

BC Geological Survey Assessment Report 38974



Ministry of Energy and Mines BC Geological Survey

18622, 19940, 26256, 34406, 35635

Assessment Report Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Assessment Report - Geochemical an	d Magentic Survey	TOTAL COST: \$203,741.26
AUTHOR(s): Mitchell, A and Prowse, N	SIGNATURE(S):	A. Mitchell New Prower
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):		YEAR OF WORK : 2019
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):	5767751, December 20	0, 2019
PROPERTY NAME: Doc - West Eskay		
OLAIN NAME(O) (OII WINCII the WORK Was dolle).		1036955, 1036939, 1036878, 065301, 1065320, 1065300
COMMODITIES SOUGHT: Gold, Silver, Lead, Copper		
MINIOR DIVISION: Skeena	NTS/BCGS: 108B/0	
LATITUDE: 56 ° 19 '00 " LONGITUDE: 130		(at centre of work)
OWNER(S): 1) Milestone Infrastructure Inc.	2) Orogenic Gold Cor	
MAILING ADDRESS: 7960 132 Street, Surrey, British Columbia, Canada V3W 4N1		
OPERATOR(S) [who paid for the work]: 1) As Above	2)	
MAILING ADDRESS: 7960 132 Street, Surrey, British Columbia, Canada V3W 4N1		
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, a	alteration, mineralization, siz	e and attitude):
The Doc - West Eskay Property is primarily underlain by met		•
Group, intruded by granodioritic plutonic rocks of the Late Tr	riassic Bucke Stock. N	umerous zones of Au-Ag rich
mineralization occur in northwest trending sheared quartz ve	ins. Au mineralization	is commonly associated with
galena +/- chalcopyrite.		

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			¢45.700.00
Magnetic		1036952, 1036954, 1031031, 1065301, 1065300, 1036939, 1036953	\$15,728.29
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			_
GEOCHEMICAL (number of samples analysed for)			
Soil	55 Soil Samples	1065301, 1065300	\$45,957.90
Silt			
Rock	170 Dook Comples	1036952, 1036954, 1031031, 1065301, 1065300,	\$142,055.07
		1036939, 1036955	
Biogeochemistry 			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/t			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$203,741.26

ASSESSMENT REPORT

describing

ROCK and SOIL GEOCHEMICAL SAMPLING, and GROUND BASED MAGNETOMETER SURVEY

at the

Doc - West Eskay Property

Skeena Mining Division, British Columbia, Canada Latitude 56° 19′ North, Longitude 130° 26′ West NAD 83, Zone 9N, 410500E, 6243500N NTS Map Sheet 108B/08

Prepared for

Milestone Infrastructure Inc.

And

Orogenic Gold Corp.

by

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March 20, 2020

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1.0 Summary and Introduction

The Doc – West Eskay Property ("the Property" or "Doc") is an Au-Ag exploration project located in an area informally known as the "Golden Triangle", one of the most important mineral districts in northwest British Columbia, Canada (Figure 1.1). The "Golden Triangle" encompasses the northwest Stikine terrane, and is an area which hosts prolific porphyry, volcanogenic massive sulphide, and high-grade vein deposits and mines, including the presently producing Red Chris and Brucejack mines, the past-producing Eskay Creek, Snip, Granduc, Silbak-Premier and Scottie Gold mines. It also hosts large undeveloped deposits such as the Galore Creek, Schaft Creek, Kerr, Sulphurets, Mitchell, Snowfield and Iron Cap porphyry deposits, and exciting recent discoveries such as the Saddle North porphyry Cu-Au and Saddle South Au-Ag vein zones. Resource estimates have been calculated for mineral zones on the Doc Property; however, they are non NI 43-101 compliant and are based on historical drilling conducted intermittently between 1948 and 1988.

At the request of Milestone Infrastructure Inc. ("Milestone") and Orogenic Gold Corp. ("Orogenic"), the authors and a small crew from C.J. Greig & Associates Ltd. carried out an independent review of the Property and conducted a property examination, and a detailed sampling and prospecting program over eight days between July 30 and August 7, 2019, with additional prospecting and sampling taking place between September $3 - 9^{th}$, 2019. The authors also reviewed available historical documents prior to preparing this Technical Report.

A total of 170 rock and 55 soil samples were taken for analysis. In addition, 29.1 line kilometers of ground-based magnetic surveying was completed by a crew from SJ Geophysics Ltd. Results from the field program confirmed the high-grade results from previous operators, and expanded known mineralized zones. This report details the results and interpretations from the 2019 field program, and the extensive historical compilation and review. The author believes that the Doc Property has considerable merit, offers strong discovery potential in the target areas, and that further work, including detailed mapping (surface and underground), geochemical and geophysical surveys and diamond drilling is justified.

2.0 Location, Access, Physiography, Climate and Vegetation

2.1 Location and Access

The Doc – West Eskay Property is located in the Skeena Mining Division of northwest British Columbia, approximately 55 kilometres northwest of the community of Stewart BC. The claims are centred at Latitude 56° 19' N, Longitude 130° 26' W or, in the North American Datum 83 (NAD 83) coordinate system, Zone 9 N, at 410500E, 6243500N, on NTS Map Sheet 108B/08. The Property lies 32 kilometres south of the road accessible and past producing Eskay Creek mine site and about 10 kilometres north of the past producing Granduc Cu-Au-Ag mine (Figure 1).

2

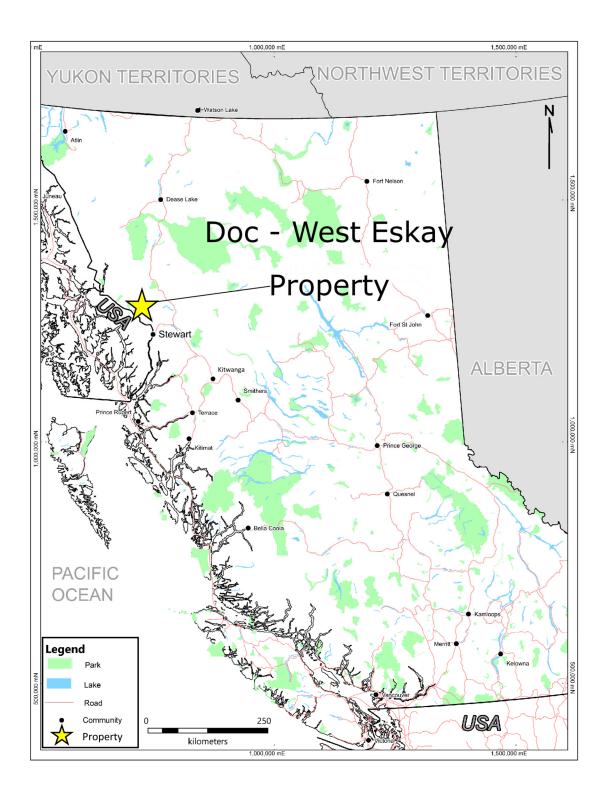


Figure 1: Doc - West Eskay Property location

Access to the Doc – West Eskay Property is currently by helicopter from a base at Stewart BC (20 to 25 minute flight). Supplies can be driven to Troy Flats, approximately 40 km by road to the northwest, where a large staging area can be used to mobilize in personnel and supplies. From

there, a 30 kilometre helicopter flight accesses a temporary camp on the Doc Property. The Project can also be accessed via helicopter from a staging area (kilometre 54) on the Eskay Creek mine road, approximately 35 kilometres to the north. There is presently no wheeled access to the Property; however, an old bulldozer trail from Granduc mine to the mouth of Divelbliss (Cabin) Creek is visible from the air, and could be upgraded to a useable access/haul road for exploration and for potential future mine access. Overland transport on glaciers has been proven possible, but is rarely used due to logistical challenges and the dangers of travel on glaciers. Ideally, future drilling operations on the Property will be staged by helicopter from Troy Flats-Tide Lake area. Alternatively, by wheeled aircraft from Stewart BC airport to an airstrip at the past producing Granduc mine followed by helicopter-support to site (Figure 2).

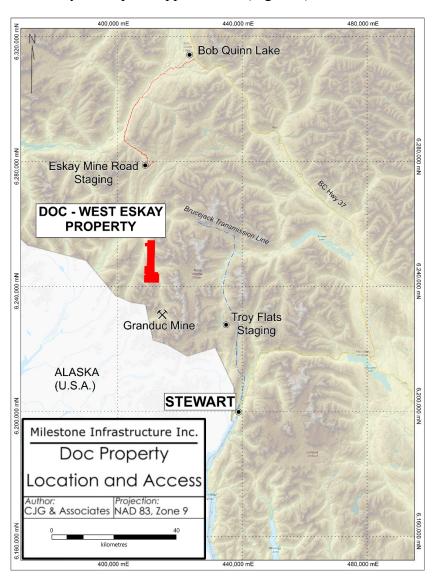


Figure 2: Doc - West Eskay property location and access

2.2 Climate and Vegetation

The climate on the Doc – West Eskay Property is generally that of a northern coastal rainforest, with subarctic conditions at high elevations. Precipitation is high with an annual total precipitation (rainfall and snow equivalents) estimated to be somewhere between the historical averages for the Eskay Creek mine and Stewart, BC. These range from 801 to 1,295 mm of rain and 572 to 1,098 cm of snow, respectively (data to 2005) (Ghaffari et al. 2016).

Surface exploration is generally restricted to the period from June through early October due to heavy snowfall in winter months, some of which typically remains on north-facing slopes until late summer, or year-round in areas of glacial ice (mostly restricted to the southwest part of the Property). Underground work can be completed year-round at the Project. Treeline in the area is about 1250 metres ASL. Vegetation in areas above tree line is heather and grasses with pockets of scrub brush, as well as stunted black spruce and balsam fir. The highest elevations, particularly in the southwest part of Doc, are typically devoid of any vegetation, except lichens. Vegetation in the valley bottom is characterized primarily by thick stands of mature hemlock, spruce, fir, aspen and alder with a thick understory of ferns, devil's club, huckleberry and salmonberry.

It is unknown if fish inhabit the South Unuk River, though they are known to inhabit the Unuk River to the west. Large wildlife such as moose and caribou are rare at higher elevations due to the rugged topography and poor access. However, bears, wolverine, and mountain sheep may be present on occasion.

2.3 Physiography

The terrain at the Doc – West Eskay Property is diverse, with the southwestern half of the property lying completely above treeline. A fairly gentle northwest trending plateau occupies the northwest part of the Property, while expanses of ice cover and mountainous peaks lie to the southwest. The northeastern half of the property is entirely below treeline and covers a steep northeast trending slope that descends down into the South Unuk River valley. Elevations on the Property range from 1750 m in the southwest part of the Property down to 475 m in the northeast. Bedrock exposure is greatest in the northwestern part of the Property on the plateau. Lesser outcrop is found in the southwest part of the Property, confined to areas devoid of ice, as well as within incised creek drainages along the northeast facing slope. Streams draining the Property flow northwesterly and north-easterly into the South Unuk River, ultimately discharging into the Pacific Ocean via the Unuk River.

The treeline is at about 1250 m, below which thick forests of mostly hemlock and balsam fir are found. Above treeline, hillsides are characterized by barren rock and ice, with limited vegetation of grasses and low brush. Soil development is very poor in the southwest part of the property, moderate along the plateau in the northwest, and moderate to well developed in the northeast half of the Property. Sufficient water for camp and drilling purposes can be collected from lakes and ponds on the plateau, and creeks draining the extensive glaciers in the southwest.



Figure 3: Photo showing physiography of the central Doc - West Eskay Property 2019 exploration area

3.0 Claim Locations and Description

The Doc – West Eskay Property consists of 14 contiguous Mineral Titles Online (MTO) digitally registered mineral tenures totalling 4068.84 ha. The mineral tenures are listed in Table 1 and are shown in Figure 4.

Note: The tenure information shown is effective January 14, 2020.

Table 1: Doc – West Eskay Property mineral tenures

					Area
Tenure No.	Claim Name	Owner Name	Issue Date	Expiry Date	(Hectares)
1031031		BOT, JOHN CHRISOSTOM	2014-09-18	2025-03-07	179.46
1036878		BOT, JOHN CHRISOSTOM	2015-06-23	2025-03-07	17.94
1036939	GRACE NW	BOT, JOHN CHRISOSTOM	2015-06-29	2025-03-07	125.51
1036952	GOLDEN GRACE 2	BOT, JOHN CHRISOSTOM	2015-06-29	2025-03-07	430.45
1036953	GRACE N	BOT, JOHN CHRISOSTOM	2015-06-29	2025-03-07	71.72
1036954	GRACE SE	BOT, JOHN CHRISOSTOM	2015-06-29	2025-03-07	699.69
1036955	GRACE S	BOT, JOHN CHRISOSTOM	2015-06-29	2025-03-07	161.52
1033369		BOT, JOHN CHRISOSTOM	2015-01-14	2025-03-07	17.94
1039253	SHEELAGH	MILL, RICHARD H	2015-10-12	2021-11-01	143.35
1040402	SHEELAGH 2	MILL, RICHARD H	2015-12-05	2021-11-01	842.28
1041376	MACKIE ESKAY	MILL, RICHARD H	2016-01-18	2021-11-01	1145.72
1065320		MILL, RICHARD H	2018-12-27	2021-11-01	17.94
1065300		MILL, RICHARD H	2018-12-25	2021-11-01	71.76
1065301		MILL, RICHARD H	2018-12-25	2021-11-01	143.56
				Total:	4068.84

The tenures comprising the Doc Claims (Milestone) were staked by John C. Bot in 2014 and 2015 and remain registered to him (owner number 102844). Mr. Bot entered into an option agreement with Milestone Infrastructure Inc. in July, 2019, which has a term of 6 years beginning July 3, 2019. The tenures comprising the West Eskay Claims are wholly owned by Orogenic Gold Corp.

The authors have determined, by viewing British Columbia Mineral Titles Online records, that the mineral tenures are in good standing as of the writing of this Report, with expiration dates shown in the above table. Applications for an exploration permit for 2020 has been submitted to the BC Ministry of Mines and, in the opinion of the authors, the granting of such a permit is considered probable.

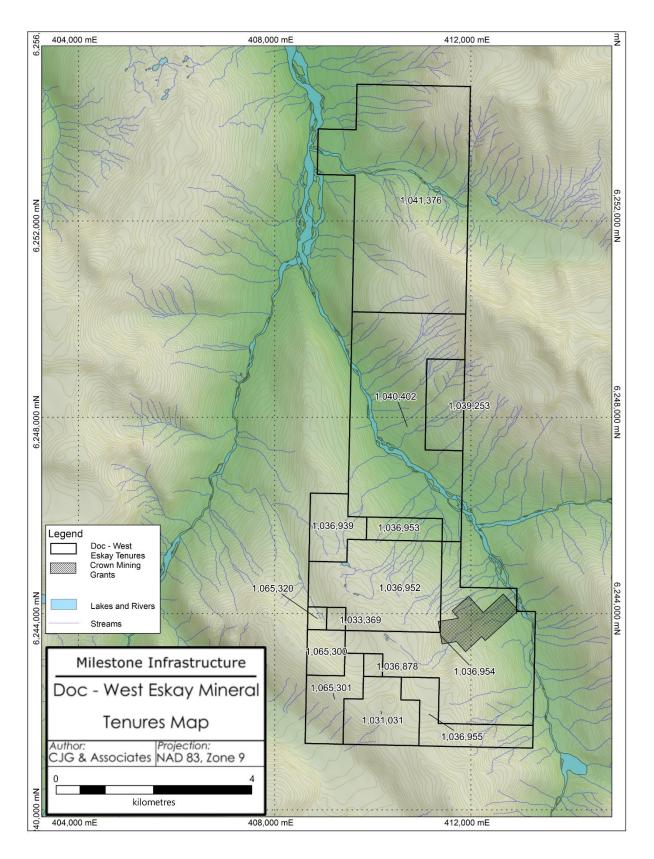


Figure 4: Doc - West Eskay Property mineral tenures

4.0 History

The earliest work reported near the Doc Property, circa 1900, included exploration of two veins containing sulphide mineralization and gold values at the Globe Showing. This work included trenching and underground development of four adits (Minister of Mines, 1901). Also developed during this time was a small stamp mill that included a concentrating table and copper plates, and had a capacity of three tons per twenty-four hours (Minister of Mines, 1901). High-grade ore was stockpiled but no shipments were made (Freeze et al. 1989 – BC Assessment Report18622A).

In 1935, it was reported that a wide quartz vein was discovered, carrying pyrite, chalcopyrite, galena and gold values (Minister of Mines, Annual Report 1935, p. B11). The quartz vein is located about 1.6 kilometres south of the Globe Showing, (Ministry of Mines, Annual Report 1935, p. B11), and is now referred to as the Florence Minfile occurrence.

Discoveries in September 1946 by Tom McQuillan and his partner, Pat Onhasy, on the south fork of the Unuk River, opposite Divelbliss (Cabin) Creek, led to claim staking by Leitch Gold Mines (Minister of Mines, Annual Report 1948, p. A66; Tully, 1974 – AR5239). The discoveries by McQuillan and Onhasy included numerous quartz veins occurring in shear zones that are mineralized with hematite, pyrite, galena, and minor chalcopyrite. It was noted that quartz veins mineralized with sulphides often contained gold, and to a lesser extent, silver (Minister of Mines, Annual Report 1948, p. A66).

In 1947 and 1948, the Doc Property was optioned from Leitch Gold Mines by Halport Mines and was explored by trenching and diamond drilling (Minister of Mines, Annual Report 1948, p. A66). Supplies and equipment required in 1947 and 1948 were flown by fixed-wing from Stewart and dropped at the Property; equipment for the 1948 program totalled 16 tons, including a diamond drill. Mineralized quartz veins were numbered and designated by the prefix "Q" (Q17, Q19, Q22 & Q25). In 1948, the Q17 and Q22 veins were traced for 400 m along strike by excavation of forty-four trenches, and tested below the surface by diamond drilling in 19 EX holes totalling 1280.16 m of drilling. The Q25 vein was traced for 150 m along strike and tested by eleven trenches, while the Q19 lode was traced for 267 m by excavation of twenty trenches (Minister of Mines, Annual Report 1948, p. A66).

In 1949, Halport Mines conducted 633.98 m of diamond drilling at the Q25 vein. The purpose of the drilling was to prove the underground lateral extension of the vein. Results from this program showed only spotty gold values. Core recovery was reported to be reasonably good within the quartz vein, but poor along the sheared margins of the veins (Minister of Mines, Annual Report 1949, p. A73).

The Property did not see any additional work until 1974, when New Minex Resources collected 16 channel and 6 grab samples, and conducted 10.8 kilometres of magnetometer surveying. Channel sampling along the Q17 vein returned an average grade of 0.309 oz/ton gold across an average width of 2.47 m over an exposed strike length of 79.25 m. A 1.77 m long channel sample across the Q25 vein assayed 1.82 oz/ton gold and 8.18 oz/ton silver. New Minex Resources

reported magnetometer results which showed the gold-bearing quartz veins occurring within northwest trending magnetic lows (Tully, 1974 – BC Assessment Report 05239).

In 1975, New Minex Resources completed 19.1 km of Ronka EM-16 electromagnetic surveys over the known mineralized zones on the Doc Property. They concluded that the electromagnetic work showed no apparent response to known gold-bearing quartz vein structures, possibly due to their low sulphide content. They recommended geological mapping and prospecting prior to any further exploration work (Tully, 1975 – BC Assessment Report 05512).

In 1980, Du Pont of Canada Exploration performed geological mapping, and soil and rock geochemical sampling, with a focus on the main mineralized veins found by previous operators. They established a grid in the central part of the claim group and mapped the historical workings at 1:2500 scale. Geological mapping over the grid area indicated that interbedded felsic and mafic volcanic rocks strike northwest and were folded along a northwest trending fold axis, while quartz feldspar porphyry, diabase and diorite dykes intrude the volcanic rocks. A clastic limestone unit is shown by the mapping to unconformably overlie the volcanic rocks. Auriferous-quartz veins discordantly cut the volcanic rocks at roughly 110 degrees and dip steeply to the north. A soil grid comprising 447 soil samples over the Doc workings returned anomalous gold values (≥22 ppb) for over half of the grid area (Figure 5), while elevated silver results were more erratically distributed. A total of 19 rock samples (only 13 were analyzed for gold, silver, copper, lead and zinc) were collected and yielded a high of 0.405 oz/ton Au, 4.30 oz/ton Ag, 1.44% Cu and 11.45% Pb (Harron, 1981 – BC Assessment Report 08925).

In 1985, Silver Princess Resources Inc. optioned the Doc Property and carried out detailed mapping, mainly at the Q17 and Q22 veins, and extensive trenching and geochemical sampling within historical trenches and along exposed veins (Gewargis, 1986 – BC Assessment Report 15615). The report for the 1985 work was not located during the literature review for this report; however, Gewargis' 1986 report summarizes important discoveries made during the program. The most significant results were obtained from semi to massive sulphide mineralization on the footwall side of the Q17 vein, where a grab sample of the material in Trench #12 returned over 3 oz/ton Au, over 14 oz/ton Ag and over 9% Pb.

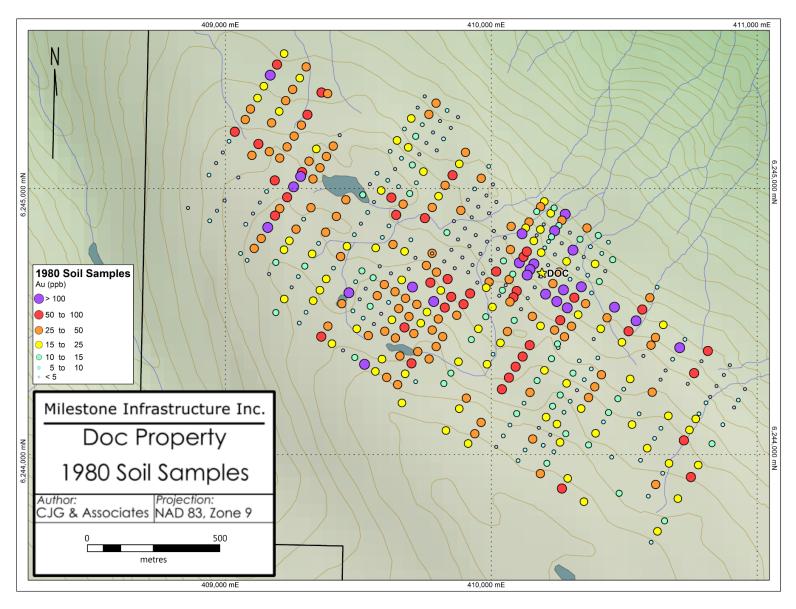


Figure 5: Historical soil sampling (1980)

In 1986, Magna Ventures Limited optioned the property from Silver Princess Resources and conducted a 10 hole diamond drill program totalling 913.2 m of BQ-size core (Figure 6) and completed 33.5 m of underground development at the Q17 vein. The program was designed to test beneath the high-grade results from the 1985 surface trenching and rock sampling program. Diamond drilling was completed on 5 drill pads and focused at the Q17 and Q22 vein systems to test their strike and down-dip potential. It was reported that core recovery in the vein structure, particularly within the highly auriferous-limonitic-oxidized footwall and hanging wall was poor.

A summary of 1986 drill hole results are provided in Table 2. The drill program confirmed the gold values in the trenches continue along strike and down dip and it was recommended that future drilling should collect larger diameter core, such as NQ-size.

A "possible" "geological reserve" for the Q17 and Q22 vein of 49,095 tons with an average grade of 0.46 oz/ton Au and 1.60 oz/ton Ag was calculated in 1986 (Gewargis, 1986 – BC Assessment Report 15615); however, this resource calculation is non-NI 43-101 compliant and cannot be relied upon in any way.

Table 2: Summary of 1986 diamond drilling results

Hole	Target	Results
86-1	Trench 14, Q17, Q22 Veins	No significant mineralization
86-2	Trench 5	No significant mineralization
86-3	Q17, Q22 Veins	From 89.7 to 93.0 m: 2.96 g/t Au and 14.44 g/t Ag over 3.3 m
86-4	Trench 12	From 64 to 64.8 m: 2.19 g/t Au and 9.26 g/t Ag over 0.8 m
86-5	Trench 12	From 82.0 to 83.2 m: 1.23 g/t Au and 4.80 g/t Ag over 1.2 m
86-6	Trench 23	From 63.2 to 68.1 m: 27.37 g/t Au and 101.44 g/t Ag over 4.9 m
86-7	Down-dip extension of 86-6	From 130.2 to 137.8 m: 7.60 g/t Au and 23.31 g/t Ag over 7.6 m
86-8	Q17, Q22 Veins	From 60.0 to 60.6 m: 34.22 g/t Au to 101.03 g/t Ag over 0.6 m
86-9	Q17, Q22 Veins	From 35.8 to 36.4 m: 19.68 g/t Au and 35.31 g/t Ag over 0.6 m; and
		from 43.5 to 47.2 m: 10.34 g/t Au and 13.49 g/t Ag over 3.7 m
86-10	Q17, Q22 Veins	From 25.6 to 30.9 m: 15.77 g/t Au and 74.28 g/t Ag over 5.3 m

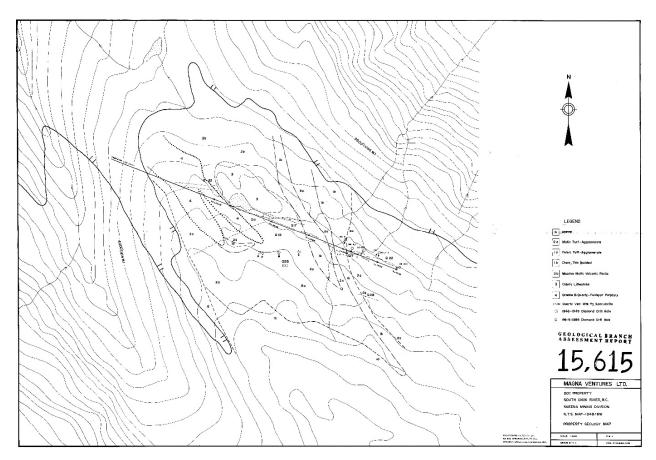


Figure 6: Property geology, 1948-49 and 1986 drill holes, from Gewargis, 1986

In 1987, Magna Ventures and Silver Princess expanded their claim block to approximately 7,600 hectares, taking in the Globe crown grants and Divelbliss Creek area. They carried out a review of the geological setting, site preparation, underground development and drilling, surface prospecting, and mineral reserve estimations. Surface facilities were established and comprised a fully winterized 18-man mining camp, a 6-man summer prospecting tent camp, a seasonal water supply and storage system, and a full complement of mining equipment for trackless operations.

A large prospecting and rock and soil sampling program was carried out on the Doc Project. This was done in conjunction with surface trenching and underground sampling on gold veins other than Q17 and Q22. Four new veins were discovered and six old zones were extended, all of which were reported to contain potentially economic grades over mineable widths on surface. The veins were ranked in order of importance as follows: 1) Q17-Q22-Q32 zone; 2) Q25-Q28 zone; 3) Globe North-Globe South zone; 4) Q19 zone, 5) Pyramid zone (currently known as BGS); 6) Alf 3 (currently known as Quinn Eskay), Glacier, TK, TS zones (Figure 7).

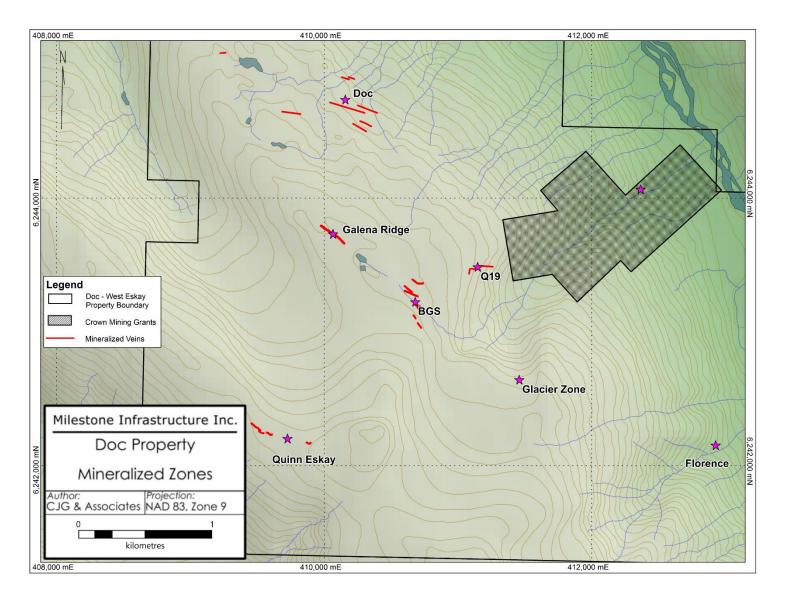


Figure 7: Doc - West Eskay Property mineralized zones

A total of 694.33 m of underground drilling completed by Magna Ventures and Silver Princess in 8 holes from 2 setups was successful in locating the Q22 vein and testing the Q17 vein (Figure 8). Every hole intersected mineralization, with the best result coming from hole 87-6, which averaged 0.305 oz/ton Au and 1.908 oz/ton Ag over 2.00 m, with 90% recovery in mineralized zones (Aelicks et al. 1988 – BC Assessment Report 16708). A summary table showing drill highlights is presented in Table 3.

Table 3: 1987 underground drilling highlights

Hole	Target	Results
87-1	Q22	From 18.60 to 19.36 m: 0.137 oz/ton Au and 0.44 oz/ton Ag over 0.76 m
87-2	Q22	From 70.95 to 71.63 m: 0.648 oz/ton Au and 1.886 oz/ton Ag over 0.68 m; and from 94.79 to 95.75 m: 0.093 oz/ton Au and 0.327 oz/ton Ag over 0.96 m
<i>87-3</i>	Q22	From 10.48 to 10.93 m: 0.203 oz/ton Au and 1.41 oz/ton Ag over 0.45 m
87-4	Q22	From 12.56 to 12.91 m: 1.088 oz/ton Au and 4.13 oz/ton Ag over 0.35 m
87-5	Q22	From 10.95 to 14.40 m: 0.138 oz/ton Au and 0.656 oz/ton Ag over 0.45 m
87-6	Q17	From 33.50 to 35.50 m: 0.305 oz/ton Au and 1.908 oz/ton Ag over 2.0 m
87-7	Q17	From 42.80 to 45.18 m: 0.109 oz/ton Au and 0.567 oz/ton Ag over 2.38 m
87-8	Abandoned due to water shortage	

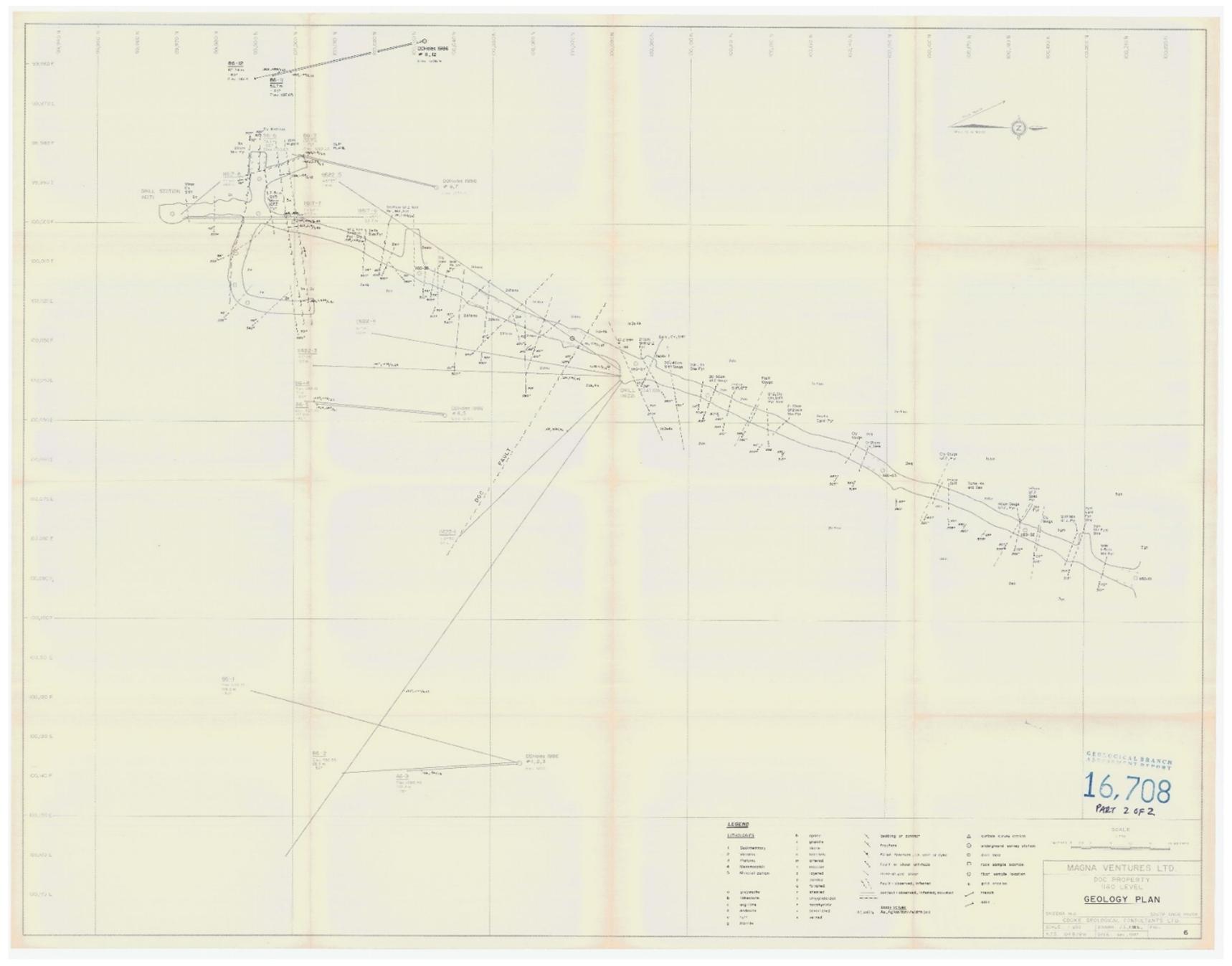


Figure 8: Geology, drill holes, underground workings at the Doc Zone (Aelicks et al. 1988)

A total of 376 m of underground development on the 1160 level, mainly to access and test the Q17 vein (Figure 8). Three mine crosscuts, 76.2 m below surface into the Q17 vein, averaged 0.47 oz/ton Au and 1.71 oz/ton Ag over 2.29 m (true width), with select high-grade chip samples grading up to 4.2 oz/ton Au and 9.8 oz/ton Ag over 0.88 m (Aelicks et al. 1988 – BC Assessment Report 16708).

Non-NI 43-101 compliant reserves for the Q17 vein were reported by Magna Ventures and Silver Princess in 1988 in the proven, probable and possible categories (uncut and undiluted). The non-compliant reserves totalled 206,872 tons grading 0.32 oz/ton Au and 1.38 oz/ton Ag (no cut-off grade was stated), and it was noted that the resource blocks remained open in all directions for expansion. Magna Ventures and Silver Princess also reported possible reserves from other veins which contributed another 262,594 tons grading 0.23 oz/ton Au and 1.25 oz/ton Ag, for a total combined non-compliant reserve of 469,466 tons grading 0.27 oz/ton Au and 1.31 oz/ton Ag on the Doc Property (Aelicks et al. 1988 – BC Assessment Report 16708). These non-NI 43-101 compliant values cannot be relied upon in any way.

In 1988, Echo Bay Mines Limited entered into a joint venture agreement with Magna Ventures and Silver Princess. A 40-person camp was erected during the program to house the crews. Helicopter-supported diamond drilling (one NQ and one BQ drill) totalling 3074.10 m was completed in 32 holes (Figure 9). The drill program was designed to test the Q17 and Q22 veins and areas between the Q22 and Q28 veins.

Of the 32 holes drilled, 14 intersected sub-economic to potentially economic grade values over narrow widths, while the remaining holes either returned low gold values, missed the mineralized structure or were abandoned due to bad ground conditions. A new vein (JT vein) was discovered and characterized as having a 100 m strike length and an average width between 1.0 and 2.0 m. It was drill tested to a vertical depth of 80 m below surface. Drill hole summaries for the 1988 drill programs are presented in Table 4.

Table 4: Summary of 1988 diamond drill results

Hole	Target	Results
88-1	Q17 Vein	No Samples Taken
88-2	Q17 Vein	From 95.2 to 97.2 m: 12.86 g/t Au and 16.46 g/t Ag over 2 m
88-3	Q17 Vein	No significant results
88-4	Q17 Vein	From 32.1 to 43.0 m: 14.71 g/t Au and 53.49 g/t Ag over 0.9 m
88-5	Q22 and Q17 Veins	No Samples, Hole lost to Caving
88-6	Q17 Vein	From 28.2 to 31.3 m: 5.60 g/t Au and 16.78 g/t Ag over 3.1 m
88-7	Q22 and Q17 Veins	From 51.4 to 52.2 m: 3.81 g/t Au and 16.11 g/t Ag over 0.8 m
88-8	Q22 and Q17 Veins	No veins intersected; no samples taken
88-9	Q17 Vein	From 13.3 to 13.5 m: 4.11 g/t Au and 9.26 g/t Ag over 0.2 m; and from 21.0 to 22.0 m: 4.46 g/t Au and 25.71 g/t Ag over 1 m
88-10	Q22 Vein	No vein intersected.
88-11	Q17 Vein from 88-2 collar	No Samples, Hole lost to Caving
88-12	Q22 Vein	No significant results

88-13	Q17 Vein from 88-2 collar	From 81.0 to 82.0 m: 3.14 g/t Au and 10.97 g/t Ag over 1.0 m
88-14	Q22 Vein	No significant results
88-15	Q22, Q17 and JT veins	From 22.2 to 23.9 m: 3.77 g/t Au and 22.63 g/t Ag over 1.7 m; and from 96.7 to 100.3 m: 3.43 g/t Au and 13.43 g/t Ag over 3.6 m
88-16	Q22 Vein	No samples taken
88-17	Q17 Vein	No significant results
88-18	Q17 Vein	From 71.0 to 73.0 m: 18.35 g/t Au and 45.05 g/t Ag over 2.0 m
88-19	Q22 and JT Veins	No significant results
88-20	Q22 Vein	No significant results
88-21	Q22 and JT Veins	From 23.6 to 24.6 m: 4.25 g/t Au and 50.06 g/t Ag over 1.0 m
88-22	Q22 Vein	From 40.6 to 41.2 m: 27.19 g/t Au and 95.66 g/t Ag over 0.6 m
88-23	Q17 Vein	No significant results
88-24	Q17 Vein	From 27.0 to 28.8 m: 14.77 g/t Au and 40.08 g/t Ag over 1.8 m
88-25	Q17 Vein	From 32.6 to 39.1 m: 5.81 g/t Au and 21.29 g/t Ag over 6.5 m
88-26	Q17 Vein	From 7.9 to 8.8 m: 6.51 g/t Au over 0.9 m (Ag not assayed)
88-27	Q28 Vein	From 36.4 to 37.0 m: 13.06 g/t Au and 41.14 g/t Ag over 0.6 m
88-28	Q28 Vein	No vein intersected; no samples taken
88-29	Q28 Vein	From 5.3 to 5.6 m: 24.55 g/t Au and 125.14 g/t Ag over 0.3 m
88-30	Q17 Vein	From 151.6 to 152.5 m: 3.09 g/t Au and 12.69 g/t Ag over 0.9 m
88-31	JT Vein	No significant results
88-32	Q22 Vein	From 112.2 to 115.3 m: 10.87 g/t Au and 50.48 g/t Ag over 3.1 m

Underground development totalling 230 m on the 1160 m level was completed along the strike of the Q17 vein west and east from the ends of former workings. Development was extended to the limit of vein mineralization and could not be located any further along trend. Along the Q17 West Drift, a 30 m long exposure of sulphide-rich potentially economic grade mineralization occurs over mineable widths (between 1.2 to 2.0 m). A crosscut was driven from the eastern limit of the Q17 vein to the projected extension of the Q22 vein; however, difficult ground conditions prevented further advancement.

Detailed underground sampling was done at the Q17 vein by collecting muck and face samples. A 300 pound sample of potentially economic grade material was also collected from each drift round and placed into 45 gallon drums for future metallurgical testing. An overview of surface drilling and underground working is provided on Figure 9.

A non-NI 43-101 compliant reserve calculation was done at Q17 and Q22 veins using all data from 1947 to 1988 from all categories grading greater than 0.100 oz/ton Au and totalled 100,851 tons grading 0.258 oz/ton Au. (Freeze, et al. 1989 – BC Assessment Report 18622).

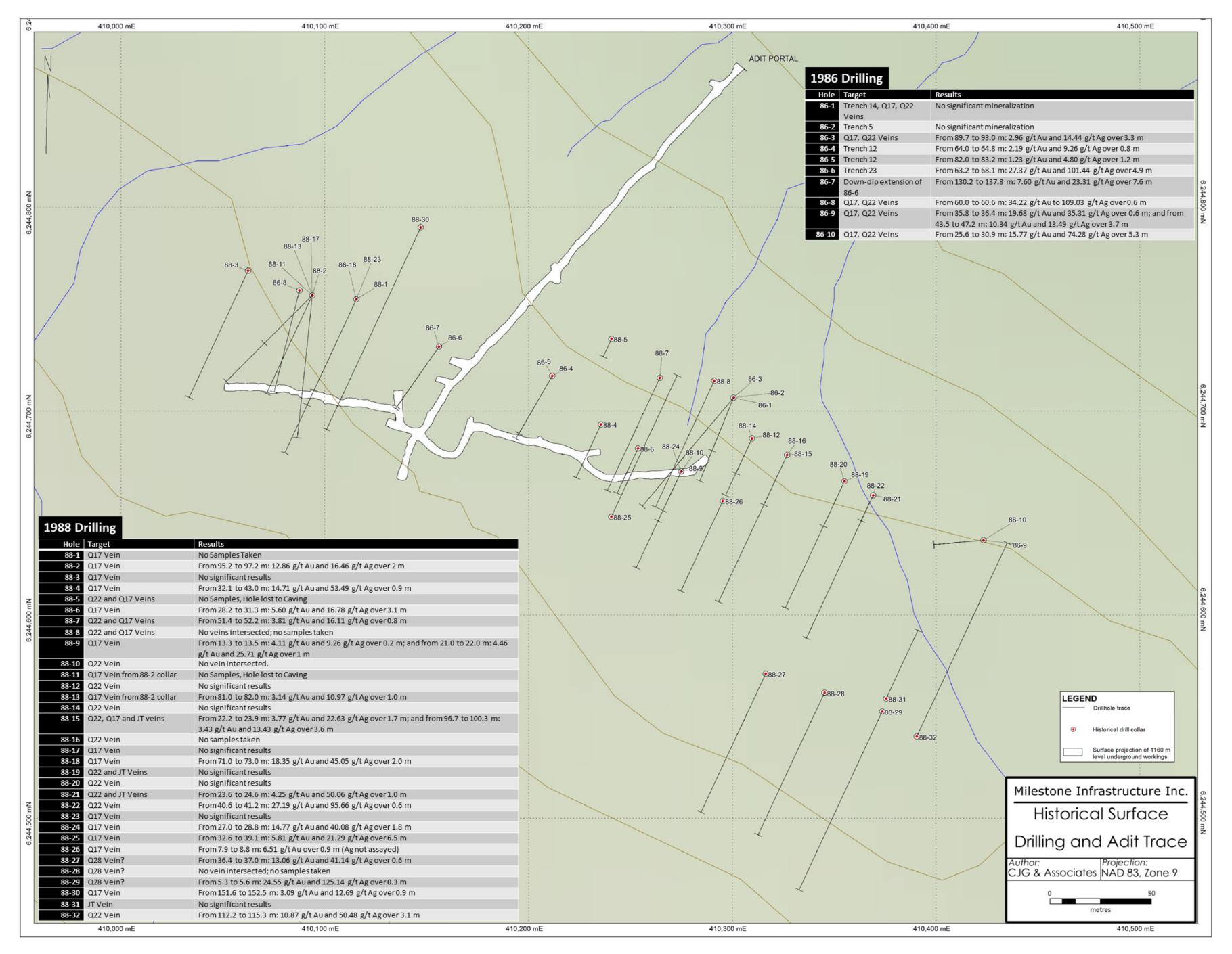


Figure 9: Plan view of historical surface drilling and underground development

It was concluded that the size and grades of the Q17 and Q22 veins were insufficient to support a mining operation, given the remoteness and ruggedness of the area. Echo Bay recommended a mapping program be carried out at the Q17 and Q22 veins, as well as over the entire Doc Property, to gain a better understanding of ore controls and deposit types, to identify new mineralization, and delineate possible major structure(s) that may control special distribution of veins. The ultimate goal of the program was to evaluate alternative targets elsewhere on the property for drill testing (Glover, et al. 1989 – BC Assessment Report 19940).

In 1989, Echo Bay and their joint venture partners Magna Ventures and Silver Princess performed helicopter-supported surface geology mapping, prospecting and sampling over the entire Property. A total of 40 traverses were completed and 140 grab and rough chip rock samples were collected during the program. It was concluded that the gold-bearing veins are the most promising exploration target, but that the veins discovered on surface have limited tonnage potential at a minimum average grade of 0.3 oz/ton Au.

In 1989, Kengate Resources carried out rock, soil and heavy sediment sampling at the Gracey Creek property, immediately west of the Doc Project. No soil or rock samples were collected from the Doc Property, but one heavy sediment sample draining the southwestern area returned 11 ppb Au, and 0.1 ppm Ag (Hrkac, C., 1989 – BC Assessment Report 18367).

In 1990, Amphora Resources flew an airborne magnetic and VLF-EM survey over their Pearson, GC, Galena Cliff and Summa claims. A small part of this survey (Summa property) covered the southwestern part of the current Doc Project, over an area of expansive ice-cover. The magnetic and VLF-EM responses were as expected within an area of thick ice cover and steep slopes, causing data processing to be very difficult and potentially unreliable (Murton, 1990 – Assessment Report 19995).

In 1996, the claims were allowed to lapse due to a dispute between the previous claim owners, and the Hunter Exploration Group immediately staked the Property. In October 1999, Hunter Exploration carried out a prospecting program and discovered the BGS Zone, described as a 25 m by 6 m area comprising quartz vein rubble in subcrop near the base of a snowfield. The vein material consists primarily of white quartz with abundant pyrite and chalcopyrite, and assayed up to 44.66 g/t Au, 219 g/t Ag, 1.02% Cu and 5.58% Pb (Robins, 2000 – Assessment Report 26256).

In 2011, Cache Minerals Inc. collected a total of 13 rock samples from the southwestern corner of the current Doc Property, in the western part of the Quinn Eskay Zone. Six rock samples were collected from a gossan zone that forms a rounded ridge and has a strike length of over 300 m and a width of greater than 50 m. The two best samples were taken from quartzo-feldspathic gneiss with ankerite/sulphide weathering that returned 828 ppb Au and a quartz vein within host melanocratic metasedimentary rocks with trace sulphides that graded 368 ppb Au, 6.9 g/t Ag and 0.17% Pb (Fox et al. 2011 – Assessment Report 32600).

In 2013, claim owner John Bot contracted UTM Exploration Services Ltd. to conduct a 4 day field program consisting of prospecting and rock sampling on the Doc Property. A total of 18 rock samples were collected and focused on locating new areas of interest along the strike of the known

veins and along their peripheries. Two rock samples, taken about 400 m northeast of Cache Minerals gossanous zone discovery, consisted of quartz vein material (<30 cm thick) hosting chalcopyrite and specularite with malachite staining. Samples assayed 1.31% Cu, 366 g/t Ag and 485 ppb Au, and 471 ppm Cu, 35.2 g/t Ag and 131 ppb Au (Mackenzie et al. 2013 – Assessment Report 34406).

In 2015, John Bot hired CJL Enterprises Ltd. to perform a limited prospecting and sampling program on the Doc Property. A small fly camp was erected for a 4 day prospecting program where a total of 26 rock samples were collected and assayed for gold and silver. Samples were primarily taken from old hand trenches at the main Doc workings and along strike to the west-northwest, as well as to the north-northwest. Samples ranged from heavily mineralized to barren bull quartz with the highest grade samples returning up to 103.0 g/t Au and 515 g/t Ag, 58.6 g/t Au and 343 g/t Ag, and 41.0 g/t Au and 189 g/t Ag, all of which are associated with galena mineralization (Middleton, 2015 – Assessment Report 35635).

In 2018, Tudor Gold Corp. performed reconnaissance rock sampling approximately 80 to 400 m west of the BGS Zone. A total of 11 rock samples were collected, mostly from quartz sulphide veins and narrow breccia/stockwork zones. A 2 cm wide quartz vein with up to 5% pyrite, 1% chalcopyrite, up to 5% magnetite and malachite staining returned 454.0 g/t Ag, 4.86% Cu, 639 ppm Pb, 962 ppm Zn and 622 ppb Au. Two additional samples comprising narrow quartz vein material hosted elevated silver values of 1.8 and 2.2 g/t (Rowe, 2018 – Assessment Report 38639).

Documentation of current exploration programs by the Company are found in Section 7.0.

5.0 Regional Geological Setting and Mineralization

5.1 Regional Geology

The Doc Property lies within a mineral-rich belt that extends over 200 km north from the town of Stewart, along the western part of the Stikine terrane (Figure 10). Stikinia makes up a large part of the northern Intermontane Belt in this part of the northern Cordillera, and is bound by rocks of the largely plutonic Coast Complex, which lie immediately to the west (Figure 12). Rocks making up Stikinia are almost exclusively of intra-oceanic island arc affinity, and were accreted to the North American continental margin in mid-Mesozoic time. In northwestern BC the Stikine terrane follows an arc-like trend known as the Stikine Arch, which hosts prolific porphyry, high-grade vein and VMS deposits. (Figure 11).



Figure 10: Location of Doc – West Eskay Property and significant mineral deposits in the "Golden Triangle"

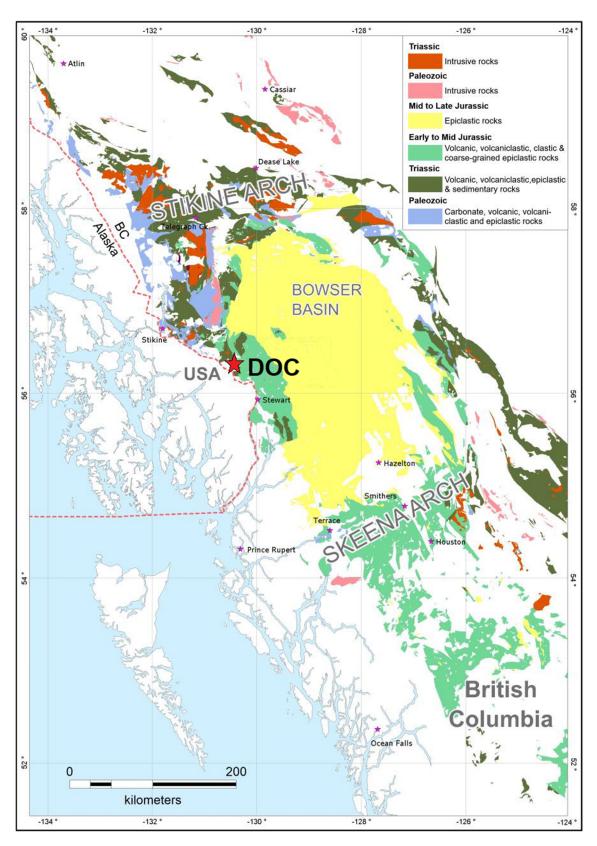


Figure 11: Doc – West Eskay Property location within the Stikine Arch (Rowe, 2018)

The oldest rocks in Stikinia are Devonian to Mississippian arc-related volcanic and plutonic bodies and accompanying sedimentary strata of the upper Paleozoic Stikine assemblage. These are unconformably overlain by Triassic arc and marine sedimentary strata of the Stuhini Group. Above a Late Triassic-Early Jurassic unconformity, the Hazelton Group and its intrusive sources (latest Triassic to Middle Jurassic) represent the final stage of island arc magmatism and related events. Unconformably to conformably above the Hazelton Group is Bowser Lake Group (Middle Jurassic to Lower Cretaceous), which is a northeasterly-sourced, southwestward-younging clastic overlap sequence derived from the collision of the Intermontane terranes and the edge of ancestral North America (Figure 11).

The mineral-rich belt in the Doc area consists mainly of the Triassic Stuhini and Jurassic Hazelton groups, shown in shades of green on Figure 11. The belt is bound to the east and south by Middle to Upper Jurassic Bowser Basin and to the west by the Coast Plutonic Complex.

