8893709	0.272	0.277	1.8%	8893729	0.40	0.40	0.0%	8893750	0.339	0.333	1.8%
Tl	8893689	0.25	0.26	3.9%	8893709	0.25	0.25	0.0%	8893729	0.23	0.22	4.4%	8893750	0.26	0.28	7.4%
U	8893689	0.520	0.525	1.0%	8893709	1.00	0.838	17.6%	8893729	1.27	1.10	14.3%	8893750	0.960	0.955	0.5%
V	8893689	35.5	36.4	2.5%	8893709	59.4	61.5	3.5%	8893729	99.7	95.9	3.9%	8893750	65.9	67.0	1.7%
W	8893689	0.1	0.1	0.0%	8893709	0.4	0.2		8893729	0.4	0.4	0.0%	8893750	0.3	0.3	0.0%
Y	8893689	8.4	9.1	8.0%	8893709	11.2	10.8	3.6%	8893729	14.6	13.6	7.1%	8893750	11.4	12.6	10.0%
Zn	8893689	20.5	19.3	6.0%	8893709	64.8	64.0	1.2%	8893729	57.8	55.8	3.5%	8893750	32.8	36.7	11.2%
Zr	8893689	99.5	96.9	2.6%	8893709	162	152	6.4%	8893729	179	186	3.8%	8893750	209	186	11.6%

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282580

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.4	95%	90% - 110%	6.96	6.91	99%	90% - 110%								
As					124	124	100%	90% - 110%								
Ba	340	323	95%	90% - 110%	186	185	100%	90% - 110%								
Be	2.6	2.8	107%	90% - 110%												
Ca	5.72	5.39	94%	90% - 110%	4.01	4	100%	90% - 110%								
Ce	122	127	104%	90% - 110%	24	24	100%	90% - 110%								
Co	2.8	3	107%	90% - 110%	22.1	24.1	109%	90% - 110%					2.8	3.0	107%	90% - 110%
Cs	1.5	1.7	113%	90% - 110%												
Cu	7	5	73%	90% - 110%	88.6	85.7	97%	90% - 110%								
Fe	4.34	3.77	86%	90% - 110%	7.56	7	93%	90% - 110%								
Ga	35	38	108%	90% - 110%												
K	1.37	1.35	98%	90% - 110%	2.021	2.031	101%	90% - 110%								
La	58	60	103%	90% - 110%												
Li	37	37	101%	90% - 110%												
Mg	0.325	0.291	90%	90% - 110%	2.412	2.436	101%	90% - 110%								
Mn					1510	1402	93%	90% - 110%								
Na	5.267	5.213	99%	90% - 110%	0.617	0.635	103%	90% - 110%								
Ni	9	7	79%	90% - 110%	77.1	71.1	92%	90% - 110%								
P					892	938	105%	90% - 110%								
Pb	10	10	97%	90% - 110%												
Rb	55	57.9	105%	90% - 110%												
S					0.348	0.378	108%	90% - 110%								
Sr	1191	1161	97%	90% - 110%	92.8	90.2	97%	90% - 110%								
Ta	0.9	1	109%	90% - 110%												
Th	1.4	1.3	95%	90% - 110%												
Ti	0.172	0.155	90%	90% - 110%												
V	8	6	81%	90% - 110%					77	77	100%	90% - 110%	8	6	79%	90% - 110%
Zn	93	86	93%	90% - 110%	208	202	97%	90% - 110%								
	CRM #5 (ref.Till-2)				CRM #6 (ref.GTS-2A)				CRM #7 (ref.SY-4)				CRM #8 (ref.GTS-2A)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	8.17	8.26	101%	90% - 110%					10.95	10.33	94%	90% - 110%	6.96	7.05	101%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

As	26	24.4	94%	90% - 110%									124	128	103%	90% - 110%
Ba	540	533	99%	90% - 110%					340	319	94%	90% - 110%	186	188	101%	90% - 110%
Be	4.0	4.2	106%	90% - 110%					2.6	2.9	111%	90% - 110%				
Ca	0.907	0.929	102%	90% - 110%					5.72	5.39	94%	90% - 110%	4.01	4.14	103%	90% - 110%
Ce	98	103	105%	90% - 110%					122	118	96%	90% - 110%	24	24	98%	90% - 110%
Co					22.1	23.8	107%	90% - 110%								
Cr	60.3	59.5	99%	90% - 110%												
Cs	12	12	103%	90% - 110%					1.5	1.7	115%	90% - 110%				
Cu	150	147	98%	90% - 110%									88.6	87.4	99%	90% - 110%
Fe	3.77	3.58	95%	90% - 110%					4.34	3.78	87%	90% - 110%	7.56	7.32	97%	90% - 110%
Ga									35	37	105%	90% - 110%				
K									1.37	1.29	94%	90% - 110%	2.021	2.072	103%	90% - 110%
La	44	46	104%	90% - 110%					58	54	93%	90% - 110%				
Li	47	46	97%	90% - 110%					37	36	98%	90% - 110%				
Mg	1.10	1.07	98%	90% - 110%					0.325	0.286	88%	90% - 110%	2.412	2.483	103%	90% - 110%
Mn	780	729	93%	90% - 110%									1510	1455	96%	90% - 110%
Mo	14	15	107%	90% - 110%												
Na	1.624	1.685	104%	90% - 110%					5.267	5.054	96%	90% - 110%	0.617	0.655	106%	90% - 110%
Nb	20	21	107%	90% - 110%												
Ni	32	33	104%	90% - 110%					9	7	83%	90% - 110%	77.1	72.8	94%	90% - 110%
P													892	923	103%	90% - 110%
Pb	31	31	99%	90% - 110%					10	10	96%	90% - 110%				
Rb	143	132	92%	90% - 110%					55	57.2	104%	90% - 110%				
S													0.348	0.38	109%	90% - 110%
Sc	12	12	104%	90% - 110%												
Sr	144	146	101%	90% - 110%					1191	1141	96%	90% - 110%	92.8	93.1	100%	90% - 110%
Ta	1.9	1.7	89%	90% - 110%					0.9	1	113%	90% - 110%				
Th	18.4	17.6	95%	90% - 110%					1.4	1.2	85%	90% - 110%				
Ti	0.53	0.43	81%	90% - 110%					0.172	0.152	88%	90% - 110%				
U	5.7	4.5	79%	90% - 110%					0.8	0.7	82%	90% - 110%				
V									8	8	99%	90% - 110%				
W	5	5	91%	90% - 110%												
Y	40	31	78%	90% - 110%												
Zn	130	121	93%	90% - 110%					93	88	94%	90% - 110%	208	206	99%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 17T282580
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
P.O BOX 10112 1470-701 W. GEORGIA ST
VANCOUVER, BC V7Y 1C6
604-646-6908

ATTENTION TO: Jason Gigliotti, Jim Nelson

PROJECT:

AGAT WORK ORDER: 17T282581

SOLID ANALYSIS REVIEWED BY: Kevin Motomura, Data Review Supervisor

DATE REPORTED: Jan 02, 2018

PAGES (INCLUDING COVER): 19

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Results relate only to the items tested and to all the items tested

Certificate of Analysis

AGAT Laboratories

AGAT WORK ORDER: 17T282581

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
D5 (8893776)		0.54	6.79	8.8	421	1.30	0.27	1.28	0.12	37.6	17.4	100	1.71	180	4.24
D6 (8893777)		0.32	6.95	4.9	554	1.43	0.15	1.41	0.07	43.3	12.1	67.7	1.65	27.3	2.30
D7 (8893778)		0.31	7.36	3.4	565	1.33	0.11	1.41	0.09	37.4	11.5	68.3	1.87	19.1	2.36
D8 (8893779)		0.35	7.15	4.9	531	1.38	0.15	1.57	0.11	38.2	13.7	82.3	2.04	32.4	3.08
D9 (8893780)		0.36	6.64	3.7	479	1.31	0.12	1.44	0.07	30.4	12.7	73.4	1.80	23.3	2.83
D10 (8893781)		0.35	7.49	4.4	548	1.24	0.12	1.62	0.10	32.8	11.5	70.6	1.64	19.6	2.87
D11 (8893782)		0.25	7.80	2.9	542	1.39	0.13	1.49	0.10	36.1	13.9	84.5	2.25	24.1	3.62
D12 (8893783)		0.44	7.57	3.4	517	1.42	0.12	1.39	0.09	37.0	15.6	87.6	1.97	19.6	3.30
D13 (8893784)		0.25	7.26	1.7	593	1.35	0.10	1.35	0.05	37.7	11.6	70.0	1.91	11.6	2.31
D14 (8893785)		0.33	8.11	2.6	602	1.32	0.10	1.46	0.07	27.7	12.3	87.6	2.05	19.0	3.18
D15 (8893786)		0.31	8.55	4.8	539	1.38	0.14	1.38	0.12	28.3	17.2	95.6	2.47	31.3	3.77
D16 (8893787)		0.31	8.03	6.1	493	1.33	0.15	1.25	0.13	25.2	15.5	90.4	2.41	43.6	4.42
D17 (8893788)		0.37	6.15	3.6	515	1.00	0.12	1.53	0.09	30.8	8.65	64.6	2.28	17.6	2.25
D18 (8893789)		0.49	7.81	5.6	391	1.18	0.16	1.23	0.13	25.7	18.2	77.7	2.23	64.7	4.47
D19 (8893790)		0.34	6.63	7.2	544	1.09	0.14	1.39	0.13	24.1	14.7	55.7	1.79	22.4	2.61
D20 (8893791)		0.26	7.33	5.5	477	1.25	0.14	1.39	0.06	22.5	23.9	66.5	1.66	27.9	3.01
D21 (8893792)		0.32	7.98	3.0	515	1.34	0.16	1.52	0.11	26.3	22.7	69.0	1.78	42.0	3.33
D22 (8893793)		0.20	7.56	6.3	478	1.41	0.18	1.44	0.10	27.5	16.5	71.1	1.84	44.2	3.22
D23 (8893794)		0.24	6.35	6.3	424	1.01	0.19	1.28	0.12	29.7	7.62	57.5	1.79	30.5	3.43
D24 (8893795)		0.31	7.34	3.3	512	1.44	0.11	1.45	0.08	29.8	17.1	76.6	1.99	15.6	3.06
D25 (8893796)		0.45	7.45	3.9	569	1.52	0.14	1.40	0.06	39.7	14.3	79.7	2.59	18.9	3.02
D26 (8893797)		0.36	8.54	8.9	521	1.75	0.24	1.42	0.07	49.0	27.8	128	2.78	75.8	5.95
D27 (8893798)		0.62	7.63	9.6	434	1.50	0.17	1.32	0.13	26.3	17.7	98.6	2.16	27.3	4.15
D28 (8893799)		0.41	7.63	7.4	532	1.41	0.14	1.49	0.13	28.6	23.0	70.8	2.12	21.5	3.19
E1 (8893800)		0.22	7.04	3.0	593	1.20	0.08	1.53	0.05	25.0	10.7	70.9	1.94	11.9	2.62
E2 (8893801)		0.26	6.68	2.2	551	1.24	0.09	1.30	0.10	33.8	11.3	71.4	1.99	11.4	2.46
E3 (8893802)		0.24	6.64	3.9	518	1.25	0.11	1.62	0.07	34.7	13.8	74.1	1.94	14.6	2.78
E4 (8893803)		0.24	6.47	4.6	509	1.30	0.09	1.89	0.07	38.5	13.5	104	1.53	11.0	2.85
E5 (8893804)		0.18	7.28	3.8	590	1.65	0.12	1.76	0.04	53.6	18.7	81.9	2.41	22.9	3.09
E6 (8893805)		0.23	6.68	11.6	541	1.31	0.11	1.72	0.09	31.8	17.4	81.2	2.29	17.1	2.96
E7 (8893806)		0.23	7.60	3.9	610	1.35	0.15	1.49	0.06	31.0	16.9	92.4	2.17	24.8	2.92
E8 (8893807)		0.27	6.68	3.6	608	1.14	0.11	1.42	0.06	29.1	12.3	67.5	2.37	7.9	2.37

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
E9 (8893808)		0.29	6.60	1.2	494	1.32	0.10	1.42	0.06	23.8	11.3	66.3	1.77	6.5	3.04
E10 (8893809)		0.56	7.05	6.1	504	1.37	0.14	1.41	0.10	17.2	14.3	85.3	1.86	11.7	4.11
E11 (8893810)		0.32	7.48	3.0	538	1.37	0.12	1.57	0.07	36.1	15.5	104	1.48	19.9	4.51
E12 (8893811)		0.25	8.41	4.2	573	1.40	0.13	1.63	0.10	20.7	19.6	88.2	1.98	15.2	4.34
E13 (8893812)		0.30	8.02	4.5	564	1.22	0.12	1.69	0.06	27.1	18.5	89.3	1.85	14.8	4.65
E14 (8893813)		0.29	8.45	4.7	580	1.36	0.15	1.65	0.10	27.7	14.9	111	1.87	24.5	4.80
E15 (8893814)		0.40	8.34	8.9	576	1.40	0.20	1.28	0.11	27.0	19.9	94.5	2.37	57.3	5.06
E16 (8893815)		0.33	7.74	3.6	559	1.32	0.10	1.61	0.07	35.2	12.4	73.6	1.67	14.5	2.83
E17 (8893816)		0.44	7.09	7.6	558	1.19	0.17	1.43	0.10	27.3	10.9	81.5	2.26	12.1	3.27
E18 (8893817)		0.31	7.13	3.8	514	1.10	0.10	1.35	0.07	25.3	9.98	72.4	1.74	10.2	2.81
E19 (8893818)		0.34	8.41	2.9	596	1.32	0.11	1.61	0.08	35.8	12.6	85.3	2.41	14.7	3.55
E20 (8893819)		0.33	8.08	3.0	579	1.51	0.10	1.53	0.10	37.8	14.3	88.2	1.78	27.9	3.33
E21 (8893820)		0.27	7.04	2.3	492	1.30	0.09	1.71	0.07	25.2	13.3	88.3	1.48	8.5	3.55
E22 (8893821)		0.27	7.77	6.0	514	1.22	0.13	1.58	0.09	26.1	14.9	72.3	1.90	36.4	3.43
E23 (8893822)		0.19	7.30	5.1	548	1.29	0.11	1.61	0.03	53.1	10.6	77.4	1.42	44.1	2.71
E24 (8893823)		0.27	5.67	4.1	388	0.91	0.14	1.38	0.11	18.5	8.46	98.4	1.41	16.0	2.60
E25 (8893824)		0.28	5.92	8.6	478	1.01	0.14	1.36	0.06	18.4	7.27	50.4	1.46	13.9	2.04
E26 (8893825)		0.21	7.21	4.2	442	1.11	0.14	1.42	0.11	25.2	14.1	60.6	1.66	70.1	3.78
E27 (8893826)		0.21	7.07	6.8	457	1.25	0.16	1.42	0.06	22.1	14.8	63.7	1.80	56.6	3.71
E28 (8893827)		0.19	5.87	3.5	486	1.17	0.10	1.34	0.04	18.9	9.52	42.7	1.24	27.7	1.88
E29 (8893828)		0.27	7.28	5.4	526	1.08	0.10	1.42	0.05	21.9	10.1	57.9	1.37	16.6	2.60
E30 (8893829)		0.27	7.86	9.9	532	1.36	0.17	1.82	0.07	47.4	15.4	73.7	1.38	94.7	3.43
E31 (8893830)		0.20	7.92	7.5	451	1.32	0.18	1.53	0.06	25.7	17.9	69.1	1.57	33.3	3.39
E32 (8893831)		0.28	5.90	2.1	508	0.91	0.13	1.31	0.06	22.0	5.27	45.3	1.15	6.8	2.22
E33 (8893832)		0.19	6.80	2.5	514	1.20	0.08	1.71	0.07	16.5	9.11	57.1	1.11	4.5	2.51
E34 (8893833)		0.17	7.00	1.6	546	1.46	0.07	1.65	0.07	18.8	9.34	56.0	1.19	5.4	2.13
E35 (8893834)		0.20	7.09	0.8	527	1.27	0.08	1.59	0.06	26.0	11.1	66.8	1.45	5.8	2.45
E36 (8893835)		0.44	7.37	5.9	483	1.33	0.14	1.35	0.09	25.1	16.5	75.7	2.14	17.0	3.41
E37 (8893836)		0.29	6.82	4.5	498	1.21	0.11	1.48	0.06	38.3	11.8	74.7	1.76	12.2	2.96
E38 (8893837)		0.20	7.12	4.4	557	1.29	0.09	1.43	0.05	40.5	10.2	65.5	1.42	13.9	2.31
E39 (8893838)		0.18	6.81	1.9	500	1.28	0.08	1.37	0.05	22.6	10.6	58.8	1.40	6.7	2.15
E40 (8893839)		0.16	8.23	1.7	690	1.39	0.07	1.80	0.03	21.3	9.63	53.1	1.20	5.9	2.25

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
E41 (8893840)		0.24	7.81	3.6	531	1.20	0.09	1.67	0.05	22.4	13.3	112	1.20	6.3	3.17
E42 (8893841)		0.30	6.90	7.2	444	1.48	0.12	1.90	0.09	25.4	19.8	135	1.87	17.4	4.32
E43 (8893842)		0.21	7.40	3.4	515	1.34	0.10	1.56	0.10	17.0	10.7	64.7	1.43	5.3	3.29
E44 (8893843)		0.25	6.71	4.7	477	1.13	0.12	1.30	0.11	22.3	7.86	65.8	1.81	10.2	3.43
E45 (8893844)		0.36	6.59	4.6	484	1.50	0.12	1.37	0.10	29.1	13.4	71.6	2.21	11.2	2.93
F1 (8893845)		0.18	6.53	3.5	497	1.42	0.07	1.25	0.07	21.7	11.0	50.4	1.47	4.9	2.05
F2 (8893846)		0.15	6.19	2.0	520	1.37	0.07	1.34	0.06	14.4	8.44	42.7	1.28	4.2	1.85
F3 (8893847)		0.19	6.51	2.9	446	1.40	0.08	1.46	0.06	31.7	12.1	72.1	1.40	6.8	2.82

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 02, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
D5 (8893776)		17.3	0.38	3.2	0.034	1.41	18.0	23.1	0.72	451	0.76	1.61	6.9	61.5	751
D6 (8893777)		19.6	0.08	3.2	0.024	1.94	17.0	15.3	0.82	322	0.35	2.06	6.7	36.6	284
D7 (8893778)		18.7	0.34	3.1	0.026	2.08	14.5	19.5	0.77	335	0.44	2.00	6.7	35.8	343
D8 (8893779)		19.0	0.33	3.6	0.026	1.79	17.8	20.2	0.78	418	0.56	1.96	6.9	38.5	525
D9 (8893780)		16.8	0.48	3.1	0.026	1.66	13.6	18.7	0.72	378	0.56	1.80	6.4	35.5	496
D10 (8893781)		16.7	0.76	3.3	0.026	1.90	14.3	18.5	0.78	405	0.50	2.12	6.4	34.2	397
D11 (8893782)		19.8	0.81	3.7	0.030	1.81	16.5	28.5	0.84	407	0.75	1.91	7.0	42.4	639
D12 (8893783)		18.6	0.77	3.0	0.029	1.76	17.0	24.9	0.86	373	0.71	1.81	6.9	46.2	686
D13 (8893784)		19.3	0.57	3.0	0.023	2.11	14.9	18.9	0.80	304	0.36	2.02	6.8	35.6	207
D14 (8893785)		17.4	0.72	2.7	0.022	2.07	13.9	23.7	0.93	376	0.40	1.97	6.2	44.3	577
D15 (8893786)		21.3	0.45	2.8	0.031	1.94	13.9	29.8	1.03	416	0.71	1.84	6.9	51.1	1000
D16 (8893787)		20.0	0.74	2.3	0.028	1.71	12.3	32.7	0.82	403	0.71	1.57	6.3	45.4	1050
D17 (8893788)		18.3	0.22	3.3	0.021	1.95	14.7	19.2	0.73	362	0.47	1.82	6.2	23.5	230
D18 (8893789)		19.4	0.56	2.7	0.033	1.42	12.3	78.1	1.13	316	1.04	1.38	5.5	50.5	882
D19 (8893790)		19.1	0.29	3.8	0.024	1.84	11.4	23.2	0.64	323	0.63	1.87	6.8	33.6	269
D20 (8893791)		17.7	0.55	2.5	0.026	1.57	10.6	25.7	0.76	326	0.54	1.91	5.5	42.9	274
D21 (8893792)		18.6	<0.05	3.0	0.029	1.70	11.5	26.8	0.79	345	0.61	2.04	5.7	41.6	347
D22 (8893793)		18.9	<0.05	2.9	0.025	1.58	11.7	21.8	0.77	360	0.57	2.06	4.9	35.3	317
D23 (8893794)		20.0	0.24	3.2	0.028	1.40	14.0	18.4	0.55	298	0.91	1.61	6.0	18.4	989
D24 (8893795)		18.3	0.08	3.1	0.025	1.76	13.6	22.2	0.76	358	0.52	1.95	6.0	41.9	465
D25 (8893796)		21.7	<0.05	3.0	0.025	1.87	19.2	28.0	0.83	386	0.51	1.83	7.5	46.3	505
D26 (8893797)		20.3	1.31	3.3	0.035	1.79	20.4	36.8	1.18	622	1.28	1.62	8.6	68.1	1440
D27 (8893798)		17.9	0.64	2.5	0.033	1.51	12.1	28.8	0.81	488	0.82	1.64	5.7	45.6	1170
D28 (8893799)		19.8	0.44	2.6	0.028	1.77	12.0	26.9	0.76	355	0.79	1.95	6.6	46.9	619
E1 (8893800)		18.6	0.37	2.4	0.020	2.19	12.3	21.3	1.01	407	0.31	2.17	5.9	33.4	221
E2 (8893801)		19.9	0.33	2.4	0.023	2.04	15.3	19.7	0.93	333	0.31	2.00	6.0	33.7	195
E3 (8893802)		19.4	0.38	2.2	0.024	1.87	16.6	25.1	1.12	521	0.38	2.08	6.6	35.3	305
E4 (8893803)		19.0	0.27	2.6	0.023	1.79	18.5	19.0	1.10	555	0.46	2.24	6.2	36.2	467
E5 (8893804)		22.6	<0.05	2.6	0.027	2.15	23.0	24.1	1.28	588	0.41	2.21	7.0	41.8	523
E6 (8893805)		21.0	<0.05	2.7	0.025	1.97	14.0	28.1	1.13	475	0.44	2.10	6.9	38.8	212
E7 (8893806)		19.4	0.40	2.4	0.023	2.20	14.1	23.5	1.22	459	0.29	2.11	7.0	50.5	275
E8 (8893807)		20.7	<0.05	2.9	0.023	2.25	14.3	21.5	0.94	359	0.33	1.94	7.1	33.2	189

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
E9 (8893808)	22.0	<0.05	2.6	0.025	1.69	11.5	19.8	0.69	312	0.60	1.96	6.0	27.6	257
E10 (8893809)	20.6	0.58	1.9	0.028	1.59	8.0	30.4	0.82	356	0.75	1.91	5.7	39.0	532
E11 (8893810)	16.4	0.62	3.8	0.023	1.72	14.8	23.2	0.91	574	0.39	1.91	6.1	42.4	572
E12 (8893811)	18.1	0.43	2.4	0.024	2.11	9.6	32.5	1.20	505	0.39	2.01	5.2	50.2	773
E13 (8893812)	18.6	0.50	2.3	0.028	2.02	13.3	32.0	1.10	536	0.44	1.99	5.5	51.0	726
E14 (8893813)	17.3	0.63	2.2	0.028	1.95	12.3	36.7	1.17	621	0.37	2.04	5.1	55.9	2570
E15 (8893814)	17.7	0.48	2.2	0.030	1.93	11.9	37.8	1.14	541	0.66	1.48	6.8	59.4	3140
E16 (8893815)	17.5	0.20	3.4	0.021	1.97	15.9	19.6	0.86	404	0.42	2.13	6.1	36.4	590
E17 (8893816)	19.4	<0.05	3.2	0.028	1.90	14.1	26.8	0.72	560	0.50	1.82	7.1	33.5	797
E18 (8893817)	15.8	0.14	3.0	0.020	1.77	12.4	24.8	0.77	353	0.42	1.73	5.8	39.2	600
E19 (8893818)	16.9	0.17	3.3	0.031	2.13	16.5	25.6	0.98	453	0.53	2.11	10.5	42.6	910
E20 (8893819)	17.4	0.27	2.9	0.025	1.96	15.4	20.7	0.97	415	0.39	2.05	6.1	44.4	730
E21 (8893820)	18.6	<0.05	3.9	0.023	1.60	11.4	17.1	0.82	543	0.43	2.04	6.6	34.0	622
E22 (8893821)	17.8	<0.05	2.7	0.024	1.92	11.2	28.2	0.98	417	0.45	2.00	5.4	39.3	684
E23 (8893822)	16.6	<0.05	2.7	0.022	2.03	14.2	22.5	0.92	433	0.32	2.21	5.4	38.6	207
E24 (8893823)	17.7	<0.05	2.1	0.024	1.30	8.7	17.7	0.75	495	0.44	1.70	5.2	31.0	1010
E25 (8893824)	19.5	<0.05	2.6	0.022	1.67	9.0	12.3	0.59	283	0.53	2.05	5.4	21.0	177
E26 (8893825)	17.8	<0.05	2.8	0.031	1.58	11.7	26.9	0.79	359	0.58	1.80	5.2	32.2	448
E27 (8893826)	19.8	<0.05	2.6	0.029	1.55	10.9	32.3	0.70	315	0.80	1.95	5.3	36.4	280
E28 (8893827)	18.2	<0.05	2.2	0.017	1.58	8.0	16.1	0.54	252	0.43	2.16	3.9	24.7	176
E29 (8893828)	18.5	<0.05	2.6	0.022	1.73	11.0	19.3	0.58	289	0.52	2.14	4.9	26.5	269
E30 (8893829)	16.6	<0.05	2.7	0.023	1.80	14.4	25.0	0.90	463	0.45	2.54	4.0	41.1	397
E31 (8893830)	18.1	<0.05	2.6	0.030	1.56	11.4	22.8	0.86	396	0.60	2.09	4.8	35.1	362
E32 (8893831)	19.7	<0.05	3.7	0.019	1.59	10.7	11.1	0.45	294	0.55	1.95	7.2	14.5	216
E33 (8893832)	17.0	<0.05	1.7	0.018	1.72	6.9	14.3	0.67	461	0.29	2.49	3.4	22.3	605
E34 (8893833)	17.5	<0.05	1.4	0.018	1.80	8.6	12.5	0.71	346	0.28	2.59	4.7	25.3	386
E35 (8893834)	18.4	<0.05	2.6	0.020	1.76	11.0	15.0	0.75	370	0.33	2.31	4.6	28.7	414
E36 (8893835)	18.8	<0.05	2.5	0.028	1.68	11.1	25.5	0.81	400	0.63	1.76	5.8	45.8	764
E37 (8893836)	17.5	<0.05	3.1	0.021	1.72	17.6	17.4	0.71	372	0.45	1.98	5.5	34.0	348
E38 (8893837)	16.7	<0.05	2.8	0.020	2.06	12.0	14.6	0.78	321	0.24	2.32	4.6	29.4	265
E39 (8893838)	16.9	<0.05	2.4	0.018	1.67	9.6	15.4	0.64	296	0.40	2.05	4.3	33.1	332
E40 (8893839)	17.7	<0.05	2.4	0.017	2.21	7.7	13.8	0.78	335	0.26	2.99	3.9	25.5	177

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
E41 (8893840)		15.3	0.32	2.7	0.021	1.76	10.7	19.0	0.74	401	0.66	2.35	4.7	46.9	459
E42 (8893841)		17.4	0.13	2.4	0.033	1.34	12.7	30.2	1.66	550	0.68	1.77	5.2	49.0	747
E43 (8893842)		18.5	<0.05	1.9	0.021	1.73	8.2	17.8	0.66	405	0.43	2.28	4.4	24.0	1410
E44 (8893843)		18.5	0.05	2.4	0.025	1.57	10.7	21.8	0.56	342	0.67	1.73	5.1	20.9	1120
E45 (8893844)		21.1	<0.05	3.3	0.029	1.61	13.8	20.2	0.68	370	0.70	1.84	6.8	36.3	843
F1 (8893845)		17.9	<0.05	2.1	0.024	1.61	9.6	16.2	0.58	247	0.32	1.98	4.1	26.3	246
F2 (8893846)		18.3	<0.05	1.5	0.016	1.68	6.1	11.2	0.51	241	0.26	2.21	3.5	20.3	274
F3 (8893847)		18.5	<0.05	2.5	0.021	1.49	15.1	17.1	0.67	358	0.30	2.06	4.8	27.2	512

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
D5 (8893776)		14.2	53.0	<0.002	0.06	0.25	11.0	1.7	1.6	261	0.50	0.24	6.3	0.40	0.21
D6 (8893777)		12.8	72.0	<0.002	0.03	0.12	11.2	1.0	1.1	310	0.51	0.08	5.4	0.29	0.31
D7 (8893778)		12.3	71.2	<0.002	0.03	0.13	10.7	1.2	1.0	306	0.52	0.05	4.1	0.32	0.31
D8 (8893779)		13.8	65.4	<0.002	0.04	0.15	11.1	1.2	1.1	301	0.54	0.09	5.4	0.39	0.26
D9 (8893780)		12.5	60.3	<0.002	0.03	0.13	10.6	1.1	1.5	279	0.48	0.05	4.2	0.35	0.24
D10 (8893781)		11.8	59.0	<0.002	0.04	0.17	10.3	0.9	1.0	320	0.50	0.04	4.4	0.37	0.25
D11 (8893782)		14.0	66.1	<0.002	0.07	0.14	11.6	1.1	1.2	303	0.53	0.06	5.5	0.39	0.27
D12 (8893783)		14.7	62.2	<0.002	0.05	0.13	11.4	1.3	1.1	280	0.50	0.03	4.7	0.34	0.27
D13 (8893784)		12.3	77.3	<0.002	0.03	0.12	11.1	0.8	1.2	296	0.50	0.04	3.9	0.32	0.31
D14 (8893785)		12.1	69.7	<0.002	0.04	0.14	10.7	1.0	1.0	297	0.45	0.04	3.6	0.35	0.28
D15 (8893786)		14.1	70.6	<0.002	0.06	0.21	12.1	1.2	1.2	283	0.53	0.06	3.9	0.35	0.29
D16 (8893787)		30.3	66.3	<0.002	0.07	0.21	11.2	1.6	1.2	245	0.47	0.07	3.7	0.36	0.28
D17 (8893788)		10.7	77.1	<0.002	0.03	0.17	11.3	1.2	1.2	279	0.47	0.05	5.2	0.39	0.28
D18 (8893789)		11.0	53.1	<0.002	0.05	0.15	13.8	1.0	1.1	218	0.41	0.04	4.1	0.32	0.21
D19 (8893790)		15.6	68.5	<0.002	0.03	0.33	10.2	1.1	1.2	291	0.62	0.08	4.3	0.36	0.28
D20 (8893791)		12.4	58.9	<0.002	0.04	0.21	10.6	1.2	1.2	285	0.51	0.05	3.9	0.30	0.23
D21 (8893792)		14.6	60.6	<0.002	0.06	0.16	13.1	1.1	1.0	307	0.52	0.04	4.2	0.34	0.25
D22 (8893793)		13.9	58.9	<0.002	0.07	0.17	11.8	0.8	1.0	297	0.46	0.02	5.0	0.31	0.24
D23 (8893794)		15.1	49.0	<0.002	0.05	0.25	11.6	1.4	1.4	243	0.48	0.05	4.9	0.35	0.21
D24 (8893795)		13.9	61.8	<0.002	0.04	0.14	10.7	1.2	1.1	307	0.49	0.04	4.1	0.32	0.25
D25 (8893796)		15.9	76.5	<0.002	0.03	0.18	11.3	1.0	1.4	279	0.63	0.06	7.4	0.37	0.30
D26 (8893797)		19.2	66.9	<0.002	0.05	0.32	14.5	1.3	1.4	257	0.65	0.12	9.0	0.64	0.26
D27 (8893798)		17.0	57.4	<0.002	0.06	0.24	11.0	1.2	1.3	263	0.45	0.04	4.2	0.36	0.22
D28 (8893799)		16.0	62.8	<0.002	0.04	0.27	10.4	1.3	1.9	305	0.49	0.05	3.4	0.35	0.25
E1 (8893800)		10.9	81.0	<0.002	0.03	0.10	10.4	1.0	1.0	329	0.44	0.04	3.5	0.34	0.30
E2 (8893801)		12.1	81.2	<0.002	0.03	0.11	10.7	0.6	1.1	285	0.47	0.02	9.2	0.31	0.30
E3 (8893802)		11.3	70.9	<0.002	0.03	0.12	12.8	0.7	1.0	320	0.51	0.02	4.6	0.40	0.28
E4 (8893803)		15.3	70.1	<0.002	0.04	0.19	13.4	1.1	1.2	350	0.47	0.06	5.3	0.42	0.26
E5 (8893804)		13.6	87.7	<0.002	0.03	0.17	14.7	0.9	1.2	320	0.54	0.04	7.6	0.36	0.37
E6 (8893805)		13.6	81.3	<0.002	0.03	0.19	12.9	0.7	1.1	304	0.51	0.02	3.7	0.41	0.32
E7 (8893806)		12.3	80.5	<0.002	0.03	0.12	12.4	0.9	1.1	286	0.53	0.11	4.5	0.33	0.33
E8 (8893807)		12.7	92.9	<0.002	0.03	0.14	11.1	0.7	1.1	281	0.55	0.03	3.8	0.35	0.38

