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

## **2021 ASSESSMENT REPORT ON THE HECTOR PROPERTY**

**Work Completed:**  
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  
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Prepared By: APEX Geoscience Ltd.  
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Effective Date: November 8, 2021

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## 1 Summary

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) within the Coleman and Gillies Limit Townships, Larder Lake Mining Division, Timiskaming District, Ontario, Canada. It is approximately 500 kilometres (km) north of Toronto, and 6 km southwest 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.

APEX Geoscience Ltd. (“APEX”) was retained by Cruz Cobalt during 2021 as consultants to execute a diamond drilling program and complete an assessment report specific to the Hector Property. This assessment report presents the results of the 2021 diamond drilling program. Unless otherwise stated, all units used in this report are metric and all coordinates are referenced to the North American Datum (NAD) 1983, Universal Transverse Mercator (UTM) Zone 17 North.

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.

During 2017 and 2018, Cruz Cobalt conducted early exploration activities at the Hector Property. The work completed comprised data compilation and review, an airborne geophysical survey, ground magnetic geophysical surveys, prospecting, rock and soil geochemical surveys, and diamond drilling.

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 and 2018 soil geochemical results 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. 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.

Ten NQ diameter diamond drill holes, totalling 843 m, were completed during the 2018 program. 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. 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.

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 Paleoproterozoic 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.

The 2021 drilling program was completed between June 28 and July 20, 2021, including mobilization and demobilization. The total cost to complete the 2021 exploration program was \$192,232.43. The program was supervised by APEX Geoscience Ltd. of Edmonton, Alberta, and executed by Vital Drilling Services of Sudbury, Ontario. Drill core logging and sampling was completed by APEX field geological staff.

The 2021 drilling targeted lateral and down-dip extensions of mineralization intersected during the 2018 drilling program, as well as the prospective lower contact of the Nipissing diabase sills with Archean volcanic basement rocks at depth. No economic grades were returned; however, zones of anomalous silver-copper mineralized mafic volcanic rocks were encountered in holes 21HC01 and 21HC02, returning assays of 0.87 g/t Ag (grams-per-tonne silver) and 0.01% Cu (copper) over 32.3 metres from a depth of 279.7 m in 21HC01; including a higher-grade interval of 1.06 g/t Ag over 19.5 m from a depth of 286.5 m yielding individual assays of up to 3.2 g/t Ag. A similar, but narrower mineralized zone was intersected in 21HC02. Mineralization in the mafic volcanic rocks is characterized by moderate chlorite alteration and silica flooding accompanied by fine grained disseminated chalcopyrite-pyrite mineralization.

In addition to the volcanic hosted silver-copper zone, several cobalt-copper intervals occur within drill holes 21HC01 and 21HC02 that are comparable to values returned during Cruz's initial 2018 drill campaign including: 0.03% Co (cobalt) and 0.09% Cu over 1 metre at a depth of 143 metres, and 0.01% Co and 0.12% Cu over 1 metre at 74 metres downhole within 21HC02; and 0.012% Co and 0.07% copper over 1 metre at 153.5 metres downhole within 21HC01.

Drill hole 21HC03 targeted a north-northwest striking fault structure that juxtaposes Nipissing diabase and Archean basement rocks to the north. The hole remained within diabase to the end-of-hole depth of 249 m; however, textural variations within the Nipissing diabase, and variation observed in the mineralization and magnetic susceptibility confirm the presence of a west-dipping, multi-phase sill complex.

Based on the presence of silver-cobalt arsenide vein intersects in drill core and numerous historic occurrences, airborne and ground magnetic geophysical anomalies, cobalt and silver in rock and soil geochemical anomalies, and favourable geology, follow-up

exploration is warranted at the Hector Property. Exploration work should include, but not be limited to:

Phase 1: A surface exploration program of rock and soil geochemical sampling, ground magnetic surveys, and geologic mapping designed to evaluate the silver-cobalt arsenide vein potential of the Kelvin Lake and Montreal River fault zones. Geologic mapping should focus on defining the geometry of the Nipissing Diabase sills, and on identifying areas with the potential to host Coleman Member sediments overlain by diabase; particularly in proximity to exposed Archean basement and the Huronian unconformity in the Montreal River area. The results of geologic mapping should be used to prioritize rock, soil and ground magnetic surveys over geologically perspective targets. The estimated cost to complete Phase 1 exploration is \$100,000.

Phase 2: If surface exploration results are favorable, drill testing of priority targets should be completed. Diamond drilling of approximately 10 holes totalling 2,000 m should be completed. The estimated cost to complete Phase 2 exploration is \$500,000.



## 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) within the Coleman and Gillies Limit Townships, Larder Lake Mining Division, Timiskaming District, Ontario, Canada. It is 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 2021 as consultants to execute a diamond drilling program and complete an assessment report specific to the Hector Property. Three drill holes were completed at the Property, totaling 837 metres. The drilling program was completed between June 28 and July 20, 2021. The total cost to complete the 2021 drilling program and assessment report was \$192,232.43.

Mr. Kristopher Raffle, B.Sc., P.Geo., Principal of APEX, Mr. Mo Asmail, M.Sc., Project Geologist of APEX, and Mr. Byron Yeung, B.Sc., Geologist of APEX, are the authors of this report. Mr. Raffle supervised the 2021 exploration program and the preparation of this assessment report. Mr. Asmail was on site as the Project Geologist for the duration of the diamond drilling phase. Mr. Yeung was on site as a core logging geotechnician during most of the drilling phase.

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 within the Coleman and Gillies Limit Townships, Timiskaming District, Ontario, Canada. It is 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 Property is 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. The approximate location in UTM coordinates is 595,000 metres East, 5,245,000 metres North, NAD 1983, Zone 17.

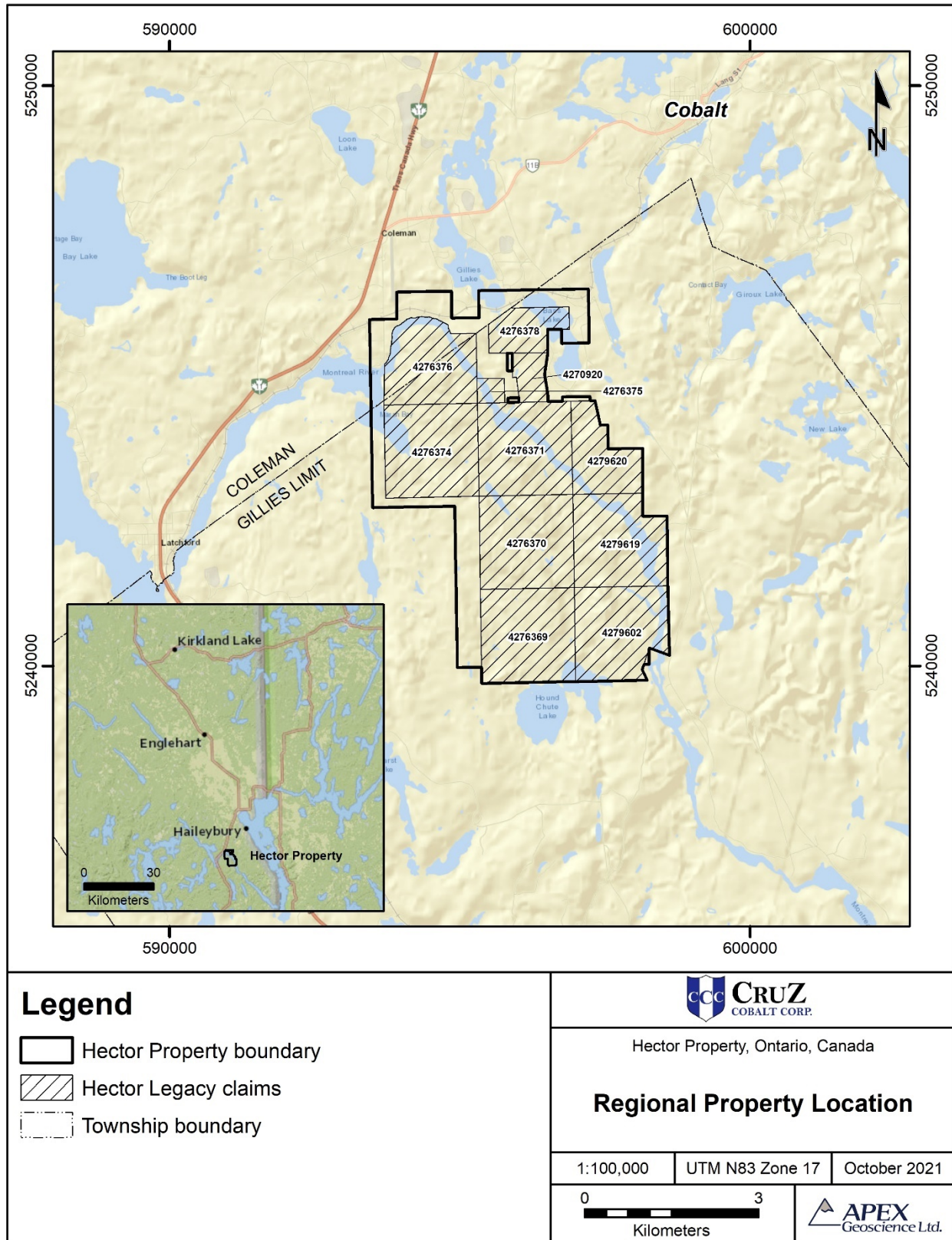
The Property is comprised of 126 unpatented mining claims covering an area of approximately 2,243 ha (Table 3.1; Figure 3.2). As of the Effective Date of this assessment report, the Ontario Ministry of Energy, Northern Development and Mines (MNDM), Mining Lands Administration System (MLAS) website (<https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/mlas-map-viewer>) lists the claims comprising the Hector Property as active and 100% owned by Cruz Cobalt.

#### 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; Figure 3.1). 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 is comprised 97 single cell and 29 boundary cell mining claims and is subject to annual assessment work requirements of \$43,200.00.

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.

Figure 3.1 Hector Property Regional Location



**Table 3.1 Hector Property Mining Claim Description and Status**

<b>Mining Claim</b>	<b>Legacy Claim ID</b>	<b>Township</b>	<b>Tenure Type</b>	<b>Anniversary Date</b>	<b>Tenure Holder (%)</b>
102671	4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
102672	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
102673	4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
102946	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
102947	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
106206	4276370, 4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
110483	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
117984	4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
118231	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
118299	4276374, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
118300	4276371, 4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
118301	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
118346	4279619	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
119515	4276376	COLEMAN	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
121214	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
121215	4276378	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
122686	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
125027	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
126362	4276374, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
128384	4276375, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
134773	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
136283	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
136284	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
142333	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
142334	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
150733	4276370, 4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.

2021 Assessment Report on the Hector Property

<b>Mining Claim</b>	<b>Legacy Claim ID</b>	<b>Township</b>	<b>Tenure Type</b>	<b>Anniversary Date</b>	<b>Tenure Holder (%)</b>
153024	4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
154325	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
156338	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
156339	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
162417	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
162418	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
165777	4276378	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
165778	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
169658	4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
170914	4279619, 4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
170964	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
171004	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
173145	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
173189	4279619	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
175779	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
178922	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2027-07-19	(100) Cruz Cobalt Corp.
178923	4270920	GILLIES LIMIT	Single Cell Mining Claim	2027-07-19	(100) Cruz Cobalt Corp.
178924	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2027-07-19	(100) Cruz Cobalt Corp.
179200	4276378	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
180941	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
182454	4276369, 4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
182455	4276369, 4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
186181	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
186182	4276369	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
189160	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
196998	4276369, 4276370, 4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.

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Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
198879	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
198880	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
198881	4276369	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
206902	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
206955	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
206956	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
209185	4276375	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
215409	4276369	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
215410	4276369	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
215976	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
215977	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
215978	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
218349	4276369, 4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
218350	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
219120	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
219121	4279620	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
219122	4279619, 4279620	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
221697	4276376	COLEMAN	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
225794	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
227068	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
227119	4276371, 4276374, 4276375, 4276376	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
227169	4279619	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
227170	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
229169	4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
229170	4276376	COLEMAN	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
233050	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.

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<b>Mining Claim</b>	<b>Legacy Claim ID</b>	<b>Township</b>	<b>Tenure Type</b>	<b>Anniversary Date</b>	<b>Tenure Holder (%)</b>
233975	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
234033	4276371, 4276375	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
253491	4276369, 4276370	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
253572	4276370, 4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
253676	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2027-07-19	(100) Cruz Cobalt Corp.
255721	4276370	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
260417	4276378	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
265569	4279602	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
266313	4276370, 4276371, 4279619	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
266889	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
273809	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
274283	4279620	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
274385	4279619	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
280513	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
281998	4276369	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
281999	4276369	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
282000	4276369	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
282050	4276371	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
282584	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
286376	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
286377	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
286423	4276370, 4276371, 4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
289115	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
290178	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2027-07-19	(100) Cruz Cobalt Corp.
290631	4276371	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
293733	4276374, 4276376	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.

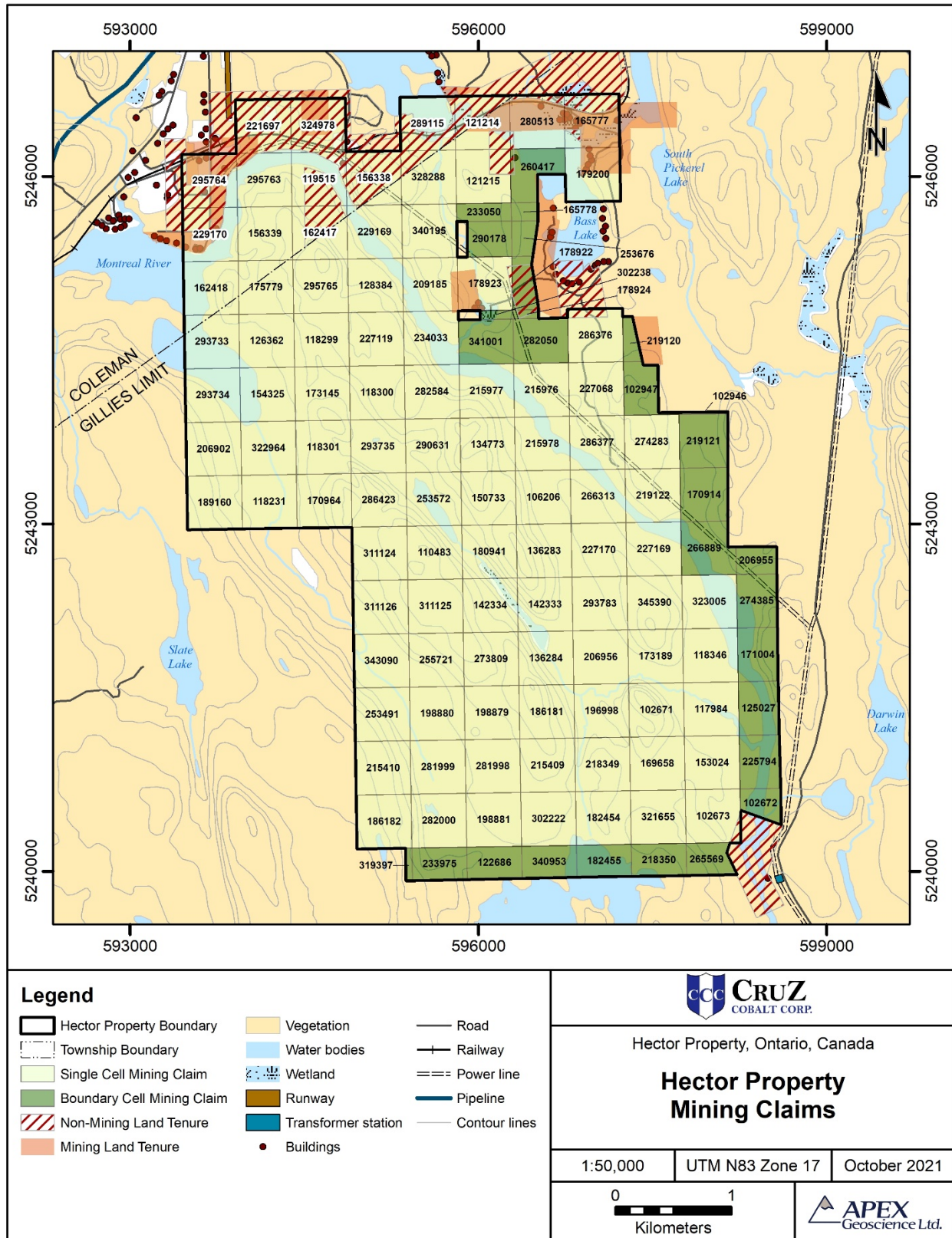


Mining Claim	Legacy Claim ID	Township	Tenure Type	Anniversary Date	Tenure Holder (%)
293734	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
293735	4276371, 4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
293783	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
295763	4276376	COLEMAN	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
295764	4276376	COLEMAN	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
295765	4276376	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
302222	4276369	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
302238	4270920	GILLIES LIMIT	Boundary Cell Mining Claim	2027-07-19	(100) Cruz Cobalt Corp.
311124	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
311125	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
311126	4276370	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
319397	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
321655	4279602	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
322964	4276374	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
323005	4279619	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
324978	4276376	COLEMAN	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
328288	4276378	COLEMAN, GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
340195	4276378	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
340953	4276369	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
341001	4276371	GILLIES LIMIT	Boundary Cell Mining Claim	2027-09-26	(100) Cruz Cobalt Corp.
343090	4276370	GILLIES LIMIT	Single Cell Mining Claim	2026-09-26	(100) Cruz Cobalt Corp.
345390	4279619	GILLIES LIMIT	Single Cell Mining Claim	2027-09-26	(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-21-000121	Jun 2, 2021	Jun 1, 2024	4270920, 4275172*, 4276369, 4276370, 4279371, 4276374, 4276375, 4276376, 4276378, 4279602, 4279619, 4279620  *not included in permit

Figure 3.2 Hector Property Mining Claims



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.

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 holds an exploration permit (Permit # PR-21-000121; Table 3.2), issued on June 2, 2021 and valid until June 1, 2024. The permit allows for the completion of limited mechanized drilling, mechanized striping, line cutting and the construction of 1 to 5 diamond drill pads. Planned activities detailed in the approved permit application covers the majority of prospective areas on the Property including Bass Lake, Kelvin Lake, and South Keora shaft areas.

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 this report, the only work requiring a permit that has been completed on the Property was the 2018 diamond drilling of 10 drill holes and the 2021 diamond drilling of 3 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 from the highway via a network of concession roads and tertiary routes, paved or otherwise, which afford excellent access to the 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.

### **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

The town of Cobalt (population ~1,100) is located approximately 6 km northeast of the Hector Property. All basic amenities are available in Cobalt, including accommodations, food, fuel, and basic supplies.

The city of Temiskaming Shores (population ~9,920), is located about 20 km northeast of the Property along the Trans-Canada Highway 11. Temiskaming Shores was created by the amalgamation of the towns of New Liskeard, Haileybury and Dymond in 2004. The town names are often still used interchangeably. All services are available in Temiskaming Shores, including housing, hotel accommodations, groceries, restaurants, supplies, general labour, hospital services, rail, bus and taxi services, and many other goods and services. Limited industry services are also available, including drilling contractors and heavy equipment operators.

The major regional mining centres of Sudbury and Timmins lie 200 km to the north and southwest of the Property, respectively. Full industry services are available including multiple drilling contractors, heavy equipment operators, assay labs, mining and exploration supplies, skilled labour, and technical services.

## 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.



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.

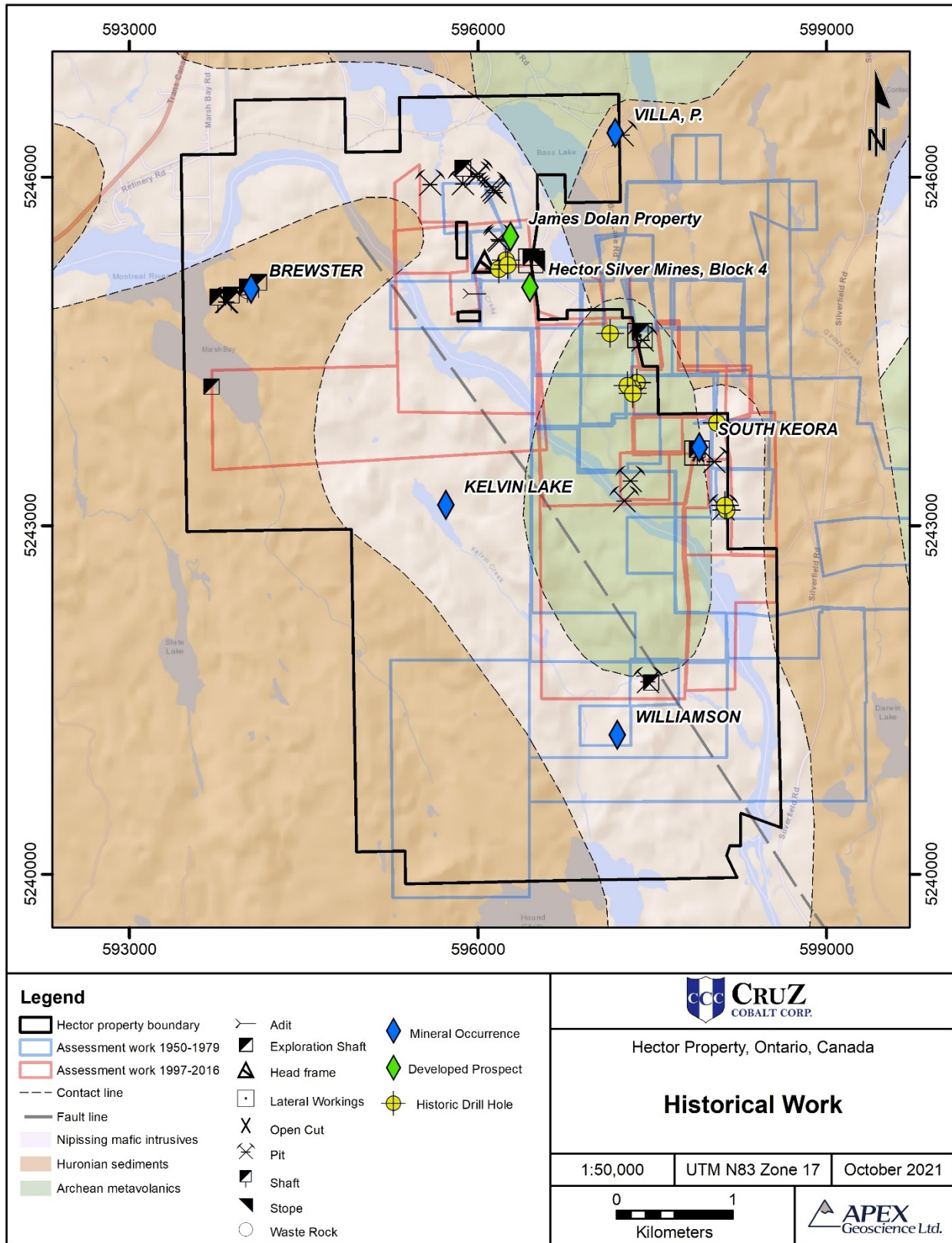
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Assessment Report ID	Year	Performed For	Work Description	Work Performed
31M05SE0092	1965	Silver Tower Mines Ltd	Geological Survey / Mapping	Detail Bedrock Mapping, 13 man-days, no samples reported. Southwestern corner of the current property outlies, 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)

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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 ( $\pm$ 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 ( $\pm$ 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 activities 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-nicolite 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 Exploration and Development Work Conducted by Cruz Cobalt**

During 2017 and 2018, Cruz Cobalt conducted early exploration activities at the Hector Property. The work completed comprised data compilation and review, an airborne geophysical survey, ground magnetic geophysical surveys, prospecting, rock and soil geochemical surveys, and diamond drilling.

### **5.2.1 2017 Airborne Survey**

Eagle Geophysics Ltd. ("Eagle") was retained by Cruz Cobalt to complete the 522.9 line-km helicopter-borne geophysical magnetometer and very low frequency electromagnetic (VLF-EM) survey over the Hector Property during August 2017. Simcoe Geoscience Limited processed, compiled, levelled, inverted and summarized the airborne geophysical survey results in September 2017. Campbell & Walker Geophysics Limited carried out additional geophysical inversion modelling on the dataset in September 2017.

The total magnetic intensity (TMI) results and to a greater extent the tilt derivative and vertical gradient products reveal dominantly northwest tending magnetic high domains

and magnetic low lineaments across the survey area. A major magnetic low lineament coincident is coincident with a narrow topographic depression trending northwest through the Williamson, Kelvin Lake, and Brewster occurrences, with a second less prominent magnetic low lineament paralleling the trace of the Montreal River (Raffle, 2019).

Preliminary inversion work on the Hector area indicates the broad diabase sill to have a steeper dip and have more dike-like geometry. Known mineralized areas are hosted within the structure, through second-order, northeast trending faults appear to localize mineralized fractures (Hughes, 2017).

Northeast and east-northeast trending VLF conductors are well defined in the north and were considered to be structures hosting some of the mineralization in the area (Proenza & Christian, 2018).