Stratified Rocks

The oldest rocks in the area consist of Upper Triassic Stuhini Group composed of a lower volcanic package with lesser amounts of intercalated sedimentary rocks, overlain by a thick upper package of primarily sedimentary rocks with some interlayered volcanic rocks (Figure 12– dark green). Alldrick et al. (2004b) have interpreted the Stuhini Group in the map area as a subaqueous accumulation of dacite, andesite and bimodal basalt-rhyolite volcanic rocks in a setting characterized by a progressively increasing accumulation of volcaniclastic sedimentary rocks with carbonate cement. The top of the Stuhini Group is a regional angular unconformity that is overlain by Hazelton Group strata. It has been noted by the BC Geological Survey that this unconformity may be key to the localization of many of the mineral deposits in the Golden Triangle (Nelson and Kyba, 2014). Total thickness of the Stuhini Group cannot be determined due to this truncation, but minimum thickness is 3,000 metres (Alldrick et al. 2004b).

Gagnon et al. (2012) reported that following deposition of the Stuhini Group, extension controlled volcanism existed in the narrow, elongate, north-trending Eskay rift basin during the relatively short period between upper Early Jurassic and lower Middle Jurassic. Fault-controlled subsidence led to development of at least 12 north-trending sub-basins within the 300 km long by 50 km wide volcanic belt (Alldrick et al. 2005; Barresi et al. 2008). Volcanic and sedimentary units of the Hazelton Group (Figure 12 – light green) show strong lateral and vertical variability as a result of the limited connectivity between sub-basins plus the local nature of the volcanic processes. Quiescent depositional environments in some of the sub-basins were more prone to accumulation and preservation of exhalative sulphides (Alldrick et al. 2004). It has also been noted that felsic volcanism is commonly closely associated with mudstone intervals containing sulphide mineralization (Gagnon et al. 2012).

Within the Eskay rift, the lower part of the Hazelton Group comprises the Jack and Betty Creek formations, which consists predominantly of arc related intermediate volcanic rocks. The lower Hazelton Group includes a wide range of lithologies dominated by maroon and green andesitic to dacitic flows, associated volcanic breccias and tuffs, and sedimentary volcaniclastic rocks (Gagnon et al. 2012). The lower Hazelton Group rocks mostly lie unconformably on Triassic volcanic rocks of the Stuhini Group, and locally over Paleozoic rocks of the Stikine assemblage. Most volcanic rocks of the lower Hazelton Group are calc-alkaline to tholeitic and most were deposited in subaerial, oxidizing environments, and likely developed into stratovolcanoes (Alldrick et al. 1989).

Discontinuous siltstone beds attest to a marine emergent arc setting. The upper boundary of the lower Hazelton Group is typically defined by an erosional surface that separates it from the overlying upper Hazelton Group.

The upper Hazelton Group specific to the region east of the Doc Project has been defined by Gagnon et al. (2012) to include their newly proposed Iskut River Formation (previously called Salmon River Formation), which splits the lower Salmon River rhyolites (footwall rhyolite hosts discordant mineralization at the Eskay Creek deposit) from the overlying Salmon River "contact mudstone" and overlying intercalated mafic volcanic rocks and sedimentary rocks (now termed the Quock Formation). At the Eskay Creek type section described by Gagnon et al. (2012), rhyolite of the Iskut River Formation disconformably overlies andesitic breccia, volcaniclastic, and dacitic volcanic rocks of the Betty Creek Formation. This unit, which has been termed "footwall rhyolite", varies in texture from massive to auto-brecciated, and was interpreted by Bartsch (1993) to represent a series of flow-dome complexes. Overlying and inter-fingering in part with the rhyolite is a fine-grained dark grey sedimentary unit known as the "contact mudstone". The contact is irregular along strike and is marked by rhyolite breccia, in which black mudstone fills the interstices of quench-fragmented rhyolite. Clasts in the mudstone include altered rhyolite, barite, and fragmental sulphides and sulphosalts (Roth 2002). The Eskay Creek deposit comprised stratiform volcanogenic massive-sulphide bodies at the base of the mudstone interval that were mined between 1995 and 2008, producing 2.18 million tonnes of ore with an average grade of 46 g/t Au and 2267 g/t Ag (Minfile No. 104B 008).

In excess of 150 metres of massive basalt sills and pillowed basalt flows and breccia, with thin (centimetre to metre-scale) intervals of bedded argillite, chert, and felsic tuff, overlie the contact mudstone. Conformably above this basalt sequence at Eskay Creek is a succession of tuffaceous mudstone, on the order of 50 metres thick, which Gagnon et al. (2012) have included in the Quock Formation. Conformably overlying the Quock Formation are thick turbidite and deltaic sedimentary sequences of the Middle to Upper Jurassic Bowser Lake Group.

The Bowser Lake Group, (Figure 12 – beige) is a thick, clastic marine sedimentary succession, including greywacke, chert pebble conglomerate, sandstone and mudstone. The lower Bowser Lake Group is a marine sequence of complexly inter-fingering deltaic, shelf, slope and submarine fan assemblages in excess of 3000 metres thick, sourced mostly from uplifted Cache Creek Group rocks in the northeast. These are overlain by several thousand metres of low energy fluvial deposits and sedimentary rocks of alluvial fan and braided stream systems.

Plutonic Rocks

Small plutonic bodies with a wide variety of compositions and ages occur near the Property to the north and south, and larger bodies are common in the region farther to the west and northwest (Figure 12). The oldest intrusions in the area form a belt trending north from a point about 48 km northwest of the Property (Figure 12 – light pink). They are Late Devonian in age and together form one of the larger intrusive bodies in the region. The intrusions vary in composition from granite to hornblende diorite to local hornblendite. Other large intrusions consisting of Middle to Late Triassic hornblende quartz diorite to granodiorite (Figure 12 – dark orange) are found farther to the west and northwest of the Property, within a belt of roughly coeval Stuhini Group rocks. Localized ultramafic bodies of Middle to Late Triassic age are also found in the same area.

Sizeable stocks of Early Jurassic monzodiorite to gabbro (Figure 12 – medium orange) are located 30 to 45 km northwest of the Doc Project, where they cut rocks of the Stuhini and Hazelton groups. Similar age, leucocratic porphyry plugs (Knipple and Inel Porphyry) are found near the Property, to the north and south, cutting Stuhini and Hazelton group rocks. These intrusions are part of the Texas Creek Plutonic Suite and have a number of associated mineral occurrences in the region, including the large porphyry gold-copper systems at Kerr-Sulphurets-Mitchell (KSM), 18 to 25 km northeast of the Property, and the Red Chris porphyry copper-gold deposit, 155 km to the northeast. A number of small, poorly age-constrained, Triassic to Jurassic quartz diorite to quartz monzonite to syenite stocks intrude Stuhini and Hazelton group rocks in the area surrounding Doc, including two diorite stocks within the Doc Claims. Other intrusions in the area belong to the Copper Mountain Plutonic Suite and John Peaks Stock or Unuk Metadiorite and many may be coeval with their host volcanic rocks.

Located in the southwest part of the map area shown on Figure 12, Paleocene to Eocene granitoid stocks (Figure 12) are probable outliers of the more massive Coast Plutonic Complex located farther to the west.

Several of the plutonic episodes have mineral occurrences associated with them, especially concentrated near the contact zones of the intrusive bodies, as shown by Minfile occurrences plotted on Figure 14. Additionally, the majority of occurrences are spatially associated with faults that trend north, northeast and northwest. These faults commonly occur along the boundaries between lithostratigraphic units and also at intrusive contacts (Figure 14).

The main structural feature near the Doc Property is the north-south trending South Unuk River fault, which lies approximately 1.5 km to the east. The fault comprises a regional-scale shear zone that separates the Stuhini Group (west) from the Hazelton Group (east). The Granduc deposit straddles this structure and mineralization is mostly bound to sheared rocks of the Stuhini Group.

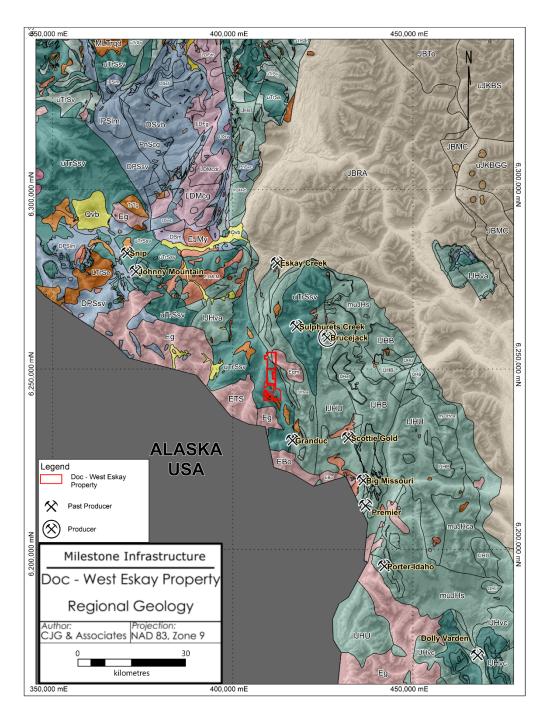


Figure 12: Regional geology of the Doc area

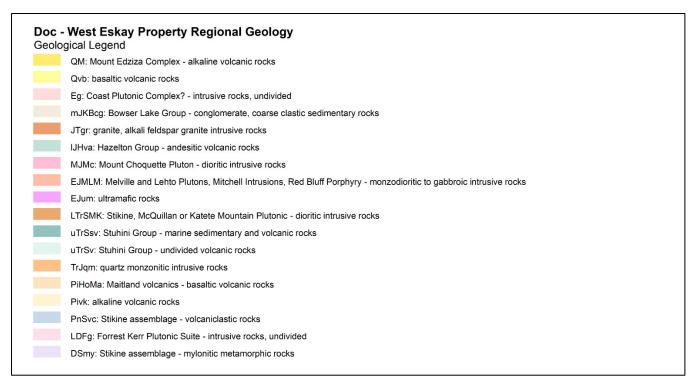


Figure 13: Geology legend to accompany Figure 12 above

5.2 Regional Mineralization

The Doc – West Eskay Property lies within an important mineral trend of northwestern British Columbia, at the heart of the region informally named the "Golden Triangle" in the Stikine terrane (Figures 10, 11). This region extends over 200 kilometres north from near the town of Stewart, along the western part of the Stikine Arch and hosts porphyry-style, VMS and precious metal-rich deposits associated with Late Triassic and Early to Middle Jurassic intrusions. Several of these structurally controlled high-grade gold-silver deposits are potentially analogous to mineralization present at Doc. The following section has been modified adapted from a 2018 Assessment Report on the Crown Project (Rowe 2018) and NI 43-101 Technical Report on the Snoball Property (Tupper 2019).

The recently commissioned **Brucejack** mine has been developed within the Valley of the Kings (VOK) Zone, which hosts high-grade gold-silver mineralization as electrum, within quartz-carbonate and quartz-adularia veins and vein stockworks. Mineralization is both structurally and stratigraphically controlled where the majority of gold intersections are confined to a 75 to 100 metre-wide zone that closely parallels the axis of a synclinal structure. Alteration at the VOK Zone is predominantly quartz-sericite-pyrite, with lesser sericite-chlorite. Alteration is most pervasive and intense within sedimentary and fragmental volcanic rocks. A number of significant showings of gold-silver, plus copper, zinc and lead occur along a north-northwest trend, informally named the "Brucejack Trend", which mostly parallels the regional Brucejack fault for about 4.5

kilometres north from VOK. Most of the showings consist of quartz-carbonate and local barite veins and stockworks associated with northwest to west-trending faults, thought to be splays of the Brucejack fault. Mineralization has been described as transitional epithermal, occurring upstratigraphy from porphyritic intrusions, potentially sourcing the mineralizing fluids.

An updated April 4, 2019, NI 43-101 compliant mineral resource estimate for the VOK deposit, combining Measured plus Indicated categories, quantified 18.7 million tonnes grading 14.18 g/t gold and 81.6 g/t silver for contained totals of 8.5 million ounces of gold and 48.7 million ounces of silver (Pretium Resources Inc. news release, April 4, 2019). The Brucejack mine was commissioned in mid-2017 and is currently ramping up to mining at a targeted rate of 2,700 tonnes per day, utilizing long-hole stoping methods.

Production at the **Silbak-Premier** mine began in about 1918 and continued intermittently until 1968. Open pit mining commenced in 1989, through to 1996. The operations have milled nearly 5.9 million tonnes of ore, recovering approximately 62 tonnes of gold and 1,333 tonnes of silver, with associated lead, zinc, copper and cadmium (BC Minfile No. 104B 054). As of January 1997, diluted Proven plus Probable Reserves were reported to be 350,140 tonnes grading 7.2 g/t gold, 37.7 g/t silver and 1.6% zinc (George Cross news letter No. 26, February 6, 1997).

The Silbak-Premier orebody is hosted in andesite flows, andesite breccia and lapilli tuff of the Unuk River Formation (a sub-set of the Hazelton Group). The volcanic rocks have been intruded by potassium feldspar porphyry dykes of the Early Jurassic Texas Creek Plutonic Suite. The dykes, spatially associated with the deposit, are historically known as "Premier Porphyry", and they are believed to be Lower Jurassic in age.

Hydrothermal alteration zones related to the mineralizing system are represented by a proximal silicification/quartz stockwork with potassium feldspar and(or) sericite-dominated alteration. Peripheral to the mineralization is characterized by a propylitic alteration assemblage comprising carbonate, chlorite and pyrite. The variable intensity and type of alteration is partially controlled by host lithology and fracture intensity, as well as the position along strike and the elevation in the hydrothermal system. The most distinct characteristic of the volcanic rocks surrounding the deposit is the pervasive carbonate, chlorite and clay alteration.

The mineralized bodies are predominantly discordant, but locally concordant with the moderately northwest-dipping andesite flows, breccias and dacite flows. Mineralization occurs along two trends; a steeply northwest dipping Main Zone and a steep to vertical West Zone. These trends appear to represent structural controls to the mineralization and the emplacement of the dacite porphyry intrusions. Most production came from an area within 500 metres of the intersection of these two zones.

There are at least four styles of mineralization, comprising textures of stockwork and siliceous breccia, to locally layered and massive sulphide-rich mineralization. Sulphide content ranges from less than 5% up to 75% and sulphides consists of pyrite, sphalerite and galena, with minor tetrahedrite, chalcopyrite, arsenopyrite and local pyrrhotite. Bonanza ore was reported to comprise native gold, electrum, pyrargyrite, polybasite, argentite and native silver. Gangue minerals include

potassium feldspar, quartz, chlorite and carbonates. A hybrid genesis model combining epigenetic vein and porphyry copper characteristics compliments mineralization and alteration observed.

The Snip mine was developed on another high-grade auriferous-vein deposit in the area. The mineralization occurs within a southwest-dipping shear vein system within Upper Triassic Stuhini Group sedimentary rocks, which are intruded by Early Jurassic age stocks and plutons. The Snip deposit occurs within the southeast trending "Bronson Structural Corridor", which appears to be associated with a number of significant deposits within the Iskut River area. The mine produced approximately 1 million ounces of gold between 1991 and 1999 at an average grade of 25 g/t. Approximately 60% of production was obtained from the Twin Zone, a 0.5 to 15 metre-wide sheared quartz-carbonate-sulphide vein system that cuts massive bedded greywacke and siltstone. Sub-parallel structures in the footwall of the Twin Zone accounted for the remainder of production. Total sulphide content in the veins seldom exceeded two percent, and was represented by minor pyrrhotite, arsenopyrite, sphalerite, chalcopyrite and rare galena (BC Minfile No. 104B 004).

The **Red Mountain** deposit comprises gold-silver mineralization in several discrete zones within Middle to Upper Triassic sedimentary rocks and Lower Jurassic volcaniclastic rocks that are intruded by the Early Jurassic Goldslide Stock, which Grove (1986) correlates with the Texas Creek Plutonic Suite (BC Assessment Report 20971). Features associated with the irregular bodies of monzodiorite, such as contact breccias, igneous breccia dykes and the existence of intrusive clasts in volcanic rocks, suggest that the intrusions were feeders to overlying volcanic units.

A wide contact breccia zone between the volcano-sedimentary package and porphyritic monzodiorite stock is characterized by argillite and(or) pyroclastic rock fragments within an intrusive matrix. Quartz stockwork is locally developed in the zone, and accompanied by weak to intense silicification, sericitization and propylitization. An extensive halo of pyrite-sericite alteration surrounds the intrusion.

Anomalous gold mineralization (>0.3 g/t) occurs at the transition from pyrite to overlying pyrrhotite dominant alteration zones over an area of more than one square kilometre. Within this anomalous zone, high-grade gold-silver mineralization grading between 3 and 20 g/t Au, lies within 5 to 29 metre-thick, semi-tabular, pyrite-pyrrhotite stockwork zones, accompanied by intense sericitic alteration and encompassed by an area of disseminated sphalerite and pyrrhotite.

Observed lithologies and alteration zoning indicates that mineralization formed in a subvolcanic environment at the top of the Goldslide intrusions and at the base of the Lower Jurassic volcanic pile. The Goldslide porphyry is interpreted to be the mineralizing intrusion and the relationships with the mineral zones show similarities common to many porphyry systems (Rhys,1995).

A NI 43-101 compliant resource estimate for Red Mountain calculated in November, 2019 (Arseneau, 2019) reported Measured resources of 1,919,600 tonnes grading 8.81 g/t Au and 28.31 g/t Ag at a cut-off grade of 3.0 g/t Au and Indicated Resources of 1,270,500 tonnes grading 5.85 g/t Au and 10.01 g/t Ag, also with a cut-off grade of 3.0 g/t Au. The Red Mountain calculated Measured plus Indicated resources includes 782,600 ounces of gold and 2,162,200 ounces of silver at a 3.0 g/t Au cut-off grade.

Scottie Gold comprises a precious metals-enriched vein type deposit. Veins are hosted by andesitic volcaniclastic rocks of the Lower-Middle Jurassic Unuk River Formation of the Hazelton Group, near the contact with a large stock. These strata are cut by mineralized veins and faults, as well as lamprophyre, microdiorite and porphyry dykes.

An Early Jurassic stock, consisting of hornblende quartz monzonite to hornblende granodiorite, lies to the northwest of the deposit. A wide, irregular aureole within and around the stock is characterized by an inner envelope containing a pervasively silicified contact zone hosting fine disseminated pyrrhotite and pyrite, decreasing outwardly to less altered volcanic breccias. The intrusive rocks are locally sheared and chloritized, particularly where transected by the Morris Summit fault.

Structurally, the Scottie property is dominated by a set of north-trending faults, the most prevalent of which is the west dipping Morris Summit fault. West of the Morris Summit fault, east-west striking faults are common, while areas to the east of it is cut by a suite of north-trending microdiorite dykes.

The Scottie deposit consists of several flat-lying mineralized quartz-carbonate veins, each forming an en-echelon or "ladder" vein pattern across widths of tens of metres, between pairs of northwest-trending steeply dipping veins, and extending to depths of up to 300 metres. The veins are components of secondary shears along the Morris Summit fault and are up to 7 metres wide, averaging 2 metres in width. The Main Zone is northwest striking and three mineralized splays from this structure strike east-west and dip steeply north. The overall mineralized area measures about 400 by 250 by 300 metres.

The main veins of the "ladders" occur within near-vertical fracture zones bordered by siliceous alteration envelopes with poorly defined borders. The veins contain variable sulphide content, with common lenses of massive sulphide consisting largely of pyrrhotite and pyrite, as well as subordinate sphalerite, chalcopyrite, galena, arsenopyrite, tetrahedrite and gold.

Exploration work was undertaken periodically on the Scottie Gold property commencing in the 1930s. Scottie Gold Mines put the property into production in 1981 through to 1984, and they mined 2.98 tonnes of gold and 1.6 tonnes of silver from 160,000 tonnes of ore, with an average grade of 18.6 g/t Au. Non-compliant historical resource estimates suggest underground mineable Measured Reserves of approximately 29,000 tonnes grading 18.5 g/t Au, as well as Indicated plus Inferred Resources of 223,000 tonnes grading 8.5 g/t Au and 4.3 g/t Ag (BC Minfile No. 104B 034).

The region surrounding Doc also contains several large Au-Cu porphyry systems associated with Late Triassic to Early Jurassic intrusions which are likely the main sources for much of the mineralization in the area. Below are brief summaries of some of the porphyry deposits in the area.

Comprehensive drilling programs by Seabridge Gold Inc. on the **KSM** property have outlined four potentially mineable deposits along a 12 kilometre-long north-easterly trend. On March 12, 2019, Seabridge announced independent updated resource estimates for the KSM deposits (Kerr, Sulphurets, Mitchell & Iron Cap) as follows: Proven and Probable Mineral Reserves of 2,198 million tonnes averaging 0.55 g/t gold, 0.21% copper, 2.6 g/t silver, and 42.6 ppm molybdenum;

and Measured plus Indicated Mineral Resources totalling 2.98 billion tonnes averaging 0.52 g/t gold, 0.21% copper and 2.8 g/t silver. An additional 4.56 billion tonnes are estimated in the Inferred Resource category grading 0.38 g/t gold, 0.32% copper and 2.4 g/t silver.

The mineral bodies at KSM are associated with the Early Jurassic "Mitchell Intrusions", high level diorite to monzonite plugs and dykes that intrude volcanic and sedimentary rocks of the Stuhini and Hazelton groups. The Iron Cap deposit, the northernmost of the four deposits, displays similar alteration to the others, with pervasive silicification, lesser sericitization and chloritization, and containing typically 3-5% disseminated pyrite. The intense silicification overprints earlier potassic and chloritic alteration, while phyllic alteration is present, is less pervasive than at the nearby Mitchell deposit. Copper bearing zones at Iron Cap demonstrate higher-grades and more extensive potassic alteration than some of the other deposits, and this is believed to be consistent with its deposition primarily within intrusive host rocks that presented a deeper and hotter environment. Associated with the silicification at Iron Cap are wide zones of hydrothermal brecciation, sporadic metre-scale quartz-pyrite-chalcopyrite veins and later centimetre-scale quartz-carbonate-pyrite-chalcopyrite-sphalerite-galena-tetrahedrite veins, providing evidence of multi-stage mineralizing events.

At KSM, Ghaffari et al. (2016), envisage a combined open-pit and underground block caving mining operation projected to operate for 53 years. During the initial 33 years, open pit production would average 130,000 tonnes per day, thereafter reducing to 95,000 tonnes per day from underground operations. Flotation concentrate would be produced on site and trucked to Stewart, for shipment to smelters.

The **Red Chris** porphyry copper-gold deposit, previously owned by Imperial Metals (now 70% owned by Newcrest Mining as of August 15, 2019), commenced commercial production in 2015. The deposit is hosted by a Late Triassic diorite to monzonite body that has intruded Late Triassic Stuhini Group volcanic and sedimentary rocks. As of September 30, 2015, combined open pit and underground block cave Measured plus Indicated resources at Red Chris totalled 1.035 billion tonnes averaging 0.35% copper, 0.35 g/t gold and 1.14 g/t silver (Gillstrom et al. 2015). The open pit resources are somewhat lower grade, but still total 847.9 million tonnes averaging 0.31% copper, 0.27 g/t gold and 1.01 g/t silver. Production is currently from two pits (Main and East) at an average of about 30,000 tonnes per day, with plans for a future increase in mining capacity. Concentrate is produced on site and trucked to Stewart for shipping overseas.

At **Schaft Creek**, porphyry copper-gold-molybdenum-silver mineralization consisting of pyrite, chalcopyrite, bornite and molybdenite occur predominantly in fractured to brecciated andesitic volcanic rocks of the Stuhini Group, which are intruded by augite porphyry basalt and quartz diorite dykes emanating from the nearby Late Triassic Hickman batholith. Less than ten percent of the mineralization occurs in intrusive rocks. The main deposit occurs within the bornite zone, with pyrite on the periphery.

Two phases of mineralization are present. The first phase comprises hydrothermal veins and breccias, and minor disseminations consisting of bornite, chalcopyrite, molybdenite, and pyrite, with accompanied potassic and sericite-chlorite alteration. The second phase is less extensive, and

consists of veins of molybdenite and local specularite, as well as copper-lead-zinc sulphide veins with little associated alteration.

Mineralization is predominantly fracture-controlled and occur in dry fractures or combined with quartz and(or) quartz-calcite veinlets within the andesitic volcanic rocks. The sulphide minerals within the intrusive rocks are usually disseminated, seemingly replacing mafic minerals. Trace amounts of covellite, chalcocite, tetrahedrite and native copper have been identified. Minor galena and sphalerite occupy breccia zones and in small calcite veins. Gold and silver are associated with the sulphide minerals.

A January 2013, NI 43-101 compliant feasibility study for the Schaft Creek project proposed a 130,000 tonne per day open pit mine, with Proven plus Probable Reserves of 940.8 million tonnes grading 0.27% copper, 0.19 g/t gold, 0.018% molybdenum and 1.72 g/t silver containing 5.6 billion pounds of copper, 5.7 million ounces of gold, 363.5 million pounds of molybdenum and 51.7 million ounces of silver and annual production of 105,000 tonnes copper, 201,000 ounces gold, 1.2 million ounces silver and 10.2 million pounds molybdenum (Copper Fox website). The feasibility study contemplated a 21-year mine life. The owners are continuing exploration and collection of geotechnical data prior to making a production decision.

The Galore Creek deposit contains at least twelve alkalic porphyry copper-gold deposits within the Galore Creek syenite complex, which is roughly 5 by 2.5 kilometres in area. This complex comprises a series of Late Triassic to Early Jurassic orthoclase-porphyry syenitic bodies, which have intruded coeval Upper Triassic Stuhini Group volcanic rocks and related sedimentary rocks.

The deposits are hosted primarily by highly altered volcanic rocks and pipe-like breccias adjacent to syenite dykes and stocks. Typically, the deposits are manto-shaped and have a north to northeast trend related to the syenite contacts and zones of structural weakness. Host rocks have commonly been skarnified, and original rock types are unclear. The term "hornfels" was frequently applied to these meta-volcanic rocks in the early stages of exploration.

An extensive hydrothermal alteration system led to the formation of large gossans. Potassic alteration has turned the syenites and volcanic rocks to pink, white and orange, and are composed mostly of orthoclase. Propylitic alteration, best developed in the syenitic rocks, consists of chlorite and calcite +/- albite and epidote alteration assemblages. Overprinted calc-silicate alteration, consisting of abundant garnet, diopside, epidote, albite and anhydrite is found locally.

As of September 2011, the Galore Creek deposit had reported Proven plus Probable Reserves of 528 million tonnes grading 0.59% copper, 0.32 g/t gold and 6.02 g/t silver containing 8.8 billion pounds of copper, 5.45 million ounces of gold and 102.1 million ounces of silver (Gill, et al. 2011). A prefeasibility study published in 2011 envisaged a large-scale open-pit mine providing ore to a process plant at a nominal rate of 95,000 tonnes per day over an approximate 18-year mine life. Concentrate would be produced and transported to the port of Stewart for shipment to various international destinations. The owners are undertaking environmental studies and seeking ways to optimize the economics of the project.

The area near the Doc Property has also been explored for volcanogenic massive sulphide (VMS) mineral occurrences since the discovery of the nearby Eskay Creek and Granduc deposits.

Eskay Creek was, during its operation, among the world's richest gold-silver mines. Host rocks are volcano-sedimentary rocks of the Middle Jurassic Unuk River Formation of the Upper Hazelton Group. Two styles of mineralization occur at Eskay Creek deposit: 1) stratiform polymetallic sulphide and sulfosalt mineralization deposited in a transitional environment between a hot spring and deeper water VMS exhalative system; and 2) high-grade gold and silver discordant stockwork feeder zones. Mineral bodies have diverse geochemical signatures dominated by Au, Ag, Cu and Zn and often accompanied by elevated As, Sb, Pb, Te and Hg. Mineralization displays both lateral and vertical zoning. Antimony, arsenic and mercury-rich mineral assemblages in the south part of the deposit grade into zinc, lead and copper-rich assemblages in the north. Vertical zoning is expressed as a systematic increase in gold, silver and base metal content up-section.

Mudstone host rocks are overprinted with varying amounts of chlorite, muscovite, chalcedonic silica, calcite and dolomite, with ubiquitous pyrobitumen. Beneath the stratiform mineralization within the "contact" mudstone unit, the footwall rhyolite unit is highly fractured and intensely chlorite and sericite altered. Fracturing, alteration intensity and metal tenor appear to increase toward the upper contact. Within 3 to 4 metres of the upper contact, rhyolite-hosted mineralization is characterized either by massive chlorite-gypsum-barite rock or by quartz-muscovite-sulphide breccia. Mineralization in footwall rocks commonly occurs as semi-massive to disseminated, crystalline pyrite, sphalerite, tetrahedrite, galena and chalcopyrite, with rare native gold.

The most important zone is the 21, which hosts most of the mined reserves and consists of a stratabound sheet within carbonaceous mudstones and underlying rhyolite-mudstone breccia. In the north, sulphide layers also occur in the hanging wall andesite unit. As traced by diamond drilling the entire zone extends 1400 metres along strike, 250 metres downdip and is from 5 to 45 metres thick.

Mining from 1995 to 2008 at Eskay Creek produced 2.1 million tonnes of ore yielding 101.65 tonnes of gold, at an average grade of 48.4 g/t, as well as 4,942 tonnes of silver, at an average grade of 2,221 g/t (BC Minfile No. 104B 008).

The **Granduc** deposit straddles the South Unuk shear zone, along the South Unuk River fault, which forms the contact between Upper Triassic Stuhini metavolcanic and metasedimentary rocks to the west, and the mainly volcanic rocks of the Lower to Middle Jurassic Hazelton Group to the east. The deposit is mostly bound to sheared rocks of the Stuhini Group, and it has been interpreted as a Besshi-type VMS copper deposit.

The Granduc ore deposit consists of a series of stratiform massive sulphide lenses, localized within a complex sequence of volcano-sedimentary rocks that have been deformed by cataclasis. Recrystallization of rocks hosting the ore horizon has converted the fine grained laminated rocks to compositionally banded, brown to pale grey quartz-rich biotite and sericite schists, quartzites and metacherts. Feldspathic and andesitic tuffs are metamorphosed into massive, or banded biotite, and biotite-epidote-actinolite schists. Massive rocks are more common in the lower half of the ore horizon, while the upper part of it consists of finely laminated quartz-rich brown biotite schists which are derived from silty argillites.

Several ore zones make up the Granduc deposit and feature pancake-like, overlapping, and commonly merging lenses, which extends vertically for 760 metres, laterally for 1200 metres and over a 120 to 240 metre lenticular width. Several steep north trending faults cut the orebodies, which have been offset by apparent right-hand strike-slip movement. The orebodies, designated as A to F, consist mainly of pyrite, chalcopyrite, pyrrhotite, magnetite, sphalerite, galena, arsenopyrite, bornite and cobaltite. Gangue includes blocks of brecciated country rock, quartz as lenses, stringers and blebs, recrystallized coarse-grained calcite as lenses and stringers, and apatite. Minor alteration minerals comprise calc-silicate lenses and tourmaline.

Total production at the Granduc mine from 1971 to 1978 and 1981 to 1984 was 15.5 million tonnes of ore from which 124,048,961 grams of silver, 2,000,061 grams of gold and 190,143,710 kilograms of copper were recovered. Ore reserves before production began in 1971 were 39,316,435 tonnes grading 1.73% copper. Inventory in 1986 was reported as 9.89 million tonnes grading 1.79% copper with minor gold and silver (Minfile No. 104B 021).

Many mineral occurrences found near the Doc Property are related to large regional structures, including the South Unuk/Harrymel Fault, located 1.5 kilometres to the east of the Property. The top of the Stuhini Group is commonly marked by a regional-scale angular unconformity, and typically overlain by Hazelton Group strata. This boundary is the so-called BCGS (British Columbia Geological Survey) "Red Line" interpreted by the BCGS to be a key to localization of many of the mineral deposits in the Golden Triangle.

5.3 Local Mineral Occurrences

Numerous B.C. Minfile occurrences for precious and base metals are located around the Doc – West Eskay Property. Figure 14 illustrates Minfile Occurrences in the immediate vicinity of the Property. Detailed descriptions for these mineral occurrences can be found online at the BCGS MINFILE Database.

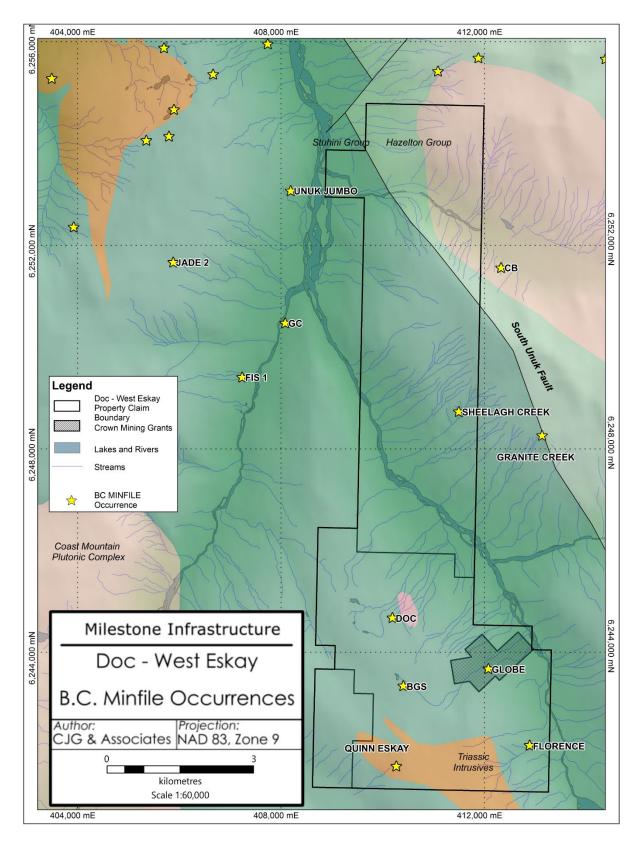


Figure 14: Local Minfile Occurrences surrounding the Doc - West Eskay Property

6.0 Property Geology, Mineralization, and Alteration

6.1 Property Geology

The Doc Property is underlain primarily by late Triassic stratified rocks of the Stuhini Group, and Late Triassic intrusive rocks of the Bronson Stock (Lewis et al. 2013, Massey et al. 2005). The most recent mapping on the Property was completed by Lewis et al. (2013) as part of the Iskut River area mapping project undertaken by the University of British Columbia's Mineral Deposits Research Unit (MDRU) (Figure 15). While this regional-scale mapping project confidently places the Doc Project with Triassic aged strata, the most detailed lithological descriptions come from 1988 and 1989 mapping programs. The details are provided below in this section.

Lithological Units

Mapping during the expansive 1988 and 1989 field programs divided the Doc Property into two main lithological units: stratified, polydeformed, upper greenschist to amphibolite facies equivalents of what are now agreed to be Stuhini Group volcanic and sedimentary rocks; and gneissic metadiorite of the Bronson Stock. The observations of the authors during their site visits is in general accord with the descriptions provided below that are largely from the work of previous geologists.

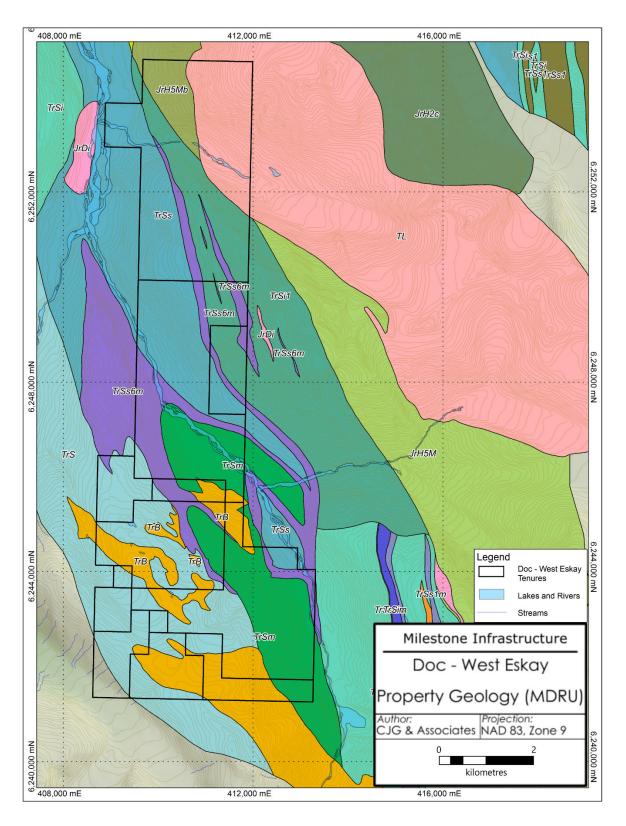


Figure 15: Property geology of the Doc Property (after Lewis et al, 2013)

Doc - West Eskay Property Geology Legend MDRU - Lewis et al (2013) TL - Coast Plutonic Suite - Lee Brant stock: hornblende-biotite quartz monzonite JrB3 - Bowser Lake Group - thinly-bedded mudstone and siltstone JrH5Sa - Hazelton Group - thinly-bedded carbonaceous mudstone, turbiditic mudstone to siltstone, locally chert JrH5Mb - Hazelton Group - pillow lavas, broken pillow breccia, interbedded mudstone JrH5M - Hazelton Group - mafic volcanic rocks JrH4 - Hazelton Group - undifferentiated sedimentary rocks JrH2c - Hazelton Group - andesitic volcanic breccia/block tuff; hornblende+plagioclase-phyric clasts, some interstratified epiclastic rocks JrH2 - Hazelton Group - undifferentiated andesitic volcanic and epiclastic rocks JrH1a - Hazelton Group - clast-supported granitoid pebble to boulder conglomerate JrH1 - Hazelton Group - undifferentiated sedimentary rocks JrF - Texas Creek Plutonic Suite - felsic dykes and stocks, unnamed JrDi - Texas Creek Plutonic Suite - unnamed dioritic plutons and stocks TrSy - Stikine Plutonic Suite - k-feldspar megacrystic syenite TrB - Stikine Plutonic Suite - Bronson stock diorite TrSs7 - Stuhini Group - green andesitic boulder conglomerate TrSs6m - Stuhini Group - white to grey coarsely crystalline marble TrSs4 - Stuhini Group - medium- to thickly-bedded coarse-grained feldspathic sandstone and tuffaceous heterolithic conglomerate TrSs1m - Stuhini Group - phyllitic metasandstone, phyllite TrSs1 - Stuhini Group - thinly- to medium-bedded argillite, siltstone turbidites; interstratified sandstone and wacke TrSs - Stuhini Group - undifferentiated sandstone, mudstone, conglomerate, limestone TrSm - Stuhini Group - undifferentiated basaltic volcanic lavas, tuffs and volcanic breccia TrSim - Stuhini Group - amphibole schist or gneiss TrSi1 - Stuhini Group - andesitic clinopyroxene/hornblende+plagioclase-phyric block tuff, volcanic breccia TrSi - Stuhini Group - undifferentiated andesitic volcanic lavas, tuffs and volcanic breccia TrS - Stuhini Group - volcanic and sedimentary rocks, undifferentiated

Figure 16: Legend to accompany property geology (Figure 15)

Stuhini Group:

Stuhini Group rocks on the Property comprise five polydeformed sub-units consisting of schistose to gneissic volcaniclastics, metapelites, marbles, and flows (Glover and Freeze, 1989).

Mafic to intermediate volcanic rocks comprise fine grained, light to dark green biotite-chlorite-hornblende schists, with a well-developed foliation. These rocks are interpreted to be derived from a volcanic protolith of andesitic composition.

Mafic to intermediate tuffs and tuffaceous sedimentary rocks are characterized by 1-2 cm thick, alternating melanocratic and leucocratic layers of fine to medium grained gneissic banding. These rocks are dominantly green, and contain abundant epidote and chlorite, respectively segregated into pale and dark bands.

Siliciclastic sedimentary rocks are grey to rusty brown, and characterized by a weakly foliated fabric. These rocks are generally thinly bedded, locally with thicker, more massive intervals, with dark, heavy minerals inferred to define bedding planes.

Calcareous sedimentary rocks present as interbeds and laminations within the above described siliciclastic sedimentary horizons. These rocks are grey to buff weathering, and contain a calc-

silicate mineral assemblage that includes garnet, epidote, and rare diopside. Texturally these rocks range from fine grained siltstones with carbonate cement, to more crystalline, carbonate rich marls.

Marble represent perhaps the only easily identifiable, continuous lithological contact within the Stuhini Group. This unit is present north of the Doc Zone, and trends north-northwest down into the South Unuk River valley. This unit is generally massive, though well-preserved isoclinal folds are observed where bedding is present.

Intrusive Rocks:

Stuhini Group rocks are intruded by a variety of plutonic to sub-volcanic intrusive units. Glover and Freeze (1989) identify at least three discrete pulses of magmatism that account for this variety.

The oldest intrusions on the Property are believed to be upper Triassic in age and characterized as mafic to intermediate, ranging from diorite to gabbro, with a similar overall composition to the mafic volcanic units underlying the Doc Property. Triassic aged intrusions commonly show well developed gneissic banding, characterized by melanocratic bands of hornblende and biotite interlayers with pale bands of quartz and plagioclase. Historically, the gneissic banded metadiorites found on the property were grouped into the Bucke Glacier Stock; however, recent mapping by the MDRU (Lewis et al. 2013) classifies these as Bronson Stock diorites. There can be some difficulty differentiating gneissic banded diorites from intermediate to mafic meta-tuff of the Stuhini Group, which when metamorphosed may exhibit similar textures.

The BCGS (Massey et al. 2005) age dated a second metadiorite body southeast of the main adit at the Doc Zone using K/Ar dating techniques and it came back with a middle Jurassic Age (170±1.7 Ma). The intrusive rocks are medium grained, lineated to gneissic banded hornblende-plagioclase bearing diorite. The authors have not been able to locate a primary source for this description or age date outside of the regional compilation map legend. This unit was also conspicuously absent from the Lewis et al. (2013) mapping effort.

Late Cretaceous to Eocene monzodiorites of the Coast Plutonic Complex were observed within a few kilometres of the western margin of the Property. In contrast to the Triassic aged metadiorites, these rocks are relatively fresh, and unmetamorphosed. The large intrusive body, coupled with accretionary tectonic forces, likely accounts for the regional metamorphism grade associated with the Triassic aged strata and intrusives.

Several phases of dykes are also present across the Doc Project, indiscriminately cutting intrusives and stratified rocks. Milky white to buff coloured fine grained quartz aplite dykes were found locally during 2019 field work. These dykes comprise acicular voids, inferred to be weathered out fine mafic minerals. Glover and Freeze (1989) note that while these aplite dykes appear to cut both the schistocity and gneissic banding, they are commonly folded (isoclinal) and locally pinch and swell. They interpret these dykes as syn-deformational structures. Dark grey-green to black, fine grained diabase dykes are also found locally.

Structural Geology

The Doc Property lies on the western side of the South Unuk River fault, a regionally significant structure that trends northwest, paralleling the South Unuk River valley. The South Unuk River fault dips 70 to 80 degrees to the northeast and strikes approximately 335 degrees (Glover and Freeze, 1989).

West of this fault, regional metamorphism has reached up to amphibolite facies. As a result of this metamorphism, most units on the Property have a well developed foliation, manifested as either schistocity (platy cleavage) or gneissic banding. Foliation is commonly sub-parallel to bedding within sedimentary strata and appears to be axial planar to small-scale, shallowly northwest plunging isoclinal folds (F1) developed in sedimentary strata, indicating the folding is coeval with regional metamorphism. A second generation of southwesterly verging macroscopic chevron folds (F2) overprints F1 folding, resulting in the complex fold interference pattern observed throughout the Property.



Figure 17: Folded meta-volcanic rocks

Mineralization on the Doc Project is hosted within steeply north dipping, west-northwest striking, shear-hosted quartz veins. Multiple shear zones have been observed across the Property, and these are commonly associated with precious metal-bearing sulphides along the footwall and hanging wall of the quartz veins. These shear zones all trend sub-parallel to each other, cut all lithologies, and are similarly discontinuous along their strikes. It can be interpreted that this property-scale shearing event post-dates the emplacement of the intrusive units, and is either co-eval with, or post dates the F2 deformation event.

The polyphase deformation is most prominent in sedimentary strata, particularly in the interbedded siliciclastic and calcareous units and the apparent similarities between gneissic volcaniclastic and intrusive units has hindered mapping efforts by previous workers to produce detailed and accurate geological maps of the Doc Property. The 2013 mapping program made an effort to differentiate between Marble horizons in the northeast, from other sedimentary and volcanic strata to the south. As development on the Doc Property proceeds, it is recommended that a concerted effort be placed into properly differentiating and delineating the contacts between stratified and intrusive rocks, particularly in areas along strike from known mineralized veins. As previous workers have noted, mineralized quartz veins appear to be preferentially emplaced into competent crystalline metavolcanic rocks, as opposed to less competent, ductilely deformed sedimentary strata. Efforts to constrain contacts of various lithological units would be of great benefit to future exploration.

6.2 Mineralization and Alteration

Previous workers on the Doc Property identified the potential for different styles of precious and base metals mineralization. Three principle types of mineralization occur at the Doc Project: 1) gold- and silver-rich quartz veins; 2) replacement style skarn with potential to host base and precious metals mineralization and 3) volcanogenic massive sulphide base metal mineralization. Previous operators noted the most important of the three are the precious metals-enriched quartz veins, which have been the primary focus for most work done on the Property to date.

In the early 1900's, auriferous-quartz veins were discovered near the Doc Property. Between 1935 and 1946, numerous gold- and silver-bearing quartz veins were discovered in shear zones and in 1947 and 1948, trenching and diamond drilling tested several of them along strike and down dip. Mineralized quartz veins were numbered and designated by the prefix "Q" (Q17, Q19, Q22 & Q25). Between 1948 and 1988, additional veins were discovered in the main Doc area (Q28, Q32, TS and JT veins) and elsewhere (BGS, Galena Ridge, Quinn Eskay and Glacier zones) on the Doc Property. In 2019, most of the historical showings were re-visited and re-sampled. The characteristics of the mineralization described by previous operators, as well as the results were confirmed during the 2019 program.

6.2.1 Mineralization of the Doc Zone

The Doc mineral occurrence has been the primary focus of historical work, which included trenching, drilling (6595.77 m) and underground development (639.5 m) directed mainly on the Q17 and Q22 veins and the other veins in the immediate Doc area (Figures 18, 19). The veins are striking west-northwest and dip steeply to the north. Freeze et al. (1989) described mineralization at the Q17 and Q22 to consist of a central bull quartz vein hosting pyrite, galena with minor chalcopyrite and sphalerite stringers. The central bull quartz vein is generally bound on both sides by brecciated vein material hosting galena, pyrite and chalcopyrite, and sheared ankeritic and sericitic wall rock. Sparse development of specularite is hosted along joint surfaces within the bull quartz. It was also reported that veins in the vicinity of Q17 have similar characteristics. The best gold and silver grades are reported in massive to semi-massive sulphides along the footwall and hanging wall margins of the veins. The most significant results were obtained from semi-massive to massive sulphide on the footwall side of the Q17 vein, where a grab sample of the material in Trench #12 returned over 100 g/t Au, 480.0 g/t Ag, and 9% Pb. (Gewargis, 1986 – Assessment Report 15615).

Freeze et al. (1989) also noted that the veins have undergone multiple phases of movement, via brittle fracturing of the central bull quartz vein and emplacement of sulphides, followed by rebrecciation and shearing of the veins. The sense of displacement of the shear zone indicates reverse movement (north-side up) with a component of right-lateral movement. The preferred model involves initial development of en-echelon tension fissures, with subsequent progressive shearing. It was also noted that veins are best developed in competent meta-volcanic rocks and diminishes in intensity and grade within sedimentary rocks.

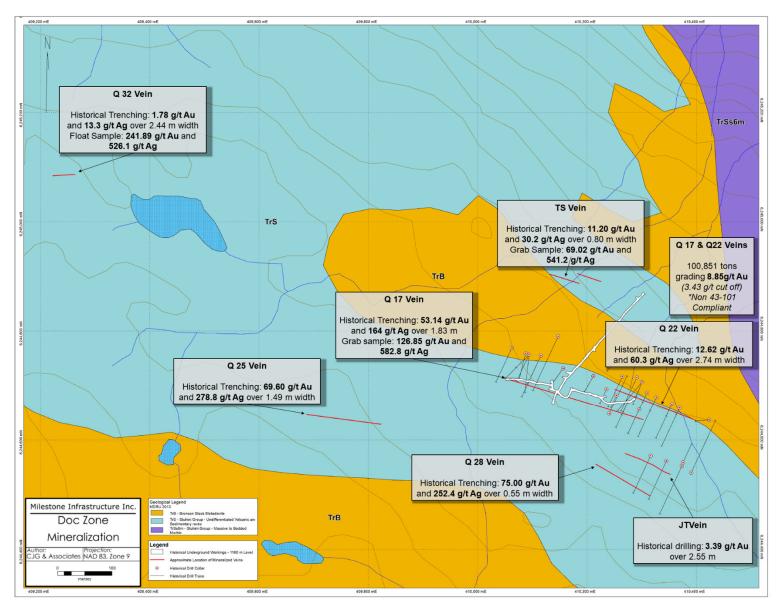


Figure 18: Overview map of Doc showing area vein zones, with highlights of historical rock and trench sampling

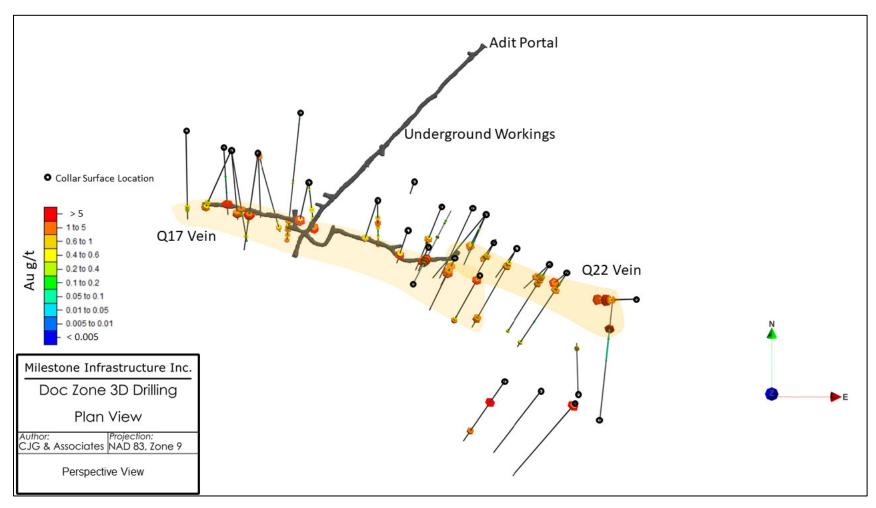


Figure 19: Doc zone 3D model from digitized historical data, showing vein locations and Au grades

The Q25 vein has seen extensive trenching, which exposed yellow stained quartz with minor disseminated pyrite and up to 15% galena over widths ranging from 0.85 up to 1.95 m (average 1.37 m) along its 115 m strike length (Figure 18). The highest grade gold values came from galena-bearing material, which assayed up to 69.60 g/t Au and 278.8 g/t Ag over 1.49 m. Seemingly barren quartz material collected from the vein yielded up to 25.82 g/t Au and 15.19 g/t Ag and was noted that gold may be in a free state, rather than tied up in sulphides, such as the other veins on the Doc Property.



Figure 20: Doc Zone (sample Y738064); 50.60 g/t Au, 479.0 g/t Ag and 16.05% Pb (2019)

Q28 has been mapped over a 95 m strike length and ranges from 0.46 to 2.19 m (average 1.95 m) in width (Figure 18). The quartz is stained yellow and heavily sheared, and hosts minor pyrite and lesser galena, specularite and magnetite. The best result graded 75.00 g/t Au and 252.4 g/t Ag over 0.55 m. It was reported that the Q28 and Q25 are along trend of each other and may share the same mineralized structure.

The Q32, the northwestern-most vein, occurs within a shear zone along the side of a small hill on the west side of a small lake (Figure 18). Four trenches were dug along a 150 m strike length with intermittent high-grade quartz vein float found between them. Gold and silver assays from Trench 1 were relatively low (1.78 g/t Au and 13.3 g/t Ag over 2.44 m); however, high-grade float (up to 241.98 g/t Au and 526.1 g/t Ag) was discovered along trend of the mineralized shear zone. It was reported that the Q32 may represent a mineralized cross shear along the Q17 trend.

The **JT** vein lies 120 m southwest of the Q22 vein and is characterized by a 100 m strike length, an average width between 1.0 and 2.0 m and a vertical depth of 80 m below surface (Figure 18). The best result from the JT vein was from hole 89-15, which averaged 3.39 g/t Au over 2.55 m.

TS vein, discovered in 1987, lies approximately 100 m west of the Doc portal (Figure 18). It consists of a 40 to 80 cm wide quartz vein hosting up to 1% galena, 2% pyrite and trace magnetite. An 80 cm wide chip sample was taken across the TS vein and assayed 11.20 g/t Au and 30.2 g/t Ag, while a grab sample of massive pyrite yielded 69.02 g/t Au and 541.2 g/t Ag. The vein trends 108/62N and lies in a creek gully exposing a 25 m dip extent.