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
E9 (8893808)		11.7	67.4	<0.002	0.04	0.11	10.8	0.9	1.1	296	0.47	0.04	3.6	0.33	0.28
E10 (8893809)		10.5	65.1	<0.002	0.05	0.17	10.7	1.2	1.0	292	0.42	0.05	2.7	0.38	0.24
E11 (8893810)		10.1	56.0	<0.002	0.04	0.23	11.3	1.1	1.0	302	0.59	0.09	8.0	0.43	0.25
E12 (8893811)		10.6	67.9	<0.002	0.05	0.25	11.9	1.1	1.0	313	0.46	0.07	3.1	0.40	0.25
E13 (8893812)		9.8	62.6	<0.002	0.04	0.21	11.3	1.1	1.0	314	0.46	0.07	5.4	0.49	0.23
E14 (8893813)		10.2	61.5	<0.002	0.05	0.26	10.5	1.0	0.9	336	0.42	0.07	4.7	0.38	0.24
E15 (8893814)		11.5	55.2	<0.002	0.07	0.22	11.1	1.5	0.9	242	0.48	0.11	4.0	0.44	0.22
E16 (8893815)		10.9	63.4	<0.002	0.04	0.12	10.4	1.1	0.9	323	0.49	0.04	5.2	0.36	0.26
E17 (8893816)		11.9	68.8	<0.002	0.04	0.24	10.1	1.3	1.5	277	0.54	0.04	4.3	0.42	0.29
E18 (8893817)		9.2	56.2	<0.002	0.04	0.12	8.6	0.9	1.0	263	0.46	0.03	3.6	0.34	0.25
E19 (8893818)		12.0	77.0	<0.002	0.05	0.19	9.4	0.7	1.9	372	0.71	0.03	6.8	0.39	0.26
E20 (8893819)		12.4	63.1	<0.002	0.04	0.10	11.4	1.3	1.0	303	0.44	0.04	6.2	0.36	0.26
E21 (8893820)		10.5	58.1	<0.002	0.04	0.11	11.2	1.3	1.0	331	0.63	0.05	4.2	0.43	0.25
E22 (8893821)		10.2	61.1	<0.002	0.04	0.13	11.4	1.5	0.9	299	0.49	0.03	3.6	0.36	0.25
E23 (8893822)		10.6	57.2	<0.002	0.03	0.10	10.8	0.6	0.9	335	0.46	0.02	3.9	0.34	0.25
E24 (8893823)		13.4	42.8	<0.002	0.04	0.13	9.4	0.8	0.9	227	0.42	0.03	2.5	0.34	0.19
E25 (8893824)		13.6	62.9	<0.002	0.03	0.26	9.1	0.8	0.8	311	0.47	0.07	2.5	0.28	0.27
E26 (8893825)		9.8	47.5	<0.002	0.04	0.20	10.0	1.3	1.7	261	0.44	0.06	4.0	0.36	0.21
E27 (8893826)		11.3	52.4	<0.002	0.04	0.16	9.8	0.9	0.9	285	0.48	0.06	3.3	0.35	0.23
E28 (8893827)		10.4	58.8	<0.002	0.02	0.09	7.4	0.6	0.7	320	0.32	0.04	2.2	0.21	0.25
E29 (8893828)		11.0	54.0	<0.002	0.04	0.37	7.9	1.0	0.8	334	0.42	0.04	3.8	0.31	0.24
E30 (8893829)		12.7	54.4	<0.002	0.04	0.15	11.6	1.0	0.8	355	0.35	0.02	4.2	0.34	0.23
E31 (8893830)		12.9	51.1	<0.002	0.05	0.14	11.3	1.3	0.8	298	0.44	0.01	8.5	0.33	0.24
E32 (8893831)		10.8	51.7	<0.002	0.03	0.32	8.2	1.0	1.1	286	0.67	0.09	4.3	0.38	0.26
E33 (8893832)		9.2	57.1	<0.002	0.03	0.19	8.3	0.9	0.8	379	0.38	0.03	2.4	0.26	0.24
E34 (8893833)		9.5	61.0	<0.002	0.03	0.23	8.2	0.8	0.8	383	0.48	0.04	2.4	0.23	0.24
E35 (8893834)		10.1	62.8	<0.002	0.03	0.11	9.7	0.9	1.1	340	0.43	0.03	4.3	0.28	0.25
E36 (8893835)		10.5	59.2	<0.002	0.06	0.16	10.1	1.3	0.9	269	0.50	0.05	3.9	0.33	0.24
E37 (8893836)		11.6	56.2	<0.002	0.04	0.11	9.3	0.8	1.0	300	0.50	0.05	6.6	0.33	0.26
E38 (8893837)		10.5	65.2	<0.002	0.03	0.10	8.5	0.8	0.8	321	0.41	0.03	4.3	0.27	0.28
E39 (8893838)		9.5	56.8	<0.002	0.03	0.15	8.2	0.7	0.7	301	0.38	0.03	2.8	0.25	0.25
E40 (8893839)		10.2	64.7	<0.002	0.04	0.06	8.8	0.8	0.7	446	0.38	0.03	2.7	0.27	0.26

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
E41 (8893840)		10.2	47.3	<0.002	0.04	0.11	9.2	1.1	0.8	355	0.47	<0.01	3.7	0.34	0.21
E42 (8893841)		10.2	45.3	<0.002	0.05	0.25	13.3	1.4	0.9	282	0.41	0.05	4.4	0.39	0.19
E43 (8893842)		10.0	53.7	<0.002	0.04	0.17	8.5	1.2	0.9	354	0.35	0.04	2.1	0.31	0.23
E44 (8893843)		11.3	51.3	<0.002	0.06	0.19	9.1	1.0	0.9	267	0.42	0.04	3.6	0.34	0.24
E45 (8893844)		13.5	67.8	<0.002	0.04	0.15	10.9	1.5	1.0	281	0.51	0.04	4.8	0.32	0.27
F1 (8893845)		11.0	64.0	<0.002	0.03	0.09	8.3	1.0	0.8	289	0.35	0.03	3.7	0.21	0.25
F2 (8893846)		10.3	66.6	<0.002	0.02	0.06	7.7	0.5	0.9	333	0.31	<0.01	2.0	0.20	0.26
F3 (8893847)		11.1	61.8	<0.002	0.03	0.10	10.6	0.8	0.7	321	0.43	0.01	5.1	0.28	0.25

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
D5 (8893776)	1.07	116	0.5	10.0	55.4	133
D6 (8893777)	0.851	73.8	0.4	9.2	29.5	130
D7 (8893778)	0.864	70.4	0.4	8.6	47.4	125
D8 (8893779)	0.993	94.8	0.5	10.4	59.9	150
D9 (8893780)	0.870	77.9	0.4	9.3	54.2	132
D10 (8893781)	0.871	72.2	0.4	8.2	67.8	140
D11 (8893782)	1.13	90.6	0.6	10.0	89.5	147
D12 (8893783)	0.942	83.0	0.5	8.8	56.3	123
D13 (8893784)	0.796	67.6	0.4	9.1	35.7	125
D14 (8893785)	0.820	73.2	0.4	8.1	62.9	110
D15 (8893786)	0.990	100	0.7	9.1	66.3	114
D16 (8893787)	0.911	93.7	0.5	8.8	112	91.6
D17 (8893788)	0.910	81.0	0.6	9.2	46.1	139
D18 (8893789)	0.799	131	0.5	7.1	100	109
D19 (8893790)	0.818	82.0	0.6	7.6	67.3	146
D20 (8893791)	0.796	84.1	0.5	7.5	45.7	98.5
D21 (8893792)	0.915	90.7	0.5	8.8	60.4	116
D22 (8893793)	0.951	94.4	0.5	8.3	44.6	116
D23 (8893794)	1.12	99.8	0.5	9.3	46.1	127
D24 (8893795)	0.853	81.6	0.4	8.3	63.0	127
D25 (8893796)	0.948	84.6	0.5	9.1	94.9	123
D26 (8893797)	1.42	150	0.7	11.3	83.8	141
D27 (8893798)	0.959	103	0.5	8.8	96.6	103
D28 (8893799)	0.967	88.9	0.4	8.9	113	108
E1 (8893800)	0.702	80.6	0.4	7.5	37.5	96.0
E2 (8893801)	0.848	74.3	0.4	8.4	36.0	97.2
E3 (8893802)	0.884	86.9	0.4	10.1	43.1	85.4
E4 (8893803)	0.905	97.7	0.4	11.0	37.9	105
E5 (8893804)	1.15	101	0.4	12.5	43.3	100
E6 (8893805)	0.874	101	0.5	10.0	51.3	108
E7 (8893806)	0.771	86.0	0.5	8.0	45.8	92.1
E8 (8893807)	0.845	80.1	0.5	8.3	37.5	109

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
E9 (8893808)	0.780	92.0	0.4	8.6	27.0	100
E10 (8893809)	0.684	106	0.5	7.0	45.9	78.5
E11 (8893810)	0.802	104	0.4	8.9	41.3	139
E12 (8893811)	0.749	98.9	0.6	8.4	53.8	88.5
E13 (8893812)	0.760	110	0.4	8.3	63.6	93.2
E14 (8893813)	0.708	90.7	0.4	7.6	75.0	69.8
E15 (8893814)	0.932	99.4	1.0	8.3	122	84.8
E16 (8893815)	0.869	78.3	0.4	8.9	52.6	137
E17 (8893816)	0.981	81.9	0.5	8.7	124	128
E18 (8893817)	0.811	68.7	0.4	7.2	112	118
E19 (8893818)	1.19	90.5	0.4	13.3	96.7	193
E20 (8893819)	0.892	83.8	0.5	9.0	45.5	123
E21 (8893820)	0.841	118	0.4	11.0	43.7	157
E22 (8893821)	0.860	97.3	0.4	8.5	78.5	109
E23 (8893822)	0.823	79.2	0.3	11.0	30.7	105
E24 (8893823)	0.685	82.6	0.4	7.5	63.7	83.7
E25 (8893824)	0.647	73.5	0.4	7.2	22.3	102
E26 (8893825)	0.822	99.8	0.4	7.8	38.2	104
E27 (8893826)	0.818	107	0.4	7.8	35.3	103
E28 (8893827)	0.602	75.7	0.2	6.5	18.2	86.4
E29 (8893828)	0.688	77.5	0.3	6.4	25.6	103
E30 (8893829)	0.842	93.7	0.4	10.6	31.9	104
E31 (8893830)	0.965	93.1	0.4	9.0	31.7	98.0
E32 (8893831)	0.910	78.9	0.6	7.1	29.3	139
E33 (8893832)	0.558	70.8	0.9	6.5	40.1	69.0
E34 (8893833)	1.50	66.1	0.3	7.5	24.8	54.6
E35 (8893834)	0.693	77.8	0.3	8.0	29.2	107
E36 (8893835)	0.847	85.1	0.4	7.8	51.3	101
E37 (8893836)	0.871	85.0	0.5	8.0	43.5	120
E38 (8893837)	0.747	68.6	0.4	7.3	24.1	117
E39 (8893838)	0.666	62.2	0.3	6.7	38.8	90.3
E40 (8893839)	0.544	61.9	0.4	6.1	24.9	95.1

Certified By:

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282581

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 02, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
E41 (8893840)		0.663	76.5	1.4	7.2	38.1	104
E42 (8893841)		0.780	122	0.3	8.1	96.5	99.1
E43 (8893842)		0.587	75.0	0.3	6.6	87.9	79.9
E44 (8893843)		0.819	86.7	0.4	7.4	118	95.4
E45 (8893844)		0.983	103	0.5	9.4	94.7	131
F1 (8893845)		0.691	62.4	0.3	6.4	22.4	84.4
F2 (8893846)		0.439	66.6	0.2	5.9	17.0	57.6
F3 (8893847)		0.680	92.5	0.3	9.1	25.0	93.8

Comments: RDL - Reported Detection Limit

8893776-8893847 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Replicate

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893776	0.54	0.54	0.0%	8893795	0.31	0.34	9.2%	8893815	0.33	0.35	5.9%	8893835	0.442	0.497	11.7%
Al	8893776	6.79	7.15	5.2%	8893795	7.34	7.47	1.8%	8893815	7.74	7.61	1.7%	8893835	7.37	7.07	4.2%
As	8893776	8.8	6.8	25.6%	8893795	3.3	3.2	3.1%	8893815	3.6	3.1	14.9%	8893835	5.9	6.0	1.7%
Ba	8893776	421	434	3.0%	8893795	512	511	0.2%	8893815	559	553	1.1%	8893835	483	468	3.2%
Be	8893776	1.30	1.38	6.0%	8893795	1.44	1.52	5.4%	8893815	1.32	1.48	11.4%	8893835	1.33	1.43	7.2%
Bi	8893776	0.27	0.21	25.0%	8893795	0.11	0.12	8.7%	8893815	0.10	0.11	9.5%	8893835	0.14	0.14	0.0%
Ca	8893776	1.28	1.32	3.1%	8893795	1.45	1.47	1.4%	8893815	1.61	1.58	1.9%	8893835	1.35	1.30	3.8%
Cd	8893776	0.122	0.103	16.9%	8893795	0.08	0.08	0.0%	8893815	0.07	0.08	13.3%	8893835	0.09	0.09	0.0%
Ce	8893776	37.6	41.0	8.7%	8893795	29.8	31.7	6.2%	8893815	35.2	40.3	13.5%	8893835	25.1	31.4	22.3%
Co	8893776	17.4	16.4	5.9%	8893795	17.1	17.7	3.4%	8893815	12.4	13.5	8.5%	8893835	16.5	17.6	6.5%
Cr	8893776	100	92.7	7.6%	8893795	76.6	70.3	8.6%	8893815	73.6	76.0	3.2%	8893835	75.7	77.1	1.8%
Cs	8893776	1.71	1.64	4.2%	8893795	1.99	2.36	17.0%	8893815	1.67	1.82	8.6%	8893835	2.14	2.26	5.5%
Cu	8893776	180	70.9		8893795	15.6	14.6	6.6%	8893815	14.5	15.2	4.7%	8893835	17.0	17.1	0.6%
Fe	8893776	4.24	4.36	2.8%	8893795	3.06	3.00	2.0%	8893815	2.83	2.77	2.1%	8893835	3.41	3.25	4.8%
Ga	8893776	17.3	16.3	6.0%	8893795	18.3	19.5	6.3%	8893815	17.5	19.3	9.8%	8893835	18.8	20.3	7.7%
Ge	8893776	0.38	0.73		8893795	0.08	0.10	22.2%	8893815	0.20	0.21	4.9%	8893835	< 0.05	< 0.05	0.0%
Hf	8893776	3.2	3.7	14.5%	8893795	3.1	3.7	17.6%	8893815	3.4	3.8	11.1%	8893835	2.5	2.8	11.3%
In	8893776	0.0337	0.0261	25.4%	8893795	0.025	0.031		8893815	0.021	0.03	35.3%	8893835	0.028	0.028	0.0%
K	8893776	1.41	1.48	4.8%	8893795	1.76	1.74	1.1%	8893815	1.97	1.94	1.5%	8893835	1.68	1.56	7.4%
La	8893776	18.0	19.3	7.0%	8893795	13.6	14.6	7.1%	8893815	15.9	18.4	14.6%	8893835	11.1	13.6	20.2%
Li	8893776	23.1	23.4	1.3%	8893795	22.2	22.2	0.0%	8893815	19.6	19.3	1.5%	8893835	25.5	24.6	3.6%
Mg	8893776	0.72	0.74	2.7%	8893795	0.76	0.75	1.3%	8893815	0.865	0.845	2.3%	8893835	0.806	0.759	6.0%
Mn	8893776	451	452	0.2%	8893795	358	356	0.6%	8893815	404	390	3.5%	8893835	400	379	5.4%
Mo	8893776	0.76	0.96	23.3%	8893795	0.52	0.61	15.9%	8893815	0.42	0.47	11.2%	8893835	0.634	0.667	5.1%
Na	8893776	1.61	1.69	4.8%	8893795	1.95	1.99	2.0%	8893815	2.13	2.10	1.4%	8893835	1.76	1.69	4.1%
Nb	8893776	6.86	6.30	8.5%	8893795	6.0	6.8	12.5%	8893815	6.1	6.6	7.9%	8893835	5.8	6.1	5.0%
Ni	8893776	61.5	47.5	25.7%	8893795	41.9	39.8	5.1%	8893815	36.4	37.9	4.0%	8893835	45.8	46.6	1.7%
P	8893776	751	751	0.0%	8893795	465	455	2.2%	8893815	590	635	7.3%	8893835	764	800	4.6%
Pb	8893776	14.2	13.5	5.1%	8893795	13.9	15.6	11.5%	8893815	10.9	11.4	4.5%	8893835	10.5	11.6	10.0%
Rb	8893776	53.0	50.2	5.4%	8893795	61.8	69.6	11.9%	8893815	63.4	65.6	3.4%	8893835	59.2	64.7	8.9%
Re	8893776	< 0.002	0.005		8893795	< 0.002	< 0.002	0.0%	8893815	< 0.002	< 0.002	0.0%	8893835	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893776	0.06	0.05	18.2%	8893795	0.04	0.04	0.0%	8893815	0.04	0.04	0.0%	8893835	0.055	0.054	1.8%
Sb	8893776	0.25	0.26	3.9%	8893795	0.14	0.15	6.9%	8893815	0.12	0.13	8.0%	8893835	0.164	0.197	18.3%
Sc	8893776	11.0	10.7	2.8%	8893795	10.7	11.2	4.6%	8893815	10.4	11.1	6.5%	8893835	10.1	10.8	6.7%
Se	8893776	1.7	1.1		8893795	1.2	1.5	22.2%	8893815	1.1	1.3	16.7%	8893835	1.33	1.55	15.3%
Sn	8893776	1.6	1.3	20.7%	8893795	1.1	1.3	16.7%	8893815	0.9	1.0	10.5%	8893835	0.9	1.0	10.5%
Sr	8893776	261	265	1.5%	8893795	307	311	1.3%	8893815	323	318	1.6%	8893835	269	256	5.0%
Ta	8893776	0.504	0.594	16.4%	8893795	0.49	0.50	2.0%	8893815	0.49	0.52	5.9%	8893835	0.501	0.539	7.3%
Te	8893776	0.24	0.14		8893795	0.04	0.03	28.6%	8893815	0.04	0.05		8893835	0.05	0.05	0.0%
Th	8893776	6.28	7.36	15.8%	8893795	4.1	4.6	11.5%	8893815	5.2	4.9	5.9%	8893835	3.9	5.1	26.7%
Ti	8893776	0.40	0.40	0.0%	8893795	0.32	0.32	0.0%	8893815	0.36	0.35	2.8%	8893835	0.326	0.317	2.8%
Tl	8893776	0.21	0.21	0.0%	8893795	0.25	0.29	14.8%	8893815	0.26	0.28	7.4%	8893835	0.241	0.259	7.2%
U	8893776	1.07	1.27	17.1%	8893795	0.853	0.94	9.7%	8893815	0.869	0.889	2.3%	8893835	0.847	1.09	25.1%
V	8893776	116	107	8.1%	8893795	81.6	93.8	13.9%	8893815	78.3	80.6	2.9%	8893835	85.1	98.8	14.9%
W	8893776	0.5	0.5	0.0%	8893795	0.4	0.3		8893815	0.4	0.5	22.2%	8893835	0.4	0.5	22.2%
Y	8893776	10.0	10.4	3.9%	8893795	8.3	9.3	11.4%	8893815	8.9	9.6	7.6%	8893835	7.82	8.71	10.8%
Zn	8893776	55.4	52.8	4.8%	8893795	63.0	63.0	0.0%	8893815	52.6	52.0	1.1%	8893835	51.3	53.1	3.4%
Zr	8893776	133	149	11.3%	8893795	127	131	3.1%	8893815	137	151	9.7%	8893835	101	108	6.7%

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282581
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	11.37	104%	90% - 110%	6.96	7.34	106%	90% - 110%								
As					124	133	107%	90% - 110%								
Ba	340	346	102%	90% - 110%	186	191	102%	90% - 110%								
Be	2.6	3.0	115%	90% - 110%												
Ca	5.72	5.9	103%	90% - 110%	4.01	4.25	106%	90% - 110%								
Ce	122	118	96%	90% - 110%	24	21.8	91%	90% - 110%								
Co	2.8	2.7	96%	90% - 110%	22.1	24.3	109%	90% - 110%								
Cs	1.5	1.7	113%	90% - 110%												
Cu	7	8	108%	90% - 110%	88.6	96.9	109%	90% - 110%								
Fe	4.34	4.25	98%	90% - 110%	7.56	7.73	102%	90% - 110%								
Ga	35	38	108%	90% - 110%												
K	1.37	1.5	109%	90% - 110%	2.021	2.147	106%	90% - 110%								
La	58	52.2	90%	90% - 110%												
Li	37	40	108%	90% - 110%												
Mg	0.325	0.325	100%	90% - 110%	2.412	2.575	107%	90% - 110%								
Mn					1510	1556	103%	90% - 110%								
Na	5.267	5.693	108%	90% - 110%	0.617	0.674	109%	90% - 110%								
Nb	13	13	99%	90% - 110%												
Ni	9	7	80%	90% - 110%	77.1	73.7	96%	90% - 110%								
P					892	935	104%	90% - 110%								
Pb	10	9	90%	90% - 110%												
Rb	55	60	109%	90% - 110%												
S					0.348	0.382	109%	90% - 110%								
Sc	1.1	1.2	109%	90% - 110%												
Sr	1191	1282	107%	90% - 110%	92.8	99.5	107%	90% - 110%								
Ta	0.9	0.9	100%	90% - 110%												
Th	1.4	1.2	85%	90% - 110%												
Ti	0.172	0.179	104%	90% - 110%												
V	8	7	83%	90% - 110%					77	85	110%	90% - 110%	8	8	96%	90% - 110%
Y	119	126	105%	90% - 110%												
Zn	93	87	93%	90% - 110%	208	208	100%	90% - 110%								

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282581

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

	CRM #5 (ref.Till-2)				CRM #6 (ref.SY-4)				CRM #7 (ref.GTS-2A)							
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits				
Al	8.17	8.9	109%	90% - 110%	10.95	10.59	97%	90% - 110%	6.96	6.77	97%	90% - 110%				
Ba	540	556	103%	90% - 110%	340	328	97%	90% - 110%	186	180	97%	90% - 110%				
Be	4.0	3.9	97%	90% - 110%	2.6	2.9	112%	90% - 110%								
Ca	0.907	1.001	110%	90% - 110%	5.72	5.4	94%	90% - 110%	4.01	3.92	98%	90% - 110%				
Ce	98	98.6	101%	90% - 110%	122	111	91%	90% - 110%	24	21.6	90%	90% - 110%				
Co					2.8	2.5	89%	90% - 110%	22.1	24	108%	90% - 110%				
Cr	60.3	60.4	100%	90% - 110%												
Cs	12	14	116%	90% - 110%	1.5	1.7	113%	90% - 110%								
Cu	150	162	108%	90% - 110%					88.6	88.4	100%	90% - 110%				
Fe	3.77	4.02	107%	90% - 110%	4.34	4.1	94%	90% - 110%	7.56	7.15	95%	90% - 110%				
Ga					35	39	111%	90% - 110%								
K					1.37	1.39	101%	90% - 110%	2.021	2.005	99%	90% - 110%				
La	44	40.1	91%	90% - 110%	58	45.6	79%	90% - 110%								
Li	47	50	107%	90% - 110%	37	40	108%	90% - 110%								
Mg	1.10	1.15	104%	90% - 110%	0.325	0.298	92%	90% - 110%	2.412	2.375	98%	90% - 110%				
Mn	780	799	102%	90% - 110%					1510	1453	96%	90% - 110%				
Mo	14	12	85%	90% - 110%												
Na	1.624	1.733	106%	90% - 110%	5.267	5.547	105%	90% - 110%	0.617	0.624	101%	90% - 110%				
Nb	20	18	90%	90% - 110%	13	12	89%	90% - 110%								
Ni	32	33	103%	90% - 110%	9	7	78%	90% - 110%	77.1	69.1	90%	90% - 110%				
P									892	966	108%	90% - 110%				
Pb	31	27	89%	90% - 110%	10	8	81%	90% - 110%								
Rb					55	61	110%	90% - 110%								
S									0.348	0.379	109%	90% - 110%				
Sb	0.8	0.8	100%	90% - 110%												
Sc	12	14	116%	90% - 110%	1.1	0.9	86%	90% - 110%								
Sr	144	157	109%	90% - 110%	1191	1250	105%	90% - 110%	92.8	92.3	99%	90% - 110%				
Ta	1.9	1.4	73%	90% - 110%	0.9	1	106%	90% - 110%								
Th	18.4	16.4	89%	90% - 110%												
Ti	0.53	0.5	95%	90% - 110%	0.172	0.167	97%	90% - 110%								
U	5.7	4.1	72%	90% - 110%												
V					8	7	81%	90% - 110%								

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

W	5	4	88%	90% - 110%												
Y					119	98	82%	90% - 110%								
Zn	130	122	94%	90% - 110%	93	83	89%	90% - 110%	208	199	96%	90% - 110%				

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
AGAT WORK ORDER: 17T282581
PROJECT:
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLING SITE:
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
P.O BOX 10112 1470-701 W. GEORGIA ST
VANCOUVER, BC V7Y 1C6
604-646-6908

ATTENTION TO: Jason Gigliotti, Jim Nelson

PROJECT:

AGAT WORK ORDER: 17T282583

SOLID ANALYSIS REVIEWED BY: Kevin Motomura, Data Review Supervisor

DATE REPORTED: Jan 08, 2018

PAGES (INCLUDING COVER): 18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
F4 (8893859)		0.17	6.20	1.7	478	1.12	0.10	1.64	0.04	20.6	9.79	48.2	1.19	23.5	2.20
F5 (8893860)		0.13	6.52	3.2	539	1.27	0.11	1.68	0.03	35.6	11.7	55.2	1.45	35.6	2.40
F6 (8893861)		0.18	5.70	3.4	435	1.17	0.11	1.59	0.03	23.7	9.17	44.6	0.95	54.1	2.21
F7 (8893862)		0.14	6.58	2.8	498	1.26	0.09	1.42	0.04	19.8	10.6	44.3	1.21	14.8	2.39
F8 (8893863)		0.24	6.37	1.9	505	1.49	0.09	1.40	0.05	21.3	9.44	38.0	1.21	9.8	2.26
F9 (8893864)		0.21	6.55	2.5	480	1.33	0.10	1.47	0.07	21.3	10.9	71.2	1.39	8.8	3.01
F10 (8893865)		0.31	8.59	2.7	563	1.42	0.13	1.88	0.11	50.4	16.0	94.1	1.74	11.9	3.85
F11 (8893866)		0.31	7.24	2.0	469	1.30	0.10	1.41	0.09	25.9	12.7	79.3	1.46	15.4	3.31
F12 (8893867)		0.36	7.12	2.8	442	1.10	0.14	1.36	0.07	19.5	11.7	80.3	1.47	14.5	3.87
F13 (8893868)		0.29	6.92	3.6	449	1.33	0.11	1.41	0.06	21.4	12.7	71.5	1.56	15.1	3.21
F14 (8893869)		0.22	6.34	1.8	423	1.13	0.11	1.37	0.07	27.4	9.43	60.5	1.24	9.3	2.95
F15 (8893870)		0.40	6.72	2.4	431	1.23	0.09	1.36	0.05	17.3	9.35	65.1	1.26	10.0	2.89
F16 (8893871)		0.17	6.41	2.5	441	1.22	0.08	1.44	0.05	39.0	10.3	54.0	1.03	8.1	2.79
F17 (8893872)		0.15	6.14	1.7	424	1.11	0.10	1.62	0.07	27.9	10.7	81.6	0.93	7.5	3.41
F18 (8893873)		0.21	6.50	2.7	521	1.23	0.12	1.36	0.04	21.3	8.96	43.7	0.95	7.9	2.10
F19 (8893874)		0.44	5.99	4.0	419	1.09	0.12	1.33	0.09	21.1	9.39	57.5	1.15	10.9	2.64
F20 (8893875)		0.23	7.19	4.4	575	1.31	0.15	1.67	0.07	29.9	10.6	53.5	1.59	26.9	2.51
F21 (8893876)		0.14	6.06	1.8	499	1.15	0.08	1.53	0.05	16.8	8.18	40.6	0.86	7.0	2.25
F22 (8893877)		0.27	6.59	2.5	429	1.12	0.12	1.49	0.08	20.5	11.0	64.1	0.99	9.7	3.07
F23 (8893878)		0.25	6.48	3.2	499	1.22	0.13	1.44	0.06	25.7	10.2	52.3	1.26	28.1	2.43
F24 (8893879)		0.38	5.45	5.7	434	0.99	0.27	1.21	0.09	23.4	8.79	44.5	1.34	46.3	2.38
F25 (8893880)		0.36	6.19	4.1	431	1.13	0.20	1.25	0.08	24.9	10.9	57.3	1.51	18.2	3.28
F26 (8893881)		0.27	7.71	6.7	577	1.37	0.18	1.79	0.07	38.4	13.7	62.5	1.66	72.7	3.31
F27 (8893882)		0.33	6.59	13.1	477	1.21	0.11	1.48	0.06	25.3	12.4	48.0	1.09	15.6	2.61
F28 (8893883)		0.76	6.33	4.9	418	1.10	0.15	1.27	0.10	25.0	11.5	62.1	1.62	18.7	3.08
F29 (8893884)		0.21	6.63	3.2	451	1.01	0.17	1.30	0.06	19.8	9.49	42.5	1.05	6.7	2.37
F30 (8893885)		0.55	7.09	7.3	354	1.18	0.21	1.09	0.09	23.9	13.0	70.4	1.84	24.3	4.69
F31 (8893886)		0.28	6.36	4.3	452	1.29	0.10	1.47	0.06	55.1	10.9	53.9	1.18	20.2	2.51
F32 (8893887)		0.30	6.14	1.7	478	1.05	0.10	1.36	0.07	24.1	7.63	48.0	1.18	7.6	2.13
F33 (8893888)		0.17	6.32	2.0	490	1.19	0.09	1.32	0.02	21.5	7.51	39.6	1.01	6.0	2.19
F34 (8893889)		0.26	7.16	1.8	451	1.23	0.10	1.28	0.07	23.2	9.48	60.1	1.18	6.4	3.12
F35 (8893890)		0.34	6.32	2.2	480	1.08	0.10	1.55	0.07	23.6	8.12	53.1	1.11	5.8	2.65

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
F36 (8893891)		0.22	6.69	1.6	489	1.15	0.10	1.31	0.08	27.6	10.1	71.0	1.47	8.6	2.46
F37 (8893892)		0.28	6.43	2.1	460	1.14	0.14	1.21	0.08	22.9	12.3	75.2	1.63	8.4	3.09
F38 (8893893)		0.23	6.59	2.7	497	1.10	0.12	1.44	<0.02	41.4	11.5	58.4	1.20	9.7	2.75
F39 (8893894)		1.28	6.65	2.3	482	1.15	0.11	1.37	0.07	22.7	11.3	69.9	1.29	11.1	2.79
F40 (8893895)		0.21	6.14	1.7	460	1.13	0.09	1.39	0.07	26.1	8.87	76.7	1.24	6.3	2.59
F41 (8893896)		0.26	5.58	1.8	346	0.88	0.11	1.04	0.07	22.3	10.5	49.6	1.34	9.9	2.68
F42 (8893897)		0.32	6.94	4.2	458	1.13	0.15	1.28	0.08	28.9	13.0	83.7	1.72	19.3	3.93
F43 (8893898)		0.30	7.40	5.5	408	1.26	0.21	1.19	0.26	27.1	14.4	80.4	1.90	16.5	3.98
F44 (8893899)		0.35	6.47	6.5	518	1.28	0.16	1.40	0.12	29.4	9.76	63.7	1.77	8.2	2.66
F45 (8893900)		0.34	5.64	5.0	435	1.01	0.15	1.29	0.07	24.2	11.4	69.7	1.46	11.5	3.60
F46 (8893901)		0.24	6.29	14.4	514	1.08	0.20	1.40	0.20	29.5	11.4	67.4	2.00	12.5	3.51
G1 (8893902)		0.09	6.31	1.5	494	1.05	0.07	1.59	0.04	34.7	8.78	71.9	1.06	11.3	2.71
G2 (8893903)		0.14	6.12	2.2	487	0.99	0.09	1.44	0.07	30.1	8.70	63.9	1.21	6.4	2.86
G3 (8893904)		0.20	6.42	2.9	472	1.12	0.08	1.50	0.05	19.7	9.21	55.4	1.00	6.5	2.37
G4 (8893905)		0.17	6.49	1.4	465	1.26	0.07	1.53	0.07	22.2	8.40	49.2	0.95	5.3	2.35
G5 (8893906)		0.24	6.32	1.8	470	1.14	0.08	1.55	0.06	28.8	9.44	79.1	1.09	6.3	2.77
G6 (8893907)		0.27	6.61	0.9	476	1.10	0.11	1.52	0.09	19.7	7.51	61.6	1.15	6.6	3.07
G7 (8893908)		0.15	6.54	1.3	474	1.18	0.08	1.39	0.07	24.9	8.20	55.3	1.08	6.6	2.29
G8 (8893909)		0.12	6.65	1.8	495	1.05	0.09	1.32	0.07	22.7	7.14	48.3	1.15	4.0	2.41
G9 (8893910)		0.26	6.47	3.1	461	1.24	0.09	1.40	0.07	20.3	9.65	52.0	1.12	6.8	2.16
G10 (8893911)		0.27	6.20	3.7	430	1.18	0.10	1.52	0.09	26.2	10.7	66.4	1.11	9.3	3.23
G11 (8893912)		0.17	6.68	1.8	475	1.26	0.08	1.51	0.09	36.3	8.85	59.5	1.13	5.7	2.48
G12 (8893913)		0.14	6.01	1.1	493	1.25	0.08	1.56	0.04	37.6	7.70	54.9	1.17	7.5	2.00
G13 (8893914)		2.23	6.06	1.6	495	1.16	0.08	1.46	0.04	23.7	5.58	56.9	1.15	3.3	2.13
G14 (8893915)		0.10	6.31	2.9	476	1.24	0.06	1.45	0.04	20.3	8.23	54.7	0.94	5.0	2.06
G15 (8893916)		0.67	6.63	4.9	490	1.29	0.13	1.52	0.06	42.9	11.6	69.1	1.46	19.9	2.61
G16 (8893917)		0.14	6.49	3.3	493	1.30	0.09	1.49	0.05	28.8	11.7	49.9	1.13	10.0	2.32
G17 (8893918)		0.16	6.47	2.2	499	1.17	0.10	1.35	0.06	20.0	12.3	50.8	1.30	7.5	2.72
G18 (8893919)		0.13	6.38	3.8	478	1.15	0.16	1.42	0.06	26.1	11.8	65.3	1.52	16.4	3.38
G19 (8893920)		0.23	6.12	4.7	429	1.33	0.13	1.33	0.06	48.6	13.6	61.9	1.24	28.2	2.58
G20 (8893921)		0.34	6.47	3.3	475	1.12	0.12	1.44	0.09	27.4	10.3	57.4	1.55	6.8	2.60
G21 (8893922)		0.17	6.06	2.4	462	1.11	0.12	1.25	0.06	26.9	7.02	59.3	1.06	5.0	2.77