### **5.2.2 2017 & 2018 Soil & Rock Sampling**

Following the 2017 airborne survey, Cruz Cobalt retained Jean Marc Gaudreau to complete a soil geochemical survey west of Bass Lake, covering an area of approximately 1.14 ha containing historical shafts and pits (Figure 5.2). 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.

In 2018, APEX Geoscience Ltd. (“APEX”) was retained by Cruz Cobalt to further compile and review historical data, complete soil and rock geochemical sampling, a ground geophysical survey, and a diamond drilling program at the Hector Property. The 2018 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 soil geochemical survey was also completed west of Bass Lake, covering an area of approximately 1.6 ha (Figure 5.3). 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. A total of 203 samples were collected from Ah horizon soils (humus).

The 2017 and 2018 soil geochemical results 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 (Raffle et al., 2019):

- 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 5.2 2017 B-horizon Soil Geochemical Survey

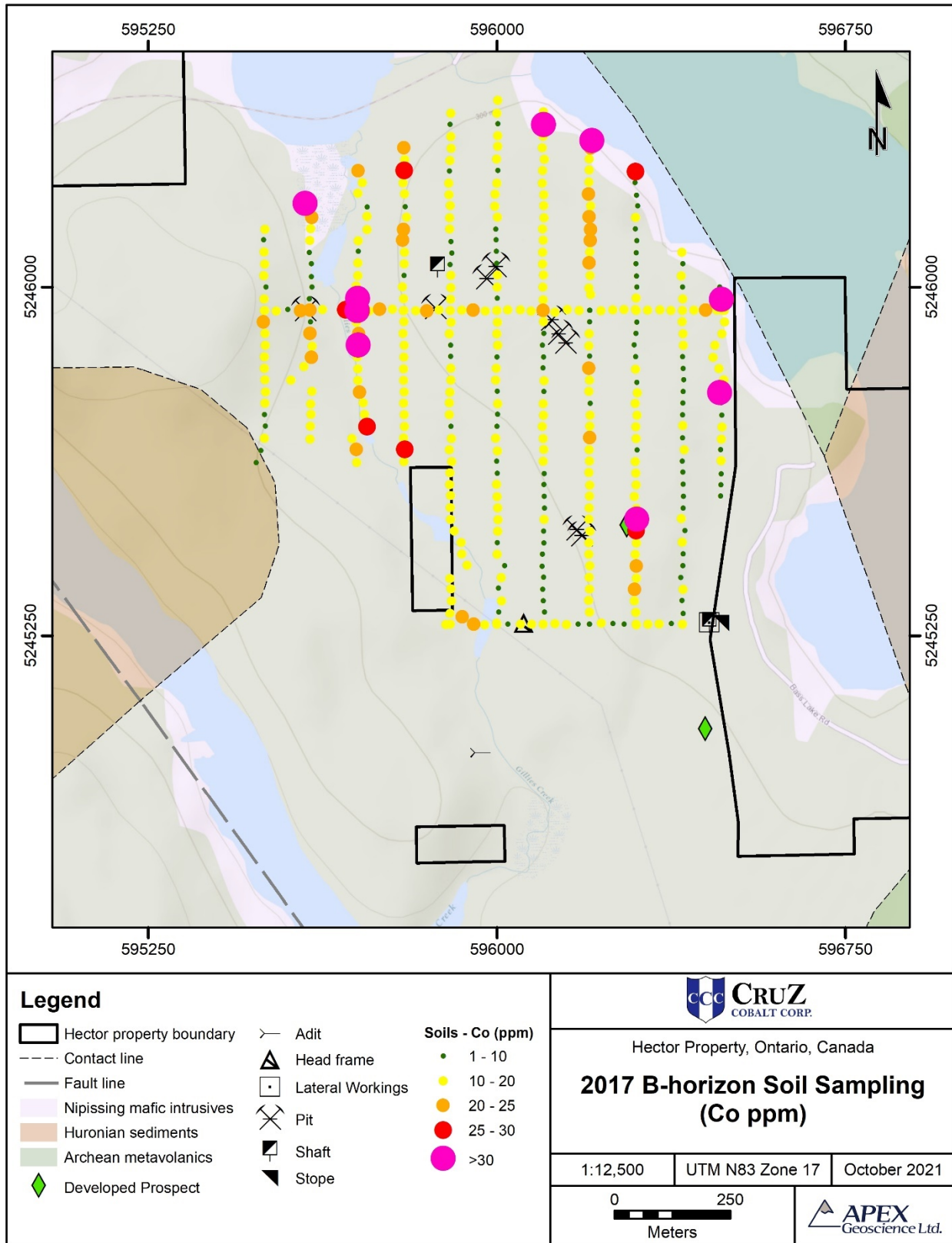
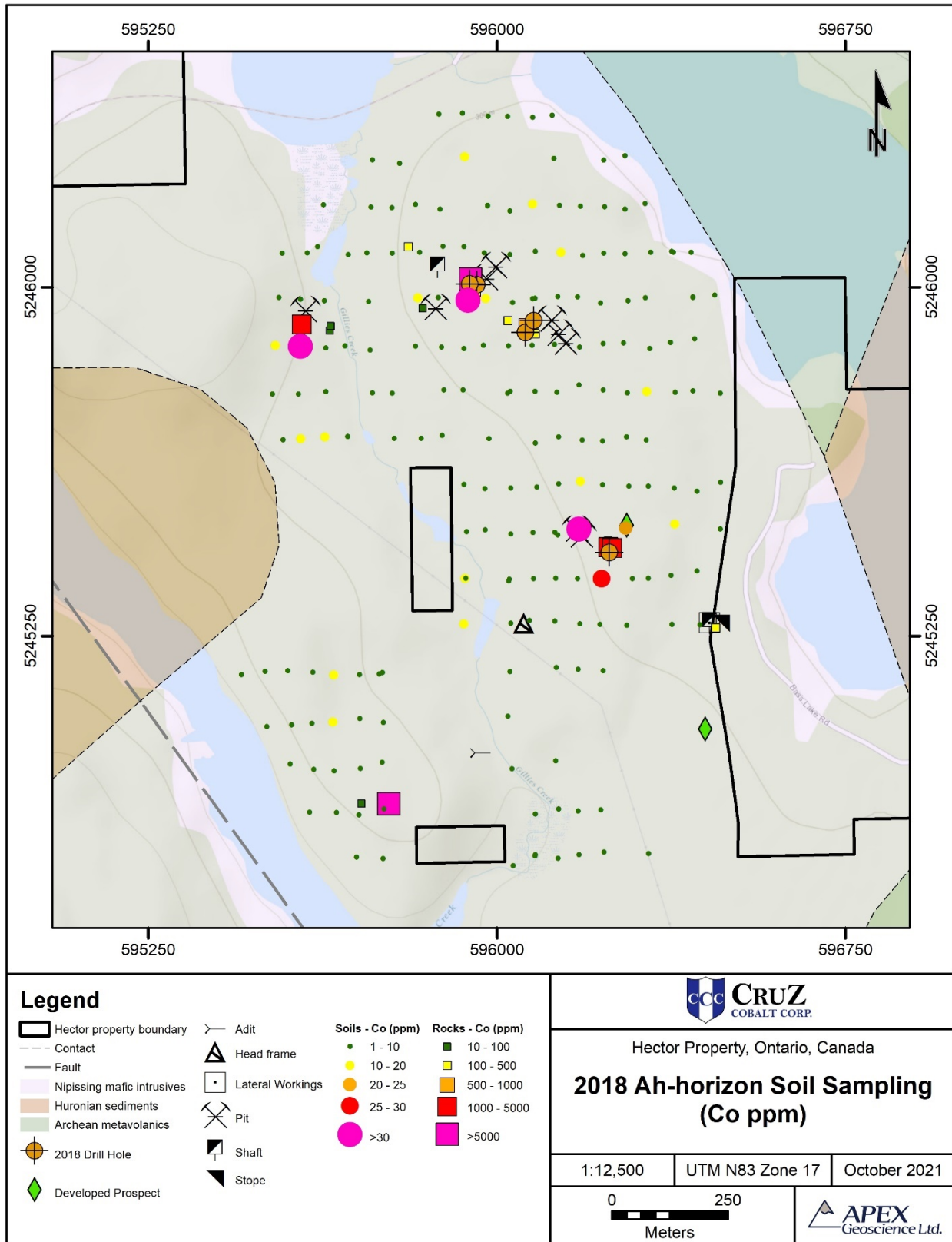


Figure 5.3 2018 Ah-horizon Soil Geochemical Survey, Rock Sampling and Drilling



A total of 43 rock samples were collected during 2018 in the vicinity of Bass Lake, in the northeast part of the Hector Property (Figure 5.3). The rock sampling campaign tested historical occurrences, known pits, shafts and mineralized veins, and new sites of interest. Rock samples were representative of the mineralized vein systems within the property and typically found in outcrops, talus and float. 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 (Raffle et al., 2019).

### **5.2.3 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. The ground magnetic 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.

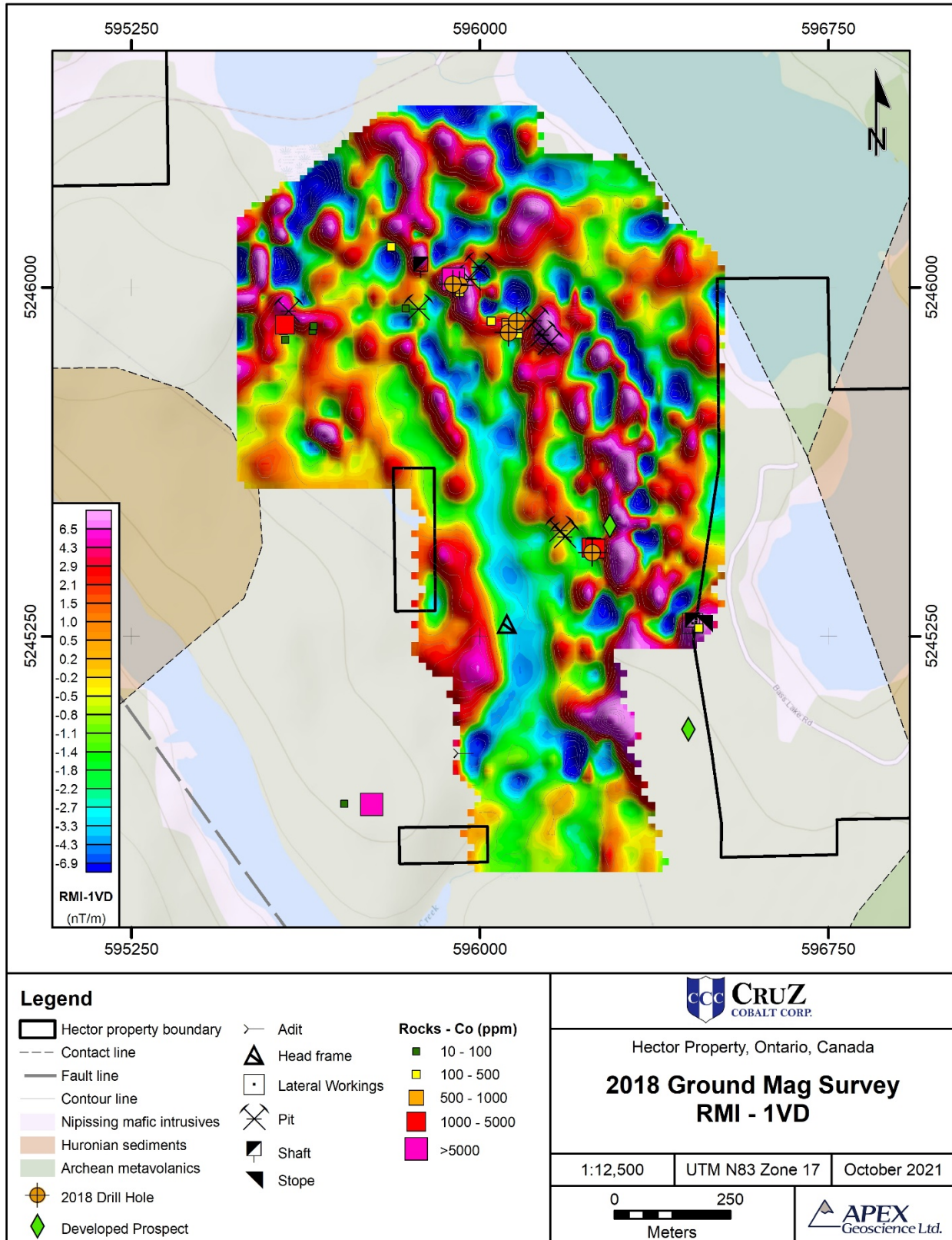
Residual magnetic intensity (RMI) and RMI first vertical derivative (1VD; Figure 5.4) data show laterally persistent linear highs and corresponding lows paralleling the structural trend at the Property. The high anomalies may represent stronger magnetic phases within the diabase complex; the magnetic lows are interpreted as structural jointing and/or localized offsets (faults).

The magnetic survey results provide a significant improvement in resolution versus the previous 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 (Raffle et al., 2019):

- 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 Gillies East.
- 2) 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 5.4 2018 Ground Magnetometer Survey Residual Magnetic Intensity First Vertical Derivative (RMI - 1VD)**



### 5.2.4 2018 Drilling

Ten NQ diameter diamond drill holes, totalling 843 m, were completed during the 2018 program. 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. Significant drill hole intercepts are presented in Table 5.4.

**Table 5.4. 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	-	-
	<i>and</i>	24	25	1	110	-	-	-
	18HC02	83.45	84.45	1	310	60	-	-
	<i>and</i>	89.45	91.45	2	110	110	-	-
	<i>and</i>	94.33	95.02	0.69	130	150	-	-
	18HC03	11.8	17	5.2	-	127	-	-
	<i>and</i>	89.1	89.6	0.5	130	240	-	-
	<i>and</i>	93.4	95.5	2.1	90	300	-	-
Gillies East 1	18HC04	92	93	1	80	410	-	-
	18HC05	12	14	2	70.00	50.00	-	-
	<i>and</i>	30.8	31.3	0.5	40.00	230.00	-	-
	18HC06	10.5	15.5	5	42	162	-	-
	<i>and</i>	50	51	1	50	650	-	-
	18HC07	4.0	4.5	0.5	30.00	110.00	-	-
Gillies East 2	<i>and</i>	32	33	1	40.00	110.00	-	-
	18HC08	8	9	1	-	-	37	1.3
	<i>and</i>	18	21	3	97	57	-	-
	18HC09	18	23	5	-	472	-	-
	<i>including</i>	18	19	1	-	1420	-	-
	<i>and</i>	74.15	74.65	0.5	120	-	21	-
	18HC10	15	16	1	110	-	33	-
	<i>and</i>	18	21	3	-	283	-	-
<i>including</i>	19	20	1	-	560	-	-	

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

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 (Raffle et al., 2019).

The Gillies East 1 target is a northwest trending, sub-vertical vein zone intermittently exposed on the surface over a 100 m strike length. It is associated with anomalous cobalt in rock and soil values. Holes 18HC05 through 18HC07 drilled across the projected strike of the vein, intersecting a broad zone of anomalous copper 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, returned 650 ppm Cu over 1 m core length starting at a depth of 50 m down hole in 18HC06 (Raffle et al., 2019).

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 ( $\pm$ chlorite) veins, and clotty pyrite-chalcopyrite (Raffle et al., 2019).

### **5.3 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; Figure 5.1). During 2018, the James Dolan occurrence was subject to surface rock sampling and subsequent diamond drill testing by Cruz Cobalt.

## 6 Geological Setting and Mineralization

### 6.1 Regional Geology

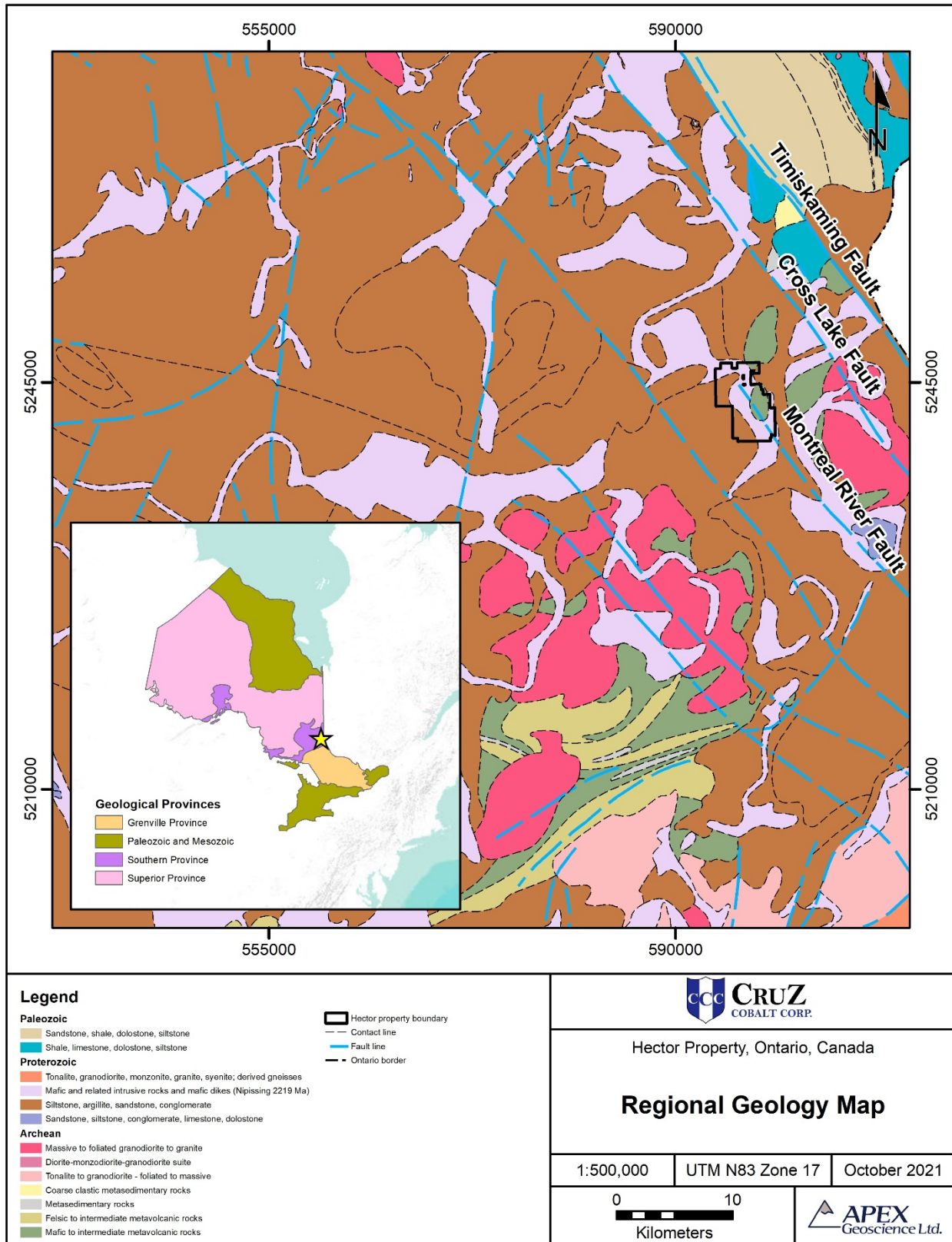
The Cobalt - Gowganda silver mining camp is located in the northeastern part of the Southern Province, proximal to the boundary of the Superior and Grenville provinces, also known as the Cobalt Embayment. This embayment extends for approximately 200 km from Gowganda in the northeast to southeast of Cobalt. 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<sup>2</sup>), 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.

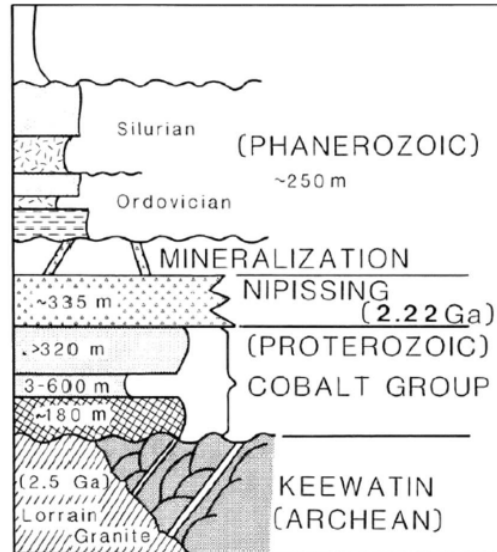
Four formations were deposited in the embayment, the Gowganda, Lorrain, Gordon Lake and River Bar forming the most upper sedimentary cycle of the Huronian Supergroup, collectively known as the Cobalt Group (Bennett et al. 1991). The Gowganda Formation is subdivided into the lower Coleman Member and the 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 fluvial 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

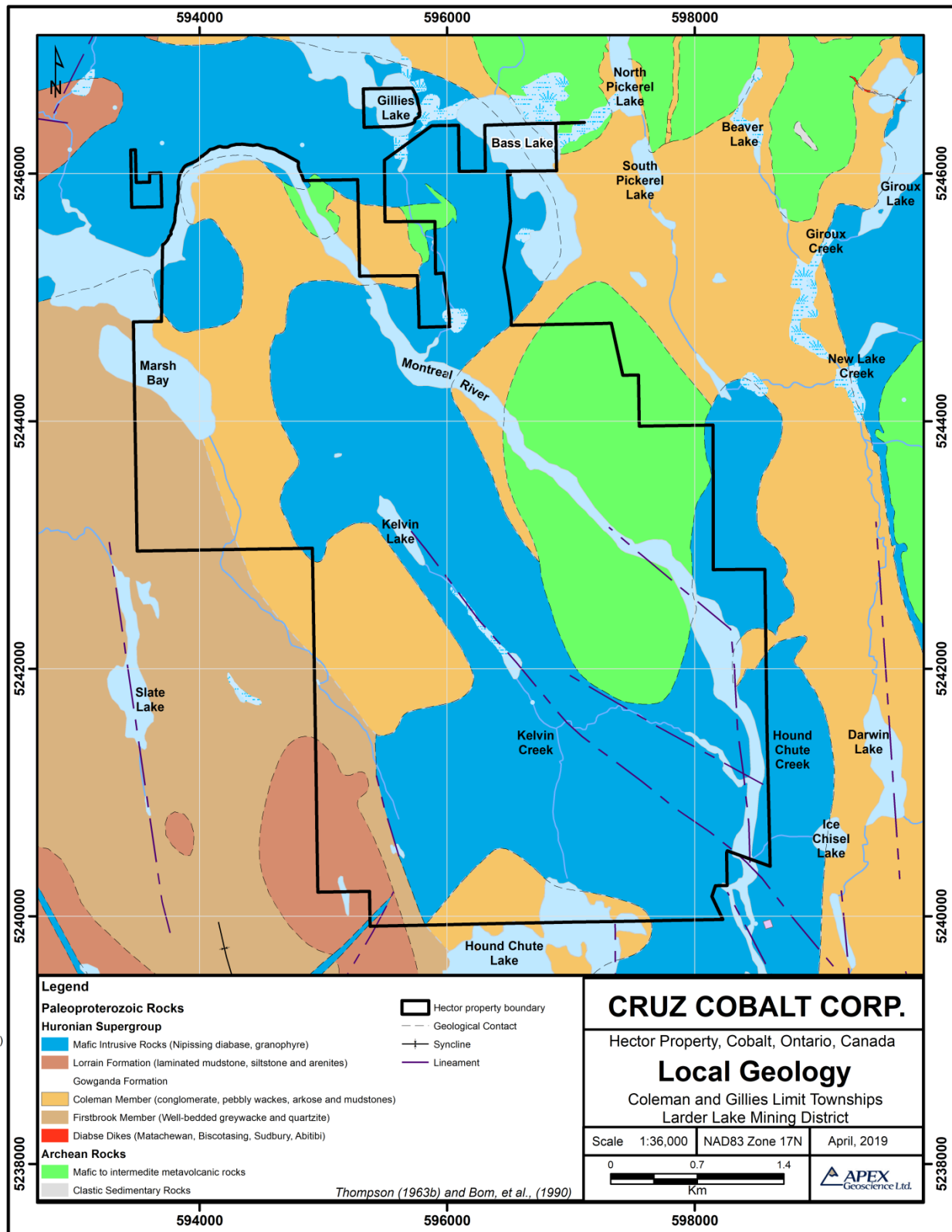
The Property area and surrounding was mapped over the course of several decades by various government geologists. The property geology is best represented by ODM Map 2051 covering the northern two-thirds of the Property (Thomson, 1963b); and ODM Map 2551 covering the southern third of the Property (Born 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 Local Geology



### 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).

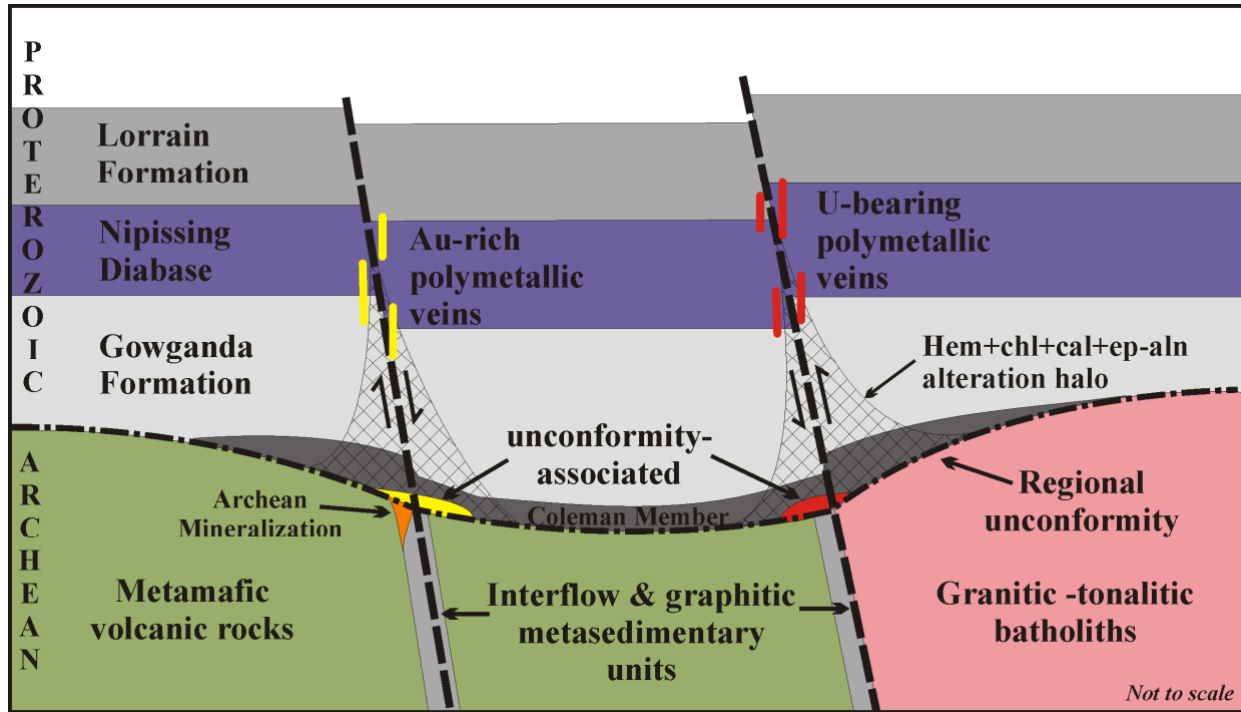
Recent discoveries of polymetallic mineralization in a geological setting akin to that of the historical Cobalt Camp silver-cobalt veins have demonstrated the potential of the Cobalt Embayment to host hydrothermal mineral deposits enriched in economic metals other than silver. This has prompted a re-evaluation 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)**



## 7 2021 Exploration

### 7.1 Introduction

In 2021, Cruz Cobalt completed a diamond drilling program at the Hector Property comprising three NQ diameter drill holes, totalling 837 m (Table 7.1; Figure 7.1). The drill holes were planned with the dual purpose of following up on past results and testing for mineralization at greater depth than previously drilled. All three holes were drilled from the same pad, also used during the 2018 drilling program, targeting the Hector anomaly.