6.2.2 Mineralization of the BGS and Galena Ridge Zones

In 1987, a total of 14 trenches were excavated across 2 veins found intermittently along a 1200 m long and 10 to 15 m wide shear zone (this work was documented under the Pyramid Zone). The veins are parallel to the shear zone, which trends northwest and comprises strong clay alteration, pyritization and local silicification.

Historical grab and trench samples collected in 1987 yielded low values for gold and silver, except for two samples taken from veins within the shear zone, and assayed 13.25 g/t Au and 138.5 g/t Ag, and 10.50 g/t Au and 117.5 g/t Ag over 0.70 m (Figure 21).

In October 1999, Hunter Exploration carried out a prospecting program and discovered the BGS Zone. It was described as a 25 m by 6 m area comprising quartz vein rubble in subcrop near the base of a snowfield. The vein material consisted primarily of white quartz with abundant pyrite and chalcopyrite. A sample of this material assayed up to 44.66 g/t Au, 219 g/t Ag, 1.02% Cu and 5.58% Pb (Robins, 2000 – Assessment Report 26256).

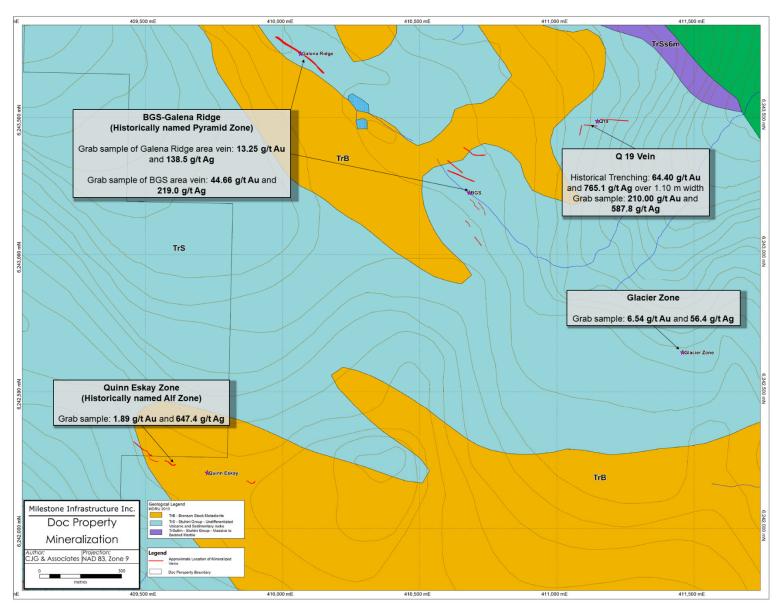


Figure 21: Doc Property mineralization and historical trench and rock sample highlights

6.2.3 Mineralization of the Q19 Zone

The Q19 Zone lies 1500 m southeast of the main Doc workings and 450 m northeast of the southeastern-most extent of the BGS Zone. It was reported that 10 old trenches (probably from the 1940's) were dug at Q19 (Aelicks et al. 1987). Four of the trenches were re-excavated during the 1987 exploration program and exposed the vein intermittently over a 25 m strike length and over widths of up to 3.60 m. The vein trends 110/65N and is cut by two faults trending 130 degrees. At least three veins were mapped in this area, including the main vein.

The vein was described as being heavily fractured and stained yellow with minor pyrite, and cut by a narrow cross shear containing a pod of massive galena. The best results from trenching were collected from the footwall of the vein, which averaged 64.40 g/t Au and 765.1 g/t Ag over 1.10 m. The vein itself assayed up to 13.25 g/t Au and 67.7 g/t Ag over 1.49 m. A high-grade grab sample yielded 210.00 g/t Au and 587.8 g/t Ag (Figure 21).

6.2.4 Mineralization of the Quinn Eskay Zone

In 1987, Magna Ventures and Silver Princess discovered the Quinn Eskay Showing (named the ALF3 Zone – Assessment Report 16708), approximately 2.5 km southwest of the main Doc Zone. Three galena-rich veins were identified with varying orientations. Sampling returned up to 647.4 g/t Ag, with generally low gold values of up to 1.89 g/t (Figure 21).

In 2011, Cache Minerals Inc. collected 13 rock samples in the eastern and southeastern parts of the Quinn Eskay Zone. A 300 m long by 50 m wide gossan was discovered. A rock sample collected from the gossan consisted of quartzofeldspathic gneiss with ankerite/sulphide weathering, and yielded 0.83 g/t Au, while a quartz vein taken from talus assayed 0.25 g/t Au and >5000 ppm Pb.

6.2.5 Mineralization of the Glacier Zone

The Glacier Zone is situated 2.5 km southeast of the main Doc Zone, near the toe of the Globe Glacier. It was discovered by Magna Ventures and Silver Princess in 1987 and described as a 1 to 2 m wide quartz vein trending 100/45N, with assays up to 0.47 g/t Au and 364.8 g/t Ag. A grab sample from a faulted vein, 1.31 m wide, yielded 6.54 g/t Au and 56.4 g/t Ag (Figure 21). It was noted that a large outcrop of quartz was observed from the helicopter on the other side of the peak, and may represent an extension of the vein.

6.2.6 Mineralization of the Florence Zone

In 1935, a wide quartz vein containing pyrite, chalcopyrite and galena with gold values was reported 1.6 kilometres south of the Globe mineral occurrence (Minister of Mines, Annual Report 1935, p. B11). This is currently represented by the Florence Minfile and no further work in this area was reported.

7.0 2019 Exploration Program

The Company's field activities in 2019 consisted of 1) prospecting and rock sampling at the Doc, Galena Ridge, BGS, Q19, Quinn Eskay, Glacier, and 2) ground-based magnetic surveys over the Doc, Galena Ridge, BGS and Quinn Eskay targets.

7.1 2019 Prospecting, and Rock and Channel Sampling

In 2019, the program was designed to re-locate, and carry out prospecting, and rock sampling at the Doc, Galena Ridge, BGS, Q19, Quinn Eskay, Glacier and Florence zones. The goal was to prioritize drill targets by completing systematic sampling at the various mineralized zones, as well as to identify additional mineralization beyond the extent of known zones, and elsewhere on the Property, while also gaining a better understanding of the styles of mineralization and structural controls. Figure 22 shows the rock sample locations from the 2019 program.

Rock samples typically consisted of outcrop and float that generally contained veins or rusty gossanous material, commonly with sulphide minerals, within metamorphosed intrusive, volcanic and sedimentary rocks. Channel sampling targeted both bull quartz and mineralized quartz veins to assess their economic potential, and to prioritize drill targets. Detailed descriptions and results for the mineralized zones are provided below and complete descriptions and results are provided in Appendix C.

7.1.1 Rock Sampling Protocol

Rock samples consisted primarily of selected chips and channel samples from mineralized or altered bedrock or float. UTM co-ordinates were recorded for each rock sample site using a handheld Garmin GPS unit. Data was recorded regarding the type, strength and extent of mineralization, as well as host rock characteristics, including alteration and possible controlling structures.

Rock samples were placed in heavy plastic bags marked with identifying numbers, packed in sacks and transported to ALS Global Laboratories prep lab in Terrace B.C. The fine fractions were then sent to ALS in North Vancouver B.C., for analysis of gold (code Au-ICP21) and a suite of 35 additional elements (code ME-ICP41).

At the lab, rock samples were dried and crushed to 70% <2 mm, then riffle split to a 250 gram lot, which was then pulverized to 85% <75 microns. From each sample pulp, 50 grams of -75 micronsize material was analyzed for Au content (0.001 ppm to 10 ppm detection range) by fire assay followed by inductively coupled plasma-atomic emission spectroscopy (ICP) analysis (AU-ICP21). As well, a suite of 35 additional elements was analyzed by dissolving at least 1 gram of -75 micron pulp in an aqua-regia solution and measuring the element concentrations by ICP (ME-ICP41). Aqua-regia digestions represent the leachable portion of the particular analyte, and not all elements are quantitatively extracted in some sample matrices.

Rock samples > 10.0 ppm Au were analyzed for over limits by fire assay and gravimetric finish (Au-GRA21). Select over limits for silver, copper, lead and zinc by aqua regia digestion and inductively coupled plasma atomic emission spectroscopy (ICP-AES) finish (OG46).

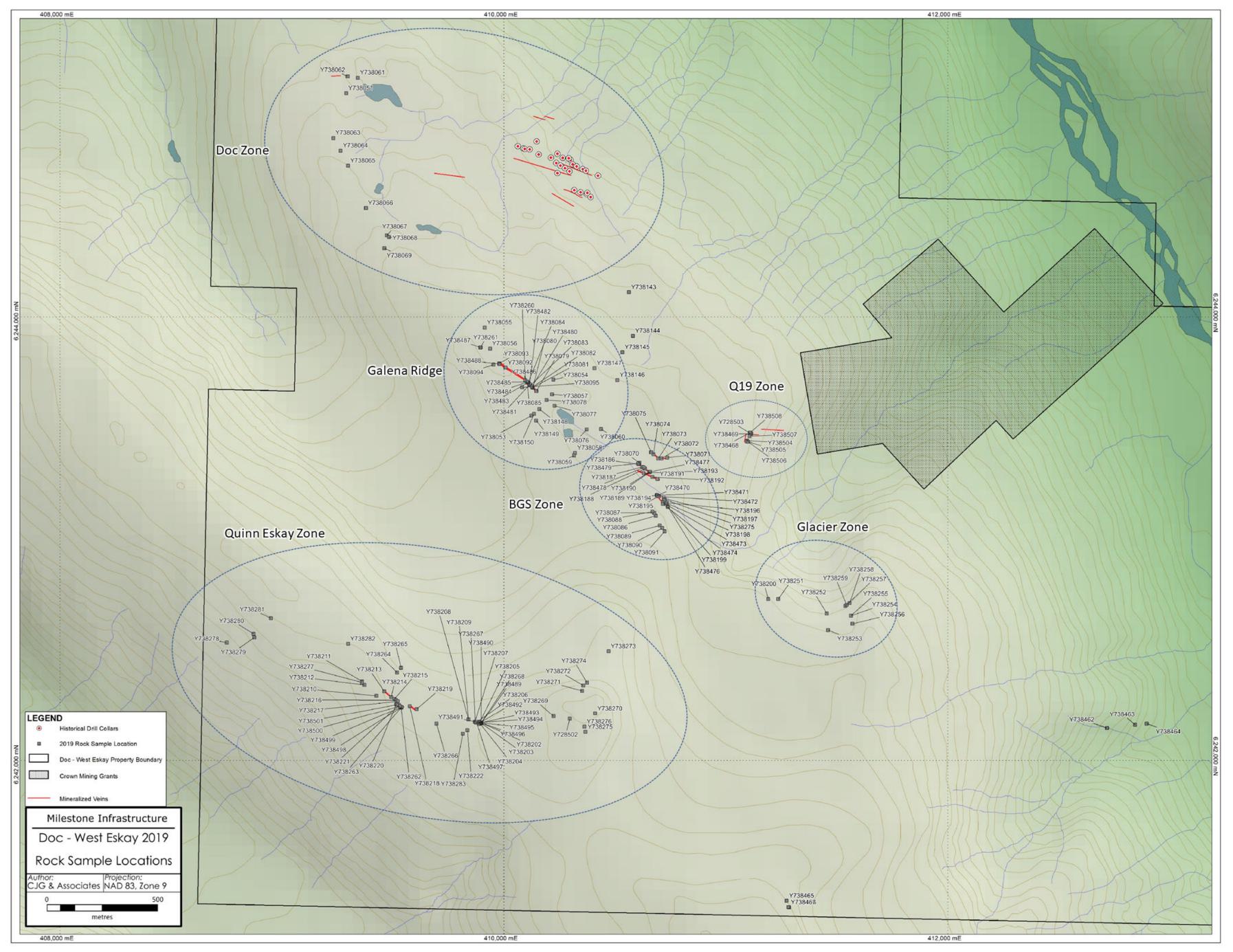


Figure 22: Map of 2019 Rock Sample Locations

7.1.2 Doc Zone Sampling

At the Doc Zone, rocks were collected from the Q32 area and approximately 430 m northwest (along trend) of the Q25 vein. Rock samples were taken over a 400 by 80 m area as float, from historical trenches and in outcrop. Samples generally comprised variably rusty and mineralized quartz veins hosting pyrite, chalcopyrite and galena. Six rock samples taken from this area averaged 19.65 g/t Au (up to 50.60 g/t), 226.3 g/t Ag (up to 479.0 g/t), 0.73% Cu (up to 2.07%) and 10.6% Pb (up to 11.9%). Highlights are provided in Table 5 and results for gold, silver, copper and lead are illustrated thematically on Figures 23 to 26, respectively.

Table 5: Assays for selected 2019 rock samples: Doc Zone

Sample ID	Sample Type	Vein Name	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738051	float	Q32	Weakly rusty weathered qz vein hosting coarse cubic gn seams (up to 1 cm) and encrustations on fractures.	2.86	30.4	173	20800	23
Y738061	float	Q32	Rusty qz vein with 1-3% gn and cp. Coarse crystalline vuggy qz with li powder lining vugs and seams.	0.12	35.7	2380	281	72
Y738062	outcrop	Q32	Qz vein material with cubic py + mg, and trace grey, dull lustre material with a faint brown streak (sph?). Coarse milky white qz with rusty weathered surfaces. Specimen taken from blasted outcrop.	0.16	3.4	45	85	7
Y738063	float	Q25	Qz vein boulder, likely float or subcrop. Coarse crystalline milky white qz with up to 20% clotty cp and coarse cubic to fine gn. Common li staining along vugs and seams throughout	2.22	64.0	20700	39700	387
Y738064	float	Q25	Rusty pink vuggy qz vein float (12 cm wide) hosting seams of fine grained gn with trace cp. Coarse qz crystals, with li staining bounding gn seams.	50.60	479.0	288	160500	118

Sample	Sample	Vein	Description	Au	Ag	Cu	Pb	Zn
ID	Type	Name		(g/t)	(g/t)	(ppm)	(ppm)	(ppm)
Y738065	float	Q25	Rusty qz vein (30 cm) hosting crystalline milky white qz, with li seams, very fine grained py with 1 - 8 mm wide stringers of fine grained gn.	6.15	136.0	113	118500	4

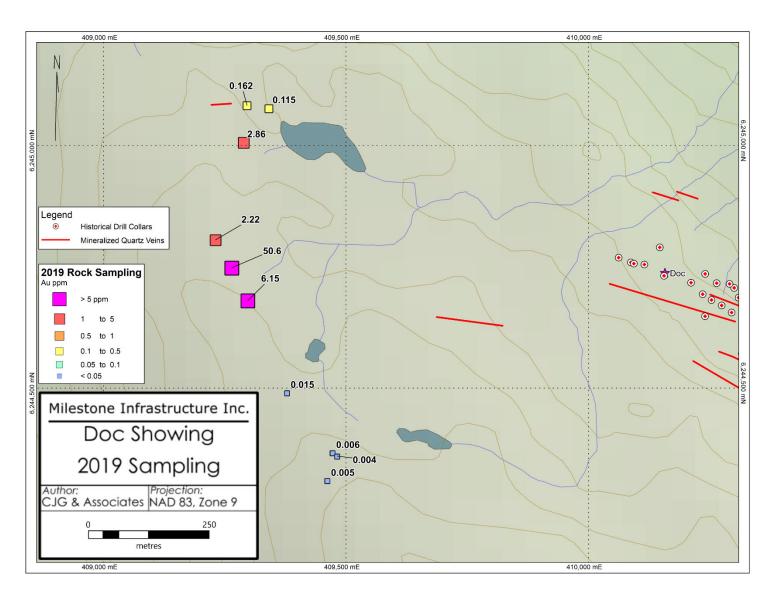


Figure 23: 2019 Doc Zone rock sampling - gold results

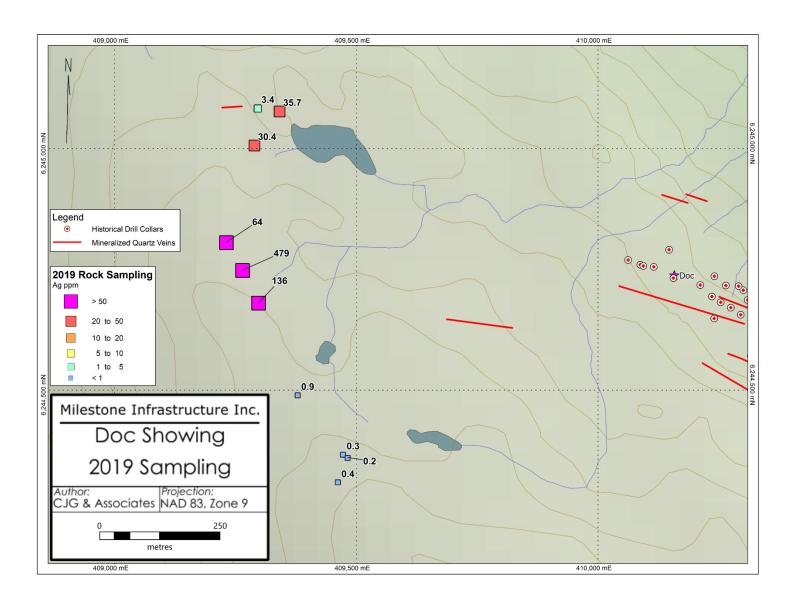


Figure 24: 2019 Doc Zone rock sampling - silver results

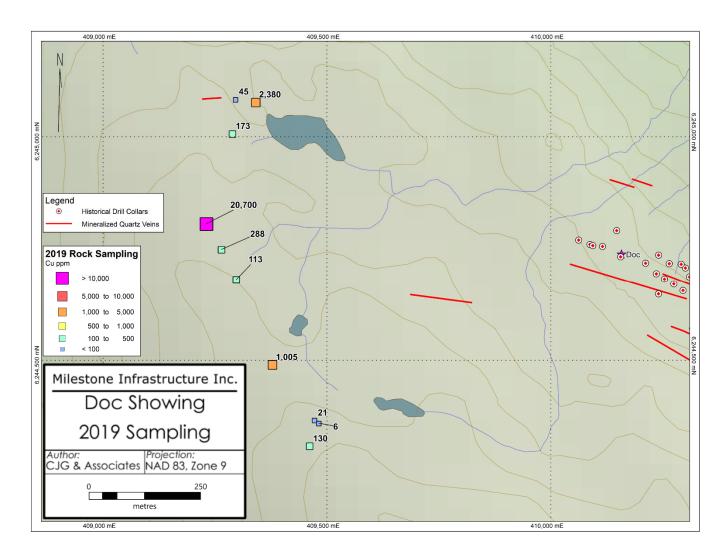


Figure 25: 2019 Doc Zone rock sampling - copper results

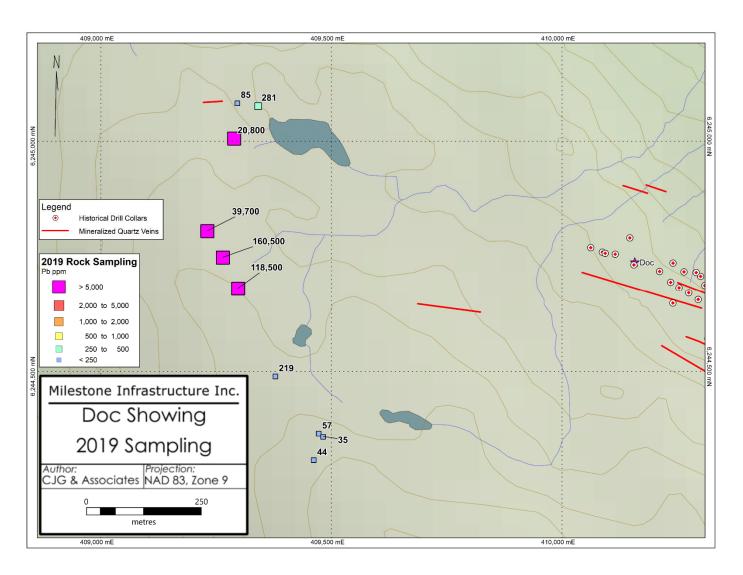


Figure 26: 2019 Doc Zone rock sampling - lead results

7.1.3 2019 Results from BGS and Galena Ridge Zones

In 2019, a total of 72 (28 rocks, 25 chip and 19 channel samples) rock samples were collected from the BGS and Galena Ridge zones. A total of 19 rock samples taken intermittently over a 1 km strike length yielded > 1 g/t Au. Veins in the northwest part of the structure (Galena Ridge) are more lead-rich and copper-poor, becoming more copper-rich and lead-poor to the southeast (BGS). The BGS Zone also has elevated arsenic and antimony associated with it, where as Galena Ridge does not. A 35 cm wide chip sample collected from the Galena Ridge Zone comprising rusty weathering, massive to brecciated, coarse milky white bull quartz vein (335/74NE), with brecciated cubic galena along its margins, averaged 12.80 g/t Au and 263.0 g/t Ag, with elevated copper and lead. A channel sample taken from the same zone cut across a semi-massive galena vein with subordinate chalcopyrite and pyrite, and averaged 7.75 g/t Au and 286.0 g/t Ag over 0.44 m. Three rock samples (Y738186, 187 and 199) collected from the BGS Zone comprising quartz veins hosting chalcopyrite+pyrite+magnetite (111/79SW) averaged 3.68 g/t Au (up to 4.04 g/t) and 74.2 g/t Ag (up to 170.0 g/t). Results are tabulated in Table 6, while values for gold, silver, copper and lead are shown on Figures 29 to 36.

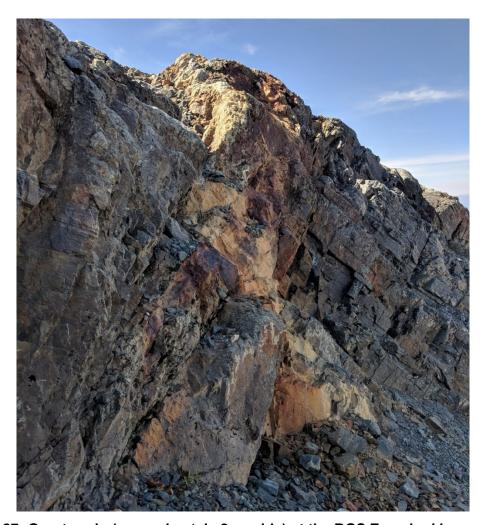


Figure 27: Quartz vein (approximately 2 m wide) at the BGS Zone looking northeast

Table 6: Assays for selected 2019 rock samples: BGS and Galena Ridge zones

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738053	float	0.30	Rusty weathered qz vein with milky white coarse grained qz crystals (pegmatitic) hosting semimassive, fine to medium grained, subhedral to euhedral py (20-25%) as disseminations and patches. Material represents about 5% of talus in the area.	1.81	8.1	7	36	1
Y738056	float	N/A	Vuggy qz vein material hosting patches of semi- massive fine grained gn (up to 40%) and cp (2-5%).	4.10	267.0	306	>200000	2250
Y738186	composite chip	1.00 x 1.00	1x1 m composite chip from a py-mg-cp-specularite mineralized qz vein 1 m in width. Py, mg and specularite occurs as clots, masses and fracture fillings. Cp occurs as rare blebs that weather to malachite. Mineralization occupies approximately 5-7% of the qz vein. Exposure is strongly oxidized and contains 10-15 cm thick rock bridges at margins.	3.07	22.2	2080	2	43

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738187	composite	1.00 x 1.00	1x1 m composite chip from 1.5 m wide, weakly py mineralized qz vein. Py occurs as fine clots and rare fracture fillings. Qz vein is heavily li stained and contains rare sections that are completely altered to goethite with boxworks. Mineralization occupies approximately 2-3% of qz vein. The host rock on the NE side of it comprises 20 cm wide orange-grey fault gouge that appears to parallel the vein. Qz vein is heavily fractured and crumbly.	3.94	30.4	2070	9	48
Y738199	grab	N/A	Cp > py mineralized qz vein likely representing tail end extension of sample Y738198. Vein width and orientation unknown.	4.04	170.0	24200	163	291
Y738060	chip	0.10	~10 to 20 cm wide massive crystalline qz vein with semimassive cp (up to 40%). Vein trends ~285°, pinching and swelling over a 10 m strike length. Blowouts appear to exploit foliation of country rock (foliated mafic volcanic rocks).	2.00	42.9	15250	201	209

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738080	chip	0.35	Massive to brecciated two-phase qz vein. 1) massive phase consists of coarse milky white bull quartz, with rusty weathering and vuggy texture. 2) brecciated cubic gn on eastern margin of vein.	12.80	263.0	1975	140500	23
Y738081	chip	0.35	Brecciated phase (35 cm wide) consisting of clasts of pale, rusty purple to green metavolcanics? Anastomosing 5 mm wide qz veinlets cut brecciation. Disseminated py, cp (up to 2%), with malachite staining along contact with massive phase.	1.35	19.4	1105	4900	389
Y738083	chip	0.68	Brecciated phase is absent, west side of vein is densely mineralized with coarse gn and cp +/- py. East side of vein appears to be largely barren bull qz (represents approximately 40 cm of the vein).	5.53	99.0	8410	29700	1800
Y738084	chip	0.25	Bull qz vein pinches to 25cm. Similar to Y738083.	1.53	20.2	145	6690	175
Y738085	chip	0.45	Similar to Y738083, but with up to 30% gn disseminated throughout, and a massive, fine grained seam of gn, ~ 4 cm wide, running	1.04	110.0	454	95700	91

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
			through middle of the vein.					
Y738094	grab	0.15	~15 cm wide massive milky white qz vein trending 310° with seams of clotty py (up to 15%).	2.80	22.9	166	1995	15
Y738480	channel	0.60	Qz vein mineralized with gn, cp and py. Mineralization occupies ~15% of sample with gn and subordinate cp and py. Gn occurs as coarse masses and fracture filling bands. Cp is weathered to malachite at surface.	1.57	137.0	491	125500	1120
Y738481	channel	0.47	Qz vein mineralized with semi-massive to massive gn and minor cp and py.	5.55	531.0	239	>200000	590
Y738482	channel	0.44	Qz vein hosting semi- massive gn containing minor coarse cp and py. Collected as channel sample 1.70 m from Y738481.	7.75	286.0	289	>200000	1475
Y738483	channel	0.60	Qz vein hosting semi- massive gn and minor coarse cp and py.	4.86	88.8	4110	57600	150
Y738484	channel	0.57	Qz vein hosting 7% coarse gn, 3% cp and 2% py.	1.11	58.2	384	44600	95
Y738485	channel	0.40	Qz vein containing 1% gn as coarse grains along with trace cp and py.	6.67	46.4	317	2520	178

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738486	channel	0.37	Qz vein mineralized with gn, cp and py. Mineralization is restricted to the top 10 cm of vein (hanging wall) and occurs as fine to coarse grained, vein parallel fracture fillings.	1.48	62.4	1960	44800	586



Figure 28: Galena Ridge-BGS shear zone (approximately six metres wide)

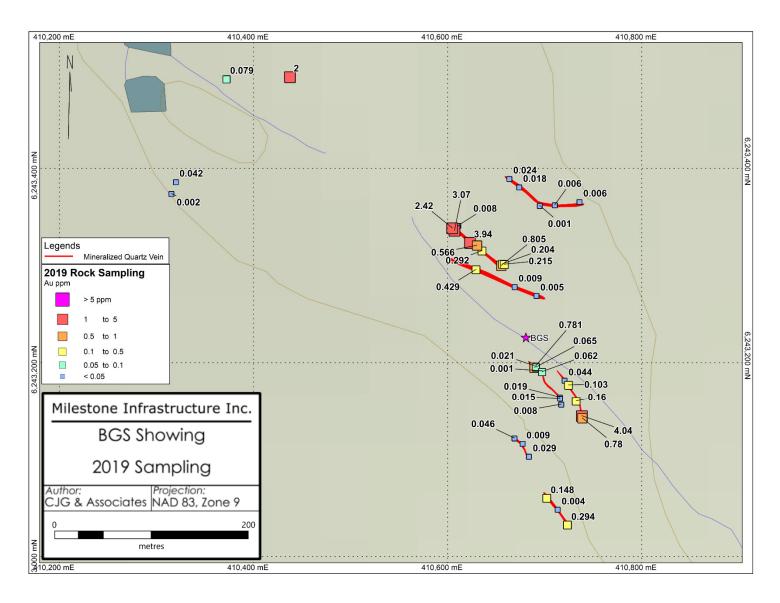


Figure 29: Results for gold, 2019 BGS Zone rock sampling

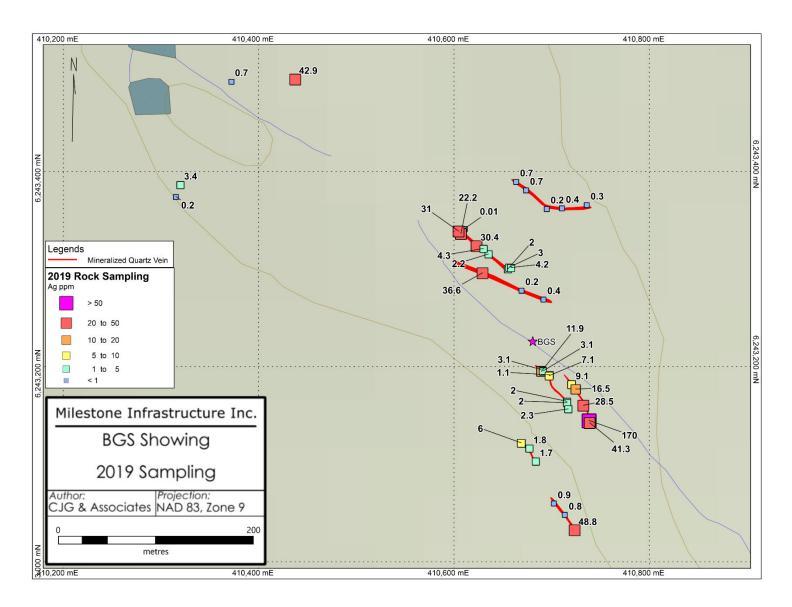


Figure 30: 2019 BGS Zone rock sampling - silver results

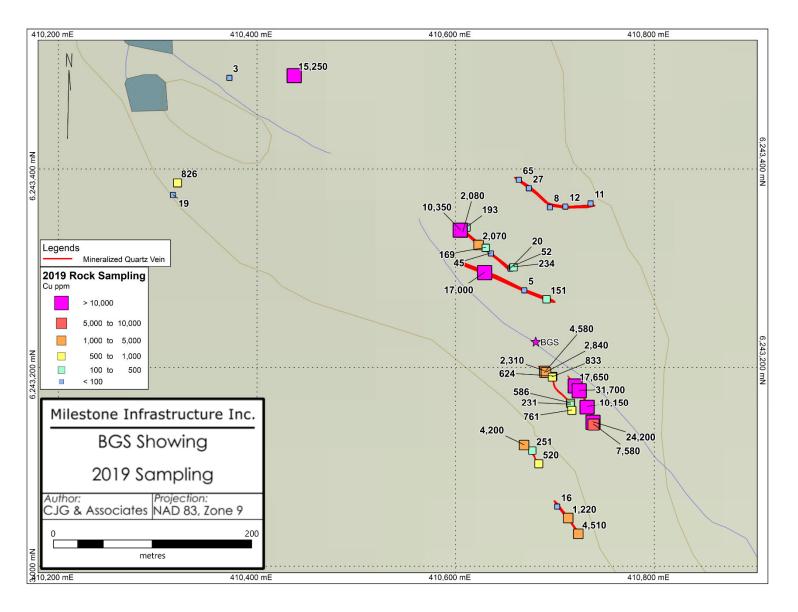


Figure 31: 2019 BGS Zone rock sampling - copper results

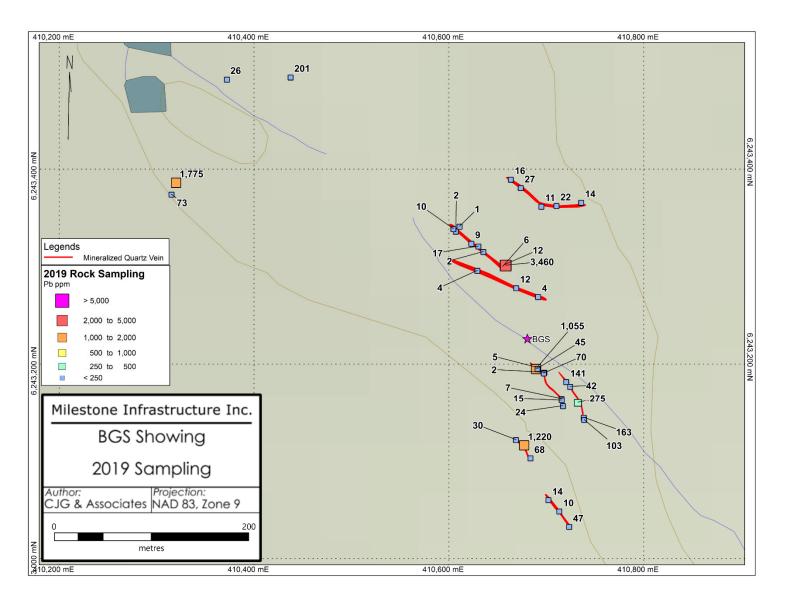


Figure 32: 2019 rock sampling results for lead, BGS Zone

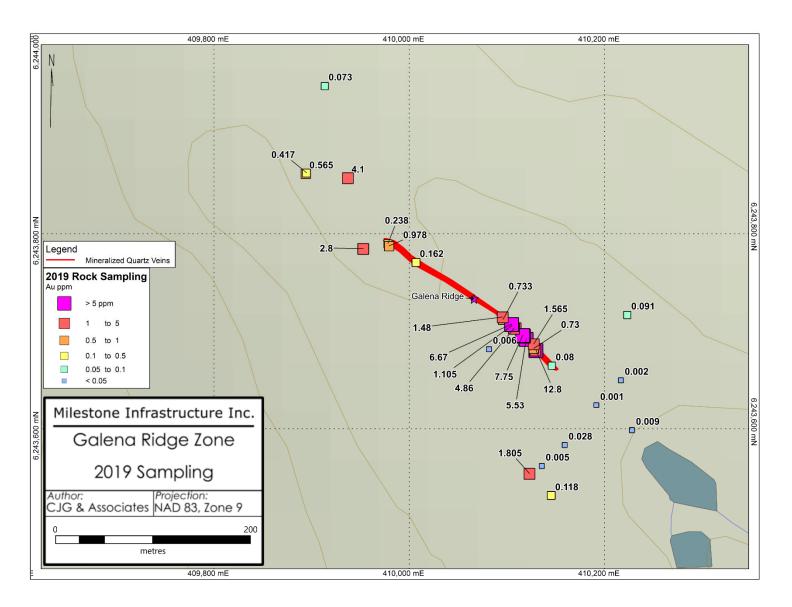


Figure 33: 2019 Galena Ridge Zone rock sampling - gold results

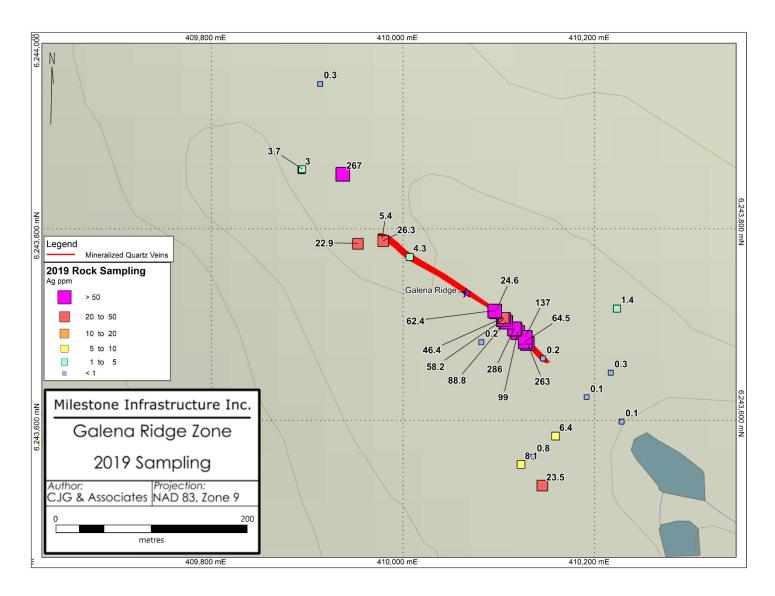


Figure 34: 2019 Galena Ridge Zone rock sampling - silver results

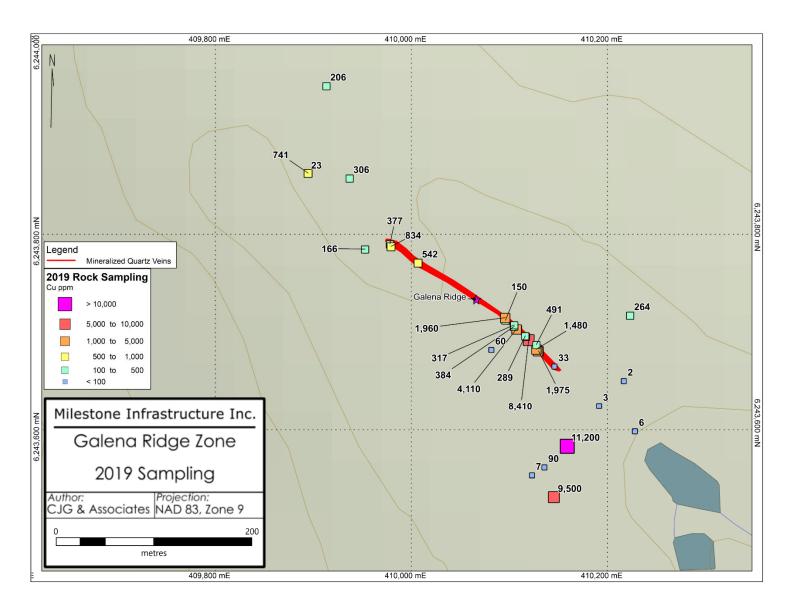


Figure 35: 2019 Galena Ridge Zone rock sampling - copper results

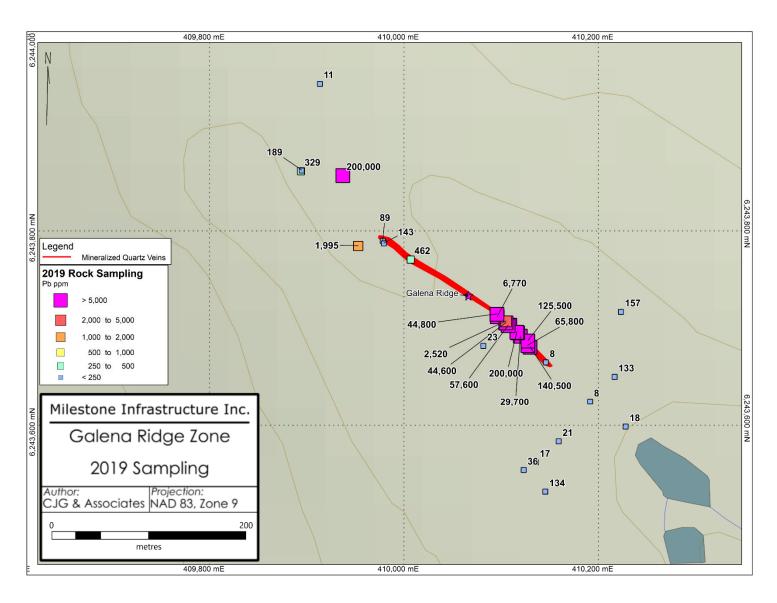


Figure 36: 2019 Galena Ridge Zone rock sampling - lead results

7.1.4 2019 Results from Q19 Zone

In 2019, a total of 3 rock and 5 channel samples were collected from the Q19 Zone. Three channel samples were taken over a 7.4 m long quartz vein exposure hosting up to 3% coarse grained pyrite and returned up to 13.15 g/t Au, 71.6 g/t Ag, 0.24% Cu and 812 ppm lead over 1.25 m. A 0.70 m long channel sample, taken across a subcropping quartz vein of unknown width or orientation, hosting semi-massive galena and pyrite (over 0.35 cm of the sample), yielded 71.1 g/t Au, 721.0 g/t Ag, 0.11% Cu and 12.7% Pb. A high-grade grab sample of quartz vein hosting massive galena > pyrite yielded 202 g/t Au, 1735 g/t Ag and 32.1% Pb. Select samples are provided in Table 7 and results for gold, silver, copper and lead are illustrated thematically on Figures 37 to 40, respectively.

Table 7: Assays for selected 2019 rock samples: Q19 Zone

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738468	grab	N/A	High-grade massive to semi-massive gn-py vein.	168.5	1480	440	>200000	6100
Y738469	float	N/A	High-grade qz vein hosting semi-massive coarse grained py.	17.90	172.0	1200	7940	20
Y738503	grab	N/A	High-grade grab of qz vein containing massive gn > py. Mineralization is coarse grained and occupies approximately 35 cm x 30 cm lens with unknown depth.	202	1735	546	321200	4420
Y738506	channel	1.25	Qz vein containing 3% coarse grained py sparsely distributed throughout vein.	13.15	71.6	2430	812	20
Y738507	channel	1.28	Qz vein containing 3% coarse grained py sparsely distributed throughout vein and one band of massive gn and py (up to 15 cm wide). Sulphide content is nearly 20% of sample. Qz vein thickness and	12.75	121.0	35	42700	33

Sample ID	Sample Type	Sample Width (m)	Description orientation unknown due to cover on top and bottom (only exposed in a small gulch).	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738508	channel	0.70	Qz vein of unknown width and orientation exposed in a small gulch containing semimassive gn and py over 0.35m of the sample.	71.10	721.0	1070	127000	109

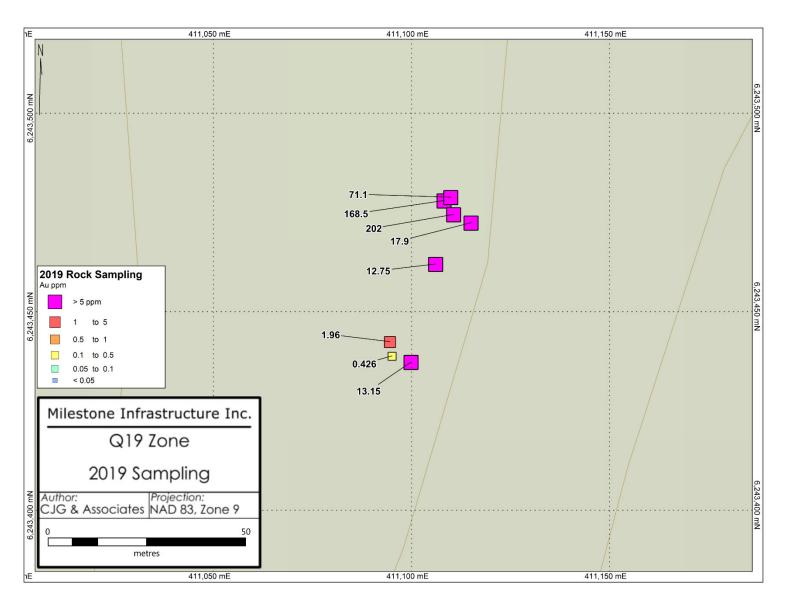


Figure 37: 2019 Q19 Zone rock sampling - gold results

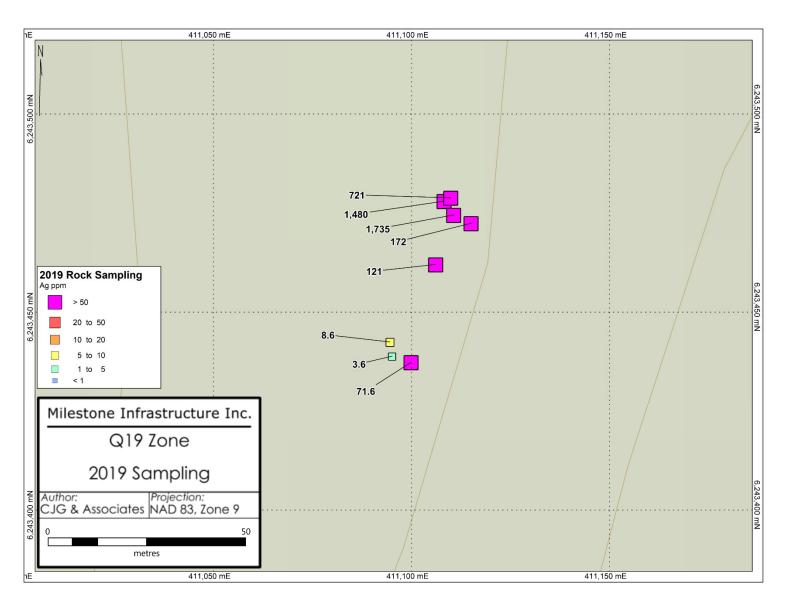


Figure 38: 2019 Q19 Zone rock sampling - silver results

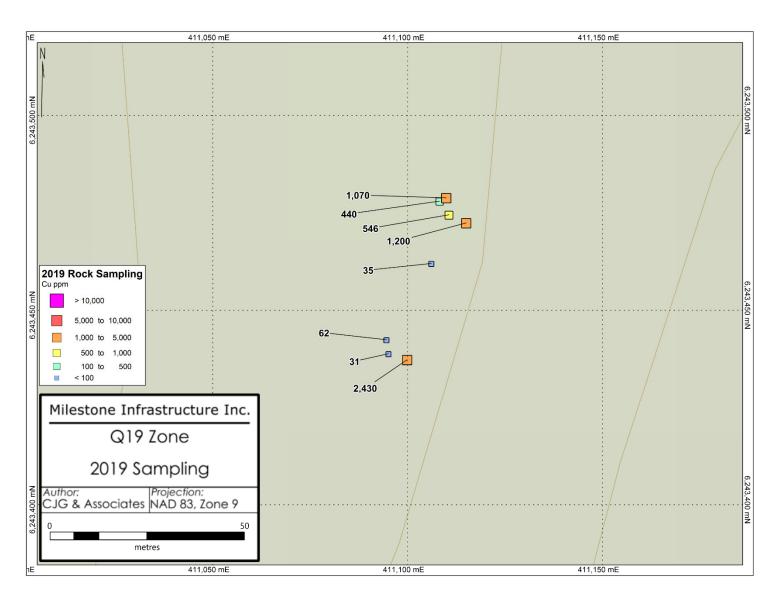


Figure 39: 2019 Q19 Zone rock sampling; results for copper

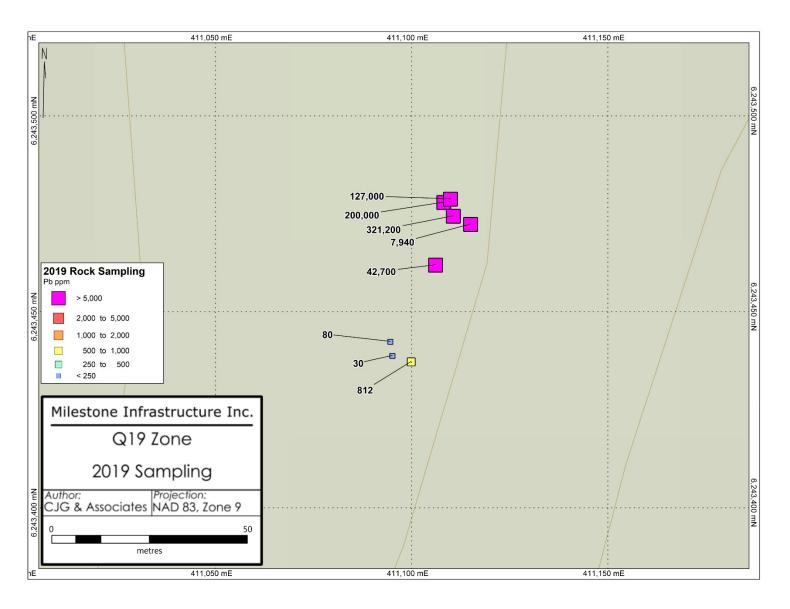


Figure 40: 2019 Q19 Zone rock sampling - lead results

7.1.5 2019 Results from Quinn Eskay Zone

In 2019, the Quinn Eskay mineral occurrence was re-located and traced over an 860 m strike length. The variably mineralized structure is covered by talus and scree periodically along strike, perhaps covering additional vein material. A total of 19 rock, 9 chip and 13 channel samples were taken intermittently along the mineralized structure. Mineralization is hosted within four veins trending west-northwest, dipping shallowly to moderately to the northeast and ranging from a few metres up to 45 metres in length. The veins appear to be either offset (10 to 15 m) by small scale northeast-southwest trending faults, or represent an en-echelon array of dilation zones (dilatant jog structures) along a regional-scale shear zone, or a combination of both. The veins are fairly discontinuous and appear to pinch and swell along strike.

For the most part, veins comprise milky white bull quartz with subordinate galena, pyrite, chalcopyrite and hematite. Quartz veins are up to 3.85 m wide and host discontinuous, poddy sulphides, which are found intermittently along strike. A 45 cm wide chip sample of rusty quartz vein hosting a 20 cm seam of semi-massive galena and chalcopyrite (5%) along its footwall margin yielded 15.35 g/t Au, 2790 g/t Ag, 2.00% Cu, >20% Pb and 0.74% Zn. A 1.23 m channel sample across a weakly mineralized quartz vein with a seam of semi-massive to massive galena with lesser pyrite and chalcopyrite assayed 4.54 g/t Au, 346.2 g/t Ag, 0.31% Cu and 5.87% Pb, including 6.31 g/t Au, 726.0 g/t Ag, 0.60% Cu and 13.95% Pb over 0.50 m. The 2019 results show a much higher gold and silver content than what historical work produced (up to 1.89 g/t Au and 647.4 g/t Ag). Highlights are tabulated in Table 8 and values for gold, silver, copper and lead are shown on Figures 41 to 44, respectively.