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
G22 (8893923)		0.18	6.44	6.0	454	1.48	0.16	1.41	0.06	36.8	14.5	65.3	1.33	21.1	2.31
G23 (8893924)		0.15	6.47	2.1	450	1.33	0.08	1.52	0.06	27.5	9.10	55.4	0.93	5.4	2.47
G24 (8893925)		0.26	5.80	4.5	367	0.95	0.20	0.98	0.21	20.1	7.16	60.5	1.37	14.4	3.91
G25 (8893926)		0.11	6.08	2.4	504	1.23	0.08	1.55	0.02	25.1	8.59	31.6	1.00	10.7	1.75
G26 (8893927)		0.26	6.38	3.6	474	1.27	0.08	1.53	0.05	31.4	9.99	60.9	1.05	6.5	2.31
G27 (8893928)		0.23	6.74	3.5	483	1.33	0.08	1.47	0.07	23.7	10.9	49.3	1.05	5.0	2.31
G28 (8893929)		0.17	6.48	2.0	487	1.25	0.10	1.55	0.05	18.5	9.46	49.3	1.15	3.5	2.60
G29 (8893930)		0.17	6.48	3.2	447	1.33	0.15	1.34	0.05	48.9	17.1	70.0	1.48	17.1	2.98

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
F4 (8893859)	15.1	<0.05	1.9	0.027	1.57	10.2	18.0	0.84	346	0.33	2.12	5.6	31.6	371
F5 (8893860)	16.5	<0.05	2.6	0.024	1.88	18.8	19.6	1.00	355	0.32	2.17	7.3	35.8	411
F6 (8893861)	12.7	<0.05	2.0	0.025	1.37	10.7	15.7	0.80	358	0.33	2.04	4.5	34.6	364
F7 (8893862)	14.4	<0.05	2.2	0.023	1.52	8.4	17.5	0.66	275	0.51	2.07	5.3	33.8	327
F8 (8893863)	14.2	<0.05	1.6	0.022	1.61	10.1	15.4	0.59	284	0.33	2.15	4.5	27.8	606
F9 (8893864)	15.3	<0.05	2.3	0.029	1.50	9.4	16.8	0.74	424	0.41	1.94	6.2	32.3	608
F10 (8893865)	19.3	<0.05	2.5	0.036	1.79	25.2	27.9	1.01	555	0.47	2.47	8.1	44.7	3250
F11 (8893866)	16.0	<0.05	2.5	0.030	1.44	12.9	21.2	0.72	344	0.53	1.83	6.4	40.1	977
F12 (8893867)	16.2	<0.05	3.4	0.033	1.34	9.3	26.0	0.70	390	0.66	1.77	7.1	38.1	936
F13 (8893868)	15.9	<0.05	3.1	0.032	1.40	10.6	21.5	0.81	438	0.50	1.85	7.8	39.6	865
F14 (8893869)	14.9	<0.05	2.1	0.026	1.32	13.4	17.4	0.64	376	0.48	1.85	6.2	31.5	637
F15 (8893870)	14.7	<0.05	2.6	0.030	1.37	8.5	18.9	0.62	309	0.47	1.87	5.6	29.7	660
F16 (8893871)	14.6	<0.05	2.1	0.026	1.41	18.7	15.7	0.69	330	0.48	2.00	5.1	29.5	467
F17 (8893872)	14.5	<0.05	4.4	0.025	1.37	12.7	12.3	0.68	467	0.37	1.97	6.5	30.5	723
F18 (8893873)	14.5	<0.05	2.4	0.022	1.66	9.2	12.5	0.56	270	0.35	2.11	4.3	26.8	312
F19 (8893874)	12.7	<0.05	3.0	0.029	1.28	10.2	14.8	0.61	305	0.52	1.72	5.7	26.7	528
F20 (8893875)	17.0	<0.05	2.5	0.030	1.77	13.3	19.5	0.83	374	0.56	2.45	6.4	35.4	391
F21 (8893876)	13.9	<0.05	1.9	0.020	1.54	7.0	11.8	0.58	330	0.38	2.25	4.6	22.4	370
F22 (8893877)	13.4	<0.05	2.0	0.030	1.30	9.8	14.4	0.71	373	0.56	1.94	5.0	30.4	558
F23 (8893878)	16.1	<0.05	3.1	0.030	1.55	11.5	15.2	0.61	294	0.63	2.08	6.5	26.7	250
F24 (8893879)	15.4	<0.05	2.8	0.034	1.35	11.0	18.4	0.53	346	0.81	1.63	7.3	26.6	266
F25 (8893880)	16.9	<0.05	3.0	0.033	1.37	12.1	22.2	0.57	301	0.73	1.71	7.4	27.0	366
F26 (8893881)	19.2	<0.05	3.7	0.036	1.83	19.3	20.8	0.89	367	0.77	2.37	8.4	42.5	277
F27 (8893882)	14.5	<0.05	2.7	0.028	1.48	10.3	14.7	0.68	313	0.56	2.12	5.5	29.4	263
F28 (8893883)	14.7	<0.05	3.2	0.034	1.36	11.2	18.4	0.65	322	0.79	1.74	6.6	31.0	387
F29 (8893884)	15.1	<0.05	2.7	0.026	1.42	10.3	14.9	0.53	262	0.70	1.90	6.3	23.6	350
F30 (8893885)	15.7	<0.05	2.5	0.048	1.29	11.5	24.5	0.74	397	1.24	1.49	6.6	32.7	1100
F31 (8893886)	14.8	<0.05	2.9	0.026	1.51	17.6	13.2	0.71	332	0.55	2.03	6.5	29.4	544
F32 (8893887)	13.8	<0.05	2.7	0.027	1.54	11.4	12.7	0.56	270	0.57	1.89	6.4	24.6	340
F33 (8893888)	14.8	<0.05	2.3	0.023	1.14	10.0	12.7	0.51	281	0.40	2.03	5.2	22.7	329
F34 (8893889)	15.3	<0.05	2.5	0.034	1.34	11.5	19.4	0.60	327	0.59	1.75	7.2	29.0	669
F35 (8893890)	15.4	<0.05	4.1	0.026	1.48	10.9	12.9	0.62	351	0.41	2.14	18.3	23.2	571

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
F36 (8893891)	14.6	<0.05	2.2	0.027	1.54	13.5	17.4	0.72	330	0.47	1.85	5.3	33.9	538
F37 (8893892)	17.1	<0.05	2.3	0.033	1.49	11.6	22.8	0.65	317	0.71	1.61	6.8	34.8	608
F38 (8893893)	14.1	<0.05	3.1	0.025	1.55	20.2	14.4	0.73	357	1.45	1.96	5.6	36.2	455
F39 (8893894)	14.8	<0.05	2.6	0.030	1.55	10.2	17.7	0.71	332	0.51	1.84	5.9	33.9	524
F40 (8893895)	13.9	<0.05	2.8	0.025	1.45	11.8	13.5	0.64	349	0.49	1.88	5.3	27.6	517
F41 (8893896)	12.8	<0.05	0.6	0.029	1.12	10.9	18.1	0.57	244	0.62	1.17	2.3	31.0	813
F42 (8893897)	16.3	<0.05	2.8	0.036	1.46	14.4	24.0	0.73	352	0.80	1.63	7.2	43.6	892
F43 (8893898)	15.5	<0.05	2.6	0.042	1.28	13.9	23.7	0.69	382	0.97	1.46	7.2	33.1	2070
F44 (8893899)	15.3	<0.05	2.9	0.035	1.68	14.7	17.3	0.67	425	0.71	1.83	6.7	32.5	1480
F45 (8893900)	15.0	<0.05	2.0	0.030	1.33	11.9	18.0	0.63	371	0.72	1.75	5.8	27.1	965
F46 (8893901)	17.3	<0.05	2.5	0.036	1.64	13.0	24.6	0.76	471	0.66	1.77	7.9	34.1	2000
G1 (8893902)	14.0	<0.05	1.6	0.023	1.51	13.2	12.5	0.80	397	0.25	2.15	3.9	28.7	390
G2 (8893903)	16.4	<0.05	2.3	0.028	1.49	12.8	14.5	0.66	390	0.35	2.01	5.8	27.1	608
G3 (8893904)	13.8	<0.05	1.5	0.020	1.47	9.0	15.3	0.68	352	0.28	2.13	4.2	32.6	666
G4 (8893905)	14.0	<0.05	1.7	0.021	1.44	11.2	12.6	0.66	343	0.31	2.19	4.1	26.7	521
G5 (8893906)	14.5	<0.05	2.3	0.026	1.50	12.5	14.1	0.67	378	0.34	2.11	5.4	26.9	633
G6 (8893907)	17.5	<0.05	2.4	0.025	1.50	8.8	14.8	0.65	382	0.36	2.08	19.4	23.5	1210
G7 (8893908)	14.3	<0.05	2.1	0.023	1.52	12.3	14.8	0.57	286	0.37	2.00	4.7	27.8	732
G8 (8893909)	14.7	<0.05	2.2	0.027	1.56	11.2	16.3	0.55	296	0.46	1.94	4.9	25.3	422
G9 (8893910)	13.8	<0.05	1.6	0.023	1.47	10.0	14.6	0.62	300	0.35	2.02	4.7	29.1	468
G10 (8893911)	16.1	<0.05	2.3	0.028	1.34	12.0	15.3	0.71	473	0.46	1.93	5.6	28.0	1150
G11 (8893912)	15.4	<0.05	1.9	0.025	1.47	18.8	14.9	0.64	372	0.41	2.10	4.4	29.8	732
G12 (8893913)	14.2	<0.05	2.0	0.022	1.57	14.3	11.3	0.64	505	0.28	2.19	4.6	22.1	235
G13 (8893914)	15.8	<0.05	2.1	0.023	1.51	12.0	12.7	0.47	277	0.57	2.20	5.2	15.8	204
G14 (8893915)	13.7	<0.05	1.5	0.021	1.51	8.7	11.5	0.58	291	0.34	2.14	3.6	25.2	411
G15 (8893916)	14.9	<0.05	2.5	0.030	1.49	23.5	22.2	0.69	427	0.56	1.92	7.1	34.5	373
G16 (8893917)	14.5	<0.05	2.1	0.025	1.60	9.4	12.8	0.67	329	0.40	2.13	4.5	30.1	359
G17 (8893918)	15.3	<0.05	2.6	0.027	1.53	9.7	20.7	0.59	275	0.62	1.88	6.2	31.4	282
G18 (8893919)	17.3	<0.05	2.8	0.030	1.56	10.3	18.7	0.75	351	0.51	2.00	7.4	31.2	239
G19 (8893920)	14.2	<0.05	2.2	0.026	1.46	11.4	14.5	0.72	344	0.44	1.91	4.3	30.5	346
G20 (8893921)	16.1	<0.05	3.0	0.030	1.52	13.3	17.4	0.64	329	0.64	1.85	7.3	27.2	349
G21 (8893922)	19.0	<0.05	2.2	0.022	1.38	15.7	12.5	0.47	273	0.94	2.09	5.6	15.8	209

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
G22 (8893923)		14.8	<0.05	2.2	0.029	1.40	18.3	14.8	0.59	314	0.66	1.92	6.1	34.3	377
G23 (8893924)		13.9	<0.05	1.9	0.023	1.42	10.5	11.4	0.66	322	0.36	2.17	4.7	24.3	349
G24 (8893925)		18.0	<0.05	2.8	0.038	1.12	9.9	21.5	0.45	259	1.16	1.37	6.9	18.4	413
G25 (8893926)		15.5	<0.05	2.5	0.021	1.55	12.9	11.5	0.66	283	0.31	2.27	4.6	24.0	149
G26 (8893927)		14.8	<0.05	2.2	0.025	1.46	12.1	11.3	0.65	305	0.43	2.11	4.6	26.4	379
G27 (8893928)		14.5	<0.05	1.9	0.026	1.49	10.2	13.2	0.58	295	0.41	2.18	4.1	24.9	467
G28 (8893929)		16.0	<0.05	1.9	0.025	1.51	8.7	14.0	0.64	355	0.49	2.14	5.2	27.4	652
G29 (8893930)		15.3	<0.05	3.0	0.031	1.50	13.6	17.8	0.77	380	0.51	1.87	6.8	36.6	525

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
F4 (8893859)	11.6	60.6	<0.002	0.03	0.11	8.2	0.5	1.2	374	0.39	0.02	2.4	0.28	0.26
F5 (8893860)	13.3	63.3	<0.002	0.03	0.15	9.6	0.8	1.1	285	0.46	0.04	5.6	0.31	0.35
F6 (8893861)	10.1	45.2	<0.002	0.03	0.11	8.9	0.6	0.9	279	0.30	0.07	2.0	0.25	0.22
F7 (8893862)	11.6	53.0	<0.002	0.03	0.13	7.2	0.6	1.0	280	0.37	<0.01	2.3	0.24	0.25
F8 (8893863)	11.8	54.0	<0.002	0.03	0.18	6.9	0.8	1.3	273	0.32	0.02	3.2	0.22	0.28
F9 (8893864)	11.5	52.4	<0.002	0.04	0.14	9.4	0.8	1.1	259	0.42	0.01	3.6	0.32	0.26
F10 (8893865)	14.9	63.7	<0.002	0.04	0.21	11.3	0.7	1.5	336	0.56	0.02	13.7	0.38	0.30
F11 (8893866)	11.8	49.5	<0.002	0.05	0.20	9.6	1.0	1.4	240	0.47	0.04	6.9	0.31	0.26
F12 (8893867)	12.0	46.0	<0.002	0.04	0.28	9.2	1.1	1.3	232	0.54	0.06	4.0	0.33	0.26
F13 (8893868)	11.1	49.0	<0.002	0.05	0.28	9.2	0.8	1.5	248	0.57	0.07	5.5	0.30	0.27
F14 (8893869)	11.0	46.3	<0.002	0.04	0.14	8.1	0.9	1.1	245	0.44	0.01	12.2	0.30	0.24
F15 (8893870)	10.9	47.1	<0.002	0.04	0.14	8.3	0.8	1.0	248	0.42	0.01	2.7	0.26	0.24
F16 (8893871)	11.5	48.6	<0.002	0.03	0.15	8.1	0.7	1.0	273	0.36	<0.01	9.5	0.25	0.24
F17 (8893872)	12.1	45.0	<0.002	0.04	0.11	9.5	0.9	1.2	275	0.47	0.02	6.3	0.35	0.22
F18 (8893873)	11.2	49.3	<0.002	0.03	0.14	7.1	0.6	1.3	281	0.32	0.03	3.0	0.22	0.26
F19 (8893874)	10.4	39.3	<0.002	0.04	0.18	7.7	0.8	1.2	227	0.37	0.04	3.2	0.28	0.21
F20 (8893875)	12.7	57.0	<0.002	0.04	0.16	9.0	0.9	1.6	317	0.45	0.02	4.2	0.29	0.37
F21 (8893876)	10.8	47.3	<0.002	0.03	0.10	7.3	<0.5	0.9	292	0.33	<0.01	1.8	0.23	0.24
F22 (8893877)	11.2	40.8	<0.002	0.05	0.18	8.8	0.9	1.8	259	0.37	0.03	3.4	0.28	0.22
F23 (8893878)	12.0	47.3	<0.002	0.04	0.18	8.5	0.9	1.2	264	0.43	0.03	3.3	0.30	0.28
F24 (8893879)	13.5	41.7	<0.002	0.04	0.32	7.3	0.8	9.2	206	0.48	0.20	3.3	0.30	0.26
F25 (8893880)	12.3	46.8	<0.002	0.05	0.22	9.1	0.8	1.9	206	0.57	0.02	4.8	0.34	0.26
F26 (8893881)	15.4	55.5	<0.002	0.04	0.26	9.8	0.9	3.9	304	0.62	0.02	8.2	0.35	0.35
F27 (8893882)	12.0	46.2	<0.002	0.05	0.18	8.2	0.6	1.1	269	0.42	0.02	3.5	0.26	0.25
F28 (8893883)	12.8	45.9	<0.002	0.04	0.26	8.9	0.8	1.4	209	0.51	<0.01	4.1	0.31	0.27
F29 (8893884)	11.7	42.0	<0.002	0.04	0.19	7.2	0.9	1.1	253	0.41	0.01	3.3	0.26	0.27
F30 (8893885)	12.1	41.6	<0.002	0.07	0.41	10.7	1.3	1.3	161	0.54	0.04	4.4	0.33	0.26
F31 (8893886)	11.7	47.5	<0.002	0.04	0.15	9.2	0.6	1.0	260	0.47	<0.01	5.0	0.27	0.25
F32 (8893887)	11.6	45.0	0.002	0.04	0.16	7.7	0.8	1.3	245	0.47	0.02	3.8	0.26	0.24
F33 (8893888)	11.3	26.5	<0.002	0.03	0.15	7.2	0.7	1.2	270	0.41	0.03	4.1	0.24	0.26
F34 (8893889)	10.4	42.4	<0.002	0.04	0.17	8.4	0.9	1.2	222	0.62	0.04	3.9	0.31	0.24
F35 (8893890)	11.9	46.9	<0.002	0.04	0.23	8.4	0.8	1.3	284	0.73	0.04	4.6	0.30	0.28

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
F36 (8893891)	11.4	49.3	<0.002	0.04	0.18	8.1	0.9	1.1	247	0.31	0.05	5.7	0.24	0.28
F37 (8893892)	11.8	48.9	<0.002	0.04	0.17	8.4	0.9	1.4	211	0.39	0.01	3.9	0.31	0.27
F38 (8893893)	11.6	45.4	<0.002	0.04	0.13	8.3	0.7	30.9	259	0.40	0.02	9.2	0.29	0.25
F39 (8893894)	10.8	45.7	<0.002	0.03	0.16	9.0	0.8	1.0	245	0.32	0.01	3.6	0.29	0.26
F40 (8893895)	11.1	46.6	<0.002	0.03	0.14	8.6	0.9	1.3	251	0.30	0.01	4.3	0.28	0.25
F41 (8893896)	9.5	35.8	<0.002	0.04	0.16	7.7	0.8	0.9	157	<0.05	0.01	3.2	0.18	0.21
F42 (8893897)	13.2	44.3	<0.002	0.06	0.36	9.1	0.9	2.6	210	0.43	0.03	4.7	0.34	0.26
F43 (8893898)	13.1	40.6	<0.002	0.07	0.35	9.1	1.4	1.6	192	0.52	0.04	4.8	0.38	0.23
F44 (8893899)	14.9	50.1	<0.002	0.04	0.31	8.3	0.7	2.6	237	0.38	0.03	5.4	0.30	0.28
F45 (8893900)	12.6	42.2	<0.002	0.03	0.22	7.7	0.6	1.1	233	0.33	0.03	4.0	0.30	0.23
F46 (8893901)	13.6	50.7	<0.002	0.04	0.34	8.5	0.9	1.6	229	0.42	0.08	3.9	0.32	0.27
G1 (8893902)	10.9	46.3	<0.002	0.03	0.10	8.6	<0.5	1.0	289	0.21	<0.01	5.8	0.24	0.25
G2 (8893903)	11.8	49.3	<0.002	0.03	0.37	8.1	0.5	1.1	269	0.33	0.03	5.3	0.30	0.26
G3 (8893904)	11.8	44.3	<0.002	0.03	0.17	7.5	0.5	9.3	278	0.26	0.01	3.7	0.22	0.24
G4 (8893905)	11.0	46.0	<0.002	0.03	0.12	7.7	0.6	1.1	286	0.25	<0.01	3.6	0.23	0.26
G5 (8893906)	11.4	46.1	<0.002	0.03	0.10	8.5	0.6	1.0	276	0.32	<0.01	4.8	0.27	0.26
G6 (8893907)	13.0	48.6	<0.002	0.04	0.14	8.7	0.6	1.0	265	2.76	0.02	2.8	0.31	0.26
G7 (8893908)	11.6	46.1	<0.002	0.04	0.15	7.2	0.7	0.9	266	0.26	<0.01	4.3	0.21	0.26
G8 (8893909)	12.2	44.9	<0.002	0.03	0.37	7.2	0.9	1.0	251	0.31	0.03	5.6	0.24	0.28
G9 (8893910)	10.9	50.0	<0.002	0.04	0.18	7.4	0.8	0.8	260	0.28	0.01	3.9	0.21	0.25
G10 (8893911)	10.8	47.5	<0.002	0.04	0.14	8.9	0.9	1.1	258	0.32	<0.01	4.6	0.30	0.24
G11 (8893912)	11.9	49.9	<0.002	0.04	0.15	7.8	0.9	0.9	266	0.25	0.02	9.6	0.23	0.25
G12 (8893913)	10.5	52.0	<0.002	0.03	0.10	7.4	0.5	0.9	291	0.23	<0.01	5.5	0.23	0.26
G13 (8893914)	10.9	53.7	<0.002	0.03	0.13	7.2	<0.5	1.0	278	0.27	<0.01	3.4	0.28	0.26
G14 (8893915)	10.7	49.9	<0.002	0.03	0.10	6.9	0.7	0.7	273	0.19	<0.01	2.4	0.19	0.25
G15 (8893916)	13.3	49.0	<0.002	0.04	0.18	9.6	1.0	4.2	255	0.30	0.02	7.4	0.27	0.28
G16 (8893917)	11.8	50.5	<0.002	0.03	0.14	8.0	0.8	1.0	278	0.26	<0.01	3.2	0.23	0.26
G17 (8893918)	11.2	49.0	<0.002	0.03	0.13	7.9	0.5	1.1	240	0.32	0.02	3.2	0.28	0.25
G18 (8893919)	12.5	54.4	<0.002	0.04	0.16	9.6	0.6	1.2	248	0.35	0.01	3.9	0.31	0.29
G19 (8893920)	12.6	48.5	<0.002	0.03	0.18	8.6	0.8	0.9	231	0.26	0.03	4.3	0.25	0.27
G20 (8893921)	11.3	51.0	<0.002	0.03	0.18	8.8	0.9	1.3	242	0.42	0.03	4.8	0.32	0.28
G21 (8893922)	11.6	46.8	<0.002	0.04	0.15	7.5	0.9	1.2	262	0.32	0.03	3.8	0.30	0.29

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
G22 (8893923)		10.4	48.5	<0.002	0.04	0.15	9.0	1.0	1.1	253	0.33	0.01	4.2	0.24	0.28
G23 (8893924)		11.0	47.2	<0.002	0.04	0.11	8.0	0.9	1.1	287	0.28	<0.01	3.6	0.24	0.25
G24 (8893925)		12.8	39.9	<0.002	0.05	0.27	7.8	1.0	1.4	165	0.41	0.04	4.0	0.34	0.26
G25 (8893926)		11.7	53.1	<0.002	0.03	0.11	7.6	0.9	1.0	292	0.25	<0.01	3.4	0.23	0.30
G26 (8893927)		11.4	50.6	<0.002	0.03	0.11	8.0	0.7	1.0	276	0.24	0.01	4.3	0.23	0.25
G27 (8893928)		10.7	49.0	<0.002	0.04	0.13	7.2	0.6	1.0	284	0.22	0.01	3.1	0.21	0.24
G28 (8893929)		10.8	51.4	<0.002	0.03	0.16	8.0	0.7	1.1	283	0.30	0.01	2.1	0.27	0.26
G29 (8893930)		13.0	53.5	<0.002	0.04	0.18	9.7	1.1	1.1	224	0.37	0.03	5.5	0.30	0.26

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
F4 (8893859)	0.609	55.8	0.3	9.5	35.1	82.5
F5 (8893860)	0.811	64.4	0.3	11.5	37.7	110
F6 (8893861)	0.561	59.9	0.2	10.6	27.1	89.0
F7 (8893862)	0.627	57.7	0.3	8.5	24.9	97.0
F8 (8893863)	0.599	54.0	0.3	7.2	40.6	65.9
F9 (8893864)	0.757	75.1	0.3	9.4	44.7	97.7
F10 (8893865)	1.15	90.9	0.4	13.2	63.2	110
F11 (8893866)	0.813	76.1	0.4	9.5	65.5	106
F12 (8893867)	0.905	86.4	0.5	9.0	85.2	136
F13 (8893868)	1.07	74.5	0.5	9.2	54.6	125
F14 (8893869)	1.06	70.8	0.5	8.8	53.5	89.2
F15 (8893870)	0.772	66.3	0.3	8.1	40.2	107
F16 (8893871)	1.15	68.2	0.3	10.1	27.9	98.3
F17 (8893872)	0.990	85.7	0.3	11.7	34.4	198
F18 (8893873)	0.614	51.2	0.4	7.3	29.6	99.5
F19 (8893874)	0.807	63.3	0.5	7.8	35.8	126
F20 (8893875)	0.950	63.2	0.6	10.9	36.0	111
F21 (8893876)	0.534	56.4	0.2	7.8	31.6	75.8
F22 (8893877)	0.744	72.5	0.4	8.6	35.1	88.2
F23 (8893878)	0.963	67.1	0.4	9.9	30.6	140
F24 (8893879)	0.949	67.8	5.3	8.3	55.8	128
F25 (8893880)	1.06	83.2	0.5	9.6	58.6	132
F26 (8893881)	1.22	77.7	0.7	11.5	52.1	158
F27 (8893882)	0.800	61.6	0.4	8.9	29.3	113
F28 (8893883)	1.09	71.8	0.6	8.9	43.4	128
F29 (8893884)	19.3	55.6	0.6	7.3	76.9	115
F30 (8893885)	1.35	95.7	0.6	10.1	49.4	105
F31 (8893886)	1.03	62.1	0.4	12.9	36.8	136
F32 (8893887)	0.828	53.7	0.4	8.1	51.2	109
F33 (8893888)	0.708	55.3	0.3	7.2	27.3	97.9
F34 (8893889)	0.960	69.3	0.5	8.2	46.7	102
F35 (8893890)	0.937	66.9	0.5	9.7	38.9	158

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
F36 (8893891)	0.829	58.1	0.4	7.4	43.6	78.7
F37 (8893892)	0.852	73.9	0.4	8.2	58.2	96.6
F38 (8893893)	0.962	68.4	0.3	8.8	36.7	131
F39 (8893894)	0.866	70.2	0.3	8.2	41.8	107
F40 (8893895)	0.789	68.5	0.3	8.2	36.6	124
F41 (8893896)	0.643	62.6	<0.1	6.9	57.6	26.7
F42 (8893897)	0.970	84.8	0.7	9.1	108	108
F43 (8893898)	1.04	88.4	0.6	8.5	83.8	102
F44 (8893899)	0.886	64.1	0.3	8.4	91.7	123
F45 (8893900)	0.734	81.5	0.4	7.5	70.5	82.8
F46 (8893901)	0.895	73.4	0.4	7.5	147	98.5
G1 (8893902)	0.632	69.8	0.1	7.9	28.7	61.2
G2 (8893903)	0.759	74.6	0.3	8.1	47.5	95.5
G3 (8893904)	0.644	58.8	0.2	7.0	53.2	61.9
G4 (8893905)	0.579	60.2	0.2	8.1	27.2	67.3
G5 (8893906)	0.898	68.7	0.2	9.2	35.9	87.2
G6 (8893907)	0.681	78.9	0.3	8.7	39.3	94.1
G7 (8893908)	0.672	54.2	0.3	6.9	44.1	79.4
G8 (8893909)	0.877	58.9	0.5	7.1	36.4	80.2
G9 (8893910)	0.624	52.5	0.2	7.0	34.1	63.7
G10 (8893911)	0.713	79.0	0.3	9.6	40.7	97.2
G11 (8893912)	0.752	58.6	0.2	8.9	63.1	85.8
G12 (8893913)	0.658	51.8	0.2	8.9	31.9	84.2
G13 (8893914)	0.727	59.3	0.2	7.5	31.0	95.8
G14 (8893915)	0.519	49.1	0.2	7.2	22.2	63.4
G15 (8893916)	1.70	69.2	0.3	15.7	32.2	111
G16 (8893917)	0.696	58.6	0.2	8.6	28.0	91.3
G17 (8893918)	0.743	68.3	0.3	7.7	39.8	113
G18 (8893919)	0.917	89.2	0.3	9.1	39.5	123
G19 (8893920)	0.945	69.0	0.3	9.7	28.2	89.7
G20 (8893921)	0.961	68.5	0.4	9.7	59.3	132
G21 (8893922)	0.926	84.2	0.3	10.0	21.7	97.3

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
G22 (8893923)		1.06	61.6	0.4	12.1	32.6	92.2
G23 (8893924)		0.677	58.3	0.2	8.9	23.3	77.1
G24 (8893925)		1.19	97.0	0.5	7.8	41.3	120
G25 (8893926)		0.672	50.8	0.2	9.2	23.0	112
G26 (8893927)		0.860	58.5	0.2	10.2	23.1	100
G27 (8893928)		0.609	53.8	0.3	8.4	27.8	82.0
G28 (8893929)		0.617	65.1	0.2	8.8	40.6	81.5
G29 (8893930)		1.16	75.6	0.4	10.9	36.0	137