**Table 7.1 2021 Diamond Drill Hole Details**

Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip	Total Depth (m)	Samples Collected	Samples Assayed
21HC01	596242	5245430	294	20	-60	326	88	88
21HC02	596242	5245430	294	70	-60	262	62	62
21HC03	596242	5245430	294	250	-50	249	30	30
					<b>Total:</b>	<b>837</b>	<b>180</b>	<b>180</b>

The 2021 drilling program was completed between June 28 and July 20, 2021, including mobilization and demobilization. The total cost to complete the 2021 exploration program, including diamond drilling and associated costs for supervision, wages, logistics (mobilization, travel, equipment rentals, supplies, accommodations, food), geochemical analyses, data processing, evaluation, interpretation, and reporting was \$192,232.43 (Appendix 1).

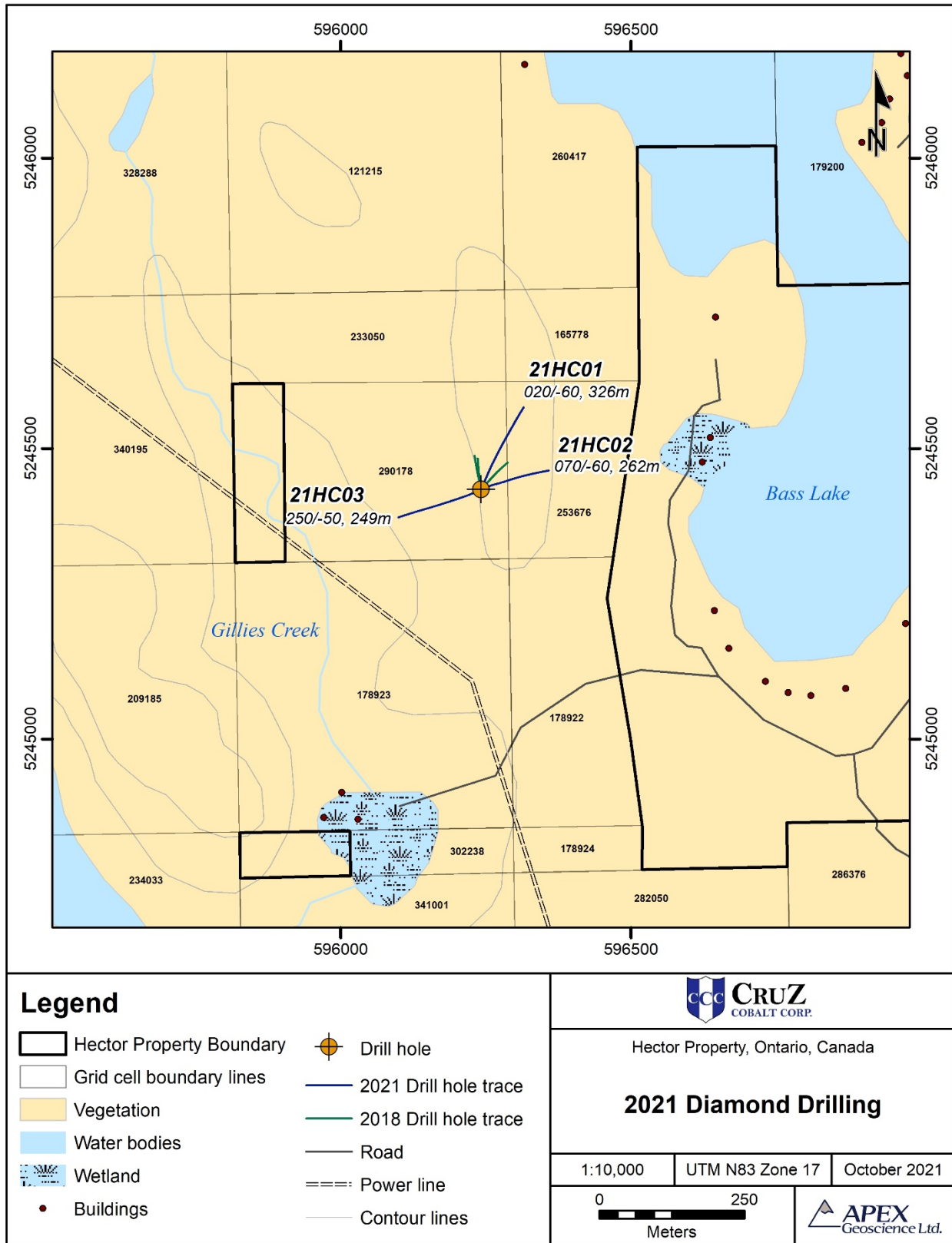
The program was supervised by APEX Geoscience Ltd. of Edmonton, Alberta, and executed by Vital Drilling Services of Sudbury, Ontario. Drill core logging and sampling was completed by APEX field geological staff. For each drill hole, geological observations were recorded comprising lithology, mineralization, alteration, veining and structural measurements. Geotechnical data were recorded comprising core recovery, rock quality designation (RQD) and magnetic susceptibility. Down-hole directional survey data were collected using a Reflex EZ-Shot instrument. Subsequent data processing, evaluation, interpretation, and reporting was completed by APEX office staff.

Personnel involved with the 2021 program are listed in Appendix 1. Survey data, geological logs, and geotechnical logs are presented in Appendix 2. Full analytical results keyed to drill hole number and depth, and copies of laboratory certificates are presented in Appendix 3.

### 7.2 Drilling Results

The 2021 drilling targeted lateral and down-dip extensions of mineralization intersected during the 2018 drilling program, as well as the prospective lower contact of the Nipissing diabase sills with Archean volcanic basement rocks at depth.

Figure 7.1 2021 Diamond Drill Hole Locations



Drill holes 21HC01 and 21HC02 intersected the base of the Nipissing diabase at 248 and 231 metres, respectively (Figures 7.2 and 7.3). Hole 21HC01 cut a broad zone of anomalous silver-copper mineralized mafic volcanic rocks returning assays of 0.87 g/t Ag (grams-per-tonne silver) and 0.01% Cu (copper) over 32.3 metres from a depth of 279.7 m; including a higher-grade interval of 1.06 g/t Ag over 19.5 m from a depth of 286.5 m yielding individual assays of up to 3.2 g/t Ag. The silver-copper zone within 21HC01 is characterized by the presence of moderate chlorite alteration and silica flooding accompanied by fine grained disseminated chalcopyrite-pyrite mineralization.

A narrower zone of anomalous silver-copper mineralized mafic volcanic rocks was intersected in 21HC02, returning assays of 0.97 g/t Ag and 0.03% Cu over 3.0 metres from a depth of 255 m. The silver-copper zone within 21HC02 is characterized by the presence of silica flooding and minor vein-related chlorite alteration, accompanied by fine grained disseminated chalcopyrite-pyrite mineralization.

In addition to the volcanic hosted silver-copper zone, several cobalt-copper intervals occur within drill holes 21HC01 and 21HC02 that are comparable to values returned during Cruz's initial 2018 drill campaign including: 0.03% Co (cobalt) and 0.09% Cu over 1 metre at a depth of 143 metres, and 0.01% Co and 0.12% Cu over 1 metre at 74 metres downhole within 21HC02; and 0.012% Co and 0.07% copper over 1 metre at 153.5 metres downhole within 21HC01.

The true width of mineralization is estimated to be 80-90% of the drilled interval.

Drill hole 21HC03 targeted a north-northwest striking fault structure that juxtaposes Nipissing diabase and Archean basement rocks to the north. The hole remained within diabase to the end-of-hole depth of 249 m (Figure 7.4). Several weakly anomalous cobalt-copper intervals occur throughout the drill hole. Textural variations within the Nipissing diabase, and variation observed in the mineralization and magnetic susceptibility confirm the presence of a west-dipping, multi-phase sill complex.

Figure 7.2 Drill Hole Cross Section 21HC01

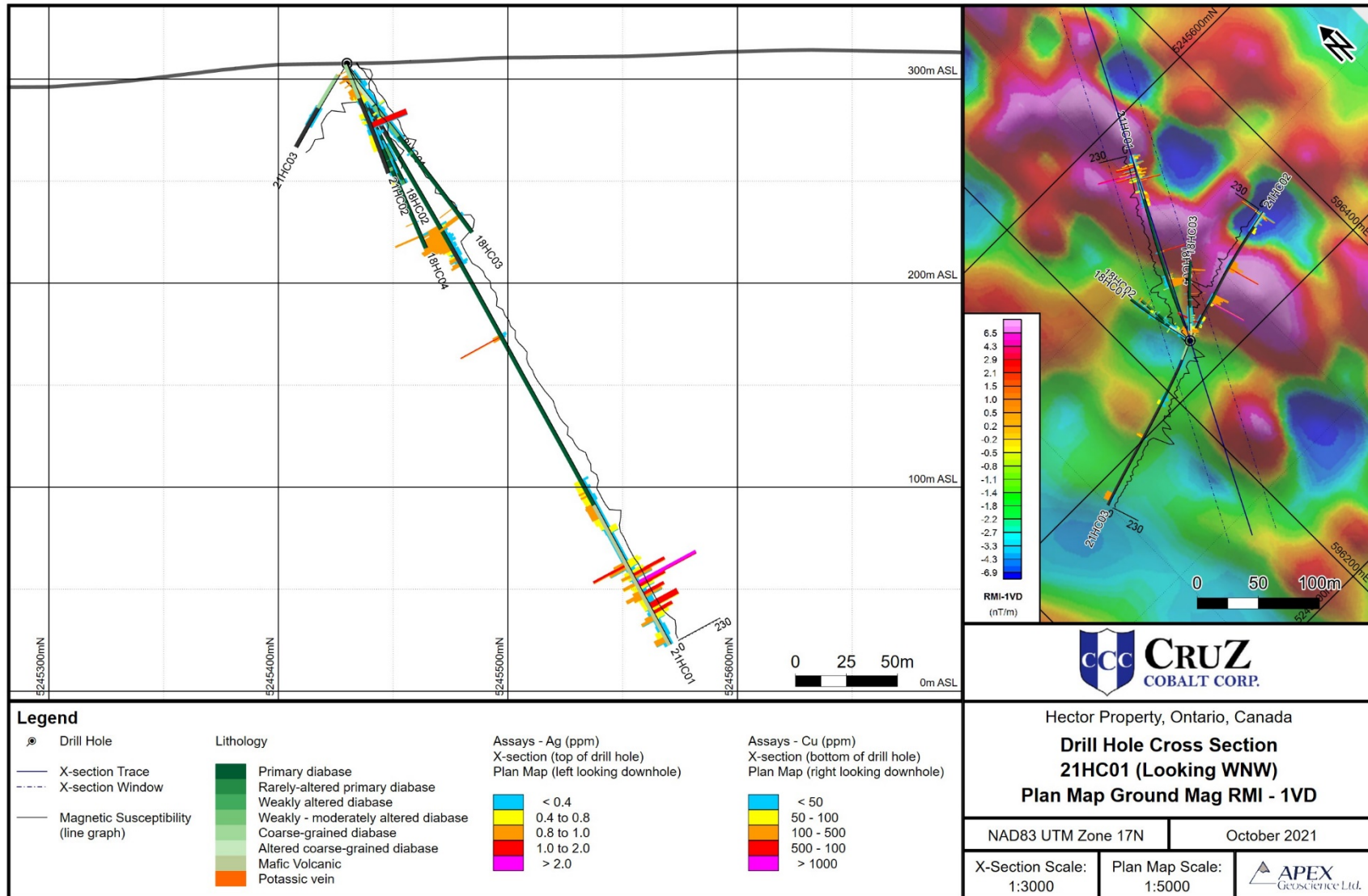
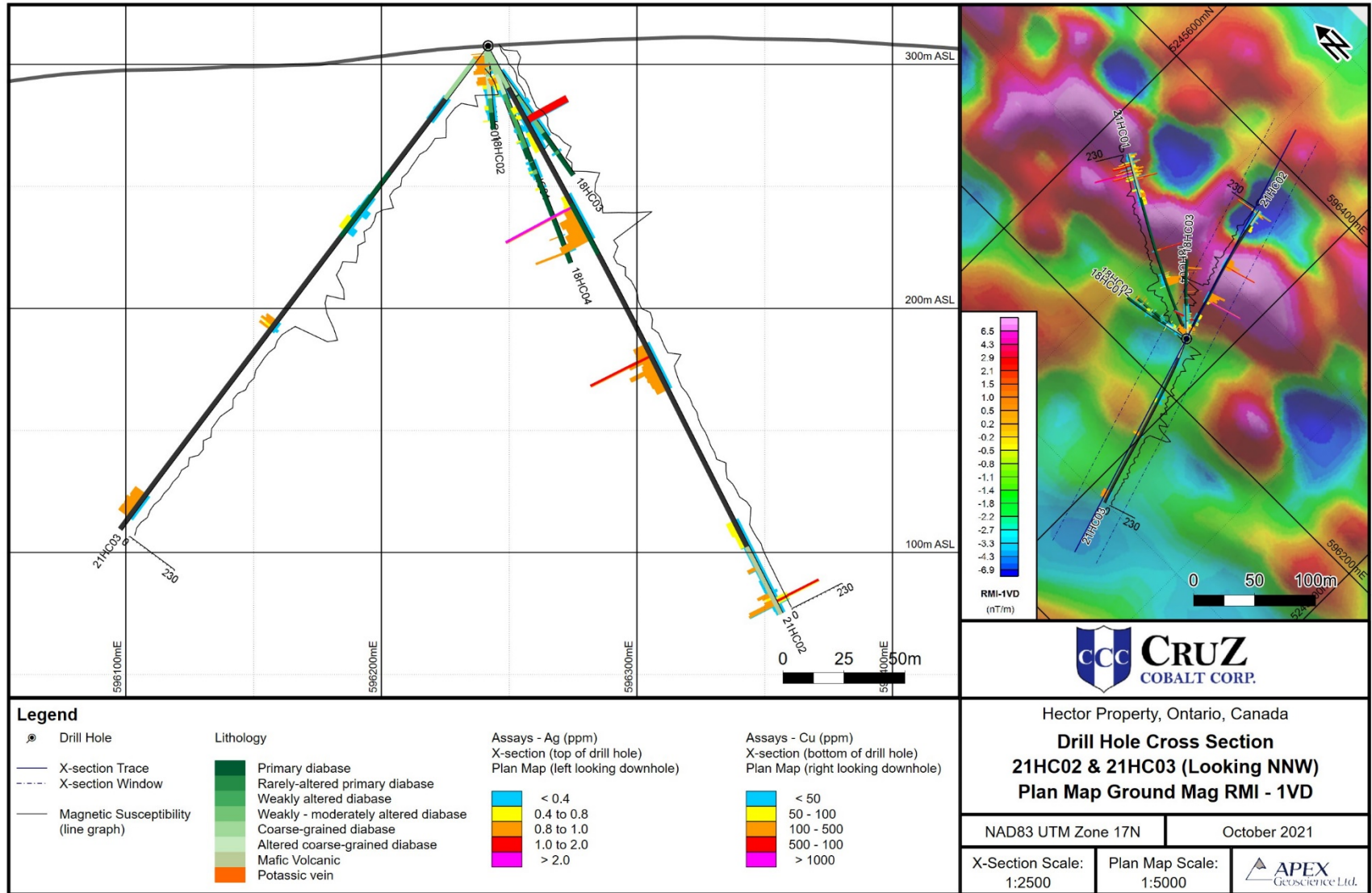


Figure 7.3 Drill Hole Cross Section 21HC02 & 21HC03



## 8 Sample Preparation, Analyses and Security

### 8.1 Sample Collection and Shipping

Three NQ diameter diamond drill holes, totalling 837 m, were completed during the 2021 program. Upon completion of each run, drill core was transferred directly from the core tube to wooden core boxes and sealed with wooden lids. Full boxes of core were transported to a nearby core logging facility in Cobalt, Ontario. 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.

A total of 180 drill core intervals were sampled and sent for analysis, totalling 270.25 metres of core length. Sampled intervals were selected based on geological characteristics, with lengths ranging from 0.4 m to 3.0 m depending on the intensity of visual mineralization and alteration. The average sample length was 1.78 m, with nominal lengths of 1.0, 1.5 or 3.0 metres. All sample intervals were selected, marked out and tagged in the box by APEX geologists. Standards, blanks and core duplicate samples were inserted at regular intervals in the sample sequence. Wet and dry photographs were taken of the drill core after the samples were marked out.

Drill core samples were sawed in half lengthwise using a diamond bladed core saw. For each sample, one half core was sent for analysis and the other was left in the box. For duplicate samples, one quarter core was used as the “original” sample, one quarter was used as the “duplicate” sample, and the remaining half core was left in the box. The core boxes are stored on site at the Hector Property.

Drill core samples were placed into labelled plastic sample bags along with a sample tag inscribed with the unique sample number. The samples, including requisite standard and blank 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 (“ALS”) laboratory in Sudbury, Ontario for preparation. From there, the samples were transported within the ALS network to the ALS laboratory in North Vancouver, British Columbia for analysis.

### 8.2 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, Palladium 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:HNO<sub>3</sub>) in a graphite heating block. The solution is then analyzed atomic absorption spectroscopy.

### **8.3 Quality Assurance and Quality Control**

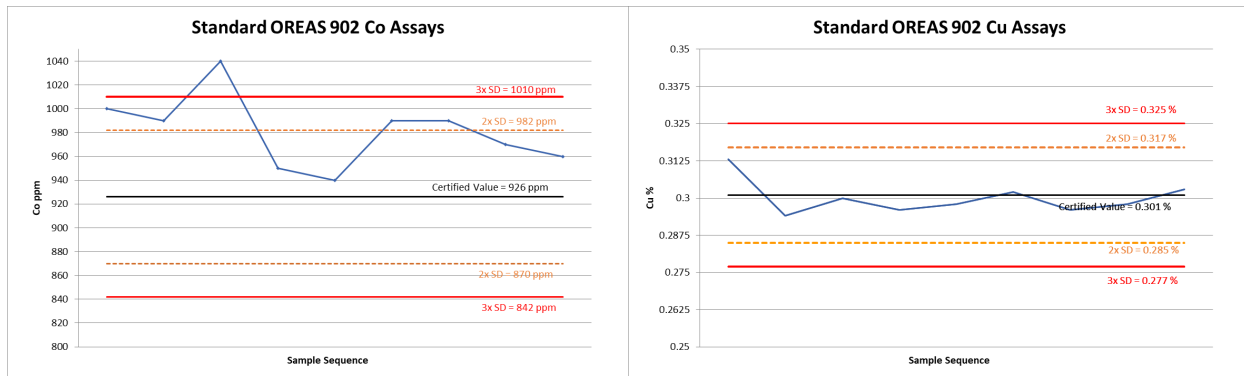
Quality assurance and quality control (QA/QC) measures at ALS include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates (every 50 samples), and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted with each 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. The ALS analytical facilities in Sudbury and North Vancouver are certified to ISO 9001:2015 standards and have received ISO/IEC 17025:2017 accreditation from the Standards Council of Canada (SCC) for the relevant methods.

The QA/QC measures employed in the field by APEX during the 2021 diamond drilling programs comprised inserting certified 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. A total of 9 standards, 10 blanks, and 9 duplicate samples were analyzed.

#### **8.3.1 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 2021 drilling program. QA/QC summary charts showing 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), are presented in Figure 8.1.



**Figure 8.1 Plot of QA/QC Analytical Standard OREAS 902 (Co and Cu)**

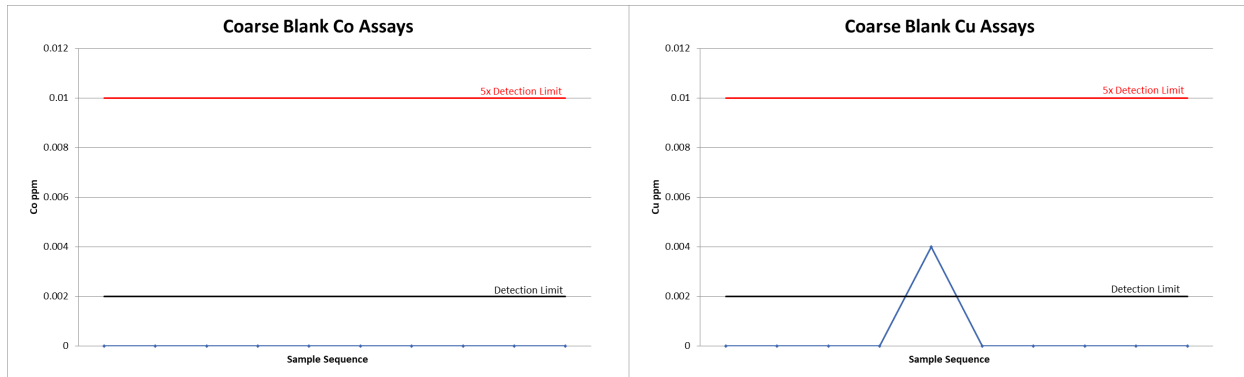
Each standard has an accepted gold concentration as well as known “between laboratory” standard deviations or expected variability. There are two general industry criteria employed by which standards are assigned a “pass” or “reviewable” status. First, a “reviewable” standard is defined as any standard occurring anywhere in a drill hole returning greater than three standard deviations (>3SD) above or below the accepted value for an element (Au). 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 for at least one element, they are classified as “reviewable”. QA/QC samples falling outside established limits are flagged and subject to review and possibly re-analysis, along with the 10 preceding and succeeding samples.

Of the 9 standards analyzed, one was initially considered reviewable for returning a value >3SD above the certified value for Co. All other standards were assigned a “pass” status according to the criteria outlined above. The OREAS 902 standard showed a consistent high bias, with ALS analyses averaging 6% above the certified value. This is likely due to the more aggressive digestion and different analytical technique used for the ALS samples. 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.

### 8.3.2 Blanks

Coarse blank samples were inserted into the sample stream to check for contamination during the sample preparation procedures. Analytical Solutions Ltd. (ASL) coarse silica blanks were used, sourced from Carboniferous sedimentary rocks of the Maritimes Basin in New Brunswick. The blank is coarse enough to require both crushing and pulverization. QA/QC summary charts showing the measured values for each blank in addition to the analytical method detection limit and the value 5 times the detection limit for cobalt (Co) and copper (Cu), are presented in Figure 8.2. A blank is considered “reviewable” if it returns a value greater than 5 times the detection limit of the analytical method.