Table 8: Assays for selected 2019 rock samples: Quinn Eskay Zone

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738489	channel	0.50	Qz vein containing a 0.20 m wide rock bridge. Footwall of vein contains semi-massive to massive gn with minor py and cp.	6.31	726.0	5950	139500	929
Y738490	channel	0.73	Weakly py-hm mineralized qz vein – continuation of sample Y738489.	3.37	86.1	1115	3160	40
Y738491	channel	0.56	Qz vein containing multiple cm-scale rock bridges. Qz vein is mineralized with minor py and red hm.	1.87	152.0	229	1700	28

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738498	channel	2.74	Qz vein containing semi-massive gn and py on the footwall side (25 cm) comprising coarse grained fracture fillings.	1.36	258.0	38	54000	7
Y738203	chip	1.37	Qz vein containing trace py and gn.	4.56	676.0	6240	189000	1405
Y738202	chip	0.55	Qz vein containing multiple cm-scale rock bridges. Qz vein is mineralized with minor py and hm and contains light green sericite.	1.61	45.3	1270	6910	68
Y738263	chip	0.20	sample collected from a 0.20m wide qz vein containing trace py.	0.45	161.0	380	48000	8
Y738268	chip	0.45	Qz vein containing minor py. Sample was collected parallel to vein orientation.	15.35	2790	19950	>200000	7440
Y738502	grab	N/A	High-grade sample from 0.73 m wide qz vein containing py and gn stringers (up to 5% total sulphide content).	6.86	233.0	48900	804	203
Y738266	grab	N/A	High-grade grab from a 2.74 m wide qz vein. Sample contains mostly barren white qz with minor py and gn.	3.37	185.0	148	3400	32
Y738262	chip	0.24	Qz vein containing ga and minor py and hm along with secondary light green sericite.	0.94	283.0	522	123500	5
Y738221	chip	0.20	Qz vein containing ga and trace fine to medium grained py.	0.79	393.0	145	>200000	5
Y738276	chip	0.50	sample collected across a 0.50 m wide qz vein containing trace py.	0.61	237.0	2390	23800	409

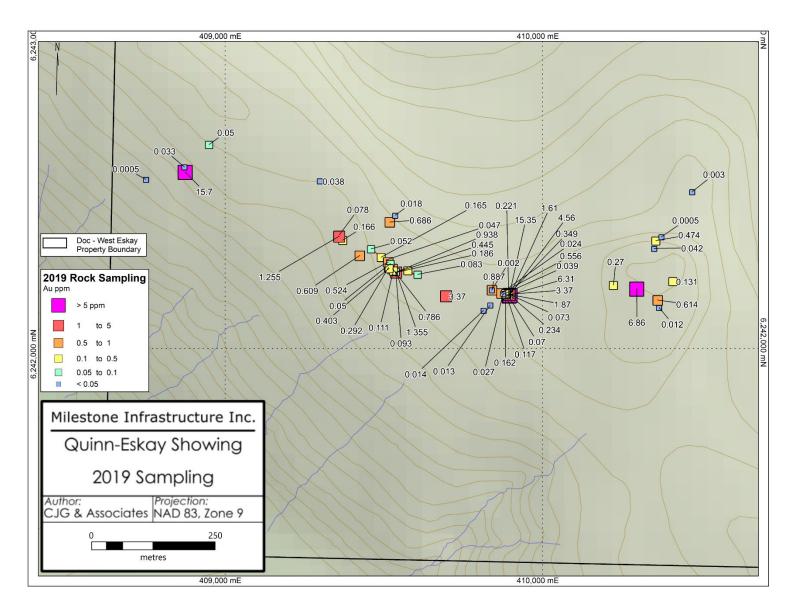


Figure 41: 2019 Quinn Eskay Zone rock sampling - gold results

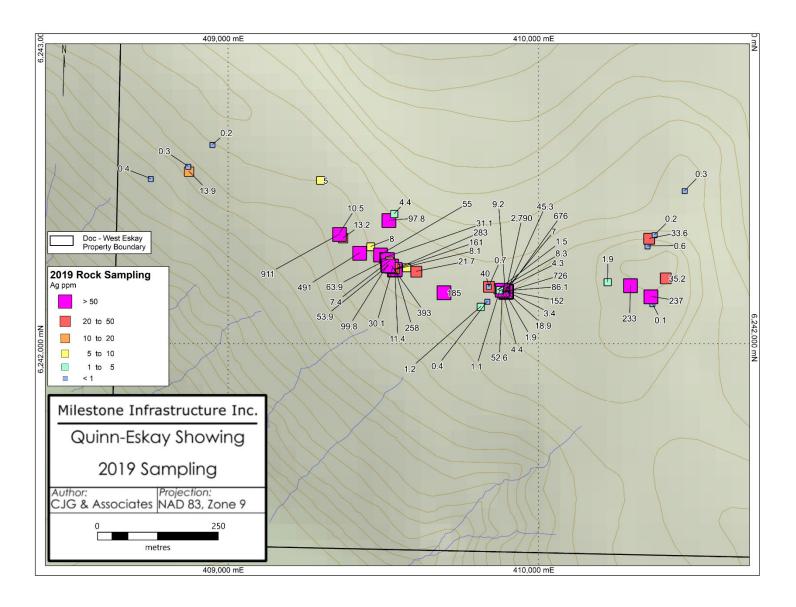


Figure 42: 2019 Quinn Eskay Zone rock sampling - silver results

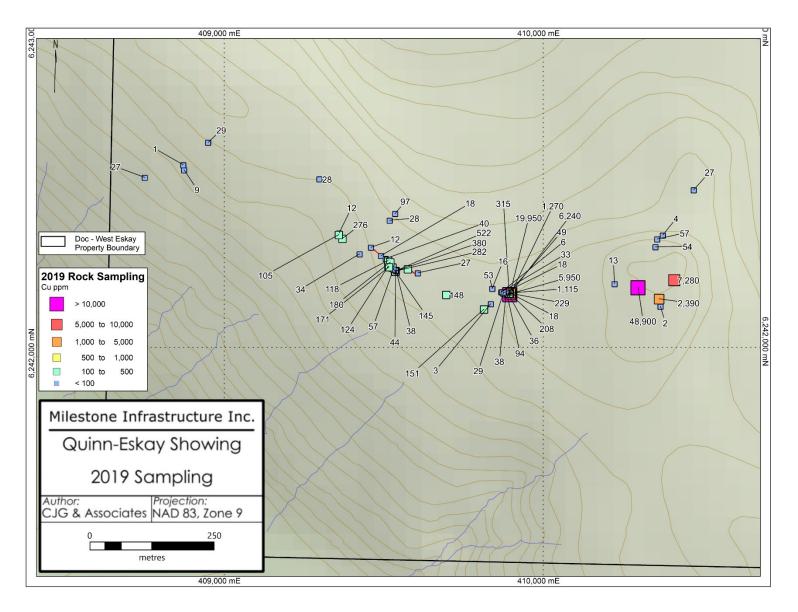


Figure 43: 2019 Quinn Eskay Zone rock sampling - copper results

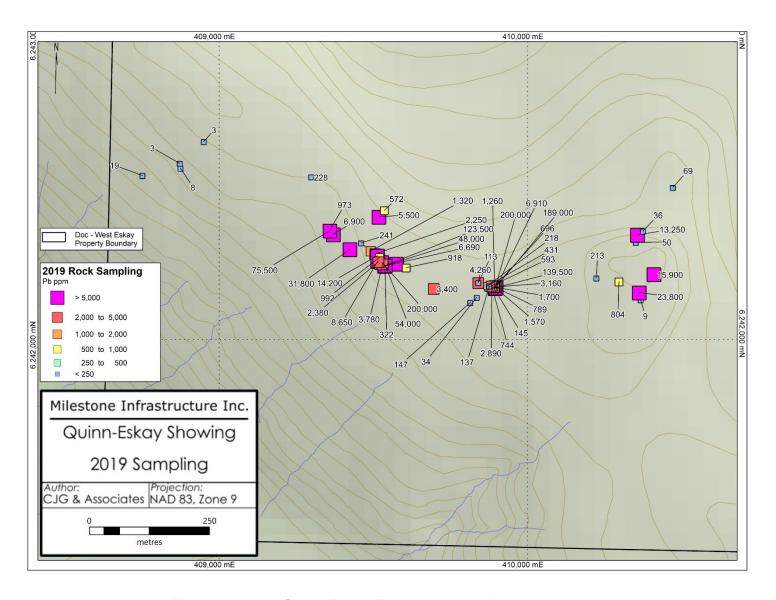


Figure 44: 2019 Quinn Eskay Zone rock sampling - lead results

7.1.6 2019 Results from Glacier Zone

In 2019, the Glacier Zone was revisited and sampled. It was noted that the showing is likely part of the Galena Ridge and BGS shear zone, which would extend for over 2 kilometres in length. The vein is exposed on a northwest facing cliff face, where a 50 cm wide chip sample was collected across it. The quartz vein hosts fracture filling and clotty pyrite with lesser chalcopyrite, and disseminated fine grained galena, and graded 4.86 g/t Au, 95.5 g/t Ag, 0.45% Cu and 0.19% Pb. A sample of mineralized float (50 x 50 cm) consisting of fracture filling and clotty pyrite, with subordinate galena taken from the toe of the glacier (boulder in float), about 400 m to the northwest of the exposed vein, returned 2.39 g/t Au, 320.0 g/t Ag and 8.85% Pb. Select results are provided in Table 9, while results for gold, silver, copper and lead are provided on Figures 45 to 48, respectively.

Table 9: Assays for selected 2019 rock samples: Glacier Zone

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Y738256	chip	0.5	Py-cp-gn mineralized qz vein. Cp and py comprise clots and fracture fillings with lesser fine grained gn throughout. Mineralization occupies 5-7% of qz vein.	4.86	95.5	4510	1860	91
Y738257	grab	N/A	Strongly malachite stained 3-5 cm qz vein hosting cp and py. High-grade grab sample.	4.41	63.4	10650	46	45
Y738200	grab (boulder)	N/A	Rusty py-gn-grey sulphide (sulphosalts?) mineralized qz vein boulder (rounded) at the toe of the glacier. Py occurs as masses, fracture fillings and fine grained clots. Gn and grey sulphide are intimately associated with py	2.39	320.0	173	88500	28

Sample ID	Sample Type	Sample Width (m)	Description	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
			masses. Mineralization occupies 20-25% of qz vein. Boulder is approximately 0.5 x 0.5 m.					
Y738253	composite chip	0.5 x 0.5	Cp-gn mineralized qz vein. Gn and cp are intimately associated, filling fractures in qz and occupying ~6-8% of qz vein (0.65 m in width).	1.73	91.3	6620	4100	783

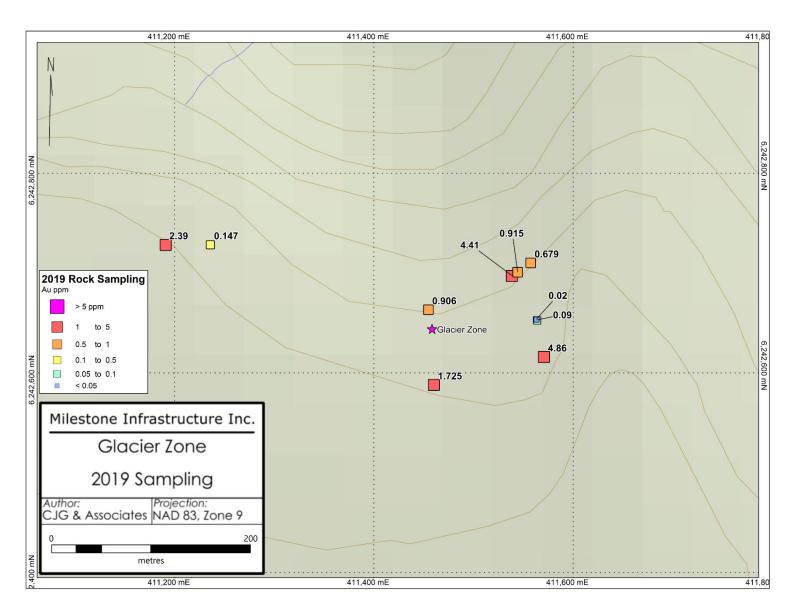


Figure 45: 2019 Glacier Zone rock sampling - gold results

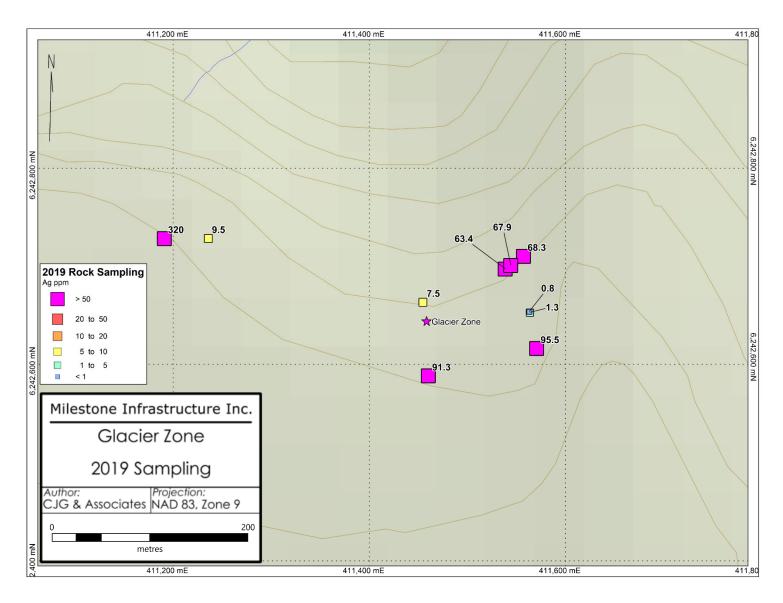


Figure 46: 2019 Glacier Zone rock sampling silver results

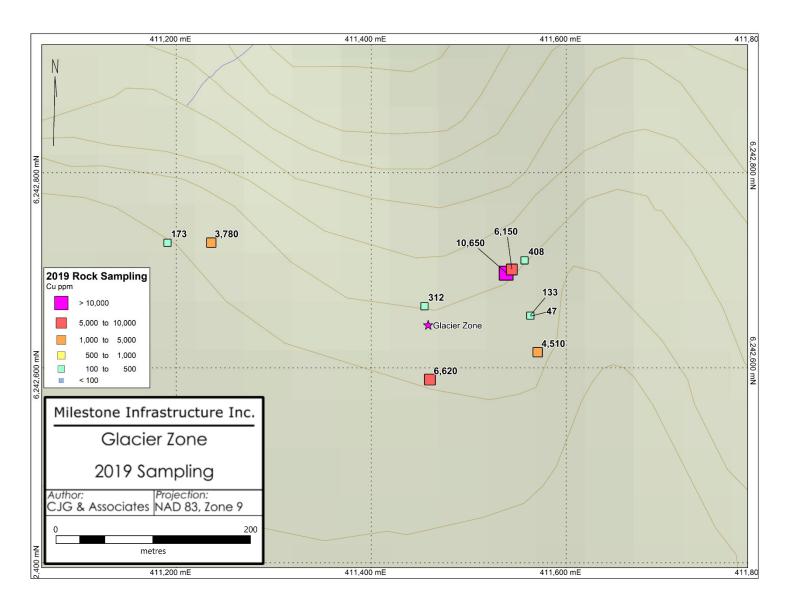


Figure 47: 2019 Glacier Zone rock sampling - copper results

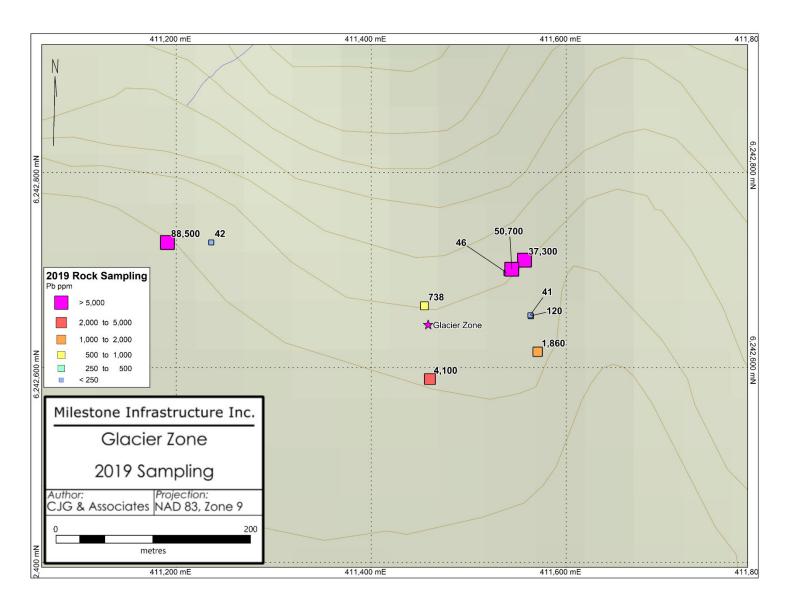


Figure 48: 2019 Glacier Zone rock sampling - lead results

7.2 2019 Soil Sampling

On September 8th, 2019, a field crew collected 55 soil samples from a grid laid out over western part of the Quinn Eskay Area, along strike from exposed mineralized quartz veins. Soil samples were collected at 50 m intervals along seven lines spaced 100 m apart.

Soil samples were collected at a depth of 10-25 cm using an augur or GeoTul. Approximately 500 grams of B-horizon material was collected at each site. Each sample station was marked with the sample identification on orange flagging and UTM coordinates were recorded by a Garmin GPS handheld device. The soil sample material was placed into pre-labelled Kraft paper bags, which were then allowed to dry over a seven-day period. Once dry, the samples were then packed into plastic poly-bags that were then packed into larger, more durable rice bags prior to shipment to ALS Global Laboratories preparation lab in Terrace, B.C.

Samples were dried at less than 60 degrees Celsius and then weighed and sieved to -180 micron (80 mesh). The samples were then packaged and sent to ALS Global Laboratories in North Vancouver B.C. for analysis. Thirty grams of the fine material was then analyzed for gold using fire assay, followed by inductively coupled plasma-atomic emission spectroscopy analysis (AU-ICP21) and for 35 elements using an aqua regia digestion and mass spectrometry analysis (ME-ICP41). Certificates of Analysis are provided in Appendix D and sample identifications and UTM coordinates are tabulated in Appendix C.

Soil Sample locations are plotted on figure 49, with thematic maps for gold, silver, copper, and lead presented on figures 50 - 53.

Results were muted for all elements of interest. Given the exceptionally high values for gold, lead, and silver at surface from the near-by Quinn Eskay veins to the east, it could be interpreted that either these veins do not continue to the west, or are present, but consist of un-mineralized bull quartz. Alternatively, because the width of these veins are narrow \sim (1-3 m), and the soil development in the area is poor and likely derived from directly underlying bedrock, the spacing of the soil grid may be too wide to detect these structures. It is recommended that infill lines at 25 m spacing be conducted to better delineate any continuation of the Quinn Eskay veins.

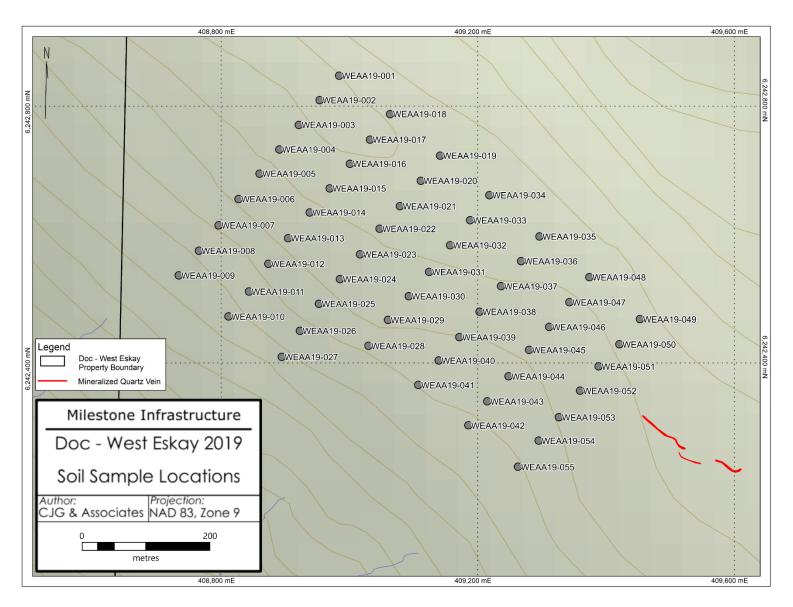


Figure 49: 2019 Soil Sample locations

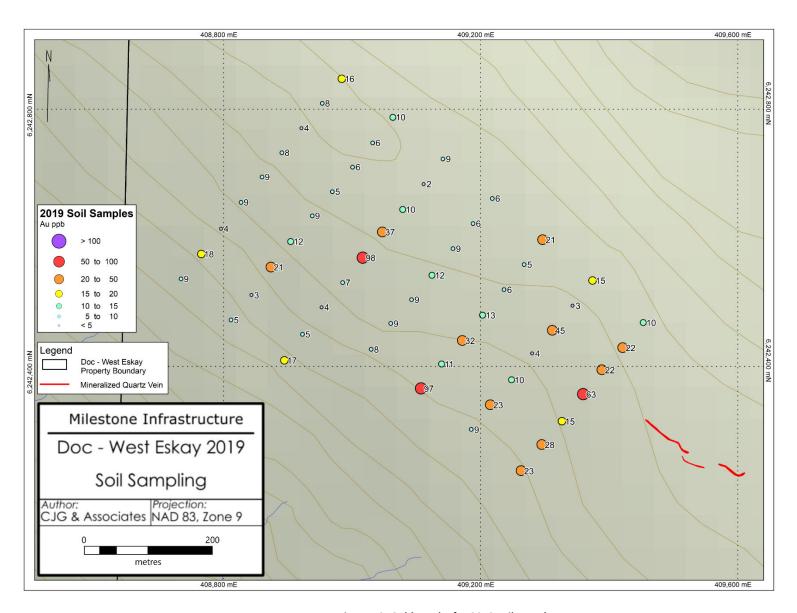


Figure 50: Gold results for 2019 soil samples

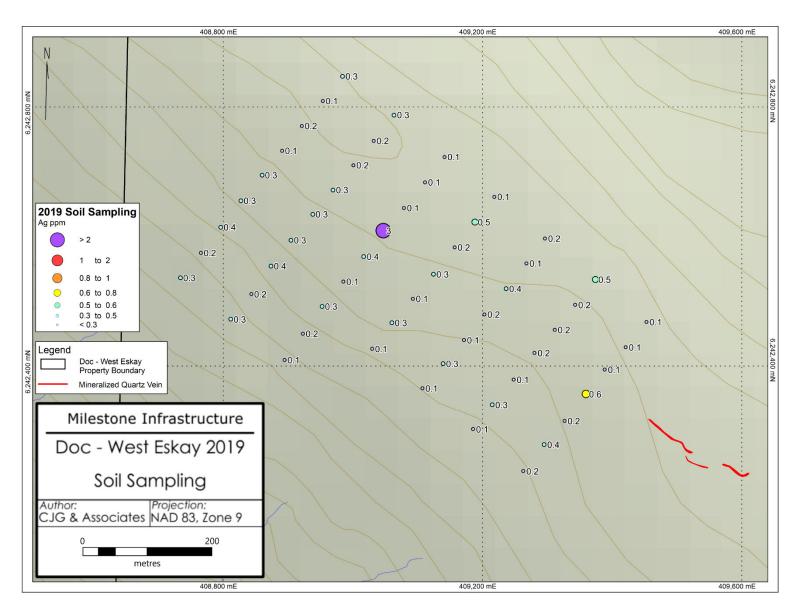


Figure 51: Silver results for 2019 soil samples

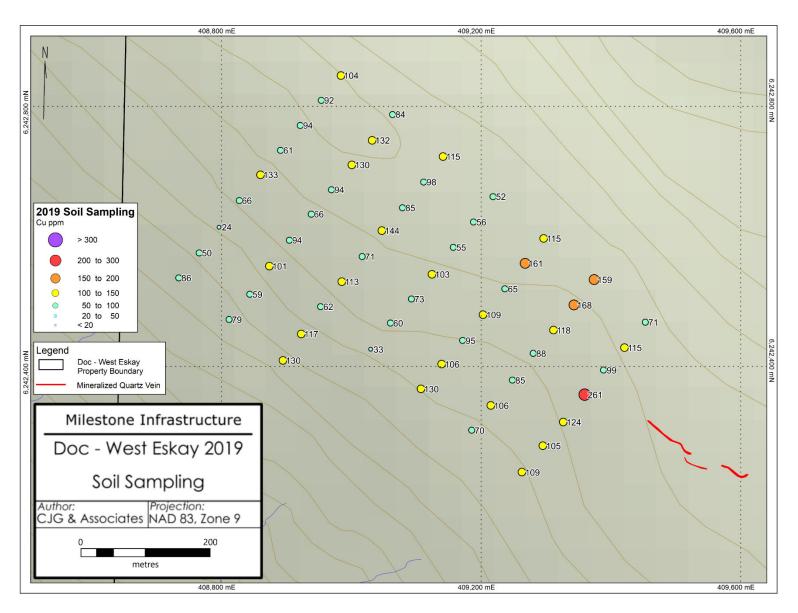


Figure 52: Copper results for 2019 soil samples

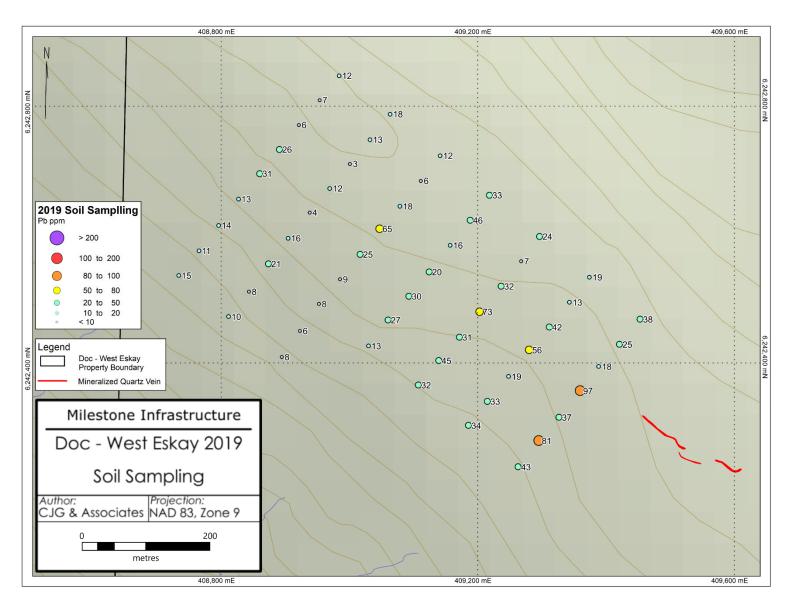


Figure 53: Lead results for 2019 soil samples

7.3 2019 Ground-Based Magnetometer Survey

From August 2 to August 5, 2019, SJ Geophysics Ltd. undertook a 24.1 line-km ground-based magnetic survey over two survey grids at the Doc, BGS and Galena Ridge zones (Figure 54). Both grids each consisted of 16 survey lines, with a line spacing of 100 m, and a line azimuth of 45 degrees. The lines were approximately 750 m in length, with a few lines shorter due to terrain obstructions.

On August 6, 2019, SJ completed a ground-based magnetic survey over the Quinn Eskay Zone totalling 4.6 line-km comprising 13 lines, with a line spacing of 100 m, and a line azimuth of 45 degrees (Figure 55). Lines ranged from around 80 to 750 m. Logistics reports for these surveys are provided in Appendix E

The results from the magnetic survey over the Doc, BGS and Galena Ridge zones show a dominant north-northwest and northwest magnetic fabric. The dominant fabric is cross-cut by a number of west-northwest trending structures (Figure 9.26). The north-northwest fabric generally agrees with mapped geological units on the Property, while the northwest magnetic signature overlaps with a mapped large-scale shear zone at Galena Ridge and BGS zones.

A nearly 3 kilometre long regional-scale magnetic low begins near the BGS Zone and trends north-northwest through the Doc Zone, extending towards the northwestern Property boundary, and may correspond to either a property-scale geological contact or large-scale fault. Near the Doc Zone, a number of subtle west-northwesterly trending magnetic lows cut across the magnetic highs bordering the regional magnetic low. These discreet west-northwesterly trending magnetic lows may represent the known mineralized shear zones hosting mineralization.

A nearly 1.5 kilometre long magnetic low begins at the northwest end of the Galena Ridge Zone, and trends southeast, along the mapped shear zone associated with the Galena Ridge and BGS zones. It appears to continue towards the Glacier and Florence zones; however, the survey ends 150 m southeast of the last exposed vein at the BGS Showing. The large-scale structure is subparallel to the South Unuk River fault, and may represent a secondary structure off of it.

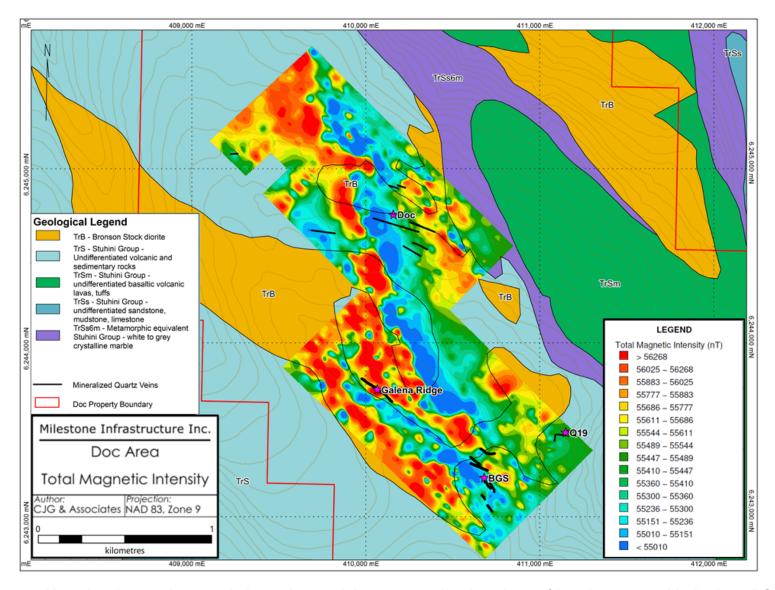


Figure 54: Map showing total magnetic intensity overlain on generalized geology of Doc Property, with the Doc, BGS and Galena Ridge showings noted

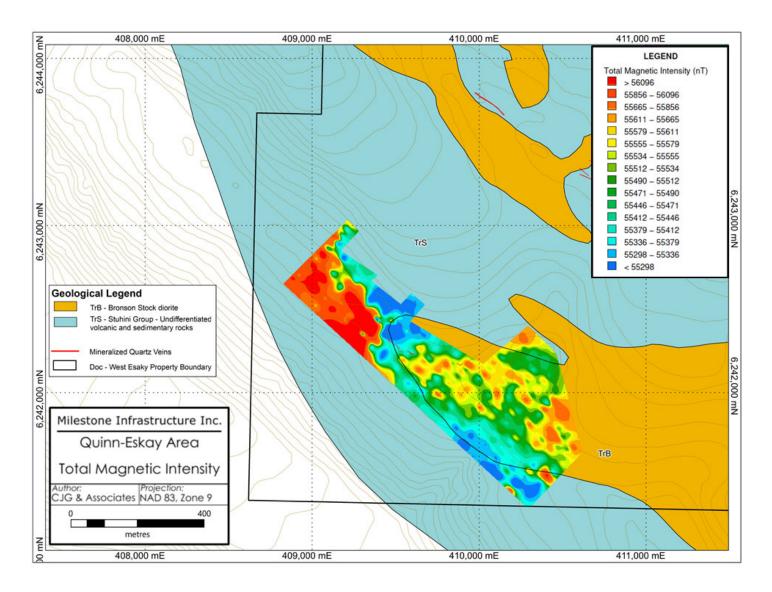


Figure 55: Map showing total magnetic intensity overlain on generalized geology, in the Quinn Eskay Showing area

At the Quinn Eskay Zone, a dominant northwest trending fabric covers the survey area (Figure 55). The overall magnetic signature is relatively low compared to Doc, BGS and Galena Ridge area. A 1200 by 400 m magnetic high outlined by the survey, is occupied by several circular and linear magnetic lows.

The relative magnetic high is underlain by Bronson Stock diorite, and the magnetic low to the southwest, overlies Stuhini Group undifferentiated volcanic and sedimentary rocks. The circular magnetic lows within the magnetic high may encompass pockets of alteration associated with veining, while the linear features may represent mineralized structures along strike of the exposed veins on surface. In the eastern part of the survey area, a 350 by 150 m ellipsoidal magnetic low, mapped metadiorite and meta-volcanic rocks, encompasses a 300 by 50 m gossan, which hosts several mineralized quartz veins.

8.0 Interpretations and Recommendations

8.1 Interpretations

The Doc – West Eskay Property has been shown to host numerous high-grade gold veins and to have the potential to host replacement style skarn and volcanogenic-massive sulphide mineralization. The high-grade gold veins are characterized by a common style, comprising a central vein of bull quartz with disseminated pyrite and chalcopyrite. The veins have been subsequently sheared, and are commonly flanked by coarse to fine grained galena carrying high-grade gold values. Areas of known quartz veining with associated galena should be the primary focus of exploration on the Doc Property. The locations of the main target areas are provided on Figure 56.

- **Doc**, which includes historical drilling (6595.77 m) and underground development (639.5 m) which led to a non-compliant resource calculation of 100,851 tons grading 0.258 oz/ton Au at a cut-off of 0.1 oz/ton for the Q17 and Q22 veins.
- **BGS and Galena Ridge**, located south of the Doc Showing comprises auriferous-quartz veins exposed intermittently along a 1.2 km shear zone. Veins in the northwest part of the structure are generally more lead-rich and copper poor (Galena Ridge), while veins to the southeast are more copper-rich and lead poor.
- Q19, located 1500 m southeast of the Doc and 450 m northeast of the BGS zones, host a quartz vein exposed over a 25 m long strike length with shear margins containing massive galena and high-grade gold values.
- Quinn Eskay lies approximately 2.5 km southwest of the Doc Showing and hosts four gold-silver rich veins occurring periodically over an 860 m strike length. Veins range from a few to 45 metres in length and are relatively more silver-rich compared to the rest of the mineralized showings on the Property.

- Glacier Zone, situated 2.5 km southeast of the Doc Showing and about 900 m southeast of the BGS Zone, appears to be part of the main shear zone hosting mineralization at the BGS and Galena Ridge trend. Gold-rich veins from this area contain galena, chalcopyrite and pyrite mineralization.
- **Florence Zone**, located about 3.5 km southeast of the Doc Zone, reportedly hosts a wide gold-rich quartz vein containing pyrite, chalcopyrite and galena. In 2019, limited prospecting in this area could not confirm this.

Interpretation of ground-based magnetic surveys carried out by Milestone in 2019 suggests that gold-bearing mineralized structures on the property are associated with linear north-northwest trending regional-scale and more subtle west-northwest trending magnetic lows, as well as with circular magnetic lows, which may represent pockets of alteration associated with veining.

Doc Zone

Mineralization at the Q17 and Q22 was noted to be similar to most of the veins in this area, and comprises a central bull quartz vein hosting pyrite, galena with minor chalcopyrite and sphalerite stringers, usually bounded on both sides by brecciated vein material hosting galena, pyrite and chalcopyrite, and sheared ankeritic and sericitic wall rock. The best gold and silver grades are reported in massive to semi-massive sulphides along the sheared, brecciated footwall and hanging wall margins of the veins (Freeze et al. 1989).

Freeze et al. (1989) also noted that the veins have undergone multiple phases of movement, via brittle fracturing of the central bull quartz vein and emplacement of sulphides, followed by rebrecciation and shearing of the veins. The sense of displacement of the shear zone indicates reverse movement (north-side up) with a component of right-lateral movement. The preferred model involves initial development of en echelon tension fissures, with subsequent progressive shearing.

3D modeling by Milestone of historical drill results and underground workings demonstrates that the west-northwest end of the Q17 vein may be offset by a fault, confirmed by holes 88-2, 88-13 and 86-8, all of which intersected fault zones prior to cutting mineralized quartz veins. The west-northwestern-most hole (88-3) did not encounter significantly mineralized vein material or a shear zone, suggesting potential for the Q17 vein to be offset along a northeast-southwest trending fault. Alternatively, with known kinematics of the mineralized zone (reverse movement of northern block with right-lateral movement), hole 83-3 may not have been drilled deep enough to encounter mineralization if the vein is plunging to the west-northwest. The model clearly shows the spatial distribution of mineralization at the Q17 and Q22 veins, and the relative location of the underground workings. It should be noted however, that historical collar locations were difficult to accurately digitize, and elevation values given from the historical collar surveys differ significantly (up to 25 m) from the currently available digital elevation model. Figures 57 to 59 illustrate different views of the current 3D drill and underground workings model.

Geological interpretations could also be assisted by obtaining Pb-Pb age dates from Au-rich veins to apply age constraints to mineral emplacement, which in turn could help define the overall style of mineralization within a broader regional context, where much of the age controls are known.

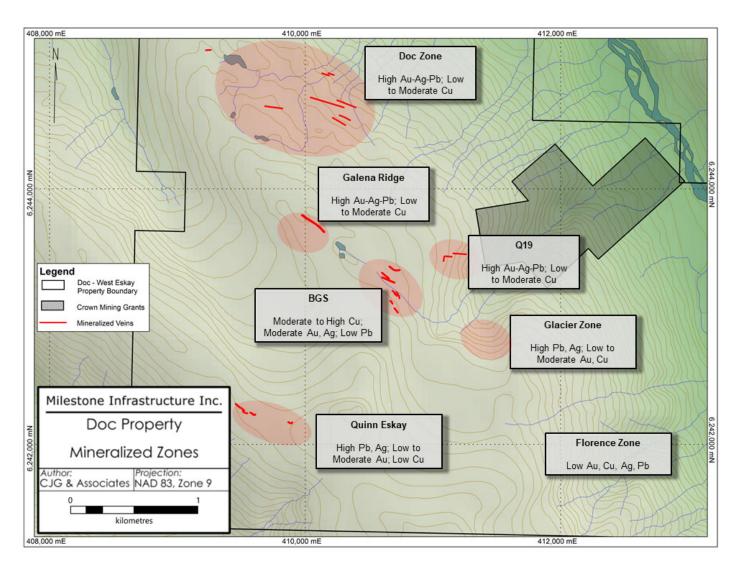


Figure 56: Location of priority Target Areas

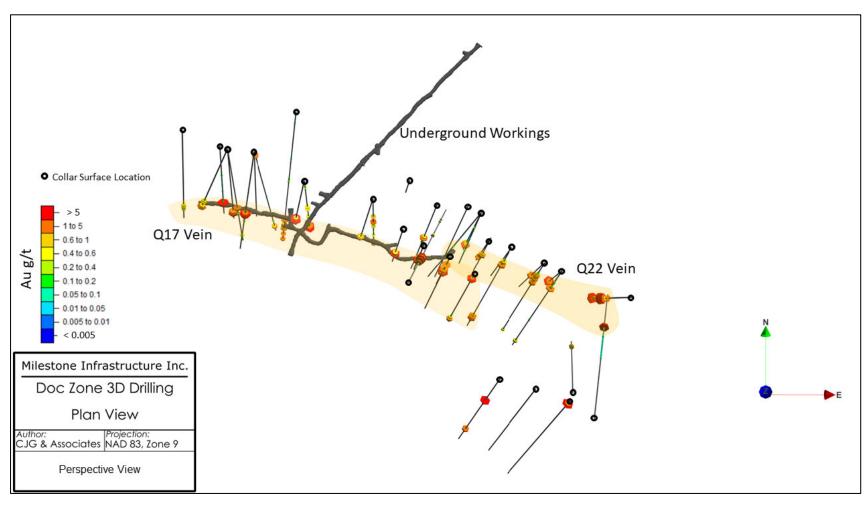


Figure 57: 3D planview of 1986-88 surface drilling

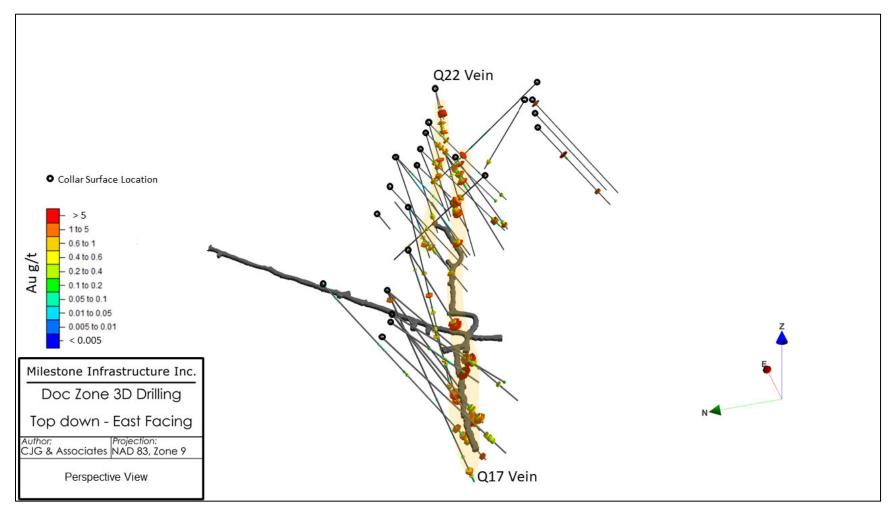


Figure 58: 3D top-down view of 1986-1988 surface drilling, facing east

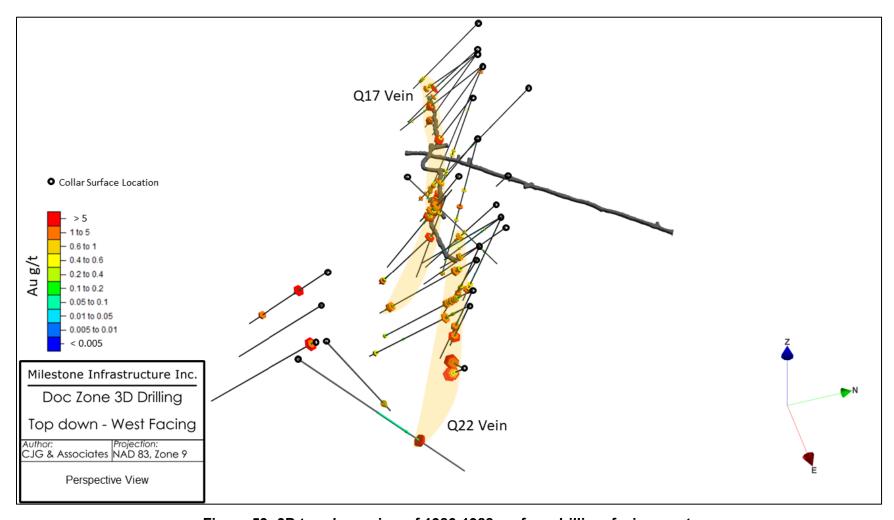


Figure 59: 3D top-down view of 1986-1988 surface drilling, facing west

BGS and Galena Ridge Zones

The BGS and Galena Ridge zones occur over a 1.2 km long, northwest trending shear zone with associated gold-bearing quartz veins found intermittently along the structure. The northwestern part of the trend hosts the Galena Ridge Zone, which encompasses quartz veins and associated galena stringers and brecciated margins. In the southwest, veins are predominantly bull quartz, hosting clotty pyrite and chalcopyrite. This zone is of high priority for immediate exploration, due to its large extent, and easily accessible location. This trend differs in orientation (sub-parallel to the South Unuk River fault) from the more east-west trending Doc Zone veins, and may represent a different phase of shearing, and(or) style of mineral emplacement.

Q19 Zone

Mineralization and gold grades at the Q19 Zone are similar to the Q17 and Q22 veins, and also shares the same trend (110° and dipping north). While this area is limited in its surface exposure, there is a high likelihood that mineralized veins at the Q19 Zone pinch and swell with a similar style observed at the Q17 and Q22 veins. Structural analysis of kinematic indicators from the exposed Q17 and Q22 veins in underground workings could lead to a more robust exploration model for expanding the known mineralization at the Q19 Zone.

Quinn Eskay Zone

The Quinn Eskay Zone hosts well exposed galena-bearing quartz veins up to 2.5 m in width, with a relatively high silver to gold ratio compared to other mineralized quartz veins on the Property. The highest Au values (15.35 g/t) were obtained from a poorly exposed brecciated vein margin containing semi-massive galena. The quartz vein pinches and swells over an approximately 4 m strike length, and could not be traced over a significant distance, partially due to cover to the east. Soil sampling and additional detailed prospecting over this area should be done on a lower priority basis.

Glacier Zone

In 2019, the Glacier Zone was re-visited for the first time since 1987, and it was interpreted from field observations that it may be part of the same mineralized trend hosting the Galena Ridge and BGS zones. Additionally, a large boulder of quartz vein material hosting galena was found at the outlet of a glacial stream, approximately 400 m northwest of the Glacier Zone, and over time, as the glacier recedes, new vein exposures may be uncovered.

8.2 Recommendations

The author believes that the Doc – West Eskay Property has considerable merit, offers strong discovery potential in the target areas, and that further work, including detailed mapping (surface and underground), geochemical and geophysical surveys and diamond drilling are justified. The following are general property-scale and target specific recommendations for exploration. They are accompanied by and refer to the figures which follow (Figures 60-62).

Not Target Specific:

- Detailed airborne magnetic survey: An airborne magnetic survey should be completed over the entire Doc Property to provide a magnetic framework that will aid in delineation of host lithologic units during geologic mapping and to help identify key geological structures, particularly those which may host or offset high-grade gold veins.
- Induced Polarization (IP) geophysical survey: A program of ground-based IP is recommended as a targeting tool for the Doc, BGS, Galena Ridge, Q19 and Quinn Eskay zones (Figure 18.1). Lines should initially be spaced at 200 metres, with in-fill lines to spacings as close as 50 metres over areas showing strong chargeability and low to high resistivity responses (these responses might be expected given the known physical properties of the gold-bearing veins on the Property; one thought is that an elevated chargeability response associated with elevated resistivity may reflect a zone of sulphide mineralization associated with a silicified stockwork zone, heretofore unrecognized on the property but possibly occurring at depth and in areas of overburden cover).
- LiDAR survey: A drone, or fixed-wing supported, high resolution LiDAR survey over the Doc, BGS, Galena Ridge and Q19 zones could add significant value to exploration and development efforts on the Property. A centimetre-scale digital elevation model will be of enormous benefit to precisely target infill and expansion drill holes, as well as to assist in geological and structural mapping efforts, by allowing geologists to accurately see the surface expression of bedding, faults, and shear zones.
- Geochemical sampling: Soil grids should be established over the Doc, BGS, Galena Ridge, Quinn Eskay, Q19, Glacier and Florence trends. Soil lines, spaced 200 m apart should also be done downhill, across the known trends of veins, along the entire northeast-facing slope in the northeastern half of the Property.
- Diamond drilling: Approximately 20 drill holes should be completed at the Doc, Galena Ridge and Q19 zones (Figures 60 61).

Doc Zone:

- Locations of historical workings (drill collars, trenches etc.) should be determined using a differential GPS unit.
- An airborne LiDAR survey should be considered over the area to produce a centimetrescale digital elevation model used for drill hole planning and targeting, as well as for identifying topographic features such as linear depressions or highs, which may represent mineralized structures in heavily treed and poorly exposed areas.
- Detailed surface and underground mapping should be done to help identify structural controls and high-grade ore-shoot geometry within the mineralizing system.
- A closely spaced soil grid (100 line spacings at 50 m sample intervals) should cover the entire Doc area.

- A broadly spaced IP survey should be completed and followed up with tighter lines in areas of strong chargeability and low resistivity to help delineate the anomalies.
- Diamond drilling (5 to 8 holes) should test high-grade ore-shoots identified by the geological model, as well as twinning specific historical holes in areas of both low recoveries and suspected high-grade gold mineralization. Holes should also target the southeastern extent of the Q22 vein and below hole 88-3 (west-northwest end of the Q17 vein), which may not have been adequately tested due to the plunge of the structure, and may remain open (Figure 60). IP targets should also be tested.

BGS, Galena Ridge and Q19 Zones:

- Detailed geological mapping, focusing on structural controls of gold-bearing quartz veins within and along the shear zone. Mapping should be done at Q19 to identify proposed drill holes along the mineralized veins.
- Tightly spaced soil grid (50 m intervals along lines spaced 100 m apart) should cover the mineralized trend.
- Broadly spaced IP lines should be conducted over the entire BGS-Galena Ridge and Q19 trends. If favourable results are identified, tighter lines should be established to delineate the prospective anomalies.
- Drilling should be done at the Galena Ridge (6 holes) and Q19 (6 holes) zones to test the veins for "blow outs" at depth that may host high-grade gold mineralization over mineable widths. If any other targets are identified by geochemical and geophysical surveys, they should be tested by drilling as well (Figures 61, 62).

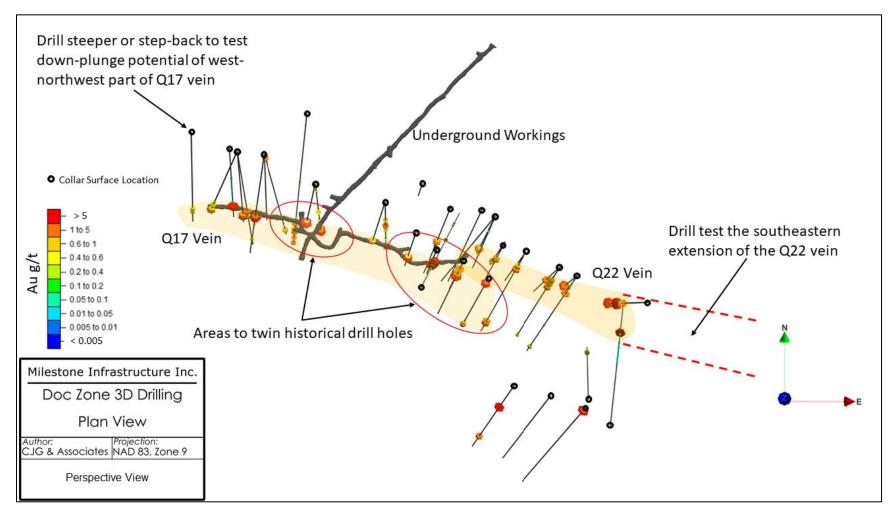


Figure 60: Proposed drill locations at the Q17 and Q 22 veins

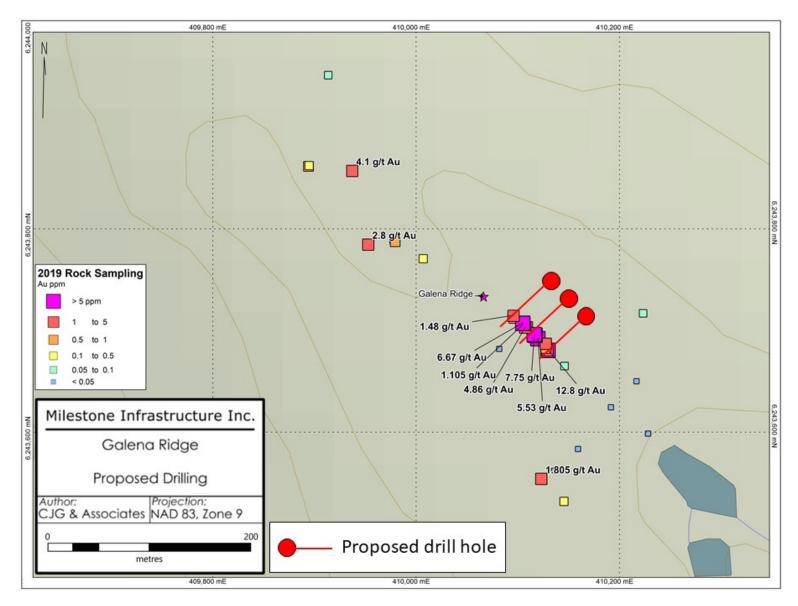


Figure 61: Proposed drill holes at the Galena Ridge Zone

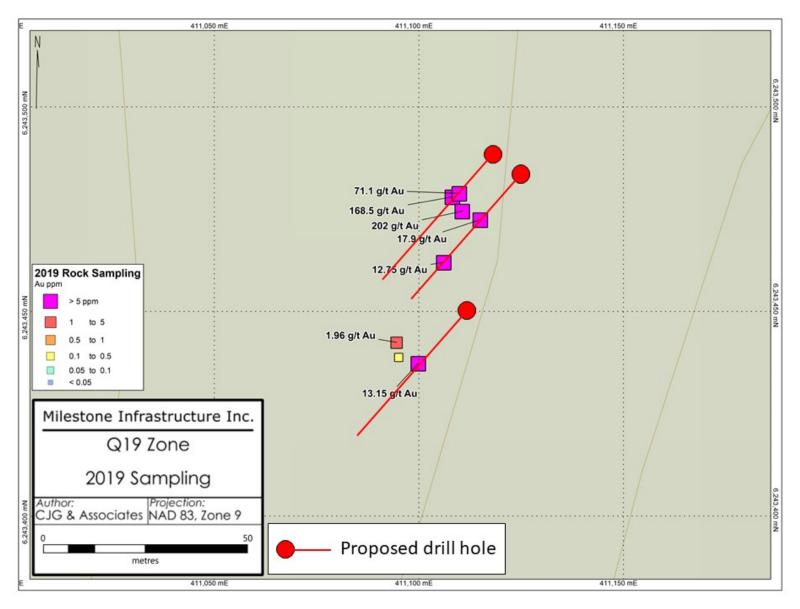


Figure 62: Proposed drill holes at the Q19 Zone

8.3 Proposed Exploration Budget

Table 10: Proposed exploration budget, Phase I program

Activity	Scope	Cost (\$CDN)
IP Survey		\$120,000.00
Drill Services		\$208,000.00
Geological Mapping		\$22,000.00
Geochemical Sampling		\$45,000.00
Core cutting, logging		\$42,000.00
Assaying	1 500 6 1.:11:	\$15,000.00
Aircraft rental	1,500 m of drilling from 10 drill pads	\$70,000.00
Fuel	nom to arm pads	\$30,000.00
Shipping and transport		\$5,000.00
Claims and permitting		\$5,000.00
Camp		\$120,000.00
LiDAR Survey		\$40,000
Magnetic Survey		\$34,000
Grand Total		\$756,000.00

The total budget excludes any provision for corporate support services and activities.

Phase II Drilling

Phase II would be contingent upon the success of Phase I, and expand upon results achieved. It would also be predominantly oriented to drilling, and encompass an additional 1,500 metres of work at a similar estimated cost to Phase I.

Respectfully submitted,

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N. Prowse, M.Sc.

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ASSESSMENT REPORTS

- * All Assessment Reports are available on-line at: http://aris.empr.gov.bc.ca/
- * Minfile descriptions are available on-line at: http://minfile.gov.bc.ca/searchbasic.aspx
- * BC Ministry of Energy and Mines, Exploration Assistant is available online at: http://webmap.em.gov.bc.ca/mapplace/minpot/ex_assist.cfm
- * All BC GSB publications are available on-line at: http://www.empr.gov.bc.ca/MINING/GEOSCIENCE/PUBLICATIONSCATALOGUE/Pages/default.aspx
- * BC Mineral Titles data is available online at: https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/mineral-placer-titles/mineraltitlesonline

Appendix A – Statements of Qualifications

I, Andrew Mitchell of 1090 Lacombe Road, Kelowna, British Columbia, Canada, hereby certify that:

- 1. I graduated from the University of British Columbia in 2010 with a B.Sc. in Earth and Environmental Sciences
- 2. From 2010 to present, I have been actively engaged in mineral exploration in Yukon Territory and British Columbia.
- 3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (license #46211).
- 4. I personally participated in the work described herein.
- 5. I am the author of the report entitled: "ROCK and SOIL GEOCHEMICAL SAMPLING, and GROUND BASED MAGNETOMETER SURVEY at the Doc West Eskay Property", dated March, 2020.

Dated at Penticton, British Columbia, this 20th day of March, 2020.

Respectfully submitted,

"Andrew James Mitchell"

Andrew J. Mitchell, B.Sc., P.Geo.