Comments: RDL - Reported Detection Limit
8893859-8893930 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893859	0.17	0.12		8893878	0.252	0.298	16.7%	8893898	0.301	0.361	18.1%	8893919	0.13	0.23	
Al	8893859	6.20	6.17	0.5%	8893878	6.48	6.13	5.6%	8893898	7.40	7.27	1.8%	8893919	6.38	6.29	1.4%
As	8893859	1.7	1.2		8893878	3.22	3.98	21.1%	8893898	5.49	5.58	1.6%	8893919	3.8	4.6	19.0%
Ba	8893859	478	490	2.5%	8893878	499	465	7.1%	8893898	408	407	0.2%	8893919	478	468	2.1%
Be	8893859	1.12	1.17	4.4%	8893878	1.22	1.06	14.0%	8893898	1.26	1.12	11.8%	8893919	1.15	1.33	14.5%
Bi	8893859	0.10	0.10	0.0%	8893878	0.126	0.113	10.9%	8893898	0.21	0.22	4.7%	8893919	0.16	0.16	0.0%
Ca	8893859	1.64	1.60	2.5%	8893878	1.44	1.38	4.3%	8893898	1.19	1.14	4.3%	8893919	1.42	1.39	2.1%
Cd	8893859	0.04	0.04	0.0%	8893878	0.06	0.05	18.2%	8893898	0.26	0.27	3.8%	8893919	0.06	0.07	15.4%
Ce	8893859	20.6	21.2	2.9%	8893878	25.7	27.2	5.7%	8893898	27.1	28.9	6.4%	8893919	26.1	27.2	4.1%
Co	8893859	9.79	10.5	7.0%	8893878	10.2	9.00	12.5%	8893898	14.4	13.6	5.7%	8893919	11.8	11.4	3.4%
Cr	8893859	48.2	44.4	8.2%	8893878	52.3	43.8	17.7%	8893898	80.4	77.1	4.2%	8893919	65.3	65.8	0.8%
Cs	8893859	1.19	1.22	2.5%	8893878	1.26	1.17	7.4%	8893898	1.90	1.93	1.6%	8893919	1.52	1.48	2.7%
Cu	8893859	23.5	25.8	9.3%	8893878	28.1	23.3	18.7%	8893898	16.5	16.1	2.5%	8893919	16.4	15.6	5.0%
Fe	8893859	2.20	2.18	0.9%	8893878	2.43	2.29	5.9%	8893898	3.98	3.87	2.8%	8893919	3.38	3.27	3.3%
Ga	8893859	15.1	15.2	0.7%	8893878	16.1	14.1	13.2%	8893898	15.5	15.2	2.0%	8893919	17.3	16.6	4.1%
Ge	8893859	< 0.05	< 0.05	0.0%	8893878	< 0.05	< 0.05	0.0%	8893898	< 0.05	< 0.05	0.0%	8893919	< 0.05	< 0.05	0.0%
Hf	8893859	1.9	1.9	0.0%	8893878	3.1	3.1	0.0%	8893898	2.6	2.6	0.0%	8893919	2.8	2.8	0.0%
In	8893859	0.027	0.025	7.7%	8893878	0.030	0.025	18.2%	8893898	0.0416	0.0397	4.7%	8893919	0.030	0.028	6.9%
K	8893859	1.57	1.57	0.0%	8893878	1.55	1.47	5.3%	8893898	1.28	1.26	1.6%	8893919	1.56	1.53	1.9%
La	8893859	10.2	10.3	1.0%	8893878	11.5	12.2	5.9%	8893898	13.9	15.8	12.8%	8893919	10.3	11.3	9.3%
Li	8893859	18.0	17.9	0.6%	8893878	15.2	14.4	5.4%	8893898	23.7	23.4	1.3%	8893919	18.7	18.4	1.6%
Mg	8893859	0.840	0.814	3.1%	8893878	0.611	0.573	6.4%	8893898	0.69	0.67	2.9%	8893919	0.75	0.73	2.7%
Mn	8893859	346	359	3.7%	8893878	294	279	5.2%	8893898	382	363	5.1%	8893919	351	352	0.3%
Mo	8893859	0.33	0.38	14.1%	8893878	0.63	0.56	11.8%	8893898	0.973	1.05	7.6%	8893919	0.51	0.50	2.0%
Na	8893859	2.12	2.11	0.5%	8893878	2.08	1.99	4.4%	8893898	1.46	1.42	2.8%	8893919	2.00	1.97	1.5%
Nb	8893859	5.6	5.6	0.0%	8893878	6.5	5.9	9.7%	8893898	7.2	7.4	2.7%	8893919	7.4	6.0	20.9%
Ni	8893859	31.6	32.0	1.3%	8893878	26.7	26.6	0.4%	8893898	33.1	32.6	1.5%	8893919	31.2	30.2	3.3%
P	8893859	371	366	1.4%	8893878	250	240	4.1%	8893898	2070	2150	3.8%	8893919	239	235	1.7%
Pb	8893859	11.6	12.1	4.2%	8893878	12.0	11.4	5.1%	8893898	13.1	13.2	0.8%	8893919	12.5	11.9	4.9%
Rb	8893859	60.6	61.3	1.1%	8893878	47.3	43.6	8.1%	8893898	40.6	40.1	1.2%	8893919	54.4	51.3	5.9%
Re	8893859	< 0.002	< 0.002	0.0%	8893878	< 0.002	< 0.002	0.0%	8893898	< 0.002	< 0.002	0.0%	8893919	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893859	0.03	0.03	0.0%	8893878	0.04	0.04	0.0%	8893898	0.07	0.07	0.0%	8893919	0.04	0.04	0.0%
Sb	8893859	0.111	0.105	5.6%	8893878	0.181	0.191	5.4%	8893898	0.35	0.40	13.3%	8893919	0.16	0.20	22.2%
Sc	8893859	8.2	8.5	3.6%	8893878	8.5	8.2	3.6%	8893898	9.1	9.0	1.1%	8893919	9.59	9.11	5.1%
Se	8893859	0.5	0.5	0.0%	8893878	0.9	0.8	11.8%	8893898	1.40	1.49	6.2%	8893919	0.6	0.9	
Sn	8893859	1.2	1.1	8.7%	8893878	1.2	1.2	0.0%	8893898	1.6	1.1		8893919	1.24	1.15	7.5%
Sr	8893859	374	377	0.8%	8893878	264	247	6.7%	8893898	192	182	5.3%	8893919	248	251	1.2%
Ta	8893859	0.39	0.36	8.0%	8893878	0.433	0.449	3.6%	8893898	0.52	0.47	10.1%	8893919	0.35	0.32	9.0%
Te	8893859	0.02	0.02	0.0%	8893878	0.028	0.025	11.3%	8893898	0.042	0.050	17.4%	8893919	0.01	0.06	
Th	8893859	2.43	3.00	21.0%	8893878	3.34	3.70	10.2%	8893898	4.84	5.72	16.7%	8893919	3.9	4.3	9.8%
Ti	8893859	0.28	0.28	0.0%	8893878	0.297	0.290	2.4%	8893898	0.375	0.350	6.9%	8893919	0.31	0.30	3.3%
Tl	8893859	0.265	0.270	1.9%	8893878	0.278	0.271	2.6%	8893898	0.23	0.23	0.0%	8893919	0.29	0.27	7.1%
U	8893859	0.609	0.612	0.5%	8893878	0.963	0.931	3.4%	8893898	1.04	1.13	8.3%	8893919	0.917	0.870	5.3%
V	8893859	55.8	57.6	3.2%	8893878	67.1	63.4	5.7%	8893898	88.4	81.3	8.4%	8893919	89.2	84.3	5.6%
W	8893859	0.3	0.5		8893878	0.45	0.46	2.2%	8893898	0.6	0.5	18.2%	8893919	0.34	0.36	5.7%
Y	8893859	9.50	9.58	0.8%	8893878	9.93	9.33	6.2%	8893898	8.5	8.7	2.3%	8893919	9.11	9.36	2.7%
Zn	8893859	35.1	29.9	16.0%	8893878	30.6	33.0	7.5%	8893898	83.8	85.8	2.4%	8893919	39.5	38.8	1.8%
Zr	8893859	82.5	82.2	0.4%	8893878	140	130	7.4%	8893898	102	102	0.0%	8893919	123	124	0.8%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282583
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.Till-2)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	11.02	100%	90% - 110%	6.96	6.68	95%	90% - 110%					8.17	7.99	97%	90% - 110%
As					124	123	99%	90% - 110%					26	28.3	108%	90% - 110%
Ba	340	338	99%	90% - 110%	186	179	96%	90% - 110%					540	519	96%	90% - 110%
Be	2.6	2.83	108%	90% - 110%									4.0	3.41	85%	90% - 110%
Ca	5.72	5.65	98%	90% - 110%	4.01	3.75	93%	90% - 110%					0.907	0.882	97%	90% - 110%
Ce	122	115	94%	90% - 110%	24	22	91%	90% - 110%					98	95.1	97%	90% - 110%
Co	2.8	2.64	94%	90% - 110%	22.1	21.3	96%	90% - 110%								
Cr													60.3	61	101%	90% - 110%
Cs	1.5	1.62	108%	90% - 110%									12	11.8	98%	90% - 110%
Cu					88.6	98.2	110%	90% - 110%					150	144	96%	90% - 110%
Fe	4.34	4.25	97%	90% - 110%	7.56	7.13	94%	90% - 110%					3.77	3.71	98%	90% - 110%
Ga	35	37.5	107%	90% - 110%												
Hf													11	3.59		90% - 110%
K	1.37	1.4	102%	90% - 110%	2.021	1.909	94%	90% - 110%								
La	58	53.0	91%	90% - 110%									44	41.4	94%	90% - 110%
Li	37	38	102%	90% - 110%									47	44	93%	90% - 110%
Mg	0.325	0.313	96%	90% - 110%	2.412	2.353	97%	90% - 110%					1.10	1.05	95%	90% - 110%
Mn					1510	1382	91%	90% - 110%					780	719	92%	90% - 110%
Mo													14	13.6	97%	90% - 110%
Na	5.267	5.258	99%	90% - 110%	0.617	0.603	97%	90% - 110%					1.624	1.621	99%	90% - 110%
Nb	13	14.3	110%	90% - 110%									20	16.3	81%	90% - 110%
Ni	9	9	100%	90% - 110%	77.1	69.5	90%	90% - 110%					32	32	100%	90% - 110%
P					892	976	109%	90% - 110%								
Pb	10	10.8	108%	90% - 110%									31	29.3	94%	90% - 110%
Rb	55	54.6	99%	90% - 110%					143	142	99%	90% - 110%	143	157	109%	90% - 110%
S					0.348	0.383	110%	90% - 110%								
Sb													0.8	0.841	105%	90% - 110%
Sc	1.1	0.8	72%	90% - 110%									12	12	100%	90% - 110%
Sr	1191	1113	93%	90% - 110%									144	123	85%	90% - 110%
Ta	0.9	0.9	100%	90% - 110%												
Th	1.4	1.11	79%	90% - 110%									18.4	17.0	92%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

Ti	0.172	0.174	101%	90% - 110%									0.53	0.45	84%	90% - 110%
U													5.7	4.33	75%	90% - 110%
V	8	7	87%	90% - 110%									77	76	98%	90% - 110%
W													5	4.30	86%	90% - 110%
Y	119	131	110%	90% - 110%												
Zn	93	98	105%	90% - 110%	208	203	97%	90% - 110%					130	119	91%	90% - 110%
	CRM #5 (ref.GTS-2A)															
Parameter	Expect	Actual	Recovery	Limits												
Al	6.96	6.72	96%	90% - 110%												
As	124	130	104%	90% - 110%												
Ba	186	180	96%	90% - 110%												
Ca	4.01	3.78	94%	90% - 110%												
Ce	24	22	91%	90% - 110%												
Co	22.1	21.6	97%	90% - 110%												
Cu	88.6	82.9	93%	90% - 110%												
Fe	7.56	7.23	95%	90% - 110%												
K	2.021	1.937	95%	90% - 110%												
Mg	2.412	2.37	98%	90% - 110%												
Mn	1510	1403	92%	90% - 110%												
Na	0.617	0.608	98%	90% - 110%												
Ni	77.1	71.8	93%	90% - 110%												
P	892	994	111%	90% - 110%												
S	0.348	0.376	108%	90% - 110%												
Zn	208	197	94%	90% - 110%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 17T282583
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.
P.O BOX 10112 1470-701 W. GEORGIA ST
VANCOUVER, BC V7Y 1C6
604-646-6908

ATTENTION TO: Jason Gigliotti, Jim Nelson

PROJECT:

AGAT WORK ORDER: 17T282584

SOLID ANALYSIS REVIEWED BY: Kevin Motomura, Data Review Supervisor

DATE REPORTED: Jan 18, 2018

PAGES (INCLUDING COVER): 19

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
G30 (8893940)	0.19	6.98	4.1	509	1.29	0.10	1.47	0.08	36.1	10.7	60.4	1.29	3.6	2.37
G31 (8893941)	0.21	7.74	3.0	430	1.30	0.12	1.36	0.08	32.4	13.2	79.1	1.51	5.8	3.42
G32 (8893942)	0.36	6.92	1.4	497	1.17	0.09	1.38	0.09	41.7	12.7	71.0	1.77	9.9	2.40
G33 (8893943)	0.17	6.91	2.2	466	1.31	0.09	1.62	0.06	21.9	15.3	75.6	1.25	5.5	2.74
G34 (8893944)	0.24	6.91	2.0	498	1.23	0.08	1.68	0.07	52.0	14.1	81.0	1.42	8.9	3.20
G35 (8893945)	0.24	6.85	2.1	479	1.18	0.09	1.36	0.07	21.3	14.6	60.6	1.38	6.2	2.39
G36 (8893946)	0.35	7.41	3.2	509	1.17	0.12	1.43	0.07	26.6	17.0	70.5	1.63	6.9	2.63
G37 (8893947)	0.31	7.51	3.6	493	1.33	0.15	1.50	0.09	27.5	18.3	80.5	1.90	8.3	3.49
G38 (8893948)	0.26	7.35	2.9	553	1.26	0.09	1.52	0.08	31.2	15.4	73.8	1.89	9.4	2.51
G39 (8893949)	0.18	6.93	3.1	525	1.28	0.09	1.37	0.05	41.5	14.2	68.5	1.60	13.4	2.24
G40 (8893950)	0.25	7.11	1.7	560	1.27	0.09	1.31	0.06	27.1	11.9	59.0	1.94	6.0	2.22
G41 (8893951)	0.27	7.17	2.4	512	1.30	0.12	1.41	0.09	30.2	14.8	69.7	2.10	5.9	3.02
G42 (8893952)	0.32	6.94	4.0	507	1.25	0.11	1.43	0.11	29.4	16.6	66.2	2.10	13.8	2.81
G43 (8893953)	0.24	7.40	4.1	513	1.31	0.11	1.54	0.08	26.6	18.7	68.4	1.59	7.9	2.63
G44 (8893954)	0.51	8.07	15.7	446	1.78	0.30	1.40	0.18	51.1	38.6	88.2	2.60	44.3	3.58
G45 (8893955)	0.37	6.66	6.8	529	1.18	0.17	1.50	0.17	28.0	16.1	69.5	2.92	12.7	2.97
H1 (8893956)	0.19	6.50	2.5	527	1.13	0.08	1.24	0.05	13.9	8.69	41.2	1.53	4.4	1.91
H2 (8893957)	0.14	6.87	2.4	476	1.36	0.09	1.50	0.05	16.3	13.3	53.8	1.48	5.0	2.24
H3 (8893958)	0.12	6.46	4.2	539	1.38	0.08	1.47	0.02	37.4	10.3	44.1	1.26	15.5	1.57
H4 (8893959)	0.13	6.46	2.3	517	1.28	0.06	1.32	0.04	12.4	10.2	35.5	1.24	3.9	1.54
H5 (8893960)	0.14	6.60	4.0	492	1.28	0.07	1.48	0.06	18.5	12.5	44.0	1.22	3.9	1.84
H6 (8893961)	0.19	7.16	2.5	486	1.20	0.11	1.32	0.08	20.0	11.9	54.7	1.38	4.6	2.42
H7 (8893962)	0.15	6.55	3.3	500	1.35	0.08	1.46	0.07	31.7	14.0	54.7	1.40	7.6	2.00
H8 (8893963)	0.25	6.95	3.9	504	1.31	0.11	1.35	0.05	28.6	12.9	55.8	1.72	6.1	2.45
H9 (8893964)	0.27	6.80	78.2	453	1.23	0.19	1.27	0.06	29.2	16.7	66.7	2.17	12.6	3.30
H10 (8893965)	0.21	6.60	4.4	466	1.30	0.13	1.54	0.08	30.8	18.8	76.1	1.68	16.6	3.72
H11 (8893966)	0.19	6.67	2.4	491	1.38	0.11	1.39	0.06	33.0	14.1	52.3	1.60	13.3	2.17
H12 (8893967)	0.13	6.26	2.4	476	1.33	0.07	1.40	0.03	23.3	12.5	41.6	1.13	4.6	1.74
H13 (8893968)	0.18	6.46	1.6	511	1.12	0.09	1.49	0.04	24.3	10.3	50.2	1.40	9.5	1.96
H14 (8893969)	0.15	6.69	3.6	500	1.38	0.08	1.67	0.05	32.4	15.8	57.3	1.14	4.4	2.14
H15 (8893970)	0.21	6.48	2.1	475	1.33	0.12	1.44	0.05	28.5	14.5	56.5	2.01	11.5	2.46
H16 (8893971)	0.22	6.59	3.1	439	1.21	0.15	1.37	0.05	28.2	18.0	63.7	2.16	18.7	2.84

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
H17 (8893972)		0.31	7.18	7.7	390	1.48	0.22	1.16	0.11	25.9	24.4	77.4	2.52	19.1	4.31
H18 (8893973)		0.14	6.78	2.5	535	1.31	0.07	1.84	0.02	32.5	10.4	50.3	1.23	3.7	1.88
H19 (8893974)		0.25	6.87	6.6	425	1.32	0.17	1.43	0.09	29.3	19.1	74.0	2.03	16.3	3.41
H20 (8893975)		0.14	6.45	1.4	531	1.13	0.07	1.57	0.05	18.2	9.67	45.5	1.30	3.7	1.51
H21 (8893976)		0.37	6.80	8.3	359	1.27	0.29	1.07	0.10	25.8	19.7	80.1	2.49	20.2	5.45
H22 (8893977)		0.34	6.70	1.8	513	1.19	0.12	1.28	0.05	25.5	11.1	53.9	1.66	4.1	2.46
H23 (8893978)		0.18	6.73	8.9	479	1.54	0.28	1.45	0.07	30.9	23.4	51.5	1.45	23.9	2.81
H24 (8893979)		0.20	6.50	2.8	502	1.18	0.12	1.35	0.06	18.7	9.58	48.9	1.36	7.5	2.29
H25 (8893980)		0.14	7.01	3.3	469	1.41	0.08	1.59	0.04	29.7	16.3	59.2	1.21	3.7	2.58
H26 (8893981)		0.19	6.98	2.6	471	1.32	0.16	1.50	0.08	30.1	14.3	59.3	1.44	4.3	2.53
H27 (8893982)		0.28	5.60	3.8	464	0.88	0.15	1.08	0.07	28.5	7.38	44.5	1.46	13.8	2.14
H28 (8893983)		0.29	6.00	3.9	496	1.12	0.13	1.30	0.07	29.0	9.56	46.1	1.23	7.8	1.85
H29 (8893984)		0.33	6.94	2.0	488	1.35	0.08	1.45	0.07	19.0	13.7	62.7	1.50	4.4	2.41
H30 (8893985)		0.18	6.83	4.2	474	1.39	0.09	1.53	0.05	30.2	15.3	65.1	1.37	5.2	2.38
H31 (8893986)		0.26	7.06	2.1	523	1.38	0.08	1.55	0.06	31.7	14.3	64.1	1.60	4.8	2.23
H32 (8893987)		0.30	7.09	2.5	476	1.18	0.12	1.39	0.07	22.8	20.7	75.8	1.70	7.5	3.08
H33 (8893988)		0.29	6.68	3.3	475	1.26	0.11	1.44	0.09	36.9	17.6	81.1	1.67	7.4	3.05
H34 (8893989)		0.39	7.04	3.2	467	1.32	0.15	1.55	0.07	33.2	22.9	87.9	1.84	12.2	3.45
H35 (8893990)		0.47	7.22	5.5	472	1.38	0.16	1.43	0.13	34.6	23.2	92.3	2.03	21.2	3.60
H36 (8893991)		0.51	7.81	7.4	474	1.55	0.18	1.26	0.08	29.9	24.4	84.9	2.35	14.2	3.62
H37 (8893992)		0.46	7.13	6.5	491	1.36	0.16	1.49	0.13	24.6	16.8	77.4	1.75	7.0	3.69
H38 (8893993)		0.43	7.32	5.8	464	1.32	0.13	1.45	0.09	22.2	23.1	94.6	1.98	14.0	3.91
H39 (8893994)		0.32	7.06	2.4	494	1.49	0.10	1.58	0.08	37.6	18.5	74.7	1.73	5.1	2.80
H40 (8893995)		0.19	6.56	1.8	500	1.50	0.09	1.48	0.05	28.1	15.0	53.9	1.40	4.0	2.18
H41 (8893996)		0.21	6.68	2.7	507	1.45	0.09	1.45	0.06	23.8	16.2	69.2	1.75	7.2	2.20
H42 (8893997)		0.27	7.07	4.0	497	1.48	0.11	1.55	0.07	33.3	23.5	73.6	1.70	6.1	2.79
H43 (8893998)		0.70	7.50	17.3	412	1.75	0.27	1.37	0.17	41.2	43.1	88.2	3.35	68.1	4.48
I1 (8893999)		0.23	6.68	2.2	499	1.31	0.07	1.40	0.04	17.1	12.2	51.7	1.44	3.0	1.92
I2 (8894000)		0.51	6.60	3.8	514	1.26	0.10	1.41	0.07	25.7	12.1	49.0	1.38	3.0	2.13
I3 (8894001)		0.35	6.69	3.8	516	1.28	0.14	1.35	0.05	20.9	12.4	51.1	1.64	5.3	2.08
I4 (8894002)		0.24	6.82	6.0	437	1.46	0.17	1.23	0.06	71.9	23.0	70.1	2.44	38.4	2.86
I5 (8894003)		0.22	7.22	3.8	454	1.34	0.14	1.23	0.07	21.8	19.5	63.4	1.84	6.2	2.81

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
I6 (8894004)		0.20	7.04	5.5	476	1.46	0.16	1.31	0.04	28.5	21.2	67.5	1.83	16.2	2.59
I7 (8894005)		0.28	6.66	3.0	471	1.33	0.14	1.34	0.08	29.1	18.3	66.6	2.01	12.9	2.77
I8 (8894006)		0.25	7.39	7.4	476	1.36	0.17	1.22	0.07	27.0	19.4	71.1	2.21	19.5	3.19
I9 (8894007)		0.24	7.14	8.6	406	1.38	0.21	1.17	0.09	27.9	25.5	77.5	2.49	21.9	3.94
I10 (8894008)		0.40	7.75	6.0	490	1.68	0.12	1.46	0.06	116	36.4	78.1	1.57	30.5	2.77
I11 (8894009)		0.30	6.94	4.8	440	1.28	0.16	1.33	0.08	36.4	18.1	75.7	1.78	20.1	2.88
I12 (8894010)		0.27	7.09	4.3	497	1.16	0.10	1.43	0.05	26.5	14.0	56.9	1.41	7.1	2.34
I13 (8894011)		0.17	6.75	2.8	519	1.29	0.09	1.45	0.06	25.8	14.2	53.2	1.49	8.3	2.08

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
G30 (8893940)		19.5	<0.05	3.5	0.031	1.62	16.9	14.7	0.59	342	0.59	2.07	9.0	22.9	466
G31 (8893941)		20.1	<0.05	3.0	0.041	1.36	16.2	19.7	0.66	383	0.84	1.79	8.8	29.0	746
G32 (8893942)		19.0	<0.05	3.1	0.033	1.66	19.9	17.3	0.67	314	0.61	1.91	9.1	31.1	578
G33 (8893943)		18.7	<0.05	2.2	0.030	1.51	9.9	14.7	0.82	467	0.50	2.18	7.2	31.0	491
G34 (8893944)		18.3	<0.05	3.8	0.031	1.60	25.0	14.2	0.82	474	0.48	2.15	11.4	32.7	458
G35 (8893945)		17.2	<0.05	3.0	0.025	1.52	10.6	17.3	0.62	325	0.63	1.98	6.9	36.4	469
G36 (8893946)		18.6	<0.05	3.1	0.032	1.62	13.2	20.5	0.69	362	0.77	1.82	8.6	38.3	460
G37 (8893947)		21.3	<0.05	3.3	0.041	1.57	13.2	22.8	0.80	383	0.80	1.78	9.5	40.5	856
G38 (8893948)		19.6	<0.05	3.1	0.029	1.79	13.6	18.2	0.90	371	0.52	1.98	9.2	36.3	420
G39 (8893949)		18.5	<0.05	2.3	0.025	1.82	14.3	15.1	0.84	340	0.44	1.97	7.9	35.6	407
G40 (8893950)		19.2	<0.05	3.6	0.031	1.93	12.7	17.6	0.73	302	0.55	1.96	10.4	28.4	347
G41 (8893951)		21.8	<0.05	3.0	0.032	1.64	14.6	23.9	0.74	402	0.61	1.90	9.3	32.9	938
G42 (8893952)		20.3	<0.05	3.2	0.036	1.62	13.9	17.3	0.70	355	0.98	1.82	10.4	32.5	756
G43 (8893953)		18.4	<0.05	3.3	0.028	1.64	12.4	17.4	0.76	342	0.75	2.00	7.9	37.4	413
G44 (8893954)		19.2	<0.05	2.0	0.046	1.51	20.6	23.6	1.02	633	1.73	1.61	8.7	59.0	1290
G45 (8893955)		22.0	<0.05	3.6	0.038	1.75	13.5	26.8	0.76	473	1.07	1.77	10.1	29.9	954
H1 (8893956)		20.2	<0.05	1.7	0.020	1.66	6.8	12.1	0.47	257	0.41	2.10	5.6	19.6	531
H2 (8893957)		19.2	<0.05	2.2	0.027	1.57	7.9	14.9	0.69	344	0.45	2.14	5.5	28.5	507
H3 (8893958)		19.6	<0.05	2.3	0.020	1.68	11.8	10.9	0.58	391	0.44	2.31	4.8	21.9	137
H4 (8893959)		17.5	<0.05	1.4	0.015	1.63	5.7	11.1	0.53	226	0.29	2.24	4.1	22.5	236
H5 (8893960)		19.2	<0.05	1.6	0.021	1.59	8.3	12.9	0.60	323	0.37	2.25	4.8	24.0	327
H6 (8893961)		19.8	<0.05	2.5	0.031	1.59	9.6	16.2	0.54	274	0.69	1.98	6.5	23.6	369
H7 (8893962)		18.5	<0.05	2.7	0.022	1.60	10.9	11.7	0.64	336	0.52	2.10	6.7	27.5	391
H8 (8893963)		21.3	<0.05	3.6	0.027	1.67	13.1	17.0	0.60	282	0.80	1.89	7.9	24.9	410
H9 (8893964)		23.1	<0.05	3.6	0.036	1.55	13.9	27.3	0.68	334	1.15	1.69	9.6	27.4	270
H10 (8893965)		21.4	<0.05	3.6	0.032	1.47	10.7	16.3	0.74	460	0.75	2.04	8.0	33.1	421
H11 (8893966)		21.3	<0.05	2.7	0.026	1.53	14.8	14.8	0.53	294	0.81	2.03	6.8	22.3	277
H12 (8893967)		18.3	<0.05	1.6	0.019	1.50	7.6	10.2	0.55	259	0.44	2.21	4.5	20.5	342
H13 (8893968)		20.5	<0.05	3.4	0.024	1.57	12.0	12.6	0.59	321	0.70	2.14	7.4	21.5	181
H14 (8893969)		19.4	<0.05	2.4	0.023	1.57	13.8	10.3	0.67	392	0.50	2.33	5.4	23.7	522
H15 (8893970)		22.7	<0.05	3.8	0.029	1.52	14.4	17.6	0.65	328	0.92	2.00	7.6	24.4	203
H16 (8893971)		21.1	<0.05	3.3	0.030	1.54	12.8	20.6	0.87	425	0.65	1.91	7.9	32.4	207

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.
ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 18, 2018 SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
H17 (8893972)	22.4	<0.05	4.0	0.044	1.32	12.0	26.8	0.77	404	1.27	1.56	9.8	36.5	530
H18 (8893973)	19.7	<0.05	3.5	0.023	1.73	15.5	10.9	0.78	395	0.36	2.45	7.0	20.8	136
H19 (8893974)	21.0	<0.05	3.7	0.038	1.40	13.3	21.8	0.73	366	0.91	1.76	8.2	31.0	398
H20 (8893975)	21.4	<0.05	2.7	0.018	1.68	9.0	11.7	0.66	317	0.38	2.36	6.4	18.9	170
H21 (8893976)	26.9	<0.05	3.6	0.048	1.27	12.7	29.8	0.78	363	2.14	1.41	10.0	32.2	513
H22 (8893977)	27.9	<0.05	3.3	0.026	1.63	11.8	15.3	0.47	263	0.96	1.87	8.9	16.7	257
H23 (8893978)	22.2	<0.05	2.3	0.040	1.50	14.0	15.4	0.61	343	0.72	2.10	7.1	26.9	482
H24 (8893979)	21.5	<0.05	2.8	0.023	1.54	8.7	12.4	0.52	282	0.70	2.08	6.0	16.8	156
H25 (8893980)	19.6	<0.05	2.4	0.027	1.46	13.0	12.2	0.70	354	0.43	2.17	5.9	27.8	327
H26 (8893981)	19.8	<0.05	2.7	0.028	1.46	14.2	14.3	0.62	350	0.60	2.07	6.7	25.2	433
H27 (8893982)	23.7	<0.05	3.9	0.029	1.41	13.4	12.8	0.41	283	0.96	1.44	10.1	14.0	467
H28 (8893983)	19.7	<0.05	3.3	0.024	1.50	13.6	11.5	0.46	298	0.60	1.91	7.2	17.3	262
H29 (8893984)	20.1	<0.05	2.9	0.029	1.56	8.2	15.1	0.65	344	0.57	2.08	13.3	25.9	575
H30 (8893985)	21.1	<0.05	2.7	0.024	1.51	14.0	13.1	0.71	375	0.49	2.15	6.1	31.3	526
H31 (8893986)	20.8	<0.05	3.3	0.027	1.69	12.8	13.5	0.71	343	0.52	2.14	7.7	29.5	351
H32 (8893987)	20.2	<0.05	3.5	0.028	1.52	11.0	20.1	0.72	380	0.69	1.80	8.1	42.8	513
H33 (8893988)	20.5	<0.05	3.5	0.029	1.58	17.5	15.7	0.77	414	0.61	1.87	7.8	34.1	403
H34 (8893989)	21.3	<0.05	3.9	0.033	1.57	14.8	17.6	0.90	541	0.62	1.85	10.3	42.0	614
H35 (8893990)	22.2	<0.05	3.8	0.038	1.62	15.3	19.4	0.87	504	0.73	1.76	9.0	40.3	814
H36 (8893991)	22.4	<0.05	4.1	0.040	1.57	15.2	26.6	0.81	386	1.18	1.51	11.0	45.9	1040
H37 (8893992)	24.5	<0.05	3.1	0.038	1.58	11.7	23.5	0.71	476	0.74	1.89	9.0	28.1	1210
H38 (8893993)	21.1	<0.05	2.5	0.035	1.57	10.4	21.9	0.89	595	0.83	1.73	9.3	44.8	889
H39 (8893994)	22.1	<0.05	3.8	0.032	1.60	17.8	16.8	0.77	406	0.52	2.01	8.8	37.0	538
H40 (8893995)	22.7	<0.05	3.1	0.023	1.58	12.9	12.7	0.62	314	0.44	2.17	6.3	26.5	701
H41 (8893996)	19.9	<0.05	2.4	0.027	1.61	10.6	13.0	0.69	328	0.57	2.07	7.0	30.0	469
H42 (8893997)	22.2	<0.05	4.0	0.033	1.49	15.2	14.9	0.73	352	0.71	2.00	8.2	36.0	497
H43 (8893998)	23.6	<0.05	3.2	0.052	1.37	18.3	32.2	0.86	506	1.56	1.38	11.0	61.6	1850
I1 (8893999)	20.1	<0.05	1.9	0.019	1.57	8.1	12.1	0.56	278	0.40	2.15	6.2	23.4	456
I2 (8894000)	22.6	<0.05	2.7	0.025	1.60	11.9	12.5	0.53	303	1.38	2.05	6.5	21.2	782
I3 (8894001)	20.4	<0.05	3.0	0.027	1.68	10.6	13.6	0.47	286	0.55	1.95	7.5	21.5	391
I4 (8894002)	21.1	<0.05	3.0	0.031	1.58	14.1	19.8	0.78	384	0.77	1.80	7.2	34.6	499
I5 (8894003)	19.3	<0.05	2.8	0.028	1.43	11.1	22.9	0.59	305	0.91	1.74	6.8	31.7	446

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.   ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017   DATE RECEIVED: Nov 10, 2017   DATE REPORTED: Jan 18, 2018   SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
I6 (8894004)		20.9	<0.05	2.5	0.028	1.49	10.3	16.8	0.72	337	0.73	1.94	6.2	36.4	427
I7 (8894005)		21.5	<0.05	3.9	0.030	1.57	12.4	18.9	0.70	345	0.75	1.89	7.2	30.6	528
I8 (8894006)		23.1	<0.05	2.7	0.036	1.53	12.6	26.1	0.64	309	1.14	1.71	8.5	33.4	499
I9 (8894007)		21.3	<0.05	2.9	0.032	1.35	12.4	25.3	0.75	384	1.06	1.59	7.8	37.2	522
I10 (8894008)		20.3	<0.05	3.5	0.033	1.44	21.6	19.5	0.69	379	0.63	1.96	7.2	49.4	486
I11 (8894009)		19.2	<0.05	3.4	0.031	1.45	14.1	18.9	0.76	390	0.67	1.88	6.4	32.1	397
I12 (8894010)		20.1	<0.05	3.4	0.025	1.60	12.4	16.0	0.60	298	0.76	2.04	7.0	22.8	221
I13 (8894011)		20.0	<0.05	2.2	0.023	1.65	8.7	12.9	0.61	296	0.51	2.19	5.3	24.8	375