**Figure 8.2 Plot of QA/QC Blank Samples (Co and Cu)**

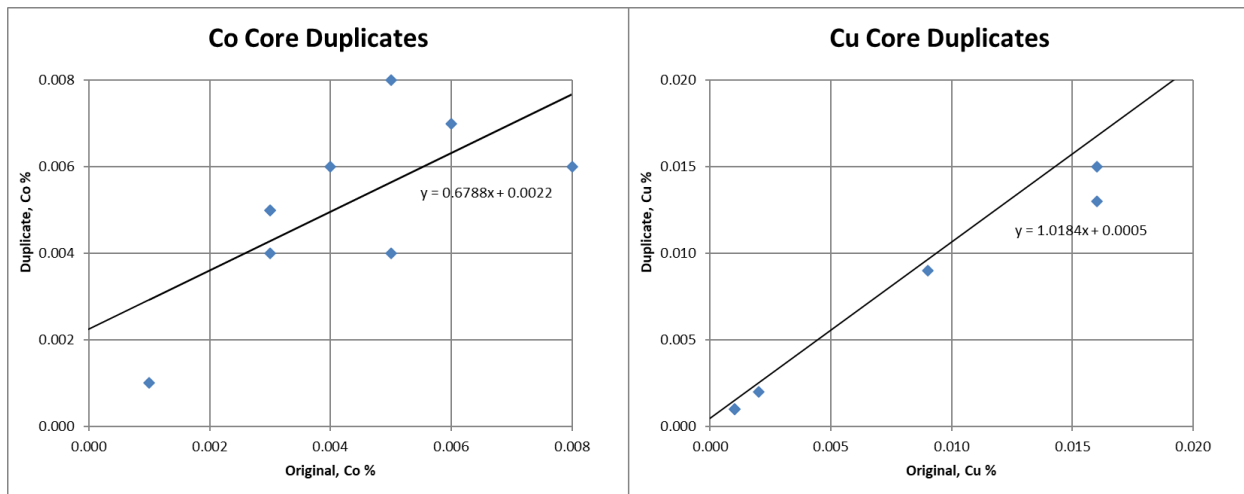


All 10 blanks were assigned a “pass” status according to the criteria outlined above.

**8.3.3 Duplicate Samples**

Duplicate (quartered drill core) samples were collected to assess the repeatability of individual analytical values. Figure 8.3 plots the original versus duplicate analytical 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 Plot of QA/QC Core Duplicate Samples (Co and Cu)**



It is the authors’ opinion that the sample collection, preparation, security, analytical and QA/QC measures used during the 2021 diamond drilling program were adequate for this stage of exploration at the Hector Property.

## 9 Exploration Expenditures

The 2021 Hector Property drilling program was completed between June 28 and July 20, 2021, including mobilization and demobilization. The total cost to complete the 2021 exploration program, including diamond drilling and associated costs for supervision, wages, logistics (mobilization, travel, equipment rentals, supplies, accommodations, food), geochemical analyses, data processing, evaluation, interpretation, and reporting was \$192,232.43. A detailed breakdown of the expenditures is presented in Appendix 1.

## 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 silver-cobalt vein deposits.

The majority of mineral occurrences with the Hector Property consist of narrow fracture controlled northwest-southeast, or northeast-southwest striking, sub-vertical to steeply dipping, quartz-carbonate-potassium feldspar veins containing variable percentages of disseminated to clotted pyrite, chalcopyrite, pyrrhotite, and erythrite (hydrous cobalt arsenate) mineralization. Veins range in width from less than 5 cm up to 25 cm in width. The majority of historically reported mineral occurrences are represented by one or more shallow prospect pits and trenches, or water-filled shafts.

The results of the 2017 and 2018 soil and rock geochemical campaigns defined cobalt in soil and rock anomalies west of Gillies Creek that warrant follow-up exploration. Airborne and ground magnetic geophysical surveys reveal diabase sills presenting strong positive magnetic anomalies in comparison to Archean basement. Internal magnetic variation of the diabase sill, which comprises one or more parallel linear or sinuous magnetic trends, indicates it is a multi-phase composite intrusion.

The 2021 drilling targeted lateral and down-dip extensions of mineralization intersected during the 2018 drilling program, as well as the prospective lower contact of the Nipissing diabase sills with Archean volcanic basement rocks at depth. No economic grades were returned; however, zones of anomalous silver-copper mineralized basement mafic volcanic rocks were encountered in holes 21HC01 and 21HC02, demonstrating the exploration potential at the unconformable contact with and within the Archean basement, in addition to mineralization known to occur within the Nipissing diabase at the Hector Property. Mineralization in the mafic volcanic rocks is characterized by moderate chlorite alteration and silica flooding accompanied by fine grained disseminated chalcopyrite-pyrite mineralization.

Drill hole 21HC03 targeted a north-northwest striking fault structure that juxtaposes Nipissing diabase and Archean basement rocks to the north. The hole remained within diabase to the end-of-hole depth of 249 m; however, textural variations within the Nipissing diabase, and variation observed in the mineralization and magnetic susceptibility confirm the presence of a west-dipping, multi-phase sill complex.

The distribution of historic mineral occurrences throughout the Hector Property is coincident with interpreted structural lineaments within the Nipissing diabase sill, for example between the Williamson to Brewster occurrences, and in the case of the Bass Lake area showings they appear to be locally spatially associated with the margins of a relatively more magnetic phase of the diabase. The majority of historic silver-cobalt vein showings within the Hector Property occur within the Nipissing diabase and are spatially

related to one of two parallel northwest trending structural lineaments coincident with the trace of the Kelvin Lake fault, and an interpreted Archean basement topographic high and anticlinal fold axis subparallel to the Montreal River fault. In the area east of the Montreal River there is a close spatial relationship between Archean volcanic rocks, basal Coleman Member sediments and diabase rocks, which is considered highly prospective within the context of the silver-cobalt arsenide vein deposit model.

Additional follow-up exploration within both the Kelvin Lake and Montreal River fault and anticline areas are warranted where a close spatial relationship between the Archean-Huronian unconformity and diabase sill is predicted by prior geologic mapping.

## 11 Recommendations

Based on the presence of silver-cobalt arsenide vein intersects in drill core and numerous historic occurrences, airborne and ground magnetic geophysical anomalies, cobalt and silver in rock and soil geochemical anomalies, and favourable geology, follow-up exploration is warranted at the Hector Property.

Exploration work should include, but not be limited to:

**Phase 1:** A surface exploration program of rock and soil geochemical sampling, ground magnetic surveys, and geologic mapping designed to evaluate the silver-cobalt arsenide vein potential of the Kelvin Lake and Montreal River fault zones. Geologic mapping should focus on defining the geometry of the Nipissing Diabase sills, and on identifying areas with the potential to host Coleman Member sediments overlain by diabase; particularly in proximity to exposed Archean basement and the Huronian unconformity in the Montreal River area. The results of geologic mapping should be used to prioritize rock, soil and ground magnetic surveys over geologically perspective targets. The estimated cost to complete Phase 1 exploration is \$100,000.

**Phase 2:** If surface exploration results are favorable, drill testing of priority targets should be completed. Diamond drilling of approximately 10 holes totalling 2,000 m should be completed. The estimated cost to complete Phase 2 exploration is \$500,000.

**Table 11.1 Proposed 2019 Hector Property Exploration Budget**

Budget Item	Cost
<b>Phase 1</b>	
Salaries Field (senior supervision, 2 project geologists, 2 field assistants for 30 days)	\$55,000
Accommodation / Food / Travel	\$10,000
Fuel (gas, diesel)	\$1,000
Rentals (geophysical equipment, trucks, software, etc.)	\$9,000
Analytical (500 soils, 50 rocks)	\$20,000
Miscellaneous Fuel and Field Supplies	\$2,000
Office and Logistics	\$3,000
<b>TOTAL PHASE 1 (not including GST)</b>	<b>\$100,000</b>
<b>Phase 2</b>	
Diamond Drilling (2,000 metres @ \$250/metre all up)	\$500,000
<b>TOTAL PHASE 2 (not including GST)</b>	<b>\$500,000</b>

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## 13 Certificate of Author

### 13.1 Kristopher J. Raffle Certificate of Author

I, Kristopher J. Raffle, B.Sc., P.Ge., residing in North 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 “**2021 Assessment Report on the Hector Property**”, dated November 8, 2021 (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.Ge.) 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 8<sup>th</sup> of November 2021  
Vancouver, British Columbia, Canada

“Signed”

Kristopher Raffle, B.Sc., P.Ge.

### 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 “**2021 Assessment Report on the Hector Property**”, dated November 8, 2021 (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 5 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 8<sup>th</sup> of November 2021  
Vancouver, British Columbia, Canada

“Signed”

Mohamad Asmail, M.Sc.

### 13.3 Byron Yeung Certificate of Author

I, Byron Yeung, B.Sc., 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 Sections 3, 4, 5 and 6, and Appendices 2 and 3 of the report entitled “**2021 Assessment Report on the Hector Property**”, dated November 8, 2021 (the “Assessment Report”).
3. I am a graduate of the University of British Columbia, Vancouver, British Columbia with a B.Sc. in Geology in 2020 and have practiced my profession continuously since 2020.
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 8<sup>th</sup> of November 2021  
Vancouver, British Columbia, Canada

“Signed”

Byron Yeung, B.Sc.

## Appendix 1. 2021 Personnel and Exploration Expenditures

## 2021 Exploration Expenditures

Date	Num	Description	Amount
<b>Geological field work</b>			
2021-07-31	2021-393	Party Leader Geological Services Field - Mo Asmail (June 22-July 21/21)	\$13,512.50
2021-07-31	2021-393	Geological Services Performed Field - Byron Yeung (June 22-July 21/21)	\$5,225.00
Total Geological field work			\$18,737.50
<b>Geological office work</b>			
2021-03-31	2021-136	Geological Services Performed Office - Mo Asmail (Feb 22-March 21/21)	\$908.00
2021-03-31	2021-136	Geological Services Performed Office - Kris Raffle (Feb 22-March 21/21)	\$875.00
2021-03-31	2021-136	Geological Services Performed Office - Robyn Morton (Feb 22-March 21/21)	\$35.00
2021-04-30	2021-196	Geological Services Performed Office - Mo Asmail (March 22-April 21/21)	\$1,560.00
2021-04-30	2021-196	Geological Services Performed Office - Robyn Morton (March 22-April 21/21)	\$35.00
2021-04-30	2021-196	Geological Services Performed Office - Kris Raffle (March 22-April 21/21)	\$525.00
2021-05-31	2021-265	Geological Services Performed Office - Mo Asmail (April 22-May 21/21)	\$160.00
2021-05-31	2021-265	Geological Services Performed Office - Kris Raffle (April 22-May 21/21)	\$236.25
2021-06-30	2021-334	Geological Services Performed Office - Mo Asmail (May 22-June 21/21)	\$840.00
2021-06-30	2021-334	Geological Services Performed Office - Kris Raffle (May 22-June 21/21)	\$1,750.00
2021-06-30	2021-334	Geological Services Performed Office - Tara Gunson (May 22-June 21/21)	\$42.00
2021-07-31	2021-393	Geological Services Performed Office - Kris Raffle (June 22-July 21/21)	\$1,688.75
2021-07-31	2021-393	Geological Services Performed Office - Chris Livingstone (June 22-July 21/21)	\$384.25
2021-07-31	2021-393	Geological Services Performed Office - Byron Yeung (June 22-July 21/21)	\$87.75
2021-08-31	2021-453	Geological Services Performed Office - Mo Asmail (July 22-Aug 21/21)	\$772.00
2021-09-30	2021-522	Geological Services Performed Office - Kris Raffle (Aug 22-Sept 21/21)	\$700.00
2021-10-31		Geological Services Performed Office - Byron Yeung (Sept 22-Oct 21/21)	\$2,970.50
2021-10-31		Geological Services Performed Office - Chris Livingstone (Sept 22-Oct 21/21)	\$2,559.25
2021-10-31		Geological Services Performed Office - Kris Raffle (Sept 22-Oct 21/21)	\$525.00
Total Geological office work			\$16,653.75
<b>Overhead &amp; management fee</b>			
2021-04-30	2021-196	Operator's overhead and management fee (10%)	\$9.14
2021-07-31	2021-393	Operator's overhead and management fee (10%)	\$811.99
2021-08-31	2021-453	Operator's overhead and management fee (10%)	\$993.73
2021-09-30	2021-522	Operator's overhead and management fee (10%)	\$891.05
Total Overhead & management fee			\$2,705.91
<b>Rentals</b>			
2021-07-31	2021-393	APEX rental - laptop (1 month @ \$565/mo)	\$565.00
2021-07-31	2021-393	APEX rental - inReach (1 month @ \$115/mo)	\$115.00
2021-07-31	2021-393	APEX rental - GPS (1 month @ \$115/mo)	\$115.00
2021-07-31	2021-393	APEX rental - ArcGIS software (2 weeks @ \$120/wk)	\$240.00
2021-07-31	2021-393	APEX rental - Micromine software (2 weeks @ \$600/wk)	\$1,200.00
Total Rentals			\$2,235.00
<b>Assays &amp; related costs</b>			
2021-08-31	2021-453	Mo Asmail: standards, June 30/21	\$204.98
2021-09-30	2021-522	ALS Canada: assay analysis (drill core), certificate SD21188681, Sept 4/21, inv 5607672	\$8,910.51
Total Assays & related costs			\$9,115.49
<b>Drilling &amp; related costs</b>			
2021-08-31	2021-453	Vital Drilling: drilling, July 16/21, inv 21VDS421	\$124,932.50
Total Drilling & related costs			\$124,932.50
<b>Field supplies</b>			
2021-08-31	2021-453	ALS Canada: supplies, sample tag book, Aug 2/21, inv 5620955	\$6.75
2021-08-31	2021-453	Byron Yeung: supplies, July 11/21	\$32.86
2021-08-31	2021-453	Mo Asmail: supplies, July 4-14/21	\$878.76
2021-08-31	2021-453	Mo Asmail: supplies, July 15-19/21	\$906.06

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			Total Field supplies	\$1,824.43
<b>Freight</b>				
2021-08-31	2021-453	Mo Asmail: freight, June 29-July 12/21		\$185.92
			Total Freight	\$185.92
<b>Rental - automotive</b>				
2021-07-31	2021-393	Enterprise: truck rental, June 28-July 21/21, inv 6500-4432-7530		\$2,862.65
			Total Rental - automotive	\$2,862.65
<b>Rental - buildings</b>				
2021-07-31	2021-393	Blackstone Development: core shack rental, July/21, inv 2021-13		\$1,000.00
			Total Rental - buildings	\$1,000.00
<b>Rental - equipment</b>				
2021-07-31	2021-393	Reflex: APS with charger rental, June 29-30/21, inv 74616		\$25.81
2021-07-31	2021-393	Reflex: APS with charger rental, July 1-31/21, inv 75273		\$325.12
			Total Rental - equipment	\$350.93
<b>Travel - accommodations</b>				
2021-08-31	2021-453	Mo Asmail: hotel, Kelowna, June 27-28/21		\$320.79
2021-08-31	2021-453	Mo Asmail: hotel, Haileybury, July 9-10/21		\$90.00
2021-08-31	2021-453	Mo Asmail: hotel, New Liskeard, June 28-July 19/21		\$4,687.69
			Total Travel - accommodations	\$5,098.48
<b>Travel - airfare</b>				
2021-07-31	2021-393	Direct Travel: airfare, Mo Asmail, Kelowna/Toronto, June 28/21, inv 4427454		\$962.12
2021-07-31	2021-393	Direct Travel: airfare, Byron Yeung, Vancouver/Timmins, July 9/21, inv 4428022		\$2,000.12
2021-07-31	2021-393	Direct Travel: airfare, Byron Yeung, Sudbury/Vancouver, July 19/21, inv 4428444		\$944.12
2021-08-31	2021-453	Byron Yeung: baggage fee, July 19/21		\$50.00
2021-08-31	2021-453	Mo Asmail: baggage fee, June 28/21		\$100.00
			Total Travel - airfare	\$4,056.36
<b>Travel - food</b>				
2021-08-31	2021-453	Byron Yeung: food, July 9/21		\$26.11
2021-08-31	2021-453	Mo Asmail: food, June 28-July 14/21		\$1,097.09
2021-08-31	2021-453	Mo Asmail: food, July 15-19/21		\$459.62
			Total Travel - food	\$1,582.82
<b>Travel - fuel</b>				
2021-08-31	2021-453	Mo Asmail: fuel, July 2-20/21		\$824.87
			Total Travel - fuel	\$824.87
<b>Taxi, parking &amp; other</b>				
2021-08-31	2021-453	Byron Yeung: taxi, July 19/21		\$38.10
2021-08-31	2021-453	Mo Asmail: taxi, June 28/21		\$27.72
			Total Taxi, parking & other	\$65.82
<b>Total Expenditures</b>			<b>Total</b>	<b>\$192,232.43</b>



## Appendix 2. Drill Logs

## 2021 Drill Hole Collars

Hole ID	21HC01	21HC02	21HC03
Start Date	June 30th	July 4th	July 10th
End Date	July 4th	July 10th	July 14th
Easting N83 Z17	596242	596242	596242
Northing N83 Z17	5245430	5245430	5245430
Elevation N83 Z17	294	294	294
Azimuth	20	70	250
Azimuth Survey Type	Reflex APSII	Reflex APSII	Reflex APSII
Dip (degree)	-60	-60	-50
Hole Depth (m)	326.00	262.00	249.00
Casing (m)	1.5	1.5	6
Casing Pulled	Yes	Yes	Yes
Core Size	NQ	NQ	NQ
Artesian flow	No	No	No
Drill Type	CS1000	CS1000	CS1000
Drilling Company	Vital Drilling	Vital Drilling	Vital Drilling
Geologist	M.A.	M.A.	M.A.

## 2021 Drill Hole Downhole Survey

Hole ID	Depth (m)	Magnetic field (nt)	Temperature (°C)	Azimuth uncorrected	Azimuth corrected	Dip	Surveyor
21HC01	50	53653	12	34.2	23.16	-59.7	Guy
21HC01	99	52679	16	37.3	26.26	-60.1	Marc
21HC01	150	55856	18	38.5	27.46	-61.4	Marc
21HC01	200	57323	28	40.7	29.66	-60.8	Guy
21HC01	250	55990	27	40.1	29.06	-61.5	Guy
21HC01	300	55197	19	42.2	31.16	-61.6	Guy
21HC02	30	56842	32	79.3	68.26	-61.4	Marc
21HC02	50	54408	21	86.8	75.76	-61.3	Guy
21HC02	100	55763	20	82.5	71.46	-62.1	Marc
21HC02	150	54981	15	85.9	74.86	63.5	Marc
21HC02	200	55581	16	88.8	77.76	-63	Guy
21HC02	240	54693	15	90.1	79.06	-63	Marc
21HC03	15	55558	23	255.6	244.56	-52.8	Guy
21HC03	50	55250	16	261.7	250.66	-52.7	Marc
21HC03	99	53784	13	263	251.96	-52.8	Guy
21HC03	150	55065	22	264.6	253.56	-52.9	Marc
21HC03	200	54345	23	264.4	253.36	-52.7	Guy
21HC03	249	54132	18	262.4	251.36	-53.6	Guy

## 2021 Drill Hole Geotechnical Measurements

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-01	0.90	3.00	2.10	1.22	1.00	0.58	4.69
21-HC-01	3.00	6.00	2.85	2.50	0.95	0.88	3.39
21-HC-01	6.00	9.00	3	2.22	1.00	0.74	13.8
21-HC-01	9.00	12.00	2.95	1.80	0.98	0.61	12.7
21-HC-01	12.00	15.00	2.95	1.65	0.98	0.56	24.1
21-HC-01	15.00	18.00	3.05	2.30	1.02	0.75	26.1
21-HC-01	18.00	21.00	2.95	1.45	0.98	0.49	19.4
21-HC-01	21.00	24.00	2.9	1.70	0.97	0.59	27.7
21-HC-01	24.00	27.00	3.02	2.40	1.01	0.79	31.2
21-HC-01	27.00	30.00	2.8	2.40	0.93	0.86	26.5
21-HC-01	30.00	33.00	2.9	1.85	0.97	0.64	33.7
21-HC-01	33.00	36.00	2.9	1.25	0.97	0.43	34.5
21-HC-01	36.00	39.00	2.85	1.80	0.95	0.63	39
21-HC-01	39.00	42.00	3	2.50	1.00	0.83	30.8
21-HC-01	42.00	45.00	2.95	2.20	0.98	0.75	27.7
21-HC-01	45.00	48.00	2.95	2.30	0.98	0.78	31
21-HC-01	48.00	51.00	2.95	2.25	0.98	0.76	63.7
21-HC-01	51.00	54.00	3	2.40	1.00	0.80	13.4
21-HC-01	54.00	57.00	2.95	2.20	0.98	0.75	25.3
21-HC-01	57.00	60.00	2.85	2.40	0.95	0.84	12.6
21-HC-01	60.00	63.00	3	1.95	1.00	0.65	13.6
21-HC-01	63.00	66.00	2.8	2.20	0.93	0.79	15.8
21-HC-01	66.00	69.00	3	1.95	1.00	0.65	15.2
21-HC-01	69.00	72.00	3	2.35	1.00	0.78	31.3
21-HC-01	72.00	75.00	3.05	1.90	1.02	0.62	37.3
21-HC-01	75.00	78.00	2.85	1.30	0.95	0.46	15.4
21-HC-01	78.00	81.00	3	1.90	1.00	0.63	44.2
21-HC-01	81.00	84.00	2.95	2.20	0.98	0.75	57.7
21-HC-01	84.00	87.00	2.95	1.30	0.98	0.44	72.1
21-HC-01	87.00	90.00	3	1.40	1.00	0.47	69.9
21-HC-01	90.00	93.00	3	1.30	1.00	0.43	55.4
21-HC-01	93.00	96.00	2.7	0.60	0.90	0.22	112
21-HC-01	96.00	99.00	2.4	0.45	0.80	0.19	116
21-HC-01	99.00	102.00	2.3	0.40	0.77	0.17	92.1
21-HC-01	102.00	105.00	2.7	0.60	0.90	0.22	5.54
21-HC-01	105.00	108.00	2.75	1.25	0.92	0.45	1.27

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Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-01	108.00	111.00	2.8	0.40	0.93	0.14	0.117
21-HC-01	111.00	114.00	3.1	0.90	1.03	0.29	0.962
21-HC-01	114.00	117.00	2.95	1.90	0.98	0.64	1.26
21-HC-01	117.00	120.00	2.97	2.40	0.99	0.81	19.3
21-HC-01	120.00	123.00	2.8	1.80	0.93	0.64	28.5
21-HC-01	123.00	126.00	2.8	1.30	0.93	0.46	24.8
21-HC-01	126.00	129.00	2.8	1.60	0.93	0.57	34.5
21-HC-01	129.00	132.00	3	1.45	1.00	0.48	22.2
21-HC-01	132.00	135.00	2.95	1.65	0.98	0.56	30.9
21-HC-01	135.00	138.00	3.05	1.70	1.02	0.56	23.2
21-HC-01	138.00	141.00	3	2.25	1.00	0.75	3.43
21-HC-01	141.00	144.00	3	0.95	1.00	0.32	21.5
21-HC-01	144.00	147.00	2.85	0.90	0.95	0.32	17.2
21-HC-01	147.00	150.00	2.95	1.85	0.98	0.63	22.1
21-HC-01	150.00	153.00	2.9	1.80	0.97	0.62	15.8
21-HC-01	153.00	156.00	3.02	1.60	1.01	0.53	25.4
21-HC-01	156.00	159.00	3	1.95	1.00	0.65	8.39
21-HC-01	159.00	162.00	3	1.50	1.00	0.50	10.9
21-HC-01	162.00	165.00	3	1.90	1.00	0.63	20.3
21-HC-01	165.00	168.00	2.97	2.00	0.99	0.67	25.2
21-HC-01	168.00	171.00	2.95	2.15	0.98	0.73	6.68
21-HC-01	171.00	174.00	3.05	1.20	1.02	0.39	2.18
21-HC-01	174.00	177.00	3	1.65	1.00	0.55	6.06
21-HC-01	177.00	180.00	2.88	1.65	0.96	0.57	1.33
21-HC-01	180.00	183.00	3.25	1.15	1.08	0.35	2.59
21-HC-01	183.00	186.00	3	1.65	1.00	0.55	6.54
21-HC-01	186.00	189.00	2.9	1.10	0.97	0.38	9.82
21-HC-01	189.00	192.00	3.02	2.15	1.01	0.71	16.3
21-HC-01	192.00	195.00	3.2	1.30	1.07	0.41	22.3
21-HC-01	195.00	198.00	3	1.50	1.00	0.50	15.9
21-HC-01	198.00	201.00	3	2.10	1.00	0.70	11.5
21-HC-01	201.00	204.00	2.97	2.00	0.99	0.67	10
21-HC-01	204.00	207.00	2.85	1.15	0.95	0.40	14.8
21-HC-01	207.00	210.00	2.95	1.50	0.98	0.51	23.7
21-HC-01	210.00	213.00	3	2.50	1.00	0.83	2.19
21-HC-01	213.00	216.00	3	1.80	1.00	0.60	13.8
21-HC-01	216.00	219.00	3	1.80	1.00	0.60	12.5
21-HC-01	219.00	222.00	2.7	0.95	0.90	0.35	17.5