- I, Neil Prowse, of 1116 Jonathan Drive, Penticton, British Columbia, hereby certify that:
 - 1. I graduated from Carleton University with a B.Sc. in Earth Sciences in 2014, and an M.Sc. in Earth Sciences in 2017.
 - 2. From 2017 to present, I have been actively engaged in mineral exploration in British Columbia.
 - 3. I personally participated in the work described herein.
 - 4. I am a co-author of the report entitled: "ROCK and SOIL GEOCHEMICAL SAMPLING, and GROUND BASED MAGNETOMETER SURVEY at the Doc West Eskay Property", dated March2020.

Dated at Penticton, British Columbia, this 20th day of March, 2020.

Respectfully submitted,

"Neil David Prowse"

Neil D. Prowse, M.Sc.

Appendix B – Statement of Costs

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Doc/West Eskay Property - Milestone							
Infrastructure Inc. and Orogenic Gold Corp.							
	Jul 29 to Aug 7 and						
Work Invoices	Sept 3 to 11, 2019	Doc/West Eskay	Arron Albano	17 days	\$11,050.00	Geologist, 13 Field Days, 4 Travel	\$650/day (Geo.)
				,	· ,	Senior Geologist, 9 Field Days 1	
	July 29 to August 7	Doc/West Eskay	Neil Prowse	10 days	\$7,000.00		\$700/day (Senior Geologist)
			Andrew			Senior Geologist, 8 Field Days 1	
	July 29 to August 7	Doc/West Eskay	Mitchell	9 days	\$6,300.00	Travel	\$700/day (Senior Geologist)
	Jul 29 to Aug 7 and						
	Sept 3 to 9, 2019	Doc/West Eskay	Calum Quinn	18 days	\$9,900.00	Prospector, 14 Field Days, 4 Travel	550/day (Prospector/Sampler)
	Jul 29 to Aug 7 and						
	Sept 3 to 9, 2019	Doc/West Eskay	Charles Greig	5.275 days	\$4,220.00	Supervising Geologist	800/day (Supervisor - P.Geo)
	Jul 29 to Aug 7 and						
	Sept 3 to 9, 2019	Doc/West Eskay	Ray Marks	18 days		President and Prospector	833/day (President/Prospector)
	July 25 to August 6	Doc/West Eskay	Joe	13 days	\$7,475.00	Camp Labourer - 9 Field and 4 Travel	500/day Camp Labourer
	July 25 to August 6	Doc/West Eskay	Brian	13 days	\$3,900.00	Camp Labourer - 9 Field and 4 Travel	300/day Camp Labourer/assistant
		Doc/West Eskay	David Green	1.5 days	· ·	U.G. Miner - 1 Field and 1/2 Travel	500/day (Underground Miner)
Pre-field planning	July 14 to 18, 2019	Doc/West Eskay	Oliver Friesen	5 days	\$3,500.00	Project Geologist - 0 field days	\$700/day (Geologist)
			Andrew				
	August 28 to 30, 2019	Doc/West Eskay	Mitchell	1.25 day		Project Geologist - 0 field days	\$700/day (Senior Geologist)
	August 28, 2019	Doc/West Eskay	Neil Prowse	0.5 day		Senior Geologist/GIS Expert	\$700/day (Senior Geologist)
Total Pre-field and field labour					\$70,320.00		
Total labour for report writing and drafting (12 x					\$8,400.00		
\$700)	+				\$8,400.00		
Transportation, Food, Accomodation							
Fuel, accom, food	\$10,805.51						
Truck and Trailer Rentals	\$10,803.31	1 truck trailer 31 days (\$140/day), 1 truck trailer for 13 days (\$140/day),					
Truck and trailer kentals	\$10,452.29	1 truck and trailer 9 days (\$115/day), 1 truck 8 days (\$95/day), total of 10,713					
		km					
	\$424.50	3 days of truck rentals at \$95/day and 222.5 km at \$0.20/km					
Quad Rental		24 days at \$100/day					
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Field Equipment charges							
Consumables	\$2,847.97						
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Camp Supplies and Materials	\$12,737.47	32					
Geochemistry costs							
Rock geochem	\$9,177.87	170 rock Samples					
Soil and Stream Sediment geochem		55 soil samples					
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Miscellaneous							
Field rentals (GPS, radios, sat phone)	\$900						
Office equipment , GIS software, Field Gear							
, , , , , , , , , , , , , , , , , , , ,	1,7=55						
Helicopter	\$56,325.86						
	. , , , , , , , , , , ,						
Ground-Based Magnetometer Survey	\$15,728.29						
,	, , , , ,						
Total	\$125,021.26				\$125,021.26		
Total for entire 2019 program	7-13,321.20			Grand Total	\$203,741.26		
Total for entire 2015 program				Grana Total	7203,741.20	<u> </u>	<u> </u>

Appendix C – Sample Locations and Descriptions

2019 Rock Samples

2019 ROCK Sam	pies									
Sample_ID	Sampler	Date	UTM_NAD83E	UTM_NAD83N	Elevation (masl)	Sample_Type (chip, grab, float)	Sample_Width (cm, unless noted)	Detailed Notes		
Y738070	Andrew Mitchell/Neil Prowse	2019-08-03	410611.04	6243341.47	1477.92	Float	N/A	Rusty float cobble of massive magnetite + pyrite. Massive fine black metallic magnetite with pyrtie stringers and fine disseminations up to 30% of specimen.		
Y738086	Andrew Mitchell/Neil Prowse	2019-08-04	410683.80	6243103.24	1486.67	chip	40	QV9 - Massive, coarse quartz vein with coarse to fine, cubic to powdery pryite as stringers, disseminations and filling vugs. Trace cpy and malachite staining. Vein pinches and swells over a short distacne. Chip sample over 40 cm		
Y738087	Andrew Mitchell/Neil Prowse	2019-08-04	410677.21	6243116.51	1489.91	chip	170	QV9 - Quartzz vein swells to 170 cm wide, including and angular raft of host rock, up to 20 cm wide. Variable vuggy and mineralized, with ! 30 cm of barren bull quartz on easter margin. Host rock is weakly schistose fine grained green volcanics.		
Y738088	Andrew Mitchell/Neil Prowse	2019-08-04	410668.91	6243122.03	1490.20	chip	40	QV9 - Northern End of QV9. Less mineralization, with up to 5 % cpy disseminated throughout. 40 cm composite chip sample.		
Y738089	Andrew Mitchell/Neil Prowse	2019-08-04	410702.14	6243060.32	1487.22	chip	50	QV10 - Rusty pyritic quartz vein. QV10 is composed of euhedral to prismatic quartz, 2-6 mm, with coarse cubic pyrite up to 1 cm wide. Py up to 40% of location. Pyrite is finely disseminated thoughout groundmass, and as semi massive clots, up to 2 cm wide. QV10 pinches and swels, and location composite chips sample over 50 cm.		
Y738090	Andrew Mitchell/Neil Prowse	2019-08-04	410713.40	6243048.73	1491.22	chip	65	QV10 - More massive rusty bull quartz vien, with brecciated clasts of green metavolcanic host rock. Up to 20% py as cubic disseminations and fine stringers. Composite chip sample over 65 cm.		
Y738091	Andrew Mitchell/Neil Prowse	2019-08-04	410723.46	6243032.82	1486.92	chip	20	QV10 - Finer grained quartz than Y738090, with similar abundance of py and up to 5 % cpy, with malachite staining on surface. Composite chip sample over 20 cm.		
Y738186	Arron Albano/Calum Quinn	2019-08-03	410607.09	6243336.32	1476.91	composite chip	1m x 1m	sample collected as a composite 1x1m chip from a pyrite-magnetite-chalcopyrite-specularite mineralized quartz vein 1m in width. Pyrite occurs as clots, masses and fracture fillings. Magnetite occurs as clots up to 4x4cm and as fracture fillings. chalcopyrite occurs as rare blebs that weather to malachite. specularite is silverish and platy and occurs as fracture fillings and is variably magnetic, scratching red. mineralization occupies approximately 5-7% of the quartz vein. exposure is strongly oxidized and contains 10-15cm thick rock bridges at margins.		
Y738187	Arron Albano/Calum Quinn	2019-08-03	410623.10	6243323.85	1475.37	composite chip	1m x 1m	sample collected as a 1x1m composite chip from a weakly pyrite mineralized 1.5 m wide quartz vein. Pyrite occurs as fine clots and rare fracture fillings. Quartz vein is heavily limonitically stained and contains rare sections that are completely altered to goethite with boxworks. mineralization occupies approximately 2-3% of quartz vein. the host rock on the NE side of the quartz vein is 20 cm wide orange-grey fault gouge that appears to parallel the quartz vein. quartz vein is heavily fractured and crumbly.		
Y738188	Arron Albano/Calum Quinn	2019-08-03	410635.42	6243315.46	1476.69	composite chip	0.8m x 1m	sample collected as a 0.8 x 1m composite chip from a weakly mineralized bull quartz vein. Mineralization consists of fine grained cubic pyrite (<1%). Quartz vein is heavily fractured and limonitic stained with possibly 2, parallel to quartz vein fault gouge zones that are 5-10 cm wide and possibly trend onto fault gouge observed at Y738187.		
Y738189	Arron Albano/Calum Quinn	2019-08-03	410655.27	6243300.24	1470.99	composite chip	0.55m x 1m	sample collected as a 0.55 x 1m composite chip from a 0.55 m wide magnetite-pyrite-specularite-galena mineralized quartz vein. Mineralization texture and quantity resemble rock sample Y738186 but does not contain any chalcopyrite, and instead hosts galena. same gouge gault zone observed at Y738187 and Y738188 is observed at this quartz vein location on the footwall and is up to 60cm wide.		
Y738190	Arron Albano/Calum Quinn	2019-08-03	410656.48	6243301.88	1471.31	chip	0.60m	sample collected from 0.60m wide fault gouge zone on footwall of quartz vein.		
Y738191	Arron Albano/Calum Quinn	2019-08-03	410691.61	6243269.19	1473.34	chip	0.20m	sample collected as a 0.20m chip across a 0.20m wide pyrite mineralized quartz vein. Pyrite occurs as fine grained disseminations and fracture fillings and occupies 3-5% of the quartz vein.		
Y738192	Arron Albano/Calum Quinn	2019-08-03	410669.16	6243278.35	1472.53	chip	0.20m	same as Y738191		
Y738193	Arron Albano/Calum Quinn	2019-08-03	410629.26	6243296.11	1477.42	grab	N/A	same as Y738191 and Y738192. Gra b sample collected from quartz vein and host rock material with strong malachite staining and chalcopyrite-pyrite mineralization. Mineralization consists of 5-7% of the vein and host rock and occur as fracture fillings and fine grained disseminations.		
Y738194	Arron Albano/Calum Quinn	2019-08-03	410689.23	6243196.98	1470.75	composite chip	1m x 1m	sample collected as a 1 x 1m composite of pyrite mineralized quartz vein. Pyrite occurs as fine grained and semi-massive to clotty, disseminated and fracture filled. Pyrite minerlization occupies approximately 15% of the quartz vein. Difficult to tell orientation and thickness due to rubbly habit		
Y738195	Arron Albano/Calum Quinn	2019-08-03	410698.03	6243191.68	1468.39	composite chip	1.5m x 1.5m	sample collected as a 1.5m x 1.5m composite chip from a pyrite +/- chalcopyrite mineralized 1.5m wide quartz vein and associated, parallel, centimetre scale pyrite-chalcopyrite quartz veins that are malachite stained. Mineralization occupies approximately 3-4% of quartz vein.		
Y738196	Arron Albano/Calum Quinn	2019-08-03	410715.64	6243164.47	1470.11	composite chip	1m x 1m	sample collected as a 1x1m composite chip from a pyrite +/- chalcopyrite +/- malachite stained 1m wide quartz vein. Pyrite is ubiquitous as massive clots and fracture fillings, rare malachite staining and chalcopyrite are also observed. Mineralization occupies approximately 10-15% of quartz vein.		
Y738197	Arron Albano/Calum Quinn	2019-08-03	410720.53	6243181.96	1465.56	chip	0.65m	sample collected from a 0.65 m chip across a chalcopyrite-pyrite mineralized, boudinaged quartz vein 0.30 to 0.80 m wide. Chalcopyrite is as fracture fillings and occupies approximately 5-10% of vein.		
Y738198	Arron Albano/Calum Quinn	2019-08-03	410732.51	6243160.45	1469.31	composite chip	0.7m x 2m	sample collected as a 0.70 x 2m composite chip from a pyrite-chalcopyrite-dark grey sulphide (sulphosalts?) mineralized 0.7m wide quartz vein. Mineralization occurs as semi-massive masses and fracture fillings along with minor malachite stained surfaces. Rare pockets of calcite purcolate through quartz vein, but are mostly removed, with only prismatic quartz vugs remaining. mineralization occupies approximately 15-17% of quartz vein with pyrite predominating.		
Y738199	Arron Albano/Calum Quinn	2019-08-03	410738.37	6243144.96	1467.19	grab	N/A	sample collected as a grab from a chalcopyrite-pyrite mineralized quartz vein with chalcopyrite predominating. Likely tail end extension of sample Y738198. vein width and orientation unknown due to being in a creek bed covered by bouldery material.		
Y738202	Andrew Mitchell	2019-08-06	409898.52	6242169.40	1673.52	Chip	27 cm	Chip sample taken across 27 cm quartz vein, hosting Y738268 massive galena sample. Sample contains entrained fragments of host rock with malachite staining along foliation. Trace pyrite		
Y738203	Andrew Mitchell	2019-08-06	409896.58	6242168.32	1673.69	Chip	130 cm	Chip sample taken across 130 cm quartz vein hosting about 10% Gn, 1% cp in contact with foliation of host rock.		
Y738204	Andrew Mitchell	2019-08-06	409893.35	6242164.83	1672.86	Chip	40 cm	Chip sample across 40 cm wide rusty weathering bull quartz with trace sulphides.		
Y738220	Andrew Mitchell	2019-08-06	409514.77	6242254.80	1642.07	Chip	160 cm	Same as sample Y738262. Chip sample collected across 1.60 m of massive bull quartz with numerous vein parallel rusty stringers, and sporadic zones of semi-massive, coarse to fine cubic galena. Pyrite 2%, Gn 3%.		
Y738221	Andrew Mitchell	2019-08-06	409527.50	6242250.86	1642.10	Grab	10 cm	Grab sample from collapsed side of QV14 vein. Semi-massive cubic galena ~ 45% of sample, encrusting prismatic quartz.		

Sample_ID	Sampler	Date	UTM_NAD83E	UTM_NAD83N	Elevation (masl)	Sample_Type (chip, grab, float)	Sample_Width (cm, unless noted)	Detailed Notes
Y738262	Neil Prowse/Calum Quinn	2019-08-05	409536.53	6242238.87	1643.66	Grab	N/A	QV14 - 3.85 m wide portion of galena +/- Cpy, Py bearing Quartz vein. Trending 296. Similar in character to veins throughout the DOC property with sulphide mineralization present near (1.5 m margins of vein and wall rock. With barren bull quartz occupying the middle of the vein. Grab sample of ~ 50 % coarse to fine cubic galena, encrusting prismatic quartz.
Y738263	Neil Prowse/Calum Quinn	2019-08-05	409536.71	6242238.64	1643.74	chip	385	QV14 - Composite chip smaple over 3.85 m. of QV14 Vein
Y738268	Neil Prowse/Calum Quinn	2019-08-05	409895.12	6242166.35	1674.99	Grab	70 cm	Grab sample of semi-massive galena with up to 5% cp, from irregularly oriented massive rusty quartz vein. Footwall seam of ~ 20 cm wide massive galena trends parallel to vein.
Y738051	Andrew Mitchell/Neil Prowse	2019-08-03	409288.93	6245006.70	1324.01	Float	N/A	Weakly rusty weathered qtz vein float with coarse cubic galena seams and encrustations on fractures. Galena seams up to 1 cm wide. Non magnetic.
Y738053	Andrew Mitchell	2019-08-02	410123.12	6243554.49	1505.08	Float	30 cm	Approximately 30 cm wide rusty weathered quartz vein with milky white coarse grained quartz crystals (pegmatitic) hosting semi-massive fine to medium grained subhedral to euhedral pyrite (20-25%) as disseminations and patches. Material represents about 5% of talus in the area.
Y738054	Andrew Mitchell/Neil Prowse	2019-08-02	410223.18	6243717.39	1504.32	Float	N/A	Fine grained pale to medium graeen fload sample of weakly foliated/Banded metavolcanics. Py present up to 20% as fine disseminations and fabric paralell stringers.
Y738055	Andrew Mitchell/Neil Prowse	2019-08-02	409913.54	6243951.62	1475.76	Outcrop	N/A	Intenseley pyritic zone within foliated/banded pale to medium green metavolcanics. Pyrite present as fine disseminations and fabric paralell stringers, and fabric oblique qtz veins, ~ 4mm wide. Strongly magnetic.
Y738056	Andrew Mitchell/Neil Prowse	2019-08-02	409937.15	6243857.37	1484.23	Float	N/A	Float Sample of massive, variably vuggy qtz vein materil. Zones of semi massive fine grained galena, up to 40% of sample. 2-5% cpy disseminated throughout galena zones.
Y738057	Andrew Mitchell/Neil Prowse	2019-08-02	410216.58	6243650.61	1495.37	Float	N/A	Coarse crystalline milky white quartz vein float sample, with metallic black hematite ireegularly distributed throughout. Trace cubic Py.
Y738058	Andrew Mitchell	2019-08-02	410320.00	6243386.45	1495.03	Float	10 cm	Approximately 10 cm wide rusty weathered coarse grained quartz vein hosting disseminated to clotty pyrite (2%) and chalcopyrite (2%). Patches of limonite to goethite filled vugs up to 1 cm wide within. Taken from talus slope boulder from ~ 30-50 m long float train.
Y738059	Andrew Mitchell/Neil Prowse	2019-08-02	410315.35	6243374.30	1496.81	Float	N/A	Rusty to pink carbonate vein breccia, with abundant soft green chlorite on weahtered faces. Trace galena and sphalerite? Texturally looks similar to phaneritic intrusive, but comprised of euhedral to subedral white calcite and pink dolomite, with flakey green chlorite/biotite.
Y738060	Andrew Mitchell/Neil Prowse	2019-08-02	410437.58	6243494.53	1494.73	chip	10	~10 com wide massive crystalline quartz vein with semi massive chalcopyrite. Composite chip sample over veins width. Vein varies in width and trends ~285, pinching and swelling up to 20 cm wide, over a 10 m strike length. Blowouts appear to exploit foliation of bounding host rock (foliated mafic volcanics). Cpy up to 40%.
Y738061	Andrew Mitchell/Neil Prowse	2019-08-03	409341.08	6245077.06	1309.25	Float	N/A	Rusty qtz vein with 1-3% galena and cpy. Coarse crystalline vuggy quartz with limonitic powder lining vugs and seams.
Y738062	Andrew Mitchell/Neil Prowse	2019-08-03	409295.88	6245083.37	1308.07	Outcrop	N/A	Qtz vein material with cubic py + magnetite, and trace amounts of a grey, dull lustre material with a faint brown strak (sphal?). Coarse milky white quartz with rusty weathered surfaces. Specimen taken from blasted outcrop.
Y738063	Andrew Mitchell/Neil Prowse	2019-08-03	409231.03	6244805.96	1352.66	Float	N/A	Qtz vein boulder, likely float or subcrop. Coarse crystalline milky white quartz with up to 20% clotty cpy andcoarse cubic to fine galena. Common limonitic staining along vugs and seams throughout vein material. Non magnetic.
Y738064	Andrew Mitchell/Neil Prowse	2019-08-03	409264.68	6244748.24	1356.99	Float	N/A	Rusty pink vuggy quartz vein float sample, 12 cm wide. Upon breaking, seams of fine grained galena with trace cpy. Coarse quartz crystals, with limonitic staining bounding galena seams. Non-magnetic
Y738065	Andrew Mitchell/Neil Prowse	2019-08-03	409297.75	6244680.84	1367.31	Float	N/A	Rusty quartz vein float. Crystalline milky white qtz, with limonitic seams, very fine grained py with 1 - 8 mm wide stringers of fine grained galena. Cpy appears to be absent, and quartz crystals are finer grained. Specimen was taken from 30 cm wide float boulder. Non-Magnetic
Y738066	Andrew Mitchell/Neil Prowse	2019-08-03	409378.36	6244490.29	1384.79	Float	N/A	Float boulder of coarse qtz vein breccia incorporating ~50% clasts of angular fine grained pale green meta-volcanics. Qtz is commonly malachite stained with sparse blebs of cpy up to 2 mm in size. Rare specular hematite flecks within rusty fracture planes. Non Magnetic
Y738067	Andrew Mitchell	2019-08-03	409472.14	6244366.60	1411.56	Float	30 cm	Rusty to buff weathering quartz vein up to 30 cm hosting fine grained anhedral to subhedral pyrite (1-2%). Vuggy textured with vugs filled with with weathered out sulphides (goethite?). Sample is float within talus and represents about 1% of the rocks within it.
Y738068	Andrew Mitchell	2019-08-03	409481.65	6244359.83	1412.88	Float	15 cm	Rusty weathering quartz vein up to 15 cm wide. Quartz vein is vuggy and hosts fine to medium grained subhedral pyrite (2-5%) and trace cp (?) with up to 25% of the rock hosting limonitic vugs up to 1 cm. Sample taken from talus and represents 1% of the rock in the area.
Y738069	Andrew Mitchell/Neil Prowse	2019-08-03	409461.39	6244309.15	1418.99	Float	N/A	Rusty, pitted float cobble of fine grained, pale to dark green metavolcanics. Groundmass hosts densely disseminated fine py and stringers paralell to a weakly defined foliation/banding. Epidote paralells py stringers as thin selvages. Weakly magnetic.
Y738071	Andrew Mitchell	2019-08-04	410735.83	6243365.91	1459.20	Grab	30 cm	Subcrop sample of rusty bull quartz vein with seams of cubic to fine pyrite along margin. Variably vuggy coarse quartz crystals with boxwork texture along weathered surfaces.
Y738072	Andrew Mitchell	2019-08-04	410710.52	6243362.65	1466.24	Chip	20 cm	Bull quartz vein in outcrop, cutting foliation of host rock (sub-parallel). Host rock is pale green, foliated/banded metasediment (quartzite?). Brecciated over 3 cm, with clasts of host rock and pyrite stringers ~ 2mm wide. Pyrite up to 2% of composite chip sample. Rare 1-2 cm vugs lined with grey sulphide. 25 cm wide.
Y738073	Andrew Mitchell	2019-08-04	410694.92	6243361.98	1469.57	Chip	25 cm	Bull quartz vein in outcrop, cutting foliation of host rock (sub-parallel). Pyrite stringers ~ 2 mm wide, tightly spaced relative to Y738072. Vein cuts interbedded marble and quartzite. Composite chip sample over 25 cm. Pyrite represents 4% of vein.
Y738074	Andrew Mitchell	2019-08-04	410673.73	6243381.02	1470.24	Chip	20 cm	Bull quartz vein in outcrop, cutting foliation of host rock (sub-parallel). Pyrite is disseminated and as stringers representing up to 10% of the vein. Chip sample collected over 20 cm.
Y738075	Andrew Mitchell	2019-08-04	410663.58	6243389.69	1471.52	Chip	25 cm	Bull quartz vein in outcrop, cutting foliation of host rock (sub-parallel). Pyrite is subhedral to cubic and occur as disseminated and as stringers representing up to 20% of the vein. Chip sample collected over 20 cm.
Y738076	Andrew Mitchell	2019-08-04	410372.15	6243492.35	1491.18	Subcrop/Float	50 cm	Subcrop/float of milky white, rusty bull quartz incorporating seams of marble/quartzite material. Trace pyrite. Patches of fine, forest green chlorite envelope marble seams and create seams within the quartz. 50 cm wide boulder.
Y738077	Andrew Mitchell	2019-08-04	410227.92	6243599.05	1487.75	Float	15 cm	Float sample of rusty quartz vein material. Abundant disseminations and stringers of fine py. Vuggy along margins of specimen with limonitic staining. Quartz is irregularly banded with a 4-6 mm crystal size.
Y738078	Andrew Mitchell	2019-08-04	410191.42	6243624.98	1491.22	Float	5 cm	Float sample of fine quartz vein with metadiorite? Approximately 4 mm wide specular hematite seam separating quartz from hematite, very weakly magnetic.
Y738079	Andrew Mitchell	2019-08-04	410145.88	6243665.46	1496.82	Chip	10 cm	Rusty quartz vein in outcrop of fine grained green volcanics. Large ~ 3cm vugs in coarse. Rusty milky quartz crystals. Boxwork and limonitic breccia along vein margins. Trace coarse cubic pyrite ~ 10 cm wide composite chip sample.

Sample_ID	Sampler	Date	UTM_NAD83E	UTM_NAD83N	Elevation (masl)	Sample_Type (chip, grab, float)	Sample_Width (cm, unless noted)	Detailed Notes
Y738080	Andrew Mitchell	2019-08-04	410129.69	6243680.95	1501.60	Chip	35 cm	Massive to brecciated two-phase? Quartz vein in outcrop. Massive phase consists of coarse milky white bull quartz, with rusty weathering and vuggy texture with cubic galena on margin with brecciated phase, and trace galena on margin with host rock (east side) approximately 35 m wide.
Y738081	Andrew Mitchell	2019-08-04	410129.13	6243680.96	1501.65	Chip	35 cm	Brecciated phase (35 cm wide) consisting of clasts of pale, rusty purple to green metavolcanics? Anastomosing 5 mm wide quartz veinlets cut brecciation. Disseminated py, cpy up to 2%, with malachite staining along contact with massive phase.
Y738082	Andrew Mitchell	2019-08-04	410127.50	6243682.78	1501.22	Grab	10 cm	High grade sample of vuggy bull quartz with $^{\sim}$ 25% galena, 10% chalcopyrite as coarse disseminations within massive phase.
Y738083	Andrew Mitchell	2019-08-04	410119.72	6243692.40	1503.19	Chip	68 cm	Brecciated phase is absent, west side of vein is densely mineralized with coarse galena and chalcopyrite +/- pyrite. East side of vein appears to be largely barren bull quartz (represents approximately 40 cm of the vein). 68 cm composite chip sample across the entire vein.
Y738084	Andrew Mitchell/Neil Prowse	2019-08-04	410108.83	6243703.66	1501.92	Chip	25	QV5 - Similar to Y738083, but with mineralized portion absent. Pinches to 25cm wide bull quartz vein.
Y738085	Andrew Mitchell/Neil Prowse	2019-08-04	410104.67	6243705.86	1498.48	chip	45	QV5 - Similar to Y738083, but with up to 30% galena disseminated throughout, and a massive, fine grained seam of galena, ~ 4 cm wide, running through middle of quartz vein. 45 cm wide composite chip sample over width of vein.
Y738092	Andrew Mitchell/Neil Prowse	2019-08-04	410006.95	6243771.05	1494.15	Float	N/A	QV5 - Coarse milky white to rusty qtz vein float grab sample. ~ 2% cpy as clotty disseminations.
Y738093	Andrew Mitchell/Neil Prowse	2019-08-04	409978.22	6243790.14	1494.29	chip	40	QV5 - Massive milky white bull quartz with a vuggy texture 5 cm from eastern margin. Up to 3 % cpy lining qtz crystal boundaries, and as rare disseminations p to 2 mm. composite chip sample over 40 cm.
Y738094	Andrew Mitchell/Neil Prowse	2019-08-04	409952.88	6243784.89	1487.91	Grab	15	Grab sample from center of ~15 cm wide, 310 trending quartz vein. Massive milky white qtz, with seams of clotty pyrite. Py up to 15% of specimen.
Y738095	Andrew Mitchell/Neil Prowse	2019-08-04	410081.66	6243682.41	1490.57			
Y738143	Andrew Mitchell/Neil Prowse	2019-08-01	410562.93	6244110.72	1373.99	Float	N/A	Qtz vein float sample. Massive quartz vien with a faintly maottled/pseudobrecciated texture, resulting in a patchy pink to ger/white appearance. Coarse to fine cupic pyrite densely disseminated throughout, up to 10 %. Weak Patchy chloritization? Non Magnetic.
Y738144	Andrew Mitchell/Neil Prowse	2019-08-01	410581.32	6243914.49	1409.02	Float	N/A	Qtz Vein Float Sample. Very similar in texture and composition to Sample Y378143, but with 10%, py, 1 % fine glaena, and trace sphalerite and Chalcopyrite.
Y738145	Andrew Mitchell/Neil Prowse	2019-08-01	410533.75	6243840.56	1425.68	Float	N/A	Float Sample of rusty weathered quartz vein breccia. Pale pink to grey fine quartz groundmass, with brecciation defined by > 1 mm veinlet/stringers of subparalell to anastomosing specular hematite. Common limonitic staining on fracture surfaces and lining 1-w mm vugs. tr py disseminated throughout
Y738146	Andrew Mitchell/Neil Prowse	2019-08-01	410511.14	6243715.44	1504.45	Float	N/A	Float Sample in close proximity (~25 m) to outcrop of pyritic, well foliated fine grained mafic meta-volcanics. Alternating pale to dark green laminations with a phylitic foliation. Pyrite up to 2 % present as fine disseminations and foliation/lamination paralell stringers. In sampled speciment, 2-4 mm wide qtz veins cut foliation and contain coarse cubic py with trace galena.
Y738147	Andrew Mitchell	2019-08-01	410407.96	6243768.38	1473.21	Grab	30 cm	Approximately 30 cm wide (average) and 15 to 20 m long rusty weathered quartz vein. Vein pinches and swells along strike between 5 and 50 cm (30 cm on average). Vein is vuggy and hosts up to fine to medium grained subhedral to euhedral pyrite (20%) as disseminations and blebs. Limonite fills about 10% of the vugs. Vein trends 060/60.
Y738148	Andrew Mitchell	2019-08-02	410159.06	6243583.91	1485.69	Float	20 cm	Approximately 20 cm wide rusty weathering quartz vein with grey to white quartz hosting blebby to stringy chalcopyrite (2%), pyrite (1%) and trace arsenopyrite(?). Minor malachite staining on surface. Sample collected as float within talus, which represents about 1% of the rock.
Y738149	Andrew Mitchell	2019-08-02	410145.35	6243532.31	1502.19	Float	10 cm	Approximately 10 cm wide rusty weathered coarse grained quartz vein hosting disseminated to clotty, nearly semi-massive pyrite (5%) and chalcopyrite (10%). Patches of limonite to goethite filled vugs up to 1 cm wide within. Taken from talus slope boulder from ~ 30-50 m long float train.
Y738150	Andrew Mitchell	2019-08-02	410135.66	6243562.58	1502.24	Float	10 cm	Approximately 10 cm wide rusty weathered coarse grained quartz vein hosting disseminated to clotty pyrite (3%) and chalcopyrite (2%). Patches of limonite to goethite filled vugs up to 1 cm wide within. Taken from talus slope boulder from ~ 30-50 m long float train.
Y738200	Arron Albano/Calum Quinn	2019-08-04	411191.00	6242728.66	1414.85	grab (boulder)	N/A	sample collected from a rusty pyrite-galena-grey sulphide (sulphosalts?) mineralized quartz vein rounded boulder at the toe of the glacier. Pyrite occurs as masses, fracture fillings and fine grained clots. Galena and grey sulphide are intimately associated with pyrite masses. mineralization occupies 20-25% of quartz vein. boulder is approximately 0.5 x 0.5m.
Y738205	Andrew Mitchell	2019-08-06	409887.02	6242163.74	1673.77	Chip	25 cm	Chip sample taken across 25 cm wide quartz vein hosting trace sulphides.
Y738206	Andrew Mitchell	2019-08-06	409874.46	6242169.91	1671.51	Chip	60 cm	Chip sample taken across 60 cm bull quartz vein with rusty fractures hosting trace pyrite. Moderate sericitization of host rock for up to 10 cm.
Y738207	Andrew Mitchell	2019-08-06	409868.54	6242173.59	1669.57	Grab	15 cm	Quartz vein trend transitions into anastomosing 2-15 cm wide bull quartz veins brecciating sericitized rusty host rock. Veins are irregularly oriented with trace pyrite in quartz and host rock.
Y738208	Andrew Mitchell	2019-08-06	409840.55	6242184.32	1660.46	Float	10 cm	Quartz vein 11 trend float sample of intensely altered, rusty meta-volcanic wall rocks. Seams of red, vesicular hematite, with trace rusty cubic pyrite disseminated throughout.
Y738209	Andrew Mitchell	2019-08-06	409840.18	6242184.44	1632.52	Float	10 cm	Quartz vein 11 trend float sample of rusty, very vuggy, euhedral prismatic quartz. Trace cubic py lining seams of flakey white mica.
Y738210	Andrew Mitchell	2019-08-06	409424.43	6242292.46	1631.86	Float	10 cm	Float sample of vuggy intensely rusty quartz vein from prominent quartz vein boulder train. Quartz boulders range from massive and barren to vuggy and mineralized with galena and pyrite. Sample contains 15% galena in strings and filling vugs.
Y738211	Andrew Mitchell	2019-08-06	409360.42	6242357.85	1619.08	Float	30 cm	Northwestern extent of QV12 vein trend. Float sample of massive to vuggy rusty coarse quartz vein. Seams of porous red hematite, and trace galena as cubic clots.
Y738212	Andrew Mitchell	2019-08-06	409371.01	6242341.14	1620.65	Float	10 cm	Float sample of deep red to orange vesicular goethite/hematite/limonite encrusting rusty bull quartz.
Y738213	Andrew Mitchell	2019-08-06	409460.20	6242313.19	1632.06	Chip	60 cm	60 cm wide chip sample taken across rusty massive bull quartz vein with vuggy pyrite mineralized margins. Mineralized margins ~ 15 cm wide. Total 1% pyrite.
Y738214	Andrew Mitchell	2019-08-06	409491.58	6242287.14	1639.58	Chip	105 cm	105 cm wide chip sample across rusty bull quartz vein with variably vuggy, pyrite (1%) mineralized zones. Rusty hematite seams.
Y738215	Andrew Mitchell	2019-08-06	409506.36	6242278.14	1640.24	Chip	245 cm	245 cm chip sample taken across massive bull quartz vein (within blast trench) which entrains parallel rafts of host rock 75 cm wide, and extends for a total width of 245 cm. Dominantly massive rusty bull quartz with a 20 cm wide zone near the centre with sparsely disseminated galena.
Y738216	Andrew Mitchell	2019-08-06	409513.85	6242272.30	1639.88	Chip	110 cm	1.1 m wide chip sample taken across dominantly bull quartz vein with rusty stringers of cubic py and a 4 cm wide seam of semi-massive galena.
Y738217	Andrew Mitchell	2019-08-06	409521.04	6242267.03	1640.44	Chip	195 cm	1.95 m chip sample taken across highly fractured quartz with common pyrite and rusty hematite-pyrite stringers.
Y738218	Andrew Mitchell	2019-08-06	409575.96	6242245.49	1638.34	Chip	80 cm	80 cm wide chip sample taken across irregular shaped blowout of massive quartz with common rusty hematite-pyrite stringers. Rare seams of disseminated galena. Composite chip sample over 80 cm, including 10 cm inclusion of foliated host rock. Vein trends approximately 295 and hosts 1% py and 1% gn.

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Y738219	Andrew Mitchell	2019-08-06	409606.76	6242233.03	1642.54	Chip	90 cm	South end of QV 13 exposure. 90 cm wide chip sample across massive highly fractured rusty bull quartz vein with only trace pyrite, galena and hematite stringers.
Y738222	Andrew Mitchell	2019-08-06	409835.39	6242136.55	1666.11	Float	10 cm	Float sample of white to grey/blue translucent prismatic quartz vein with common vugs. Vein is encrusting large float boulder of grey, foliated meta-volcanics
Y738251	Arron Albano/Calum Quinn	2019-08-04	411235.86	6242728.73	1413.85	grab (boulder)	N/A	sample collected from glacially derived float boulders of pyrite-chalcopyrite mineralized quartz veins. Chalcopyrite occurs as blebs, clots and fracture fillings, generally malachite stained on the surface. The pyrite has a net texture to it, occupying a network of fractures within quartz vein. mineralization occupies approximately 4-5% of quartz vein. boulder is approximately 1 x 1m.
Y738252	Arron Albano/Calum Quinn	2019-08-04	411454.64	6242663.61	1409.95	grab	N/A	sample collected as a grab from a weakly mineralized bull quartz vein containing minor pyrite, chalcopyrite and malachite staining. Footwall of vein is sheared.
Y738253	Arron Albano/Calum Quinn	2019-08-04	411460.19	6242588.45	1438.88	composite chip	0.5m x 0.5m	sample collected as a 0.5 x 0.5m composite chip from a chalcopyrite-galena mineralized quartz vein. Galena and chalcopyrite are intimately associated, filling fractures in quartz and occupyring approximately 6-8% of quartz vein. Quartz vein is 0.65m in width.
Y738254	Arron Albano/Calum Quinn	2019-08-04	411563.80	6242652.99	1450.80	grab	N/A	sample collected as a grab from a pyrite mineralized quartz vein 10cm wide. Pyrite occurs as fine grained disseminated clots and fracture fillings. Mineralization occupies approxmately 5-7% of quartz vein. Unknown orientation due to slumping from cliff face.
Y738255	Arron Albano/Calum Quinn	2019-08-04	411563.27	6242654.00	1452.83	grab	N/A	sample collected next to Y738254 containing fracture filled specularite. High grade grab sample. Exposed area of specularite is 0.2 x 0.2m
Y738256	Arron Albano/Calum Quinn	2019-08-04	411570.65	6242616.44	1451.52	chip	0.5m	sample collected as a 0.50m chip from a pyrite-chalcopyrite +/- galena mineralized quartz vein. Chalcopyrite and pyrite predominate mineralization and comprise clots and fracture fillings. Galena is as fine grains throughout. Mineralization occupies 5-7% of quartz vein. quartz vein is 0.5m thick.
Y738257	Arron Albano/Calum Quinn	2019-08-04	411538.49	6242697.49	1423.86	grab	N/A	sample collected from a strongly malachite stained 3-5 cm quartz vein mineralized chalcopyrite and pyrite. High grade grab sample.
Y738258	Arron Albano/Calum Quinn	2019-08-04	411557.33	6242710.57	1439.08	chip	1.5m	sample collected form a pyrite-chalcopyrite-galena mineralized quartz vein up to 1.5m wide. Mineralization constitutes 5-7% of quartz vein material with pyrite predominating. Sample hard to properly collect due to steepness of terrane, better to access from above.
Y738259	Arron Albano/Calum Quinn	2019-08-04	411544.20	6242701.27	1428.34	composite chip	3m x 3m	sample collected as a 3 x 3m composite grab from material strewn down from quartz veins above. Mineralized quartz vein material comprises pyrite, galena and chalcopyrite that occupies up to 7% of the quartz vein samples
Y738260	Arron Albano/Calum Quinn	2019-08-04	410096.08	6243712.28	1496.84	chip	0.6m	sample collected as a 0.60m chip across a weakly pyrite-galena-chalcopyrite mineralized quartz vein, mineralization occurs mainly on the hanging wall as parallel fracture fillings and fine grained clots. Mineralization constitutes 1-3% of quartz vein. quartz vein is 0.60m wide.
Y738261	Arron Albano/Calum Quinn	2019-08-04	409894.07	6243861.74	1484.20	chip	0.2m	sample collected as a 0.20m chip from a weakly pyrite-chalcopyrite mineralized quartz vein that is 0.20m wide.
Y738264	Neil Prowse/Calum Quinn	2019-08-05	409518.68	6242397.79	1638.17	Grab	N/A	~ 70 cm wide, small outcrop of massive milky whute, rusty quartz vein. Variably vuggy, with evidence of weathered out cubic sulfides. Grab sample of vuggy, rusty stained material.
Y738265	Neil Prowse/Calum Quinn	2019-08-05	409535.96	6242418.91	1633.82	Grab	N/A	~ 65 cm wide small lensoid qtz vein exposure. Milky white bull quartz with rusty weathere surfaces. Variably vuggy, with evidence of weathered sulfide mineralization up to 10 cm in foliated meta diorite host rock. Grab sample ov eastern contact of vein material and wall rock.
Y738266	Neil Prowse/Calum Quinn	2019-08-05	409695.97	6242165.45	1658.41	Grab	N/A	Barren, Milky white quartz vein. Trending ~ 337, with rusty py + cpy + gn blowout at sample location. Sulfides are present in approximately equal quantities, and are disseminated throughout distinct sub paralell zones ~ 3% total sulfides. Specimen is of mineralized zones.
Y738267	Neil Prowse/Calum Quinn	2019-08-05	409870.53	6242174.00	1668.82	Float	N/A	Float boulder of rusty, vuggy quartz from flank of pyrite/silica altered meta volcanics with quartz veining. Rusty coarse to fine cubic py encrusting vugs and angular clasts of host rock.
Y738269	Neil Prowse/Calum Quinn	2019-08-05	410223.46	6242199.28	1715.80	Grab	N/A	Massive rusty quartz vein from lense in outcrop. Specimen includes foliated, pyritized metadiorite, and vuggy quartz sample with cubic pyrite encrusting surface. Pyrite ~ 2%
Y738270	Neil Prowse/Calum Quinn	2019-08-05	410410.66	6242211.81	1730.51	Grab	N/A	Massive quartz vein subcrop. Variably vuggy with sparsely disseminated ($^{\sim}2\%$ py and cp). Specimen is malachite and azurite stained on weathered surface. Trace galena within stringers.
Y738271	Neil Prowse/Calum Quinn	2019-08-05	410351.81	6242314.59	1720.42	Grab	10 cm	Quartz veins within foliation of metadiorite? Meta-volcaniclastic?. Quartz veins are pervasive throughout lithology and are up to 10 cm wide. Coarse, interlocking tabular quartz crystals with rare vugs. Cubic pyrite disseminated throughout, up to 1% of veins.
Y738272	Neil Prowse/Calum Quinn	2019-08-05	410357.21	6242339.08	1711.57	Grab	N/A	Small outcrop exposure of irregularly oriented quartz vein. Coarse, milky white quartz with rusty fractures. Black specular hematite commonly lines fractures and quartz crystal boundaries. Trace pyrite, galena and chalcopyrite.
Y738273	Neil Prowse/Calum Quinn	2019-08-05	410471.51	6242492.89	1681.31	Grab	15 m	Approximately 100 m long exposure of intensely foliated crenulated chlorite-muscovite quartz schist. Approximately 15 m wide, sandwiched between weakly foliated meta-volcanics. Potentially indicative of a shear zone. Zone is intensely rusty weathered, and contains numerous ~ 1-3 cm wide quartz-pyrite veins paralleling foliation. Directional indicators suggest that the footwall is downthrown side, indicating a thrust fault. Pale zones strongly react with HCl, suggesting a carbonate component.
Y738274	Neil Prowse/Calum Quinn	2019-08-05	410374.48	6242351.08	1717.03	Grab	1x2m	Small 1 x 2 m zone of brecciated white meta-volcanics. Matrix supported, suspended in a black very fine groundmass of hematite. Clasts range from 2 mm to 2 cm and are subangular. Trace pyrite within hematite matrix. Zone appears entrained within a rusty, foliated package of quartz rich meta-seds.
Y738275	Neil Prowse/Calum Quinn	2019-08-05	410367.39	6242128.66	1724.44	Grab	20 cm	Quartz vein, massive, milky white, with rusty fracture surfaces. Specular hematite sporadically encrusts quartz crystal boundaries. Vein is hosted within well foliated, rusty meta-volcanics. Trace pyrite vein is ~ 20 cm wide.
Y738276	Neil Prowse/Calum Quinn	2019-08-05	410362.81	6242152.47	1733.05	Grab	N/A	Scree slope float sample of rusty quartz vein. Fracture surfaces show malachite and azurite staining with 1% gn and cp disseminated throughout.
Y738277	Arron Albano/Calum Quinn	2019-08-05	409359.38	6242352.86	1601.99	grab	N/A	sample collected from two 1m x 1m boulders, possibly subcrop, mineralized with galena up to 3%. Galena occurs as fracture fillings and around quartz vein boundaries. High grade grab.
Y738278	Arron Albano/Calum Quinn	2019-08-05	408751.01	6242531.86	1532.95	grab (float)	N/A	sample collected from a 30cm x 30cm quartz vein boulder containing fracture filling galena to 2%. High grade grab, float.
Y738279	Arron Albano/Calum Quinn	2019-08-05	408874.39	6242555.16	1583.10	grab (float)	N/A	sample collected from a strongly boxworked and weathered out pyrite mineralized quartz vein boulder. Pyrite weathered out as dark brown clots and fracture fillings. Quartz vein material strewn around a 10 x 10m area.
Y738280	Arron Albano/Calum Quinn	2019-08-05	408871.70	6242571.03	1589.66	grab	N/A	sample collected from a 10cm thick weakly mineralized white quartz vein containing 1-2% medium grained cubic pyrite. Can be traced for approximately 25m.
Y738281	Arron Albano/Calum Quinn	2019-08-05	408949.93	6242641.61	1636.40	grab	N/A	sample collected from an intensely bleached light brown to yellow brown exposure approximately 70 x 70cm containing seams of goethite.
Y738282	Arron Albano/Calum Quinn	2019-08-05	409298.18	6242526.96	1639.09	grab	N/A	sample collected from a rubbly pileof quartz boulders, vein material host to clots of cubic pyrite and abundant boxworks.
Y738283	Arron Albano/Calum Quinn	2019-08-05	409814.44	6242120.07	1660.86	grab	N/A	sample collected from a 1-1.3m wide weakly mineralized quartz vein containing 1-2% fine grained pyrite.

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Y738462	Arron Albano/Calum Quinn	2019-09-04	412716.91	6242144.99	878.25	grab	na	sample collected from a rusty orange brown quartz-iron carbonate vein breccia containing ellipsoid fragments rimmed by quartz and iron carbonate - cockade texture? With trace pyrite.
Y738463	Arron Albano/Calum Quinn	2019-09-04	412843.83	6242160.53	830.74	grab	na	sample collected from a 10cm wide quartz vein containing 2-3% fine grained pyrite as disseminations and vein parallel bands.
Y738464	Arron Albano/Calum Quinn	2019-09-04	412896.60	6242165.91	797.13	float	na	sample collected as float from an iron carbonate vein containing 3% fine grained disseminated pyrite.
Y738465	Arron Albano/Calum Quinn	2019-09-04	411274.03	6241368.61	1626.45	grab	na	sample collected from a 5-10cm wide iron carbonate quartz vein containing up to 5% specularite as fracture fillings.
Y738466	Arron Albano/Calum Quinn	2019-09-04	411284.70	6241339.66	1639.46	grab	na	sample collected from a 50cm wide quartz +/- iron carbonate vein filled shear that has offset a 1.5m wide intermediate dyke.
Y738467	Arron Albano/Calum Quinn	2019-09-04	411282.29	6241339.82	1641.49	float	na	sample collected as float from a massive magnetite boulder.
Y738468	Arron Albano/Calum Quinn	2019-09-04	411108.22	6243478.03	1371.28	grab	na	sample collected as a high grade grab from a strongly galena-pyrite mineralized quartz vein. Galena and pyrite are massive to semi-massive.
	Arron Albano/Calum Quinn	2019-09-04	411115.03	6243472.43	1371.41	float		
Y738469	·						na o zo	sample collected as a high grade float containing semi-massive coarse grained pyrite within quartz vein host.
Y738470	Arron Albano/Calum Quinn	2019-09-05	410689.44	6243195.31	1469.71	channel	0.70m	sample collected as saw channel from a quartz vein containing 10-15% coarse grained pyrite as bands and disseminations. Quartz vein width 0.70m.
Y738471	Arron Albano/Calum Quinn	2019-09-05	410690.99	6243195.50	1468.51	channel	0.60m	sample collected as saw channel from a quartz vein containing 10-15% coarse grained pyrite as bands and disseminations.
Y738472	Arron Albano/Calum Quinn	2019-09-05	410697.39	6243190.80	1469.49	channel	0.80m	sample collected as saw channel from a quartz vein containing 10-15% coarse grained pyrite as bands and disseminations. Minor cpy.
Y738473	Arron Albano/Calum Quinn	2019-09-05	410715.86	6243163.13	1471.63	channel	0.70m	sample collected as saw channel from a quartz vein containing 3-5% coarse grained pyrite as bands and disseminations.
Y738474	Arron Albano/Calum Quinn	2019-09-05	410717.15	6243156.76	1468.96	channel	0.90m	sample collected as saw channel from a quartz vein containing 3-5% coarse grained pyrite as bands and disseminations.
Y738275	Arron Albano/Calum Quinn	2019-09-05	410724.51	6243177.09	1462.31	channel	0.40m	sample collected from a 0.30m wide quartz vein containing 5-10% chalcopyrite and 5-10% pyrite as masses and disseminations
Y738476	Arron Albano/Calum Quinn	2019-09-05	410738.94	6243142.61	1464.82	channel	0.30m	sample collected from a 0.30m wide quartz vein containing 5-10% chalcopyrite and 5-10% pyrite as masses and disseminations
Y738477	Arron Albano/Calum Quinn	2019-09-05	410658.39	6243301.51	1470.76	channel	0.75m	sample collected from a magnetite-pyrite-specularite-galena mineralized quartz vein. Mineralization texture and quantity resemble rock sample Y738186 but does not contain any chalcopyrite, and instead hosts galena. same gouge fault zone observed at Y738187 and Y738188 is observed at this quartz vein location on the footwall and is up to 60cm wide.
Y738478	Arron Albano/Calum Quinn	2019-09-05	410630.28	6243321.03	1475.64	channel	0.70m	sample collected as channel from a weakly pyrite mineralized quartz vein.
Y738479	Arron Albano/Calum Quinn	2019-09-05	410604.67	6243338.93	1475.92	channel	0.80m	sample from a pyrite-magnetite-chalcopyrite-specularite mineralized quartz vein. Pyrite occurs as clots, masses and fracture fillings. Magnetite occurs as clots up to 4x4cm and as fracture fillings. chalcopyrite occurs as rare blebs that weather to malachite. specularite is silverish and platy and occurs as fracture fillings and is variably magnetic, scratching red. mineralization occupies approximately 5-7% of the quartz vein. exposure is strongly oxidized and contains 10-15cm thick rock bridges at margins.
Y738480	Arron Albano/Calum Quinn	2019-09-06	410127.47	6243687.34	1501.29	channel	0.60m	sample collected from a 0.60m wide quartz vein mineralized with galena, chalcopyrite and pyrite. Mineralization occupies approximately 15% of sample with galena predominating over chalcopyrite and pyrite. Galena occurs as coarse masses and fracture filling bands. chalcopyrite is weathered to malachite at surface.
Y738481	Arron Albano/Calum Quinn	2019-09-06	410116.95	6243695.80	1503.53	channel	0.47m	sample collected from a 0.47m wide quartz vein mineralized with semi-massive to massive galena and minor chalcopyrite and pyrite.
Y738482	Arron Albano/Calum Quinn	2019-09-06	410116.16	6243696.38	1503.55	channel	0.44m	sample collected from a 0.44m wide quartz vein mineralized with semi-massive galena containing minor coarse chalcopyrite and pyrite. Collected as channel sample 1.70m from Y738481.
Y738483	Arron Albano/Calum Quinn	2019-09-06	410107.27	6243703.24	1503.19	channel	0.60m	sample collected from a 0.60m wide quartz vein mineralized with semi-massive galena and minor coarse chalcopyrite and pyrite.
Y738484	Arron Albano/Calum Quinn	2019-09-06	410105.04	6243706.08	1500.81	channel	0.57m	sample collected from a 0.57m wide quartz vein mineralized with 7% coarse galena, 3% chalcopyrite and 2% pyrite.
Y738485	Arron Albano/Calum Quinn	2019-09-06	410104.89	6243707.53	1501.02	channel	0.40m	sample collected from a 0.40m wide quartz vein containing 1% galena as coarse grains along with trace chalcopyrite and pyrite.
Y738486	Arron Albano/Calum Quinn	2019-09-06	410095.70	6243714.85	1499.76	channel	0.37m	sample collected from a 0.37m wide quartz vein mineralized with galena, chalcopyrite and pyrite. Mineralization is restricted to the top 10cm of vein hanging all and occurs has fine to coarse grained, vein parallel fracture fillings.
Y738487	Arron Albano/Calum Quinn	2019-09-06	409894.71	6243862.61	1488.01	channel	0.16m	sample collected from a 0.16m wide quartz vein containing fracture filling vein parallel seams of pyrite and chalcopyrite to 8%.
Y738488	Arron Albano/Calum Quinn	2019-09-06	409979.35	6243787.67	1495.31	channel	0.40m	sample collected from a 0.40m wide quartz vein weakly mineralized with coarse chalcopyrite and pyrite with minor galena. Total sulphide content of sample is 3%.
Y738489	Arron Albano/Calum Quinn	2019-09-07	409897.75	6242167.85	1668.74	channel	0.50m	sample collected form a quartz vein 0.30m wide containing a 0.20m wide rock bridge. Footwall of vein contains semi-massive to massive galena with minor pyrite and chalcopyrite.
Y738490	Arron Albano/Calum Quinn	2019-09-07	409897.12	6242170.43	1669.36	channel	0.73m	sample collected from a weakly pyrite-hematite mineralized quartz vein, continuation sample of Y738489.
Y738491	Arron Albano/Calum Quinn	2019-09-07	409895.50	6242169.57	1673.37	channel	0.56m	sample collected from a 0.56m wide quartz vein containing multiple centimetre scale rock bridges. Quartz vein is mineralized with minor pyrite and red hematite.
Y738492	Arron Albano/Calum Quinn	2019-09-07	409894.03	6242170.49	1672.32	channel	0.24m	sample collected from a 0.24m wide quartz vein containing minor pyrite and hematite along with secondary light green sericite.
Y738493	Arron Albano/Calum Quinn	2019-09-07	409893.95	6242169.72	1670.25	channel	0.55m	sample collected from a 0.55m wide quartz vein containing multiple centimetre scale rock bridges. Quartz vein is mineralized with minor pyrite and hematite and contains light green sericite.
V722 12 1	Arron Albana/Calum Ouisa	2010 00 07	400000 25	6242170.05	1672.52	channel	0.20	
Y738494	Arron Albano/Calum Quinn	2019-09-07	409888.35	6242170.95	1672.53	channel	0.20m	sample collected from a 0.20m wide quartz vein containing trace pyrite.
Y738495	Arron Albano/Calum Quinn	2019-09-07	409885.62	6242170.56	1672.00	channel	0.40m	sample collected from a 0.45m wide quartz vein containing minor pyrite. Sample was collected parallel to vein orientation.
Y738496	Arron Albano/Calum Quinn	2019-09-07	409883.89	6242173.60	1671.49	channel	0.20m	sample collected form a 0.20m wide quartz vein containing trace pyrite.
Y738497	Arron Albano/Calum Quinn	2019-09-07	409876.03	6242173.55	1670.27	channel 	0.50m	sample collected across a 0.50m qide quartz vein containing trace pyrite.
Y738498	Arron Albano/Calum Quinn	2019-09-07	409539.09	6242240.26	1642.19	channel	0.76m	sample collected from a 2.74m wide vein containing semi-massive galena and pyrite on the footwall comprising 0.25m of sample as coarse grained fracture fillings.
Y738499	Arron Albano/Calum Quinn	2019-09-07	409537.70	6242241.51	1638.54	channel	1.98m	sample collected from a 2.74m wide quartz vein, a continuation from Y738498. sample contains mostly barren white quartz with minor pyrite and galena.
Y738500	Arron Albano/Calum Quinn	2019-09-07	409530.53	6242244.78	1637.54	channel	0.73m	sample collected from a 0.73m wide vein containing pyrite and galena stringers up to 5% total sulphide content.
Y738501	Arron Albano/Calum Quinn	2019-09-07	409517.00	6242251.97	1639.67	channel	1.37m	sample collected from a 1.37m wide quartz vein containing trace pyrite and galena.
Y728502	Arron Albano/Calum Quinn	2019-09-07	410296.98	6242188.15	1729.23	grab	na	sample collected form a 0.15m wide quartz vein containing semi-massive to massive chalcopyrite and pyrite. Vein can only be traced for approximately 0.50m
Y728503	Arron Albano/Calum Quinn	2019-09-09	411110.62	6243474.52	1375.65	grab	na	historical sample at site reads 12-QE-CQ-07 sample collected as high grade grab containing massive galena and pyrite with galena predominating over pyrite. Mineralization is coarse grained and occupies approximately 35cm x 30cm lens with unknown depth. Mineralization occupies fracture filling in quartz vein of unknown thickness and is exposed only in a
Y738504	Arron Albano/Calum Quinn	2019-09-09	411094.55	6243442.46	1380.65	channel	1.0m	small gulch. sample collected from a 2.60m wide white quartz vein mineralized with sparsely distributed coarse grained pyrite to 3%.