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
G30 (8893940)		12.3	55.5	<0.002	0.04	0.16	8.3	0.9	2.0	320	0.84	0.03	5.8	0.28	0.27
G31 (8893941)		11.8	49.8	<0.002	0.05	0.27	9.1	1.2	2.3	264	0.78	0.02	4.9	0.33	0.24
G32 (8893942)		11.6	61.9	<0.002	0.05	0.23	10.0	1.6	1.7	276	0.71	0.02	4.3	0.28	0.29
G33 (8893943)		11.1	55.2	<0.002	0.04	0.13	9.6	1.0	1.8	333	0.58	<0.01	2.5	0.30	0.27
G34 (8893944)		11.7	57.8	<0.002	0.03	0.16	9.9	1.0	1.8	323	0.96	0.03	10.1	0.37	0.25
G35 (8893945)		10.4	54.4	<0.002	0.04	0.15	7.7	1.2	1.4	280	0.52	0.02	3.7	0.25	0.26
G36 (8893946)		10.5	54.8	<0.002	0.04	0.24	9.1	1.4	2.1	269	0.62	0.03	3.5	0.31	0.26
G37 (8893947)		11.6	57.5	<0.002	0.05	0.26	9.8	1.8	2.0	264	0.72	0.04	3.6	0.31	0.27
G38 (8893948)		12.3	64.4	<0.002	0.04	0.20	9.1	1.0	2.4	292	0.60	0.02	3.9	0.28	0.30
G39 (8893949)		11.5	68.5	<0.002	0.03	0.18	8.2	1.3	1.6	292	0.55	0.03	4.2	0.24	0.29
G40 (8893950)		11.5	58.4	<0.002	0.04	0.26	8.3	1.3	2.0	284	0.92	0.06	4.5	0.27	0.34
G41 (8893951)		12.4	54.6	<0.002	0.04	0.21	8.7	1.0	2.1	288	0.76	0.03	4.1	0.31	0.31
G42 (8893952)		12.3	48.3	<0.002	0.04	0.21	8.8	1.5	1.9	266	0.74	0.03	3.8	0.38	0.28
G43 (8893953)		11.5	44.1	<0.002	0.04	0.18	8.9	1.2	1.6	297	0.62	0.02	3.4	0.28	0.26
G44 (8893954)		19.4	43.4	<0.002	0.08	0.57	9.8	1.9	2.4	248	0.64	0.12	8.6	0.35	0.25
G45 (8893955)		15.9	57.2	<0.002	0.04	0.44	9.4	1.7	2.4	270	0.67	0.08	3.5	0.34	0.29
H1 (8893956)		11.6	52.8	<0.002	0.03	0.18	5.8	1.3	1.6	306	0.45	0.03	1.7	0.20	0.28
H2 (8893957)		11.3	51.0	<0.002	0.03	0.15	7.6	1.5	1.4	322	0.48	0.04	2.1	0.21	0.26
H3 (8893958)		11.1	52.7	<0.002	0.02	0.10	6.8	1.0	1.2	337	0.38	0.01	4.1	0.17	0.29
H4 (8893959)		10.7	51.5	<0.002	0.03	0.07	5.7	0.8	1.0	314	0.36	0.02	2.9	0.14	0.26
H5 (8893960)		11.1	51.1	<0.002	0.03	0.17	6.7	1.6	1.3	326	0.39	0.05	2.6	0.19	0.27
H6 (8893961)		12.1	45.0	<0.002	0.04	0.24	7.1	1.1	1.4	292	0.48	0.04	2.5	0.24	0.26
H7 (8893962)		11.4	50.8	<0.002	0.03	0.15	7.5	1.4	1.3	302	0.76	0.02	3.1	0.23	0.27
H8 (8893963)		12.6	49.8	<0.002	0.04	0.14	7.9	1.6	1.7	288	0.55	0.06	3.7	0.27	0.28
H9 (8893964)		12.6	50.6	<0.002	0.04	0.23	9.6	1.9	2.1	232	0.65	0.06	4.7	0.35	0.29
H10 (8893965)		12.0	47.6	<0.002	0.04	0.18	8.8	1.4	1.8	290	0.56	0.02	3.2	0.32	0.24
H11 (8893966)		11.7	46.4	<0.002	0.04	0.14	7.6	1.7	1.5	300	0.47	0.05	6.0	0.25	0.27
H12 (8893967)		10.3	49.8	<0.002	0.03	0.10	6.3	1.4	1.1	312	0.34	0.03	1.7	0.17	0.26
H13 (8893968)		11.3	49.4	<0.002	0.03	0.14	7.7	1.2	1.6	311	0.64	0.03	3.9	0.27	0.27
H14 (8893969)		11.1	49.6	<0.002	0.03	0.12	7.9	1.3	1.3	345	0.41	0.03	4.3	0.22	0.24
H15 (8893970)		12.4	48.9	<0.002	0.03	0.16	8.3	1.4	1.7	283	0.51	0.03	4.7	0.28	0.28
H16 (8893971)		10.7	51.4	<0.002	0.03	0.22	10.1	1.5	1.7	246	0.55	0.03	4.4	0.34	0.28

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282584

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
H17 (8893972)	13.1	46.9	<0.002	0.06	0.47	10.5	2.0	2.3	192	1.01	0.15	5.8	0.34	0.31
H18 (8893973)	10.8	49.6	<0.002	0.03	0.14	8.9	1.3	1.6	364	0.66	0.04	4.8	0.27	0.27
H19 (8893974)	13.4	46.2	<0.002	0.05	0.24	9.4	1.8	1.8	245	0.63	0.06	5.8	0.30	0.27
H20 (8893975)	11.0	49.5	<0.002	0.03	0.12	7.4	1.2	1.4	336	0.51	0.04	2.4	0.26	0.30
H21 (8893976)	14.0	44.7	<0.002	0.06	0.33	10.2	2.4	2.3	182	0.68	0.07	4.7	0.37	0.28
H22 (8893977)	13.6	52.7	<0.002	0.04	0.14	7.5	2.0	2.0	275	0.60	0.02	3.6	0.33	0.29
H23 (8893978)	12.2	46.7	<0.002	0.04	0.18	8.1	2.1	1.7	302	0.77	0.04	4.9	0.22	0.25
H24 (8893979)	11.9	46.9	<0.002	0.07	0.09	7.5	1.4	1.4	309	0.46	0.04	2.9	0.24	0.27
H25 (8893980)	11.4	43.8	<0.002	0.03	0.10	8.3	1.4	1.6	331	0.47	0.02	4.5	0.26	0.23
H26 (8893981)	11.4	46.5	<0.002	0.04	0.10	8.2	1.7	1.4	301	0.49	0.03	6.5	0.27	0.25
H27 (8893982)	13.5	43.2	<0.002	0.04	0.30	7.0	2.1	2.2	212	0.61	0.06	4.5	0.35	0.25
H28 (8893983)	11.1	44.2	<0.002	0.03	0.17	7.3	1.4	1.5	282	0.45	<0.01	5.1	0.28	0.26
H29 (8893984)	10.5	47.9	<0.002	0.04	0.11	8.3	1.5	1.4	304	0.46	0.03	2.6	0.25	0.26
H30 (8893985)	11.7	50.3	<0.002	0.03	0.09	8.6	1.8	1.3	323	0.46	<0.01	5.6	0.25	0.26
H31 (8893986)	11.9	52.0	<0.002	0.03	0.11	8.7	1.6	1.5	314	0.51	0.01	4.0	0.27	0.28
H32 (8893987)	11.1	46.0	<0.002	0.04	0.16	9.1	1.8	1.5	267	0.58	0.03	3.1	0.32	0.27
H33 (8893988)	12.2	48.7	<0.002	0.03	0.13	9.6	1.6	1.5	276	0.54	0.03	5.9	0.34	0.26
H34 (8893989)	12.3	50.4	<0.002	0.04	0.16	10.5	2.0	2.6	273	1.39	0.04	6.6	0.41	0.25
H35 (8893990)	12.9	50.9	<0.002	0.04	0.21	11.1	1.9	1.8	260	0.58	0.05	5.2	0.39	0.28
H36 (8893991)	12.0	50.6	<0.002	0.06	0.40	10.0	2.0	2.1	224	1.04	0.17	6.7	0.36	0.29
H37 (8893992)	12.6	51.5	<0.002	0.05	0.34	10.0	2.0	2.0	268	0.66	0.09	4.0	0.37	0.26
H38 (8893993)	11.3	49.6	<0.002	0.05	0.17	10.4	1.9	1.7	266	0.65	0.03	3.5	0.42	0.26
H39 (8893994)	12.2	53.9	<0.002	0.04	0.12	9.5	1.6	1.7	303	0.64	0.04	5.5	0.31	0.29
H40 (8893995)	12.1	53.3	<0.002	0.03	0.14	7.7	1.3	1.3	312	0.59	0.03	5.1	0.22	0.28
H41 (8893996)	11.5	51.7	<0.002	0.03	0.13	7.7	1.4	1.4	301	0.56	0.02	3.3	0.26	0.26
H42 (8893997)	12.7	45.6	<0.002	0.04	0.13	9.3	1.5	1.7	293	0.73	0.04	5.8	0.29	0.26
H43 (8893998)	20.7	48.3	<0.002	0.07	0.43	9.8	2.3	2.5	215	0.73	0.13	7.2	0.48	0.24
I1 (8893999)	11.0	49.1	<0.002	0.04	0.10	7.0	1.4	1.3	310	0.43	0.02	2.1	0.20	0.27
I2 (8894000)	15.2	49.8	<0.002	0.03	0.16	7.0	1.4	1.6	305	0.44	0.03	3.8	0.24	0.26
I3 (8894001)	12.3	49.7	<0.002	0.03	0.15	7.5	1.3	1.6	291	0.56	0.03	3.0	0.27	0.26
I4 (8894002)	13.5	57.3	<0.002	0.03	0.27	10.7	1.5	1.7	221	0.54	0.03	5.3	0.29	0.31
I5 (8894003)	12.9	46.0	<0.002	0.04	0.20	8.8	1.8	1.7	234	0.53	0.03	3.4	0.27	0.26

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)		Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
I6 (8894004)		12.3	51.3	<0.002	0.03	0.17	8.7	1.7	1.5	274	0.46	0.04	3.1	0.24	0.28
I7 (8894005)		12.5	52.5	<0.002	0.03	0.15	9.4	1.3	1.6	258	0.51	0.04	4.4	0.29	0.28
I8 (8894006)		13.1	50.9	<0.002	0.05	0.27	8.7	1.8	1.8	256	0.54	0.03	4.1	0.31	0.30
I9 (8894007)		13.6	49.7	<0.002	0.05	0.26	10.4	2.1	1.8	200	0.53	0.05	4.9	0.32	0.29
I10 (8894008)		13.9	43.7	<0.002	0.05	0.17	11.6	1.8	1.4	287	0.48	0.04	5.0	0.26	0.28
I11 (8894009)		12.8	47.6	<0.002	0.05	0.19	9.7	1.7	1.4	248	0.48	0.03	6.4	0.28	0.28
I12 (8894010)		12.4	43.8	<0.002	0.04	0.20	8.5	1.4	1.6	296	0.46	0.03	4.3	0.28	0.26
I13 (8894011)		11.3	51.8	<0.002	0.03	0.13	7.5	1.2	1.3	324	0.37	0.01	13.5	0.22	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282584

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
G30 (8893940)	0.860	62.4	0.5	13.5	43.7	172
G31 (8893941)	0.832	83.1	0.6	12.7	42.1	159
G32 (8893942)	0.946	62.3	0.5	16.3	39.0	163
G33 (8893943)	0.620	74.0	0.4	14.2	32.2	122
G34 (8893944)	0.841	82.6	0.4	14.1	35.6	206
G35 (8893945)	0.679	59.4	0.3	10.3	38.8	153
G36 (8893946)	0.895	65.5	0.5	12.4	63.5	174
G37 (8893947)	0.906	78.0	0.5	13.6	88.8	173
G38 (8893948)	0.767	60.7	0.4	12.0	43.9	173
G39 (8893949)	0.734	54.9	0.4	11.4	31.0	128
G40 (8893950)	0.763	53.1	0.5	11.9	35.9	164
G41 (8893951)	0.817	72.8	0.5	12.4	50.1	159
G42 (8893952)	0.894	71.1	0.5	13.1	93.3	174
G43 (8893953)	0.800	63.7	0.4	12.7	64.7	178
G44 (8893954)	1.11	85.7	0.5	16.0	66.6	108
G45 (8893955)	0.999	69.5	0.6	13.7	139	202
H1 (8893956)	0.444	49.9	0.5	7.7	32.3	88.0
H2 (8893957)	0.543	55.5	0.3	10.2	28.7	121
H3 (8893958)	0.713	41.3	0.2	12.3	23.0	127
H4 (8893959)	0.392	39.6	0.2	7.1	23.4	73.1
H5 (8893960)	0.433	46.0	0.2	10.7	27.8	82.9
H6 (8893961)	0.594	58.6	0.3	9.2	33.3	131
H7 (8893962)	0.642	53.0	0.3	11.1	40.7	150
H8 (8893963)	0.899	60.2	0.4	11.7	40.6	189
H9 (8893964)	1.26	82.7	0.7	13.9	41.8	196
H10 (8893965)	0.879	85.0	0.4	15.4	33.6	192
H11 (8893966)	0.974	53.8	0.4	13.6	37.1	144
H12 (8893967)	0.500	42.9	0.2	9.7	18.8	75.8
H13 (8893968)	0.838	53.4	0.4	12.2	25.4	186
H14 (8893969)	0.658	56.4	0.3	13.8	26.4	136
H15 (8893970)	1.00	63.9	0.4	13.3	36.2	217
H16 (8893971)	1.12	77.1	0.5	14.5	35.9	184

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282584
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
H17 (8893972)		1.37	92.5	0.8	15.9	45.0	186
H18 (8893973)		0.996	53.1	0.3	14.8	27.1	187
H19 (8893974)		1.11	71.9	0.5	14.8	45.7	195
H20 (8893975)		0.621	47.3	0.3	10.7	23.6	146
H21 (8893976)		1.39	110	0.8	14.4	46.7	188
H22 (8893977)		0.870	69.6	0.4	11.6	38.9	181
H23 (8893978)		0.878	58.5	0.3	15.0	43.6	129
H24 (8893979)		0.686	59.7	0.3	9.5	28.0	141
H25 (8893980)		0.611	65.6	0.2	12.0	29.0	127
H26 (8893981)		0.811	63.0	0.3	12.6	38.2	142
H27 (8893982)		1.12	64.2	0.6	10.9	40.7	217
H28 (8893983)		0.853	55.8	0.4	10.2	37.3	177
H29 (8893984)		0.664	60.7	0.3	11.2	44.6	161
H30 (8893985)		0.746	66.7	0.3	12.9	30.5	137
H31 (8893986)		0.824	59.2	0.4	12.7	34.9	172
H32 (8893987)		0.809	77.2	0.4	12.4	49.5	183
H33 (8893988)		0.863	86.0	0.4	14.6	34.5	192
H34 (8893989)		0.979	92.0	0.4	16.7	46.8	194
H35 (8893990)		1.09	93.6	0.5	16.3	59.2	206
H36 (8893991)		1.20	87.3	0.8	14.0	78.7	188
H37 (8893992)		0.996	91.8	0.5	13.4	99.0	174
H38 (8893993)		0.831	105	0.5	14.4	51.0	130
H39 (8893994)		0.954	70.1	0.4	16.4	43.0	198
H40 (8893995)		0.796	58.3	0.4	13.2	25.7	163
H41 (8893996)		0.689	55.8	0.3	10.7	51.7	131
H42 (8893997)		0.856	72.7	0.4	14.3	41.0	230
H43 (8893998)		1.30	107	0.6	16.7	85.1	167
I1 (8893999)		0.510	49.8	0.3	9.8	36.3	98.6
I2 (8894000)		0.635	54.8	0.4	10.7	39.9	139
I3 (8894001)		0.725	54.1	0.4	11.1	39.7	153
I4 (8894002)		1.27	74.6	0.6	15.9	48.6	155
I5 (8894003)		0.915	66.9	0.5	11.3	41.7	147

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 18, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
I6 (8894004)		0.774	64.6	0.4	12.1	34.2	134
I7 (8894005)		1.04	70.7	0.5	12.3	41.1	200
I8 (8894006)		1.02	76.8	0.5	11.5	53.8	142
I9 (8894007)		1.19	86.7	0.9	13.7	53.4	157
I10 (8894008)		1.20	70.5	0.4	25.0	43.5	175
I11 (8894009)		1.04	74.1	0.4	11.5	44.1	175
I12 (8894010)		0.884	61.8	0.4	10.6	31.5	174
I13 (8894011)		0.767	54.1	0.3	11.8	32.5	116

Comments: RDL - Reported Detection Limit
8893940-8894011 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8893940	0.19	0.17	11.1%	8893957	0.14	0.12	15.4%	8893974	0.25	0.24	4.1%	8893991	0.507	0.469	7.8%
Al	8893940	6.98	6.94	0.6%	8893957	6.87	6.84	0.4%	8893974	6.87	6.90	0.4%	8893991	7.81	7.34	6.2%
As	8893940	4.1	3.1		8893957	2.4	1.1		8893974	6.6	7.0	5.9%	8893991	7.4	4.5	
Ba	8893940	509	513	0.8%	8893957	476	498	4.5%	8893974	425	430	1.2%	8893991	474	452	4.8%
Be	8893940	1.29	1.16	10.6%	8893957	1.36	1.30	4.5%	8893974	1.32	1.35	2.2%	8893991	1.55	1.44	7.4%
Bi	8893940	0.099	0.091	8.4%	8893957	0.085	0.070	19.4%	8893974	0.173	0.155	11.0%	8893991	0.177	0.171	3.4%
Ca	8893940	1.47	1.47	0.0%	8893957	1.50	1.43	4.8%	8893974	1.43	1.42	0.7%	8893991	1.26	1.25	0.8%
Cd	8893940	0.08	0.08	0.0%	8893957	0.05	0.05	0.0%	8893974	0.09	0.09	0.0%	8893991	0.083	0.093	11.4%
Ce	8893940	36.1	31.3	14.2%	8893957	16.3	14.7	10.3%	8893974	29.3	25.9	12.3%	8893991	29.9	24.0	21.9%
Co	8893940	10.7	10.3	3.8%	8893957	13.3	11.4	15.4%	8893974	19.1	18.4	3.7%	8893991	24.4	23.7	2.9%
Cr	8893940	60.4	57.9	4.2%	8893957	53.8	44.6	18.7%	8893974	74.0	74.1	0.1%	8893991	84.9	81.4	4.2%
Cs	8893940	1.29	1.23	4.8%	8893957	1.48	1.37	7.7%	8893974	2.03	1.97	3.0%	8893991	2.35	2.24	4.8%
Cu	8893940	3.61	3.54	2.0%	8893957	4.96	4.74	4.5%	8893974	16.3	16.1	1.2%	8893991	14.2	12.9	9.6%
Fe	8893940	2.37	2.35	0.8%	8893957	2.24	1.89	16.9%	8893974	3.41	3.43	0.6%	8893991	3.62	3.46	4.5%
Ga	8893940	19.5	18.5	5.3%	8893957	19.2	18.9	1.6%	8893974	21.0	20.3	3.4%	8893991	22.4	22.0	1.8%
Ge	8893940	< 0.05	< 0.05	0.0%	8893957	< 0.05	< 0.05	0.0%	8893974	< 0.05	< 0.05	0.0%	8893991	< 0.05	< 0.05	0.0%
Hf	8893940	3.5	3.2	9.0%	8893957	2.2	1.6		8893974	3.7	3.4	8.5%	8893991	4.1	3.4	
In	8893940	0.0307	0.0301	2.0%	8893957	0.0268	0.0221	19.2%	8893974	0.038	0.034	11.1%	8893991	0.040	0.040	0.0%
K	8893940	1.62	1.61	0.6%	8893957	1.57	1.64	4.4%	8893974	1.40	1.41	0.7%	8893991	1.57	1.47	6.6%
La	8893940	16.9	14.2	17.4%	8893957	7.92	7.24	9.0%	8893974	13.3	11.7	12.8%	8893991	15.2	12.1	22.7%
Li	8893940	14.7	14.9	1.4%	8893957	14.9	14.0	6.2%	8893974	21.8	21.7	0.5%	8893991	26.6	25.4	4.6%
Mg	8893940	0.59	0.58	1.7%	8893957	0.686	0.647	5.9%	8893974	0.73	0.73	0.0%	8893991	0.811	0.792	2.4%
Mn	8893940	342	332	3.0%	8893957	344	285	18.8%	8893974	366	367	0.3%	8893991	386	392	1.5%
Mo	8893940	0.587	0.550	6.5%	8893957	0.45	0.39	14.3%	8893974	0.91	0.88	3.4%	8893991	1.18	1.00	16.5%
Na	8893940	2.07	2.09	1.0%	8893957	2.14	2.23	4.1%	8893974	1.76	1.77	0.6%	8893991	1.51	1.48	2.0%
Nb	8893940	9.0	8.0	11.8%	8893957	5.5	5.0	9.5%	8893974	8.21	7.52	8.8%	8893991	11.0	11.0	0.0%
Ni	8893940	22.9	22.0	4.0%	8893957	28.5	25.7	10.3%	8893974	31.0	31.7	2.2%	8893991	45.9	44.6	2.9%
P	8893940	466	463	0.6%	8893957	507	441	13.9%	8893974	398	428	7.3%	8893991	1040	981	5.8%
Pb	8893940	12.3	11.9	3.3%	8893957	11.3	10.8	4.5%	8893974	13.4	12.9	3.8%	8893991	12.0	11.0	8.7%
Rb	8893940	55.5	52.8	5.0%	8893957	51.0	51.0	0.0%	8893974	46.2	44.7	3.3%	8893991	50.6	47.0	7.4%
Re	8893940	< 0.002	< 0.002	0.0%	8893957	< 0.002	< 0.002	0.0%	8893974	< 0.002	< 0.002	0.0%	8893991	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8893940	0.04	0.04	0.0%	8893957	0.03	0.03	0.0%	8893974	0.05	0.05	0.0%	8893991	0.058	0.053	9.0%
Sb	8893940	0.16	0.16	0.0%	8893957	0.148	0.122	19.3%	8893974	0.24	0.24	0.0%	8893991	0.40	0.36	10.5%
Sc	8893940	8.3	8.2	1.2%	8893957	7.59	6.54	14.9%	8893974	9.4	9.6	2.1%	8893991	10.0	10.2	2.0%
Se	8893940	0.92	0.98	6.3%	8893957	1.46	1.10	28.1%	8893974	1.84	1.54	17.8%	8893991	2.03	2.12	4.3%
Sn	8893940	2.0	1.7	16.2%	8893957	1.4	1.3	7.4%	8893974	1.8	1.7	5.7%	8893991	2.1	2.0	4.9%
Sr	8893940	320	311	2.9%	8893957	322	337	4.6%	8893974	245	242	1.2%	8893991	224	222	0.9%
Ta	8893940	0.84	0.65	25.5%	8893957	0.48	0.43	11.0%	8893974	0.626	0.609	2.8%	8893991	1.04	1.20	14.3%
Te	8893940	0.026	0.025	3.9%	8893957	0.04	0.02		8893974	0.06	0.04		8893991	0.17	0.12	
Th	8893940	5.8	4.8	18.9%	8893957	2.1	1.7	21.1%	8893974	5.8	5.0	14.8%	8893991	6.7	5.9	12.7%
Ti	8893940	0.280	0.274	2.2%	8893957	0.21	0.18	15.4%	8893974	0.30	0.30	0.0%	8893991	0.356	0.347	2.6%
Tl	8893940	0.27	0.27	0.0%	8893957	0.261	0.266	1.9%	8893974	0.27	0.27	0.0%	8893991	0.290	0.255	12.8%
U	8893940	0.860	0.752	13.4%	8893957	0.543	0.471	14.2%	8893974	1.11	1.07	3.7%	8893991	1.20	1.13	6.0%
V	8893940	62.4	62.0	0.6%	8893957	55.5	47.2	16.2%	8893974	71.9	75.0	4.2%	8893991	87.3	85.0	2.7%
W	8893940	0.46	0.42	9.1%	8893957	0.30	0.26	14.3%	8893974	0.5	0.5	0.0%	8893991	0.76	0.69	9.7%
Y	8893940	13.5	11.5	16.0%	8893957	10.2	8.63	16.7%	8893974	14.8	13.1	12.2%	8893991	14.0	13.6	2.9%
Zn	8893940	43.7	43.2	1.2%	8893957	28.7	25.1	13.4%	8893974	45.7	46.6	2.0%	8893991	78.7	73.4	7.0%
Zr	8893940	172	161	6.6%	8893957	121	55.5		8893974	195	179	8.6%	8893991	188	148	23.8%
	REPLICATE #5															
Parameter	Sample ID	Original	Replicate	RPD												
Ag	8894008	0.40	0.25													
Al	8894008	7.75	7.59	2.1%												
As	8894008	5.96	5.41	9.7%												
Ba	8894008	490	487	0.6%												
Be	8894008	1.68	1.70	1.2%												
Bi	8894008	0.12	0.12	0.0%												
Ca	8894008	1.46	1.44	1.4%												
Cd	8894008	0.06	0.06	0.0%												
Ce	8894008	116	119	2.6%												
Co	8894008	36.4	35.4	2.8%												
Cr	8894008	78.1	81.1	3.8%												
Cs	8894008	1.57	1.54	1.9%												
Cu	8894008	30.5	29.8	2.3%												
Fe	8894008	2.77	2.78	0.4%												
Ga	8894008	20.3	20.2	0.5%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

Ge	8894008	< 0.05	< 0.05	0.0%												
Hf	8894008	3.50	3.23	8.0%												
In	8894008	0.033	0.030	9.5%												
K	8894008	1.44	1.45	0.7%												
La	8894008	21.6	23.8	9.7%												
Li	8894008	19.5	18.6	4.7%												
Mg	8894008	0.690	0.697	1.0%												
Mn	8894008	379	379	0.0%												
Mo	8894008	0.63	0.62	1.6%												
Na	8894008	1.96	1.94	1.0%												
Nb	8894008	7.2	6.9	4.3%												
Ni	8894008	49.4	48.1	2.7%												
P	8894008	486	474	2.5%												
Pb	8894008	13.9	13.7	1.4%												
Rb	8894008	43.7	44.0	0.7%												
Re	8894008	< 0.002	< 0.002	0.0%												
S	8894008	0.05	0.05	0.0%												
Sb	8894008	0.17	0.14	19.4%												
Sc	8894008	11.6	11.4	1.7%												
Se	8894008	1.78	2.26	23.8%												
Sn	8894008	1.43	1.48	3.4%												
Sr	8894008	287	297	3.4%												
Ta	8894008	0.48	0.52	8.0%												
Te	8894008	0.04	0.02													
Th	8894008	5.0	7.6													
Ti	8894008	0.26	0.26	0.0%												
Tl	8894008	0.28	0.27	3.6%												
U	8894008	1.20	1.26	4.9%												
V	8894008	70.5	69.0	2.2%												
W	8894008	0.4	0.4	0.0%												
Y	8894008	25.0	25.3	1.2%												
Zn	8894008	43.5	42.8	1.6%												
Zr	8894008	175	158	10.2%												

Quality Assurance - Certified Reference materials
AGAT WORK ORDER: 17T282584
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.98	100%	90% - 110%	6.96	6.86	99%	90% - 110%	8.17	8.8	108%	90% - 110%	10.95	10.77	98%	90% - 110%
As					124	132	106%	90% - 110%	26	28	107%	90% - 110%				
Ba	340	329	97%	90% - 110%	186	177	95%	90% - 110%	540	542	100%	90% - 110%	340	327	96%	90% - 110%
Be	2.6	2.8	107%	90% - 110%					4.0	4	99%	90% - 110%	2.6	2.8	107%	90% - 110%
Ca	5.72	5.51	96%	90% - 110%	4.01	3.85	96%	90% - 110%	0.907	0.95	105%	90% - 110%	5.72	5.29	92%	90% - 110%
Ce	122	135	110%	90% - 110%	24	24	102%	90% - 110%	98	107	109%	90% - 110%	122	123	100%	90% - 110%
Co	2.8	3.1	110%	90% - 110%									2.8	3.1	110%	90% - 110%
Cr									60.3	61.3	102%	90% - 110%				
Cs	1.5	1.7	113%	90% - 110%					12	14	116%	90% - 110%				
Cu	7	6	80%	90% - 110%	88.6	83.1	94%	90% - 110%	150	154	103%	90% - 110%				
Fe	4.34	4	92%	90% - 110%	7.56	7.06	93%	90% - 110%	3.77	3.83	101%	90% - 110%	4.34	3.96	91%	90% - 110%
Ga	35	38	108%	90% - 110%												
K	1.37	1.36	99%	90% - 110%	2.021	1.918	95%	90% - 110%					1.37	1.38	101%	90% - 110%
La	58	62	106%	90% - 110%					44	43	97%	90% - 110%	58	59	102%	90% - 110%
Li	37	38	102%	90% - 110%					47	48	101%	90% - 110%	37	40	108%	90% - 110%
Mg	0.325	0.311	96%	90% - 110%	2.412	2.427	101%	90% - 110%	1.10	1.16	106%	90% - 110%	0.325	0.312	96%	90% - 110%
Mn					1510	1513	100%	90% - 110%	780	804	103%	90% - 110%				
Na	5.267	5.151	98%	90% - 110%	0.617	0.596	97%	90% - 110%	1.624	1.699	105%	90% - 110%	5.267	5.139	98%	90% - 110%
Nb									20	22	111%	90% - 110%				
Ni	9	8	91%	90% - 110%	77.1	70.9	92%	90% - 110%	32	34	105%	90% - 110%	9	8	85%	90% - 110%
P					892	937	105%	90% - 110%								
Pb	10	10	100%	90% - 110%					31	30	95%	90% - 110%	10	9	92%	90% - 110%
Rb	55	55	100%	90% - 110%					143	159	111%	90% - 110%	55	54	99%	90% - 110%
S					0.348	0.38	109%	90% - 110%								
Sb									0.8	0.9	116%	90% - 110%				
Sc	1.1	0.8	73%	90% - 110%					12	13	107%	90% - 110%				
Sr	1191	1181	99%	90% - 110%	92.8	84.6	91%	90% - 110%	144	149	104%	90% - 110%	1191	1167	98%	90% - 110%
Ta									1.9	1.8	93%	90% - 110%				
Th									18.4	17.6	95%	90% - 110%	1.4	1.2	85%	90% - 110%
Ti	0.172	0.164	95%	90% - 110%					0.53	0.47	88%	90% - 110%	0.172	0.167	97%	90% - 110%
U									5.7	4.4	77%	90% - 110%				

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

V	8	7	88%	90% - 110%					77	79	102%	90% - 110%	8	7	89%	90% - 110%
W									5	5	100%	90% - 110%				
Y									40	33	83%	90% - 110%				
Zn	93	90	97%	90% - 110%	208	198	95%	90% - 110%	130	126	97%	90% - 110%	93	88	95%	90% - 110%
	CRM #5 (ref.GTS-2A)															
Parameter	Expect	Actual	Recovery	Limits												
Al	6.96	7.22	104%	90% - 110%												
As	124	134	108%	90% - 110%												
Ba	186	185	99%	90% - 110%												
Ca	4.01	4.01	100%	90% - 110%												
Ce	24	18	76%	90% - 110%												
Cu	88.6	89.3	101%	90% - 110%												
Fe	7.56	7.36	97%	90% - 110%												
K	2.021	2.01	99%	90% - 110%												
Mg	2.412	2.553	106%	90% - 110%												
Mn	1510	1583	105%	90% - 110%												
Na	0.617	0.621	101%	90% - 110%												
Ni	77.1	72.6	94%	90% - 110%												
P	892	961	108%	90% - 110%												
S	0.348	0.383	110%	90% - 110%												
Sr	92.8	85.3	92%	90% - 110%												
Zn	208	208	100%	90% - 110%												