2021 Assessment Report on the Hector Property

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-01	222.00	225.00	2.95	2.45	0.98	0.83	38.6
21-HC-01	225.00	228.00	2.85	2.20	0.95	0.77	32.4
21-HC-01	228.00	231.00	3.1	1.55	1.03	0.50	33.6
21-HC-01	231.00	234.00	2.8	1.40	0.93	0.50	18.6
21-HC-01	234.00	237.00	2.9	2.15	0.97	0.74	33.7
21-HC-01	237.00	240.00	2.85	1.25	0.95	0.44	27.2
21-HC-01	240.00	243.00	2.9	1.20	0.97	0.41	1.73
21-HC-01	243.00	246.00	1.2	0.00	0.40	0.00	2.01
21-HC-01	246.00	249.00	3	2.40	1.00	0.80	1
21-HC-01	249.00	252.00	2.9	2.00	0.97	0.69	1.76
21-HC-01	252.00	255.00	3	2.22	1.00	0.74	6.52
21-HC-01	255.00	258.00	2.8	1.50	0.93	0.54	55.1
21-HC-01	258.00	261.00	3.1	0.85	1.03	0.27	37.4
21-HC-01	261.00	264.00	2.9	1.85	0.97	0.64	13.4
21-HC-01	264.00	267.00	3	1.25	1.00	0.42	2.47
21-HC-01	267.00	270.00	2.97	2.75	0.99	0.93	4.74
21-HC-01	270.00	273.00	2.95	2.05	0.98	0.69	2.62
21-HC-01	273.00	276.00	3	2.20	1.00	0.73	0.753
21-HC-01	276.00	279.00	3	2.15	1.00	0.72	0.661
21-HC-01	279.00	282.00	3	2.00	1.00	0.67	0.989
21-HC-01	282.00	285.00	3	2.70	1.00	0.90	5.77
21-HC-01	285.00	288.00	3	2.50	1.00	0.83	5.21
21-HC-01	288.00	291.00	3	2.75	1.00	0.92	4.75
21-HC-01	291.00	294.00	2.9	1.75	0.97	0.60	1.65
21-HC-01	294.00	297.00	2.95	0.85	0.98	0.29	1.56
21-HC-01	297.00	300.00	3	1.80	1.00	0.60	1.59
21-HC-01	300.00	303.00	2.97	2.80	0.99	0.94	0.486
21-HC-01	303.00	306.00	2.65	0.75	0.88	0.28	2.46
21-HC-01	306.00	309.00	3.05	2.55	1.02	0.84	1.38
21-HC-01	309.00	312.00	2.85	0.95	0.95	0.33	6.46
21-HC-01	312.00	315.00	2.95	0.95	0.98	0.32	17.8
21-HC-01	315.00	318.00	3	1.60	1.00	0.53	32.5
21-HC-01	318.00	321.00	3	1.50	1.00	0.50	21
21-HC-01	321.00	324.00	3	1.50	1.00	0.50	3.72
21-HC-01	324.00	326.00	2	0.30	1.00	0.15	1.8
21-HC-02	0.00	3.00	3.00	1.45	1.00	0.48	1.62
21-HC-02	3.00	6.00	2.95	2.30	0.98	0.78	8.77
21-HC-02	6.00	9.00	3	2.17	1.00	0.72	53.8

2021 Assessment Report on the Hector Property

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-02	9.00	12.00	3	2.80	1.00	0.93	54.3
21-HC-02	12.00	15.00	2.97	2.80	0.99	0.94	23.8
21-HC-02	15.00	18.00	3	2.80	1.00	0.93	13.9
21-HC-02	18.00	21.00	3	2.80	1.00	0.93	26.1
21-HC-02	21.00	24.00	3	2.25	1.00	0.75	25.2
21-HC-02	24.00	27.00	3	1.35	1.00	0.45	18.9
21-HC-02	27.00	30.00	2.95	2.15	0.98	0.73	16.6
21-HC-02	30.00	33.00	2.85	2.20	0.95	0.77	13.9
21-HC-02	33.00	36.00	2.9	2.30	0.97	0.79	30.1
21-HC-02	36.00	39.00	3.03	2.60	1.01	0.86	33.4
21-HC-02	39.00	42.00	3.05	0.85	1.02	0.28	18.1
21-HC-02	42.00	45.00	3.1	0.45	1.03	0.15	17.8
21-HC-02	45.00	48.00	2.8	1.22	0.93	0.44	36.9
21-HC-02	48.00	51.00	2.8	1.95	0.93	0.70	43.7
21-HC-02	51.00	54.00	2.6	0.65	0.87	0.25	61.1
21-HC-02	54.00	57.00	2.6	0.70	0.87	0.27	20.8
21-HC-02	57.00	60.00	2.95	1.35	0.98	0.46	32.8
21-HC-02	60.00	63.00	3	1.30	1.00	0.43	16.5
21-HC-02	63.00	66.00	2.95	2.40	0.98	0.81	68.1
21-HC-02	66.00	69.00	2.95	1.70	0.98	0.58	113
21-HC-02	69.00	72.00	3.03	2.70	1.01	0.89	77
21-HC-02	72.00	75.00	3	2.60	1.00	0.87	57.5
21-HC-02	75.00	78.00	3	2.20	1.00	0.73	66.8
21-HC-02	78.00	81.00	2.95	2.60	0.98	0.88	58.7
21-HC-02	81.00	84.00	2.98	2.20	0.99	0.74	46.1
21-HC-02	84.00	87.00	2.9	2.15	0.97	0.74	106
21-HC-02	87.00	90.00	3	1.60	1.00	0.53	160
21-HC-02	90.00	93.00	2.85	2.10	0.95	0.74	226
21-HC-02	93.00	96.00	3	2.15	1.00	0.72	33
21-HC-02	96.00	99.00	2.95	2.30	0.98	0.78	36.7
21-HC-02	99.00	102.00	3.05	2.70	1.02	0.89	0.832
21-HC-02	102.00	105.00	2.95	2.30	0.98	0.78	0.835
21-HC-02	105.00	108.00	3.05	2.20	1.02	0.72	23.8
21-HC-02	108.00	111.00	2.95	1.25	0.98	0.42	8
21-HC-02	111.00	114.00	3	2.05	1.00	0.68	19.1
21-HC-02	114.00	117.00	3	2.10	1.00	0.70	19.5
21-HC-02	117.00	120.00	2.97	1.75	0.99	0.59	16.4
21-HC-02	120.00	123.00	2.97	2.35	0.99	0.79	6.49

2021 Assessment Report on the Hector Property

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-02	123.00	126.00	3.05	1.35	1.02	0.44	4.75
21-HC-02	126.00	129.00	2.95	0.80	0.98	0.27	29.1
21-HC-02	129.00	132.00	3.05	1.35	1.02	0.44	24.2
21-HC-02	132.00	135.00	2.95	0.70	0.98	0.24	5.11
21-HC-02	135.00	138.00	3.05	1.15	1.02	0.38	20.7
21-HC-02	138.00	141.00	2.8	1.35	0.93	0.48	20.1
21-HC-02	141.00	144.00	2.6	0.66	0.87	0.25	17.8
21-HC-02	144.00	147.00	2.9	0.75	0.97	0.26	18.9
21-HC-02	147.00	150.00	3.15	1.35	1.05	0.43	63.3
21-HC-02	150.00	153.00	3.05	1.05	1.02	0.34	17.9
21-HC-02	153.00	156.00	2.9	1.90	0.97	0.66	11.9
21-HC-02	156.00	159.00	3.05	1.80	1.02	0.59	8.24
21-HC-02	159.00	162.00	2.92	2.20	0.97	0.75	6.52
21-HC-02	162.00	165.00	2.7	1.05	0.90	0.39	14.1
21-HC-02	165.00	168.00	2.15	1.00	0.72	0.47	16.1
21-HC-02	168.00	171.00	2.85	1.25	0.95	0.44	12.6
21-HC-02	171.00	174.00	3	2.00	1.00	0.67	16.4
21-HC-02	174.00	177.00	3	2.25	1.00	0.75	9.05
21-HC-02	177.00	180.00	2.97	1.95	0.99	0.66	6.9
21-HC-02	180.00	183.00	2.88	1.88	0.96	0.65	10
21-HC-02	183.00	186.00	3	1.10	1.00	0.37	8.32
21-HC-02	186.00	189.00	3.1	1.55	1.03	0.50	4.74
21-HC-02	189.00	192.00	3	2.10	1.00	0.70	6.68
21-HC-02	192.00	195.00	3	2.20	1.00	0.73	1.74
21-HC-02	195.00	198.00	2.9	1.15	0.97	0.40	29
21-HC-02	198.00	201.00	2.97	1.20	0.99	0.40	14.2
21-HC-02	201.00	204.00	2.55	0.55	0.85	0.22	4.16
21-HC-02	204.00	207.00	2.45	1.20	0.82	0.49	14.5
21-HC-02	207.00	210.00	3	1.85	1.00	0.62	16.3
21-HC-02	210.00	213.00	3	1.75	1.00	0.58	15.5
21-HC-02	213.00	216.00	3	0.95	1.00	0.32	32.7
21-HC-02	216.00	219.00	3	1.10	1.00	0.37	37.5
21-HC-02	219.00	222.00	2.95	1.45	0.98	0.49	20
21-HC-02	222.00	225.00	2.8	1.00	0.93	0.36	1.11
21-HC-02	225.00	228.00	2.6	0.85	0.87	0.33	1.2
21-HC-02	228.00	231.00	2.5	0.55	0.83	0.22	3.2
21-HC-02	231.00	234.00	2.6	1.15	0.87	0.44	7.79
21-HC-02	234.00	237.00	2.8	0.55	0.93	0.20	2.98



2021 Assessment Report on the Hector Property

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-02	237.00	240.00	2.95	0.80	0.98	0.27	2.33
21-HC-02	240.00	243.00	2.65	1.60	0.88	0.60	1.59
21-HC-02	243.00	246.00	2.1	0.10	0.70	0.05	2.03
21-HC-02	246.00	249.00	3.05	0.80	1.02	0.26	1.16
21-HC-02	249.00	252.00	3.05	1.75	1.02	0.57	1.1
21-HC-02	252.00	255.00	2.95	1.95	0.98	0.66	0.955
21-HC-02	255.00	258.00	2.95	2.50	0.98	0.85	1
21-HC-02	258.00	261.00	3	1.75	1.00	0.58	0.701
21-HC-02	261.00	262.00	0.85	0.10	0.85	0.12	0.99
21-HC-03	7.50	9.00	1.5	0.30	1.00	0.20	4.29
21-HC-03	9.00	12.00	2.95	1.60	0.98	0.54	71.9
21-HC-03	12.00	15.00	2.9	2.05	0.97	0.71	113
21-HC-03	15.00	18.00	2.9	1.85	0.97	0.64	76.3
21-HC-03	18.00	21.00	3.05	2.05	1.02	0.67	38.4
21-HC-03	21.00	24.00	3.05	1.55	1.02	0.51	75.7
21-HC-03	24.00	27.00	2.85	1.80	0.95	0.63	13.9
21-HC-03	27.00	30.00	3	1.45	1.00	0.48	4.76
21-HC-03	30.00	33.00	2.9	1.30	0.97	0.45	3.69
21-HC-03	33.00	36.00	3	1.66	1.00	0.55	3.65
21-HC-03	36.00	39.00	3	2.20	1.00	0.73	26.5
21-HC-03	39.00	42.00	2.93	1.85	0.98	0.63	48.4
21-HC-03	42.00	45.00	2.93	2.33	0.98	0.80	14.6
21-HC-03	45.00	48.00	3	1.50	1.00	0.50	17
21-HC-03	48.00	51.00	2.85	1.15	0.95	0.40	16.2
21-HC-03	51.00	54.00	3.1	2.20	1.03	0.71	3.86
21-HC-03	54.00	57.00	2.9	1.90	0.97	0.66	6.65
21-HC-03	57.00	60.00	3	1.70	1.00	0.57	7.16
21-HC-03	60.00	63.00	3	1.30	1.00	0.43	10
21-HC-03	63.00	66.00	3	1.42	1.00	0.47	4.21
21-HC-03	66.00	69.00	3	1.70	1.00	0.57	20.1
21-HC-03	69.00	72.00	2.97	1.60	0.99	0.54	7.65
21-HC-03	72.00	75.00	3	1.80	1.00	0.60	8.81
21-HC-03	75.00	78.00	3.1	1.30	1.03	0.42	51.3
21-HC-03	78.00	81.00	2.9	1.30	0.97	0.45	23
21-HC-03	81.00	84.00	2.75	1.15	0.92	0.42	8.03
21-HC-03	84.00	87.00	2.9	0.90	0.97	0.31	20.8
21-HC-03	87.00	90.00	3	1.00	1.00	0.33	24.8
21-HC-03	90.00	93.00	2.97	1.70	0.99	0.57	13.5

2021 Assessment Report on the Hector Property

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-03	93.00	96.00	2.8	0.70	0.93	0.25	42.5
21-HC-03	96.00	99.00	2.9	0.90	0.97	0.31	27.9
21-HC-03	99.00	102.00	2.7	0.55	0.90	0.20	50.7
21-HC-03	102.00	105.00	2.95	0.95	0.98	0.32	65.4
21-HC-03	105.00	108.00	2.8	0.80	0.93	0.29	18.7
21-HC-03	108.00	111.00	2.75	1.75	0.92	0.64	27.8
21-HC-03	111.00	114.00	3	1.30	1.00	0.43	31.1
21-HC-03	114.00	117.00	3.05	2.30	1.02	0.75	91.8
21-HC-03	117.00	120.00	2.8	1.55	0.93	0.55	117
21-HC-03	120.00	123.00	2.9	1.90	0.97	0.66	50.7
21-HC-03	123.00	126.00	2.9	1.20	0.97	0.41	63.6
21-HC-03	126.00	129.00	3.05	0.85	1.02	0.28	96.3
21-HC-03	129.00	132.00	2.85	1.10	0.95	0.39	153
21-HC-03	132.00	135.00	2.8	1.00	0.93	0.36	196
21-HC-03	135.00	138.00	3.05	1.50	1.02	0.49	167
21-HC-03	138.00	141.00	3	2.10	1.00	0.70	23.8
21-HC-03	141.00	144.00	2.96	1.35	0.99	0.46	11.6
21-HC-03	144.00	147.00	3	1.90	1.00	0.63	1.01
21-HC-03	147.00	150.00	2.95	0.90	0.98	0.31	0.271
21-HC-03	150.00	153.00	2.8	1.90	0.93	0.68	9.8
21-HC-03	153.00	156.00	2.95	1.35	0.98	0.46	1.93
21-HC-03	156.00	159.00	0.3	0.00	0.10	0.00	0.725
21-HC-03	159.00	162.00	2.95	1.30	0.98	0.44	2.55
21-HC-03	162.00	165.00	3	0.85	1.00	0.28	2.91
21-HC-03	165.00	168.00	2.95	1.00	0.98	0.34	17.4
21-HC-03	168.00	171.00	3	0.75	1.00	0.25	12.5
21-HC-03	171.00	174.00	3.05	0.85	1.02	0.28	18.7
21-HC-03	174.00	177.00	2.85	1.10	0.95	0.39	2.24
21-HC-03	177.00	180.00	3	1.55	1.00	0.52	1.08
21-HC-03	180.00	183.00	2.95	0.80	0.98	0.27	21.1
21-HC-03	183.00	186.00	2.75	0.60	0.92	0.22	11.1
21-HC-03	186.00	189.00	3	0.60	1.00	0.20	2.01
21-HC-03	189.00	192.00	3	1.50	1.00	0.50	3.05
21-HC-03	192.00	195.00	2.9	1.80	0.97	0.62	3.65
21-HC-03	195.00	198.00	2.95	1.95	0.98	0.66	22.5
21-HC-03	198.00	201.00	2.85	2.00	0.95	0.70	6.45
21-HC-03	201.00	204.00	3	1.15	1.00	0.38	28.2
21-HC-03	204.00	207.00	2.95	1.90	0.98	0.64	26.4

2021 Assessment Report on the Hector Property

Hole ID	From (m)	To (m)	Recovery (m)	RQD (m)	Recovery %	RQD %	MagSus Average
21-HC-03	207.00	210.00	2.95	1.65	0.98	0.56	2.88
21-HC-03	210.00	213.00	2.85	0.90	0.95	0.32	19.6
21-HC-03	213.00	216.00	2.9	1.75	0.97	0.60	8.21
21-HC-03	216.00	219.00	3.05	1.05	1.02	0.34	13.7
21-HC-03	219.00	222.00	3	1.05	1.00	0.35	9.32
21-HC-03	222.00	225.00	2.8	1.60	0.93	0.57	12.3
21-HC-03	225.00	228.00	2.95	0.95	0.98	0.32	8.08
21-HC-03	228.00	231.00	2.8	1.45	0.93	0.52	10.6
21-HC-03	231.00	234.00	2.85	1.80	0.95	0.63	2.79
21-HC-03	234.00	237.00	2.95	1.30	0.98	0.44	3.76
21-HC-03	237.00	240.00	2.9	1.35	0.97	0.47	12.1
21-HC-03	240.00	243.00	3	0.75	1.00	0.25	3.14
21-HC-03	243.00	246.00	3.1	1.90	1.03	0.61	2.36
21-HC-03	246.00	249.00	2.65	0.65	0.88	0.25	14.8

## 2021 Drill Core Lithology

Hole ID	From (m)	To (m)	Interval (m)	Lithology	Colour	Description
21HC01	0.9	20.3	19.4	Coarse-grained Diabase	Medium green	Massive, coarse-grained, green with pink-feldspars, weak - mod altered (chl-K-mt alteration) and trace, diss pyrite. The rock exhibits medium to coarse-grained, elongated, euhedral to anhedral light-green specks (saussuritized plagioclase), spotty pink K-feldspars and dark grey magnetite. Alteration decreases significantly from 20.3 - 41m.
21HC01	20.3	41	20.7	Medium-grained diabase	Medium green and maroon	Massive, medium-grained, green with a pale red /maroon tint, mod altered with patches of K alteration and trace, diss pyrite. The rock contains lesser, coarse-grained K-feldspars, still exhibits pink potassic in addition to the green propylitic alteration.
21HC01	41	104	63	Primary Diabase	Dark green	Massive, medium-grained, dark-green, chlorite-altered with trace sulphide (disseminated specks and clots), trace k-alteration and trace, sub mm-scale, pink veinlets.
21HC01	104	113	9	Medium-grained diabase	Medium green and maroon	Massive, medium-grained, green with a pale red /maroon tint, mod altered with patches of K alteration and trace, diss pyrite. The interval exhibits a pink potassic as well as weathering along fractures. Slightly more veined.
21HC01	113	248	135	Primary Diabase	Dark green	Massive, medium-grained, dark-green, chlorite-altered with trace sulphide (disseminated specks and clots), rare k-alteration, mainly chlorite-altered, and trace, sub mm-scale, pink veinlets.
21HC01	248	326	78	Mafic Volcanic	Dark green/grey	Fine-grained volcanic, massive & fresh (at start of unit) to foliated & altered, feldspathic alteration dominates at the start of the unit, chlorite, and silica alteration for the rest of the unit. Contains zones of mod min (pyrite, trace cpy and moly), magnetic patches were noted within the unit. The unit contains rare, altered clasts, often brecciated, up to 3cm wide.
21HC02	0	19	19	Coarse-grained Diabase	Medium green	Massive, coarse-grained, green with pink-feldspars, weak - mod altered (chl-K-mt alteration) and trace, diss pyrite. The rock exhibits medium to coarse-grained, elongated, euhedral to anhedral light-green specks (saussuritized plagioclase), spotty pink K-feldspars and dark grey magnetite.
21HC02	19	73	54	Medium-grained diabase	Medium green and maroon	Massive, medium-grained, green with a pale red /maroon tint (31-33m), mod altered with patches of K alteration and trace, diss pyrite. The rock exhibits lesser pink potassic alteration.
21HC02	73	96.5	23.5	Primary Diabase	Dark green	Massive, medium-grained, dark-green, chlorite-altered with trace sulphide (disseminated specks and clots), chlorite-altered.
21HC02	96.5	231.05	134.55	Medium-grained diabase	Medium green	Massive, medium to coarse-grained, light green plagioclase and dark green matrix with trace, diss pyrite. This unit contains dm - meter scale primary diabase and chlorite infilling fractures. The bottom contact with lower unit exhibits a chill margin over 0.5m & broken up (possibly a mechanical fault)

Hole ID	From (m)	To (m)	Interval (m)	Lithology	Colour	Description
21HC02	231.05	262	30.95	Mafic Volcanic	Dark green	Fine-grained volcanic, massive (at start of unit) to foliated & altered (chlorite and silica) for the rest of the unit. Contains zones of mod min (pyrite & trace cpy). Also, contains strongly altered clasts of unknown origins, averaging at 1-3 cm in diameter, however larger clasts up to 15cm were also observed at 255.6-258m. This unit most likely represent a volcanic flow.
21HC03	7.5	28.05	20.55	Coarse-grained Diabase	Medium green	Massive, coarse-grained, green with pink-feldspars, weak - mod altered (chl-K-mt alteration) and trace, diss pyrite. The rock exhibits medium to coarse-grained, elongated, euhedral to anhedral light-green specks (saussuritized plagioclase), sporadic patches of pink K-feldspars and dark grey magnetite.
21HC03	28.05	65.7	37.65	Medium-grained diabase	Medium green and maroon	Massive, medium-grained, green with a pale red /maroon tint, weakly altered with K alteration and trace, diss pyrite. The rock contains lesser coarse-grained K-feldspars, still exhibits minor potassic.
21HC03	65.7	99	33.3	Primary Diabase	Dark green	Massive, medium-grained, dark-green, chlorite-altered with trace sulphide, trace k-alteration and trace, sub mm-scale, pink veinlets (typically weathered).
21HC03	99	249	150	Medium-grained diabase	Medium green	Massive, medium to coarse-grained, light green plagioclase and dark green matrix with trace, diss pyrite. This unit contains chlorite infilling fractures. Altered plagioclase are weakly developed throughout the core and become dominant at 134.7m while K-feldspar is completely absent. Contains magnetic intervals up to 138m - where magnetic, plagioclase is rare, and the rock appear darker in colour (dark green to black).

## 2021 Drill Core Alteration

Hole ID	From (m)	To (m)	Alteration Type	Intensity	Description
21HC01	0.9	21.3	Potassic / propylitic	Moderate	Mod K-alteration, altered plagioclase and hydrothermal chlorite
21HC01	21.3	41	Potassic	Weak - moderate	Minor cg secondary K-spars
21HC01	104	114	Potassic	Moderate	Mod, pink K-alteration.
21HC01	255.8	266	Potassic - Silica	Moderate	Wispy K-alteration overprint mod silica alteration
21HC01	279.7	311	Silica - chlorite	Moderate	Cm-dm scale zone of mod - strong silica alteration and mod chlorite alteration where silica is rare. Sulphide is abundant in high silica zones. No cobalt alteration throughout.
21HC02	0	30	Potassic / propylitic	Moderate	Mod K-alteration, altered plagioclase and hydrothermal chlorite
21HC02	30	33	Potassic	Moderate	Mg secondary K-spars, zone exhibit trace carb veining
21HC02	96	133	Potassic / propylitic	Moderate	Mod K-alteration & altered plagioclase (mg-cg)
21HC02	143.3	149.6	Potassic / silica	Moderate - strong	Includes mod-strong K-Si alteration with sulphide, slightly veined by carb.
21HC02	231.1	239.5	Silica-K	Moderate	Moderate silica alteration overprint minor K-alteration (@ 234-245)
21HC02	239.5	241.6	Silica	Strong	Strong silica alteration with minor sulphide (py/cpy)
21HC02	245	252	Silica - chlorite	Weak - moderate	Moderate silica alteration over 1m at start of zone
21HC02	252	261.9	Silica	Strong	Strong silica alteration with plenty sulphide (py). Silica alteration may have brecciated and altered clasts of unknown protolith ranging from mm up to 15cm. These clasts appear grey with sulphide around clasts' margins
21HC03	17.5	20.85	Potassic	Moderate	Mod, maroon K-alteration flooding this interval.
21HC03	144.6	144.9	Potassic	Strong	Strong K-alteration surrounding the veining of a K-rich vein - contains sulphide
21HC03	234	239	Potassic	Weak	Up to 10cm patches of weak potassic alteration.