Sample_ID	Sampler	Date	UTM_NAD83E	UTM_NAD83N	Elevation (masl)	Sample_Type (chip, grab,	Sample_Width (cm, unless	Detailed Notes
						float)	noted)	
Y738505	Arron Albano/Calum Quinn	2019-09-09	411095.09	6243438.89	1375.46	channel	1.60m	sample collected from a 2.60m wide white quartz vein mineralized with sparsely distributed coarse grained pyrite to 3%. Continuation sample of Y738504.
Y738506	Arron Albano/Calum Quinn	2019-09-09	411099.88	6243437.34	1377.27	channel	1.25m	sample collected from a 1.25m wide vein containing 3% coarse grained pyrite sparsely distrubuted throughout vein.
Y738507	Arron Albano/Calum Quinn	2019-09-09	411106.09	6243462.04	1378.09	channel	1.28m	sample collected as a channel 1.28m long containing sparsely distributed coarse grained pyrite to 3% and one band of massive galena and pyrite to 15cm wide. Sulphide content is approximately 20% of sample. Quartz vein thickness and oritentation unknown due to being covered on top and bottom only exposed in a small gulch.
Y738508	Arron Albano/Calum Quinn	2019-09-09	411109.91	6243478.88	1374.31	channel	0.70m	sample collected form a quartz vein of unknown width and orientation exposed in a small gulch and contains semi-massive galena and pyrite for 0.35m of sample.
D008056	Ray Marks	2019-10-01	410222.00	624294.00		grab		taken on Gossan Hill 20cm long
D008057	Ray Marks	2019-10-01	410223.00	624292.00		grab		taken same place as above sample, one meter apart and is in place

2019 Soil Samples Sample ID

2019 Soil Sample			
Sample ID	UTM E (NAD 83)	UTM N (NAD 83)	Elevation (m)
WEAA19-001	408983.92	6242848.09	1644.978149
WEAA19-002	408953.54	6242809.99	1658.617065
WEAA19-003	408921.16	6242771.38	1661.976196
WEAA19-004	408890.76	6242733.18	1650.020996
WEAA19-005	408859.89	6242695.54	1630.622925
WEAA19-006	408827.18	6242656.04	1608.472046
WEAA19-007	408796.11	6242615.07	1594.262451
WEAA19-008	408765.38	6242575.53	1558.563721
WEAA19-009	408733.92	6242537.01	1529.833252
WEAA19-010	408811.57	6242473.11	1541.29834
WEAA19-011	408843.33	6242511.85	1571.743652
WEAA19-012	408873.59	6242555.18	1586.883545
WEAA19-013	408904.45	6242595.04	1608.922485
WEAA19-014	408937.98	6242635.08	1632.565552
WEAA19-015	408969.28	6242672.60	1654.313599
WEAA19-016	409000.79	6242710.78	1665.274902
WEAA19-017	409031.97	6242748.42	1671.810791
WEAA19-018	409063.39	6242788.27	1655.523926
WEAA19-019	409141.32	6242723.59	1645.250366
WEAA19-020	409111.22	6242684.37	1657.710327
WEAA19-021	409078.70	6242644.87	1651.518311
WEAA19-022	409046.95	6242609.70	1637.253174
WEAA19-023	409016.58	6242569.82	1625.754639
WEAA19-024	408985.32	6242531.19	1603.138428
WEAA19-025	408952.44	6242492.81	1593.580444
WEAA19-026	408922.71	6242450.80	1571.539307
WEAA19-027	408894.62	6242410.21	1544.151855
WEAA19-028	409029.63	6242427.47	1584.350342
WEAA19-029	409060.00	6242467.69	1600.510986
WEAA19-030	409092.47	6242504.63	1621.670776
WEAA19-031	409124.22 409156.90	6242542.47	1632.650757
WEAA19-032 WEAA19-033		6242583.97	1638.234131
	409188.12	6242623.06	1638.122925
WEAA19-034	409218.15	6242662.05	1643.278198
WEAA19-035	409296.23	6242597.70	1643.156372
WEAA19-036	409267.69	6242559.34	1644.175049
WEAA19-037	409236.35	6242520.26	1636.981445
WEAA19-038	409202.90	6242480.45	1632.247192
WEAA19-039	409171.30	6242440.93	1612.265259
WEAA19-040	409139.03	6242404.43	1591.857544
WEAA19-041	409107.28	6242366.47	1584.565674
WEAA19-042	409185.37	6242302.79	1576.802124
WEAA19-043	409214.90	6242341.02	1582.879883
WEAA19-044	409247.96	6242379.84	1601.366089
WEAA19-045	409280.15	6242421.02	1619.024414
WEAA19-046	409311.29	6242456.76	1631.758789
WEAA19-047	409342.80	6242495.28	1639.897461
WEAA19-048	409373.95	6242534.37	1650.040039
WEAA19-049	409452.81	6242468.89	1643.815674
WEAA19-050	409420.79	6242429.82	1645.208984
WEAA19-051	409388.44	6242395.44	1637.927979
WEAA19-052	409359.36	6242357.54	1619.029175
WEAA19-053	409326.47	6242315.48	1607.50354
WEAA19-054	409295.01	6242279.08	1591.501587
WEAA19-055	409262.83	6242238.45	1573.974609

APPENDIX D – Certificates of Analysis



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: 1 Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019

Account: MARRAY

CERTIFICATE TR19227730

This report is for 45 Rock samples submitted to our lab in Terrace, BC, Canada on 11-SEP-2019.

The following have access to data associated with this certificate:

ARRON ALBANO	CHARLES GREIG	RAY MARKS
ANDREW MITCHELL		

SAMPLE PREPARATION						
ALS CODE	DESCRIPTION					
WEI-21	Received Sample Weight					
LOG-22	Sample login - Rcd w/o BarCode					
CRU-QC	Crushing QC Test					
PUL-QC	Pulverizing QC Test					
CRU-31	Fine crushing - 70% <2mm					
SPL-21	Split sample - riffle splitter					
PUL-31	Pulverize up to 250g 85% <75 um					

	ANALYTICAL PROCEDURES	
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	
Pb-OG46	Ore Grade Pb - Aqua Regia	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	

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

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

Signature:

Saa Traxler, General Manager, North Vancouver



To: MILESTONE INFRASTRUCTURE INC **729 OKANAGAN AVE E** PENTICTON BC V2A 3K7

Page: 2 - A Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019

Account: MARRAY

CERTIFICATE OF ANALYSIS TR19227730

								<u></u>			<i>-</i> ,	- //	_ 1 3 1 3		27730	
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738462 Y738463 Y738464 Y738465		0.60 0.44 0.42 0.73	0.007 0.002 0.001 0.007		<0.2 0.2 0.3 <0.2	0.26 1.39 0.22 0.74	7 20 2 4	<10 <10 <10 <10	320 50 210 70	<0.5 <0.5 <0.5 <0.5	<2 <2 <2 <2	3.03 0.36 16.4 18.0	0.9 <0.5 3.2 0.8	8 18 9 45	8 8 2 2	7 110 2 5
Y738466 Y738467		0.47	0.014		0.3	0.57	39	<10	20	<0.5	<2	0.22	<0.5	11 21	36 67	34
Y738468 Y738469 Y738470		0.47 0.71 0.94 3.13	>10.0 >10.0 >10.0 0.781	168.5 17.90	>100 >100 >100 11.9	0.03 0.12 0.09	<2 <2 7	<10 <10 <10 <10	20 30 60	<0.5 <0.5 <0.5	19 3 2	0.01 0.03 0.01	205 <0.5 2.8	2 5 10	4 8 14	440 1200 4580
Y738471 Y738472 Y738473		3.20 3.73 3.49	0.065 0.062 0.015		7.1 2.0	0.05 0.02 0.10	7 4 3	<10 <10 <10	50 110 80	<0.5 <0.5 <0.5	<2 <2 <2	0.05 0.01 0.02	2.3 1.0 0.8	11 1 1	20 22 19	2840 833 231
Y738474 Y738475 Y738476		2.81 2.39 2.86	0.008 0.103 0.780		2.3 16.5 41.3	0.10 0.02 0.06 0.12	21 11 86	<10 <10 <10 <10	10 10 30	<0.5 <0.5 <0.5	<2 12 20	<0.01 0.01 0.11	1.3 68.4 5.8	2 21 39	27 15 19	761 >10000 7580
Y738477 Y738478 Y738479 Y738480		2.19 3.10 3.75 2.24	0.215 0.566 2.42 1.565		4.2 4.3 31.0 >100	0.11 0.15 0.03 0.05	<2 <2 <2 <2	<10 <10 <10 <10	210 40 20 20	<0.5 <0.5 <0.5 <0.5	<2 2 3 <2	0.07 0.02 0.19 0.06	0.5 <0.5 <0.5 46.4	9 18 15 4	19 18 13 13	234 169 >10000 491
Y738481 Y738482		3.63 2.58	5.55 7.75		>100	0.02	8 14	<10	10	<0.5 <0.5	<2 <2	0.01	125.5 66.6	3	7	239 289
Y738483 Y738484 Y738485 Y738486		2.89 2.25 2.61 2.89	4.86 1.105 6.67 1.480		88.8 58.2 46.4 62.4	0.02 0.04 0.05 0.09	<2 <2 <2 <2	<10 <10 <10 <10	40 50 880 40	<0.5 <0.5 <0.5 <0.5	<2 <2 <2 2	<0.01 0.01 0.01 0.02	9.1 12.6 3.9 28.6	2 1 <1 3	15 26 19 20	4110 384 317 1960
Y738487 Y738488 Y738489 Y738490 Y738491		1.72 2.63 3.05 2.88 2.17	0.417 0.978 6.31 3.37 1.870		3.7 26.3 >100 86.1 >100	0.12 0.16 0.27 0.38 0.33	<2 2 494 91 49	<10 <10 <10 <10 <10	100 40 20 890 1030	<0.5 <0.5 <0.5 <0.5 <0.5	<2 2 526 82 29	0.07 <0.01 0.02 0.01 0.01	0.5 <0.5 46.9 0.6 1.1	7 1 4 1 2	20 18 12 13 12	741 834 5950 1115 229
Y738492 Y738493 Y738494 Y738495 Y738496		2.29 3.29 1.56 1.81 2.09	0.073 0.234 0.070 0.117 0.162		3.4 18.9 1.9 4.4 52.6	0.22 0.52 0.15 0.13 0.42	2 4 <2 4 <2	<10 <10 <10 <10 <10	1510 1330 980 570 390	<0.5 <0.5 <0.5 <0.5 <0.5	3 20 <2 8 101	<0.01 0.01 0.01 <0.01 <0.01 0.08	<0.5 <0.5 <0.5 <0.5 <0.5	1 1 2 3 2	13 6 17 20 7	18 208 36 94 38
Y738497 Y738498 Y738499 Y738500 Y738501		2.22 2.64 2.28 2.52 2.79	0.027 1.355 0.093 0.111 0.403		1.1 >100 11.4 30.1 53.9	0.42 0.08 0.02 0.03 0.05 0.08	<2 <2 <2 <2 <2 <7	<10 <10 <10 <10 <10 <10	970 20 10 30 30	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5	2 663 59 95 360	<0.01 <0.01 <0.01 <0.01 <0.01	<0.5 10.0 <0.5 0.5 0.6	1 5 1 1 <1	21 27 20 28 17	29 38 44 57 171



To: MILESTONE INFRASTRUCTURE INC **729 OKANAGAN AVE E** PENTICTON BC V2A 3K7

Page: 2 - B Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019

Account: MARRAY

CERTIFICATE OF ANALYSIS TR19227730

											CAILO	יו אויאו			21130	
Sample Description	Method Analyte Units LOD	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
Y738462		3.23	<10	1	0.15	<10	0.05	857	7	0.01	9	440	7	0.12	2	6
Y738463		2.77	<10	1	0.29	10	0.79	162	5	0.05	6	1120	4	0.36	<2	3
Y738464		4.90	<10	<1	0.14	<10	6.84	2810	2	0.03	42	1620	90	1.15	3	9
Y738465		6.86	<10	<1	0.06	<10	0.94	2500	<1	0.01	54	30	6	0.26	<2	5
Y738466		1.99	<10	1	0.06	<10	0.24	89	2	<0.01	26	50	5	<0.01	4	17
Y738467		3.08	10	1	0.11	<10	2.29	425	<1	0.25	55	70	11	<0.01	<2	18
Y738468		7.54	<10	51	0.03	10	0.01	22	40	0.01	7	30	>10000	9.80	85	<1
Y738469		9.01	<10	4	0.05	<10	0.02	31	56	0.01	5	70	7940	2.22	<2	<1
Y738470		4.17	<10	1	0.06	<10	< 0.01	37	3	0.01	3	20	1055	4.13	<2	<1
Y738471		3.81	<10	1	0.01	<10	0.02	53	1	0.01	2	20	45	3.54	<2	<1
Y738472		0.85	<10	1	0.01	<10	0.01	42	1	0.01	2	10	70	0.60	<2	<1
Y738473		1.15	<10	1	0.04	<10	0.02	43	2	0.02	4	140	15	0.37	<2	1
Y738474		1.11	<10	1	0.01	<10	< 0.01	36	1	0.02	1	<10	24	0.82	145	<1
Y738475		5.01	<10	<1	0.01	<10	0.02	38	4	0.01	4	30	42	4.33	<2	<1
Y738476		7.88	<10	<1	0.02	<10	0.07	125	6	0.01	11	40	103	8.60	6	<1
Y738477		2.44	<10	<1	0.02	<10	0.09	240	9	0.01	7	20	3460	0.88	<2	2
Y738478		2.96	<10	<1	0.12	<10	0.01	120	27	0.01	12	160	17	1.78	<2	1
Y738479		12.70	<10	<1	< 0.01	<10	0.17	226	1	0.01	23	<10	10	6.64	<2	4
Y738480		2.93	<10	1	0.03	<10	0.01	172	9	0.01	6	60	>10000	3.61	29	<1
Y738481		5.45	<10	1	<0.01	<10	<0.01	15	<1	0.01	2	20	>10000	>10.0	250	<1
Y738482		5.25	<10	<1	0.02	<10	<0.01	44	8	0.01	4	40	>10000	6.79	203	<1
Y738483		3.13	<10	1	0.01	<10	<0.01	36	8	0.01	3	30	>10000	3.13	23	<1
Y738484		2.40	<10	<1	0.03	<10	0.01	42	17	0.01	4	40	>10000	2.15	26	<1
Y738485		1.15	<10	<1	0.04	<10	<0.01	37	16	0.01	2	50	2520	0.17	7	<1
Y738486		3.00	<10	<1	0.07	<10	0.01	88	20	0.01	5	100	>10000	3.49	15	<1
Y738487		1.78	<10	<1	0.10	<10	0.03	84	15	0.01	5	150	189	1.39	<2	1
Y738488		2.51	<10	<1	0.13	10	0.01	41	15	<0.01	2	40	143	0.59	<2	<1
Y738489		2.27	<10	7	0.20	<10	0.08	184	<1	0.01	4	310	>10000	3.60	2810	<1
Y738490		2.59	<10	1	0.26	<10	0.07	43	2	0.02	5	480	3160	0.25	403	<1
Y738491		2.01	<10	1	0.23	<10	0.03	51	2	0.04	3	350	1700	0.22	569	<1
Y738492		0.68	<10	<1	0.21	<10	0.01	35	34	<0.01	2	110	789	0.15	16	<1
Y738493		1.67	<10	<1	0.34	10	0.12	44	2	0.06	2	500	1570	0.22	13	<1
Y738494		0.87	<10	<1	0.07	<10	0.05	73	4	0.01	5	80	145	0.05	2	<1
Y738495		0.77	<10	<1	0.09	<10	0.01	42	5	0.01	12	120	744	0.04	5	<1
Y738496		1.66	<10	<1	0.31	<10	0.05	32	35	0.02	1	820	2890	0.56	13	1
Y738497		0.65	<10	<1	0.06	<10	0.01	41	5	0.01	4	50	137	0.04	<2	<1
Y738498		2.96	<10	<1	0.02	<10	<0.01	40	8	0.01	10	<10	>10000	4.19	3	<1
Y738499		1.10	<10	<1	0.02	<10	<0.01	36	31	0.01	2	10	322	0.06	<2	<1
Y738500		1.18	<10	<1	0.04	<10	<0.01	35	124	0.01	3	10	3780	0.48	<2	<1
Y738501		1.30	<10	<1	0.05	<10	0.01	37	28	0.01	2	90	2380	0.18	63	<1



To: MILESTONE INFRASTRUCTURE INC **729 OKANAGAN AVE E** PENTICTON BC V2A 3K7

Page: 2 - C Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019

Account: MARRAY

CERTIFICATE OF ANALYSIS TR19227730

											CAILO	I ANALISIS	1113227730
Sample Description	Method Analyte Units LOD	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-OG46 Ag ppm 1	Cu-OG46 Cu % 0.001	Pb-OG46 Pb % 0.001	
Y738462 Y738463 Y738464 Y738465 Y738466		39 5 510 179 9	<20 <20 <20 <20 <20	<0.01 0.15 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	16 23 24 34 28	<10 <10 <10 <10 <10	53 19 258 47 17				
Y738467 Y738468 Y738469 Y738470 Y738471		80 38 158 4 4	<20 <20 <20 <20 <20	0.36 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	115 1 5 3 3	<10 <10 <10 <10 <10	31 6100 20 173 157	1480 172		>20.0	
Y738472 Y738473 Y738474 Y738475 Y738476		3 3 1 1 5	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	1 5 <1 2 3	<10 <10 <10 <10 <10	51 36 38 5590 310		3.17		
Y738477 Y738478 Y738479 Y738480 Y738481		10 2 16 39 72	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	8 7 17 1	10 <10 120 40 390	21 5 23 1120 590	137 531	1.035	12.55 >20.0	
Y738482 Y738483 Y738484 Y738485 Y738486		30 24 27 14 9	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	2 1 1 1 2	160 110 70 50 60	1475 150 95 178 586	286		>20.0 5.76 4.46 4.48	
Y738487 Y738488 Y738489 Y738490 Y738491		14 2 241 70 81	<20 <20 <20 <20 <20 <20	<0.01 <0.01 0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	3 4 4 5 4	<10 <10 <10 <10 <10	9 3 929 40 28	726 152		13.95	
Y738492 Y738493 Y738494 Y738495 Y738496		127 134 31 21 38	<20 <20 <20 <20 <20	<0.01 0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	8 7 3 4 26	10 10 <10 10 <10	3 21 5 4 8				
Y738497 Y738498 Y738499 Y738500 Y738501		32 7 2 2 4	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	4 2 1 4 3	<10 30 <10 <10 90	4 7 3 2 12	258		5.40	



To: MILESTONE INFRASTRUCTURE INC **729 OKANAGAN AVE E PENTICTON BC V2A 3K7**

Page: 3 - A Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019

C	EKIIFIC	TR1922//30				

												I ANA	L 1 313	111172	27730	
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738504 Y738505 Y738506 Y738507 Y738508		3.88 5.18 5.26 6.45 7.90	1.960 0.426 >10.0 >10.0 >10.0	13.15 12.75 71.1	8.6 3.6 71.6 >100 >100	0.03 0.14 0.25 0.03 0.15	4 <2 <2 <2 <2 2	<10 <10 <10 <10 <10	1880 60 310 60 30	<0.5 <0.5 <0.5 <0.5 <0.5	4 3 3 5 9	<0.01 0.01 0.01 <0.01 0.02	<0.5 <0.5 <0.5 7.6 23.8	26 20 17 20 25	20 20 15 17 11	62 31 2430 35 1070



To: MILESTONE INFRASTRUCTURE INC **729 OKANAGAN AVE E PENTICTON BC V2A 3K7**

Page: 3 - B Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019 **Account: MARRAY**

CERTIFICATE OF ANALYSIS	TR19227730

(· ()									C	ERTIFI	CATE C	F ANA	LYSIS	TR192	227730	
Sample Description	Method Analyte Units LOD	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP4 Sc ppm 1
Y738504 Y738505 Y738506 Y738507 Y738508		1.37 1.21 3.80 3.08 12.05	<10 <10 <10 <10 <10	<1 <1 <1 1 3	0.01 0.08 0.14 0.01 0.07	10 10 <10 10 <10	0.01 0.02 0.03 0.01 0.03	46 42 133 48 47	3 15 4 6 90	<0.01 0.01 0.01 0.01 0.01	3 3 2 8 12	30 120 280 70 130	80 30 812 >10000 >10000	0.14 0.10 0.38 2.45 6.93	11 <2 <2 <2 20 37	<1 1 1 <1 1



ALS Canada Ltd.

To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: 3 - C Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 26-OCT-2019

CERTIFICATE OF ANALYSIS TR1	9227730
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									C	EKIIFI	AILO	F ANALYSIS	1819227730
Sample Description	Method Analyte Units LOD	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-OG46 Ag ppm 1	Cu-OG46 Cu % 0.001	Pb-OG46 Pb % 0.001	
Y738504 Y738505 Y738506 Y738507 Y738508		67 3 10 6 21	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	3 6 8 3 7	<10 10 10 <10 <10	3 4 20 33 109	121 721		4.27 12.70	



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 26-OCT-2019

CERTIFICATE OF ANALTSIS TRIMEZZ//SC	CFRTIFICATE	OF ANALYSIS	TR19227730
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		CERTIFICATE COM	IMENTS	
		LABOR	ATORY ADDRESSES	
		ocated at 2912 Molitor Street, Terra		
Applies to Method:	CRU-31	CRU-QC	LOG-22	PUL-31
	PUL-QC	SPL-21	WEI-21	
Assorber to Made and		er located at 2103 Dollarton Hwy, No		6.0646
Applies to Method:	Ag-OG46 ME-ICP41	Au-GRA21 ME-OG46	Au-ICP21 Pb-OG46	Cu-OG46
	WE-ICF41	ME-OG40	PD-0G40	



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7

Page: 1 Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 13-OCT-2019

d Date: 13-OC1-2019 Account: MARRAY

CERTIFICATE VA19247282

This report is for 7 Rock samples submitted to our lab in Vancouver, BC, Canada on 1-OCT-2019.

The following have access to data associated with this certificate:

ARRON ALBANO	CHARLES GREIG	RAY MARKS
ANDREW MITCHELL		

SAMPLE PREPARATION						
ALS CODE	DESCRIPTION					
WEI-21	Received Sample Weight					
LOG-21	Sample logging - ClientBarCode					
CRU-31	Fine crushing - 70% <2mm					
SPL-21	Split sample - riffle splitter					
PUL-31	Pulverize split to 85% <75 um					

	ANALYTICAL PROCEDURES	
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Pb-OG46	Ore Grade Pb - Aqua Regia	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	

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

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

Signature:

Saa Traxler, General Manager, North Vancouver



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: 2 - A Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 13-OCT-2019

									С	ERTIFIC	CATE O	F ANAI	_YSIS	VA192	47282	
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
							Ī							4		T
									I							
D008056 D008057		1.80 2.62	1.115 0.772		6.8 6.1	0.08 0.11	<2 <2	<10 <10	70 100	<0.5 <0.5	<2 5	0.01 0.01	<0.5 <0.5	1 <1	25 19	25 24



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: 2 - B Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 13-OCT-2019

(, , , ,									С	ERTIFIC	CATE O	F ANAI	_YSIS	VA192	47282	
Sample Description	Method	ME-ICP41														
	Analyte	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc
	Units	%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.01	10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1
				•				ł	1			ļ	Ŧ		I	
D008056		0.97	<10	<1	0.06	<10	0.01	47	16	0.01	1	50	137	0.05	<2	<1
D008057		0.95	<10	<1	0.07	<10	0.01	53	21	0.01	<1	140	742	0.07	<2	<1



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: 2 - C Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 13-OCT-2019

CERTIFICATE OF ANALYSIS VA192

								J				
Sample Description	Method Analyte Units LOD	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-OG46 Ag ppm 1	Pb-OG46 Pb % 0.001	
		+		I			ı		ļ		-	
D008056 D008057		5 14	<20 <20	<0.01 <0.01	<10 <10	<10 <10	2 5	230 90	5 6			



To: MILESTONE INFRASTRUCTURE INC 729 OKANAGAN AVE E PENTICTON BC V2A 3K7 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 13-OCT-2019

Account: MARRAY

CERTIFICATE OF ANALYSIS VA19247282

		CERTIFICATE COM	MMENTS	
			ATORY ADDRESSES	
Applies to Method:	Processed at ALS Vancou Ag-OG46 LOG-21 PUL-31	over located at 2103 Dollarton Hwy, No Au-GRA21 ME-ICP41 SPL-21	orth Vancouver, BC, Canada. Au-ICP21 ME-OG46 WEI-21	CRU-31 Pb-OG46



To: RAY MARKS 729 OKANAGAN AVE E PENTICTON BC V2A 3K7

Page: 1 Total # Pages: 2 (A - C) **Plus Appendix Pages** Finalized Date: 23-SEP-2019 This copy reported on 26-SEP-2019

Account: MARRAY

CERTIFICATE TR19227729

This report is for 2 Rock samples submitted to our lab in Terrace, BC, Canada on 11-SEP-2019.

The following have access to data associated with this certificate:

ARRON ALBANO	CHARLES GREIG	RAY MARKS
ANDREW MITCHELL		

SAMPLE PREPARATION						
ALS CODE	DESCRIPTION					
WEI-21	Received Sample Weight					
LOG-22	Sample login - Rcd w/o BarCode					
CRU-QC	Crushing QC Test					
PUL-QC	Pulverizing QC Test					
CRU-31	Fine crushing - 70% <2mm					
SPL-21	Split sample - riffle splitter					
PUL-31	Pulverize split to 85% <75 um					

	ANALYTICAL PROCEDURE	:S
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	
Pb-OG46	Ore Grade Pb - Aqua Regia	
Ag-GRA21	Ag 30g FA-GRAV finish	WST-SIM
Pb-VOL70	Pb by Titration	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	

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: ***Corrected copy with sample descriptions Y728502 and Y728503 corrected to Y738502 and Y738503***

Signature: Colin Ramshaw, Vancouver Laboratory Manager



To: RAY MARKS **729 OKANAGAN AVE E** PENTICTON BC V2A 3K7

Page: 2 - A Total # Pages: 2 (A - C) **Plus Appendix Pages** Finalized Date: 23-SEP-2019

Account: MARRAY

CERTIFICATE OF ANALYSIS TR192277	29
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									C	ERTIFIC	CATE O	F ANAI	LYSIS	TR192	27729	
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738502 Y738503		0.72 2.79	6.86 >10.0	202	>100 >100	0.18 0.03	29 3	<10 <10	10 <10	<0.5 <0.5	2 15	0.04 <0.01	3.3 180.0	12 12	6 3	>10000 546

Comments: ***Corrected copy with sample descriptions Y728502 and Y728503 corrected to Y738502 and Y738503***



To: RAY MARKS
729 OKANAGAN AVE E
PENTICTON BC V2A 3K7

Page: 2 - B Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 23-SEP-2019 Account: MARRAY

									С	ERTIFIC	CATE O	F ANA	LYSIS	TR192	27729	
Sample Description	Method Analyte Units LOD	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
Y738502 Y738503		11.05 10.10	<10 <10	1 23	0.07 0.02	<10 10	0.01 <0.01	69 18	3 27	0.01 0.01	35 24	450 10	804 >10000	7.34 >10.0	118 103	1 <1

Comments: ***Corrected copy with sample descriptions Y728502 and Y728503 corrected to Y738502 and Y738503***



To: RAY MARKS **729 OKANAGAN AVE E PENTICTON BC V2A 3K7**

Page: 2 - C Total # Pages: 2 (A - C) **Plus Appendix Pages** Finalized Date: 23-SEP-2019

Account: MARRAY

CERTIFICATE OF ANALYSIS TR19227729

	Method	ME-ICP41	Ag-OG46	Cu-OG46	Pb-OG46	Ag-GRA21	Pb-VOL70							
	Analyte	Sr	Th	Ti	TI	U	V	W	Zn	Ag	Cu	Pb	Ag	Pb
Complete Description	Units	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	%
Sample Description	LOD	1	20	0.01	10	10	1	10	2	1	0.001	0.001	5	0.01
Y738502		43	<20	<0.01	<10	<10	4	<10	203	233	4.89			
Y738503		42	<20	<0.01	<10	<10	1	<10	4420	>1500		>20.0	1735	32.12

Comments: ***Corrected copy with sample descriptions Y728502 and Y728503 corrected to Y738502 and Y738503***



To: RAY MARKS **729 OKANAGAN AVE E PENTICTON BC V2A 3K7**

Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 23-SEP-2019

Account: MARRAY

		CERTIFICATE COM	MMENTS	
		LABOR	ATORY ADDRESSES	
Applies to Method:	Processed at ALS Terrace CRU-31 PUL-QC	located at 2912 Molitor Street, Terra CRU-QC SPL-21	ce, BC, Canada. LOG-22 WEI-21	PUL-31
Applies to Method:	Processed at ALS Vancouv Ag-GRA21 Cu-OG46 Pb-VOL70	ver located at 2103 Dollarton Hwy, No Ag-OG46 ME-ICP41	orth Vancouver, BC, Canada. Au-GRA21 ME-OG46	Au-ICP21 Pb-OG46



To: RAY MARKS
729 OKANAGAN AVE E
PENTICTON BC V2A 3K7

Page: 1 Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 31-AUG-2019 Account: MARRAY

CERTIFICATE TR19198900

This report is for 76 Rock samples submitted to our lab in Terrace, BC, Canada on 8-AUG-2019.

The following have access to data associated with this certificate:

ARRON ALBANO	CHARLES GREIG	RAY MARKS
ANDREW MITCHELL		

	SAMPLE PREPARATION
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

	ANALYTICAL PROCEDURES	
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	
Pb-OG46	Ore Grade Pb - Aqua Regia	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



To: RAY MARKS
729 OKANAGAN AVE E
PENTICTON BC V2A 3K7

Page: 2 - A Total # Pages: 3 (A - C) Plus Appendix Pages Finalized Date: 31-AUG-2019 Account: MARRAY

								<u> </u>								
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738051 Y738053 Y738054 Y738055 Y738056		1.70 1.60 1.21 1.12 0.87	2.86 1.805 0.091 0.073 4.10		30.4 8.1 1.4 0.3 >100	0.01 0.03 1.74 1.11 0.02	<2 <2 <2 <2 <2	<10 <10 <10 <10 <10	220 20 40 40 <10	<0.5 <0.5 <0.5 <0.5 <0.5	<2 <2 2 4 <2	0.01 <0.01 0.36 0.20 0.01	5.2 <0.5 <0.5 <0.5 125.5	1 14 37 36 2	17 14 2 11 7	173 7 264 206 306
Y738057 Y738058 Y738059 Y738060 Y738061		0.64 1.01 0.61 1.51 1.72	0.002 0.042 0.002 2.000 0.115		0.3 3.4 0.2 42.9 35.7	0.04 0.49 2.29 0.19 0.18	<2 6 <2 <2 20	<10 <10 <10 <10 <10	20 120 450 50 40	<0.5 <0.5 0.6 <0.5 <0.5	<2 2 2 12 2	0.33 3.92 18.3 0.72 2.01	<0.5 12.9 0.9 12.8 3.6	2 5 5 29 5	12 17 9 24 18	2 826 19 >10000 2380
Y738062 Y738063 Y738064 Y738065 Y738066		1.10 0.98 1.54 1.40 1.84	0.162 2.22 >10.0 6.15 0.015	50.6	3.4 64.0 >100 >100 0.9	0.03 0.22 0.02 0.01 1.37	6 3 <2 <2 <2	<10 <10 <10 <10 <10	110 10 130 90 10	<0.5 <0.5 <0.5 <0.5 <0.5	5 16 17 6 <2	0.17 0.19 <0.01 <0.01 0.12	<0.5 31.3 5.6 1.4 <0.5	3 3 1 1 12	18 14 12 10 18	45 >10000 288 113 1005
Y738067 Y738068 Y738069 Y738071 Y738072		0.95 0.77 1.04 0.91 0.70	0.006 0.004 0.005 0.006 0.006		0.3 0.2 0.4 0.3 0.4	0.10 0.23 0.86 0.03 0.24	<2 <2 2 2 15	<10 <10 <10 <10 <10	20 170 30 10 30	<0.5 <0.5 <0.5 <0.5 <0.5	<2 <2 2 <2 2	0.42 1.39 0.93 0.01 0.03	<0.5 <0.5 <0.5 <0.5 0.6	7 5 13 <1 9	15 9 14 15 15	21 6 130 11 12
Y738073 Y738074 Y738075 Y738076 Y738077		0.58 0.65 0.42 0.71 2.09	0.001 0.018 0.024 0.079 0.009		0.2 0.7 0.7 0.7 <0.2	0.06 0.16 0.15 0.12 0.07	2 5 18 <2 <2	<10 <10 <10 <10 <10	20 10 70 10 30	<0.5 <0.5 <0.5 <0.5 <0.5	<2 2 <2 <2 <2	0.33 0.07 <0.01 0.79 2.41	<0.5 <0.5 <0.5 <0.5 <0.5	2 20 9 3 9	18 12 10 15 14	8 27 65 3 6
Y738078 Y738079 Y738080 Y738081 Y738082		0.70 1.21 0.57 1.03 1.68	0.001 0.080 >10.0 1.350 0.730	12.80	<0.2 0.2 >100 19.4 64.5	1.35 0.12 0.03 0.29 0.06	<2 3 <2 <2 <2	<10 <10 <10 <10 <10	580 120 20 100 90	<0.5 <0.5 <0.5 <0.5 <0.5	<2 10 <2 <2 <2	0.38 0.02 0.01 2.54 0.03	<0.5 <0.5 14.9 11.7 21.2	27 3 <1 9 1	22 11 9 7 23	3 33 1975 1105 1480
Y738083 Y738084 Y738085 Y738092 Y738093		1.09 0.76 1.86 1.18 1.85	5.53 1.530 1.040 0.162 0.238		>100 20.2 >100 4.3 5.4	0.07 0.02 0.04 0.05 0.07	2 <2 <2 <2 <2	<10 <10 <10 <10 <10	30 310 20 30 40	<0.5 <0.5 <0.5 <0.5 <0.5	6 <2 <2 <2 <2	0.02 <0.01 0.01 <0.01 0.01	62.9 5.0 25.1 <0.5 <0.5	3 <1 2 <1 1	17 13 17 19 21	8410 145 454 542 377
Y738094 Y738095 Y738143 Y738144 Y738145		1.24 2.70 1.33 0.68 0.80	2.80 0.006 0.011 0.003 0.441		22.9 0.2 0.3 1.0 1.8	0.08 0.75 0.19 0.64 0.16	<2 2 <2 2 <2	<10 <10 <10 <10 <10	280 80 10 10 30	<0.5 <0.5 <0.5 <0.5 <0.5	<2 <2 <2 <2 <2	<0.01 0.99 0.09 0.52 0.91	<0.5 <0.5 <0.5 2.4 <0.5	2 26 12 15 41	16 8 10 9 2	166 60 5 199 31



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PENTICTON BC V2A 3K7

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Y738068 2.45 <10 <1 0.14 <10 0.29 878 <1 <0.01 4 120 35 0.60 <2 2 Y738069 8.53 <10 <1 0.04 <10 0.07 63 2 <0.01 17 780 44 1.24 <2 2 Y738071 1.19 <10 <1 0.01 <10 0.01 36 2 <0.01 2 10 14 0.02 <2 <1 Y738072 3.65 <10 <1 0.06 <10 0.08 62 3 <0.01 8 150 22 2.32 <2 1 Y738073 1.49 <10 <1 0.02 <10 0.02 74 3 <0.01 4 360 27 7.07 <2 <1 Y738075 5.63 <10 <1 0.02 <10 0.01 41 0.01 7 40 16									<u> </u>								
\text{Y38053} \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qqquad \qqqqq \qqqqq \qqqqqq \qqqqqqqqqqqqqq	Sample Description	Analyte Units	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm
\text{Y38053} \qquad 3.17 \qquad <10 \qquad <1 \qquad 0.01 \qquad <10 \qquad <0.01 \qquad 2. \qquad 1.01 \qquad 15 \qqqqq \qqqqqq	Y738051		0.80	<10	<1	<0.01	<10	<0.01	55	4	<0.01	3	10	>10000	0.45	7	<1
\(\cap 2 \) \(\cap 3 \) \(\cap 4 \) \(\cap 5 \) \(\cap 6 \) \(\c			3.17	<10	<1	0.01	<10	< 0.01	23	1	0.01	12	80	36	3.11	<2	<1
\(\cap 2 \) \(\cap 3 \) \(\cap 5 \) \(\cap 6 \) \(\c			10.90	10	1	0.05	10	1.56	470	4	0.09	2	1810	157	4.50	<2	19
\$\cap 738056 6.83					1					3							
Y738058 2.15 <10 <1 <10 <10 <10 <10 <10 <10 <10 <10 <10 <2 2 Y738059 <2 <2 <2 Y738050 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <1 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10					1		<10			2				>10000			<1
\text{Y38069} \text{6.72} & 10 & <1 & 0.73 & <10 & 6.04 & 3120 & <1 & <0.01 & 29 & 800 & 73 & 0.23 & <2 & 9 \\text{Y38060} \text{73} & \text{Col} & 1 & 1 & 0.01 & 29 & 800 & 73 & 0.23 & <2 & 9 \\text{Y38060} \text{73} & \text{Col} & 1 & 1 & 0.01 & 18 & 310 & 281 & 0.10 & 15 & 4 \\\text{Y38061} \text{V38061} & 1 & <10 & <1 & 0.02 & <10 & 0.10 & 686 & 1 & 0.01 & 18 & 310 & 281 & 0.10 & 15 & 4 \\\text{Y38062} \text{V38063} & 3.32 & <10 & <1 & 0.02 & <10 & 0.01 & 151 & 1 & <0.01 & 7 & 60 & >10000 & 310 & 22 & 11 \\\text{Y38063} & 3.35 & <10 & <1 & 0.01 & <10 & 0.13 & 381 & 1 & <0.01 & 7 & 60 & >10000 & 310 & 22 & 11 \\\text{Y38064} & 4.00 & <10 & <1 & 0.01 & <10 & <0.01 & <10 & <1 & <0.01 & 32 & 22 & <0.01 & 6 & 20 & > 10000 & 310 & 22 & 17 \\\\text{Y38065} & 3.45 & 10 & <1 & 0.02 & <10 & <0.01 & 38 & 47 & <0.01 & 2 & 20 & > 10000 & 310 & 22 & 27 & <1 \\\\\\text{Y38066} & 3.45 & 10 & <1 & 0.02 & <10 & <0.01 & 38 & 47 & <0.01 & 2 & 20 & > 10000 & 302 & 27 & <1 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Y738057		2.51	<10	<1	0.01	<10	0.04	617	<1	<0.01	2	20	133	0.09	<2	1
Y738060 6.72 <10 <1 0.14 <10 0.27 906 1 <0.01 71 180 201 4.48 <2 2 Y738061 1.81 <10 <1 0.02 <10 0.01 166 1 <0.01 18 310 281 0.10 56 <1 Y738062 3.42 <10 <1 0.01 <10 0.01 161 1 <0.01 7 60 >10000 3.10 22 1 Y738064 4.30 <1 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 32 <2 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.01 <1 <0.02 <1 <0.02 <1 <0.02	Y738058		2.15	<10	<1	0.14	<10	1.26	730	1	0.01	6	170	1775	0.37	<2	2
Y738061 1.81 <10 <1 0.09 <10 0.10 696 1 0.01 18 310 281 0.10 15 4 Y738062 3.42 <10	Y738059		6.72	10	<1	0.73	<10	6.04	3120	<1	< 0.01	29	800	73	0.23	<2	9
Y738062 3.42 <10	Y738060		6.72	<10	<1	0.14	<10	0.27	906	1	< 0.01	71	180	201	4.48	<2	2
Y738063 3.75 <10 <11 0.17 <10 0.13 381 1 <0.01 7 60 >10000 3.10 22 1 Y738065 2.57 <10 <1 0.03 <10 <0.01 38 47 <0.01 2 20 >10000 3.02 27 <1 Y738066 3.45 10 <1 0.02 <10 0.01 38 47 <0.01 2 20 >10000 30 2 2 8 Y738067 2.01 <10 <1 0.04 <10 0.02 855 3 <0.01 10 110 57 0.78 <2 1 Y738068 2.45 <10 <1 0.04 <10 0.02 878 <1 <0.01 1 10 35 0.60 <2 2 2 Y738073 1.19 <10 <1 0.01 <10 0.01 36 2 <0.0	Y738061		1.81	<10	<1	0.09	<10	0.10	696	1	0.01	18	310	281	0.10	15	4
Y738064 4,30 <10 <1 0.01 <10 <0.01 32 22 <0.01 6 2.0 >10000 1.81 40 <1 Y738065 2.57 <10 <1 0.03 <10 <0.01 38 47 <0.01 2 20 >10000 3.02 27 <1 Y738066 3.45 10 <1	Y738062		3.42	<10	<1	0.02	<10	0.01	151	1	<0.01		30	85	1.94	5	<1
Y738065 2.57 <10 <1 0.03 <10 <0.01 38 47 <0.01 2 20 >10000 3.02 27 <1 Y738066 2.01 <10	Y738063		3.75	<10	<1	0.17	<10	0.13	381	1	<0.01	-	60	>10000	3.10	22	1
Y738066 3.45 10 <1 0.02 <10 1.01 312 1 0.03 7 330 219 0.39 2 8 Y738067 2.01 <10	Y738064		4.30	<10	<1	0.01	<10	<0.01	32	22	<0.01			>10000	1.81	40	<1
Y738067	Y738065		2.57	<10	<1	0.03	<10	<0.01	38	47	<0.01	2	20	>10000	3.02	27	<1
Y738068 2.45 <10 <1 0.14 <10 0.29 878 <1 <0.01 4 120 35 0.60 <2 2 Y738071 1.19 <10 <1 0.04 <10 0.07 63 2 0.01 17 780 44 1.24 <2 2 Y738073 1.49 <10 <1 0.06 <10 0.08 62 3 <0.01 8 150 22 232 <2 1 Y738073 1.49 <10 <1 0.02 <10 0.02 74 3 <0.01 8 150 22 232 22 2.1 Y738074 6.80 <10 <1 0.02 <10 0.07 42 8 0.01 4 360 27 7.07 <2 <1 Y738075 5.63 <10 <1 0.02 <10 0.12 226 <1 <0.01 4 150	Y738066		3.45	10	<1	0.02	<10	1.01	312	1	0.03	7	330	219	0.39	2	8
Y738069 8.53 <10 <1 0.04 <10 0.07 63 2 0.01 17 780 44 1.24 <2 2 Y738072 3.65 <10	Y738067																•
Y738071 1.19 <10			-		· ·												
Y738072 3.65 <10 <1 0.06 <10 0.08 62 3 <0.01 8 150 22 2.32 <2 1 Y738073 1.49 <10	Y738069		8.53	<10	<1	0.04	<10	0.07	63		0.01		780	44			2
Y738073 1.49 <10 <1 0.02 <10 0.02 74 3 <0.01 2 20 11 0.87 <2 <1 Y738074 6.80 <10 <1 0.03 <10 0.07 42 8 0.01 4 360 27 7.07 <2 <1 Y738075 5.63 <10 <1 0.08 <10 0.01 41 11 10.01 7 40 16 3.87 <2 1 Y738076 0.82 <10 <1 0.02 <10 0.12 226 <1 <0.01 4 150 26 0.41 <2 1 Y738077 6.23 <10 <1 0.02 <10 0.17 472 5 0.01 9 250 18 6.40 <2 1 Y738078 4.90 10 1 0.02 <10 0.18 71 0.06 85 500 8	Y738071			<10	<1	0.01	<10	0.01	36		<0.01		10			<2	<1
Y738074 6.80 <10 <1 0.03 <10 0.07 42 8 0.01 4 360 27 7.07 <2 <1 Y738075 5.63 <10 <1 0.08 <10 0.01 41 11 0.01 7 40 16 3.87 <2 1 Y738076 0.82 <10 <1 0.02 <10 0.12 226 <1 <0.01 4 150 26 0.41 <2 1 Y738077 6.23 <10 <1 0.02 <10 0.17 472 5 0.01 9 250 18 6.40 <2 1 Y738078 4.90 10 1 0.02 <10 1.87 719 <1 0.06 85 500 8 0.41 <2 8 Y738078 4.00 1 0.01 <10 0.05 96 1 0.06 8 0.41 <2	Y738072		3.65	<10	<1	0.06	<10	0.08	62	3	<0.01	8	150	22	2.32	<2	1
Y738075 5.63 <10																	
Y738076 0.82 <10 <1 0.02 <10 0.12 226 <1 <0.01 4 150 26 0.41 <2 1 Y738077 6.23 <10 <1 0.02 <10 0.17 472 5 0.01 9 250 18 6.40 <2 1 Y738078 4.90 10 1 0.09 <10 1.87 719 <1 0.06 85 500 8 0.41 <2 8 Y738079 8.23 <10 <1 0.09 <10 1.87 719 <1 0.06 85 500 8 0.41 <2 <1 Y738080 4.46 <10 <1 0.03 <10 <0.01 23 39 <0.01 1 60 >10000 3.84 38 <1 Y738081 2.96 <10 <1 0.03 <10 0.01 117 32 <0.01 3 146																	
Y738077 6.23 <10 <1 0.02 <10 0.17 472 5 0.01 9 250 18 6.40 <2 1 Y738078 4.90 10 1 0.09 <10																	
Y738078 4.90 10 1 0.09 <10 1.87 719 <1 0.06 85 500 8 0.41 <2 8 Y738079 8.23 <10 <1 0.01 <10 0.05 96 1 0.01 7 60 8 1.02 <2 <1 Y738080 4.46 <10 <1 0.03 <10 <0.01 23 39 <0.01 1 60 >10000 3.84 38 <1 Y738081 2.96 <10 <1 0.02 <1 0.01 13 3280 21 <0.01 8 1460 4900 0.94 2 4 Y738082 1.39 <10 <1 0.05 <10 0.01 117 32 <0.01 3 100 >10000 1.58 27 1 Y738083 3.20 <10 <1 0.05 <10 0.01 50 6 0.01 5																	· ·
Y738079 8.23 <10	Y738077		6.23	<10	<1	0.02	<10	0.17	472	5	0.01		250		6.40	<2	1
Y738080 4.46 <10					· ·												-
Y738081 2.96 <10														-			
Y738082 1.39 <10 <1 0.05 <10 0.01 117 32 <0.01 3 100 >10000 1.58 27 1 Y738083 3.20 <10			-		· ·							-					
Y738083 3.20 <10 1 0.05 <10 0.01 50 6 0.01 5 80 >10000 3.34 23 1 Y738084 1.66 <10 <1 0.02 <10 <0.01 34 14 0.01 1 20 6690 0.80 4 <1 Y738085 3.87 <10 <1 0.02 <10 0.02 32 5 <0.01 3 40 >10000 4.36 60 <1 Y738092 1.06 <10 <1 0.05 <10 <0.01 62 1 <0.01 1 30 462 0.18 <2 <1 Y738093 0.88 <10 <1 0.02 <10 0.01 55 1 <0.01 2 40 89 0.23 <2 <1 Y738094 3.29 <10 <1 0.07 <10 0.01 147 21 <0.01 4 90<																	
Y738084 1.66 <10	Y738082		1.39	<10	<1	0.05	<10	0.01	117	32	<0.01	3	100	>10000	1.58	27	1
Y738085 3.87 <10																	
Y738092 1.06 <10												•					
Y738093 0.88 <10 <1 0.02 <10 0.01 55 1 <0.01 2 40 89 0.23 <2 <1 Y738094 3.29 <10												-					
Y738094 3.29 <10										•		=					
Y738095 2.26 <10				<10						-							<1
Y738143 4.97 <10 <1 0.01 <10 0.11 47 1 0.05 8 390 52 4.72 <2 1 5.95 <10 <1 0.02 <10 0.60 396 1 0.03 7 180 327 4.91 25 4	Y738094																
Y738144 5.95 <10 <1 0.02 <10 0.60 396 1 0.03 7 180 327 4.91 25 4																	
										-							•
Y738145 8.58 <10 <1 0.02 <10 0.19 407 1 0.07 15 3000 22 3.23 2 10										-							
	Y738145		8.58	<10	<1	0.02	<10	0.19	407	1	0.07	15	3000	22	3.23	2	10