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
AGAT WORK ORDER: 17T282584
PROJECT:
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLING SITE:
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282585
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 08, 2018
PAGES (INCLUDING COVER):	18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 08, 2018 SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
I14 (8894013)	0.23	6.68	2.9	496	1.19	0.09	1.39	0.07	29.1	11.4	57.4	1.17	11.4	2.26
I15 (8894014)	0.31	6.67	3.6	462	1.27	0.13	1.31	0.07	23.5	15.2	66.9	1.42	14.1	2.95
I16 (8894015)	0.23	6.44	3.4	459	1.11	0.11	1.27	0.05	25.3	9.76	59.1	1.31	9.5	2.57
I17 (8894016)	0.18	6.60	7.3	455	1.33	0.14	1.36	0.06	27.5	14.5	61.4	1.28	9.8	2.77
I18 (8894017)	0.20	6.55	10.2	435	1.21	0.20	1.25	0.12	31.9	14.9	70.1	1.69	27.8	3.19
I19 (8894018)	0.20	6.40	6.6	398	1.27	0.15	1.21	0.12	21.0	12.6	69.8	1.47	28.9	3.60
I20 (8894019)	0.23	6.80	4.7	438	1.24	0.15	1.25	0.09	24.3	10.9	65.3	1.38	10.2	2.90
I21 (8894020)	0.20	6.54	7.1	419	1.16	0.15	1.30	0.12	31.8	11.0	70.9	1.39	21.8	3.68
I22 (8894021)	0.19	5.92	3.5	492	1.14	0.86	1.39	0.06	22.4	7.56	40.6	0.92	7.4	1.85
I23 (8894022)	0.18	6.66	3.4	479	1.19	0.08	1.45	0.05	27.4	10.9	53.3	1.04	8.3	2.38
I24 (8894023)	0.21	6.25	3.4	508	1.11	0.09	1.43	0.08	17.5	8.50	51.5	1.13	5.7	2.29
I25 (8894024)	0.31	6.17	4.9	436	0.96	0.15	1.09	0.08	20.0	5.16	48.4	1.10	8.8	2.45
I26 (8894025)	0.18	6.47	2.3	490	1.17	0.09	1.40	0.07	20.9	9.42	59.1	1.22	4.0	2.60
I27 (8894026)	0.20	6.27	1.9	444	1.07	0.07	1.47	0.05	14.2	8.61	58.1	0.95	3.8	2.69
I28 (8894027)	0.20	6.58	4.3	467	1.27	0.09	1.48	0.05	23.9	11.3	65.1	1.13	4.0	2.82
I29 (8894028)	0.17	6.57	2.3	463	1.15	0.08	1.55	0.06	22.3	11.5	69.2	1.10	7.9	2.91
I30 (8894029)	0.24	5.63	1.1	514	0.93	0.08	1.34	0.05	19.4	4.80	40.8	1.04	2.6	1.75
I31 (8894030)	0.13	6.53	2.5	513	1.11	0.08	1.50	0.07	21.6	7.16	54.6	1.02	3.2	2.31
I32 (8894031)	0.21	6.56	1.3	528	1.17	0.08	1.40	0.06	20.6	8.92	54.0	1.17	4.0	2.40
I33 (8894032)	0.23	6.36	1.1	527	1.17	0.07	1.37	0.04	15.0	7.89	47.1	1.05	3.6	1.95
I34 (8894033)	0.19	6.42	1.9	514	1.13	0.07	1.40	0.04	17.6	9.26	46.9	0.93	7.5	1.97
I35 (8894034)	0.28	5.91	2.2	461	0.90	0.11	1.21	0.07	30.3	9.07	55.3	1.53	10.1	2.56
I36 (8894035)	0.26	6.43	4.4	489	1.15	0.16	1.36	0.13	23.7	13.0	67.5	2.00	11.2	3.17
I37 (8894036)	0.15	6.00	2.3	569	1.05	0.09	1.28	0.04	14.5	5.59	33.6	1.00	2.9	1.65
I38 (8894037)	0.44	5.66	6.1	532	0.91	0.14	1.34	0.09	21.6	6.17	43.3	1.34	6.1	2.04
I39 (8894038)	0.27	6.43	4.5	517	1.12	0.12	1.42	0.10	22.3	9.36	58.4	1.25	4.8	2.48
I40 (8894039)	0.61	6.35	22.5	408	1.51	0.39	1.44	0.21	43.9	26.8	81.7	2.63	69.7	5.47
J1 (8894040)	1.22	7.38	2.0	467	1.25	2.92	1.23	0.04	17.8	9.59	56.0	1.18	4.4	2.52
J2 (8894041)	0.17	6.35	2.4	521	1.23	0.07	1.40	0.03	20.6	8.80	47.1	1.03	4.6	2.01
J3 (8894042)	0.19	6.66	2.0	513	1.22	0.09	1.39	0.07	21.8	9.43	55.6	1.25	3.2	2.16
J4 (8894043)	0.20	6.48	2.1	497	1.21	0.09	1.43	0.06	21.6	10.4	58.0	1.18	3.8	2.38
J5 (8894044)	0.24	7.10	3.9	458	1.28	0.10	1.41	0.06	31.8	8.39	65.0	1.04	12.8	2.76

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID) RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
J6 (8894045)	0.18	6.25	2.1	514	1.13	0.08	1.46	0.07	20.0	7.41	47.3	1.03	2.9	2.03
J7 (8894046)	0.22	6.40	2.1	499	1.23	0.09	1.35	0.06	25.8	8.04	51.3	1.08	3.2	2.40
J8 (8894047)	0.21	6.33	3.0	481	1.05	0.08	1.38	0.10	22.3	10.1	54.2	1.06	5.6	2.18
J9 (8894048)	0.19	6.11	3.9	452	1.04	0.16	1.27	0.06	24.9	9.56	51.5	1.48	11.7	2.70
J10 (8894049)	0.26	7.12	1.9	483	1.20	0.09	1.48	0.05	21.0	10.8	63.9	1.13	5.5	2.57
J11 (8894050)	0.15	6.20	2.7	503	1.18	0.08	1.37	0.05	16.6	7.35	45.1	1.06	3.7	1.92
J12 (8894051)	0.14	6.49	2.4	513	1.23	0.08	1.36	0.06	19.6	8.72	55.6	1.07	3.5	2.26
J13 (8894052)	0.23	6.81	2.1	507	1.20	0.08	1.57	0.05	21.1	9.67	65.8	1.15	3.6	2.24
J14 (8894053)	0.12	6.48	3.4	547	1.26	0.10	1.35	0.04	24.1	8.66	54.3	1.12	12.0	2.12
J15 (8894054)	0.13	6.20	5.4	501	1.36	0.11	1.53	0.07	38.4	7.70	56.6	1.22	20.3	2.03
J16 (8894055)	0.14	6.62	4.9	514	1.31	0.10	1.49	0.05	29.3	13.1	62.0	1.13	11.2	2.52
J17 (8894056)	0.21	6.26	2.7	505	1.31	0.09	1.47	0.06	39.1	8.30	55.0	1.08	12.2	2.11
J18 (8894057)	0.25	6.83	4.9	448	1.30	0.15	1.26	0.08	19.3	11.6	74.6	1.58	11.1	4.01
J19 (8894058)	0.21	6.27	0.7	504	1.19	0.08	1.37	0.07	19.3	7.72	48.6	1.00	2.5	1.97
J20 (8894059)	0.11	6.44	1.2	504	1.15	0.07	1.38	0.06	16.3	7.91	45.3	0.97	3.7	2.03
J21 (8894060)	0.21	5.98	5.5	440	1.33	0.12	1.52	0.10	33.8	9.67	76.3	1.17	4.8	3.67
J22 (8894061)	0.14	6.56	1.5	492	1.20	0.09	1.45	0.05	17.5	8.54	60.4	1.06	5.2	2.84
J23 (8894062)	0.13	6.59	2.1	529	1.34	0.08	1.35	0.06	18.2	8.60	50.5	1.13	5.2	2.10
J24 (8894063)	0.41	6.64	1.7	497	1.20	0.10	1.41	0.06	19.0	8.64	56.8	1.14	4.2	2.43
J25 (8894064)	0.16	6.50	3.1	459	1.22	0.09	1.75	0.06	37.4	10.5	77.1	1.01	7.3	3.13
J26 (8894065)	0.18	6.71	1.9	505	1.26	0.09	1.34	0.06	22.2	10.5	76.0	1.36	7.6	2.55
J27 (8894066)	0.20	7.00	2.5	491	1.22	0.09	1.28	0.07	25.2	11.1	76.0	1.37	7.9	2.84
J28 (8894067)	0.21	6.56	1.9	491	1.15	0.09	1.46	0.06	22.1	9.82	61.3	1.21	7.9	2.80
J29 (8894068)	0.28	6.98	1.7	407	1.29	0.10	1.74	0.10	27.6	11.0	104	1.06	7.3	4.07
J30 (8894069)	0.14	6.70	1.8	482	1.26	0.08	1.45	0.05	18.0	9.61	48.7	1.03	4.3	2.30
J31 (8894070)	0.14	6.54	2.7	479	1.30	0.08	1.61	0.05	17.1	10.7	58.1	1.06	5.3	2.62
J32 (8894071)	0.24	6.36	1.5	500	1.23	0.08	1.56	0.08	19.1	8.76	63.1	1.08	4.6	2.43
J33 (8894072)	0.16	6.80	1.6	468	1.38	0.09	1.54	0.06	21.4	10.2	71.8	1.10	4.5	3.04
K1 (8894073)	0.19	6.59	1.7	505	1.27	0.08	1.55	0.08	21.3	9.72	54.7	1.14	3.9	2.37
K2 (8894074)	0.16	6.59	2.5	530	1.22	0.09	1.49	0.09	20.4	9.27	49.3	1.37	6.3	2.52
K3 (8894075)	0.25	6.25	2.3	516	1.13	0.09	1.43	0.13	23.9	9.12	57.1	1.34	3.7	2.21
K4 (8894076)	0.19	6.81	3.0	437	1.32	0.10	1.56	0.11	32.5	12.1	88.8	1.15	4.9	3.78

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
K5 (8894077)		0.24	6.00	1.0	491	1.22	0.07	1.44	0.10	18.7	7.58	52.4	1.17	3.6	2.13
K6 (8894078)		0.56	7.00	2.8	482	1.19	0.11	1.41	0.11	26.8	11.1	67.4	1.48	8.9	3.03
K7 (8894079)		0.12	5.90	2.8	453	1.13	0.09	1.54	0.06	28.1	13.9	75.5	1.11	4.9	3.24
K8 (8894080)		0.09	5.97	2.6	479	1.24	0.15	1.51	0.05	16.8	7.31	49.0	1.03	5.9	2.42
K9 (8894081)		0.17	6.19	1.5	529	1.24	0.10	1.11	0.04	31.0	8.08	51.7	1.51	8.1	2.17
K10 (8894082)		0.32	7.54	15.3	433	1.64	0.38	1.07	0.15	79.0	32.9	124	3.02	81.3	5.22
K11 (8894083)		0.26	7.01	3.5	483	1.27	0.12	1.37	0.07	23.0	13.2	67.5	1.53	6.2	3.06
K12 (8894084)		0.30	7.19	2.3	512	1.42	0.10	1.30	0.08	30.4	12.6	81.4	1.52	8.7	2.64

Certified By:

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
I14 (8894013)		14.5	<0.05	2.7	0.024	1.53	11.6	13.5	0.67	278	0.46	1.99	5.4	30.5	348
I15 (8894014)		14.5	<0.05	2.3	0.032	1.40	10.1	20.7	0.68	331	0.76	1.83	5.4	39.2	374
I16 (8894015)		14.5	<0.05	2.8	0.028	1.48	12.3	18.4	0.53	260	0.69	1.74	6.0	25.2	444
I17 (8894016)		14.1	<0.05	2.7	0.030	1.43	12.4	20.0	0.59	325	0.61	1.85	5.8	33.1	464
I18 (8894017)		14.3	<0.05	2.2	0.032	1.42	12.1	21.7	0.81	419	0.50	1.82	4.9	39.0	533
I19 (8894018)		14.1	<0.05	2.7	0.038	1.32	9.8	24.2	0.69	337	0.79	1.62	5.7	32.5	709
I20 (8894019)		15.1	<0.05	2.8	0.033	1.36	11.8	21.8	0.55	272	0.70	1.74	5.7	30.3	855
I21 (8894020)		14.8	<0.05	2.7	0.036	1.34	16.7	19.7	0.65	309	0.89	1.70	6.0	31.1	546
I22 (8894021)		13.3	<0.05	2.0	0.019	1.53	9.4	9.6	0.55	293	0.34	2.18	4.1	21.0	368
I23 (8894022)		13.9	<0.05	1.9	0.024	1.53	11.4	13.5	0.63	318	0.45	2.14	4.3	27.7	455
I24 (8894023)		14.4	<0.05	1.8	0.025	1.51	8.4	14.2	0.54	307	0.48	2.07	4.5	21.7	505
I25 (8894024)		15.5	<0.05	2.8	0.031	1.31	10.0	18.9	0.41	234	0.67	1.52	6.6	14.9	573
I26 (8894025)		14.3	<0.05	2.5	0.028	1.51	9.9	15.6	0.56	416	0.52	1.98	5.2	21.6	878
I27 (8894026)		13.9	<0.05	1.4	0.024	1.39	6.7	13.0	0.64	363	0.38	2.06	4.6	26.2	546
I28 (8894027)		14.9	<0.05	2.3	0.033	1.46	11.5	15.8	0.68	355	0.48	2.00	5.8	29.1	523
I29 (8894028)		13.8	<0.05	3.0	0.026	1.49	10.0	14.4	0.79	423	0.43	1.98	5.3	35.2	499
I30 (8894029)		13.8	<0.05	2.6	0.020	1.55	9.6	9.6	0.45	285	0.38	1.99	4.9	14.7	210
I31 (8894030)		14.8	<0.05	2.4	0.026	1.51	11.2	12.5	0.55	324	0.35	2.13	5.1	22.1	398
I32 (8894031)		14.6	<0.05	2.6	0.024	1.63	10.2	14.6	0.56	301	0.56	2.02	5.2	25.7	387
I33 (8894032)		14.2	<0.05	1.6	0.021	1.57	7.0	12.1	0.58	255	0.32	2.16	4.0	25.7	263
I34 (8894033)		13.3	<0.05	1.9	0.022	1.57	7.8	11.9	0.61	285	0.53	2.21	4.5	28.6	376
I35 (8894034)		14.2	<0.05	2.1	0.027	1.42	15.0	21.0	0.58	283	0.62	1.69	5.4	26.4	585
I36 (8894035)		15.5	<0.05	2.3	0.034	1.57	10.2	24.8	0.68	415	0.76	1.67	6.1	34.9	1240
I37 (8894036)		14.9	<0.05	1.9	0.017	1.72	6.9	9.7	0.41	244	0.28	2.25	3.7	13.8	562
I38 (8894037)		15.0	<0.05	2.8	0.026	1.69	10.6	13.9	0.49	294	0.60	1.88	5.7	17.4	522
I39 (8894038)		15.5	<0.05	2.5	0.026	1.50	10.7	16.3	0.64	325	0.56	1.89	6.3	30.4	535
I40 (8894039)		15.2	<0.05	2.4	0.062	1.41	18.5	31.5	1.00	703	1.23	1.43	9.2	55.9	2300
J1 (8894040)		14.3	<0.05	2.8	0.030	1.49	8.6	16.9	0.50	233	0.53	1.85	5.4	24.0	347
J2 (8894041)		13.5	<0.05	2.2	0.021	1.63	8.7	12.2	0.58	287	0.29	2.14	4.0	27.2	414
J3 (8894042)		14.3	<0.05	2.8	0.027	1.62	9.6	14.5	0.60	275	0.41	2.01	5.7	27.7	489
J4 (8894043)		14.6	<0.05	2.9	0.024	1.59	10.1	13.0	0.64	354	0.43	2.03	5.5	27.6	567
J5 (8894044)		13.8	<0.05	2.7	0.030	1.44	14.3	14.0	0.60	299	0.74	1.93	5.1	24.9	909

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
J6 (8894045)	14.0	<0.05	3.0	0.021	1.63	9.8	11.8	0.53	313	0.33	2.13	4.6	21.8	486
J7 (8894046)	15.7	<0.05	2.1	0.024	1.59	11.9	12.7	0.52	302	0.43	2.02	5.1	21.6	494
J8 (8894047)	13.3	<0.05	2.1	0.025	1.56	9.2	12.3	0.66	333	0.37	2.00	4.8	25.7	558
J9 (8894048)	15.5	<0.05	2.9	0.027	1.47	10.6	18.9	0.60	343	0.56	1.77	5.7	24.9	822
J10 (8894049)	14.7	<0.05	2.2	0.025	1.50	10.6	16.1	0.71	311	0.53	2.06	6.1	33.9	477
J11 (8894050)	14.2	<0.05	2.0	0.021	1.60	7.5	10.9	0.57	264	0.39	2.14	3.8	22.1	344
J12 (8894051)	14.5	<0.05	1.7	0.021	1.56	10.4	14.1	0.56	310	0.39	2.07	4.1	26.6	491
J13 (8894052)	14.5	<0.05	2.4	0.023	1.60	9.3	12.2	0.69	317	0.45	2.22	5.6	27.4	303
J14 (8894053)	14.7	<0.05	1.6	0.020	1.64	9.9	13.4	0.62	289	0.41	2.28	3.6	26.4	247
J15 (8894054)	14.9	<0.05	2.9	0.026	1.64	33.6	12.9	0.66	366	0.40	2.16	4.7	24.1	297
J16 (8894055)	14.6	<0.05	2.1	0.026	1.59	9.4	14.0	0.65	326	0.47	2.16	4.7	31.5	408
J17 (8894056)	14.8	<0.05	2.3	0.021	1.64	22.6	10.6	0.62	373	0.45	2.22	4.4	24.3	372
J18 (8894057)	16.2	<0.05	2.4	0.036	1.43	9.7	22.4	0.69	337	0.82	1.80	6.2	31.5	571
J19 (8894058)	14.3	<0.05	1.8	0.019	1.58	8.0	10.7	0.56	253	0.39	2.18	3.8	20.6	248
J20 (8894059)	13.8	<0.05	1.4	0.020	1.55	7.1	11.7	0.55	244	0.34	2.19	3.5	22.7	457
J21 (8894060)	16.6	<0.05	3.0	0.034	1.39	16.5	15.4	0.66	459	0.50	1.94	6.5	21.6	839
J22 (8894061)	16.1	<0.05	1.5	0.026	1.59	8.2	13.0	0.63	397	0.32	2.13	4.5	21.5	2410
J23 (8894062)	14.5	<0.05	1.9	0.019	1.67	8.7	12.8	0.64	272	0.31	2.16	5.7	27.9	362
J24 (8894063)	15.1	<0.05	1.6	0.024	1.52	9.3	16.5	0.63	314	0.38	2.08	4.5	27.0	563
J25 (8894064)	14.8	<0.05	3.0	0.028	1.46	17.3	14.5	0.81	501	0.45	2.17	6.3	34.4	726
J26 (8894065)	15.1	<0.05	2.3	0.027	1.60	10.5	17.9	0.69	305	0.52	1.93	5.8	34.8	380
J27 (8894066)	15.1	<0.05	1.8	0.028	1.59	11.0	18.7	0.75	331	0.44	1.87	5.7	38.5	494
J28 (8894067)	15.2	<0.05	2.6	0.027	1.55	10.1	15.3	0.69	353	0.37	2.04	5.1	31.6	558
J29 (8894068)	14.6	<0.05	3.2	0.030	1.24	12.7	17.4	0.77	564	0.51	1.90	6.6	29.0	1020
J30 (8894069)	14.6	<0.05	1.6	0.023	1.49	8.5	13.9	0.65	308	0.36	2.18	4.7	26.9	534
J31 (8894070)	15.0	<0.05	1.9	0.026	1.46	7.7	13.8	0.71	370	0.31	2.22	4.3	30.2	529
J32 (8894071)	14.4	<0.05	2.3	0.023	1.54	8.8	12.9	0.66	332	0.35	2.23	4.8	25.5	509
J33 (8894072)	14.9	<0.05	2.5	0.026	1.48	9.8	15.8	0.71	389	0.36	2.12	5.3	27.3	471
K1 (8894073)	15.2	<0.05	2.3	0.026	1.56	10.2	13.4	0.70	345	0.46	2.11	5.3	30.8	541
K2 (8894074)	15.6	<0.05	2.4	0.023	1.65	9.7	15.0	0.67	342	0.44	2.09	5.3	29.5	556
K3 (8894075)	15.6	<0.05	2.4	0.027	1.68	10.8	12.5	0.62	392	0.39	1.98	6.2	24.8	310
K4 (8894076)	15.6	<0.05	4.1	0.035	1.42	15.0	15.7	0.73	510	0.61	1.85	7.2	30.5	1000

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
K5 (8894077)		14.9	<0.05	2.6	0.022	1.55	8.9	10.4	0.60	339	0.42	2.04	4.6	21.2	278
K6 (8894078)		15.4	<0.05	3.2	0.033	1.53	13.0	18.5	0.63	369	0.67	1.82	7.1	29.1	579
K7 (8894079)		15.8	<0.05	1.7	0.026	1.49	12.4	11.7	0.66	676	0.41	2.07	5.9	21.2	1260
K8 (8894080)		14.6	<0.05	1.8	0.022	1.54	7.8	11.6	0.66	362	0.44	2.19	4.8	21.0	301
K9 (8894081)		16.1	<0.05	2.6	0.025	1.80	14.3	16.2	0.58	232	0.59	1.72	6.5	25.7	274
K10 (8894082)		15.3	<0.05	2.6	0.053	1.80	13.2	31.7	1.10	704	1.52	1.12	8.7	72.8	1470
K11 (8894083)		16.1	<0.05	2.4	0.033	1.54	11.4	20.2	0.69	351	0.69	1.78	7.2	37.1	538
K12 (8894084)		15.4	<0.05	2.5	0.029	1.73	14.1	20.5	0.79	294	0.40	1.88	6.9	44.0	584

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
I14 (8894013)	12.1	44.0	<0.002	0.04	0.13	8.6	0.9	0.9	263	0.40	<0.01	3.3	0.24	0.26
I15 (8894014)	12.4	45.7	<0.002	0.03	0.22	8.7	0.9	1.1	229	0.38	0.01	4.1	0.27	0.24
I16 (8894015)	11.8	43.9	<0.002	0.04	0.19	8.0	0.7	1.0	217	0.42	0.02	3.9	0.28	0.25
I17 (8894016)	12.6	44.5	<0.002	0.04	0.40	8.3	0.8	1.1	236	0.38	0.03	4.4	0.26	0.23
I18 (8894017)	12.4	48.9	<0.002	0.04	0.32	9.5	0.8	1.1	196	0.37	0.02	4.9	0.27	0.25
I19 (8894018)	11.4	40.7	<0.002	0.05	0.28	9.3	0.8	1.1	194	0.39	0.02	4.3	0.27	0.24
I20 (8894019)	12.2	41.9	<0.002	0.05	0.23	8.1	0.8	1.2	218	0.39	0.03	4.4	0.27	0.24
I21 (8894020)	12.4	40.6	<0.002	0.05	0.27	9.7	1.0	1.1	209	0.43	0.03	5.3	0.30	0.24
I22 (8894021)	10.8	47.1	<0.002	0.03	0.16	6.9	0.6	0.9	270	0.29	<0.01	2.8	0.20	0.25
I23 (8894022)	11.0	45.7	<0.002	0.03	0.62	8.2	0.6	0.9	283	0.29	<0.01	3.0	0.24	0.24
I24 (8894023)	10.8	45.8	<0.002	0.03	0.26	7.5	0.6	0.9	270	0.31	<0.01	2.6	0.24	0.23
I25 (8894024)	12.9	39.0	<0.002	0.05	0.27	7.4	0.8	1.3	187	0.42	0.04	3.7	0.31	0.23
I26 (8894025)	11.3	46.1	<0.002	0.04	0.13	7.7	0.8	0.9	255	0.36	<0.01	3.1	0.27	0.24
I27 (8894026)	9.8	43.2	<0.002	0.04	0.11	7.9	0.6	0.8	272	0.33	<0.01	3.6	0.25	0.22
I28 (8894027)	11.0	45.6	<0.002	0.04	0.21	8.8	0.7	1.0	266	0.40	0.01	5.3	0.28	0.24
I29 (8894028)	10.2	45.5	<0.002	0.03	0.12	9.1	0.6	1.0	263	0.35	0.01	3.5	0.30	0.22
I30 (8894029)	10.5	47.6	<0.002	0.02	0.15	7.0	0.7	1.0	258	0.36	<0.01	3.3	0.27	0.25
I31 (8894030)	11.2	46.4	<0.002	0.04	0.12	7.7	0.8	0.9	287	0.36	<0.01	3.0	0.26	0.24
I32 (8894031)	10.9	48.5	<0.002	0.03	0.15	7.8	0.7	1.2	270	0.36	<0.01	3.2	0.27	0.24
I33 (8894032)	10.9	49.3	<0.002	0.03	0.13	6.7	0.6	0.9	279	0.28	<0.01	2.3	0.20	0.24
I34 (8894033)	10.7	47.6	<0.002	0.03	0.18	7.0	0.6	1.5	297	0.38	0.05	2.6	0.20	0.25
I35 (8894034)	13.5	45.0	<0.002	0.04	0.21	7.1	1.0	1.0	218	0.38	0.03	8.8	0.26	0.25
I36 (8894035)	13.6	48.7	<0.002	0.05	0.34	8.1	0.8	1.1	228	0.40	0.03	3.3	0.29	0.24
I37 (8894036)	11.9	56.5	<0.002	0.03	0.15	5.4	<0.5	0.8	297	0.28	0.01	2.2	0.19	0.28
I38 (8894037)	14.2	50.0	<0.002	0.03	0.29	6.9	0.8	1.1	252	0.37	0.03	3.5	0.27	0.26
I39 (8894038)	11.9	45.2	<0.002	0.03	0.25	7.9	0.5	1.5	254	0.43	0.01	3.1	0.28	0.23
I40 (8894039)	24.8	39.0	<0.002	0.08	0.64	10.6	1.0	1.2	192	0.50	0.11	7.1	0.62	0.19
J1 (8894040)	28.4	45.6	<0.002	0.09	0.13	7.7	0.9	1.0	243	0.35	<0.01	3.5	0.24	0.26
J2 (8894041)	10.8	50.1	<0.002	0.03	0.16	6.9	<0.5	0.8	285	0.31	<0.01	3.1	0.20	0.24
J3 (8894042)	11.3	49.6	<0.002	0.04	0.15	8.0	0.5	1.0	255	0.40	0.03	3.2	0.26	0.26
J4 (8894043)	11.5	51.2	<0.002	0.04	0.15	7.8	<0.5	1.0	274	0.36	<0.01	3.2	0.25	0.25
J5 (8894044)	12.2	40.2	<0.002	0.05	0.19	8.6	1.1	0.8	259	0.35	<0.01	5.3	0.25	0.23

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
J6 (8894045)	10.5	48.2	<0.002	0.03	0.16	7.1	0.7	0.9	279	0.32	<0.01	7.4	0.24	0.25
J7 (8894046)	11.7	50.6	<0.002	0.03	0.23	7.2	0.7	1.0	270	0.34	<0.01	4.5	0.26	0.25
J8 (8894047)	10.3	48.3	<0.002	0.03	0.13	7.6	0.5	0.8	265	0.30	0.01	2.7	0.23	0.23
J9 (8894048)	11.8	50.1	<0.002	0.04	0.26	8.7	0.6	1.2	208	0.35	0.01	4.3	0.29	0.27
J10 (8894049)	10.7	45.9	<0.002	0.04	0.15	8.5	0.8	0.9	269	0.35	<0.01	3.2	0.25	0.25
J11 (8894050)	10.4	50.1	<0.002	0.03	0.12	6.7	<0.5	0.8	279	0.21	<0.01	2.2	0.19	0.26
J12 (8894051)	10.8	47.9	<0.002	0.03	0.12	6.8	0.6	0.8	272	0.23	<0.01	4.8	0.21	0.25
J13 (8894052)	17.0	50.1	<0.002	0.03	0.12	8.2	0.6	0.9	280	0.45	<0.01	2.8	0.25	0.25
J14 (8894053)	11.0	51.9	<0.002	0.03	0.12	6.8	<0.5	0.7	285	0.21	0.01	2.8	0.20	0.27
J15 (8894054)	12.2	50.3	<0.002	0.03	0.16	8.8	0.7	0.9	288	0.28	<0.01	9.7	0.26	0.29
J16 (8894055)	11.3	49.9	<0.002	0.03	0.15	7.9	0.7	0.9	282	0.25	0.02	3.0	0.24	0.26
J17 (8894056)	11.4	50.2	<0.002	0.03	0.13	8.9	0.9	1.1	296	0.31	0.01	7.2	0.23	0.27
J18 (8894057)	12.0	49.4	<0.002	0.05	0.23	9.0	0.9	1.1	212	0.35	0.03	3.2	0.31	0.26
J19 (8894058)	11.1	48.6	<0.002	0.03	0.10	6.9	<0.5	0.8	285	0.21	0.02	2.6	0.20	0.26
J20 (8894059)	10.4	48.0	<0.002	0.03	0.14	6.4	0.6	0.9	293	0.20	<0.01	1.6	0.18	0.25
J21 (8894060)	10.8	47.6	<0.002	0.04	0.19	9.1	0.7	1.1	258	0.32	<0.01	6.8	0.34	0.23
J22 (8894061)	10.9	52.7	<0.002	0.03	0.18	7.6	0.5	0.8	287	0.27	<0.01	2.5	0.24	0.24
J23 (8894062)	10.7	52.8	<0.002	0.03	0.12	7.1	0.5	0.8	282	0.23	0.02	2.7	0.20	0.27
J24 (8894063)	11.6	48.5	<0.002	0.04	0.12	7.7	0.7	0.9	273	0.27	<0.01	2.8	0.23	0.26
J25 (8894064)	11.0	48.7	<0.002	0.03	0.11	9.9	0.6	1.0	298	0.29	<0.01	9.2	0.33	0.24
J26 (8894065)	11.3	54.5	<0.002	0.04	0.20	8.5	0.8	1.1	241	0.31	<0.01	3.5	0.28	0.26
J27 (8894066)	11.3	52.5	<0.002	0.04	0.18	8.3	1.1	2.4	243	0.33	<0.01	9.5	0.27	0.28
J28 (8894067)	11.0	51.9	<0.002	0.04	0.11	8.4	0.7	0.9	269	0.31	<0.01	3.9	0.27	0.26
J29 (8894068)	10.7	40.9	<0.002	0.05	0.18	11.2	1.0	1.1	257	0.39	0.02	4.8	0.42	0.23
J30 (8894069)	10.9	49.2	<0.002	0.04	0.12	7.8	0.7	0.9	285	0.24	0.01	2.9	0.21	0.25
J31 (8894070)	10.7	49.2	<0.002	0.03	0.12	8.3	0.7	0.9	296	0.23	<0.01	4.2	0.26	0.25
J32 (8894071)	11.1	51.1	<0.002	0.03	0.10	7.9	<0.5	0.9	293	0.25	0.01	3.1	0.25	0.25
J33 (8894072)	10.9	48.9	<0.002	0.04	0.13	8.9	0.7	0.9	293	0.30	<0.01	4.0	0.29	0.24
K1 (8894073)	10.6	51.6	<0.002	0.03	0.20	8.4	0.7	1.0	279	0.29	0.01	3.5	0.25	0.25
K2 (8894074)	11.2	56.3	<0.002	0.03	0.12	8.1	0.7	1.0	278	0.29	<0.01	2.8	0.26	0.26
K3 (8894075)	11.3	57.8	<0.002	0.03	0.12	8.3	0.7	1.0	266	0.30	<0.01	3.1	0.29	0.28
K4 (8894076)	11.4	47.1	<0.002	0.05	0.27	10.1	1.1	1.1	256	0.40	0.05	5.2	0.38	0.26

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
K5 (8894077)		10.5	51.9	<0.002	0.03	0.15	7.8	0.6	1.4	269	0.25	<0.01	2.8	0.25	0.27
K6 (8894078)		11.8	48.8	<0.002	0.05	0.18	8.8	0.7	1.1	233	0.40	0.02	4.5	0.32	0.26
K7 (8894079)		12.0	50.7	<0.002	0.04	0.16	8.7	0.6	1.0	277	0.30	<0.01	4.7	0.31	0.25
K8 (8894080)		10.3	50.3	<0.002	0.05	0.15	7.8	0.7	0.8	286	0.29	0.02	1.9	0.26	0.24
K9 (8894081)		11.7	60.6	<0.002	0.04	0.16	7.6	0.6	1.1	219	0.37	0.01	4.6	0.28	0.31
K10 (8894082)		21.7	53.4	<0.002	0.08	0.49	11.7	1.2	1.2	144	0.46	0.10	7.8	0.50	0.27
K11 (8894083)		11.7	50.3	<0.002	0.05	0.17	8.9	1.0	1.2	233	0.40	0.02	3.5	0.32	0.27
K12 (8894084)		11.6	56.0	<0.002	0.04	0.21	9.0	0.9	1.0	235	0.42	0.02	5.3	0.28	0.30

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282585

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
I14 (8894013)	0.792	54.4	0.4	8.7	34.1	107
I15 (8894014)	0.831	68.1	0.4	8.4	37.5	92.6
I16 (8894015)	0.959	59.5	0.4	8.2	41.0	115
I17 (8894016)	2.42	61.8	0.3	8.6	44.7	118
I18 (8894017)	1.09	69.1	0.4	9.0	53.7	89.4
I19 (8894018)	1.18	74.0	0.5	8.1	57.4	112
I20 (8894019)	0.994	62.4	0.4	8.3	67.9	117
I21 (8894020)	1.12	79.2	0.4	10.5	46.6	113
I22 (8894021)	0.607	47.9	0.3	7.5	27.4	81.7
I23 (8894022)	0.654	57.8	0.3	8.4	27.2	78.2
I24 (8894023)	0.667	54.1	0.3	7.0	71.5	74.0
I25 (8894024)	1.03	66.9	0.5	7.0	61.9	114
I26 (8894025)	0.812	59.6	0.3	7.4	48.8	105
I27 (8894026)	0.533	65.9	0.2	7.5	30.2	59.2
I28 (8894027)	0.771	68.7	0.3	9.3	37.1	97.4
I29 (8894028)	0.883	73.2	0.3	9.1	33.7	127
I30 (8894029)	0.752	48.9	0.3	7.1	28.0	110
I31 (8894030)	0.681	58.5	0.3	7.8	40.0	101
I32 (8894031)	0.758	59.4	0.3	7.6	34.4	116
I33 (8894032)	0.520	49.2	0.4	6.0	35.9	63.8
I34 (8894033)	0.562	49.3	0.3	6.6	25.9	68.2
I35 (8894034)	0.901	56.4	0.3	7.4	58.6	84.2
I36 (8894035)	0.846	69.9	0.4	7.5	117	95.2
I37 (8894036)	0.541	41.4	0.2	5.4	35.4	77.0
I38 (8894037)	0.787	52.8	0.3	7.2	53.1	116
I39 (8894038)	0.781	60.6	0.4	7.9	88.8	107
I40 (8894039)	1.36	119	0.6	10.7	94.1	99.1
J1 (8894040)	0.813	52.8	0.3	7.2	23.8	118
J2 (8894041)	0.713	47.3	0.2	7.0	25.7	93.6
J3 (8894042)	0.711	53.1	0.4	7.5	35.7	115
J4 (8894043)	0.793	58.1	0.3	8.2	36.1	123
J5 (8894044)	1.08	60.0	0.3	9.0	42.6	108