## 2021 Drill Core Structures

Hole ID	From (m)	To (m)	Interval (m)	Structure	Intensity	Description
21HC01	93.5	112.6	19.1	Blocky	Moderate	Blocky and fractured pieces of rocks (40%).
21HC01	122.8	124.6	1.8	Blocky	Moderate	Blocky and fractured pieces of rocks (40%).
21HC01	242.5	247.6	5.1	Fault	Intense	Fault gouge and rubbly material (90%). Low Recovery
21HC01	247.5	249	1.5	Contact	-	Gradational contact
21HC01	260.7	263	2.3	Blocky	Moderate	Blocky and fractured pieces of rocks (50%).
21HC01	307	309	2	Blocky	Moderate	Fractured pieces of rocks and rubbly material (80%).
21HC01	312.4	314.4	2	Blocky	Moderate	Blocky and fractured pieces of rocks (40%).
21HC01	321.5	324.5	3	Blocky	Moderate	Blocky and fractured pieces of rocks (20%).
21HC01	256	300	44	Foliation	30	Foliation planes within volcanic unit, occasionally mineralized with sulphide
21HC01	300	326	26	Foliation	15-20	Foliation planes within volcanic unit, occasionally mineralized with sulphide
21HC01	274.1	274.35	0.25	Fault	35	Fault gouge - chlorite-rich - barren.
21HC01	307.5	309	1.5	Fault	40	Fault gouge and rubbly material (90%)
21HC01	312.5	314	1.5	Blocky	Moderate	Blocky and fractured pieces of rocks (50%).
21HC02	42.5	46	3.5	Blocky	Moderate	Fractured pieces of rocks (80%).
21HC02	57.1	57.6	0.5	Fault	Moderate	Fractured pieces of rocks & minor rubble (80%).
21HC02	130	136.5	6.5	Blocky	Moderate	Blocky and fractured pieces of rocks (30%).
21HC02	143.15	144.5	1.35	Blocky	Moderate	Fractured pieces of rocks (80%).
21HC02	166	166.5	0.5	Fault	Moderate	Fault gouge and rubbly material over 20cm
21HC02	225.95	237	11.05	Blocky	Weak	Fractured pieces of rocks & minor rubble (30%).
21HC02	231.05	231.05	0	Contact	60	A sharp contact between lower volcanic unit and upper/younger diabase - chilled margin, strongly chloritized and fine grained.
21HC02	243.2	248	4.8	Blocky	Moderate	Fractured pieces of rocks & minor rubble (50%).
21HC02	260.75	261.25	0.5	Blocky	Moderate	Fractured pieces of rocks & rubble over 10-15 cm intervals (50%).
21HC02	239.5	241.6	2.1	Breccia	Moderate	Brecciated interval with rock fragments completely altered by silica, relict planes at roughly 45 degrees TCA
21HC02	241.6	246	4.4	Foliation	0-5	Weak foliation parallel TCA with minor mm-cm clasts within volcanic flow
21HC02	246	247.5	1.5	Foliation	45	Weak foliation

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Hole ID	From (m)	To (m)	Interval (m)	Structure	Intensity	Description
21HC02	247.5	261.85	14.35	Foliation	5-15	Weak foliation at a shallow degree TCA with minor mm-cm clasts within volcanic flow
21HC03	21.75	23.1	1.35	Blocky	Moderate	Fractured pieces of rocks (50%).
21HC03	24.8	25.4	0.6	Blocky	Moderate	Fractured pieces of rocks (50%).
21HC03	50	51	1	Blocky	Weak	Fractured pieces of rocks (30%).
21HC03	65.7	66	0.3	Blocky	Moderate	Fractured pieces of rocks (100%).
21HC03	77.35	78	0.65	Blocky	Moderate	Fractured pieces of rocks (50%).
21HC03	81.1	83.3	2.2	Blocky	Moderate	Fractured pieces of rocks & minor rubble over 10-15cm (70%).
21HC03	85.2	88.8	3.6	Blocky	Moderate	Fractured pieces of rocks (50%).
21HC03	93	103	10	Blocky	Moderate	Fractured pieces of rocks (30%).
21HC03	107	108	1	Blocky	Moderate	Fractured pieces of rocks & minor rubble over 5cm (50%).
21HC03	112.3	113.2	0.9	Blocky	Strong	Fractured pieces of rocks & rubble (mostly chlorite-rich fractured-filled material) (100%)
21HC03	118.9	119.25	0.35	Blocky	Moderate	Fractured pieces of rocks & minor rubble over 5cm (50%).
21HC03	124.5	125.8	1.3	Blocky	Moderate	Fractured pieces of rocks & minor rubble over 5cm (70%).
21HC03	130.1	130.9	0.8	Blocky	Moderate	Fractured pieces of rocks (30%).
21HC03	163.7	165	1.3	Blocky	Moderate	Fractured pieces of rocks (50%).
21HC03	168.5	170	1.5	Blocky	Moderate	Fractured pieces of rocks (30%).
21HC03	171.6	173.2	1.6	Blocky	Moderate	Fractured pieces of rocks (70%).
21HC03	179	180.5	1.5	Blocky	Moderate	Fractured pieces of rocks & minor rubble over 5cm (70%).
21HC03	183.5	185.95	2.45	Blocky	Moderate	Fractured pieces of rocks (50%).
21HC03	193.8	195	1.2	Blocky	Moderate	Fractured pieces of rocks (70%).
21HC03	195.02	195.05	0.03	Breccia	Moderate	Brecciated zone (1.5cm) with country rocks K-altered fragments.
21HC03	222.5	227.3	4.8	Blocky	Moderate	Fractured pieces of rocks (70%).
21HC03	240.3	244	3.7	Blocky	Moderate	Fractured pieces of rocks (50%).



## 2021 Drill Core Veining

Hole ID	From (m)	To (m)	Width	Vein type	Composition	% of Rock	Angle to core	Description
21HC01	20	20.02	0.02	Veinlets	Qtz-K	100	50	Barren, fracture filled.
21HC01	54.5	54.55	0.05	Veinlet	Chl - Carb	100	60	Barren, chlorite-rich vein, and minor carb
21HC01	81.28	81.3	0.02	Veinlet	Qtz-Chl-Py	100	60	Sulphide-bearing (py, mg, trace), hydrothermal chl - qtz vein.
21HC01	93.5	94	0.5	Veinlet	Qtz-Chl-feld	5%	10	Sulphide-bearing (cpy, mg, clots) veinlet (<1cm wide), very shallow to CA.
21HC01	104	113.5	9.5	Veinlet	Carb-Feld-Chl	0.1	Variable	Trace veinlets cutting through the rock at variable degrees to CA. Strongly fractured along veining.
21HC01	126	133	7	Veinlet	Chlorite	0.1	Variable	Black, soft, trace, mm-scale veinlets.
21HC01	149	160	11	Veinlet	Chlorite	0.1	Variable	Black, soft, trace, mm-scale veinlets.
21HC01	153.5	153.9	0.4	Vein	Feld-qtz	100	45	Pink & white vein with trace pyrite + cpy.
21HC01	165	201	36	Veinlets	Chlorite	0.1	Variable	Black, soft, trace, mm-scale veinlets.
21HC01	309.1	309.1	0.05	Vein	Chl-Qtz-Py	100	60	Green & white, sulphide rich (30%) vein
21HC01	260	326	66	Veinlets	Chl-carb-qtz	0.01	Variable	Trace, sub-mm up to 2cm wide veinlets of variable compositions throughout the core. Most veinlets are barren while others contain up to 1% sulphide.
21HC02	30	32.5	2.5	Veinlets	Carb	1	Variable	Trace, sub-mm veinlets of carb, roughly @ 45-degree TCA
21HC02	70.5	77.2	6.7	Veinlets	Carb-Chl-Si	1	20-25	Mm up to 2cm wide mineralized veins / veinlets with Cpy & pyrite
21HC02	143.5	149.6	6.1	Veinlets	Carb-K-Chl	30	Variable	mm-cm scale veining with mg-cg pyrite & cpy clots in strongly silicified and K-rich zones (pink halo)
21HC02	234	235	1	Veins	Qtz - chl - carb	3	45	Two 0.5 - 2cm wide veins, white & green around vein margins.
21HC02	256	257.5	1.5	Veins	Qtz - chl	3	90	Two white, mineralized veins, up to 3cm wide, minor chlorite around margins
21HC03	28.2	35	6.8	Veinlets	Qtz-Carb-chl	0.01	Variable	Trace, sub-mm, barren veinlets. Dominant at 45-55 degrees TCA
21HC03	84.5	92	7.5	Veinlets	Carb-chl	0.05	Variable	Trace, mm up to 2cm wide vein, roughly at 45-60 degrees TCA. No mineralization, only hematite on few fractured surfaces
21HC03	144.6	144.9	0.3	Vein	K-carb-chl	70	40	A wide, red brown, mineralized vein (trace cpy, 5% pyrite), slightly brecciated, K-vein with trace carb + Chl. The vein has alteration halos around it.
21HC03	235.5	235.7	0.2	Veinlets	Carb	20	50	mm-scale veinlets, light pink, and lemon green carb, slightly brecciating the rock in the vicinity of veinlets

## 2021 Drill Core Mineralization

Hole ID	From (m)	To (m)	Mineral I	Mineral I %	Mineral I Occurrence	Mineral II	Mineral II %	Mineral II Occurrence	Mineral III	Mineral III %	Mineral III Occurrence	Description
21HC01	0.9	41	Py	0.01	disseminated	-	-	-	-	-	-	Trace fine-grained pyrite at K-altered zones
21HC01	93.5	94	Cpy	1	clot	-	-	-	-	-	-	Clots of cpy in feld vein
21HC01	279.7	298	Py	3	disseminated	Py	0.2	stringer	Cpy	0.01	disseminated	Trace, fg cpy. Up to 5% py in cm-dm zones of mineralization as diss and stringers (5mm wide, 40-degree TCA). Disseminated py is mg, cubic - blebby, usually around chlorite halos while pyrite in stringers is vfg-fg and occur along foliation planes.
21HC01	298	307.3	Py	0.5	disseminated	Po	0.01	disseminated	Cpy	0.01	disseminated	Trace fg-mg sulphide
21HC01	307.3	311	Py	3	disseminated	Py	0.5	stringer	-	-	-	Fg-mg pyrite, disseminated throughout and as stringers along foliation planes.
21HC02	70.5	77.2	Cpy	1	clot	Py	0.01	disseminated	-	-	-	Up to 1cm clots of Cpy in veinlets / veins with trace, mg, cubic pyrite
21HC02	143.3	146	Py	1	disseminated	Py	2	stringer	Cpy	0.01	disseminated	Mg-cg pyrite in a strongly brecciated, altered, veined 10cm wide zone with up to 2cm wide of massive sulphide
21HC02	148.3	148.6	Py	10	disseminated	Cpy	1	clots	-	-	-	Mg, diss pyrite throughout the zone, clots of cpy coexist with pyrite
21HC02	231.05	252.5	Py	1	disseminated	Py	0.1	clots	Cpy	0.01	clots	-
21HC02	252.5	258	Py	3	disseminated	Py	1	stringer	Py/Cpy	0.1	clots	Fg-mg pyrite in clots, diss and stringers - up to 0.5cm - usually occur around clast margins, veining and along foliation / flow planes
21HC03	17.5	20.85	Py	0.01	disseminated	-	-	-	-	-	-	Trace, mg pyrite, cubic in a moderate K-altered zone
21HC03	144.55	144.85	Py	5	disseminated	Cpy	0.01	clots	-	-	-	Mg, cubic pyrite and mg cpy clots in a k-rich vein

### **Appendix 3. Analytical Results and Laboratory Certificates**

## 2021 Drill Hole Analytical Results

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Au (ppm)	Pt (ppm)	Pd (ppm)	Al2O3 (%)	As (%)	CaO (%)	Co (%)	Cr2O3 (%)	Cu (%)	Fe (%)	Fe2O3 (%)	K2O (%)	MgO (%)	MnO (%)	Ni (%)	Pb (%)	S (%)	SiO2 (%)	TiO2 (%)	Zn (%)	Ag (ppm)
21HC01	D837051	91	92	1		<0.001	<0.005	0.001	12.5	0.01	7.68	0.007	0.01	0.027	13.85	19.8	1.13	4.24	0.22	0.004	<0.01	0.17	49	2.05	0.012	0.3
21HC01	D837052	92	93	1		0.001	<0.005	<0.001	12.45	0.01	7.36	0.006	0.01	0.032	14.45	20.7	1.28	4.18	0.22	0.006	<0.01	0.18	47.9	2.16	0.015	0.5
21HC01	D837053	93	94	1		<0.001	<0.005	0.001	12.7	0.01	6.91	0.008	0.01	0.018	14.1	20.2	1.1	4.23	0.21	0.003	<0.01	0.17	50.7	2.12	0.009	0.3
21HC01	D837054	94	95	1		<0.001	<0.005	0.001	12.75	0.01	7.4	0.006	0.01	0.028	14.5	20.7	1.01	4.71	0.21	0.007	<0.01	0.18	47.7	2.22	0.006	0.2
21HC01	D837055				Std	0.053	0.009	0.004	8.94	0.07	5.92	0.1	0.01	0.313	3.26	4.66	3.98	4.24	0.06	0.017	<0.01	1.69	59.5	0.4	<0.002	0.3
21HC01	D837056	95	96	1		0.001	0.005	0.002	12.8	0.01	6.6	0.008	0.01	0.031	15.65	22.4	1.1	4.48	0.23	0.007	<0.01	0.18	46	2.47	0.009	<0.2
21HC01	D837057	96	97	1		0.001	<0.005	0.002	13	0.01	6.62	0.008	0.01	0.03	15.65	22.4	1.16	4.28	0.23	0.007	<0.01	0.17	45.4	2.57	0.011	<0.2
21HC01	D837058	97	98	1		<0.001	<0.005	0.002	13.35	0.01	5.99	0.008	0.01	0.032	15.75	22.5	1.21	4.53	0.21	0.008	<0.01	0.17	45.6	2.56	0.011	0.2
21HC01	D837059	98	99	1		<0.001	<0.005	0.001	13.35	<0.01	5.76	0.006	0.01	0.037	15.8	22.6	1.46	4.74	0.2	0.007	<0.01	0.16	46.2	2.56	0.008	0.3
21HC01	D837060				Blank	<0.001	<0.005	0.001	0.41	<0.01	0.1	<0.002	0.01	<0.002	0.76	1.09	0.08	0.07	0.01	<0.002	<0.01	0.01	99.7	0.04	<0.002	<0.2
21HC01	D837061	99	100	1		<0.001	<0.005	0.001	13.25	0.01	5.82	0.009	0.01	0.043	16.25	23.2	1.48	4.97	0.2	0.011	<0.01	0.16	45.1	2.6	0.009	0.2
21HC01	D837062	100	101	1		<0.001	<0.005	0.002	13.95	0.01	7.14	0.008	0.01	0.042	15.55	22.2	1.2	4.15	0.2	0.012	<0.01	0.17	46.2	2.45	0.012	0.3
21HC01	D837063	101	102	1		<0.001	<0.005	0.001	14.75	0.01	6.83	0.005	0.01	0.029	12.7	18.15	0.91	4.56	0.18	0.01	<0.01	0.11	48.8	1.75	0.008	<0.2
21HC01	D837064	102	103	1		<0.001	<0.005	0.001	15.25	<0.01	7.09	0.007	0.01	0.024	10.6	15.15	1.1	4.46	0.18	0.005	0.03	0.09	51.1	1.14	0.008	0.2
21HC01	D837065	102	103		Dup	<0.001	<0.005	0.002	15.45	0.01	7.19	0.006	0.01	0.024	10.4	14.85	1.13	4.44	0.17	0.006	<0.01	0.1	52	1.09	0.007	<0.2
21HC01	D837066	103	104	1		<0.001	<0.005	<0.001	15.5	<0.01	7.51	0.005	0.01	0.018	9.51	13.6	1.18	4.86	0.17	0.004	<0.01	0.08	52.8	0.77	0.008	0.2
21HC01	D837067	104	105	1		<0.001	<0.005	0.001	15.7	<0.01	6.93	0.005	<0.01	0.013	9.24	13.2	1.31	4.79	0.17	0.003	<0.01	0.08	52.6	0.86	0.007	<0.2
21HC01	D837068	105	106	1		<0.001	<0.005	0.001	16	0.01	6.97	0.005	0.01	0.008	9.3	13.3	1.35	4.74	0.17	0.003	<0.01	0.1	52.6	0.96	0.005	0.2
21HC01	D837069	106	107	1		<0.001	<0.005	0.001	15.5	<0.01	7.26	0.004	0.01	0.007	8.99	12.85	1.41	4.83	0.16	0.003	<0.01	0.09	51.3	0.94	0.004	0.2
21HC01	D837070	107	108	1		<0.001	<0.005	0.001	15.9	<0.01	6.87	0.002	0.01	0.004	8.4	12	1.34	4.39	0.14	0.004	<0.01	0.08	51.1	0.91	0.003	0.2
21HC01	D837071	108	109	1		<0.001	<0.005	0.001	16.5	0.01	6.66	<0.002	0.01	0.008	8.43	12.05	1.5	4.43	0.14	0.002	<0.01	0.09	52.6	0.94	0.004	0.2
21HC01	D837072	109	110	1		<0.001	<0.005	0.002	16.05	<0.01	6.16	0.005	0.01	0.01	8.43	12.05	1.54	4.38	0.14	0.005	<0.01	0.08	51.1	0.89	0.005	<0.2
21HC01	D837073	110	111	1		<0.001	<0.005	0.002	16.25	<0.01	6.41	0.004	0.01	0.011	8.37	11.95	1.63	4.43	0.15	0.005	<0.01	0.07	51.3	0.91	0.005	<0.2
21HC01	D837074	111	112	1		<0.001	<0.005	0.002	15.8	<0.01	6.23	0.005	<0.01	0.004	8.41	12	1.39	4.83	0.15	0.003	<0.01	0.05	51.3	0.93	0.004	<0.2
21HC01	D837075				Std	0.039	<0.005	0.008	8.67	0.06	5.62	0.099	0.02	0.294	3.18	4.55	3.84	4.13	0.06	0.015	0.01	1.64	58.6	0.39	<0.002	0.3
21HC01	D837076	112	113	1		<0.001	<0.005	0.001	14.95	<0.01	6.84	0.004	<0.01	0.01	8.64	12.35	1.06	4.68	0.15	<0.002	<0.01	0.07	52	0.92	0.004	0.3
21HC01	D837077	113	114	1		<0.001	<0.005	0.001	15.5	<0.01	7.02	0.005	0.01	0.014	9.07	12.95	1.22	4.56	0.18	0.003	0.01	0.09	52	0.99	0.011	0.2
21HC01	D837078	152.5	153.5	1		0.001	<0.005	0.001	14.55	<0.01	8.54	0.007	0.02	0.01	8.43	12.05	0.56	7	0.16	0.012	0.01	0.08	50.9	0.75	0.006	0.2
21HC01	D837079	153.5	153.9	0.4		<0.001	<0.005	0.001	12.1	<0.01	11.8	0.012	<0.01	0.071	1.14	1.63	0.31	0.81	0.1	<0.002	<0.01	0.45	55.6	0.32	<0.002	0.2
21HC01	D837080				Blank	<0.001	<0.005	0.001	0.36	<0.01	0.14	<0.002	0.01	<0.002	0.72	1.03	0.07	0.07	0.01	<0.002	<0.01	<0.01	98.8	0.02	<0.002	<0.2
21HC01	D837081	153.9	154.9	1		0.001	<0.005	0.001	14.5	<0.01	7.29	0.004	0.01	0.011	8.22	11.75	0.56	6.63	0.16	0.008	<0.01	0.07	50.9	0.77	0.005	<0.2
21HC01	D837082	234	235	1		0.001	0.009	0.019	13	<0.01	7.75	0.008	0.02	0.008	8.12	11.6	0.75	12.1	0.15	0.036	<0.01	0.05	47.1	0.59	0.007	0.3
21HC01	D837083	235	236	1		0.001	0.011	0.024	13	<0.01	8.35	0.007	0.02	0.008	8.27	11.8	0.69	12.5	0.16	0.033	<0.01	0.05	48.1	0.58	0.01	<0.2
21HC01	D837084	236	237	1		0.001	0.009	0.023	12.75	<0.01	8.55	0.006	0.02	0.009	8.11	11.6	0.59	12.2	0.16	0.035	<0.01	0.04	47.9	0.57	0.011	<0.2
21HC01	D837085	236	237	1	Dup	0.002	0.01	0.023	13	<0.01	8.61	0.008	0.02	0.009	8.33	11.9	0.63	12.15	0.16	0.037	0.01	0.05	48.8	0.59	0.012	<0.2
21HC01	D837086	237	238	1		0.002	0.008	0.018	13.3	<0.01	8.35	0.007	0.02	0.009	7.97	11.4	0.83	11.7	0.15	0.03	<0.01	0.04	48.3	0.6	0.007	<0.2
21HC01	D837087	238	239	1		0.001	0.007	0.015	13	0.01	6.63	0.006	0.02	0.009	7.87	11.25	1.24	11.95	0.13	0.027	<0.01	0.05	47.1	0.61	0.005	0.2
21HC01	D837088	239	240	1		0.002	0.009	0.021	13	<0.01	6.37	0.007	0.02	0.009	7.89	11.3	1.33	12.75	0.12	0.025	<0.01	0.06	46.8	0.61	0.004	<0.2
21HC01	D837089	240	241	1		0.002	0.009	0.018	12.7	<0.01	4.42	0.007	0.02	0.01	8.06	11.5	1.25	13	0.13	0.028	<0.01	0.06	47.1	0.61	0.005	<0.2







Hole ID	Sample ID	From (m)	To (m)	Interval (m)	QA/QC	Au (ppm)	Pt (ppm)	Pd (ppm)	Al2O3 (%)	As (%)	CaO (%)	Co (%)	Cr2O3 (%)	Cu (%)	Fe (%)	Fe2O3 (%)	K2O (%)	MgO (%)	MnO (%)	Ni (%)	Pb (%)	S (%)	SiO2 (%)	TiO2 (%)	Zn (%)	Ag (ppm)
21HC03	D837213	93	96	3		<0.001	<0.005	0.001	13.15	0.01	5.3	0.004	0.02	0.007	13.45	19.25	1.72	2.93	0.27	0.003	<0.01	0.15	52.4	1.93	0.014	0.3
21HC03	D837214	142	143	1		<0.001	<0.005	0.001	15.7	<0.01	8.51	0.005	0.01	0.013	9.41	13.45	0.93	4.47	0.19	<0.002	<0.01	0.08	53.1	0.97	0.01	<0.2
21HC03	D837215				Std	0.048	<0.005	0.003	8.69	0.06	5.93	0.096	0.01	0.303	3.16	4.52	3.83	4.21	0.06	0.016	<0.01	1.62	58.8	0.4	<0.002	0.2
21HC03	D837216	143	144	1		<0.001	<0.005	0.001	15.85	<0.01	8.51	0.004	0.01	0.011	9.02	12.9	1.08	4.34	0.18	<0.002	<0.01	0.09	53.1	0.99	0.01	<0.2
21HC03	D837217	144	145	1		<0.001	<0.005	0.002	15.4	<0.01	7.25	0.006	0.01	0.017	7.35	10.5	1.17	3.62	0.15	0.003	<0.01	0.1	52	0.88	0.005	<0.2
21HC03	D837218	145	146	1		<0.001	<0.005	0.002	16.1	0.01	8.2	0.005	0.01	0.008	8.49	12.15	1.25	3.73	0.17	0.003	<0.01	0.09	52	0.95	0.008	0.2
21HC03	D837219	146	147	1		<0.001	<0.005	0.002	16.1	<0.01	8.61	0.003	0.01	0.015	8.64	12.35	1.16	3.77	0.17	0.003	<0.01	0.1	51.8	0.93	0.008	<0.2
21HC03	D837220				Blank	<0.001	<0.005	<0.001	0.53	<0.01	0.15	<0.002	0.01	<0.002	0.83	1.19	0.07	0.09	0.01	<0.002	<0.01	0.01	98.8	0.05	<0.002	<0.2
21HC03	D837221	231	234	3		0.004	<0.005	0.001	14.85	<0.01	10.55	0.005	0.02	0.014	7.47	10.7	0.63	7.26	0.16	0.009	<0.01	0.07	52.4	0.72	0.004	<0.2
21HC03	D837222	234	235	1		0.003	<0.005	0.001	14.8	<0.01	9.92	0.005	0.02	0.014	7.19	10.3	0.7	7.37	0.16	0.007	<0.01	0.07	51.1	0.7	0.004	<0.2
21HC03	D837223	235	236	1		0.003	<0.005	0.001	14.7	0.01	10.2	0.003	0.02	0.012	7.72	11.05	0.76	7.46	0.19	0.008	<0.01	0.06	49.6	0.72	0.003	<0.2
21HC03	D837224	236	237	1		0.004	<0.005	0.001	15.1	<0.01	10.75	0.006	0.02	0.016	7.28	10.4	0.54	7.42	0.16	0.008	<0.01	0.05	52.6	0.74	0.003	<0.2
21HC03	D837225	236	237	1	Dup	0.004	<0.005	0.001	14.95	<0.01	10.3	0.004	0.02	0.013	7.17	10.25	0.56	7.37	0.15	0.007	<0.01	0.07	51.6	0.72	0.004	<0.2
21HC03	D837226	237	238	1		0.006	<0.005	0.001	14.35	<0.01	9.08	0.005	0.02	0.014	7.84	11.2	0.63	7.73	0.18	0.01	<0.01	0.07	50.7	0.69	0.003	<0.2
21HC03	D837227	238	239	1		0.004	<0.005	0.001	14.95	<0.01	10.6	0.005	0.02	0.014	7.36	10.5	0.56	7.31	0.16	0.009	<0.01	0.07	52.2	0.72	0.005	<0.2
21HC03	D837228	239	240	1		0.005	<0.005	0.001	14.35	<0.01	10.4	0.005	0.02	0.013	7.38	10.55	0.76	7.45	0.16	0.009	<0.01	0.05	51.6	0.73	0.005	<0.2
21HC03	D837229	240	243	3		0.005	<0.005	0.001	14.55	<0.01	9.93	0.002	0.03	0.014	7.52	10.75	0.76	7.75	0.16	0.01	<0.01	0.05	52	0.7	0.004	<0.2
21HC03	D837230				Blank	<0.001	<0.005	0.001	0.66	0.01	0.21	<0.002	0.01	<0.002	1.02	1.46	0.11	0.18	0.01	<0.002	<0.01	<0.01	99	0.04	<0.002	<0.2





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Page: 1  
 Total # Pages: 6 (A - B)  
 Plus Appendix Pages  
 Finalized Date: 4-SEP-2021  
 This copy reported on 7-SEP-2021  
 Account: GEAPEX

**CERTIFICATE SD21188681**

Project: Hector Project  
 P.O. No.: 99421  
 This report is for 180 samples of Drill Core submitted to our lab in Sudbury, ON, Canada on 21-JUL-2021.  
 The following have access to data associated with this certificate:

MO ASMAIL	SETH KAY	KRIS RAFFLE
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SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-31	Fine crushing - 70% <2mm
LOG-23	Pulp Login - Rcvd with Barcode
LOG-21	Sample logging - ClientBarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES
Aq-AA45	Trace Ag - aqua regia/AAS	AAS
PGM-ICP23	Pt, Pd, Au 30g FA ICP	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 \*\*\*\*\*  
 Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

Signature:   
 Saa Traxler, General Manager, North Vancouver



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Project: Hector Project

**CERTIFICATE OF ANALYSIS SD21188681**

Sample Description	Method Analyte Units LOD	WEI-21	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
		Recvd Wt. kg	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr2O3 %	Cu %	Fe %	Fe2O3 %	K2O %	MgO %	MnO %
D837051		2.50	<0.001	<0.005	0.001	12.50	0.01	7.68	0.007	0.01	0.027	13.85	19.80	1.13	4.24	0.22
D837052		2.54	0.001	<0.005	<0.001	12.45	0.01	7.36	0.006	0.01	0.032	14.45	20.7	1.28	4.18	0.22
D837053		1.94	<0.001	<0.005	0.001	12.70	0.01	6.91	0.008	0.01	0.018	14.10	20.2	1.10	4.23	0.21
D837054		2.09	<0.001	<0.005	0.001	12.75	0.01	7.40	0.006	0.01	0.028	14.50	20.7	1.01	4.71	0.21
D837055		<0.02	0.053	0.009	0.004	8.94	0.07	5.92	0.100	0.01	0.313	3.26	4.66	3.98	4.24	0.06
D837056		1.96	0.001	0.005	0.002	12.80	0.01	6.60	0.008	0.01	0.031	15.65	22.4	1.10	4.48	0.23
D837057		2.06	0.001	<0.005	0.002	13.00	0.01	6.62	0.008	0.01	0.030	15.65	22.4	1.16	4.28	0.23
D837058		1.47	<0.001	<0.005	0.002	13.35	0.01	5.99	0.008	0.01	0.032	15.75	22.5	1.21	4.53	0.21
D837059		1.52	<0.001	<0.005	0.001	13.35	<0.01	5.76	0.006	0.01	0.037	15.80	22.6	1.46	4.74	0.20
D837060		0.09	<0.001	<0.005	0.001	0.41	<0.01	0.10	<0.002	0.01	<0.002	0.76	1.09	0.08	0.07	0.01
D837061		1.45	<0.001	<0.005	0.001	13.25	0.01	5.82	0.009	0.01	0.043	16.25	23.2	1.48	4.97	0.20
D837062		1.58	<0.001	<0.005	0.002	13.95	0.01	7.14	0.008	0.01	0.042	15.55	22.2	1.20	4.15	0.20
D837063		1.57	<0.001	<0.005	0.001	14.75	0.01	6.83	0.005	0.01	0.029	12.70	18.15	0.91	4.56	0.18
D837064		0.67	<0.001	<0.005	0.001	15.25	<0.01	7.09	0.007	0.01	0.024	10.60	15.15	1.10	4.46	0.18
D837065		0.61	<0.001	<0.005	0.002	15.45	0.01	7.19	0.006	0.01	0.024	10.40	14.85	1.13	4.44	0.17
D837066		1.77	<0.001	<0.005	<0.001	15.50	<0.01	7.51	0.005	0.01	0.018	9.51	13.60	1.18	4.86	0.17
D837067		1.87	<0.001	<0.005	0.001	15.70	<0.01	6.93	0.005	<0.01	0.013	9.24	13.20	1.31	4.79	0.17
D837068		1.64	<0.001	<0.005	0.001	16.00	0.01	6.97	0.005	0.01	0.008	9.30	13.30	1.35	4.74	0.17
D837069		2.06	<0.001	<0.005	0.001	15.50	<0.01	7.26	0.004	0.01	0.007	8.99	12.85	1.41	4.83	0.16
D837070		2.07	<0.001	<0.005	0.001	15.90	<0.01	6.87	0.002	0.01	0.004	8.40	12.00	1.34	4.39	0.14
D837071		1.66	<0.001	<0.005	0.001	16.50	0.01	6.66	<0.002	0.01	0.008	8.43	12.05	1.50	4.43	0.14
D837072		1.75	<0.001	<0.005	0.002	16.05	<0.01	6.16	0.005	0.01	0.010	8.43	12.05	1.54	4.38	0.14
D837073		2.25	<0.001	<0.005	0.002	16.25	<0.01	6.41	0.004	0.01	0.011	8.37	11.95	1.63	4.43	0.15
D837074		2.34	<0.001	<0.005	0.002	15.80	<0.01	6.23	0.005	<0.01	0.004	8.41	12.00	1.39	4.83	0.15
D837075		<0.02	0.039	<0.005	0.008	8.67	0.06	5.62	0.099	0.02	0.294	3.18	4.55	3.84	4.13	0.06
D837076		2.29	<0.001	<0.005	0.001	14.95	<0.01	6.84	0.004	<0.01	0.010	8.64	12.35	1.06	4.68	0.15
D837077		2.58	<0.001	<0.005	0.001	15.50	<0.01	7.02	0.005	0.01	0.014	9.07	12.95	1.22	4.56	0.18
D837078		2.56	0.001	<0.005	0.001	14.55	<0.01	8.54	0.007	0.02	0.010	8.43	12.05	0.56	7.00	0.16
D837079		0.80	<0.001	<0.005	0.001	12.10	<0.01	11.80	0.012	<0.01	0.071	1.14	1.63	0.31	0.81	0.10
D837080		0.10	<0.001	<0.005	0.001	0.36	<0.01	0.14	<0.002	0.01	<0.002	0.72	1.03	0.07	0.07	0.01
D837081		2.54	0.001	<0.005	0.001	14.50	<0.01	7.29	0.004	0.01	0.011	8.22	11.75	0.56	6.63	0.16
D837082		2.11	0.001	0.009	0.019	13.00	<0.01	7.75	0.008	0.02	0.008	8.12	11.60	0.75	12.10	0.15
D837083		2.09	0.001	0.011	0.024	13.00	<0.01	8.35	0.007	0.02	0.008	8.27	11.80	0.69	12.50	0.16
D837084		1.15	0.001	0.009	0.023	12.75	<0.01	8.55	0.006	0.02	0.009	8.11	11.60	0.59	12.20	0.16
D837085		1.10	0.002	0.010	0.023	13.00	<0.01	8.61	0.008	0.02	0.009	8.33	11.90	0.63	12.15	0.16
D837086		2.35	0.002	0.008	0.018	13.30	<0.01	8.35	0.007	0.02	0.009	7.97	11.40	0.83	11.70	0.15
D837087		2.23	0.001	0.007	0.015	13.00	0.01	6.63	0.006	0.02	0.009	7.87	11.25	1.24	11.95	0.13
D837088		2.45	0.002	0.009	0.021	13.00	<0.01	6.37	0.007	0.02	0.009	7.89	11.30	1.33	12.75	0.12
D837089		2.22	0.002	0.009	0.018	12.70	<0.01	4.42	0.007	0.02	0.010	8.06	11.50	1.25	13.00	0.13
D837090		2.18	0.002	0.012	0.018	12.45	<0.01	4.24	0.008	0.02	0.009	7.86	11.25	1.21	12.90	0.12

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative



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 Finalized Date: 4-SEP-2021  
 Account: GEAPEX

Project: Hector Project

CERTIFICATE OF ANALYSIS SD21188681
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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
D837051		0.004	<0.01	0.17	49.0	2.05	0.012	0.3	78.8	91.3
D837052		0.006	<0.01	0.18	47.9	2.16	0.015	0.5		95.7
D837053		0.003	<0.01	0.17	50.7	2.12	0.009	0.3		
D837054		0.007	<0.01	0.18	47.7	2.22	0.006	0.2		
D837055		0.017	<0.01	1.69	59.5	0.40	<0.002	0.3		
D837056		0.007	<0.01	0.18	46.0	2.47	0.009	<0.2		
D837057		0.007	<0.01	0.17	45.4	2.57	0.011	<0.2		
D837058		0.008	<0.01	0.17	45.6	2.56	0.011	0.2		
D837059		0.007	<0.01	0.16	46.2	2.56	0.008	0.3		
D837060		<0.002	<0.01	0.01	99.7	0.04	<0.002	<0.2		
D837061		0.011	<0.01	0.16	45.1	2.60	0.009	0.2		
D837062		0.012	<0.01	0.17	46.2	2.45	0.012	0.3		
D837063		0.010	<0.01	0.11	48.8	1.75	0.008	<0.2		
D837064		0.005	0.03	0.09	51.1	1.14	0.008	0.2		
D837065		0.006	<0.01	0.10	52.0	1.09	0.007	<0.2		
D837066		0.004	<0.01	0.08	52.8	0.77	0.008	0.2		
D837067		0.003	<0.01	0.08	52.6	0.86	0.007	<0.2		
D837068		0.003	<0.01	0.10	52.6	0.96	0.005	0.2		
D837069		0.003	<0.01	0.09	51.3	0.94	0.004	0.2		
D837070		0.004	<0.01	0.08	51.1	0.91	0.003	0.2		
D837071		0.002	<0.01	0.09	52.6	0.94	0.004	0.2		
D837072		0.005	<0.01	0.08	51.1	0.89	0.005	<0.2		
D837073		0.005	<0.01	0.07	51.3	0.91	0.005	<0.2		
D837074		0.003	<0.01	0.05	51.3	0.93	0.004	<0.2		
D837075		0.015	0.01	1.64	58.6	0.39	<0.002	0.3		
D837076		<0.002	<0.01	0.07	52.0	0.92	0.004	0.3		
D837077		0.003	0.01	0.09	52.0	0.99	0.011	0.2		
D837078		0.012	0.01	0.08	50.9	0.75	0.006	0.2		
D837079		<0.002	<0.01	0.45	55.6	0.32	<0.002	0.2		
D837080		<0.002	<0.01	<0.01	98.8	0.02	<0.002	<0.2		
D837081		0.008	<0.01	0.07	50.9	0.77	0.005	<0.2		
D837082		0.036	<0.01	0.05	47.1	0.59	0.007	0.3		
D837083		0.033	<0.01	0.05	48.1	0.58	0.010	<0.2		
D837084		0.035	<0.01	0.04	47.9	0.57	0.011	<0.2		
D837085		0.037	0.01	0.05	48.8	0.59	0.012	<0.2		
D837086		0.030	<0.01	0.04	48.3	0.60	0.007	<0.2		
D837087		0.027	<0.01	0.05	47.1	0.61	0.005	0.2		
D837088		0.025	<0.01	0.06	46.8	0.61	0.004	<0.2		
D837089		0.028	<0.01	0.06	47.1	0.61	0.005	<0.2		86.0
D837090		0.027	0.01	0.06	46.4	0.59	0.005	<0.2	92.3	86.7

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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



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 100, 11450 - 160 STREET NW  
 EDMONTON AB T5M 3Y7

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 Finalized Date: 4-SEP-2021  
 Account: GEAPEX

Project: Hector Project

**CERTIFICATE OF ANALYSIS SD21188681**

Sample Description	Method Analyte Units LOD	WEI-21	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
		Recvd Wt. kg	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr2O3 %	Cu %	Fe %	Fe2O3 %	K2O %	MgO %	MnO %
		0.02	0.001	0.005	0.001	0.02	0.01	0.07	0.002	0.01	0.002	0.05	0.05	0.06	0.01	0.01
D837091		2.13	0.002	0.010	0.020	12.30	0.01	3.39	0.006	0.02	0.010	8.26	11.80	0.92	13.95	0.13
D837092		1.49	0.002	0.010	0.022	13.10	<0.01	2.91	0.008	0.02	0.009	7.94	11.35	0.71	13.05	0.15
D837093		2.13	0.002	0.007	0.019	12.25	0.01	4.62	0.006	0.02	0.008	8.42	12.05	0.83	13.40	0.14
D837094		2.35	0.002	0.011	0.016	13.10	<0.01	7.26	0.008	0.02	0.010	8.44	12.05	1.06	10.40	0.18
D837095		<0.02	0.034	<0.005	0.001	8.69	0.06	5.74	0.104	0.01	0.300	3.27	4.68	3.88	4.20	0.06
D837096		2.22	0.002	0.009	0.016	13.15	<0.01	8.68	0.007	0.02	0.012	8.27	11.80	1.67	9.05	0.18
D837097		7.58	0.003	0.006	0.016	13.15	<0.01	8.83	0.006	0.02	0.011	8.37	11.95	1.64	9.09	0.18
D837098		7.12	0.007	0.009	0.013	14.05	<0.01	8.97	0.004	0.02	0.011	8.23	11.75	1.60	7.56	0.20
D837099		6.66	0.002	<0.005	0.003	12.75	<0.01	6.44	0.004	0.03	0.009	7.63	10.90	1.41	5.44	0.22
D837100		5.99	0.002	<0.005	0.001	15.55	0.01	3.40	0.006	0.02	0.005	6.32	9.04	2.38	2.98	0.18
D837101		6.92	0.001	<0.005	0.002	16.35	0.01	2.74	0.003	0.02	0.002	4.92	7.03	1.99	2.70	0.14
D837102		6.16	<0.001	<0.005	0.001	16.55	<0.01	2.18	<0.002	0.01	<0.002	3.51	5.02	2.60	2.07	0.10
D837103		6.53	<0.001	<0.005	0.002	15.05	<0.01	2.78	0.002	0.02	<0.002	5.68	8.12	1.19	4.00	0.15
D837104		3.28	0.001	<0.005	0.005	12.10	0.01	6.32	0.005	0.07	<0.002	9.02	12.90	0.50	8.52	0.25
D837105		3.23	0.002	0.005	0.004	12.20	<0.01	5.95	0.003	0.07	<0.002	9.02	12.90	0.48	8.56	0.25
D837106		7.40	0.001	0.006	0.004	11.30	<0.01	6.53	0.002	0.12	<0.002	9.25	13.20	0.74	11.00	0.24
D837107		5.09	<0.001	<0.005	0.005	12.00	0.01	6.53	<0.002	0.06	<0.002	7.77	11.10	0.43	8.06	0.19
D837108		4.65	0.001	<0.005	0.004	12.35	<0.01	6.02	0.003	0.06	<0.002	8.31	11.90	0.57	7.94	0.20
D837109		2.46	0.007	<0.005	0.002	12.15	0.01	2.42	0.005	0.02	0.017	5.99	8.56	1.12	3.08	0.12
D837110		2.79	0.004	<0.005	0.002	14.00	0.01	1.53	<0.002	0.01	0.057	7.39	10.55	0.70	3.13	0.14
D837111		3.54	0.005	<0.005	0.001	14.60	<0.01	2.74	0.002	0.01	0.029	8.19	11.70	0.51	3.61	0.17
D837112		3.57	<0.001	<0.005	0.002	13.95	<0.01	5.65	0.003	0.04	<0.002	8.39	12.00	0.52	5.27	0.20
D837113		3.69	0.001	<0.005	0.001	13.55	<0.01	5.53	0.002	0.01	0.007	11.05	15.80	0.45	5.99	0.27
D837114		3.41	<0.001	<0.005	0.002	14.20	<0.01	6.83	<0.002	0.01	0.015	10.25	14.65	0.31	4.97	0.28
D837115		<0.02	0.034	0.010	0.002	8.65	0.06	5.69	0.095	0.02	0.296	3.21	4.59	3.82	4.15	0.06
D837116		3.60	<0.001	<0.005	0.003	14.85	0.01	2.95	<0.002	0.01	0.005	10.75	15.35	0.78	4.91	0.26
D837117		3.75	<0.001	<0.005	<0.001	12.15	<0.01	5.25	0.002	0.01	<0.002	15.35	21.9	0.97	7.21	0.38
D837118		3.41	0.004	<0.005	<0.001	11.00	0.01	4.51	0.004	0.01	0.020	12.60	18.00	0.39	5.34	0.34
D837119		3.45	0.003	<0.005	<0.001	15.15	0.01	1.72	0.007	0.01	0.008	10.85	15.50	2.98	3.91	0.23
D837120		0.09	<0.001	<0.005	<0.001	0.53	<0.01	0.15	<0.002	0.01	<0.002	1.34	1.92	0.09	0.10	0.02
D837121		3.36	<0.001	<0.005	<0.001	14.35	0.01	3.72	0.004	0.01	0.006	9.90	14.15	1.93	3.68	0.24
D837122		3.94	<0.001	<0.005	<0.001	13.85	0.01	3.67	0.005	0.01	0.010	12.05	17.25	1.65	5.57	0.29
D837123		3.21	0.001	0.005	<0.001	13.95	0.01	3.72	0.003	0.02	0.025	10.70	15.30	1.29	4.66	0.25
D837124		1.58	<0.001	<0.005	<0.001	15.65	0.01	2.25	0.004	0.02	0.013	9.11	13.00	1.81	3.76	0.21
D837125		1.49	0.001	<0.005	<0.001	14.40	0.01	2.74	0.005	0.04	0.023	9.90	14.15	1.70	4.41	0.23
D837126		6.96	0.001	<0.005	<0.001	14.60	0.01	2.08	<0.002	0.01	0.006	6.87	9.82	1.27	2.72	0.17
D837127		6.77	<0.001	<0.005	<0.001	15.20	<0.01	2.85	0.002	0.01	0.005	6.55	9.36	0.80	2.54	0.18
D837128		2.68	<0.001	<0.005	<0.001	16.15	<0.01	1.83	0.003	0.01	<0.002	6.42	9.18	2.26	2.50	0.17
D837129		2.72	0.001	<0.005	<0.001	14.00	<0.01	3.71	0.003	0.02	0.004	7.53	10.75	2.24	3.53	0.21
D837130		0.10	<0.001	<0.005	<0.001	0.59	<0.01	0.15	<0.002	0.01	<0.002	1.58	2.26	0.13	0.10	0.02

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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



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 Account: GEAPEX

Project: Hector Project

CERTIFICATE OF ANALYSIS SD21188681
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Sample Description	Method Analyte Units LOD	ME-ICP81 Ni %	ME-ICP81 Pb %	ME-ICP81 S %	ME-ICP81 SiO2 %	ME-ICP81 TiO2 %	ME-ICP81 Zn %	Ag-AA45 Ag ppm	CRU-QC Pass2mm %	PUL-QC Pass75um %
D837091		0.027	<0.01	0.08	46.8	0.59	0.006	<0.2		
D837092		0.028	<0.01	0.08	46.8	0.66	0.007	0.2		
D837093		0.026	<0.01	0.11	45.4	0.60	0.008	<0.2		
D837094		0.022	<0.01	0.08	49.0	0.69	0.008	<0.2		
D837095		0.014	<0.01	1.63	59.0	0.39	<0.002	0.2		
D837096		0.017	<0.01	0.08	49.4	0.70	0.007	<0.2		91.7
D837097		0.015	<0.01	0.08	50.1	0.71	0.007	<0.2		
D837098		0.012	<0.01	0.12	50.1	0.79	0.011	<0.2		
D837099		0.016	0.01	0.14	53.9	0.78	0.012	<0.2		
D837100		0.011	<0.01	0.06	57.8	0.90	0.012	<0.2		
D837101		0.009	<0.01	0.01	61.4	1.02	0.009	0.4		
D837102		0.003	<0.01	<0.01	61.6	1.09	0.006	<0.2		
D837103		0.007	<0.01	0.02	59.0	0.95	0.010	<0.2		
D837104		0.013	<0.01	0.06	50.3	0.75	0.018	<0.2		
D837105		0.012	<0.01	0.04	51.6	0.77	0.017	<0.2		
D837106		0.019	<0.01	0.03	50.9	0.71	0.019	<0.2		
D837107		0.012	<0.01	0.03	53.1	0.77	0.014	<0.2		
D837108		0.009	<0.01	0.05	54.1	0.75	0.014	<0.2		
D837109		0.009	0.01	0.58	67.0	0.65	0.011	0.6		
D837110		0.006	0.01	0.77	61.4	0.87	0.015	0.7		
D837111		0.003	<0.01	0.52	58.2	0.95	0.017	0.5		
D837112		0.007	<0.01	0.14	53.5	0.79	0.016	0.2		
D837113		0.005	<0.01	0.07	51.1	0.80	0.020	0.6		
D837114		<0.002	<0.01	0.01	50.1	0.86	0.020	1.7		
D837115		0.017	<0.01	1.67	59.0	0.39	<0.002	0.5		
D837116		0.003	<0.01	0.03	51.8	0.90	0.023	0.9		
D837117		0.008	<0.01	0.01	47.3	0.75	0.026	<0.2		
D837118		0.012	0.02	0.45	53.1	0.62	0.056	3.2		
D837119		0.012	0.01	0.95	54.3	0.95	0.021	1.4		
D837120		<0.002	<0.01	0.01	97.8	0.03	<0.002	<0.2		
D837121		0.008	<0.01	0.60	52.0	0.90	0.016	0.7		
D837122		0.012	<0.01	0.45	50.1	0.90	0.020	0.2		
D837123		0.012	<0.01	0.66	52.6	0.99	0.018	1.1		
D837124		0.008	<0.01	0.81	55.6	1.09	0.022	0.9		
D837125		0.015	<0.01	0.77	53.3	1.03	0.021	2.2		
D837126		0.003	<0.01	0.38	61.0	0.96	0.012	0.3		
D837127		0.006	0.02	0.08	58.2	0.98	0.048	1.5		
D837128		0.005	0.01	0.06	58.8	1.07	0.013	0.4		
D837129		0.007	0.01	0.25	56.3	0.88	0.070	1.0		
D837130		<0.002	<0.01	<0.01	97.5	0.04	<0.002	<0.2		

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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**CERTIFICATE OF ANALYSIS SD21188681**

Sample Description	Method Analyte Units LOD	WEI-21	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
		Recvd Wt. kg	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr2O3 %	Cu %	Fe %	Fe2O3 %	K2O %	MgO %	MnO %
D837131		3.41	<0.001	<0.005	<0.001	12.75	0.01	4.73	0.003	0.01	0.012	10.35	14.80	1.74	5.64	0.30
D837132		3.91	0.001	<0.005	<0.001	13.00	0.01	4.46	0.007	0.01	0.021	11.65	16.65	0.87	5.16	0.33
D837133		5.99	<0.001	<0.005	<0.001	13.85	0.01	2.22	0.005	<0.01	<0.002	10.60	15.15	1.67	4.34	0.27
D837134		6.59	<0.001	<0.005	<0.001	14.10	0.02	2.78	0.005	0.003	0.003	12.30	17.60	1.54	5.39	0.30
D837135		<0.02	0.043	<0.005	0.009	8.65	0.06	5.79	0.094	0.01	0.298	3.20	4.58	3.83	4.16	0.06
D837136		7.21	0.002	<0.005	<0.001	14.05	0.01	3.78	0.006	0.01	0.009	10.85	15.50	1.38	4.49	0.28
D837137		6.54	0.005	<0.005	<0.001	14.35	0.01	2.31	0.004	0.02	0.016	7.66	10.95	0.84	3.83	0.18
D837138		4.63	0.002	<0.005	<0.001	15.40	0.02	2.53	0.006	0.01	0.004	5.86	8.38	1.22	2.65	0.15
D837139		6.65	<0.001	<0.005	<0.001	13.75	0.01	2.59	<0.002	0.01	0.007	8.43	12.05	1.05	1.64	0.13
D837140		0.10	<0.001	<0.005	<0.001	0.42	0.01	<0.07	<0.002	0.01	0.004	1.59	2.27	<0.06	0.06	0.02
D837141		2.29	<0.001	<0.005	<0.001	13.70	<0.01	2.59	0.002	0.01	0.002	8.13	11.60	0.92	1.83	0.13
D837142		2.15	<0.001	<0.005	<0.001	13.95	<0.01	3.54	0.002	0.01	0.007	7.50	10.70	1.10	2.04	0.14
D837143		1.85	<0.001	<0.005	<0.001	13.95	0.01	4.00	0.003	0.01	0.005	7.50	10.70	1.14	1.90	0.15
D837144		3.04	<0.001	<0.005	<0.001	13.95	<0.01	2.61	0.004	0.01	0.002	8.40	12.00	1.25	1.66	0.14
D837145		2.88	<0.001	<0.005	<0.001	14.05	<0.01	2.60	0.003	0.01	0.002	8.62	12.30	1.27	1.67	0.14
D837146		7.21	<0.001	<0.005	<0.001	13.85	<0.01	2.86	0.003	0.01	0.004	9.01	12.90	1.44	1.75	0.15
D837147		6.48	<0.001	<0.005	<0.001	13.85	<0.01	2.69	0.002	0.01	0.005	9.47	13.55	2.22	1.83	0.16
D837148		5.99	<0.001	<0.005	<0.001	14.15	<0.01	2.61	0.003	0.01	0.006	9.76	13.95	1.58	2.01	0.17
D837149		5.34	<0.001	<0.005	<0.001	14.15	<0.01	3.28	0.003	0.01	0.006	10.25	14.65	1.69	2.26	0.18
D837150		8.31	<0.001	<0.005	<0.001	12.60	0.01	5.43	0.006	0.01	0.005	12.80	18.25	0.95	2.97	0.24
D837151		2.34	<0.001	<0.005	<0.001	12.70	<0.01	5.29	0.007	0.01	0.006	13.40	19.15	1.05	3.13	0.25
D837152		2.38	<0.001	<0.005	<0.001	12.75	0.01	6.34	0.005	0.01	0.008	11.40	16.30	1.36	3.46	0.26
D837153		2.31	<0.001	<0.005	<0.001	12.30	0.01	7.81	0.010	0.01	0.118	10.90	15.55	0.84	4.84	0.29
D837154		7.46	<0.001	<0.005	<0.001	12.40	<0.01	5.91	0.007	0.01	0.011	13.20	18.85	1.32	3.73	0.25
D837155		<0.02	0.043	<0.005	0.001	8.90	0.06	5.75	0.099	0.01	0.302	3.29	4.70	3.86	4.28	0.06
D837156		7.65	<0.001	<0.005	<0.001	13.00	<0.01	6.64	0.008	0.01	0.023	13.95	19.95	1.38	3.82	0.26
D837157		7.50	<0.001	<0.005	<0.001	12.25	<0.01	6.58	0.009	0.01	0.019	13.75	19.70	1.27	4.05	0.23
D837158		7.72	<0.001	<0.005	<0.001	12.20	<0.01	7.44	0.008	0.01	0.025	14.05	20.1	1.20	4.18	0.22
D837159		7.64	<0.001	<0.005	<0.001	13.05	<0.01	7.02	0.007	0.01	0.039	15.50	22.2	1.13	4.25	0.22
D837160		0.10	<0.001	<0.005	<0.001	0.59	<0.01	0.11	<0.002	0.01	<0.002	0.96	1.37	0.11	0.10	0.01
D837161		6.94	0.001	<0.005	<0.001	14.70	<0.01	9.65	0.005	0.01	0.014	8.19	11.70	0.61	7.29	0.18
D837162		2.00	<0.001	<0.005	<0.001	14.60	0.01	9.11	0.005	0.02	0.015	7.94	11.35	1.07	7.28	0.19
D837163		0.96	0.001	<0.005	<0.001	14.40	0.01	9.08	0.005	0.02	0.016	7.98	11.40	1.08	7.43	0.19
D837164		0.86	0.001	<0.005	<0.001	14.55	0.01	9.38	0.003	0.02	0.015	7.92	11.30	1.07	7.31	0.19
D837165		1.26	0.002	<0.005	<0.001	13.30	<0.01	11.70	0.032	0.01	0.088	7.83	11.20	0.99	5.59	0.15
D837166		1.65	<0.001	<0.005	<0.001	15.65	<0.01	4.49	0.003	0.02	0.030	9.64	13.80	0.21	6.71	0.13
D837167		1.88	0.001	<0.005	<0.001	13.60	0.01	7.97	0.005	0.01	0.011	8.04	11.50	0.68	6.97	0.19
D837168		1.90	0.002	<0.005	<0.001	14.55	<0.01	7.79	0.004	0.02	0.014	7.27	10.40	1.53	7.00	0.18
D837169		2.95	0.002	<0.005	<0.001	15.00	<0.01	8.73	0.005	0.02	0.015	7.97	11.40	1.52	7.41	0.18
D837170		2.99	<0.001	<0.005	<0.001	12.70	<0.01	5.76	0.003	0.01	0.036	4.20	6.00	0.22	1.98	0.07

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative



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Project: Hector Project

**CERTIFICATE OF ANALYSIS SD21188681**

Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
D837131		0.012	<0.01	0.45	49.6	0.94	0.188	0.7	76.7	97.6
D837132		0.011	<0.01	0.70	51.6	0.94	0.019	0.4		
D837133		0.006	<0.01	0.02	54.1	1.10	0.023	<0.2		
D837134		0.009	0.01	0.03	51.1	1.12	0.023	0.2		
D837135		0.018	<0.01	1.67	58.8	0.39	<0.002	0.2		
D837136		0.009	<0.01	0.09	52.0	1.03	0.018	0.2		
D837137		0.011	<0.01	0.05	58.8	0.93	0.012	<0.2	80.1	
D837138		0.011	<0.01	0.01	59.5	1.03	0.009	<0.2		
D837139		<0.002	<0.01	0.06	61.2	1.02	0.010	<0.2		
D837140		0.004	<0.01	0.01	98.2	0.03	<0.002	<0.2		
D837141		0.003	<0.01	0.03	59.9	1.03	0.006	<0.2		
D837142		0.004	<0.01	0.02	59.9	1.08	0.005	<0.2		
D837143		0.002	<0.01	0.02	58.6	1.08	0.006	<0.2		
D837144		0.004	<0.01	0.07	59.3	1.07	0.005	1.8		
D837145		0.003	<0.01	0.06	59.9	1.10	0.006	<0.2		
D837146		0.005	<0.01	0.09	58.6	1.10	0.006	<0.2		
D837147		0.003	<0.01	0.07	58.0	1.16	0.006	<0.2		
D837148		0.004	<0.01	0.06	57.3	1.23	0.006	<0.2		
D837149		0.003	<0.01	0.09	56.0	1.32	0.007	<0.2		
D837150		0.006	<0.01	0.18	51.8	1.97	0.008	<0.2		
D837151		0.005	<0.01	0.22	51.6	2.04	0.008	<0.2		
D837152		0.003	<0.01	0.23	50.5	2.14	0.005	<0.2		
D837153		0.003	<0.01	0.39	44.7	1.95	0.004	<0.2		
D837154		0.005	<0.01	0.24	49.0	2.09	0.008	<0.2		
D837155		0.018	<0.01	1.68	58.8	0.40	<0.002	<0.2		
D837156		0.002	<0.01	0.17	51.1	2.10	0.014	<0.2		
D837157		0.012	<0.01	0.22	48.1	1.95	0.011	<0.2		
D837158		0.007	<0.01	0.21	47.1	2.13	0.012	<0.2		
D837159		0.008	<0.01	0.18	46.2	2.53	0.013	<0.2		
D837160		<0.002	<0.01	0.01	97.3	0.07	<0.002	<0.2		
D837161		0.011	<0.01	0.07	52.4	0.79	0.008	<0.2		
D837162		0.013	<0.01	0.07	51.3	0.74	0.006	<0.2		
D837163		0.012	<0.01	0.08	51.3	0.75	0.006	<0.2		
D837164		0.011	<0.01	0.08	51.6	0.76	0.006	<0.2		
D837165		0.012	<0.01	0.83	45.4	0.70	0.005	<0.2		
D837166		0.010	<0.01	0.12	48.1	0.77	0.003	<0.2		
D837167		0.013	<0.01	0.10	49.0	0.66	0.005	<0.2		
D837168		0.011	<0.01	0.07	50.7	0.69	0.005	<0.2		
D837169		0.012	<0.01	0.06	52.0	0.75	0.006	<0.2		91.2
D837170		0.010	<0.01	0.45	58.8	0.63	<0.002	<0.2	85.2	92.3

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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



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**CERTIFICATE OF ANALYSIS SD21188681**

Sample Description	Method Analyte Units LOD	WEI-21	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
		Recvd Wt. kg	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr2O3 %	Cu %	Fe %	Fe2O3 %	K2O %	MgO %	MnO %
D837171		2.91	0.003	<0.005	<0.001	15.00	<0.01	9.24	0.005	0.02	0.016	7.25	10.35	1.22	6.94	0.16
D837172		2.69	0.004	<0.005	<0.001	15.05	<0.01	10.10	0.003	0.02	0.015	7.43	10.60	0.88	7.28	0.17
D837173		2.77	0.004	<0.005	<0.001	15.05	<0.01	10.15	0.004	0.02	0.016	7.58	10.85	0.94	7.28	0.17
D837174		7.02	0.004	<0.005	<0.001	14.35	<0.01	10.60	0.005	0.02	0.014	7.53	10.75	0.56	7.57	0.17
D837175		<0.02	0.047	<0.005	0.001	8.71	0.06	5.71	0.099	0.01	0.296	3.21	4.59	3.79	4.23	0.06
D837176		7.48	0.005	<0.005	<0.001	13.75	<0.01	10.35	0.006	0.02	0.012	7.05	10.10	0.67	7.27	0.19
D837177		7.07	0.002	0.011	0.016	13.60	<0.01	9.63	0.008	0.02	0.008	8.46	12.10	0.97	11.35	0.26
D837178		6.36	0.002	0.010	0.017	12.40	<0.01	8.21	0.006	0.02	0.008	7.96	11.40	0.93	10.85	0.18
D837179		5.16	0.003	0.013	0.020	12.30	<0.01	8.06	0.009	0.02	0.005	8.37	11.95	0.65	10.60	0.17
D837180		0.10	<0.001	<0.005	<0.001	0.26	<0.01	<0.07	<0.002	0.01	<0.002	0.84	1.20	<0.06	0.10	0.01
D837181		4.87	0.002	0.011	0.015	12.40	<0.01	7.79	0.005	0.02	0.005	8.29	11.85	1.07	8.76	0.20
D837182		4.84	<0.001	<0.005	<0.001	13.10	<0.01	1.61	<0.002	0.01	<0.002	3.83	5.48	0.47	1.12	0.05
D837183		4.23	<0.001	<0.005	<0.001	13.70	0.01	0.90	<0.002	0.01	<0.002	3.41	4.88	0.94	0.95	0.04
D837184		2.57	<0.001	<0.005	<0.001	13.55	<0.01	1.01	<0.002	0.01	<0.002	5.07	7.25	1.32	1.57	0.07
D837185		2.75	<0.001	<0.005	<0.001	13.55	<0.01	1.01	<0.002	<0.01	<0.002	4.95	7.08	1.32	1.52	0.06
D837186		3.30	<0.001	<0.005	<0.001	10.40	<0.01	2.01	0.002	0.01	0.011	4.45	6.36	0.47	1.48	0.12
D837187		2.18	<0.001	<0.005	<0.001	16.05	<0.01	0.97	<0.002	0.01	<0.002	5.71	8.16	2.22	2.03	0.08
D837188		4.62	<0.001	<0.005	<0.001	13.55	<0.01	1.79	0.002	0.01	<0.002	5.98	8.55	0.96	2.10	0.08
D837189		6.15	<0.001	<0.005	<0.001	13.60	0.01	2.11	<0.002	0.02	0.003	5.41	7.73	0.48	1.94	0.08
D837190		6.83	<0.001	<0.005	<0.001	15.15	<0.01	1.08	<0.002	0.02	0.003	6.19	8.85	0.89	2.16	0.09
D837191		2.11	<0.001	<0.005	0.001	14.00	0.01	1.44	<0.002	0.02	0.016	6.63	9.48	0.40	2.10	0.21
D837192		2.29	0.004	<0.005	<0.001	14.80	0.01	1.82	0.003	0.02	0.010	6.82	9.75	0.74	2.10	0.16
D837193		2.13	0.003	<0.005	0.001	17.35	0.01	0.99	<0.002	0.02	0.006	7.23	10.35	1.54	2.34	0.13
D837194		2.23	0.001	<0.005	0.001	14.80	0.01	2.03	0.003	0.02	0.010	5.97	8.54	1.19	1.84	0.19
D837195		<0.02	0.052	<0.005	<0.001	8.50	0.06	5.79	0.097	0.01	0.298	3.10	4.43	3.78	4.11	0.06
D837196		2.21	0.008	<0.005	0.001	11.95	0.01	4.44	0.002	0.01	0.035	4.82	6.89	0.20	1.36	0.09
D837197		0.09	<0.001	<0.005	<0.001	0.42	<0.01	<0.07	<0.002	0.01	<0.002	0.72	1.03	0.06	0.05	0.01
D837198		2.11	0.016	<0.005	0.001	12.30	0.01	3.92	0.003	0.01	0.037	5.85	8.36	0.50	1.77	0.10
D837199		6.85	0.001	<0.005	0.001	14.85	<0.01	1.53	0.002	0.01	0.003	7.00	10.00	1.16	2.30	0.11
D837200		1.73	0.003	<0.005	0.001	14.15	<0.01	1.36	<0.002	0.01	0.002	6.25	8.94	2.46	2.14	0.10
D837201		6.49	<0.001	<0.005	0.001	12.55	<0.01	2.49	<0.002	0.01	<0.002	7.33	10.50	1.24	1.22	0.13
D837202		6.08	0.001	<0.005	0.001	12.80	<0.01	3.82	0.003	0.01	<0.002	6.73	9.62	0.72	1.84	0.11
D837203		1.95	0.001	<0.005	0.001	12.85	<0.01	3.83	0.002	0.01	0.002	6.56	9.38	0.94	1.42	0.10
D837204		0.95	0.006	<0.005	0.001	12.95	0.01	3.89	0.008	0.01	<0.002	6.24	8.92	0.67	2.04	0.09
D837205		1.03	0.003	<0.005	0.001	13.00	0.01	3.88	0.005	0.01	<0.002	6.42	9.18	0.68	1.97	0.09
D837206		2.01	0.004	<0.005	0.001	12.85	<0.01	2.94	0.002	0.01	<0.002	7.88	11.25	1.04	1.41	0.13
D837207		6.50	<0.001	<0.005	0.001	13.15	<0.01	2.76	0.003	0.01	<0.002	8.34	11.90	2.38	1.42	0.14
D837208		6.31	<0.001	<0.005	0.001	13.95	0.01	4.38	0.007	0.01	<0.002	10.55	15.10	1.49	2.66	0.20
D837209		5.59	<0.001	<0.005	0.002	14.15	<0.01	4.20	0.003	0.01	<0.002	11.35	16.25	1.50	2.64	0.22
D837210		5.81	0.043	<0.005	0.001	13.75	0.01	4.39	0.005	0.01	0.002	10.60	15.15	1.76	2.92	0.22

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative





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Sample Description	Method Analyte Units LOD	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	Ag-AA45	CRU-QC	PUL-QC
		Ni %	Pb %	S %	SiO2 %	TiO2 %	Zn %	Ag ppm	Pass2mm %	Pass75um %
		0.002	0.01	0.01	0.2	0.01	0.002	0.2	0.01	0.01
D837171		0.016	<0.01	0.08	50.7	0.68	0.006	<0.2		
D837172		0.011	<0.01	0.06	51.3	0.69	0.007	<0.2		
D837173		0.012	<0.01	0.06	51.8	0.71	0.007	<0.2		
D837174		0.015	<0.01	0.06	51.1	0.70	0.007	<0.2		
D837175		0.018	<0.01	1.65	57.5	0.39	<0.002	<0.2		
D837176		0.010	<0.01	0.07	49.8	0.65	0.005	<0.2		
D837177		0.026	<0.01	0.07	50.3	0.69	0.007	<0.2		
D837178		0.023	<0.01	0.06	46.6	0.63	0.007	<0.2		
D837179		0.022	<0.01	0.06	48.3	0.66	0.007	<0.2		
D837180		<0.002	<0.01	<0.01	96.7	0.02	<0.002	<0.2		
D837181		0.014	<0.01	0.05	47.5	0.69	0.009	<0.2		
D837182		<0.002	<0.01	0.04	65.0	0.74	0.002	<0.2		
D837183		<0.002	<0.01	0.05	67.8	0.77	0.002	<0.2		
D837184		<0.002	<0.01	0.01	66.7	0.78	0.005	<0.2		
D837185		<0.002	<0.01	0.02	64.8	0.79	0.004	<0.2		
D837186		<0.002	<0.01	0.05	70.4	0.56	0.003	<0.2		
D837187		<0.002	<0.01	0.03	61.0	0.90	0.004	<0.2		
D837188		<0.002	<0.01	0.18	66.1	0.77	0.005	<0.2		
D837189		<0.002	<0.01	0.28	63.1	0.83	0.004	<0.2		
D837190		<0.002	<0.01	0.27	64.6	0.96	0.004	<0.2		
D837191		0.003	<0.01	0.55	62.0	0.84	0.004	0.2		
D837192		0.004	<0.01	0.58	60.5	0.89	0.004	<0.2		
D837193		0.008	<0.01	0.27	57.1	1.03	0.005	<0.2		
D837194		0.003	<0.01	0.43	56.5	0.98	0.004	0.5		
D837195		0.013	<0.01	1.61	57.5	0.39	<0.002	<0.2		
D837196		<0.002	<0.01	0.71	61.6	0.84	0.003	1.9		
D837197		<0.002	<0.01	0.01	97.1	0.03	<0.002	<0.2		
D837198		0.002	<0.01	0.62	57.8	0.84	0.004	0.5		
D837199		<0.002	<0.01	0.26	62.3	0.88	0.006	<0.2		
D837200		<0.002	<0.01	0.26	61.2	0.81	0.005	<0.2		
D837201		<0.002	<0.01	0.02	58.8	0.84	0.004	<0.2		
D837202		<0.002	<0.01	0.04	58.8	0.92	0.003	<0.2		
D837203		<0.002	<0.01	0.05	58.6	0.95	0.003	<0.2		
D837204		<0.002	<0.01	0.01	58.0	0.96	0.003	<0.2		
D837205		<0.002	<0.01	0.02	59.3	0.98	0.003	<0.2		
D837206		<0.002	<0.01	0.02	58.6	0.96	0.003	<0.2		
D837207		0.003	<0.01	0.06	58.6	0.97	0.005	<0.2		
D837208		<0.002	<0.01	0.08	52.6	1.44	0.004	<0.2		
D837209		<0.002	<0.01	0.08	54.5	1.48	0.004	<0.2		90.1
D837210		<0.002	<0.01	0.09	52.2	1.54	0.004	0.3	85.5	90.2

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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



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 Account: GEAPEX

Project: Hector Project

**CERTIFICATE OF ANALYSIS SD21188681**

Sample Description	Method Analyte Units LOD	WEI-21	PGM-ICP23	PGM-ICP23	PGM-ICP23	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81	ME-ICP81
		Recvd Wt. kg	Au ppm	Pt ppm	Pd ppm	Al2O3 %	As %	CaO %	Co %	Cr2O3 %	Cu %	Fe %	Fe2O3 %	K2O %	MgO %	MnO %
		0.02	0.001	0.005	0.001	0.02	0.01	0.07	0.002	0.01	0.002	0.05	0.05	0.06	0.01	0.01
D837211		6.55	0.017	<0.005	0.002	14.10	<0.01	4.51	0.004	0.01	0.003	12.50	17.85	1.59	2.98	0.24
D837212		7.13	<0.001	<0.005	0.002	13.45	0.01	4.90	0.005	0.01	0.007	11.40	16.30	1.47	2.86	0.23
D837213		6.57	<0.001	<0.005	0.001	13.15	0.01	5.30	0.004	0.02	0.007	13.45	19.25	1.72	2.93	0.27
D837214		2.25	<0.001	<0.005	0.001	15.70	<0.01	8.51	0.005	0.01	0.013	9.41	13.45	0.93	4.47	0.19
D837215		<0.02	0.048	<0.005	0.003	8.69	0.06	5.93	0.096	0.01	0.303	3.16	4.52	3.83	4.21	0.06
D837216		2.49	<0.001	<0.005	0.001	15.85	<0.01	8.51	0.004	0.01	0.011	9.02	12.90	1.08	4.34	0.18
D837217		2.28	<0.001	<0.005	0.002	15.40	<0.01	7.25	0.006	0.01	0.017	7.35	10.50	1.17	3.62	0.15
D837218		2.02	<0.001	<0.005	0.002	16.10	0.01	8.20	0.005	0.01	0.008	8.49	12.15	1.25	3.73	0.17
D837219		2.31	<0.001	<0.005	0.002	16.10	<0.01	8.61	0.003	0.01	0.015	8.64	12.35	1.16	3.77	0.17
D837220		0.11	<0.001	<0.005	<0.001	0.53	<0.01	0.15	<0.002	0.01	<0.002	0.83	1.19	0.07	0.09	0.01
D837221		6.65	0.004	<0.005	0.001	14.85	<0.01	10.55	0.005	0.02	0.014	7.47	10.70	0.63	7.26	0.16
D837222		2.13	0.003	<0.005	0.001	14.80	<0.01	9.92	0.005	0.02	0.014	7.19	10.30	0.70	7.37	0.16
D837223		2.14	0.003	<0.005	0.001	14.70	0.01	10.20	0.003	0.02	0.012	7.72	11.05	0.76	7.46	0.19
D837224		1.01	0.004	<0.005	0.001	15.10	<0.01	10.75	0.006	0.02	0.016	7.28	10.40	0.54	7.42	0.16
D837225		0.94	0.004	<0.005	0.001	14.95	<0.01	10.30	0.004	0.02	0.013	7.17	10.25	0.56	7.37	0.15
D837226		2.08	0.006	<0.005	0.001	14.35	<0.01	9.08	0.005	0.02	0.014	7.84	11.20	0.63	7.73	0.18
D837227		2.29	0.004	<0.005	0.001	14.95	<0.01	10.60	0.005	0.02	0.014	7.36	10.50	0.56	7.31	0.16
D837228		2.15	0.005	<0.005	0.001	14.35	<0.01	10.40	0.005	0.02	0.013	7.38	10.55	0.76	7.45	0.16
D837229		6.99	0.005	<0.005	0.001	14.55	<0.01	9.93	0.002	0.03	0.014	7.52	10.75	0.76	7.75	0.16
D837230		0.09	<0.001	<0.005	0.001	0.66	0.01	0.21	<0.002	0.01	<0.002	1.02	1.46	0.11	0.18	0.01

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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Sample Description	Method Analyte Units LOD	ME-ICP81 Ni %	ME-ICP81 Pb %	ME-ICP81 S %	ME-ICP81 SiO2 %	ME-ICP81 TiO2 %	ME-ICP81 Zn %	Ag-AA45 Ag ppm	CRU-QC Pass2mm %	PUL-QC Pass75um %
D837211		<0.002	<0.01	0.10	53.7	1.67	0.006	<0.2		
D837212		0.002	<0.01	0.12	51.8	1.68	0.006	<0.2		
D837213		0.003	<0.01	0.15	52.4	1.93	0.014	0.3		
D837214		<0.002	<0.01	0.08	53.1	0.97	0.010	<0.2		
D837215		0.016	<0.01	1.62	58.8	0.40	<0.002	0.2		
D837216		<0.002	<0.01	0.09	53.1	0.99	0.010	<0.2		
D837217		0.003	<0.01	0.10	52.0	0.88	0.005	<0.2		
D837218		0.003	<0.01	0.09	52.0	0.95	0.008	0.2		
D837219		0.003	<0.01	0.10	51.8	0.93	0.008	<0.2		
D837220		<0.002	<0.01	0.01	98.8	0.05	<0.002	<0.2		
D837221		0.009	<0.01	0.07	52.4	0.72	0.004	<0.2		
D837222		0.007	<0.01	0.07	51.1	0.70	0.004	<0.2		
D837223		0.008	<0.01	0.06	49.6	0.72	0.003	<0.2		
D837224		0.008	<0.01	0.05	52.6	0.74	0.003	<0.2		
D837225		0.007	<0.01	0.07	51.6	0.72	0.004	<0.2		
D837226		0.010	<0.01	0.07	50.7	0.69	0.003	<0.2		
D837227		0.009	<0.01	0.07	52.2	0.72	0.005	<0.2		
D837228		0.009	<0.01	0.05	51.6	0.73	0.005	<0.2		
D837229		0.010	<0.01	0.05	52.0	0.70	0.004	<0.2		
D837230		<0.002	<0.01	<0.01	99.0	0.04	<0.002	<0.2		

Comments: Pulp STD's fused at 5g - therefore results will be semi-quantitative

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



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**CERTIFICATE OF ANALYSIS SD21188681**

	<b>CERTIFICATE COMMENTS</b>								
Applies to Method:	<p style="text-align: center;"><b>LABORATORY ADDRESSES</b></p> <p>Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">CRU-31</td> <td style="width: 33%;">CRU-QC</td> <td style="width: 33%;">LOG-21</td> <td style="width: 33%;">LOG-23</td> </tr> <tr> <td>PUL-31</td> <td>PUL-QC</td> <td>SPL-21</td> <td>WEI-21</td> </tr> </table>	CRU-31	CRU-QC	LOG-21	LOG-23	PUL-31	PUL-QC	SPL-21	WEI-21
CRU-31	CRU-QC	LOG-21	LOG-23						
PUL-31	PUL-QC	SPL-21	WEI-21						
Applies to Method:	<p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Ag-AA45</td> <td style="width: 33%;">ME-ICP81</td> <td style="width: 33%;">PGM-ICP23</td> <td></td> </tr> </table>	Ag-AA45	ME-ICP81	PGM-ICP23					
Ag-AA45	ME-ICP81	PGM-ICP23							