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								<u> </u>			<i>5,</i>	ANALISIS	1113130300
Sample Description	Method Analyte Units LOD	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-OG46 Ag ppm 1	Cu-OG46 Cu % 0.001	Pb-OG46 Pb % 0.001	
Y738051 Y738053 Y738054		42 17 6	<20 <20 <20	<0.01 <0.01 0.14	<10 <10 <10	<10 <10 <10	1 1 60	<10 <10 <10	23 <2 54			2.08	
Y738055 Y738056		4 22	<20 <20	0.13 <0.01	<10 <10	<10 <10	30 1	<10 330	5 2250	267		>20.0	
Y738057 Y738058 Y738059 Y738060 Y738061		9 291 1550 31 5	<20 <20 <20 <20 <20	0.01 0.02 0.07 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	28 23 100 7 6	<10 <10 <10 <10 <10	8 906 114 209 72		1.525		
Y738062 Y738063 Y738064 Y738065 Y738066		18 10 18 7 4	<20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	4 6 1 1 76	170 10 20 <10	7 387 118 4 81	479 136	2.07	3.97 16.05 11.85	
Y738067 Y738068 Y738069 Y738071 Y738072		6 22 124 2 2	<20 <20 <20 <20 <20 <20	<0.01 <0.01 0.36 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	2 12 45 1 7	<10 <10 <10 <10 <10	3 20 3 <2 48				
Y738073 Y738074 Y738075 Y738076 Y738077		5 1 2 24 80	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 10	2 7 7 4 4	<10 <10 <10 50 <10	6 23 8 8 4				
Y738078 Y738079 Y738080 Y738081 Y738082		30 2 14 60 110	<20 <20 <20 <20 <20	0.03 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	135 8 2 10 2	<10 <10 510 20 120	35 2 23 389 114	263		14.05 6.58	
Y738083 Y738084 Y738085 Y738092 Y738093		5 6 64 2 2	<20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	2 1 2 1 2	60 70 120 <10 <10	1800 175 91 3 2	99 110		2.97 9.57	
Y738094 Y738095 Y738143 Y738144 Y738145		21 41 4 20 49	<20 <20 <20 <20 <20	<0.01 0.19 <0.01 <0.01 0.04	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	3 27 11 36 64	<10 <10 <10 <10 <10	15 8 21 139 16				



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PENTICTON BC V2A 3K7

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	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02 1.10 0.92 0.94 0.94 0.88 1.49	Au-ICP21 Au ppm 0.001 0.103 0.033 0.028 0.118	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2 0.5 0.6	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP4 Cu ppm 1
7738146 7738147 7738148 7738149 7738150 7738200 7738205 7738206 7738207 7738208	Analyte Units	kg 0.02 1.10 0.92 0.94 0.94 0.88	0.001 0.103 0.033 0.028 0.118	ppm	ppm 0.2 0.5	% 0.01 0.78	ppm 2	ppm 10	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Y738146 Y738147 Y738148 Y738149 Y738150 Y738200 Y738205 Y738205 Y738206 Y738207 Y738208		0.02 1.10 0.92 0.94 0.94 0.88 1.49	0.001 0.103 0.033 0.028 0.118		0.2	0.01	2	10								
Y738146 Y738147 Y738148 Y738149 Y738150 Y738200 Y738205 Y738205 Y738206 Y738207 Y738208	LOD	1.10 0.92 0.94 0.94 0.88	0.103 0.033 0.028 0.118	0.05	0.5	0.78			10	0.5	2	0.01	0.5	1	1	1
Y738147 Y738148 Y738149 Y738150 Y738200 Y738205 Y738206 Y738207 Y738208		0.92 0.94 0.94 0.88	0.033 0.028 0.118				<2									•
7738148 7738149 7738150 7738200 7738205 7738206 7738207 7738208		0.94 0.94 0.88	0.028 0.118		0.6			<10	50	<0.5	<2	2.14	<0.5	18	10	22
Y738149 Y738150 Y738200 Y738205 Y738206 Y738207 Y738208		0.94 0.88 1.49	0.118			0.16	40	<10	10	<0.5	4	0.01	<0.5	71	9	12
Y738150 Y738200 Y738205 Y738206 Y738207 Y738208		0.88 1.49			6.4	0.06	9	<10	10	<0.5	4	0.03	117.0	24	23	>1000
Y738200 Y738205 Y738206 Y738207 Y738208		1.49	0.005		23.5	0.02	21	<10	10	<0.5	<2	0.01	<0.5	36	19	9500
Y738205 Y738206 Y738207 Y738208			0.005		0.8	0.05	3	<10	60	<0.5	<2	0.43	<0.5	6	22	90
Y738206 Y738207 Y738208			2.39		>100	0.01	3	<10	<10	<0.5	7	0.01	18.3	38	13	173
Y738207 Y738208		0.63	0.349		7.0	0.09	<2	<10	1690	<0.5	10	0.01	<0.5	1	20	49
Y738208		0.95	0.039		4.3	0.15	<2	<10	1660	<0.5	4	<0.01	<0.5	<1	22	18
		0.89	0.024		1.5	0.28	<2	<10	1180	<0.5	<2	0.02	<0.5	1	7	6
V729200		1.12	0.887		40.0	0.33	2	<10	490	<0.5	53	0.02	<0.5	1	4	53
		0.61	0.002		0.7	0.09	<2	<10	340	<0.5	<2	0.01	<0.5	1	17	16
Y738218		1.05	0.186		8.1	0.22	<2	<10	240	<0.5	3	0.16	2.1	2	14	282
Y738219		2.06	0.083		21.7	0.03	<2	<10	10	<0.5	46	<0.01	<0.5	1	34	27
Y738222		1.14	0.013		0.4	0.06	<2	<10	2620	<0.5	<2	0.01	<0.5	2	21	3
Y738251		1.57	0.147		9.5	0.24	<2	<10	70	<0.5	<2	0.21	2.8	6	27	3780
Y738252		1.58	0.906		7.5	0.16	5	<10	540	<0.5	2	1.50	0.6	6	18	312
Y738253		1.32	1.725		91.3	0.02	<2	<10	10	<0.5	2	0.01	50.7	1	30	6620
Y738254		1.52	0.090		1.3	0.20	<2	<10	50	<0.5	<2	3.00	2.4	14	19	47
Y738255		0.75	0.020		8.0	0.61	2	<10	700	<0.5	<2	3.31	0.8	24	7	133
Y738256		1.71	4.86		95.5	0.03	<2	<10	20	<0.5	<2	0.02	3.8	4	30	4510
Y738257		1.84	4.41		63.4	0.20	<2	<10	40	<0.5	<2	0.36	0.8	24	14	>1000
Y738258		1.55	0.679		68.3	0.10	2	<10	60	<0.5	5	0.09	5.8	4	20	408
Y738259		1.72	0.915		67.9	0.08	<2	<10	50	<0.5	9	0.35	16.4	5	21	6150
Y738260		2.09	0.733		24.6	0.06	<2	<10	230	<0.5	2	0.01	0.6	1	30	150
Y738261		1.28	0.565		3.0	0.15	<2	<10	70	<0.5	<2	0.16	<0.5	8	24	23
Y738266		0.34	3.37		>100	0.04	<2	<10	20	<0.5	568	<0.01	0.5	2	19	148
Y738267		0.83	0.556		8.3	0.14	<2	<10	770	<0.5	8	0.02	<0.5	2	16	33
Y738269		1.20	0.270		1.9	0.07	<2	<10	380	<0.5	3	<0.01	<0.5	1	28	13
Y738270		0.68	0.131		35.2	0.21	3	<10	110	<0.5	3	0.40	1.4	6	19	7280
Y738271		0.57	0.042		0.6	0.13	2	<10	270	<0.5	<2	0.07	<0.5	6	21	54
Y738272		0.86	0.474		33.6	0.06	<2	<10	270	<0.5	22	0.62	1.7	2	23	57
Y738273		0.91	0.003		0.3	0.30	<2	<10	30	<0.5	<2	16.3	<0.5	18	15	27
Y738274		0.78	<0.001		0.2	0.31	<2	<10	60	<0.5	<2	1.47	<0.5	1	3	4
Y738275		1.07	0.012		<0.2	0.12	<2	<10	810	<0.5	<2	80.0	<0.5	2	25	2
Y738276		1.46	0.614		>100	0.15	310	<10	270	<0.5	3	0.10	21.2	3	16	2390
Y738283		0.58	0.014		1.2	0.17	5	<10	50	<0.5	<2	0.01	<0.5	2	14	151



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	0.01	<10	0.03	64	1	0.01	10	30	21	3.29	4	<1
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	0.01	<10	0.07	413	2	0.02	2	60	17	3.38	2	1
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	<10 4	<10 4 0.12	<10 4 0.12 <10	<10 4 0.12 <10 0.02	<10 4 0.12 <10 0.02 253	<10 4 0.12 <10 0.02 253 60	<10 4 0.12 <10 0.02 253 60 0.01	<10 4 0.12 <10 0.02 253 60 0.01 4	<10 4 0.12 <10 0.02 253 60 0.01 4 280	<10 4 0.12 <10 0.02 253 60 0.01 4 280 >10000	<10 4 0.12 <10 0.02 253 60 0.01 4 280 >10000 0.89	<10 4 0.12 <10 0.02 253 60 0.01 4 280 >10000 0.89 2980



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								I ANALISIS	11(19190900
ME-ICP41 ME-ICP41 Sr Th ppm ppm 1 20	ME-ICP41 ME-IC Ti TI % ppi 0.01 10	U m ppm	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-OG46 Ag ppm 1	Cu-OG46 Cu % 0.001	Pb-OG46 Pb % 0.001	
63 <20 3 <20 2 <20	0.10 <1 <0.01 <1 <0.01 <1	0 <10	98 7 2	<10 <10 10	124 2 8200		1.120		
1 <20 12 <20	<0.01 <1 <0.01 <1 <0.01 <1	0 <10	2 2	<10 <10 <10	49 24		1.120		
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153 <20 93 <20	<0.01 <1 <0.01 <1	0 <10	5 6	20 <10	12 23				
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118 <20 13 <20	<0.01 <1 <0.01 <1	0 <10	1 4	<10 <10	5 119				
122 <20 3 <20 172 <20	<0.01 <1 <0.01 <1 <0.01 <1	0 <10	12 1 9	750 210 440	32 783 69				
79 <20 2 <20	0.04 <1 <0.01 <1	0 <10	56 1	40 20	93 91				
12 <20 22 <20 20 <20	<0.01 <1 <0.01 <1 <0.01 <1	0 <10	6 6 4	40 10 280	45 66 49		1.065	3.73 5.07	
8 <20 23 <20	<0.01 <1 <0.01 <1	0 <10	2 4	10 <10	5 12				
3 <20 170 <20 22 <20	<0.01 <1 <0.01 <1 <0.01 <1	0 <10	3 5 3	<10 490 <10	32 19 5	185			
141 <20 16 <20	<0.01 <1 <0.01 <1	0 <10	7 4	10 <10	56 11			1.590	
124 <20 571 <20 66 <20	0.03 <1) <10 0 <10	2 14 15	370 <10 <10	15 73 9			1.325	
63 <20	<0.01 <1	0 10	4	<10	409	237		2.38	
571 66 20	<20 <20 <20	<20 <0.01 10 <20 0.03 <1 <20 <0.01 <1 <20 <0.01 <1	<20	<20	<20	<20	<20	<20	<20



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		CERTIFICATE COM	MENTS	
		LABOR	ATORY ADDRESSES	
		located at 2912 Molitor Street, Terra		
Applies to Method:	CRU-31 PUL-QC	CRU-QC SPL-21	LOG-21 WEI-21	PUL-31
Applies to Method:	Processed at ALS Vancous Ag-OG46	ver located at 2103 Dollarton Hwy, No Au-GRA21	orth Vancouver, BC, Canada. Au-ICP21	Cu-OG46
Applies to Method.	ME-ICP41	ME-OG46	Pb-OG46	Cu-0G46
			. 2 33.13	



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CERTIFICATE TR19200013

This report is for 29 Rock samples submitted to our lab in Terrace, BC, Canada on 8-AUG-2019.

The following have access to data associated with this certificate:

ARRON ALBANO	CHARLES GREIG	RAY MARKS
ANDREW MITCHELL		

	SAMPLE PREPARATION
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

	ANALYTICAL PROCEDURI	ES
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	
Pb-OG46	Ore Grade Pb - Aqua Regia	
Zn-OG46	Ore Grade Zn - Aqua Regia	
Ag-GRA21	Ag 30g FA-GRAV finish	WST-SIM
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



To: RAY MARKS
729 OKANAGAN AVE E
PENTICTON BC V2A 3K7

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Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738070		2.42	0.008		<0.2	0.05	23	<10	10	<0.5	3	0.10	<0.5	50	7	193
Y738086		1.29	0.029		1.7	0.03	2	<10	10	<0.5	<2	0.01	<0.5	13	11	520
Y738087		1.37	0.009		1.8	0.14	19	<10	10	<0.5	<2	0.02	< 0.5	3	12	251
Y738088		0.38	0.046		6.0	0.07	3	<10	20	<0.5	<2	0.02	0.6	4	10	4200
Y738089		0.37	0.148		0.9	0.90	92	<10	10	<0.5	2	4.22	<0.5	49	5	16
7738090		1.68	0.004		8.0	0.32	3	<10	20	<0.5	<2	0.04	6.7	12	15	1220
738091		0.68	0.294		48.8	0.34	22	<10	20	<0.5	5	0.03	<0.5	30	8	4510
7738186		2.16	3.07		22.2	0.15	3	<10	30	<0.5	<2	0.65	<0.5	20	12	2080
Y738187		1.58	3.94		30.4	0.03	2	<10	20	<0.5	5	0.01	0.5	19	12	2070
Y738188		1.65	0.292		2.2	0.03	<2	<10	10	<0.5	<2	0.01	<0.5	2	13	45
738189		1.90	0.805		2.0	0.11	2	<10	20	<0.5	<2	0.36	<0.5	19	15	20
738190		1.61	0.204		3.0	1.30	3	<10	410	<0.5	<2	0.22	<0.5	16	6	52
738191		1.83	0.005		0.4	0.37	2	<10	30	<0.5	<2	0.14	<0.5	10	22	151
7738192		0.71	0.009		0.2	0.12	5	<10	30	<0.5	<2	0.03	0.6	12	12	5
7738193		1.33	0.429		36.6	1.37	2	<10	10	<0.5	<2	0.31	<0.5	20	7	>10000
7738194		1.68	0.021		3.1	0.03	18	<10	20	<0.5	<2	<0.01	0.8	28	12	2310
Y738195		1.87	0.001		1.1	0.15	<2	<10	30	<0.5	<2	0.14	6.6	4	19	624
7738196		1.64	0.019		2.0	0.01	12	<10	<10	<0.5	<2	<0.01	<0.5	14	13	586
Y738197		1.63	0.044		9.1	0.42	2	<10	20	<0.5	5	0.40	118.0	12	17	>10000
Y738198		1.67	0.160		28.5	0.02	47	<10	<10	<0.5	4	0.01	170.0	31	11	>10000
738199		1.04	4.04		>100	0.15	455	<10	<10	<0.5	74	0.01	4.0	202	10	>10000
7738202		1.04	1.610		45.3	0.23	174	<10	220	<0.5	32	0.01	0.6	2	13	1270
Y738203		1.03	4.56		>100	0.34	536	<10	20	<0.5	471	0.02	62.4	4	9	6240
Y738204		0.69	0.221		9.2	0.40	8	<10	910	<0.5	3	0.01	<0.5	4	7	315
Y738220		2.66	0.292		99.8	0.03	5	<10	30	<0.5	359	<0.01	<0.5	1	20	124
Y738221		1.43	0.786		>100	0.02	<2	<10	40	<0.5	210	<0.01	114.5	<1	7	145
Y738262		1.90	0.938		>100	0.02	<2	<10	10	<0.5	656	<0.01	35.7	1	15	522
Y738263		1.95	0.445		>100	0.02	<2	<10	30	<0.5	345	<0.01	11.2	1	18	380
Y738268		1.36	>10.0	15.35	>100	0.05	1910	<10	<10	< 0.5	1755	< 0.01	233	3	2	>10000



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Sample Description	Method Analyte Units LOD	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
Y738070		46.0	10	2	0.01	<10	0.10	<5	3	0.01	289	180	<2	>10.0	<2	<1
7738086		5.50	<10	<1	0.02	<10	<0.01	36	20	< 0.01	2	20	68	5.90	<2	<1
738087		3.75	<10	<1	0.03	<10	0.06	44	6	0.02	3	240	1220	1.49	<2	1
738088		1.58	<10	<1	0.03	<10	0.02	76	2	0.01	<1	60	30	1.20	<2	<1
738089		12.85	<10	1	0.07	<10	0.35	1410	1	<0.01	6	230	14	>10.0	<2	6
738090		4.07	<10	<1	0.03	<10	0.20	84	9	0.01	3	160	10	3.52	<2	1
738091		16.45	<10	<1	0.07	<10	0.12	75	39	0.01	10	170	47	>10.0	2	1
738186		12.50	<10	1	<0.01	<10	0.40	784	1	<0.01	27	<10	2	4.64	<2	6
738187		13.15	<10	1	0.01	<10	0.02	312	16	<0.01	44	10	9	2.03	<2	8
738188		0.58	<10	<1	0.02	<10	0.01	120	1	<0.01	2	30	2	0.11	<2	<1
738189		4.45	<10	1	0.02	<10	0.17	253	3	<0.01	11	30	6	3.69	<2	1
738190		5.68	<10	1	0.17	10	0.40	441	13	0.01	8	760	12	0.06	<2	4
738191		2.31	<10	<1	0.05	<10	0.28	135	1	0.01	4	130	4	1.47	<2	1
7738192		4.00	<10	<1	0.07	<10	0.03	69	5	<0.01	6	30	12	3.74	<2	<1
738193		8.46	10	<1	0.09	<10	1.32	234	2	0.04	29	1530	4	3.83	3	8
738194		8.79	<10	<1	0.02	<10	<0.01	36	3	0.01	2	<10	5	>10.0	<2	<1
7738195		1.31	<10	<1	0.04	<10	0.06	130	1	0.01	5	110	2	0.66	<2	1
738196		7.68	<10	<1	0.01	<10	<0.01	39	2	<0.01	2	<10	7	9.04	<2	<1
7738197		3.26	<10	<1	0.04	<10	0.32	189	8	0.01	8	230	141	2.47	<2	1
738198		6.40	<10	<1	0.01	<10	<0.01	59	5	<0.01	4	10	275	7.69	18	<1
738199		14.00	<10	1	0.01	<10	0.08	67	8	<0.01	34	10	163	>10.0	3	<1
738202		2.72	<10	2	0.14	<10	0.02	63	11	0.01	1	370	6910	0.26	382	<1
738203		3.08	<10	8	0.21	<10	0.08	94	5	0.01	3	390	>10000	4.70	2540	<1
7738204		3.91	<10	<1	0.26	<10	0.06	91	5	0.01	2	560	1260	0.14	26	<1
738220		1.23	<10	<1	0.02	10	<0.01	38	28	<0.01	2	60	8650	0.25	24	<1
738221		0.35	<10	<1	0.01	<10	<0.01	32	5	<0.01	<1	10	>10000	6.52	219	<1
738262		0.81	<10	1	0.02	<10	<0.01	42	87	<0.01	2	<10	>10000	2.54	22	<1
7738263		1.19	<10	<1	0.02	<10	<0.01	37	44	<0.01	2	<10	>10000	1.83	11	<1
Y738268		3.02	<10	33	0.03	<10	0.01	25	1	<0.01	2	30	>10000	>10.0	>10000	<1



To: RAY MARKS **729 OKANAGAN AVE E** PENTICTON BC V2A 3K7

Page: 2 - C Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 23-AUG-2019

Account: MARRAY

Analyte Units LOD Y738070 Y738086 Y738087 Y738088 Y738089 Y738090 Y738091 Y738186 Y738187 Y738189 Y738189 Y738199 Y738190 Y738191 Y738192 Y738195 Y738195 Y738195 Y738196 Y738197 Y738198	Sr ppm 1 1 <1	ME-ICP41 Th ppm 20 <20 <20 <20 <20 <20 <20 <20 <20 <20	ME-ICP41 Ti % 0.01 0.02 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	ME-ICP41 T1 ppm 10 10 <10 <10 <10 <10 <10 <10 <10 <10 <	ME-ICP41 U ppm 10 <10 <10 <10 <10 <10 <10 <10 <10 <10	ME-ICP41 V ppm 1 144 2 9 2 16 12 15 22 23 1	ME-ICP41 W ppm 10 <10 <10 <10 <10 <10 <10 <10 <10 <10	ME-ICP41 Zn ppm 2 <2 6 86 63 19 280 20 43 48 2	Ag-OG46 Ag ppm 1	Cu-OG46 Cu % 0.001	Pb-OG46 Pb % 0.001	Zn-OG46 Zn % 0.001	Ag-GRA21 Ag ppm 5
(738086 (738087 (738088 (738089 (738090 (738091 (738186 (738187 (738188 (738189 (738190 (738191 (738193 (738193 (738194 (738195 (738196 (738197 (738198	1 2 1 53 2 1 46 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10 <10 <10 <10 <10 <10	<10 <10 <10 <10 <10 <10 <10 <10 <10 <10	2 9 2 16 12 15 22 23 1	<10 <10 <10 <10 <10 <10 <200 60 <10	6 86 63 19 280 20 43 48					
(738087 (738088 (738089 (738090 (738186 (738187 (738188 (738189 (738190 (738191 (738193 (738194 (738195 (738196 (738197 (738198	2 1 53 2 1 46 1 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10 <10 <10 <10 <10	<10 <10 <10 <10 <10 <10 <10 <10 <10	9 2 16 12 15 22 23 1	<10 <10 <10 <10 <10 <200 60 <10	86 63 19 280 20 43 48					
Y738088 Y738089 Y738090 Y738091 Y738186 Y738187 Y738188 Y738189 Y738190 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	1 53 2 1 46 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10 <10 <10 <10	<10 <10 <10 <10 <10 <10 <10 <10	2 16 12 15 22 23 1	<10 <10 <10 <10 <200 60 <10	63 19 280 20 43 48					
Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	53 2 1 46 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10 <10	<10 <10 <10 <10 <10 <10 <10 <10 <10	16 12 15 22 23 1	<10 <10 <10 200 60 <10	19 280 20 43 48					
Y738090 Y738091 Y738186 Y738187 Y738188 Y738189 Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	2 1 46 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10 <10	12 15 22 23 1	<10 <10 200 60 <10	280 20 43 48					
Y738091 Y738186 Y738187 Y738188 Y738189 Y738190 Y738192 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	1 46 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<10 <10 <10 <10 <10	<10 <10 <10 <10	15 22 23 1	<10 200 60 <10	20 43 48					
Y738186 Y738187 Y738188 Y738189 Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	46 1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01	<10 <10 <10	<10 <10 <10	22 23 1	200 60 <10	43 48					
Y738187 Y738188 Y738189 Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	1 1 28 9 3 2 82	<20 <20 <20 <20 <20 <20	<0.01 <0.01 <0.01 <0.01	<10 <10	<10 <10	23 1	60 <10	48					
Y738188 Y738189 Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	1 1 28 9 3 2 82	<20 <20 <20 <20	<0.01 <0.01 <0.01	<10 <10	<10 <10	1	<10						
Y738188 Y738189 Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	28 9 3 2 82	<20 <20 <20	<0.01 <0.01	<10	<10	1							
Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	9 3 2 82	<20 <20	<0.01			5							
Y738190 Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	3 2 82	<20		<10			<10	12					
Y738191 Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	3 2 82		<0.01		<10	28	<10	47					
Y738192 Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	2 82			<10	<10	16	<10	19					
Y738193 Y738194 Y738195 Y738196 Y738197 Y738198	82		< 0.01	<10	<10	4	<10	45					
Y738195 Y738196 Y738197 Y738198		<20	0.02	<10	<10	49	<10	93		1.700			
Y738196 Y738197 Y738198	1	<20	<0.01	<10	<10	1	<10	58					
Y738197 Y738198	3	<20	< 0.01	<10	<10	7	<10	388					
Y738197 Y738198	<1	<20	<0.01	<10	<10	<1	<10	4					
Y738198	6	<20	<0.01	<10	<10	13	<10	9090		1.765			
\ 	1	<20	<0.01	<10	<10	1	<10	>10000		1.015		1.345	
Y738199	1	<20	<0.01	<10	<10	6	<10	291	170	2.42			
Y738202	12	<20	< 0.01	<10	<10	2	<10	68					
Y738203		<20	<0.01	<10	<10	4	10	1405	676		18.90		
Y738204		<20	<0.01	<10	<10	7	90	30					
Y738220	5	<20	<0.01	<10	<10	2	<10	8					
Y738221	10	<20	<0.01	<10	<10	<1	<10	5	393		>20.0		
Y738262	3	<20	<0.01	<10	<10	2	<10	5	283		12.35		
Y738263		<20	<0.01	<10	<10	2	30	8	161		4.80		
Y738268	130	<20	<0.01	<10	<10	1	<10	7440	>1500	1.995	>20.0		2790



To: RAY MARKS
729 OKANAGAN AVE E
PENTICTON BC V2A 3K7

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Account: MARRAY

CERTIFICATE O	VE VNIVI ACIC	TR19200013
CERTIFICATE O	JE AINAL I SIS	IKIYZUUUIS

		CERTIFICATE COM	MENTS	
		LABOR	ATORY ADDRESSES	
		located at 2912 Molitor Street, Terra		
Applies to Method:	CRU-31 PUL-QC	CRU-QC SPL-21	LOG-22 WEI-21	PUL-31
		ver located at 2103 Dollarton Hwy, No		
Applies to Method:	Ag-GRA21	Ag-OG46	Au-GRA21	Au-ICP21
	Cu-OG46	ME-ICP41	ME-OG46	Pb-OG46
	Zn-OG46			



To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT **CALGARY AB T3A 3R9**

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Account: ORGOLD

CERTIFICATE TR19227726

Project: West Eskay

This report is for 55 Soil samples submitted to our lab in Terrace, BC, Canada on 11-SEP-2019.

The following have access to data associated with this certificate:

ALS Canada Ltd.

ARRON ALBANO **CHARLES GREIG** ANDREW MITCHELL

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

	ANALYTICAL PROCEDURE	ES
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP41	35 Element Aqua Regia ICP-AES	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: ***Corrected copy with project name Albino Lake corrected to West Eskay***

Signature:

Saa Traxler, General Manager, North Vancouver



To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

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Finalized Date: 30-SEP-2019
Account: ORGOLD

Project: West Eskay

(ALS	~L3)							CERTIFICATE OF ANALYSIS TR1						TR192	9227726		
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	
WEAA19-001 WEAA19-002 WEAA19-003 WEAA19-004 WEAA19-005		0.84 0.90 0.74 0.70 0.70	0.016 0.008 0.004 0.008 0.009	0.3 <0.2 0.2 <0.2 0.3	2.73 3.64 4.58 3.25 3.75	8 4 2 8 3	<10 <10 <10 <10 <10	260 270 270 240 90	3.1 0.6 1.2 <0.5 3.0	<2 <2 <2 <2 <2	0.46 0.41 0.42 0.45 0.33	0.5 <0.5 <0.5 <0.5 0.5	14 19 22 22 6	57 41 65 112 14	104 92 94 61 133	5.43 5.13 6.42 4.27 9.11	
WEAA19-006 WEAA19-007 WEAA19-008 WEAA19-009 WEAA19-010		0.56 0.50 0.60 0.72 0.62	0.009 0.004 0.018 0.009 0.005	0.3 0.4 0.2 0.3	4.23 1.01 2.93 3.27 2.41	4 2 2 6 3	<10 <10 <10 <10 <10	210 80 90 200 190	2.1 <0.5 0.6 0.9 <0.5	<2 <2 <2 2 2	0.34 0.16 0.10 0.21 0.13	<0.5 <0.5 <0.5 <0.5 <0.5	18 7 10 15 10	91 22 45 43 26	66 24 50 86 79	5.95 2.21 4.05 4.64 3.95	
WEAA19-011 WEAA19-012 WEAA19-013 WEAA19-014 WEAA19-015		0.68 0.84 0.74 0.68 0.74	0.003 0.021 0.012 0.009 0.005	0.2 0.4 0.3 0.3	3.35 3.10 4.64 5.84 3.86	2 6 6 2 3	<10 <10 <10 <10 <10	550 300 400 260 390	<0.5 1.1 0.6 2.0 0.8	<2 <2 <2 <2 <2 <2	0.27 0.48 0.35 1.15 0.28	<0.5 <0.5 0.8 <0.5 <0.5	17 22 29 25 25	57 65 79 439 65	59 101 94 66 94	4.53 5.10 6.21 8.33 6.65	
WEAA19-016 WEAA19-017 WEAA19-018 WEAA19-019 WEAA19-020		0.76 0.90 0.94 0.66 0.76	0.006 0.006 0.010 0.009 0.002	0.2 0.2 0.3 <0.2 <0.2	4.17 3.31 2.97 3.28 3.75	<2 2 7 5 2	<10 <10 <10 <10 <10	420 150 160 220 270	0.6 <0.5 3.2 0.5 0.7	2 <2 <2 <2 <2	0.38 0.31 0.36 0.64 0.32	<0.5 <0.5 0.5 0.5 <0.5	25 21 16 23 22	46 63 41 59 44	130 132 84 115 98	6.34 4.74 4.96 4.63 6.13	
WEAA19-021 WEAA19-022 WEAA19-023 WEAA19-024 WEAA19-025		0.64 0.78 0.86 0.78 0.76	0.010 0.037 0.098 0.007 0.004	<0.2 3.0 0.4 <0.2 0.3	4.02 4.09 3.00 3.98 3.24	<2 27 3 4 <2	<10 <10 <10 <10 <10	190 240 260 400 510	1.5 1.2 0.5 0.6 <0.5	<2 <2 <2 <2 <2	0.35 0.34 0.58 0.56 0.44	<0.5 0.6 0.6 <0.5 <0.5	20 22 18 29 19	50 51 71 164 48	85 144 71 113 62	5.75 7.05 5.33 5.21 4.65	
WEAA19-026 WEAA19-027 WEAA19-028 WEAA19-029 WEAA19-030		0.76 0.82 0.68 0.70 0.90	0.005 0.017 0.008 0.009 0.009	0.2 <0.2 <0.2 0.3 <0.2	2.31 2.59 1.85 2.75 3.49	4 3 6 4 5	<10 <10 <10 <10 <10	330 260 50 140 280	<0.5 <0.5 <0.5 <0.5 0.5	<2 <2 <2 <2 <2 <2	0.51 0.30 0.16 0.31 0.30	0.8 <0.5 <0.5 <0.5 <0.5	19 19 6 11 20	37 38 35 55 81	117 130 33 60 73	5.29 5.31 3.34 4.14 5.05	
WEAA19-031 WEAA19-032 WEAA19-033 WEAA19-034 WEAA19-035		0.72 0.72 0.82 0.72 0.78	0.012 0.009 0.006 0.006 0.021	0.3 0.2 0.5 <0.2	3.31 3.63 3.96 3.66 3.67	4 3 7 8 5	<10 <10 <10 <10 <10	120 140 160 180 80	0.6 0.6 0.8 2.5 0.5	<2 <2 <2 <2 <2	0.21 0.19 0.54 0.21 0.28	<0.5 <0.5 <0.5 <0.5 <0.5	26 18 25 12 19	113 94 232 40 94	103 55 56 52 115	6.44 5.23 5.54 4.80 5.23	
WEAA19-036 WEAA19-037 WEAA19-038 WEAA19-039 WEAA19-040		0.82 0.76 0.84 0.82 0.94	0.005 0.006 0.013 0.032 0.011	<0.2 0.4 0.2 <0.2 0.3	4.54 3.02 3.04 3.33 3.30	3 2 3 3 6	<10 <10 <10 <10 <10	480 100 140 170 130	0.5 0.9 0.5 0.6 0.8	<2 <2 <2 <2 <2 <2	0.32 0.18 0.31 0.27 0.27	<0.5 <0.5 0.5 <0.5 <0.5	35 15 23 21 17	186 70 72 70 66	161 65 109 95 106	6.57 4.98 4.80 5.29 5.39	



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Project: West Eskay

(ALS	,								CERTIFICATE OF ANALYSIS				TR19227726			
Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
	Units	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
	LOD	10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1
WEAA19-001		10	<1	0.40	40	1.18	1090	3	0.15	50	810	12	0.02	<2	6	35
WEAA19-002		10	<1	0.33	<10	1.58	822	1	0.03	29	1080	7	0.04	<2	6	124
WEAA19-003		10	<1	0.74	<10	2.19	1355	1	0.02	52	830	6	0.04	<2	15	106
WEAA19-004		10	<1	0.49	<10	1.92	1220	1	0.05	97	1050	26	0.04	<2	8	27
WEAA19-005		20	<1	1.20	20	0.70	2370	9	0.02	10	730	31	0.05	<2	5	43
WEAA19-005 WEAA19-006 WEAA19-007 WEAA19-008 WEAA19-010		20 10 10 10	<1 <1 <1 1 <1 <1	0.38 0.07 0.13 0.30 0.22	10 <10 10 10 10	1.89 0.45 0.92 1.27 0.86	1395 369 448 1190 417	4 1 2 1	0.02 0.01 0.01 0.03 0.01	60 10 22 31 16	990 580 660 1240 750	13 14 11 15	0.05 0.11 0.07 0.07 0.03 0.06	<2 2 2 <2 <2 <2 <2	7 2 4 6 4	52 26 20 33 21
WEAA19-011 WEAA19-012 WEAA19-013 WEAA19-014 WEAA19-015		10 10 10 10 30	<1 <1 <1 <1 <1	0.64 0.48 0.37 1.42 0.58	<10 10 <10 <10 <10	1.75 1.97 2.42 4.55 2.05	1190 966 1460 2110 1630	<1 1 <1 <1 3 <1	0.01 0.03 0.04 0.04 0.01	44 48 62 277 42	900 1140 970 830 690	8 21 16 4 12	0.03 <0.01 0.02 0.01 0.05	<2 <2 <2 <2 <2 <2	5 10 16 17	44 69 79 53
WEAA19-016 WEAA19-017 WEAA19-018 WEAA19-019 WEAA19-020		10 10 10 10 10	<1 <1 <1 <1 <1	0.50 0.28 0.30 0.40 0.81	<10 <10 40 10 <10	1.95 2.00 1.22 1.99 2.07	1465 1030 1065 647 1190	1 1 1 <1 <1	0.02 0.02 0.07 0.07 0.01	32 62 33 46 31	780 840 900 1020 750	3 13 18 12 6	0.05 0.02 <0.01 0.01 0.02	<2 <2 <2 <2 <2 <2	7 7 7 8 9	88 21 38 81 107
WEAA19-021		10	<1	0.33	10	1.88	1780	2	0.02	38	840	18	0.06	2	7	65
WEAA19-022		10	<1	0.57	10	2.08	1625	2	0.02	38	870	65	0.07	3	15	76
WEAA19-023		10	<1	0.19	<10	2.01	1210	1	0.01	62	720	25	0.04	<2	9	50
WEAA19-024		10	<1	0.49	<10	3.26	1245	1	0.01	115	1330	9	<0.01	<2	9	180
WEAA19-025		10	<1	0.63	<10	1.75	1385	<1	0.02	42	1070	8	0.01	<2	7	27
WEAA19-026 WEAA19-027 WEAA19-028 WEAA19-029 WEAA19-030		10 10 10 10 10	<1 <1 <1 <1 <1	0.58 0.40 0.05 0.13 0.41	<10 <10 10 <10 <10	1.31 1.36 0.34 1.50 2.01	1095 839 381 487 1075	1 <1 1 1	0.02 0.02 0.01 0.01 0.01	55 41 11 36 52	980 710 690 850 870	6 8 13 27 30	0.02 0.01 0.07 0.04 0.03	<2 <2 <2 <2 <2 <2	7 6 3 5 6	20 15 33 34 32
WEAA19-031		10	<1	0.16	<10	2.37	1955	2	0.01	90	1210	20	0.10	<2	13	21
WEAA19-032		10	<1	0.39	<10	2.20	960	1	0.01	67	870	16	0.01	<2	10	36
WEAA19-033		10	<1	0.31	10	3.70	1395	<1	0.01	196	1280	46	<0.01	2	15	24
WEAA19-034		20	<1	0.13	20	0.93	987	2	0.04	24	970	33	0.07	<2	3	45
WEAA19-035		10	<1	0.15	10	2.01	776	1	0.01	56	1450	24	0.01	<2	8	42
WEAA19-036		10	<1	0.31	<10	3.41	1560	<1	0.01	114	710	7	0.04	<2	15	247
WEAA19-037		10	<1	0.27	<10	1.60	891	1	0.01	49	750	32	0.06	<2	6	35
WEAA19-038		10	<1	0.34	<10	1.74	1060	1	0.01	56	880	73	0.02	<2	7	44
WEAA19-039		10	<1	0.33	<10	1.85	1075	1	0.01	53	780	31	0.05	<3	6	30
WEAA19-040		10	<1	0.34	10	1.55	822	2	0.02	44	1250	45	0.02	<2	7	33



To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

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Project: West Eskay

									CERTIFICATE OF ANALYSIS	TR19227726
Sample Description	Method Analyte Units LOD	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2		
WEAA19-001 WEAA19-002		<20 <20	0.24 0.24	<10 <10	<10 <10	69 129	<10 <10	204 98		
WEAA19-003 WEAA19-004		<20 <20	0.24 0.19	<10 <10	<10 <10	174 114	<10 <10	118 103		
WEAA19-004 WEAA19-005		<20	0.18	<10	<10	37	<10	237		
WEAA19-006 WEAA19-007		<20 <20	0.24 0.25	<10 <10	<10 <10	143 105	<10 <10	121 31		
WEAA19-008 WEAA19-009		<20 <20	0.19 0.21	<10 <10	<10 <10	105 109	<10 <10	59 116		
WEAA19-010		<20	0.19	<10	<10	121	<10	104		
WEAA19-011 WEAA19-012 WEAA19-013		<20 <20 <20	0.25 0.23 0.24	<10 <10 <10	<10 <10 <10	125 128 185	<10 <10 <10	179 127 440		
WEAA19-013 WEAA19-014 WEAA19-015		<20 <20 <20	0.25 0.24	10 <10	<10 <10 <10	135 195	<10 <10 <10	185 128		
WEAA19-016		<20 <20	0.25 0.19	<10 <10	<10 <10	196	<10 <10	116 97		
WEAA19-017 WEAA19-018 WEAA19-019		<20 <20 <20	0.19 0.19 0.27	<10 <10 <10	<10 <10 <10	134 84 123	<10 <10 <10	165 109		
WEAA19-019 WEAA19-020		<20	0.27	<10	<10	175	<10	93		
WEAA19-021 WEAA19-022 WEAA19-023		<20 <20 <20	0.23 0.21 0.20	<10 <10 <10	<10 <10 <10	125 169 138	<10 <10 <10	103 156 123		
WEAA19-024 WEAA19-025		<20 <20	0.26 0.23	<10 <10	<10 <10	125 118	<10 <10	85 147		
WEAA19-026 WEAA19-027 WEAA19-028 WEAA19-029		<20 <20 <20 <20	0.19 0.22 0.24 0.19	<10 <10 <10 <10	<10 <10 <10 <10	151 179 114 109	<10 <10 <10 <10	255 160 34 65		
WEAA19-030		<20	0.26	<10	<10	132	<10	98		
WEAA19-031 WEAA19-032 WEAA19-033 WEAA19-034 WEAA19-035		<20 <20 <20 <20 <20	0.21 0.24 0.22 0.19 0.18	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	202 137 133 73 125	<10 <10 <10 <10 <10	95 106 140 80 82		
WEAA19-036 WEAA19-037 WEAA19-038 WEAA19-039		<20 <20 <20 <20 <20	0.27 0.22 0.20 0.21	<10 <10 <10 <10	<10 <10 <10 <10	209 126 118 127	<10 <10 <10 <10	94 78 86 90		
WEAA19-039 WEAA19-040		<20	0.24	<10	<10	118	10	104		



To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT CALGARY AB T3A 3R9 Page: 3 - A
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Plus Appendix Pages
Finalized Date: 30-SEP-2019
Account: ORGOLD

Project: West Eskay

	,								CERTIFICATE OF ANALYSIS					TR19227726		
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
WEAA19-041		0.86	0.097	<0.2	3.54	2	<10	160	0.5	<2	0.41	<0.5	21	68	130	4.74
WEAA19-042		0.68	0.009	<0.2	3.00	13	<10	50	0.7	<2	0.10	<0.5	7	56	70	6.45
WEAA19-043		0.78	0.023	0.3	3.42	10	<10	150	2.9	<2	0.32	<0.5	17	75	106	5.29
WEAA19-044		0.92	0.010	<0.2	2.73	<2	<10	90	<0.5	<2	0.20	<0.5	20	208	85	4.09
WEAA19-045		0.88	0.004	0.2	3.54	3	<10	190	8.0	<2	0.36	<0.5	19	80	88	5.17
WEAA19-046		1.02	0.045	0.2	3.06	<2	<10	110	0.7	<2	0.23	<0.5	16	73	118	5.00
WEAA19-047		0.92	0.003	0.2	2.78	<2	<10	100	<0.5	<2	0.36	<0.5	24	67	168	4.45
WEAA19-048		0.88	0.015	0.5	3.57	<2	<10	140	0.5	2	0.27	<0.5	27	64	159	5.62
WEAA19-049		0.78	0.010	<0.2	4.18	2	<10	130	1.0	<2	0.25	<0.5	24	113	71	6.63
WEAA19-050		0.88	0.022	<0.2	3.33	2	<10	160	1.0	<2	0.30	<0.5	21	70	115	5.73
WEAA19-051		0.84	0.022	<0.2	3.35	<2	<10	130	0.8	<2	0.30	<0.5	21	87	99	5.17
WEAA19-052		0.86	0.063	0.6	3.50	3	<10	230	1.3	2	0.30	1.2	26	79	261	5.99
WEAA19-053		0.86	0.015	0.2	3.39	4	<10	160	0.6	<2	0.26	< 0.5	21	92	124	4.87
WEAA19-054		0.94	0.028	0.4	3.05	7	<10	140	1.3	<2	0.37	<0.5	17	57	105	4.74
WEAA19-055		0.78	0.023	0.2	3.10	3	<10	180	1.0	<2	0.31	< 0.5	18	77	109	5.11



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CERTIFICATE OF ANALYSIS TR19227726

Project: West Eskay

								<u></u>			-, \ \ L \ \ \	1 / 114/ 11		111132	27720	
Sample Description	Method Analyte Units LOD	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
WEAA19-041		10	<1	0.38	<10	1.85	859	1	0.02	51	1290	32	0.03	<2	6	49
WEAA19-042		30	<1	0.15	20	0.87	299	4	0.05	28	1060	34	0.04	<2	4	16
WEAA19-043		10	<1	0.43	30	1.59	980	3	0.12	59	840	33	0.01	<2	7	32
WEAA19-044		10	<1	0.19	<10	2.23	568	1	0.01	132	720	19	0.04	<2	4	19
WEAA19-045		10	<1	0.23	<10	2.23	1075	<1	0.01	59	1070	56	0.06	<2	6	26
WEAA19-046		10	<1	0.27	10	1.83	546	1	0.02	49	840	42	0.06	<2	7	37
WEAA19-047		10	<1	0.23	<10	1.74	913	2	0.01	52	1100	13	0.05	<2	4	62
WEAA19-048		10	<1	0.26	<10	1.92	1170	2	0.02	45	910	19	0.06	<2	7	45
WEAA19-049		10	<1	0.47	10	2.48	1175	4	0.01	61	1120	38	0.10	2	8	51
WEAA19-050		10	<1	0.42	10	1.95	1060	2	0.02	41	1190	25	0.07	2	8	38
WEAA19-051		10	1	0.45	<10	2.18	848	1	0.01	47	1100	18	0.06	<2	6	36
WEAA19-052		10	<1	0.59	10	2.08	1330	3	0.03	76	1250	97	0.03	<2	9	35
WEAA19-053		10	<1	0.26	<10	1.79	904	2	0.02	65	1010	37	0.04	3	7	65
WEAA19-054		10	<1	0.30	20	1.46	755	2	0.07	40	1260	81	0.02	<2	6	44
WEAA19-055		10	<1	0.36	10	1.78	976	2	0.04	51	1130	43	0.02	2	8	42



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CERTIFICATE OF ANALYSIS TR19227726

Project: West Eskay

									<u> </u>
	Method Analyte	ME-ICP41 Th	ME-ICP41 Ti	ME-ICP41 TI	ME-ICP41 U	ME-ICP41 V	ME-ICP41 W	ME-ICP41 Zn	
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	
Sample Description	LOD	20	0.01	10	10	1	10	2	
WEAA19-041		<20	0.19	<10	<10	120	10	78	
WEAA19-042		<20	0.25	<10	<10	94	<10	71	
WEAA19-043		<20	0.24	<10	<10	99	<10	153	
WEAA19-044		<20	0.20	<10	<10	113	<10	75	
WEAA19-045		<20	0.19	<10	<10	143	<10	125	
WEAA19-046		<20	0.25	<10	<10	140	20	78	
WEAA19-047		<20	0.13	<10	<10	91	<10	85	
WEAA19-048		<20	0.24	<10	<10	144	<10	87	
WEAA19-049		<20	0.42	<10	<10	158	10	105	
WEAA19-050		<20	0.27	<10	<10	122	10	91	
WEAA19-051		<20	0.28	<10	<10	134	<10	80	
WEAA19-052		<20	0.25	<10	<10	121	10	166	
WEAA19-053		<20	0.21	<10	<10	122	10	91	
WEAA19-054		<20	0.25	<10	<10	88	<10	111	
WEAA19-055		<20	0.21	<10	<10	115	10	101	



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Project: West Eskay

CERTIFICATE	OF ANALYSIS	TR19227726
	CANALL 313	

		CERTIFICATE OF ANALTSIS	1119227720												
	CERTIFICATE CO	OMMENTS													
	LABORATORY ADDRESSES														
	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.														
Applies to Method:	Au-ICP21 LOG-22 WEI-21	ME-ICP41	SCR-41												



ALS Canada Ltd. 2103 Dollarton Hwy North Vancouver BC V7H 0A7

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To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT CALGARY AB T3A 3R9

Page: 1 Total # Pages: 2 (A - C) **Plus Appendix Pages** Finalized Date: 28-AUG-2019

This copy reported on 29-JUN-2020

Account: ORGOLD

CERTIFICATE TR19197491

Project: Albino Lake

This report is for 6 Rock samples submitted to our lab in Terrace, BC, Canada on 8-AUG-2019.

The following have access to data associated with this certificate:

ARRON ALBANO **RICK MILL**

ANDREA DEMOSKOFF ANDREW MITCHELL

CHARLES GREIG NEIL PROWSE

	SAMPLE PREPARATION
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

	ANALYTICAL PROCEDUR	ES
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

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

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

Signature:

Saa Traxler, General Manager, North Vancouver



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To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT CALGARY AB T3A 3R9

Page: 2 - A Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 28-AUG-2019 Account: ORGOLD

CERTIFICATE OF ANALYSIS TR19197491

								<u> </u>								
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 AI % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738264		0.92	0.686		97.8	0.25	<2	<10	100	<0.5	148	0.30	<0.5	2	9	28
Y738265		0.95	0.018		4.4	0.27	<2	<10	210	< 0.5	6	0.02	0.6	1	8	97
Y738278		0.40	< 0.001		0.4	0.12	<2	<10	20	< 0.5	<2	0.46	< 0.5	5	14	27
Y738279		0.52	>10.0	15.70	13.9	0.19	9	<10	10	< 0.5	<2	0.01	< 0.5	9	8	9
Y738280		0.56	0.033		0.3	0.01	<2	<10	10	<0.5	<2	0.01	<0.5	1	18	1
Y738281		0.39	0.050		0.2	0.30	4	<10	20	<0.5	<2	0.01	<0.5	4	2	29



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								CERTIFICATE OF ANALYSIS TR19197491								
Sample Description	Method Analyte Units LOD	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
Y738264		1.94	<10	<1	0.17	<10	0.06	84	205	<0.01	3	420	5500	0.44	3	<1
Y738265		6.77	<10	<1	0.32	10	0.08	120	39	0.04	3	1340	572	0.51	<2	1
Y738278		1.19	<10	<1	0.01	<10	0.09	339	1	0.01	10	140	19	0.07	<2	1
Y738279		11.30	<10	<1	0.01	<10	0.01	118	30	< 0.01	7	320	8	0.04	<2	<1
Y738280		1.34	<10	<1	0.01	<10	<0.01	79	1	<0.01	2	30	3	0.27	<2	<1
Y738281		8.86	<10	<1	0.09	20	<0.01	39	20	0.05	1	230	3	0.09	<2	<1



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CERTIFICATE OF ANALYSIS TR19197491

								<u> </u>	
	Method Analyte	ME-ICP41 Sr	ME-ICP41 Th	ME-ICP41 Ti	ME-ICP41 TI	ME-ICP41 U	ME-ICP41 V	ME-ICP41 W	ME-ICP41 Zn
Sample Description	Units	ppm 1	ppm 20	% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
V720264		10							
Y738264 Y738265		19 228	<20 <20	<0.01 <0.01	<10 <10	<10 <10	9 9	470 10	6 44
Y738278		13	<20	<0.01	<10	<10	5	10	16
Y738279		2	<20	0.01	<10	<10	164	10	6
Y738280		5	<20	< 0.01	<10	<10	2	<10	<2
Y738281		4	<20	0.01	<10	<10	6	<10	3



To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT CALGARY AB T3A 3R9 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 28-AUG-2019 Account: ORGOLD

Project: Albino Lake

Applies to Method: Applie			CERTIFICATE CO	MMENTS								
Applies to Method: CRU-31 CRU-QC LOG-21 PUL-31 PUL-QC SPL-21 WEI-21 Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.												
PUL-QC SPL-21 WEI-21 Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		Processed at ALS Terrace	located at 2912 Molitor Street, Terra	ace, BC, Canada.								
Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.	Applies to Method:				PUL-31							
Applies to Method: Au-GRA21 Au-ICP21 ME-ICP41 Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. Au-GRA21 Au-ICP21 ME-ICP41												
	Applies to Method:		er located at 2103 Dollarton Hwy, N Au-ICP21	orth Vancouver, BC, Canada. MF-ICP41								
	, ipplies to method.	Au divizi	7.0 10121	ME ICI II								



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To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT **CALGARY AB T3A 3R9**

Page: 1 Total # Pages: 2 (A - C) **Plus Appendix Pages** Finalized Date: 24-AUG-2019

This copy reported on 29-JUN-2020 **Account: ORGOLD**

CERTIFICATE TR19201033

Project: Albino Lake

This report is for 10 Rock samples submitted to our lab in Terrace, BC, Canada on 8-AUG-2019.

The following have access to data associated with this certificate:

ARRON ALBANO ANDREA DEMOSKOFF **RICK MILL** ANDREW MITCHELL

CHARLES GREIG NEIL PROWSE

SAMPLE PREPARATION							
ALS CODE	DESCRIPTION						
WEI-21	Received Sample Weight						
LOG-21	Sample logging - ClientBarCode						
CRU-31	Fine crushing - 70% <2mm						
SPL-21	Split sample - riffle splitter						
PUL-31	Pulverize up to 250g 85% <75 um						
CRU-QC	Crushing QC Test						
PUL-QC	Pulverizing QC Test						

	ANALYTICAL PROCEDURE	ES
ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Pb-OG46	Ore Grade Pb - Aqua Regia	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	

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

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

Signature:

Saa Traxler, General Manager, North Vancouver



To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

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Total # Pages: 2 (A - C)
Plus Appendix Pages
Finalized Date: 24-AUG-2019
Account: ORGOLD

	,								С	ERTIFIC	CATE O	F ANAI	LYSIS	TR192	01033	
Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
Y738210		1.29	0.609	>100	0.09	<2	<10	100	<0.5	1215	<0.01	0.9	<1	11	34	2.01
Y738211		1.42	0.078	10.5	0.14	<2	<10	80	< 0.5	31	0.01	< 0.5	<1	15	12	1.70
Y738212		1.68	0.166	13.2	0.34	10	<10	120	< 0.5	236	0.01	<0.5	1	5	276	28.0
Y738213		2.57	0.052	8.0	0.10	<2	<10	70	< 0.5	19	< 0.01	<0.5	1	15	12	1.06
Y738214		2.72	0.165	55.0	0.09	<2	<10	210	<0.5	251	0.01	<0.5	<1	20	18	0.96
Y738215		2.61	0.047	31.1	0.06	<2	<10	60	<0.5	207	<0.01	<0.5	<1	20	40	0.79
Y738216		2.01	0.524	63.9	0.05	4	<10	10	< 0.5	147	0.01	0.9	<1	16	118	1.05
Y738217		3.68	0.050	7.4	0.03	2	<10	<10	< 0.5	27	0.01	<0.5	<1	18	180	1.00
Y738277		0.59	1.255	>100	0.11	<2	<10	40	< 0.5	2100	0.01	25.5	<1	21	105	0.58
Y738282		0.52	0.038	5.0	0.40	<2	<10	210	<0.5	24	0.01	<0.5	1	11	28	2.33

^{*****} See Appendix Page for comments regarding this certificate *****



To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT CALGARY AB T3A 3R9 Page: 2 - B Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 24-AUG-2019 Account: ORGOLD

									С	ERTIFIC	CATE O	F ANA	LYSIS	TR192	01033	
Sample Description	Method Analyte Units LOD	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
Y738210		<10	<1	0.07	<10	0.01	32	21	0.01	1	40	>10000	0.80	25	<1	26
Y738211		<10	<1	0.13	<10	0.02	43	64	0.01	3	110	973	0.12	<2	1	4
Y738212		<10	<1	0.20	10	0.05	84	17	0.01	4	1900	6900	0.49	<2	1	24
Y738213		<10	<1	0.10	10	0.01	39	38	0.01	2	110	241	0.17	<2	<1	14
Y738214		<10	<1	0.06	10	0.01	30	20	0.01	1	60	1320	0.06	<2	<1	7
Y738215		<10	<1	0.04	<10	<0.01	29	7	0.01	1	30	2250	0.11	<2	<1	2
Y738216		<10	<1	0.02	<10	0.01	40	13	0.01	1	30	>10000	0.14	68	<1	5
Y738217		<10	<1	0.01	<10	< 0.01	55	7	< 0.01	1	10	992	0.03	<2	<1	3
Y738277		<10	<1	0.04	<10	0.06	45	7	0.01	8	20	>10000	1.31	<2	1	5
Y738282		<10	<1	0.30	<10	0.07	56	<1	0.03	2	160	228	0.20	<2	<1	16

^{*****} See Appendix Page for comments regarding this certificate *****



To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Page: 2 - C Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 24-AUG-2019 Account: ORGOLD

								CERTIFICATE OF ANALYSIS TR19201033					
Sample Description	Method Analyte Units LOD	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 TI ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-OG46 Ag ppm 1	Pb-OG46 Pb % 0.001			
Y738210		<20	<0.01	<10	<10	5	40	3	491	3.18			
Y738211		<20	< 0.01	<10	<10	11	10	6					
Y738212		<20	0.01	<10	<10	33	60	35					
Y738213		<20	< 0.01	<10	<10	6	10	4					
Y738214		<20	< 0.01	<10	<10	3	290	4					
Y738215		<20	<0.01	<10	<10	4	<10	4					
Y738216		<20	< 0.01	<10	<10	2	<10	13		1.420			
Y738217		<20	< 0.01	<10	<10	1	<10	13					
Y738277		<20	< 0.01	<10	<10	4	30	130	911	7.55			
Y738282		<20	0.01	<10	<10	9	<10	4					



To: OROGENIC GOLD CORP. 12 EDELWEISS CRESENT CALGARY AB T3A 3R9 Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 24-AUG-2019 Account: ORGOLD

Project: Albino Lake

		CERTIFICATE CO	MMENTS								
		LABO	RATORY ADDRESSES								
	Processed at ALS Terrace located at 2912 Molitor Street, Terrace, BC, Canada.										
Applies to Method:	CRU-31 PUL-QC	CRU-QC SPL-21	LOG-21 WEI-21	PUL-31							
Applies to Method:	Ag-OG46	ver located at 2103 Dollarton Hwy, N Au-ICP21	ME-ICP41	ME-OG46							
	Pb-OG46										

APPENDIX E – Magnetic Survey Logistics Reports



LOGISTICS REPORT PREPARED FOR MILESTONE INFRASTRUCTURE INC.