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
J6 (8894045)		0.795	50.0	0.2	7.5	41.8	125
J7 (8894046)		0.759	59.4	0.3	7.6	33.0	87.3
J8 (8894047)		0.671	52.5	0.2	7.4	35.2	90.0
J9 (8894048)		1.10	66.4	0.5	8.6	48.3	123
J10 (8894049)		0.733	60.3	0.2	8.0	33.6	99.0
J11 (8894050)		0.573	48.9	0.2	6.6	26.7	85.8
J12 (8894051)		0.694	54.3	0.2	7.5	43.1	71.6
J13 (8894052)		0.696	57.3	0.2	8.4	31.4	102
J14 (8894053)		0.634	50.0	0.2	8.0	31.4	64.3
J15 (8894054)		1.35	56.7	0.2	14.9	28.4	125
J16 (8894055)		0.664	61.9	5.4	8.3	31.5	86.5
J17 (8894056)		1.41	55.2	0.3	16.6	28.6	103
J18 (8894057)		0.999	77.8	0.4	9.1	43.9	103
J19 (8894058)		0.580	50.5	0.2	6.9	25.7	75.0
J20 (8894059)		0.469	50.5	0.2	6.4	37.4	59.1
J21 (8894060)		1.09	84.0	0.3	11.8	53.4	136
J22 (8894061)		0.584	65.2	0.2	7.6	41.3	59.7
J23 (8894062)		0.591	51.2	0.2	6.7	28.3	80.4
J24 (8894063)		0.612	58.5	0.2	7.4	44.7	62.9
J25 (8894064)		1.02	82.5	0.2	12.0	35.5	125
J26 (8894065)		0.793	62.1	0.4	8.6	32.2	105
J27 (8894066)		0.758	66.5	0.3	8.6	30.8	80.9
J28 (8894067)		0.800	68.4	0.2	9.6	33.7	103
J29 (8894068)		0.990	102	0.3	11.8	47.5	126
J30 (8894069)		0.610	56.1	0.3	7.5	37.8	68.3
J31 (8894070)		0.582	66.7	0.2	8.4	35.9	78.8
J32 (8894071)		0.661	62.9	0.2	8.4	37.1	93.1
J33 (8894072)		0.727	75.0	0.2	9.3	29.5	115
K1 (8894073)		0.664	61.0	0.2	9.1	52.0	108
K2 (8894074)		0.774	63.4	0.3	8.9	52.3	110
K3 (8894075)		0.748	60.4	0.3	8.4	44.1	110
K4 (8894076)		1.16	91.0	0.4	12.9	56.7	175

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 08, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
K5 (8894077)		0.667	57.0	0.2	7.9	41.2	109
K6 (8894078)		0.942	68.6	0.3	9.7	84.3	136
K7 (8894079)		0.796	77.9	0.2	10.6	35.2	76.0
K8 (8894080)		0.682	59.9	0.2	8.3	25.9	77.2
K9 (8894081)		1.08	56.8	0.3	8.8	27.3	114
K10 (8894082)		1.52	113	0.6	10.8	75.0	105
K11 (8894083)		0.862	70.2	0.4	9.1	57.4	103
K12 (8894084)		0.891	59.9	0.4	8.7	44.2	106

Comments: RDL - Reported Detection Limit
8894013-8894084 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Replicate

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8894013	0.23	0.29	23.1%	8894033	0.19	0.12		8894053	0.12	0.47		8894074	0.16	0.27	
Al	8894013	6.68	6.61	1.1%	8894033	6.42	6.91	7.4%	8894053	6.48	6.38	1.6%	8894074	6.59	6.43	2.5%
As	8894013	2.9	1.9		8894033	1.9	2.1	10.0%	8894053	3.42	4.12	18.6%	8894074	2.5	2.0	22.2%
Ba	8894013	496	494	0.4%	8894033	514	546	6.0%	8894053	547	535	2.2%	8894074	530	505	4.8%
Be	8894013	1.19	1.07	10.6%	8894033	1.13	1.46	25.5%	8894053	1.26	1.39	9.8%	8894074	1.22	1.25	2.4%
Bi	8894013	0.092	0.109	16.9%	8894033	0.07	0.07	0.0%	8894053	0.10	0.10	0.0%	8894074	0.09	0.09	0.0%
Ca	8894013	1.39	1.41	1.4%	8894033	1.40	1.56	10.8%	8894053	1.35	1.34	0.7%	8894074	1.49	1.46	2.0%
Cd	8894013	0.07	0.08	13.3%	8894033	0.04	0.05	22.2%	8894053	0.04	0.04	0.0%	8894074	0.088	0.075	16.0%
Ce	8894013	29.1	36.2	21.7%	8894033	17.6	20.6	15.7%	8894053	24.1	24.7	2.5%	8894074	20.4	19.2	6.1%
Co	8894013	11.4	11.6	1.7%	8894033	9.26	9.25	0.1%	8894053	8.66	8.47	2.2%	8894074	9.27	8.99	3.1%
Cr	8894013	57.4	57.0	0.7%	8894033	46.9	51.7	9.7%	8894053	54.3	52.9	2.6%	8894074	49.3	54.5	10.0%
Cs	8894013	1.17	1.17	0.0%	8894033	0.930	0.966	3.8%	8894053	1.12	1.13	0.9%	8894074	1.37	1.26	8.4%
Cu	8894013	11.4	11.6	1.7%	8894033	7.5	8.2	8.9%	8894053	12.0	11.8	1.7%	8894074	6.3	6.6	4.7%
Fe	8894013	2.26	2.26	0.0%	8894033	1.97	2.19	10.6%	8894053	2.12	2.04	3.8%	8894074	2.52	2.51	0.4%
Ga	8894013	14.5	14.0	3.5%	8894033	13.3	13.2	0.8%	8894053	14.7	14.9	1.4%	8894074	15.6	15.8	1.3%
Ge	8894013	< 0.05	< 0.05	0.0%	8894033	< 0.05	< 0.05	0.0%	8894053	< 0.05	< 0.05	0.0%	8894074	< 0.05	< 0.05	0.0%
Hf	8894013	2.7	2.7	0.0%	8894033	1.9	1.5	23.5%	8894053	1.6	1.6	0.0%	8894074	2.4	2.5	4.1%
In	8894013	0.0242	0.0262	7.9%	8894033	0.0220	0.0191	14.1%	8894053	0.020	0.021	4.9%	8894074	0.0233	0.0260	11.0%
K	8894013	1.53	1.51	1.3%	8894033	1.57	1.69	7.4%	8894053	1.64	1.62	1.2%	8894074	1.65	1.59	3.7%
La	8894013	11.6	15.4	28.1%	8894033	7.8	9.1	15.4%	8894053	9.9	9.7	2.0%	8894074	9.7	9.0	7.5%
Li	8894013	13.5	13.5	0.0%	8894033	11.9	12.6	5.7%	8894053	13.4	13.1	2.3%	8894074	15.0	15.0	0.0%
Mg	8894013	0.672	0.665	1.0%	8894033	0.613	0.687	11.4%	8894053	0.62	0.61	1.6%	8894074	0.668	0.655	2.0%
Mn	8894013	278	283	1.8%	8894033	285	316	10.3%	8894053	289	283	2.1%	8894074	342	342	0.0%
Mo	8894013	0.456	0.465	2.0%	8894033	0.53	0.31		8894053	0.413	0.417	1.0%	8894074	0.438	0.445	1.6%
Na	8894013	1.99	1.99	0.0%	8894033	2.21	2.40	8.2%	8894053	2.28	2.25	1.3%	8894074	2.09	2.05	1.9%
Nb	8894013	5.4	5.3	1.9%	8894033	4.5	4.0	11.8%	8894053	3.6	3.8	5.4%	8894074	5.33	5.37	0.7%
Ni	8894013	30.5	29.9	2.0%	8894033	28.6	30.4	6.1%	8894053	26.4	26.6	0.8%	8894074	29.5	29.3	0.7%
P	8894013	348	344	1.2%	8894033	376	426	12.5%	8894053	247	260	5.1%	8894074	556	532	4.4%
Pb	8894013	12.1	12.6	4.0%	8894033	10.7	10.4	2.8%	8894053	11.0	11.1	0.9%	8894074	11.2	11.2	0.0%
Rb	8894013	44.0	42.3	3.9%	8894033	47.6	47.4	0.4%	8894053	51.9	52.0	0.2%	8894074	56.3	52.3	7.4%
Re	8894013	< 0.002	< 0.002	0.0%	8894033	< 0.002	< 0.002	0.0%	8894053	< 0.002	< 0.002	0.0%	8894074	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8894013	0.04	0.04	0.0%	8894033	0.03	0.03	0.0%	8894053	0.03	0.03	0.0%	8894074	0.03	0.03	0.0%
Sb	8894013	0.13	0.13	0.0%	8894033	0.18	0.14	25.0%	8894053	0.12	0.14	15.4%	8894074	0.121	0.114	6.0%
Sc	8894013	8.6	8.6	0.0%	8894033	7.0	7.4	5.6%	8894053	6.8	6.8	0.0%	8894074	8.1	7.8	3.8%
Se	8894013	0.9	0.9	0.0%	8894033	0.6	0.6	0.0%	8894053	< 0.5	0.6		8894074	0.7	< 0.5	
Sn	8894013	0.9	0.9	0.0%	8894033	1.5	0.8		8894053	0.7	0.8	13.3%	8894074	0.95	0.92	3.2%
Sr	8894013	263	258	1.9%	8894033	297	310	4.3%	8894053	285	292	2.4%	8894074	278	272	2.2%
Ta	8894013	0.40	0.40	0.0%	8894033	0.38	0.33	14.1%	8894053	0.21	0.21	0.0%	8894074	0.292	0.307	5.0%
Te	8894013	< 0.01	0.02		8894033	0.05	0.02		8894053	0.01	< 0.01		8894074	< 0.01	< 0.01	0.0%
Th	8894013	3.33	4.50	29.9%	8894033	2.6	3.0	14.3%	8894053	2.8	3.2	13.3%	8894074	2.8	2.7	3.6%
Ti	8894013	0.24	0.24	0.0%	8894033	0.20	0.22	9.5%	8894053	0.195	0.191	2.1%	8894074	0.261	0.276	5.6%
Tl	8894013	0.256	0.249	2.8%	8894033	0.25	0.24	4.1%	8894053	0.27	0.27	0.0%	8894074	0.257	0.265	3.1%
U	8894013	0.792	1.09		8894033	0.562	0.655	15.3%	8894053	0.634	0.660	4.0%	8894074	0.774	0.740	4.5%
V	8894013	54.4	53.7	1.3%	8894033	49.3	51.8	4.9%	8894053	50.0	50.8	1.6%	8894074	63.4	63.9	0.8%
W	8894013	0.36	0.32	11.8%	8894033	0.28	0.22	24.0%	8894053	0.2	0.2	0.0%	8894074	0.3	0.3	0.0%
Y	8894013	8.69	8.88	2.2%	8894033	6.63	6.93	4.4%	8894053	7.99	8.46	5.7%	8894074	8.9	8.9	0.0%
Zn	8894013	34.1	33.3	2.4%	8894033	25.9	28.0	7.8%	8894053	31.4	31.2	0.6%	8894074	52.3	52.9	1.1%
Zr	8894013	107	105	1.9%	8894033	68.2	59.3	14.0%	8894053	64.3	67.8	5.3%	8894074	110	107	2.8%

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282585
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.2	93%	90% - 110%	6.96	6.71	96%	90% - 110%								
As					124	124	100%	90% - 110%								
Ba	340	313	92%	90% - 110%	186	182	97%	90% - 110%								
Be	2.6	2.8	107%	90% - 110%												
Ca	5.72	5.26	91%	90% - 110%	4.01	3.86	96%	90% - 110%								
Ce	122	114	93%	90% - 110%	24	22	91%	90% - 110%								
Co	2.8	2.5	89%	90% - 110%	22.1	20.9	94%	90% - 110%								
Cs	1.5	1.4	93%	90% - 110%												
Cu					88.6	83.5	94%	90% - 110%								
Fe	4.34	3.97	91%	90% - 110%	7.56	7.32	96%	90% - 110%								
Ga	35	35	100%	90% - 110%												
Hf	10.6	1.1		90% - 110%												
K	1.37	1.29	94%	90% - 110%	2.021	1.929	95%	90% - 110%								
La	58	53	91%	90% - 110%												
Li	37	36	97%	90% - 110%												
Mg	0.325	0.316	97%	90% - 110%	2.412	2.38	98%	90% - 110%								
Mn					1510	1396	92%	90% - 110%								
Na	5.267	4.981	94%	90% - 110%	0.617	0.609	98%	90% - 110%								
Nb	13	14	107%	90% - 110%												
Ni	9	7	77%	90% - 110%	77.1	69.9	90%	90% - 110%								
P					892	983	110%	90% - 110%								
Pb	10	9	90%	90% - 110%												
Rb	55	50	90%	90% - 110%					143	140	97%	90% - 110%	55	55	100%	90% - 110%
S					0.348	0.388	111%	90% - 110%								
Sr	1191	1081	90%	90% - 110%												
Ta	0.9	1	111%	90% - 110%												
Th	1.4	1.2	85%	90% - 110%												
Ti	0.172	0.154	89%	90% - 110%												
V	8	6	75%	90% - 110%												
Y	119	118	99%	90% - 110%												
Zn	93	84	90%	90% - 110%	208	199	95%	90% - 110%								

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

	CRM #5 (ref.Till-2)				CRM #6 (ref.SY-4)											
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits								
Al	8.17	7.97	97%	90% - 110%	10.95	10.61	96%	90% - 110%								
As	26	27	103%	90% - 110%												
Ba	540	518	95%	90% - 110%	340	329	96%	90% - 110%								
Be	4.0	3.6	90%	90% - 110%	2.6	2.8	107%	90% - 110%								
Ca	0.907	0.895	98%	90% - 110%	5.72	5.47	95%	90% - 110%								
Ce	98	91	92%	90% - 110%	122	114	93%	90% - 110%								
Co					2.8	2.5	89%	90% - 110%								
Cr	60.3	54.5	90%	90% - 110%												
Cs	12	11	91%	90% - 110%	1.5	1.6	106%	90% - 110%								
Cu	150	140	93%	90% - 110%												
Fe	3.77	3.68	97%	90% - 110%	4.34	4.16	95%	90% - 110%								
Ga					35	37	105%	90% - 110%								
Hf					10.6	1.1		90% - 110%								
K					1.37	1.33	97%	90% - 110%								
La	44	40	90%	90% - 110%	58	53	91%	90% - 110%								
Li	47	43	91%	90% - 110%	37	36	97%	90% - 110%								
Mg	1.10	1.06	96%	90% - 110%	0.325	0.296	91%	90% - 110%								
Mn	780	715	91%	90% - 110%												
Mo	14	13	92%	90% - 110%												
Na	1.624	1.619	99%	90% - 110%	5.267	5.18	98%	90% - 110%								
Nb					13	14	107%	90% - 110%								
Ni	32	32	100%	90% - 110%	9	8	88%	90% - 110%								
Pb	31	29	93%	90% - 110%	10	9	90%	90% - 110%								
Rb					55	60	109%	90% - 110%								
Sb	0.8	0.8	100%	90% - 110%												
Sc	12	12	100%	90% - 110%												
Ta					0.9	0.8	88%	90% - 110%								
Th	18.4	17.2	93%	90% - 110%	1.4	1.4	100%	90% - 110%								
Ti					0.172	0.161	93%	90% - 110%								
V	77	72	93%	90% - 110%												
Y					119	130	109%	90% - 110%								
Zn	130	120	92%	90% - 110%	93	87	93%	90% - 110%								

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
AGAT WORK ORDER: 17T282585
PROJECT:
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLING SITE:
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME:	CRUZ COBALT CORP. P.O BOX 10112 1470-701 W. GEORGIA ST VANCOUVER, BC V7Y 1C6 604-646-6908
ATTENTION TO:	Jason Gigliotti, Jim Nelson
PROJECT:	
AGAT WORK ORDER:	17T282586
SOLID ANALYSIS REVIEWED BY:	Kevin Motomura, Data Review Supervisor
DATE REPORTED:	Jan 03, 2018
PAGES (INCLUDING COVER):	18

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

Certificate of Analysis

AGAT Laboratories

AGAT WORK ORDER: 17T282586

PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
K13 (8894159)		0.25	7.03	1.6	515	1.56	0.10	1.36	0.07	33.8	16.3	71.7	1.84	8.2	2.35
K14 (8894160)		0.38	6.44	2.0	515	1.45	0.09	1.51	0.04	30.1	11.5	57.2	1.49	6.2	2.28
K15 (8894161)		0.36	7.09	4.1	492	1.65	0.13	1.57	0.08	29.6	16.4	83.4	2.04	9.5	3.36
K16 (8894162)		0.35	5.86	2.6	462	1.39	0.08	1.44	0.05	30.8	10.4	54.0	1.22	5.2	1.99
K17 (8894163)		0.25	5.98	2.2	479	1.34	0.08	1.35	0.05	19.3	10.2	53.0	1.50	4.3	2.25
K18 (8894164)		0.52	7.42	4.8	472	1.68	0.19	1.56	0.13	24.3	31.7	82.9	2.77	14.0	4.69
K19 (8894165)		0.17	6.19	0.4	495	1.44	0.08	1.41	0.05	21.1	9.58	43.9	1.29	3.1	2.02
L1 (8894166)		0.22	7.48	2.2	452	1.52	0.10	1.24	<0.02	24.1	11.7	53.6	1.42	3.0	2.40
L2 (8894167)		0.22	6.09	1.2	494	1.31	0.08	1.40	0.08	28.4	9.00	51.1	1.49	1.6	1.72
L3 (8894168)		0.26	6.89	1.8	493	1.60	0.08	1.53	0.07	34.4	13.8	63.4	1.43	2.6	2.15
L4 (8894169)		0.20	6.44	2.2	502	1.47	0.09	1.58	0.06	27.4	11.8	52.7	1.24	3.4	2.07
L5 (8894170)		0.19	6.59	1.1	499	1.44	0.07	1.48	0.06	22.7	10.8	51.6	1.37	2.9	2.06
L6 (8894171)		0.88	6.23	1.2	500	1.39	0.08	1.37	0.07	17.1	9.21	44.4	1.41	1.4	1.96
L7 (8894172)		0.26	6.05	1.8	505	1.78	0.06	1.39	0.03	23.2	8.76	46.0	1.22	3.3	1.70
L8 (8894173)		0.20	6.73	1.5	523	1.48	0.08	1.57	0.05	22.7	11.3	61.1	1.41	3.2	2.46
L9 (8894174)		0.19	5.43	1.7	522	1.07	0.08	1.15	0.06	19.0	4.35	31.2	1.27	0.9	1.30
L10 (8894175)		0.18	6.34	2.3	486	1.42	0.07	1.40	0.06	17.0	9.29	44.0	1.22	3.9	1.84
L11 (8894176)		0.17	6.97	3.3	499	1.58	0.07	1.55	0.05	17.9	11.5	55.6	1.38	4.0	2.23
L12 (8894177)		0.23	6.78	2.9	453	1.55	0.10	1.52	0.06	26.0	14.4	77.0	1.61	6.2	2.89
L13 (8894178)		0.17	6.05	2.3	479	1.40	0.08	1.50	0.04	32.7	12.0	72.2	1.36	9.1	2.47
L14 (8894179)		0.22	6.74	3.1	503	1.56	0.10	1.48	0.10	32.1	16.7	74.8	1.60	10.9	2.69
L15 (8894180)		0.32	6.73	0.9	410	1.59	0.11	1.45	0.09	20.1	16.5	87.7	1.76	8.0	3.22
L16 (8894181)		0.23	6.08	0.9	504	1.34	0.07	1.29	0.05	19.5	7.91	38.3	1.43	2.2	1.76
L17 (8894182)		0.27	6.60	1.3	505	1.47	0.08	1.30	0.06	24.2	12.6	53.1	1.41	4.2	2.02
L18 (8894183)		0.23	6.01	6.6	482	1.43	0.12	1.80	0.24	36.9	11.4	58.8	1.38	19.9	1.98
L19 (8894184)		0.31	7.75	3.5	597	1.96	0.17	1.19	0.03	52.0	22.5	119	3.87	26.1	4.09
L20 (8894185)		0.30	6.94	4.0	489	1.39	0.15	1.60	0.06	36.7	22.7	92.5	3.02	18.5	3.35
L21 (8894186)		0.32	6.28	2.7	541	1.34	0.09	1.40	0.08	24.9	12.1	81.1	2.07	8.6	2.50
M1 (8894187)		0.25	6.18	6.4	509	1.63	0.19	1.51	0.09	39.7	10.2	54.0	1.61	16.8	2.06
M2 (8894188)		0.19	6.01	2.1	500	1.40	0.10	1.49	0.08	28.7	12.9	62.0	1.68	11.6	2.14
M3 (8894189)		0.33	5.91	1.8	478	1.32	0.08	1.35	0.05	30.8	8.94	44.1	1.39	7.6	1.70
M4 (8894190)		0.35	6.63	6.3	497	1.73	0.11	1.55	0.14	34.6	21.2	61.6	1.67	8.7	2.53

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
M5 (8894191)		0.61	6.54	12.9	461	1.50	3.19	1.52	0.07	40.4	18.3	76.9	2.21	65.9	2.83
M6 (8894192)		0.26	6.12	14.2	477	1.40	0.40	1.62	0.04	52.0	16.3	71.9	2.26	26.1	2.59
M8 (8894194)		0.46	7.22	6.5	516	1.57	0.19	1.27	0.15	26.0	27.1	87.5	3.09	32.9	3.50
M9 (8894195)		0.94	7.28	6.6	420	1.59	0.20	0.95	0.18	39.3	30.7	165	2.70	36.4	4.75
M10 (8894196)		0.41	6.81	2.6	532	1.32	0.13	1.39	0.11	32.8	13.5	78.2	2.45	9.7	2.46
M11 (8894197)		0.38	7.21	3.4	516	1.66	0.13	1.30	0.10	43.3	21.0	93.3	2.55	27.3	3.16
M12 (8894198)		0.31	6.44	4.8	451	1.58	0.15	1.21	0.11	37.5	14.9	73.1	2.10	12.5	3.12
M13 (8894199)		0.36	7.16	3.2	547	1.39	0.11	1.32	0.07	35.6	13.5	81.1	2.51	13.0	2.75
M14 (8894200)		1.88	6.59	2.6	522	1.45	0.10	1.48	0.05	28.9	10.8	55.8	1.63	9.6	2.11
M15 (8894201)		0.32	6.70	5.7	441	1.44	0.21	1.49	0.07	29.8	22.2	63.4	2.11	57.5	3.31
M16 (8894202)		0.18	6.60	4.2	529	1.42	0.10	1.57	0.03	26.3	11.9	54.0	1.35	18.3	2.11
M17 (8894203)		0.19	6.33	4.5	494	1.42	0.10	1.41	0.05	24.4	11.8	49.8	1.31	36.9	2.17
M18 (8894204)		0.21	6.38	4.7	466	1.33	0.15	1.44	0.08	33.2	19.1	58.8	1.47	26.0	2.61
M19 (8894205)		0.32	7.24	9.4	419	1.54	0.21	1.35	0.09	24.2	24.6	70.6	2.30	35.3	4.21
M20 (8894206)		0.19	6.76	3.9	485	1.52	0.10	1.52	0.06	33.2	17.8	60.8	1.51	11.6	2.33
M21 (8894207)		0.28	6.64	4.9	423	1.38	0.14	1.33	0.07	41.1	14.8	67.9	2.21	14.9	3.10
M22 (8894208)		0.23	6.56	3.9	432	1.37	0.14	1.33	0.08	29.0	15.8	73.5	2.11	22.8	2.91
M23 (8894209)		0.25	6.80	3.1	464	1.49	0.11	1.50	0.05	48.1	12.5	64.3	1.51	17.0	2.37
M24 (8894210)		0.25	6.58	4.0	439	1.44	0.15	1.30	0.06	30.8	15.3	68.8	2.27	13.2	3.36
M25 (8894211)		0.24	6.77	5.6	442	1.47	0.14	1.42	0.03	52.3	21.4	75.8	1.84	15.7	2.97
M26 (8894212)		0.43	6.46	3.2	463	1.43	0.15	1.34	0.08	25.1	10.2	60.5	2.21	12.9	2.67
M27 (8894213)		0.20	6.62	1.7	503	1.39	0.07	1.50	0.04	24.4	12.9	53.7	1.40	2.5	2.13
M28 (8894214)		0.26	6.91	1.5	499	1.51	0.10	1.49	0.05	26.8	14.6	61.4	1.59	3.8	2.55
M29 (8894215)		0.35	5.79	2.2	504	1.26	0.14	1.35	0.06	29.6	9.11	45.8	1.33	6.2	1.79
M30 (8894216)		0.19	6.36	2.4	473	1.62	0.08	1.42	0.06	20.1	11.6	57.4	1.43	3.7	2.29
M31 (8894217)		0.23	6.43	1.4	474	1.53	0.52	1.63	0.06	31.8	12.4	67.3	1.27	3.8	2.36
M32 (8894218)		0.23	6.45	2.9	475	1.45	0.09	1.57	<0.02	32.2	12.0	68.5	1.41	3.7	2.48
M33 (8894219)		0.25	6.73	2.1	474	1.45	0.09	1.60	0.05	24.3	15.9	67.3	1.47	3.2	2.69
M34 (8894220)		0.26	6.67	1.7	488	1.55	0.10	1.63	<0.02	34.6	12.4	73.9	1.48	3.7	2.77
M35 (8894221)		0.30	6.46	2.5	466	1.40	0.10	1.53	0.07	23.7	11.7	77.1	1.36	4.0	3.06
M36 (8894222)		0.33	6.71	1.6	474	1.55	0.10	1.58	0.07	40.5	13.1	80.4	1.62	8.0	2.86
M37 (8894223)		0.29	6.74	2.8	487	1.50	0.09	1.48	0.05	27.0	13.2	72.7	1.53	7.8	2.74

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.5	0.01
M38 (8894224)		0.27	7.05	2.6	495	1.55	0.09	1.52	0.05	30.6	13.8	65.7	1.44	5.6	2.69
M39 (8894225)		0.29	7.38	3.9	535	1.50	0.12	1.46	0.06	30.5	20.6	75.1	2.45	12.4	2.94
M40 (8894226)		0.26	6.54	1.3	507	1.55	0.08	1.65	0.06	30.5	12.9	64.5	1.42	3.0	2.42
M41 (8894227)		0.23	6.48	1.9	516	1.51	0.09	1.44	0.06	22.4	11.3	58.5	1.69	3.1	2.43

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 03, 2018 SAMPLE TYPE: Other

Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
K13 (8894159)	18.2	<0.05	3.3	0.034	1.80	13.5	18.3	0.75	317	0.54	1.96	7.9	39.5	481
K14 (8894160)	17.2	<0.05	3.2	0.024	1.66	14.1	13.3	0.64	341	0.42	2.12	6.0	27.1	579
K15 (8894161)	19.6	<0.05	4.0	0.033	1.57	13.6	19.5	0.78	422	0.86	1.98	9.1	37.3	670
K16 (8894162)	14.9	0.07	2.3	0.023	1.49	14.1	11.4	0.58	312	0.43	1.96	5.6	23.6	348
K17 (8894163)	16.6	0.06	2.1	0.023	1.51	8.8	14.9	0.52	277	0.59	1.98	5.7	23.5	466
K18 (8894164)	22.7	0.18	2.5	0.044	1.41	11.4	34.2	1.08	483	1.12	1.54	11.7	53.5	731
K19 (8894165)	16.8	<0.05	2.4	0.021	1.60	9.3	11.4	0.54	253	0.35	2.18	4.7	22.1	526
L1 (8894166)	16.7	<0.05	2.6	0.021	1.48	11.7	16.6	0.47	235	0.60	1.86	5.9	22.5	345
L2 (8894167)	17.0	0.06	3.0	0.025	1.64	12.5	10.4	0.54	270	0.45	2.01	5.8	21.5	342
L3 (8894168)	17.4	<0.05	2.7	0.027	1.59	14.7	13.3	0.59	304	0.43	2.14	6.0	29.7	526
L4 (8894169)	16.5	<0.05	2.8	0.024	1.63	11.2	12.6	0.62	306	0.51	2.25	5.4	27.2	514
L5 (8894170)	16.9	0.19	2.3	0.023	1.62	10.3	12.5	0.57	281	0.32	2.19	5.2	24.4	518
L6 (8894171)	18.0	0.17	2.2	0.024	1.64	8.0	12.6	0.47	285	0.39	2.12	5.4	17.7	610
L7 (8894172)	15.9	0.10	1.9	0.019	1.66	9.3	10.3	0.56	261	0.26	2.26	4.1	21.9	310
L8 (8894173)	18.1	0.17	2.9	0.028	1.66	11.5	15.0	0.63	336	0.42	2.29	5.7	27.2	447
L9 (8894174)	15.0	0.21	1.5	0.017	1.64	9.4	8.1	0.32	241	0.26	2.08	4.0	12.7	322
L10 (8894175)	15.6	0.09	1.7	0.023	1.54	7.9	12.8	0.55	270	0.32	2.19	3.6	23.7	421
L11 (8894176)	17.6	<0.05	1.6	0.022	1.62	8.9	15.0	0.64	329	0.34	2.32	4.6	28.6	559
L12 (8894177)	19.4	<0.05	2.2	0.029	1.47	12.6	18.7	0.71	378	0.35	2.06	6.2	33.9	821
L13 (8894178)	15.9	<0.05	3.0	0.025	1.47	13.0	12.8	0.75	399	0.24	2.12	5.1	30.2	391
L14 (8894179)	17.2	<0.05	2.4	0.026	1.56	14.5	17.6	0.77	380	0.33	2.05	5.7	40.4	522
L15 (8894180)	17.2	0.13	2.1	0.031	1.36	9.3	22.6	0.84	414	0.43	1.80	11.1	40.8	643
L16 (8894181)	16.6	<0.05	2.1	0.018	1.62	9.1	11.1	0.42	238	0.28	2.10	4.8	16.4	556
L17 (8894182)	16.0	<0.05	2.7	0.024	1.59	11.3	15.2	0.61	254	0.40	2.01	5.3	29.2	275
L18 (8894183)	16.8	<0.05	2.2	0.028	1.59	18.0	12.9	0.79	362	0.35	2.32	4.8	26.3	553
L19 (8894184)	22.9	0.11	3.2	0.032	2.04	24.5	35.9	1.27	300	0.33	1.71	11.9	57.2	138
L20 (8894185)	21.7	<0.05	2.8	0.040	1.77	18.2	34.1	1.35	466	0.42	2.03	8.8	47.4	173
L21 (8894186)	18.2	0.07	2.1	0.028	2.01	12.1	20.7	1.00	377	0.32	1.96	10.5	35.9	236
M1 (8894187)	18.9	<0.05	2.4	0.025	1.64	16.6	15.2	0.62	357	0.59	2.27	5.7	23.1	215
M2 (8894188)	17.4	<0.05	2.2	0.023	1.63	10.5	13.6	0.73	396	0.36	2.14	5.4	28.6	282
M3 (8894189)	16.6	<0.05	2.5	0.022	1.59	10.5	9.8	0.47	269	0.48	2.08	5.6	18.7	185
M4 (8894190)	19.2	<0.05	3.0	0.032	1.68	15.5	14.8	0.65	330	0.57	2.16	6.8	30.9	532