MAGNETOMETER SURVEY ON THE DOC PROPERTY

STEWART, BC, CANADA

Survey conducted by SJ Geophysics Ltd. August 2019

Report Prepared
August 2019

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1. Survey Summary

SJ Geophysics Ltd. was contracted by Milestone Infrastructure to acquire ground magnetometer data on their Doc property. The magnetic data was acquired on two survey grids, BGS and DOC. Table 1 provides a brief summary of the project.

Client	Milestone Infrastructure
Project Name	Doc Property
Project Number	SJ839
Location	Latitude: 56° 20' 04" N Longitude: 130° 27' 10 W
(approx. centre of grid)	410180E 6244250N; WGS 84 UTM Zone 9N
BCGS / NTS Sheet	104B038 / 104B08
Mining Zone	Skeena
Total Line Kilometres	24.5 km
Production Dates	August 2 – August 5, 2019

Table 1: Survey Summary

2. Location and Access

The Doc Property is located in northwestern British Columbia, Canada and is situated 52 km northwest of Stewart, BC (Figure 1). The property and exploration field camp was accessed by helicopter from Stewart, BC.

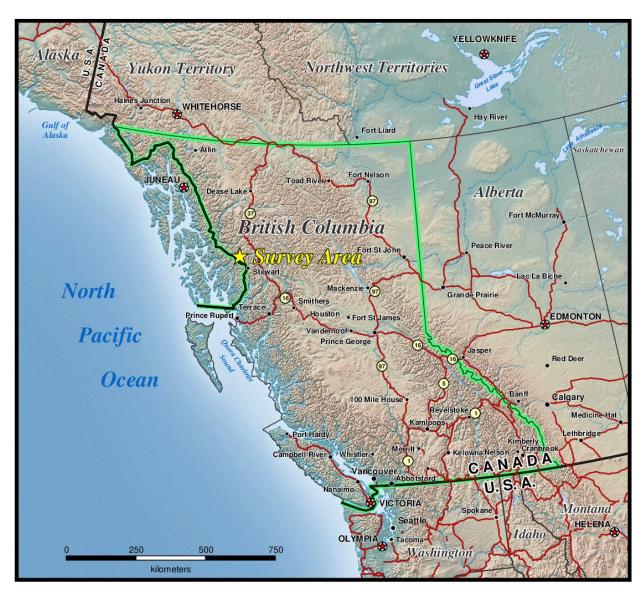


Figure 1: Overview map of the Doc Property

3. Survey Grid

Magnetic data was acquired on two survey grids, BGS and DOC. The BGS and DOC grids each consisted of 16 survey lines, with a line spacing of 100 m, and a line azimuth of 45 degrees. The lines were approximately 750 m in length, with a few lines shorter due to terrain obstructions. Four lines on the DOC grid were extensions of lines on the BGS grid. The line and station labels for both grids were based on a local coordinate system. Please refer to Appendix A for a detailed breakdown of the survey lines.

No line preparations were completed in advance of the geophysical survey. The planned theoretical survey stations were uploaded to hand-held GPS units and located in real-time by the crew. Stations were not flagged or marked in the field during the survey. The survey grids are displayed in Figure 2.

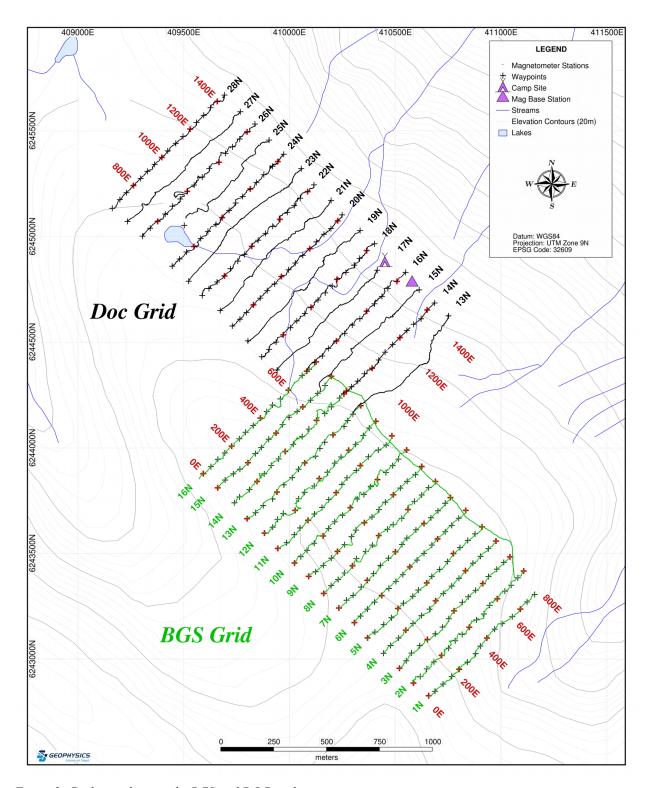


Figure 2: Grid map showing the BGS and DOC grids

4. Survey Parameters and Instrumentation

4.1. Magnetometer Survey

The magnetometer data was collected with the following instruments.

- GEM GSM-19WG Overhauser Magnetomer (integrated GPS w/ walking mode)
- GEM GSM-19W Overhauser Magnetometer (2nd Rover w/ walking mode)
- GEM GSM-19 Overhauser Magnetometer (Base)

The rover units (GSM-19WG and GSM-19W) collected total magnetic field measurements along the survey lines. Data was collected in walking mode along each survey line with a sampling rate of 2 seconds. The GSM-19WG rover unit utilized an integrated GPS unit to locate each magnetic reading. The GSM-19W rover unit did not have an integrated GPS unit. A handheld Garmin GPSMap 64s GPS was used to collect location data for each magnetic reading. The GPS was set to acquire tracks with a sampling rate of 2 seconds. The magnetic data and GPS data were then matched based on time. One GSM-19 unit was setup as a base station to record diurnal variations in the magnetic field. A recording interval of 2 seconds was selected for the base station.

Each survey day began by setting up the base station magnetometer. With each rover unit, a series of calibration measurements were taken at the established location after which survey acquisition began. Another set of calibration points were recorded at the end of each day before the base station was turned off. The locations of the magnetic base station and calibration points are listed in Table 2. Detailed instrument specifications are described in Appendix B.

Name	Easting	Northing	Elevation
Magnetic Base Station	410580	6244782	1163
Magnetic Calibration Point	410580	6244765	1164

Table 2: Coordinates of base station and calibration points (WGS 84 UTM 9N)

Garmin GPSMap 64s handheld GPS units were used to collect location data at each survey station. The GPS data was collected in the WGS 84 UTM Zone 9N coordinates system.

5. Field Logistics

The SJ Geophysics field crew consisted of two field technicians. This team oversaw all operational aspects including field logistics, data acquisition and initial field data quality control. Table 3 lists the SJ Geophysics crew members on this project.

Crew Member Name	Role	Dates on Site
Raymond Dickof	Field Technician	August 2 – August 5, 2019
Justin Hall	Field Technician	August 2 – August 5, 2019

Table 3: Details of the SJ Geophysics crew on site

The SJ Geophysics crew mobilized to Stewart, BC on July 31 and August 1. The crew arrived in camp on August 2 by helicopter. Data was acquired on August 3, 4, and 5. On August 6, the crew acquired data on an adjacent project. The crew demobilized from the project site to Stewart on August 7.

The SJ Geophysics crew was accommodated by the client in a field camp located on the DOC survey grid. The camp consisted of wooden cabins and tents. Communication with the SJ Geophysics office during the project occurred by satellite phone. The survey grid was accessed each day from camp by foot.

The SJ Geophysics crew activities are summarized in the Table 4 below.

Date	Activity
August 2	Fly to camp from Stewart. Establish magnetic base station site.
August 3	Acquire magnetic data on BGS grid.
August 4	Acquire magnetic data on DOC grid.
August 5	Acquire magnetic data on DOC grid.
August 6	Acquire magnetic data on adjacent property for different client.
August 7	Pack up camp and demobilize to Stewart.

Table 4: Crew production summary

7

6. Deliverables

This logistics report and maps are provided as two paper copies and digitally in PDF format.

The geophysical survey data is provided digitally on the included CD. A brief description of the

provided data is below.

Magnetometer data

• ASCII text files (*.txt) of the raw magnetic data for each survey day.

• ASCII text files (*.csv) of the final processed and QC'd magnetic data for each survey

grid. Contains QC flags indicating good data, bad data, etc.

• ASCII text files (*_4Plot.csv) of the final processed and QC'd magnetic data for each

survey grid. Data has been filtered to only keep data points with QC flags of "0".

These files were used to generate the final maps.

• Maps of colour contoured magnetic data (TMI) for each survey grid in PDF format.

• Geotiff images of the colour contoured magnetic data (TMI) for each survey grid.

Grid maps in PDF format

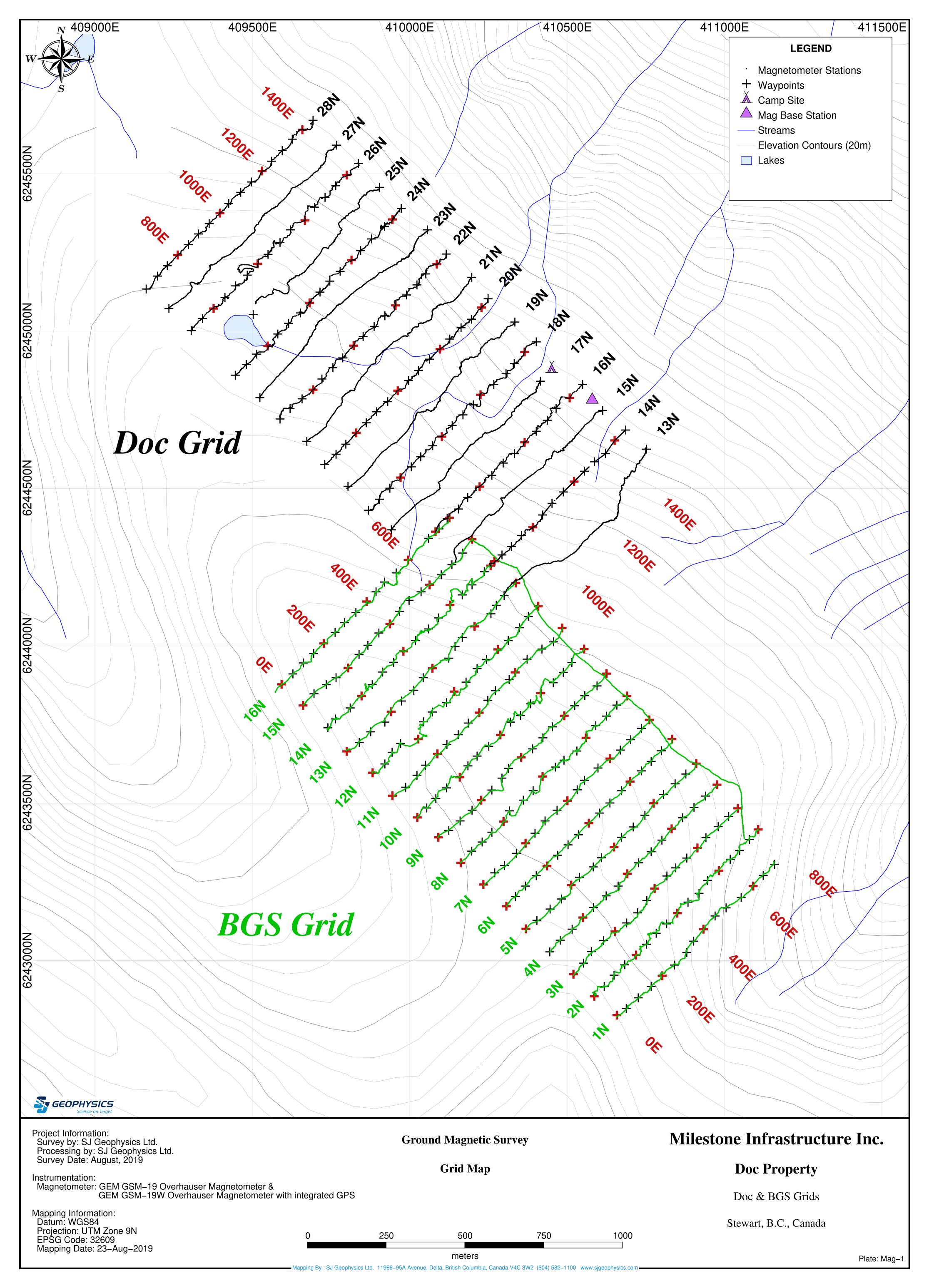
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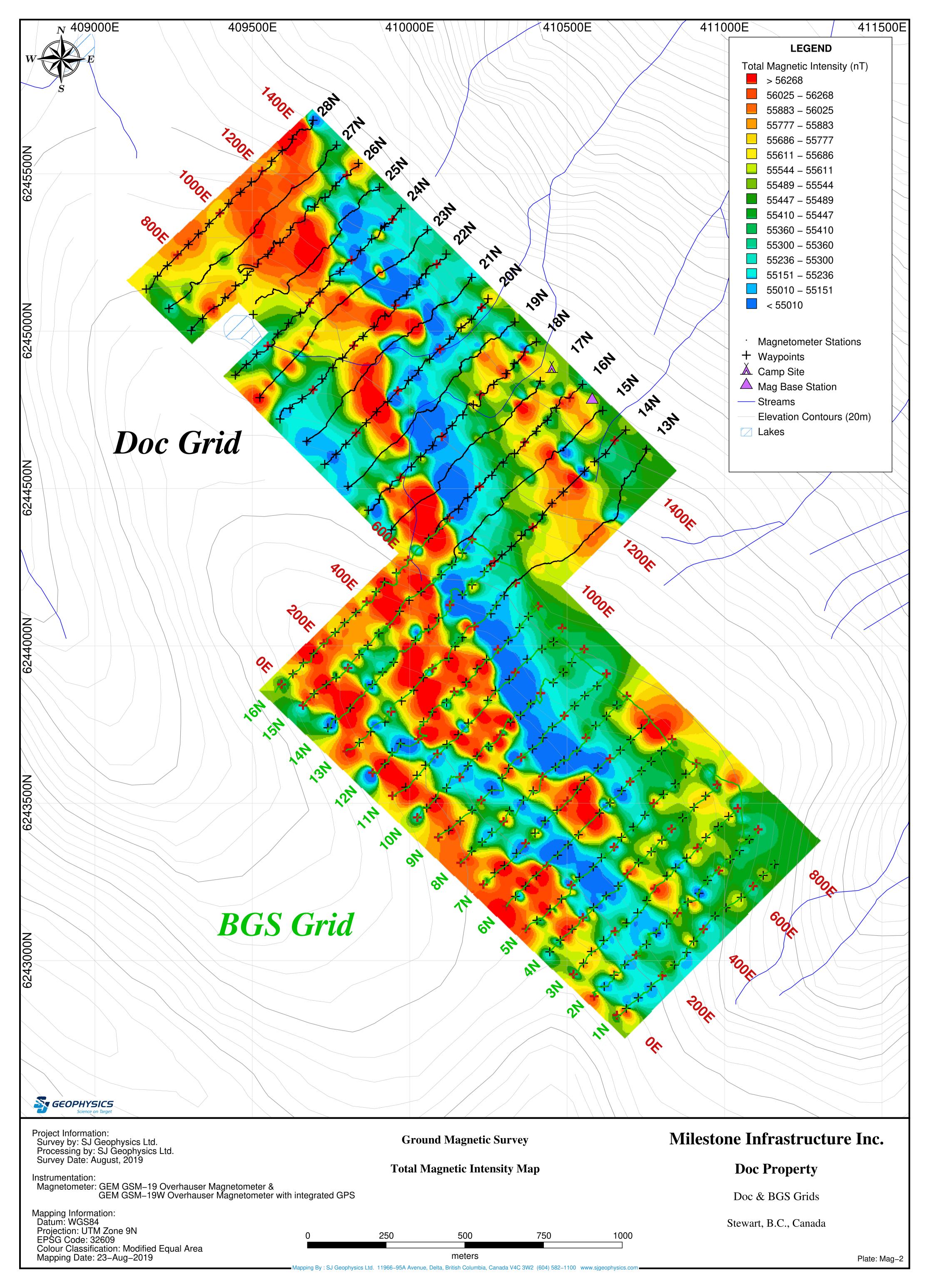
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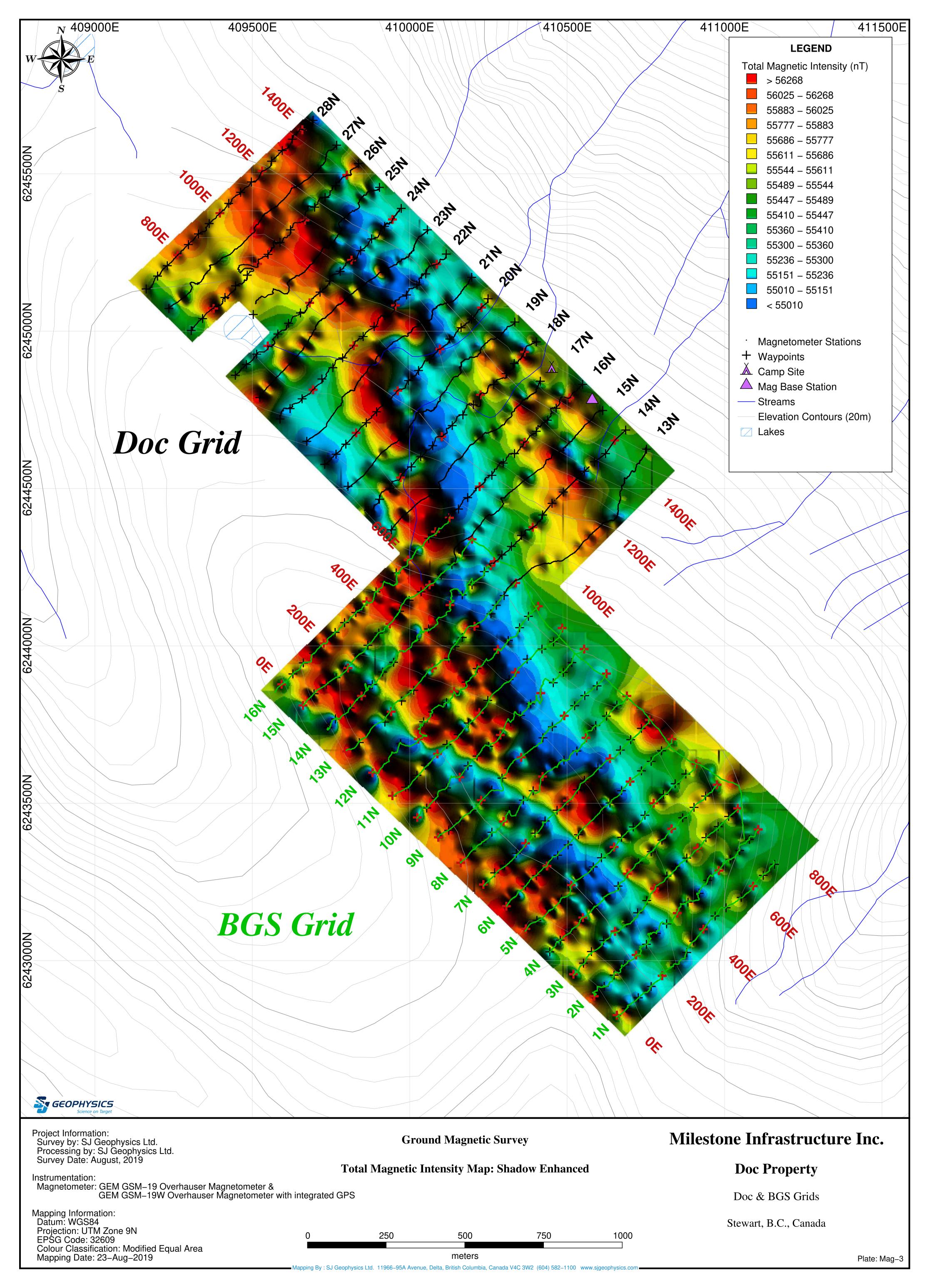
Ross Polutnik, P.Geo

Geophysicist

SJ Geophysics Ltd.







Appendix A: Survey Details

BCGS Grid

						Survey Length
Line	Series	Start X	Start Y	End X	End Y	(m)
1	N	410656.8	6242820.9	411157.8	6243315.7	704
2	N	410581.0	6242888.0	411107.0	6243417.0	746
3	N	410520.0	6242954.0	411042.6	6243481.5	743
4	N	410445.0	6243028.0	410976.0	6243558.0	750
5	N	410367.1	6243093.9	410907.5	6243621.5	755
6	N	410308.0	6243173.0	410834.0	6243704.0	747
7	N	410234.8	6243237.8	410759.6	6243764.2	743
8	N	410161.0	6243312.0	410691.0	6243842.0	750
9	N	410089.6	6243392.1	410622.0	6243912.3	744
10	N	410023.0	6243453.0	410555.0	6243990.0	756
11	N	409948.9	6243522.6	410485.9	6244057.7	758
12	N	409881.0	6243596.0	410408.0	6244128.0	749
13	N	409798.7	6243667.7	410336.4	6244202.2	758
14	N	409738.0	6243733.0	410259.0	6244256.0	738
15	N	409661.6	6243811.9	410198.6	6244340.2	753
16	N	409573.0	6243853.0	410127.0	6244407.0	783
22	Е	410198.3	6243386.7	411062.6	6244338.0	1285

Total Linear Metres = 13,264

DOC Grid

						Survey Length
Line	Series	Start X	Start Y	End X	End Y	(m)
13	N	410299.1	6244163.3	410752.6	6244629.9	651
14	N	410253.0	6244254.0	410686.0	6244685.9	612
15	N	410140.5	6244266.1	410609.9	6244747.0	672
16	N	410082.0	6244362.0	410550.0	6244832.0	663
17	N	409939.3	6244365.6	410414.5	6244843.9	674
18	N	409869.0	6244430.0	410403.0	6244966.0	757
19	N	409800.2	6244500.5	410331.3	6245024.3	746
20	N	409730.0	6244578.0	410248.0	6245104.0	738
21	N	409672.0	6244648.0	410194.7	6245168.6	738
22	N	409587.0	6244723.0	410116.0	6245246.0	744
23	N	409522.7	6244786.4	410058.3	6245319.6	756
24	N	409445.0	6244860.0	409972.0	6245390.0	747
25	N	409510.5	6245087.6	409902.2	6245451.8	535
26	N	409306.0	6245000.0	409839.0	6245533.0	754
27	N	409233.4	6245073.4	409767.8	6245591.0	744
28	N	409162.0	6245133.0	409693.0	6245670.0	755

Total Linear Metres = 11,285

Appendix B: Instrument Specifications

GEM Systems GSM-19 Magnetometer

Resolution: 0.01 nT, magnetic field and gradient

Accuracy: 0.2 nT over operating range Range: 20,000 to 120,000 nT Over 10,000 nT/m

Operating Interval: 3 seconds minimum, faster optional

Reading: Initiated by keyboard depression, external trigger or carriage return via

RS-232C

Input/Output: 6 pin weatherproof connector, RS-232C, and optional analog output
Power Requirements: 12 V, 200 mA peak (during polarization), 30 mA standby, 300 mA peak in

gradiometer mode

Power Source: Internal 12 V, 2.6 Ah sealed lead-acid battery standard, others optional

External 12 V power source can also be used Input: 110/220 VAC, 50/60 Hz and/or 12VDC

Output: 12 V dual level charging

Operating Range: Temperature: -40°C to +60°C

Battery Voltage: 10 V minimum to 15 V maximum

Dimensions:

Battery Charger:

Console: 223 x 69 x 240 mm Sensor Staff: 4 x 450 mm sections Sensor: 170 x 71 mm diameter

Weights:

Console: 2.1 kg
Staff: 0.9 kg
Sensor: 1.1 kg each

Appendix C: Geophysical Techniques

Magnetic Survey Method

Magnetic intensity measurements are conducted along survey lines (normally on a regular grid) and are used to identify metallic mineralization related to magnetic materials in the ground (e.g., magnetite and/or pyrrhotite). Magnetic data can be used as a mapping tool to distinguish rock types and to identify faults, bedding, structure and alteration zones. Line and station spacing are usually determined by the size and depth of the exploration targets of interest.

The most common technique used in mineral exploration is to measure the amplitude of the magnetic field using a magnetometer. The instrument digitally records the survey line, station, total magnetic field and time of day at each station. After each day of surveying, data are downloaded to a computer for archiving and further processing.

The earth's magnetic field is continually changing (diurnal variations) so field measurements are calibrated to these variations. The most accurate technique is to establish a stationary base station magnetometer to continually monitor and record the magnetic field over the course of a day. The base station and field magnetometers are synchronized on the basis of time and computer software is used to correct the field data for the diurnal variations.



LOGISTICS REPORT PREPARED FOR OROGENIC GOLD CORP.

MAGNETOMETER SURVEY
ON THE
WEST ESKAY PROPERTY

STEWART, BC, CANADA

Survey conducted by SJ Geophysics Ltd. August 2019

Report Prepared
August 2019

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1. Survey Summary

SJ Geophysics Ltd. was contracted by Orogenic Gold Corp. to acquire ground magnetometer data on their West Eskay project. The magnetic data was acquired on two survey grids, Quin Eskay and Albino Lake. Table 1 provides a brief summary of the project.

Client	Orogenic Gold Corp.
Project Name	West Eskay
Project Number	SJ839
Location	Albino Lake:
(approx. centre of grid)	Latitude: 56° 39' 23" N Longitude: 130° 30' 39 W
	407378 m E 6280168 m N; WGS 84 UTM Zone 9N
	Quin Eskay:
	Latitude: 56° 18' 53" N Longitude: 130° 27' 34 W
	409713 m E 6242077 m N; WGS 84 UTM Zone 9N
BCGS / NTS Sheet	Albino Lake: 104B.068.3.2.2; Quin Eskay: 104B.038.2.1.2
Mining Zone	Skeena
Total Line Kilometres	19.458
Production Dates	August 6, 2019; August 8 – August 9, 2019

Table 1: Survey Summary

2. Location and Access

The two survey grids are located in northwestern British Columbia, Canada and are situated approximately 88 km (Albino Lake) and 52 km (Quin Eskay) north-northwest of Stewart, BC (Figure 1). Albino Lake was accessed via vehicle from a nearby exploration camp (Figure 2); the Quin Eskay grid featured an exploration camp next to the grid and was only accessible by helicopter from Stewart.



Figure 1: Overview map of the West Eskay survey sites

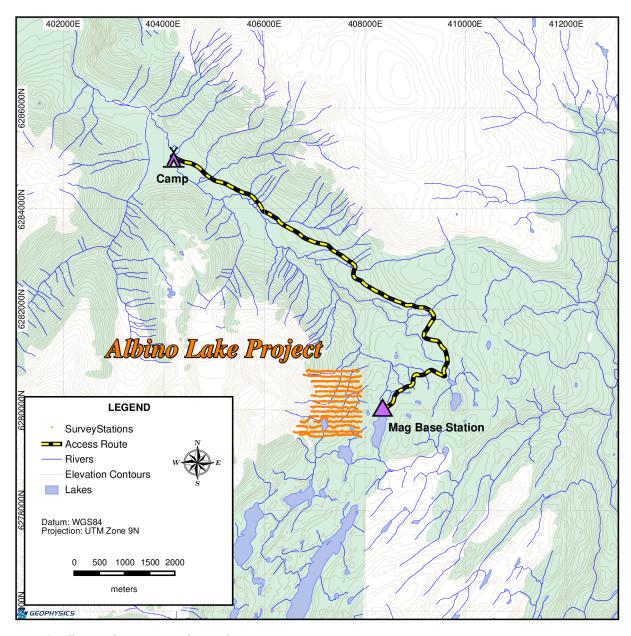


Figure 2: Albino Lake Project and camp location

3. Survey Grid

Magnetic data was acquired on two survey grids, Albino Lake (Figure 3) and Quin Eskay (Figure 4). The Albino Lake grid consisted of 14 east-west lines and Quin Eskay consisted of 20 lines with a line azimuth of 45 degrees. Both grids consisted of lines spaced 100 m apart of

varying lengths due to topographic constraints. Refer to Appendix A for a detailed breakdown of the survey line lengths for each grid. The line and station labels for both grids were based on an local coordinate system.

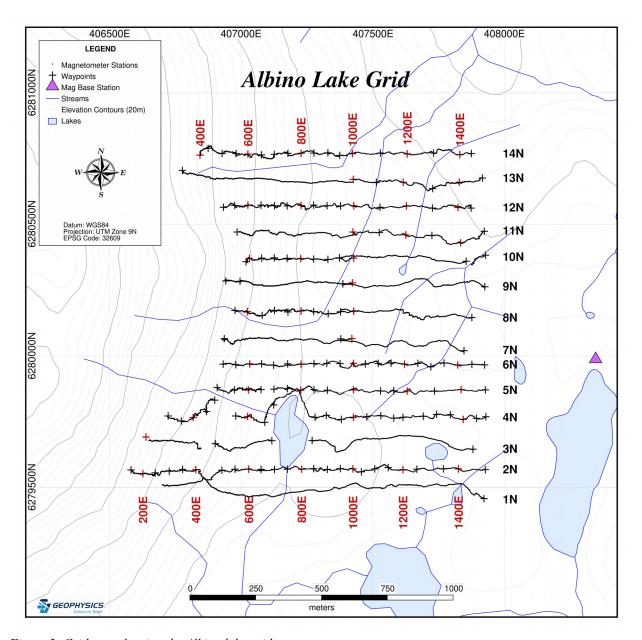


Figure 3: Grid map showing the Albino lake grid

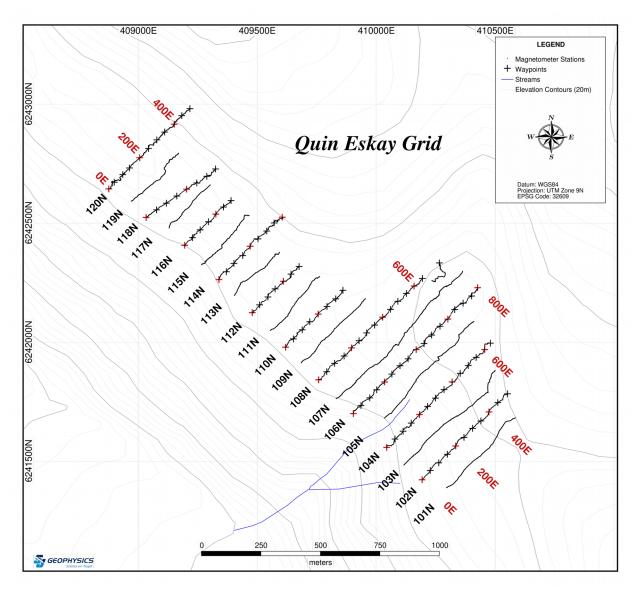


Figure 4: Grid map showing the Quin Eskay grid

No line preparations were completed in advance of the geophysical survey. The planned theoretical survey stations were uploaded to hand-held GPS units and located in real-time by the crew. Stations were not flagged or marked in the field during the survey.

4. Survey Parameters and Instrumentation

4.1. Magnetometer Survey

The magnetometer data was collected with the following instruments.

- GEM GSM-19WG Overhauser Magnetomer (integrated GPS w/ walking mode)
- GEM GSM-19W Overhauser Magnetometer (2nd Rover w/ walking mode)
- GEM GSM-19 Overhauser Magnetometer (Base)

The rover units (GSM-19WG and GSM-19W) collected total magnetic field measurements along the survey lines. Data was collected in walking mode along each survey line with a sampling rate of 2 seconds for both rover units. The GSM-19WG rover unit utilized an integrated GPS unit to locate each magnetic reading. The GSM-19W rover unit did not have an integrated GPS unit. A hand-held Garmin GPSMap 64s GPS was used to collect location data for each magnetic reading. The GPS was set to acquire tracks with a sampling rate of 2 seconds. The magnetic data and GPS data were then matched based on time. One GSM-19 unit was setup as a base station to record diurnal variations in the magnetic field. A recording interval of 2 seconds was selected for the base station.

Each survey day began by setting up the base station magnetometer. With each rover unit, a series of calibration measurements were taken at the established location after which survey acquisition began. Another set of calibration points were recorded at the end of each day before the base station was turned off. The locations of the magnetic base station and calibration points are listed in Table 2. Detailed instrument specifications are described in Appendix B.

Name	Easting	Northing	Elevation
Albino Lake – Magnetic Base Stn.	408346	6279988	1043
Albino Lake – Magnetic Calibration Point	408375	6279976	1042
Quin Eskay – Magnetic Base Stn.	410580	6244782	1163
Quin Eskay – Magnetic Calibration Point	410580	6244765	1164

Table 2: Coordinates of base station and calibration points (WGS 84 UTM 9N)

Garmin GPSMap 64s handheld GPS units were used to collect location data at each survey station. The GPS data was collected in the WGS 84 UTM Zone 9N coordinates system.

5. Field Logistics

The SJ Geophysics field crew consisted of two field technicians. This team oversaw all operational aspects including field logistics, data acquisition and initial field data quality control. Table 3 lists the SJ Geophysics crew members on this project.

Crew Member Name	Role	Dates on Site
Raymond Dickoff	Field Technician	August 6 – August 9, 2019
Justin Hall	Field Technician	August 6 – August 9, 2019

Table 3: Details of the SJ Geophysics crew on site

SJ Geophysics' crew was surveying a property adjacent to the Quin Eskay grid and stayed in the same exploration camp. They surveyed the entire Quin Esaky creek the following day after completing the other project, requiring no mobilization into the grid. On August 7, the crew packed up the camp and mobilized back to Stewart before taking a truck to another exploration camp near the Albino Lake grid. Data was acquired on August 8 and August 9 for the Albino Lake grid. The crew demobilized from the project site all the way back to Vancouver.

The SJ Geophysics crew was accommodated by the client in an exploration field camp located within walking distance from Quin Eskay grid, and a second exploration camp near the Albino Lake grid requiring a half hour drive into the survey site. The camps consisted of wooden cabins and tents. Communication with the SJ Geophysics office during the project occurred by satellite phone.

The SJ Geophysics crew activities are summarized in Table 4 below.

Date	Activity
August 6 Acquire magnetic data on Quin Eskay grid	
August 7 Pack up camp and demobilize to Stewart	
August 8 Acquire magnetic data on Albino Lake grid	
August 9 Acquire magnetic data on Albino Lake grid	
August 10	Demobilize from Eskay Creek Mine Camp to Prince George
August 11 Demobilize from Prince George to Vancouver	

Table 4: Crew production summary

8

6. Deliverables

This logistics report and maps are provided as two paper copies and digitally in PDF format.

The geophysical survey data is provided digitally on the included CD. A brief description of the

provided data is below.

Magnetometer data

• ASCII text files (*.txt) of the raw magnetic data for each survey day.

• ASCII text files (*.csv) of the final processed and QC'd magnetic data for each survey

grid. Contains QC flags indicating good data, bad data, etc.

• ASCII text files (* 4Plot.csv) of the final processed and QC'd magnetic data for each

survey grid. Data has been filtered to only keep data points with QC flags of "0".

These files were used to generate the final maps.

• Maps of colour contoured magnetic data (TMI) for each survey grid in PDF format.

• Geotiff images of the colour contoured magnetic data (TMI) for each survey grid.

• Grid maps in PDF format

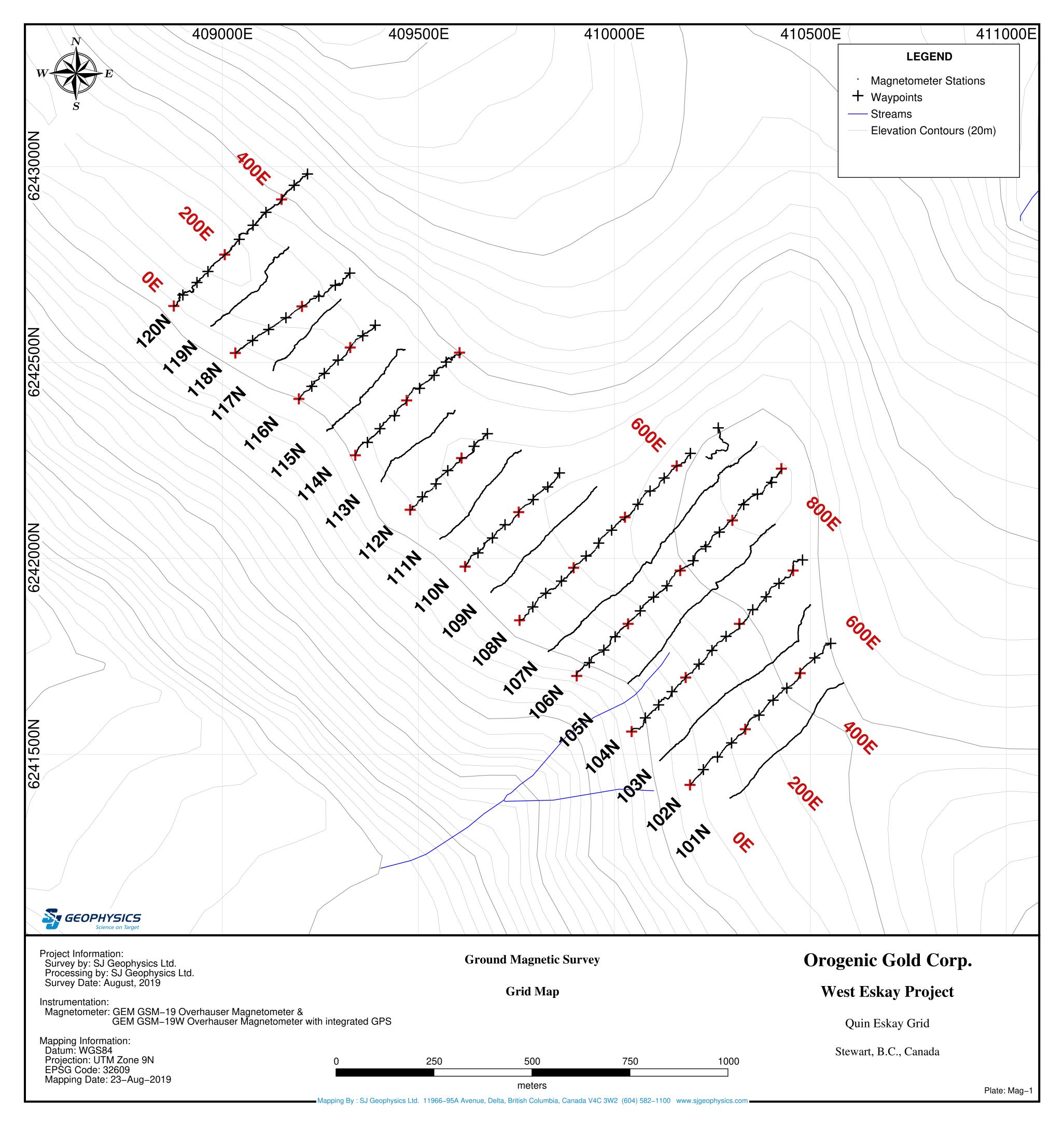
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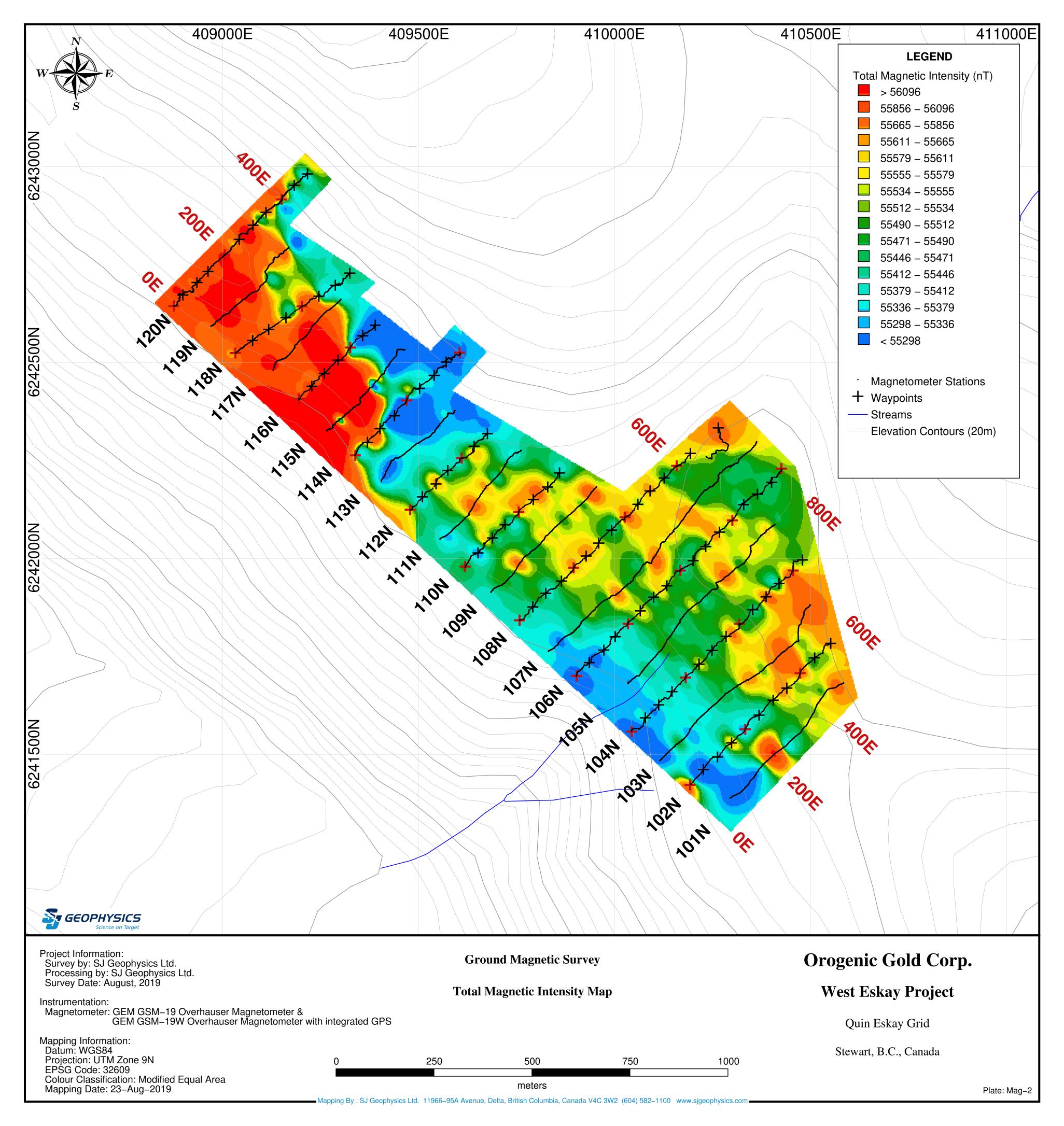
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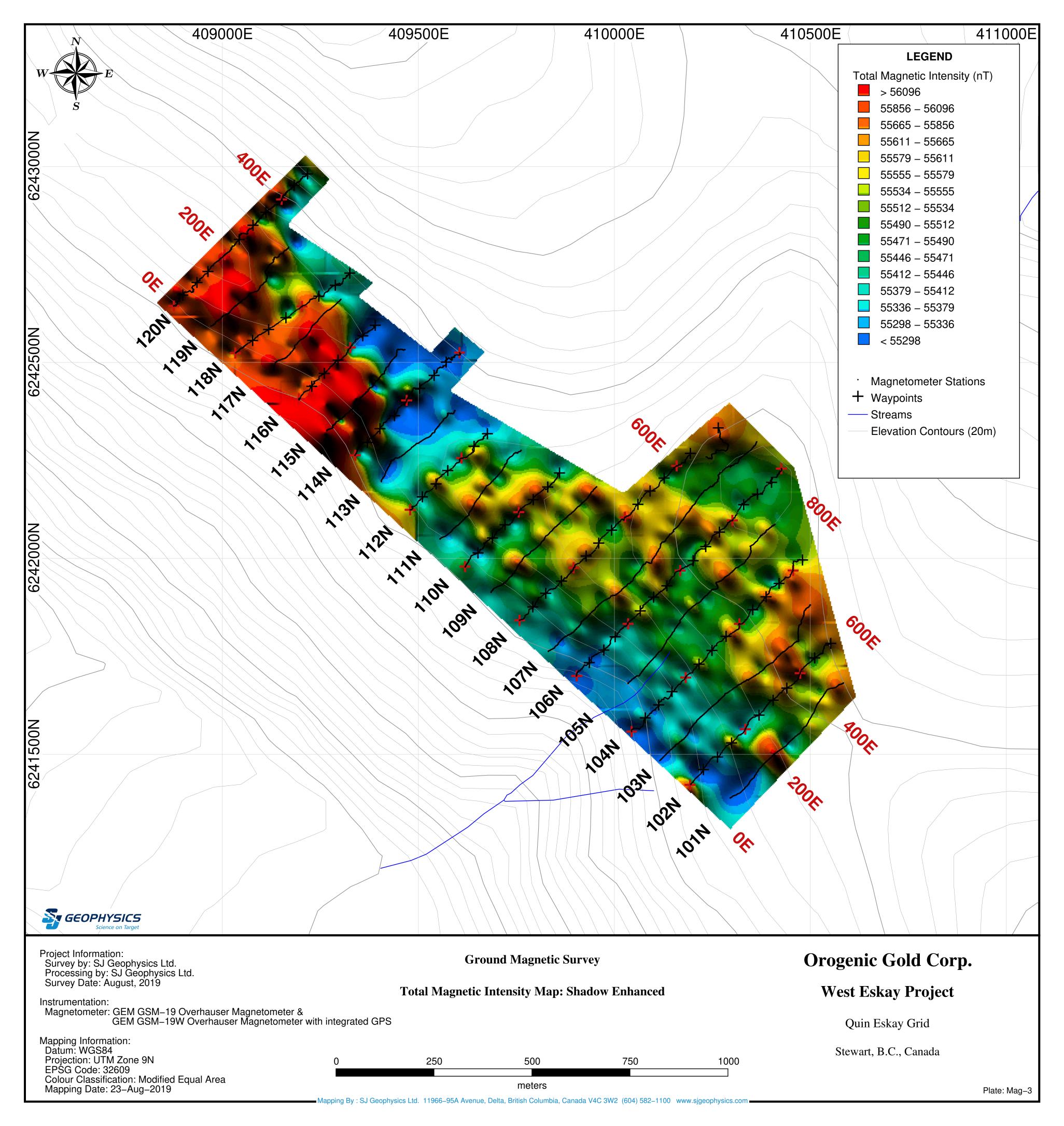
Shawn Rastad, B.Sc. Geophysics

Geophysical Operations Manager

SJ Geophysics Ltd.







Appendix A: Survey Details Albino Lake Grid

						Survey Length
Line	Series	Start X	Start Y	End X	End Y	(m)
1	N	406701.4	6279458.0	407922.7	6279536.0	1224
2	N	406582.0	6279529.0	407928.0	6279588.0	1347
3	N	406649.5	6279635.1	407880.4	6279698.2	1233
4	N	406721.0	6279747.0	407929.0	6279869.0	1214
5	N	406909.0	6279854.0	407927.0	6279886.0	1019
6	N	406931.0	6279953.0	407925.0	6279982.0	994
7	N	406928.8	6280017.3	407844.8	6280070.7	918
8	N	406978.0	6280137.6	407875.1	6280180.0	898
9	N	406943.1	6280258.1	407922.4	6280294.3	980
10	N	407021.0	6280346.3	407928.9	6280383.3	909
11	N	406992.0	6280424.0	407924.0	6280480.0	934
12	N	406934.0	6280555.0	407874.0	6280583.0	940
13	N	406776.5	6280627.0	407917.0	6280704.8	1143
14	N	406843.0	6280748.0	407875.0	6280799.0	1033

 $Total\ Linear\ Metres = 14,786$

Quin Eskay Grid

Line	Series	Start X	Start Y	End X	End Y	Survey Length (m)
102	N	410193	6241422	410552	6241783	509
104	N	410044	6241558	410480	6241996	618
106	N	409904	6241700	410426	6242229	743
108	N	409758	6241842	410265	6242333	706
110	N	409619	6241979	409860	6242218	339
112	N	409479	6242124	409676	6242318	276
114	N	409339	6242263	409605	6242525	373
116	N	409195	6242407	409390	6242595	271
118	N	409033	6242524	409325	6242728	356
120	N	408876	6242644	409217	6242981	479

 $Total\ Linear\ Metres = 4,672$

Appendix B: Instrument Specifications

GEM Systems GSM-19 Magnetometer

Resolution: 0.01 nT, magnetic field and gradient

Accuracy: 0.2 nT over operating range Range: 20,000 to 120,000 nT Over 10,000 nT/m

Operating Interval: 3 seconds minimum, faster optional

Reading: Initiated by keyboard depression, external trigger or carriage return via

RS-232C

Input/Output: 6 pin weatherproof connector, RS-232C, and optional analog output Power Requirements: 12 V, 200 mA peak (during polarization), 30 mA standby, 300 mA peak in

gradiometer mode

Power Source: Internal 12 V, 2.6 Ah sealed lead-acid battery standard, others optional

External 12 V power source can also be used Input: 110/220 VAC, 50/60 Hz and/or 12VDC

Output: 12 V dual level charging

Operating Range: Temperature: -40°C to +60°C

Battery Voltage: 10 V minimum to 15 V maximum

Dimensions:

Battery Charger:

Console: 223 x 69 x 240 mm Sensor Staff: 4 x 450 mm sections Sensor: 170 x 71 mm diameter

Weights:

Console: 2.1 kg
Staff: 0.9 kg
Sensor: 1.1 kg each

Appendix C: Geophysical Techniques

Magnetic Survey Method

Magnetic intensity measurements are conducted along survey lines (normally on a regular grid) and are used to identify metallic mineralization related to magnetic materials in the ground (e.g., magnetite and/or pyrrhotite). Magnetic data can be used as a mapping tool to distinguish rock types and to identify faults, bedding, structure and alteration zones. Line and station spacing are usually determined by the size and depth of the exploration targets of interest.

The most common technique used in mineral exploration is to measure the amplitude of the magnetic field using a magnetometer. The instrument digitally records the survey line, station, total magnetic field and time of day at each station. After each day of surveying, data are downloaded to a computer for archiving and further processing.

The earth's magnetic field is continually changing (diurnal variations) so field measurements are calibrated to these variations. The most accurate technique is to establish a stationary base station magnetometer to continually monitor and record the magnetic field over the course of a day. The base station and field magnetometers are synchronized on the basis of time and computer software is used to correct the field data for the diurnal variations.