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
M5 (8894191)		20.3	<0.05	3.8	0.032	1.63	20.7	20.6	0.91	433	0.54	2.04	7.4	35.7	243
M6 (8894192)		16.5	0.16	3.4	0.036	1.64	28.4	22.3	0.86	491	0.52	2.02	7.6	31.6	219
M8 (8894194)		19.7	0.22	2.3	0.041	1.67	11.3	43.5	0.99	354	1.03	1.56	8.9	58.4	445
M9 (8894195)		20.3	0.23	2.5	0.044	1.40	17.9	39.1	2.37	383	0.94	1.15	30.2	83.7	916
M10 (8894196)		20.0	<0.05	3.0	0.032	1.89	16.0	27.8	0.77	295	0.59	1.79	8.7	34.7	909
M11 (8894197)		19.2	0.19	2.9	0.039	1.76	17.9	21.5	0.98	383	0.64	1.65	11.2	50.3	1220
M12 (8894198)		18.7	<0.05	3.2	0.033	1.52	17.6	21.6	0.67	335	0.89	1.58	8.0	36.5	846
M13 (8894199)		18.4	<0.05	3.3	0.028	1.87	17.7	20.8	0.83	338	0.49	1.80	7.8	39.9	552
M14 (8894200)		18.1	<0.05	2.4	0.025	1.71	11.0	15.0	0.63	328	0.46	2.19	5.7	27.5	389
M15 (8894201)		19.6	<0.05	3.1	0.042	1.59	12.6	22.9	0.90	421	0.59	1.90	7.1	38.6	360
M16 (8894202)		18.2	<0.05	3.0	0.026	1.68	12.9	14.2	0.68	303	0.45	2.31	5.8	29.4	222
M17 (8894203)		17.9	<0.05	2.6	0.026	1.62	10.5	19.4	0.66	279	0.48	2.15	5.1	31.2	215
M18 (8894204)		18.3	<0.05	3.1	0.029	1.54	10.2	16.2	0.69	326	0.51	2.08	5.9	34.6	333
M19 (8894205)		20.5	0.07	2.8	0.045	1.41	11.7	28.9	0.79	355	0.95	1.89	6.9	41.2	381
M20 (8894206)		17.2	<0.05	2.8	0.025	1.58	12.0	14.9	0.68	324	0.40	2.22	5.5	30.9	267
M21 (8894207)		17.7	<0.05	3.3	0.032	1.46	19.6	19.7	0.66	339	0.74	1.87	7.4	28.0	416
M22 (8894208)		17.3	<0.05	3.3	0.030	1.52	13.0	18.5	0.77	367	0.56	1.85	6.8	31.5	375
M23 (8894209)		18.5	<0.05	3.6	0.029	1.53	21.3	14.4	0.66	304	0.63	2.05	7.6	26.4	379
M24 (8894210)		21.0	<0.05	2.8	0.033	1.55	14.7	22.0	0.77	355	0.70	1.85	7.1	30.5	431
M25 (8894211)		18.3	<0.05	3.6	0.030	1.55	15.8	19.2	0.77	407	0.54	1.95	7.1	37.7	536
M26 (8894212)		19.5	<0.05	3.6	0.030	1.57	12.2	17.9	0.60	326	0.68	1.76	7.4	23.7	945
M27 (8894213)		17.5	<0.05	2.1	0.022	1.62	11.2	13.4	0.59	300	0.42	2.28	4.4	25.7	465
M28 (8894214)		18.3	<0.05	2.8	0.027	1.57	12.9	16.2	0.64	331	0.45	2.13	5.6	30.9	448
M29 (8894215)		19.1	<0.05	3.3	0.025	1.56	14.4	11.0	0.44	277	0.52	2.02	6.3	17.8	264
M30 (8894216)		18.4	<0.05	1.9	0.023	1.49	8.4	13.2	0.58	375	0.46	2.16	5.2	23.3	561
M31 (8894217)		17.1	<0.05	2.2	0.130	1.50	14.5	12.5	0.69	367	0.30	2.28	5.8	27.9	515
M32 (8894218)		17.5	<0.05	2.7	0.023	1.55	14.7	13.6	0.67	364	0.39	2.15	5.9	28.0	529
M33 (8894219)		18.3	<0.05	2.7	0.034	1.55	11.3	15.4	0.71	391	0.49	2.16	6.7	30.8	497
M34 (8894220)		18.1	<0.05	3.0	0.028	1.55	15.9	15.5	0.67	387	0.42	2.19	6.1	29.2	680
M35 (8894221)		17.9	<0.05	3.4	0.029	1.44	10.7	16.6	0.67	417	0.46	2.06	6.9	29.5	551
M36 (8894222)		18.1	<0.05	4.0	0.029	1.60	19.1	14.6	0.72	406	0.44	2.09	6.6	32.1	613
M37 (8894223)		18.5	<0.05	2.4	0.029	1.59	11.9	16.9	0.67	346	0.39	2.08	6.0	34.1	599

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.5	10
M38 (8894224)		18.2	<0.05	2.1	0.027	1.59	14.3	17.3	0.72	339	0.44	2.19	5.6	33.0	518
M39 (8894225)		19.6	<0.05	2.8	0.033	1.74	14.1	24.5	0.80	333	0.74	1.96	7.2	45.7	464
M40 (8894226)		17.7	<0.05	2.6	0.026	1.61	13.7	11.9	0.71	372	0.37	2.27	5.9	27.3	413
M41 (8894227)		19.1	<0.05	2.8	0.026	1.64	10.5	16.4	0.56	304	0.57	2.13	6.1	24.8	452

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
K13 (8894159)	12.2	60.7	<0.002	0.05	0.22	9.0	0.8	1.5	282	0.57	<0.01	4.1	0.28	0.28
K14 (8894160)	11.6	52.3	<0.002	0.03	0.10	8.0	<0.5	4.4	326	0.46	<0.01	5.0	0.28	0.25
K15 (8894161)	12.3	48.3	<0.002	0.05	0.35	10.0	0.8	1.9	307	0.95	0.06	4.7	0.38	0.27
K16 (8894162)	17.9	43.8	<0.002	0.03	0.24	7.7	<0.5	1.3	304	0.47	<0.01	5.1	0.24	0.23
K17 (8894163)	11.1	47.7	<0.002	0.03	0.27	7.3	0.7	1.5	310	0.46	<0.01	2.5	0.24	0.23
K18 (8894164)	17.2	45.1	<0.002	0.05	0.32	10.3	1.1	2.0	256	0.85	0.02	3.9	0.59	0.23
K19 (8894165)	10.9	50.6	<0.002	0.03	0.15	6.8	0.7	1.5	338	0.33	<0.01	2.8	0.20	0.25
L1 (8894166)	11.9	45.5	<0.002	0.08	0.09	7.4	1.0	16.6	278	0.48	<0.01	4.0	0.24	0.24
L2 (8894167)	11.7	51.4	<0.002	0.03	0.13	7.7	0.6	1.3	306	0.40	<0.01	3.9	0.23	0.26
L3 (8894168)	11.3	50.7	<0.002	0.04	0.07	8.4	1.0	1.2	322	0.43	<0.01	4.4	0.25	0.24
L4 (8894169)	11.2	49.8	<0.002	0.04	0.10	7.6	<0.5	1.1	332	0.41	<0.01	3.2	0.23	0.25
L5 (8894170)	11.0	49.2	<0.002	0.05	0.08	7.5	<0.5	1.2	335	0.43	<0.01	3.2	0.22	0.23
L6 (8894171)	11.5	52.9	<0.002	0.03	0.14	6.8	<0.5	1.2	325	0.38	<0.01	1.8	0.23	0.25
L7 (8894172)	10.6	50.8	<0.002	0.03	0.05	6.5	<0.5	1.7	342	0.33	<0.01	2.9	0.18	0.25
L8 (8894173)	11.7	52.8	<0.002	0.04	0.08	7.8	0.7	1.1	348	0.43	<0.01	3.4	0.26	0.25
L9 (8894174)	11.0	48.8	<0.002	0.02	0.16	4.7	<0.5	1.1	307	0.29	<0.01	3.4	0.18	0.24
L10 (8894175)	10.7	47.6	<0.002	0.03	0.12	6.6	<0.5	1.9	320	0.29	<0.01	2.2	0.18	0.23
L11 (8894176)	11.5	52.2	<0.002	0.03	0.11	7.3	0.6	1.1	353	0.37	<0.01	2.5	0.21	0.25
L12 (8894177)	12.6	51.0	<0.002	0.04	0.10	8.8	0.6	2.5	316	0.45	<0.01	3.5	0.28	0.25
L13 (8894178)	10.9	49.3	<0.002	0.03	0.11	8.2	0.6	1.2	321	0.38	<0.01	6.4	0.27	0.23
L14 (8894179)	11.7	53.9	<0.002	0.03	0.13	8.3	0.8	1.1	316	0.41	<0.01	6.0	0.27	0.26
L15 (8894180)	11.6	49.1	<0.002	0.04	0.11	9.6	0.6	1.3	281	0.93	<0.01	2.7	0.31	0.23
L16 (8894181)	10.8	52.7	<0.002	0.03	0.11	5.9	<0.5	1.2	312	0.33	<0.01	3.0	0.21	0.24
L17 (8894182)	11.8	49.4	<0.002	0.03	0.10	7.3	0.7	1.0	302	0.39	<0.01	2.9	0.21	0.24
L18 (8894183)	15.4	51.0	<0.002	0.07	0.19	9.4	1.1	1.1	331	0.35	<0.01	4.3	0.26	0.26
L19 (8894184)	16.9	72.8	<0.002	0.02	0.30	13.6	0.6	2.0	247	1.17	0.07	11.0	0.35	0.48
L20 (8894185)	13.1	66.0	<0.002	0.03	0.29	13.0	0.8	1.8	259	0.81	0.03	4.8	0.43	0.35
L21 (8894186)	11.9	64.9	<0.002	0.03	0.13	9.3	<0.5	1.5	289	1.12	<0.01	3.2	0.30	0.30
M1 (8894187)	12.4	55.5	<0.002	0.03	0.15	8.6	0.9	1.2	341	0.45	<0.01	4.3	0.26	0.26
M2 (8894188)	11.4	54.9	<0.002	0.03	0.14	8.4	0.5	1.1	304	0.47	<0.01	2.6	0.24	0.26
M3 (8894189)	11.0	51.1	<0.002	0.03	0.13	7.1	0.8	1.6	318	0.42	<0.01	2.9	0.24	0.24
M4 (8894190)	14.2	57.1	<0.002	0.04	0.24	8.3	1.0	1.6	327	0.52	<0.01	4.1	0.29	0.26

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 DATE RECEIVED: Nov 10, 2017 DATE REPORTED: Jan 03, 2018 SAMPLE TYPE: Other

Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID) RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
M5 (8894191)	12.4	57.2	<0.002	0.03	0.25	10.0	1.0	1.6	287	0.60	<0.01	7.1	0.34	0.30
M6 (8894192)	12.9	52.7	<0.002	0.03	0.16	10.6	0.6	2.3	296	0.53	<0.01	10.5	0.37	0.28
M8 (8894194)	16.1	60.8	<0.002	0.05	0.30	9.8	0.8	1.6	234	0.57	0.02	3.8	0.37	0.29
M9 (8894195)	14.3	50.2	<0.002	0.06	0.29	11.3	1.6	2.2	173	1.92	0.03	5.8	0.52	0.23
M10 (8894196)	13.4	61.8	<0.002	0.05	0.20	9.2	0.9	1.6	262	0.62	<0.01	4.6	0.32	0.29
M11 (8894197)	13.7	57.7	<0.002	0.05	0.29	10.2	1.2	1.5	242	0.80	<0.01	6.0	0.35	0.29
M12 (8894198)	13.3	50.1	<0.002	0.05	0.24	8.5	1.1	1.5	232	0.57	<0.01	6.6	0.31	0.27
M13 (8894199)	13.0	60.3	<0.002	0.04	0.19	9.4	0.8	4.6	254	0.55	<0.01	5.6	0.31	0.30
M14 (8894200)	11.2	53.9	<0.002	0.03	0.17	8.2	0.7	2.1	313	0.60	<0.01	3.4	0.26	0.25
M15 (8894201)	12.3	56.0	<0.002	0.04	0.36	10.8	0.9	1.5	255	0.48	<0.01	4.3	0.34	0.25
M16 (8894202)	11.7	50.9	<0.002	0.03	0.11	8.4	0.8	1.2	341	0.42	<0.01	3.2	0.26	0.25
M17 (8894203)	11.5	49.4	<0.002	0.02	0.11	7.8	<0.5	1.1	320	0.36	<0.01	2.9	0.23	0.23
M18 (8894204)	12.3	51.4	<0.002	0.03	0.18	8.5	0.9	1.3	299	0.41	<0.01	4.9	0.29	0.24
M19 (8894205)	11.9	49.6	<0.002	0.05	0.32	10.4	1.2	1.6	242	0.52	<0.01	4.0	0.34	0.26
M20 (8894206)	11.9	49.1	<0.002	0.04	0.13	8.4	0.9	1.5	316	0.41	<0.01	4.2	0.26	0.24
M21 (8894207)	12.7	48.5	<0.002	0.04	0.37	9.3	1.1	1.5	259	0.86	0.07	9.7	0.31	0.27
M22 (8894208)	12.5	50.3	<0.002	0.04	0.26	10.0	1.0	1.5	245	0.57	0.02	4.7	0.32	0.28
M23 (8894209)	13.0	47.1	<0.002	0.04	0.16	8.8	1.0	2.2	303	0.58	<0.01	10.3	0.29	0.25
M24 (8894210)	11.2	53.5	<0.002	0.04	0.24	9.9	1.3	1.6	244	0.55	0.02	4.8	0.33	0.27
M25 (8894211)	12.7	52.9	<0.002	0.04	0.30	10.2	1.0	1.6	274	0.60	0.03	6.1	0.33	0.25
M26 (8894212)	11.9	52.8	<0.002	0.05	0.24	8.8	1.0	1.5	262	0.81	<0.01	4.1	0.30	0.25
M27 (8894213)	10.7	51.9	<0.002	0.04	0.11	7.3	1.0	1.3	339	0.34	<0.01	3.3	0.23	0.24
M28 (8894214)	11.4	49.9	<0.002	0.04	0.10	8.4	1.1	1.6	324	0.52	0.01	3.7	0.27	0.23
M29 (8894215)	11.6	52.5	<0.002	0.03	0.18	7.3	0.5	1.4	299	0.48	<0.01	4.8	0.27	0.26
M30 (8894216)	10.5	50.2	<0.002	0.04	0.82	7.7	0.7	1.2	329	0.37	<0.01	2.3	0.24	0.23
M31 (8894217)	11.5	50.2	<0.002	0.03	0.14	8.4	0.5	1.2	341	0.41	<0.01	6.3	0.25	0.22
M32 (8894218)	11.0	50.6	<0.002	0.03	0.15	8.7	0.8	10.6	314	0.43	<0.01	5.0	0.27	0.23
M33 (8894219)	11.0	51.0	<0.002	0.04	0.12	9.0	0.8	1.3	326	0.47	<0.01	4.0	0.30	0.23
M34 (8894220)	12.0	50.9	<0.002	0.04	0.10	8.8	<0.5	16.2	330	0.44	<0.01	5.7	0.31	0.25
M35 (8894221)	10.6	46.8	<0.002	0.04	0.16	9.2	0.8	1.3	303	0.55	0.02	3.9	0.34	0.22
M36 (8894222)	12.1	52.4	<0.002	0.04	0.23	9.3	1.2	1.3	315	0.48	<0.01	11.1	0.32	0.25
M37 (8894223)	10.9	54.0	<0.002	0.04	0.10	8.8	0.7	1.2	304	0.44	<0.01	4.0	0.28	0.24

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586
PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample ID (AGAT ID)	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
M38 (8894224)		11.1	50.7	<0.002	0.04	0.09	8.5	0.8	1.2	321	0.46	<0.01	6.9	0.28	0.24
M39 (8894225)		13.3	57.9	<0.002	0.04	0.17	9.0	1.1	1.4	291	0.49	<0.01	5.2	0.30	0.27
M40 (8894226)		11.4	54.0	<0.002	0.03	0.10	8.5	0.9	1.2	347	0.41	<0.01	3.2	0.28	0.26
M41 (8894227)		11.6	53.8	<0.002	0.03	0.15	7.6	0.7	1.2	315	0.44	<0.01	3.7	0.27	0.26

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
K13 (8894159)	0.913	57.5	0.5	12.2	40.7	165
K14 (8894160)	0.850	58.9	0.3	11.3	45.7	150
K15 (8894161)	1.00	85.3	0.6	12.7	64.9	169
K16 (8894162)	0.835	53.8	0.3	10.2	42.2	105
K17 (8894163)	0.629	59.0	0.3	9.8	56.0	101
K18 (8894164)	0.969	117	0.7	11.2	102	125
K19 (8894165)	0.602	52.6	0.2	9.2	26.3	115
L1 (8894166)	0.783	51.8	0.2	9.4	23.9	122
L2 (8894167)	0.737	48.8	0.2	9.9	36.5	141
L3 (8894168)	0.753	57.3	0.2	11.1	48.1	129
L4 (8894169)	0.664	53.1	0.2	10.6	39.7	135
L5 (8894170)	0.634	53.1	0.1	9.6	36.3	110
L6 (8894171)	0.536	50.6	0.2	8.5	52.8	101
L7 (8894172)	0.519	45.9	<0.1	8.6	23.7	90.4
L8 (8894173)	0.661	62.8	0.2	10.7	33.3	133
L9 (8894174)	0.571	38.2	0.1	5.9	28.3	69.5
L10 (8894175)	0.562	47.0	<0.1	7.6	38.6	76.1
L11 (8894176)	0.475	54.7	0.2	9.3	36.0	73.2
L12 (8894177)	0.683	75.0	0.2	11.0	36.2	99.5
L13 (8894178)	0.802	65.5	0.2	10.5	29.7	141
L14 (8894179)	0.677	67.3	0.2	11.2	46.7	115
L15 (8894180)	0.730	79.7	0.4	12.3	39.0	90.8
L16 (8894181)	0.571	43.1	0.1	8.7	20.9	100
L17 (8894182)	0.690	46.9	0.2	8.8	25.4	127
L18 (8894183)	1.24	54.9	0.2	14.1	55.5	90.9
L19 (8894184)	1.35	89.3	0.7	12.7	51.7	126
L20 (8894185)	1.19	95.4	0.6	13.7	47.2	128
L21 (8894186)	0.710	67.7	0.3	9.4	40.5	98.2
M1 (8894187)	0.950	57.0	0.2	15.4	34.4	113
M2 (8894188)	0.664	56.9	0.2	11.2	62.1	105
M3 (8894189)	0.696	49.5	0.2	9.6	23.5	121
M4 (8894190)	0.843	62.3	0.3	12.5	41.9	136

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

Analyte:	U	V	W	Y	Zn	Zr
Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID) RDL:	0.005	0.5	0.1	0.1	0.5	0.5
M5 (8894191)	1.31	74.6	0.4	15.4	52.4	182
M6 (8894192)	1.18	77.4	0.3	15.2	37.7	167
M8 (8894194)	1.01	81.7	0.6	10.1	63.6	109
M9 (8894195)	1.26	96.7	1.0	10.6	84.5	113
M10 (8894196)	1.05	60.7	0.4	12.0	80.4	138
M11 (8894197)	1.14	74.4	0.4	13.6	65.3	132
M12 (8894198)	1.19	72.0	0.5	12.0	79.9	145
M13 (8894199)	1.01	65.0	0.3	11.2	62.7	153
M14 (8894200)	0.752	54.3	0.2	10.1	50.2	110
M15 (8894201)	0.994	90.8	0.4	12.6	57.6	149
M16 (8894202)	0.727	59.5	0.2	11.3	28.2	137
M17 (8894203)	0.727	65.2	0.2	9.6	24.5	116
M18 (8894204)	0.964	71.2	0.3	11.2	33.1	127
M19 (8894205)	1.14	95.7	0.5	12.2	39.4	128
M20 (8894206)	0.782	60.4	0.2	10.7	29.1	132
M21 (8894207)	1.17	76.9	0.5	11.6	41.4	139
M22 (8894208)	1.10	80.2	0.4	11.4	42.3	149
M23 (8894209)	1.13	61.4	0.3	12.9	36.0	160
M24 (8894210)	1.08	79.6	0.4	13.2	54.6	130
M25 (8894211)	1.20	77.2	0.4	14.2	37.5	174
M26 (8894212)	1.14	65.3	0.4	11.3	78.0	170
M27 (8894213)	0.630	54.7	0.1	9.1	31.1	97.0
M28 (8894214)	0.763	64.4	0.2	10.7	39.7	126
M29 (8894215)	0.889	57.1	0.3	10.0	35.3	159
M30 (8894216)	0.599	58.3	0.2	10.0	44.9	92.6
M31 (8894217)	0.737	64.5	0.1	11.5	29.0	95.5
M32 (8894218)	0.768	67.0	0.2	11.5	33.4	125
M33 (8894219)	0.788	72.2	0.4	11.6	35.6	122
M34 (8894220)	0.854	73.9	0.2	12.4	48.5	133
M35 (8894221)	0.825	83.9	0.3	12.1	49.6	161
M36 (8894222)	1.08	76.6	0.3	13.3	34.8	169
M37 (8894223)	0.805	68.9	0.2	11.2	35.7	114

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

DATE SAMPLED: Nov 09, 2017 | DATE RECEIVED: Nov 10, 2017 | DATE REPORTED: Jan 03, 2018 | SAMPLE TYPE: Other

	Analyte:	U	V	W	Y	Zn	Zr
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm
Sample ID (AGAT ID)	RDL:	0.005	0.5	0.1	0.1	0.5	0.5
M38 (8894224)		0.716	67.4	0.2	10.3	37.4	98.2
M39 (8894225)		0.923	69.1	0.3	11.5	53.3	126
M40 (8894226)		0.802	65.8	0.2	12.4	34.0	119
M41 (8894227)		0.752	62.3	0.2	10.1	60.9	130

Comments: RDL - Reported Detection Limit

8894159-8894227 As, Sb values may be low due to digestion losses.

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP. ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	REPLICATE #1				REPLICATE #2				REPLICATE #3				REPLICATE #4			
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD
Ag	8894159	0.25	0.29	14.8%	8894179	0.220	0.225	2.2%	8894200	1.88	1.02		8894221	0.30	0.27	10.5%
Al	8894159	7.03	7.05	0.3%	8894179	6.74	6.67	1.0%	8894200	6.59	6.34	3.9%	8894221	6.46	6.81	5.3%
As	8894159	1.63	1.67	2.4%	8894179	3.1	3.8	20.3%	8894200	2.6	1.8		8894221	2.5	3.7	
Ba	8894159	515	525	1.9%	8894179	503	508	1.0%	8894200	522	501	4.1%	8894221	466	476	2.1%
Be	8894159	1.56	1.56	0.0%	8894179	1.56	1.59	1.9%	8894200	1.45	1.29	11.7%	8894221	1.40	1.41	0.7%
Bi	8894159	0.103	0.109	5.7%	8894179	0.10	0.16		8894200	0.097	0.091	6.4%	8894221	0.10	0.10	0.0%
Ca	8894159	1.36	1.36	0.0%	8894179	1.48	1.50	1.3%	8894200	1.48	1.40	5.6%	8894221	1.53	1.58	3.2%
Cd	8894159	0.074	0.087	16.1%	8894179	0.10	0.09	10.5%	8894200	0.05	0.07		8894221	0.07	0.09	25.0%
Ce	8894159	33.8	34.4	1.8%	8894179	32.1	18.3		8894200	28.9	32.1	10.5%	8894221	23.7	27.6	15.2%
Co	8894159	16.3	16.8	3.0%	8894179	16.7	16.4	1.8%	8894200	10.8	10.5	2.8%	8894221	11.7	12.6	7.4%
Cr	8894159	71.7	72.1	0.6%	8894179	74.8	74.2	0.8%	8894200	55.8	54.3	2.7%	8894221	77.1	78.9	2.3%
Cs	8894159	1.84	1.86	1.1%	8894179	1.60	1.66	3.7%	8894200	1.63	1.56	4.4%	8894221	1.36	1.49	9.1%
Cu	8894159	8.2	12.9		8894179	10.9	10.7	1.9%	8894200	9.57	7.85	19.7%	8894221	4.0	4.0	0.0%
Fe	8894159	2.35	2.36	0.4%	8894179	2.69	2.67	0.7%	8894200	2.11	2.04	3.4%	8894221	3.06	3.21	4.8%
Ga	8894159	18.2	19.1	4.8%	8894179	17.2	18.1	5.1%	8894200	18.1	17.3	4.5%	8894221	17.9	19.3	7.5%
Ge	8894159	< 0.05	< 0.05	0.0%	8894179	< 0.05	< 0.05	0.0%	8894200	< 0.05	< 0.05	0.0%	8894221	< 0.05	< 0.05	0.0%
Hf	8894159	3.3	3.3	0.0%	8894179	2.4	2.4	0.0%	8894200	2.4	2.6	8.0%	8894221	3.4	3.7	8.5%
In	8894159	0.034	0.033	3.0%	8894179	0.026	0.030	14.3%	8894200	0.0252	0.0223	12.2%	8894221	0.029	0.030	3.4%
K	8894159	1.80	1.80	0.0%	8894179	1.56	1.54	1.3%	8894200	1.71	1.68	1.8%	8894221	1.44	1.51	4.7%
La	8894159	13.5	13.8	2.2%	8894179	14.5	8.1		8894200	11.0	12.6	13.6%	8894221	10.7	12.8	17.9%
Li	8894159	18.3	18.4	0.5%	8894179	17.6	17.2	2.3%	8894200	15.0	14.3	4.8%	8894221	16.6	17.8	7.0%
Mg	8894159	0.75	0.75	0.0%	8894179	0.768	0.751	2.2%	8894200	0.63	0.61	3.2%	8894221	0.67	0.70	4.4%
Mn	8894159	317	313	1.3%	8894179	380	392	3.1%	8894200	328	318	3.1%	8894221	417	437	4.7%
Mo	8894159	0.540	0.648	18.2%	8894179	0.33	0.33	0.0%	8894200	0.46	0.41	11.5%	8894221	0.46	0.46	0.0%
Na	8894159	1.96	1.98	1.0%	8894179	2.05	2.08	1.5%	8894200	2.19	2.07	5.6%	8894221	2.06	2.08	1.0%
Nb	8894159	7.90	7.72	2.3%	8894179	5.70	6.39	11.4%	8894200	5.71	5.63	1.4%	8894221	6.86	6.82	0.6%
Ni	8894159	39.5	41.5	4.9%	8894179	40.4	39.3	2.8%	8894200	27.5	27.1	1.5%	8894221	29.5	29.5	0.0%
P	8894159	481	497	3.3%	8894179	522	490	6.3%	8894200	389	403	3.5%	8894221	551	566	2.7%
Pb	8894159	12.2	13.6	10.9%	8894179	11.7	11.9	1.7%	8894200	11.2	11.3	0.9%	8894221	10.6	10.7	0.9%
Rb	8894159	60.7	62.4	2.8%	8894179	53.9	56.8	5.2%	8894200	53.9	53.3	1.1%	8894221	46.8	49.9	6.4%
Re	8894159	< 0.002	< 0.002	0.0%	8894179	< 0.002	< 0.002	0.0%	8894200	< 0.002	< 0.002	0.0%	8894221	< 0.002	< 0.002	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

S	8894159	0.05	0.05	0.0%	8894179	0.03	0.03	0.0%	8894200	0.03	0.03	0.0%	8894221	0.04	0.04	0.0%
Sb	8894159	0.224	0.254	12.6%	8894179	0.13	0.13	0.0%	8894200	0.17	0.12		8894221	0.16	0.15	6.5%
Sc	8894159	9.03	9.10	0.8%	8894179	8.3	8.2	1.2%	8894200	8.2	8.1	1.2%	8894221	9.2	9.4	2.2%
Se	8894159	0.8	0.8	0.0%	8894179	0.8	0.5		8894200	0.7	0.7	0.0%	8894221	0.84	1.05	22.2%
Sn	8894159	1.5	1.5	0.0%	8894179	1.15	1.21	5.1%	8894200	2.13	2.40	11.9%	8894221	1.31	1.39	5.9%
Sr	8894159	282	287	1.8%	8894179	316	311	1.6%	8894200	313	309	1.3%	8894221	303	319	5.1%
Ta	8894159	0.57	0.61	6.8%	8894179	0.413	0.473	13.5%	8894200	0.60	0.40		8894221	0.548	0.499	9.4%
Te	8894159	< 0.01	< 0.01	0.0%	8894179	< 0.01	< 0.01	0.0%	8894200	< 0.01	< 0.01	0.0%	8894221	0.02	< 0.01	
Th	8894159	4.11	4.75	14.4%	8894179	6.0	2.5		8894200	3.43	3.76	9.2%	8894221	3.9	3.9	0.0%
Ti	8894159	0.283	0.273	3.6%	8894179	0.27	0.28	3.6%	8894200	0.26	0.25	3.9%	8894221	0.34	0.34	0.0%
Tl	8894159	0.280	0.298	6.2%	8894179	0.26	0.27	3.8%	8894200	0.25	0.25	0.0%	8894221	0.22	0.23	4.4%
U	8894159	0.913	0.979	7.0%	8894179	0.677	0.603	11.6%	8894200	0.752	0.774	2.9%	8894221	0.825	0.929	11.9%
V	8894159	57.5	58.0	0.9%	8894179	67.3	65.2	3.2%	8894200	54.3	53.9	0.7%	8894221	83.9	82.5	1.7%
W	8894159	0.5	0.5	0.0%	8894179	0.2	0.2	0.0%	8894200	0.2	0.2	0.0%	8894221	0.3	0.3	0.0%
Y	8894159	12.2	11.3	7.7%	8894179	11.2	10.8	3.6%	8894200	10.1	10.1	0.0%	8894221	12.1	12.3	1.6%
Zn	8894159	40.7	44.3	8.5%	8894179	46.7	48.1	3.0%	8894200	50.2	43.4	14.5%	8894221	49.6	51.8	4.3%
Zr	8894159	165	149	10.2%	8894179	115	114	0.9%	8894200	110	114	3.6%	8894221	161	161	0.0%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

AGAT Laboratories

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 17T282586

PROJECT:

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

(201-071) 4 Acid Digest - Metals Package, ICP/ICP-MS finish

	CRM #1 (ref.SY-4)				CRM #2 (ref.GTS-2A)				CRM #3 (ref.Till-2)				CRM #4 (ref.SY-4)			
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.76	98%	90% - 110%	6.96	6.52	94%	90% - 110%	8.17	8.5	104%	90% - 110%	10.95	10.96	100%	90% - 110%
As					124	124	100%	90% - 110%	26	28	107%	90% - 110%				
Ba	340	336	99%	90% - 110%	186	174	93%	90% - 110%	540	550	101%	90% - 110%	340	342	100%	90% - 110%
Be									4.0	4.2	105%	90% - 110%				
Ca	5.72	5.68	99%	90% - 110%	4.01	3.76	94%	90% - 110%	0.907	0.959	106%	90% - 110%	5.72	5.73	100%	90% - 110%
Ce	122	130	107%	90% - 110%	24	22	92%	90% - 110%	98	107	110%	90% - 110%	122	122	100%	90% - 110%
Co	2.8	3.0	107%	90% - 110%	22.1	24.2	109%	90% - 110%					2.8	3.0	107%	90% - 110%
Cr									60.3	59.3	98%	90% - 110%				
Cu	7	7	95%	90% - 110%	88.6	81.6	92%	90% - 110%	150	153	102%	90% - 110%				
Fe	4.34	3.98	92%	90% - 110%	7.56	6.85	90%	90% - 110%	3.77	3.72	99%	90% - 110%	4.34	4.05	93%	90% - 110%
Ga	35	40	114%	90% - 110%									35	39	111%	90% - 110%
K	1.37	1.39	101%	90% - 110%	2.021	1.941	96%	90% - 110%					1.37	1.42	104%	90% - 110%
La	58	60	104%	90% - 110%					44	47	106%	90% - 110%	58	55	95%	90% - 110%
Li	37	39	105%	90% - 110%					47	48	103%	90% - 110%	37	39	105%	90% - 110%
Mg	0.325	0.303	93%	90% - 110%	2.412	2.305	96%	90% - 110%	1.10	1.11	101%	90% - 110%	0.325	0.313	96%	90% - 110%
Mn					1510	1360	90%	90% - 110%	780	753	97%	90% - 110%				
Mo									14	14	103%	90% - 110%				
Na	5.267	5.464	104%	90% - 110%	0.617	0.6	97%	90% - 110%	1.624	1.781	110%	90% - 110%	5.267	5.512	105%	90% - 110%
Nb									20	19	95%	90% - 110%	13	15	115%	90% - 110%
Ni	9	9	95%	90% - 110%	77.1	69.8	91%	90% - 110%	32	34	105%	90% - 110%	9	7	82%	90% - 110%
P					892	968	109%	90% - 110%								
Pb	10	10	102%	90% - 110%					31	33	107%	90% - 110%	10	9	95%	90% - 110%
Rb	55	57	103%	90% - 110%					143	155	108%	90% - 110%	55	55	99%	90% - 110%
S					0.348	0.375	108%	90% - 110%								
Sc									12	12	104%	90% - 110%	1.1	0.8	74%	90% - 110%
Sr	1191	1231	103%	90% - 110%	92.8	88.7	96%	90% - 110%	144	155	107%	90% - 110%	1191	1246	105%	90% - 110%
Ta	0.9	1	106%	90% - 110%					1.9	1.7	89%	90% - 110%	0.9	1.1	122%	90% - 110%
Th	1.4	1.2	87%	90% - 110%					18.4	18.6	101%	90% - 110%	1.4	1.2	83%	90% - 110%
Ti	0.172	0.163	95%	90% - 110%					0.53	0.48	90%	90% - 110%	0.172	0.168	98%	90% - 110%
U	0.8	0.6	71%	90% - 110%					5.7	5.2	91%	90% - 110%				
V	8	7	82%	90% - 110%					77	76	98%	90% - 110%	8	7	89%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: CRUZ COBALT CORP.

ATTENTION TO: Jason Gigliotti, Jim Nelson

W									5	5	100%	90% - 110%				
Y									40	37	92%	90% - 110%				
Zn	93	92	99%	90% - 110%	208	192	92%	90% - 110%	130	127	98%	90% - 110%	93	88	95%	90% - 110%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: CRUZ COBALT CORP.
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 17T282586
ATTENTION TO: Jason Gigliotti, Jim Nelson
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ba	MIN-200-12020		ICP-MS
Be	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
In	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Ta	MIN-200-12020		ICP-MS
Te	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS