

**BC Geological Survey
Assessment Report
37935**



**Assessment Report
Title Page and Summary**

TYPE OF REPORT [type of survey(s)]: Geochemical

TOTAL COST: \$9,251.70

AUTHOR(S): Lisa Fodor

SIGNATURE(S):



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5717117 - 2018/OCT/28

PROPERTY NAME: Gwenyth Claim

CLAIM NAME(S) (on which the work was done): Gwenyth Claim (1055836)

COMMODITIES SOUGHT: Au, Co, Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092JNE058

MINING DIVISION: Lillooet

NTS/BCGS: 092J.086, 092J.076

LATITUDE: 50 ° 46 ' 54 " LONGITUDE: 122 ° 52 ' 9 " (at centre of work)

OWNER(S):

1) Cobalt One Energy Corp

2)

MAILING ADDRESS:

General Delivery, Gold Bridge, BC, V0K 1P0

OPERATOR(S) [who paid for the work]:

1) Cobalt One Energy Corp

2)

MAILING ADDRESS:

General Delivery, Gold Bridge, BC, V0K 1P0

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Bridge River Complex, Bralorne East-Liza Complex, Coast Plutonic Complex, Cadwallader Group, Hurley Formation,

Stibnite, Gold, Pyrite, Quartz Veins

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 00332, 11875, 14725, 18594, 33412

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			
Magnetic _____	_____	_____	_____
Electromagnetic _____	_____	_____	_____
Induced Polarization _____	_____	_____	_____
Radiometric _____	_____	_____	_____
Seismic _____	_____	_____	_____
Other _____	_____	_____	_____
Airborne _____	_____	_____	_____
GEOCHEMICAL (number of samples analysed for...)			
Soil _____	_____	_____	_____
Silt 14 stream sediment. wages + support + reporting	1055836		4918
Rock 14 rock samples. wages + support + reporting	1055836		3472
Other _____	_____	_____	_____
DRILLING (total metres; number of holes, size)			
Core _____	_____	_____	_____
Non-core _____	_____	_____	_____
RELATED TECHNICAL			
Sampling/assaying assays	1055836		861.7
Petrographic _____	_____	_____	_____
Mineralographic _____	_____	_____	_____
Metallurgic _____	_____	_____	_____
PROSPECTING (scale, area) _____	_____	_____	_____
PREPARATORY / PHYSICAL			
Line/grid (kilometres) _____	_____	_____	_____
Topographic/Photogrammetric (scale, area) _____	_____	_____	_____
Legal surveys (scale, area) _____	_____	_____	_____
Road, local access (kilometres)/trail _____	_____	_____	_____
Trench (metres) _____	_____	_____	_____
Underground dev. (metres) _____	_____	_____	_____
Other _____	_____	_____	_____
		TOTAL COST:	\$9,251.70

Stream Sediment & Rock Geochemistry Report

on the

Gwenyth Claim

BC Cobalt Project

Gwenyth Claim

(Tenure number 1055836)

Gwenyth Lake Area

South-Central British Columbia

Lillooet Mining Division

NTS Mapsheets 092J.086 & 092J.076

50°46'54" N, 122°52'9" W

Written for

Cobalt One Energy Corporation Ltd

Operated by

Cobalt One Energy Corporation Ltd

Prepared by

Lisa Fodor, P.Ge

February 15, 2019

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1.0 Summary

The Gwenyth claim lies favourably to the NW of the historic Bralorne Gold Mine along strike of the Cadwallader fault zone. Cobalt One believes that the BC Cobalt Project along strike of the Cadwallader Fault zone could present the opportunity for a belt scale cobalt mineralization system similar to Bou Azzer in Morocco. Cobalt mineralization at Bou Azzer and Little Gem occurs near the contact of a granodiorite-diorite body with serpentinized ultramafics. It is interpreted, although these systems are poorly understood, that the cobalt is leached by fluids from the serpentinite and deposited through redox reactions within the diorite not far from the contact, generally in structures.

Cobalt One Energy Corp completed a stream sediment and rock sampling program over the Gwenyth Claim during the 2018 field season. 14 stream sediment samples were collected in the field and were processed back at camp. 14 rock samples were also collected in the field and submitted for assay. 2 anomalous rock samples were noted, 850m apart, within the middle portion of the claim block comprised of quartz veins with trace disseminated pyrite along margins & in host rock. Rock sample MMLG005 returned results of 2.11 ppm Au, 102 ppm Cu, and 22.3 ppm Ag. Rock sample JSLG136 returned results of 0.3 ppm Au, 23 ppm Cu, and 4.4 ppm Ag. The stream sampling program on the Gwenyth claim appears to pick up ultramafic signatures in the southern portion of the tenement with elevated Co, Ni, Cr assay values. There were no significant stream sediment gold assays returned from this program which is moderately surprising when compared to the rock chip assays. This may suggest that the gold mineralization system associated with the quartz veins + pyrite is relatively localized, or that the streams draining from these mineralized areas were not sampled.

A more in depth compilation and digitization of historic data on the Gwenyth claim is recommended as well as scanning through historic assay results for Little Gem style mineralization pathfinder elements if available (Au, Co, As, La, Sb), identified from the 2017 stream sediment sampling program on the Little Gem Project claim package (Fodor, 2018). Follow-up mapping and correlation with historic showings in the vicinity of the anomalous quartz + pyrite veins is recommended to trace potential scale and continuity between the two occurrences.

2.0 Introduction

A small field program of stream sediment and rock sample collection commenced on the Gwenyth claim during the 2018 field season. Field crews of two Cobalt One personnel collected the stream sediment samples in the field and later processed the samples back at camp at the end of the sampling program.

This field program was designed to act as a quick first pass geochemical assessment of the mineral potential of the claim. Anomalous assay results would allow for further sampling and investigation. Samples were sent to MS Analytical Vancouver for assay.

2.1 Terms of Reference

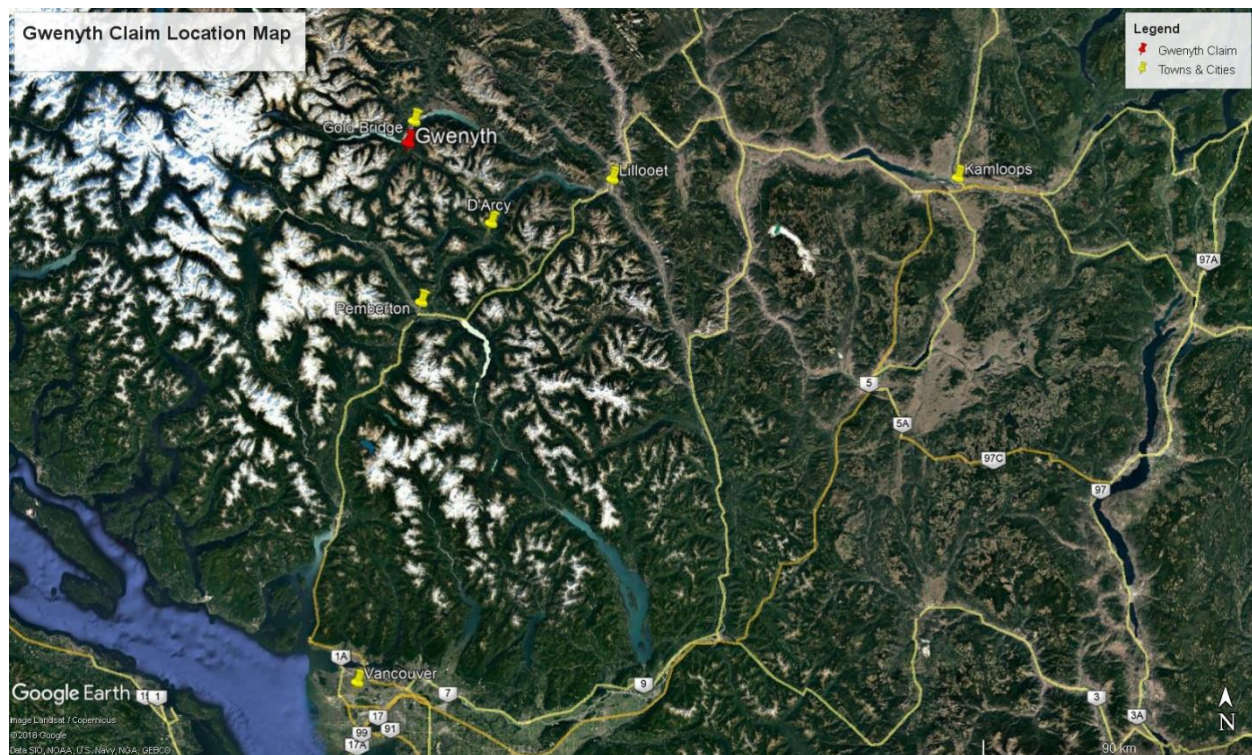
The work described in this report was conducted by Cobalt One Energy Corporation Ltd (COEC), a wholly owned subsidiary of Australian Securities Exchange listed company Blackstone Minerals Ltd. The information contained in this report is derived from unpublished and published maps, reports, government open file sources and on field work conducted by COEC and Blackstone Minerals personnel, during 2018.

2.2 Location, Access and Property Description

LOCATION

The center of the Gwenyth Claim is located 7 km to the south of the township of Gold Bridge (see Figure 1). The claim occurs within the Lillooet Mining Division, covered by NTS Mapsheets 092J.086 & 092J.076 and is approximately centered at 50°46'54" N latitude and 122°52'9" W longitude (UTM WGS84 Zone 10U 509231 easting, 5625550 northing).

Figure 1. Location Map



ACCESS

Access to the claim area is obtained by traveling on Highway 99 north from Vancouver to Pemberton. From Late-May to Early-November, turn left through Pemberton and right along Pemberton Meadows Road for 23 km to Hurley River Road. Follow this road for 34 km to the east Hurley turnoff. Turn right to follow the east Hurley for 5.5 km to access the southern portion of the tenement or keep straight for 6.5 km to begin access to the western and central portions of the tenement via various logging roads off the Hurley. 4 wheel drive is recommended to access the claim.

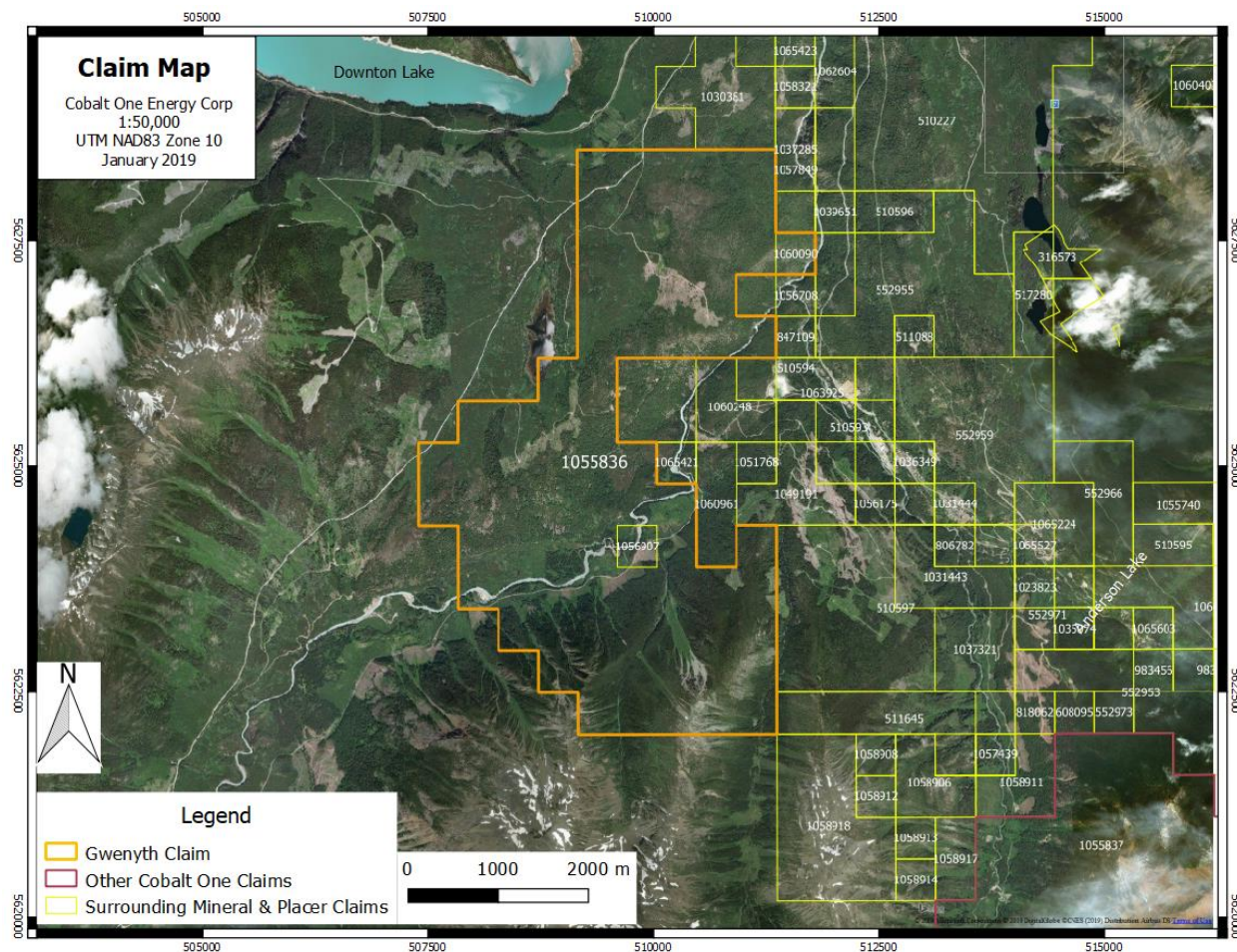
PROPERTY DESCRIPTION

The claim details are listed in Table 1, covers an area of 15.73 km² and is currently operated by Cobalt One Energy Corporation Ltd (COEC). COEC is a fully owned subsidiary of Australian Securities Exchange listed Blackstone Minerals Ltd.

Table 1. Gwentyth Claim February 2019

Claim Name	Tenure Number	Area (ha)	Current Expiry Date	Company Name
GWENTH	1055836	1573.3798	2019/DEC/29	Cobalt One Energy

Figure 2. Claim Map



2.3 Physiography, Climate and Infrastructure

PHYSIOGRAPHY

The property lies on the eastern portion of the Pacific Ranges. The terrain is generally steep and mountainous. Naturally occurring Gwenyth Lake lies partially along the western margin of the claim. Hydroelectrically dammed Downton Lake occurs to the northwest of the claim.

Elevations vary from 865 metres ASL (Above Sea Level) just downstream from the Hurley and Cadwallader creek confluence, to 2119 metres ASL on the northern shoulder of Mount Noel.

The forest cover consists primarily of fir and spruce, moderate in density and with moderate undergrowth.

CLIMATE

The general area has a northern inland dominated climate. Dramatic variations in the climate are caused by a combination of elevation, rain shadow effects, and latitude. Generally, winters are long and summers warm and short with occasional heat waves. The claim area can usually be worked from May to late October without handling or plowing snow. Temperatures from the Bralorne weather station varied from a low of -36°C in winter to a maximum of 37.8°C in summer. Overall, the annual mean temperature was 4.6°C. In terms of precipitation, total annual rainfall averaged 386mm while total snowfall averaged 231 cm (Shearer, 2017).

INFRASTRUCTURE

The claim occurs 7 km south of the town of Gold Bridge and is accessible by gravel roads. Local resources in Gold Bridge include a general store, post office, ambulance station, and two hotels. For major services, the town of Lillooet is a 105.4 km drive from Gold Bridge along Lillooet Pioneer Rd 40. The town of Pemberton is accessible during the summer months along the Hurley forest service road, an 80 km drive from Gold Bridge.

The Bralorne Gold Mine is 3.5 km to the east of the claim and has an operational water treatment plant and camp facilities. The mill has been decommissioned for the time being.

Electricity can be sourced from Gold Bridge and the area is an active hydroelectric generation region with two companies active in the area, Boralex and BC Hydro.

There is sufficient water from several lakes and streams for mineral exploration on the claim.

2.4 History

Gold was first discovered in the region in 1896 within the Cadwallader Creek drainage system. This discovery initiated intense exploration activity; by the mid 1930's the area developed into one of the most productive gold producing areas in western Canada. The two major producers of the district, the Bralorne and Pioneer Mines, merged to form Bralorne Pioneer Mines Ltd. in 1959 and continued to produce until September 1971 when the ore reserves were exhausted. For the period from 1932 to 1971 the two mines produced over 4,100,000 ounces of gold (Canadian Mines Handbook, 1980-81).

Exploration of the Gwyneth Lake property was first described by C. E. Cairnes (1937). Stating that the Golden Mitt Mining Company Ltd. developed a shallow shaft, two short adits, and a surface trenching to examine quartz veining.

Further work was commissioned by Hurley River Mines Ltd. in 1960. Geological mapping and an eight-hole diamond drill program were conducted. Six holes directly south of Gwyneth Lake examined a carbonate-talc shear zone and a felsic dike, both yielding negligible Au values. Two holes southwest of the lake examined expressions of surface quartz veins at depth, also yielding insignificant Au values (Clarke, 1960).

In 1981 New Congress Resources Ltd. conducted geochemical soil sampling as a follow up to a 1979 soil sampling program that had revealed several Au bearing veins. Our research was unable to find results on this 1979 reporting. One North-South sampling line attempting to find more Au bearing quartz veins but revealed no anomalous results (Friesen, 1981).

In 1983 X-Calibre Resources Ltd. conducted geological mapping and rock geochemical analysis. This report indicated a previously discovered "Lost Gold" Au-Sb surface showing directly south of Gwyneth Lake, and a subsequent circular As-Sb anomalous zone surrounding this showing. Two anomalous samples with weak Au values (10 and 20 ppb Au) were found within this zone, though their correlation was considered weak (Mazur, 1983).

In 1986 Cooke Geological Consultants conducted mapping, geophysical surveying, and geochemical rock and soil sampling. VLF-EM geophysical data gave four strong anomalies that were followed up with soil sampling. This soil sampling indicated two spot anomalies of 80 ppb Au and 199 ppm As. Fourteen trenches further investigated these Au soil anomalies and found two stibnite veins that assayed rock samples of 7.5% Sb and 9% Sb. Three Bralorne type quartz veins returned grab sample assays 0.35 oz/ton Au and 2.84 oz/ton Ag. Lastly, two stibnite veins in quartz-diorite assayed up to 16.9% Sb.

In 1988 Columbia Airborne Geophysical Services was commissioned by Levon Resources to conduct an airborne magnetometer and VLF-EM survey. Levon Resources further investigated two conductors indicated by these surveys in 1989. They concluded conduction anomalies to be weak and the result of pyrite and pyrrhotite mineralization. Soil geochemistry surveys revealed one highly anomalous 280 ppm Au result on the edge of one of their sampling grids (Friesen, 1989).

Lastly, in 2011 a joint venture between Goldbridge Holdings Ltd, BCT Mining Corporation, and Discovery Ventures Corporation conducted a VLF-EM survey. A north-south trending VLF-EM anomaly that reflects a previous magnetic anomaly was described in their report, as well as a weaker east-west trending VLF-

EM anomaly 400m to the east. The report described both as being significant structures that could host or be associated with potential economic mineralization (Leimanis, 2012).

3.0 Geology

3.1 Regional Geology

The regional geology of the Bridge River area has been summarized by Kirkam (2016):

The Bridge River district is situated at a tectonic boundary between the Cache Creek and Stikine allochthonous terranes. The Bridge River Terrane is possibly equivalent to the Cache Creek Terrane and comprises slabs of oceanic and transitional crust that were stacked against the continental margin together with island-arc-related units of the Cadwallader Terrane, interpreted as part of the Stikine Terrane. Diverse rock units of these two terranes are structurally deformed and imbricated in the area, together with large fault-bounded slices of gabbroic and ultramafic rocks. These early structures are crosscut by later northwest- and north-trending major faults related to the Fraser-Yalakom regional dextral strike slip fault system, and by Late Cretaceous and Tertiary granitic plutons and related dikes (see Figure 3 & 4).

The Bridge River Terrane comprises Mississippian to Middle Jurassic accretionary complexes of oceanic basalt and gabbro and related ultramafic rocks, chert, basalt, shale and argillite. It is juxtaposed with Late Triassic to Early Jurassic island arc volcanic rocks and mostly marine, arc-marginal clastic strata of the Cadwallader Terrane. These assemblages are variably overlain, mostly to the north, by clastic, mostly non-marine successions belonging to the Jurassic-Cretaceous Tyaughton Basin.

Figure 3. Regional Geology (from Warwick, 2012 report)

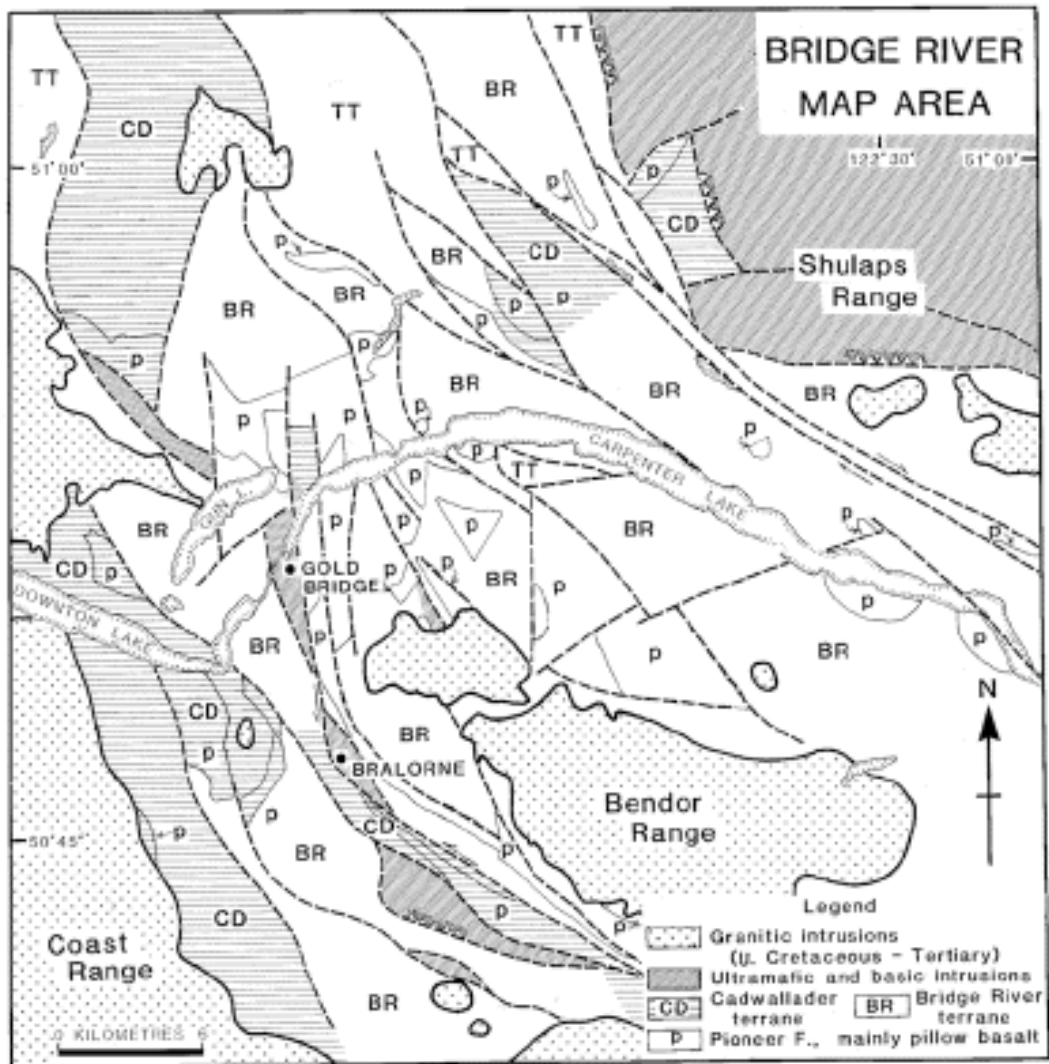
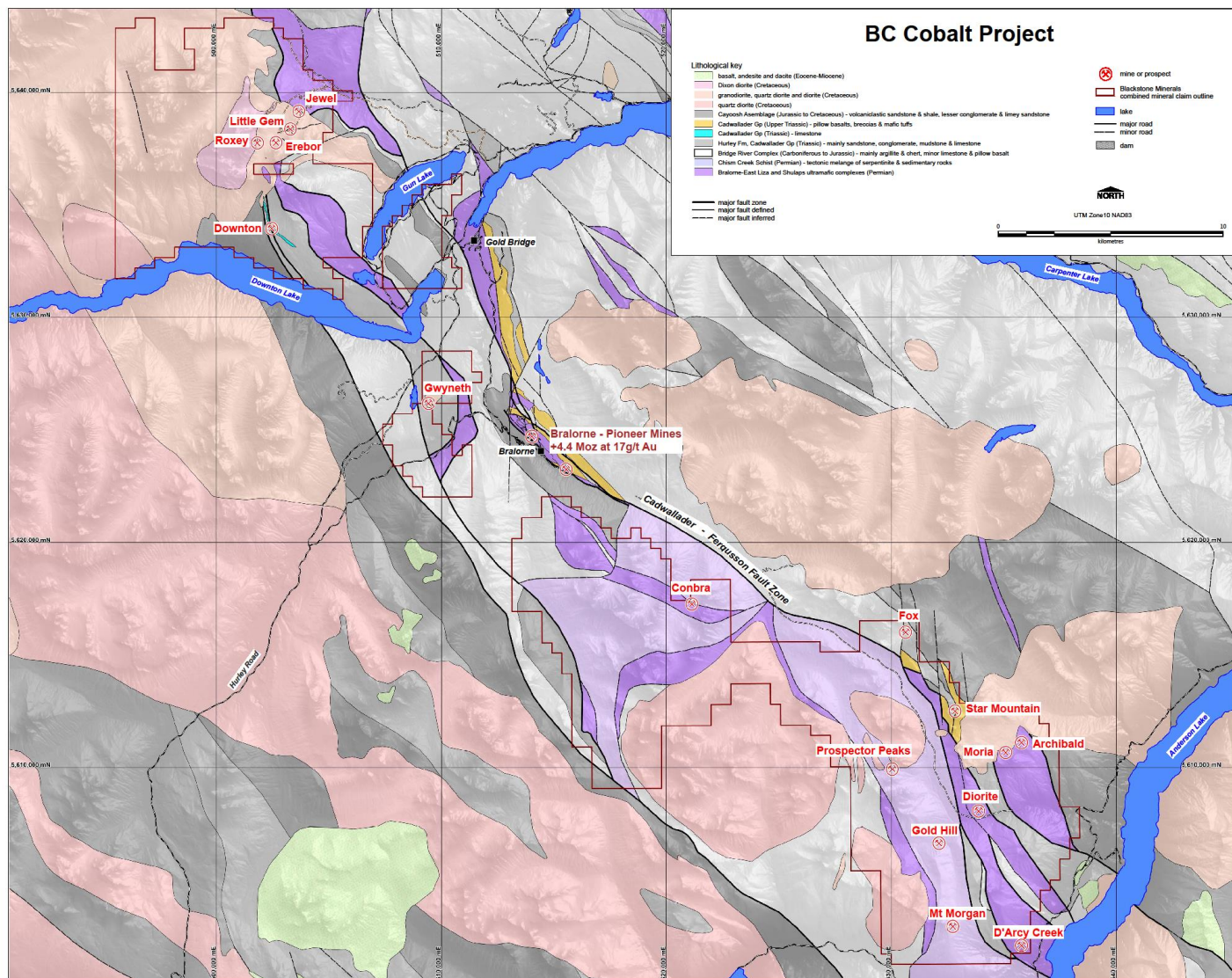


Figure 4. Regional Geology in vicinity of the BC Cobalt Project



The region has been intruded by a wide range of Cretaceous and Tertiary plutonic and volcanic rocks and their hypabyssal equivalents. Most significant among these are the dominantly Cretaceous granitoid bodies that form the Coast Plutonic Complex, which is locally characterized by the 92 Ma Dickson McClure intrusions, and the large individual bodies of the Late Cretaceous Bendor plutonic suite. Hypabyssal magmatism is reflected by emplacement of porphyritic dikes between 84 and 66 Ma, with the youngest magmatic event being 44 Ma lamprophyre dikes.

The district has been deformed by mid-Cretaceous contractional deformation within the westerly trending Shulaps thrust belt, and by contractional and oblique-sinistral deformation associated with the Bralorne-Eldorado fault system. The timing of this deformation and metamorphism is ca. 130 to 92 Ma, with synorogenic sedimentary flysch, as young as mid-Cretaceous, cut by the faults. The Bridge River and

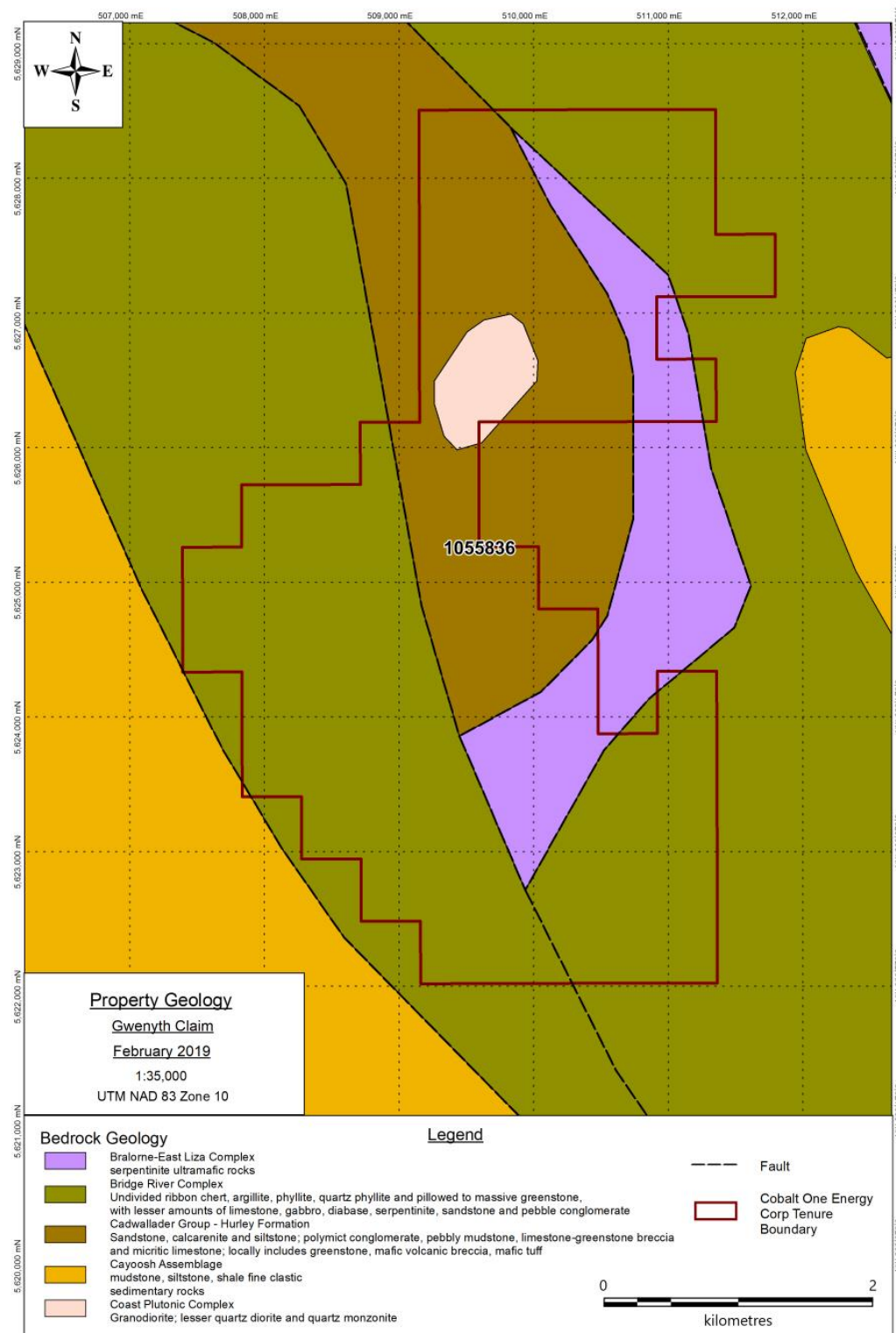
Cadwallader Terrane are juxtaposed along the Bralorne-Eldorado fault system, which in the Bridge River area consists of linear, tectonized and serpentized slices of late Paleozoic mafic and ultramafic rocks known as the Bralorne-East Liza Lake thrust belt, a 1 to 3 km wide zone defined by Schiarizza et al., 1997.

The main gold-forming event in the Bridge River district took place at ca. 68 to 64 Ma at the Bralorne-Pioneer deposit. Mineralization pre-dated or was synchronous with the emplacement of the Bendor batholith, and the gold event overlaps initiation of dextral strike-slip on the regional fault systems in this region. The abundance of gold, antimony, and mercury deposits and occurrences along the various main structures in the district suggests that the onset of dextral strike-slip in this part of the Cordillera facilitated widespread fluid flow along the reactivated fault systems.

3.2 Property Geology and Mineralization

The Gwenyth claim geology has been mapped by Schiarizza (1996) and primarily consists of the Bridge River Complex, Cadwallader Group Hurley Formation, Bralorne-East Liza Complex and minor intrusive of Coast Plutonic Complex (see Figure 5).

Figure 5. Property Geology



Minfile 092JNE058 describes local geology near Gwenyth Lake as follows: The Oro claims are underlain by Hurley Formation rocks of the Upper Triassic Cadwallader Group, consisting of sediments and volcanic aquagene breccia striking northwest and dipping southwest. These are intruded by quartz diorite stocks and hornblende porphyry dykes of the Jurassic to Tertiary Coast Plutonic Complex.

On the Oro 3 claim, three narrow quartz-calcite veins containing minor disseminated pyrite, chalcopyrite and stibnite occur in a quartz diorite stock near the contact with Hurley sediments and volcanics. The veins average 30 centimetres in width, strike north-northwest and dip steeply west.

Grab samples assayed 12.0 grams gold per tonne and 97.4 grams silver per tonne (Assessment Report 14725). The original "stibnite" showing (on Oro 2) is hosted in Hurley volcanics and sediments near a hornblende porphyry dyke. Narrow veins in shears are 60 metres long by 25 centimetres wide and contain an average of 8.9 per cent antimony. Northeast of the original showing, also on the Oro 2 claim, 2 narrow stibnite-quartz-calcite veins are hosted in quartz diorite near a felsite dyke. The veins strike north-northwest, dip steeply north and average 7.5 per cent antimony over 25 centimetres for 15 metres strike length. One grab sample assayed 16.9 per cent antimony (Assessment Report 14725).

4.0 May 2018 Exploration Program

4.1 Program Summary

A total of 10 man days were spent collecting 14 stream sediment samples and 14 rock samples in the field during the 2018 field season on the Gwenyth Claim. The field work campaign focused on utilizing the flocculated stream sediment method previously tested on the Little Gem claim package in 2017. Access to the claim was via pickup truck and foot traverse. 2 man days were spent processing stream sediment samples after collection before sending to the lab for analysis.

4.2 Sample Collection

Stream sediment sampling procedures outlined in the Flocculant Stream Sediment Sampling SOP (see Appendix 1) were followed as closely as possible in the field:

- The active stream bed and banks were sampled where ever possible;
- If the stream was not active or could not be accessed then overbank material was sampled;
- The finest grained material (mud) was sampled from at least 10 different locations along a length of the channel taking small scoops no deeper than 5 cm;
- Organic material and stagnant pools rich in organic material were avoided;
- A minimum of 3 kg of material was thus collected into clean plastic bags at each site;
- The samples were screened and flocculated off site to produce -100 µm subsamples for assaying

Notes were recorded about the characteristics of the sample sites, and an averaged waypoint location for each site was taken by Garmin GPS62s or GPS64.

Rock samples were either chipped across a specific distance or collected as a single grab sample. A location waypoint location was taken by Garmin GPS62s or GPS64s and recorded for each sample. Rocks were described in the field and recorded in a notebook. The samples were then placed in a fresh poly plastic or calico cotton bag with sample ID written on the outside of the bag. Where a sample tag booklet was used, a unique tag was assigned to the sample and the tag was placed in the bag with the sample. The bags were closed securely with a zip tie for transport out of the field.

4.3 Sample Preparation, Analyses and Security

SAMPLE PREPARATION

To reduce “unproductive” field time the stream sediment samples were screened offsite at the COEC office in Bralorne with clean water to produce clay fractions for assay. Details of the screening and flocculation processing method used are found in Appendix 1 and the objective was to produce several hundred grams of -100 µm sample for assay from each stream sediment sample site.

ANALYSES

Stream Sediments:

14 processed sediment samples were delivered by COEC personnel to MS Analytical, Vancouver. The preparation and analytical methods are listed below.

Preparation:

PPU-520 Pulverize, 500g to 85% passing 75 µm

PWA-500 Wash pulverizer with barren material between each sample

Analysis:

IMS-132 Multi-element, 40g, 3:1 Aqua regia, ICP-AES/MS, Ultra Trace Level

Rocks:

14 rock samples were delivered by COEC personnel to MS Analytical, Vancouver. The preparation and analytical methods are listed below.

Preparation:

PRP-910 Dry, Crush to 70% passing 2mm, Split 250g, Pulverize to 85% passing 75µm

Analysis:

FAS-221 Au, Fire Assay, 50g fusion, AAS, Ore Grade

ICP-230 Multi-Element, 0.2g, 4-Acid, ICP-AES, Trace Level

SECURITY

Samples were packed into several rice bags and zip tied closed. A COEC or Blackstone Minerals employee always personally dropped the samples off at the lab the same day as travel.

5.0 Results

14 rock and 14 stream sediment samples were collected during the 2018 field season on the Gwenyth Claim. Two anomalous rock samples were identified, MMLG005 and JSLG136 reporting 2.11 ppm Au & 0.3 ppm Au, 102 ppm Cu & 23 ppm Cu, 22.3 ppm Ag & 4.4 ppm Ag, and 74 ppm Bi & 60 ppm Bi, respectfully.

Appendices 2 & 3 list the collected sample coordinates in UTM NAD83 Zone 10, sample descriptions, and select assay values for the rock and stream sediment samples, respectively. For full element suite analytical results, please see certificates of analysis in Appendix 4. Assay results are plotted in Figures 6 through 19 below.

Figure 6. Rock Assay Results – Au ppm

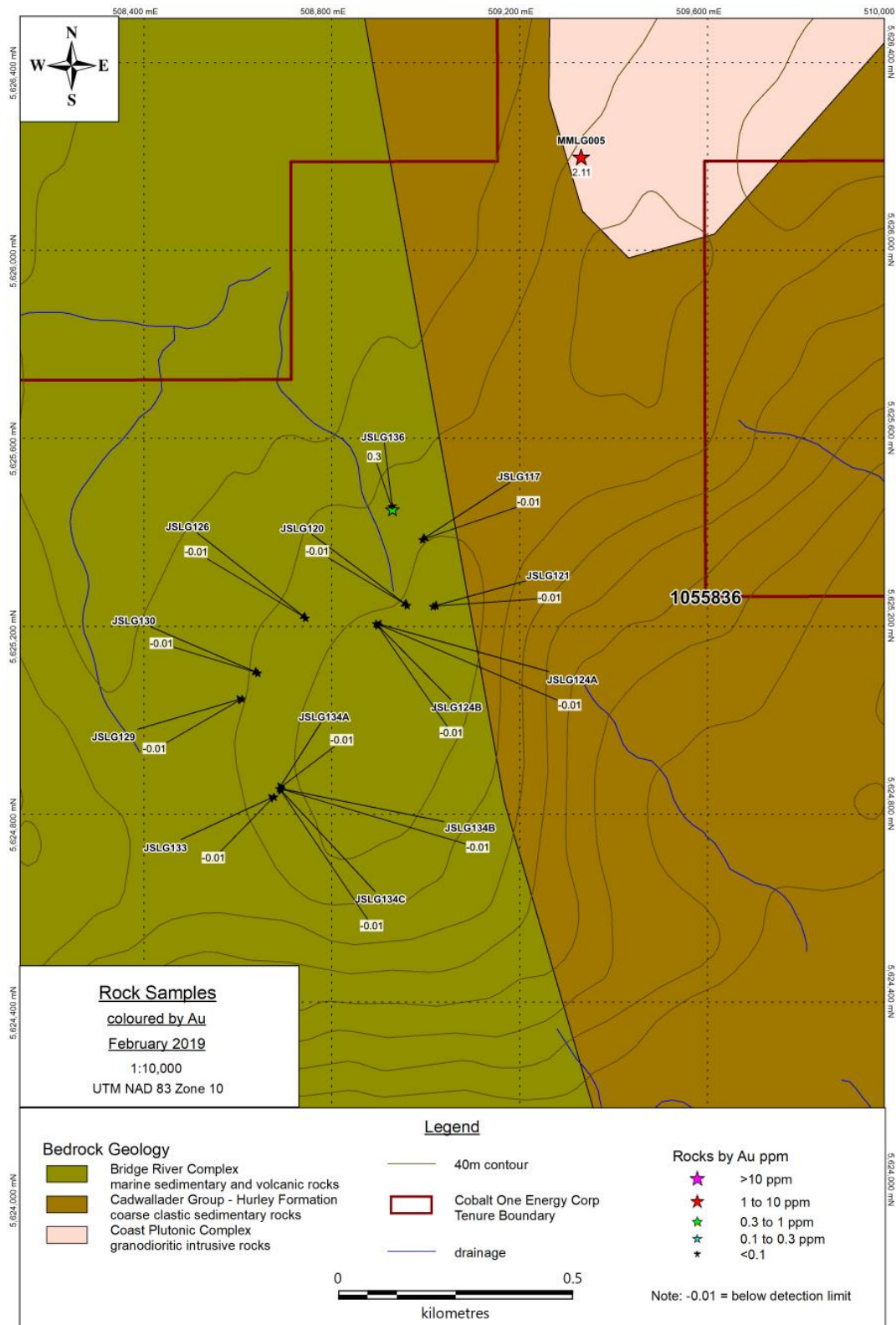


Figure 7. Rock Assay Results – As ppm

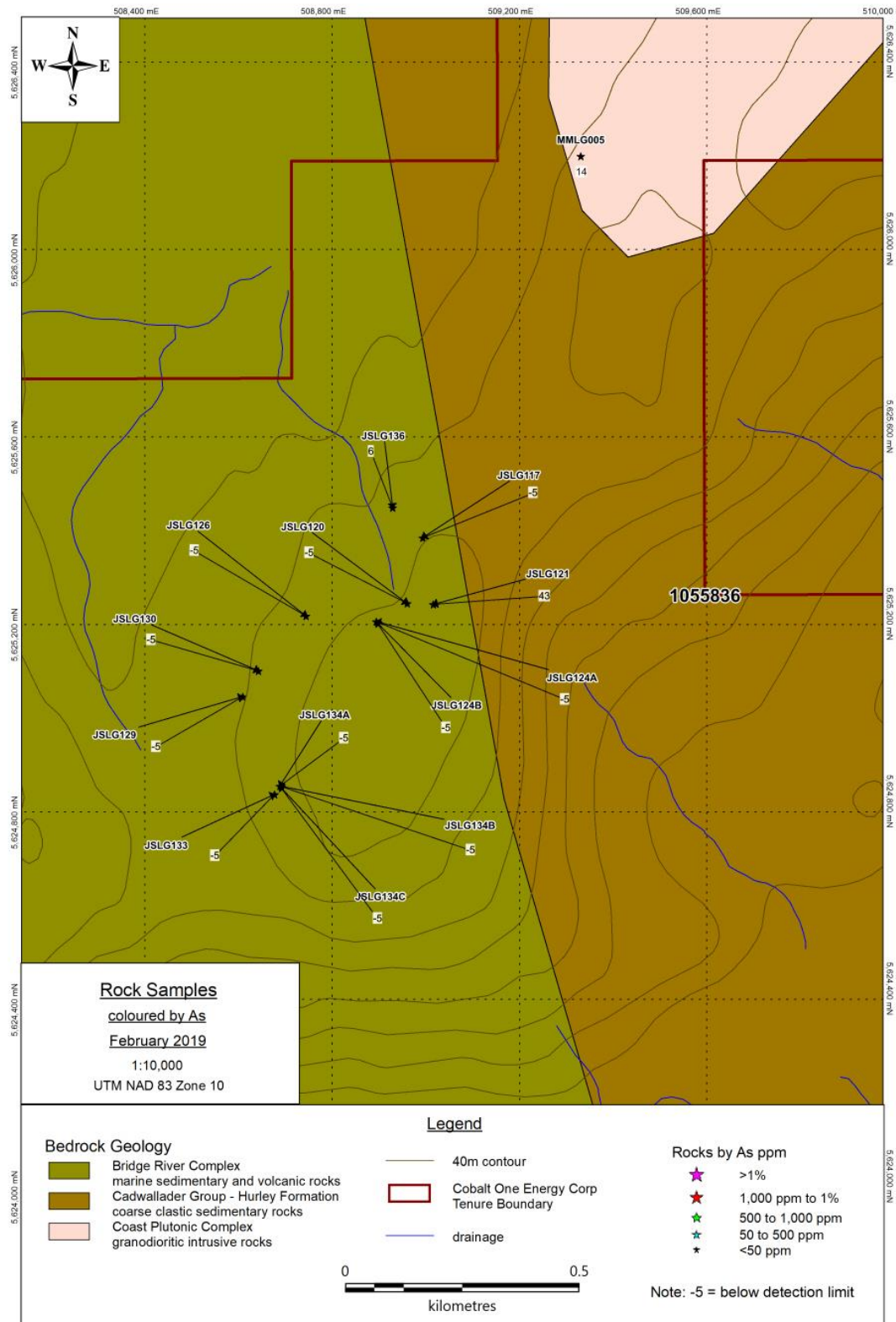


Figure 8. Rock Assay Results – Ag ppm

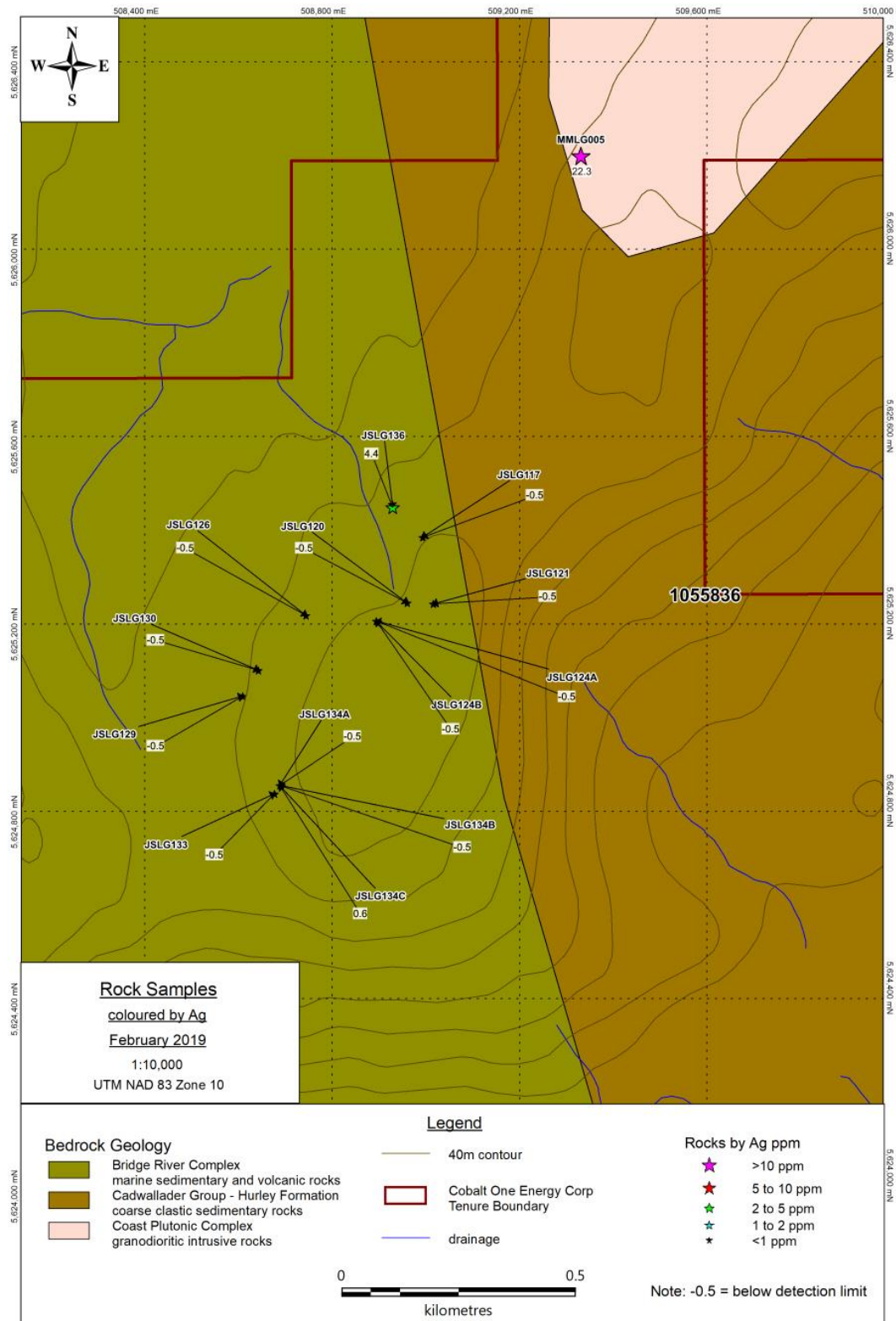


Figure 9. Rock Assay Results – Cu ppm

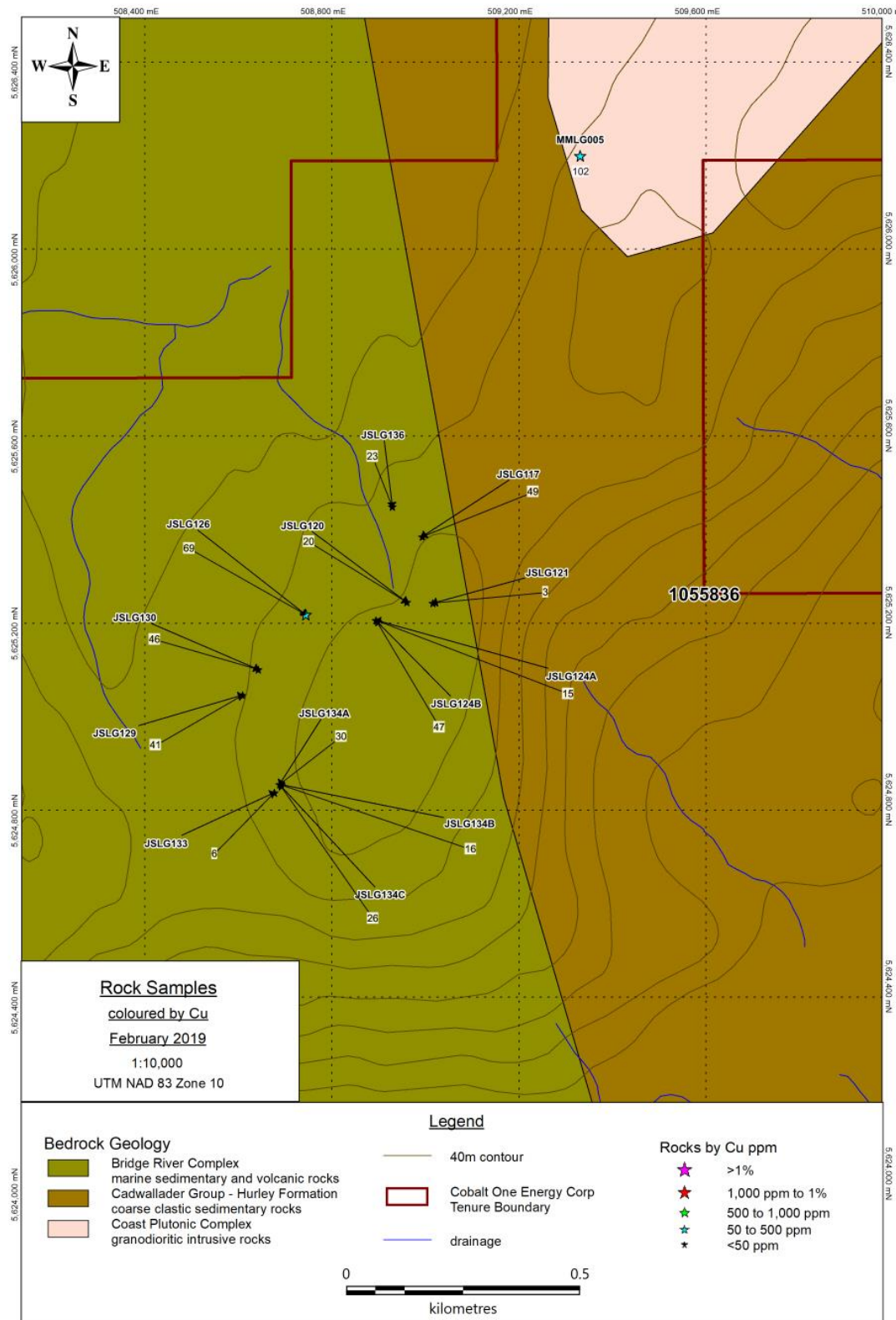


Figure 10. Rock Assay Results – Bi ppm

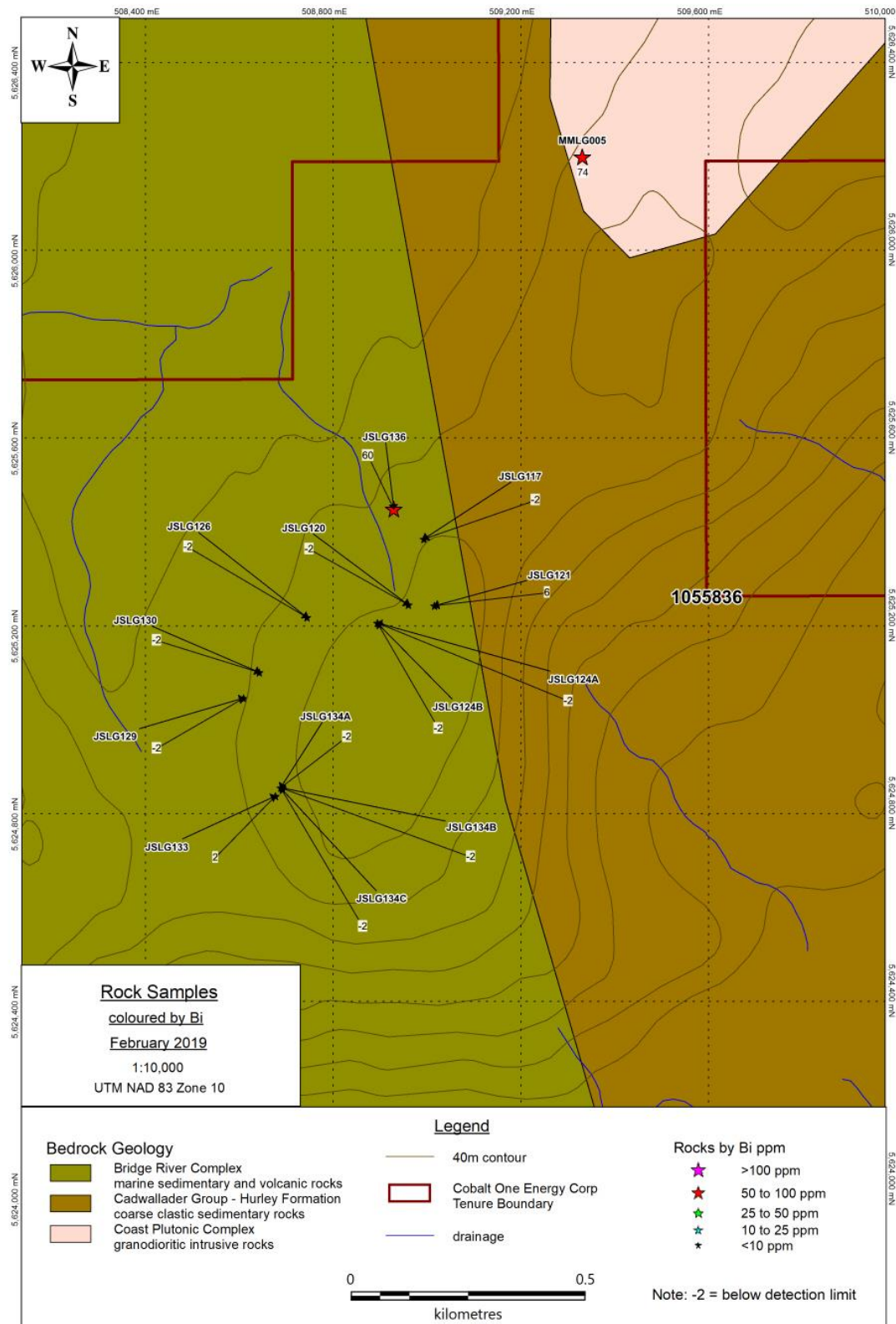


Figure 11. Stream Sediment Assay Results – Au ppm

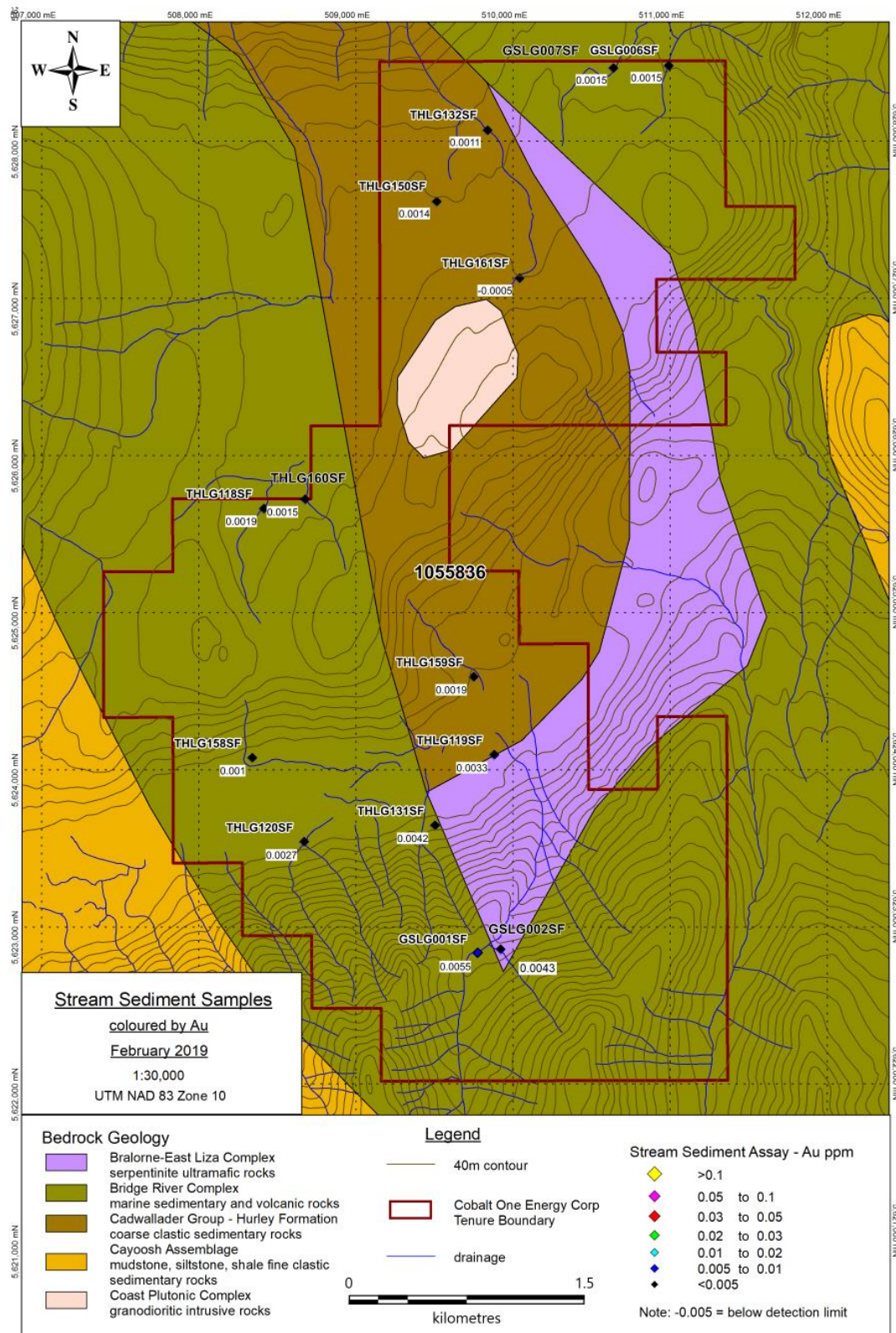


Figure 12. Stream Sediment Assay Results – As ppm

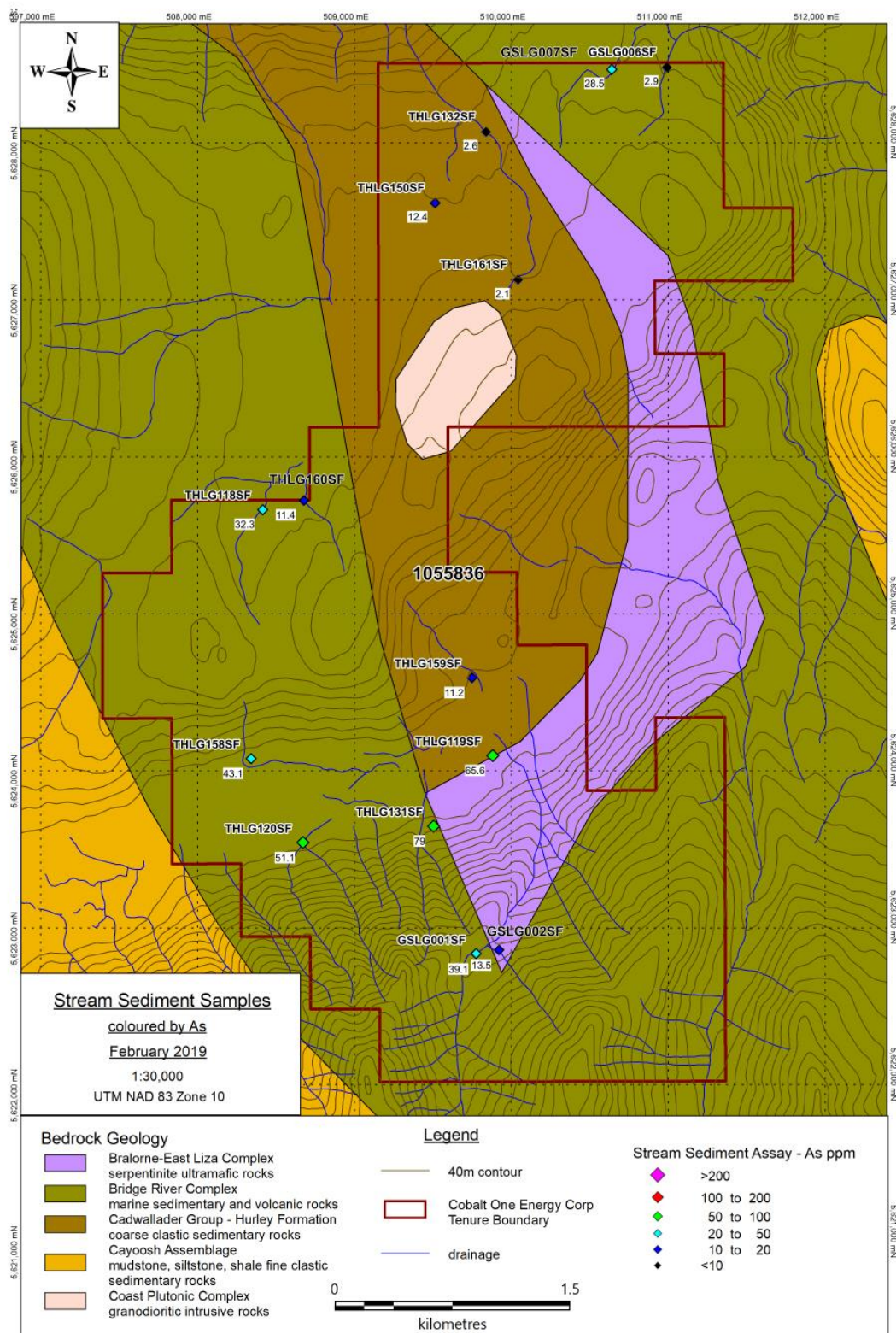


Figure 13. Stream Sediment Assay Results – Co ppm

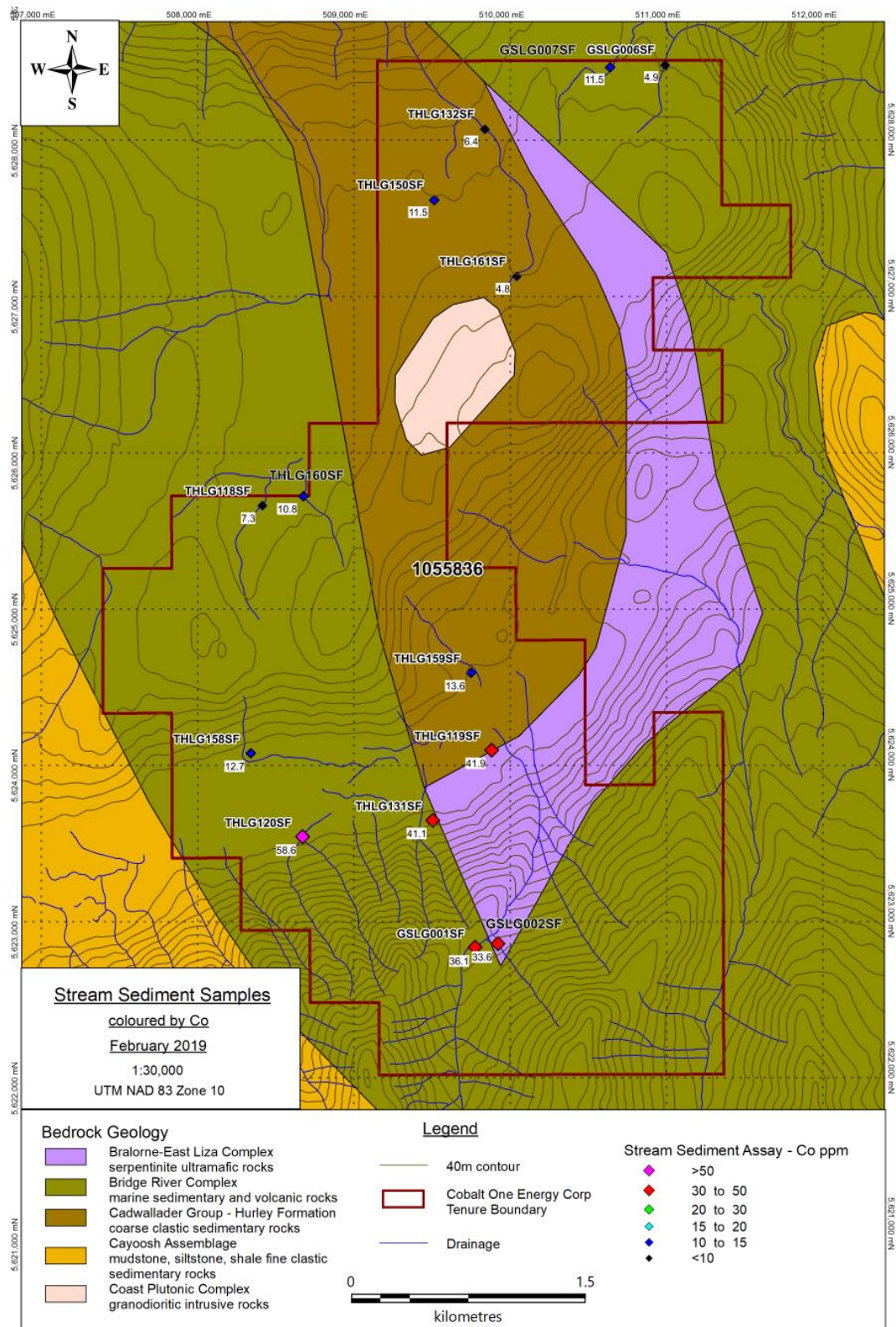


Figure 14. Stream Sediment Assay Results – Ni ppm

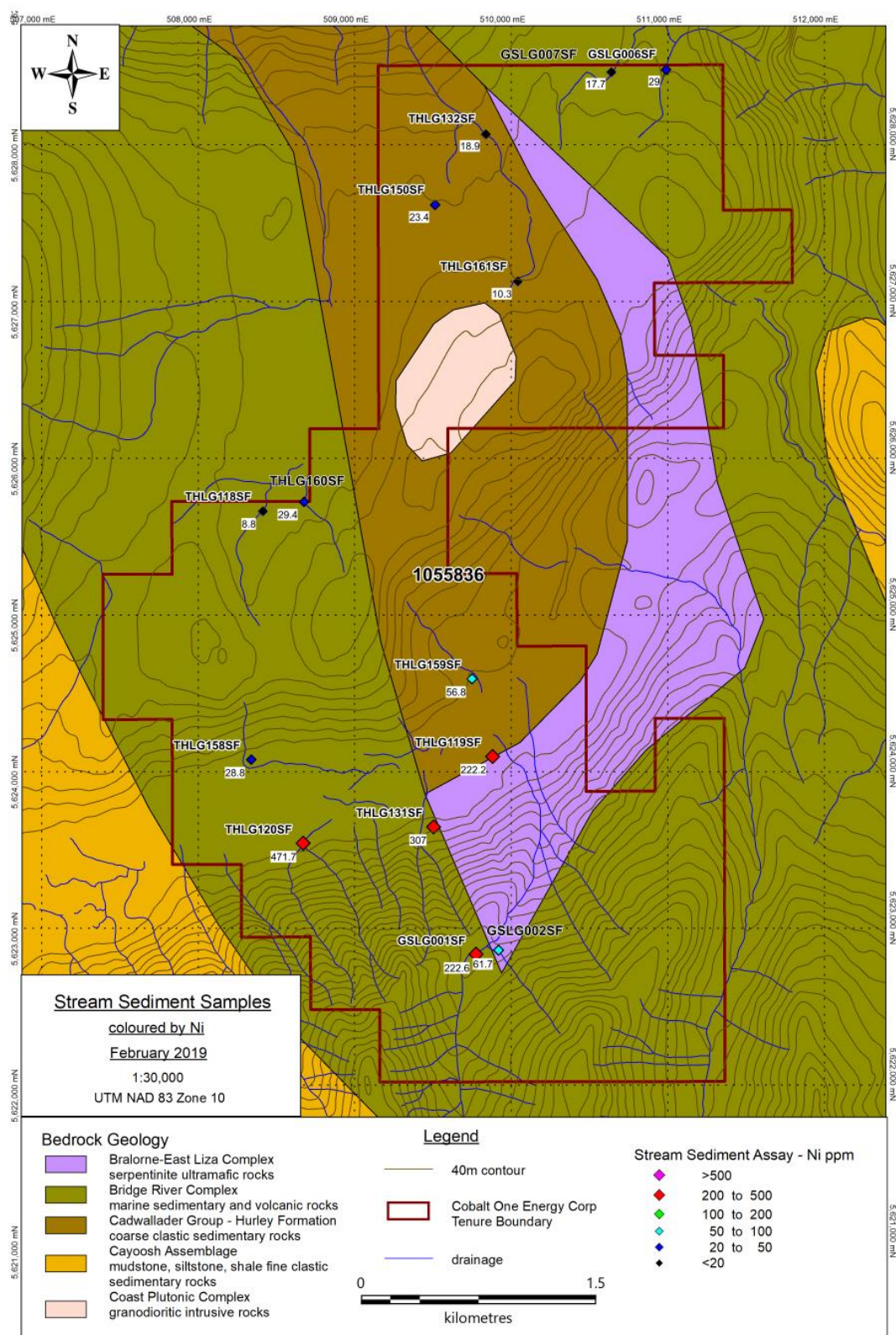


Figure 15. Stream Sediment Assay Results – Cr ppm

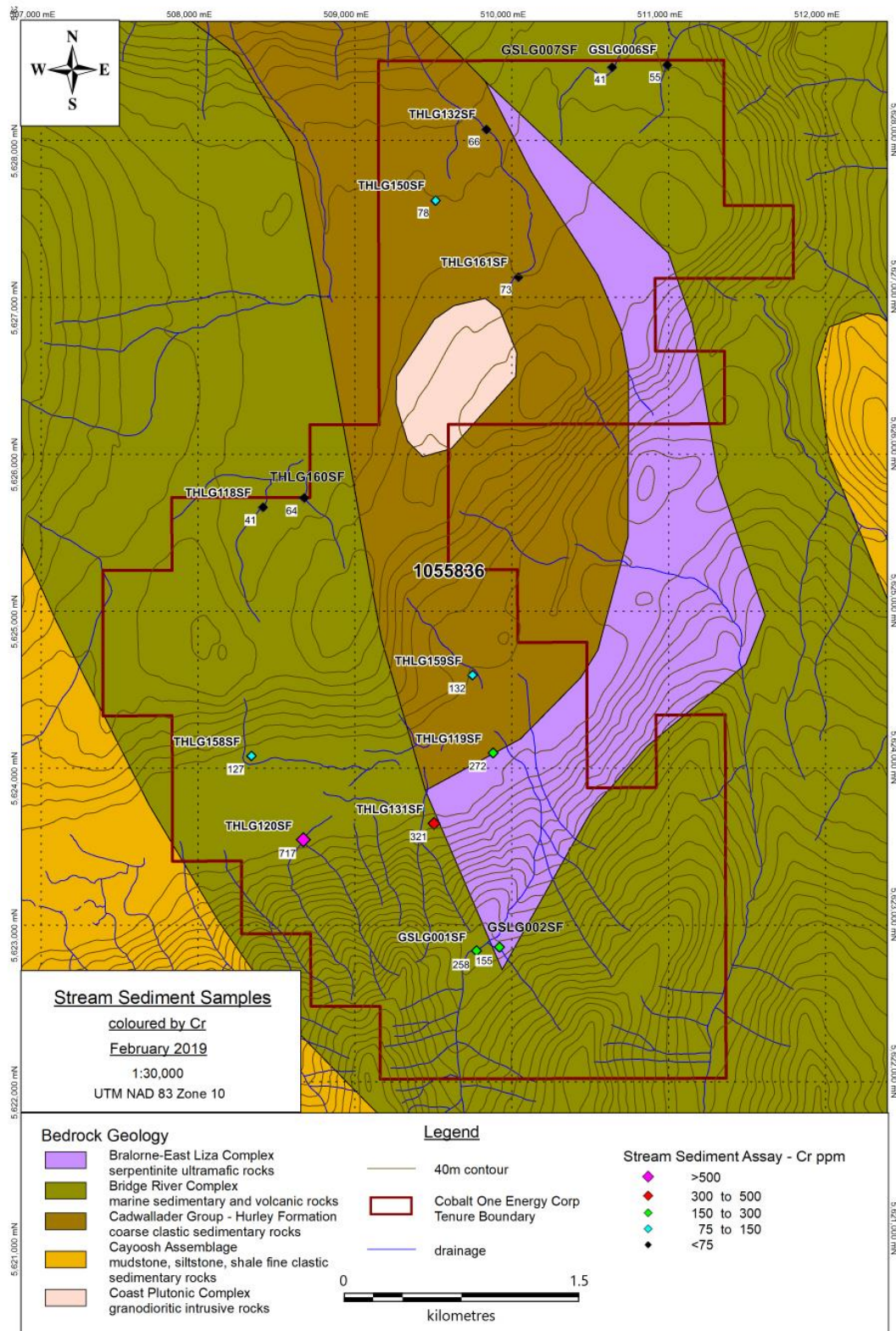


Figure 16. Stream Sediment Assay Results – Cu ppm

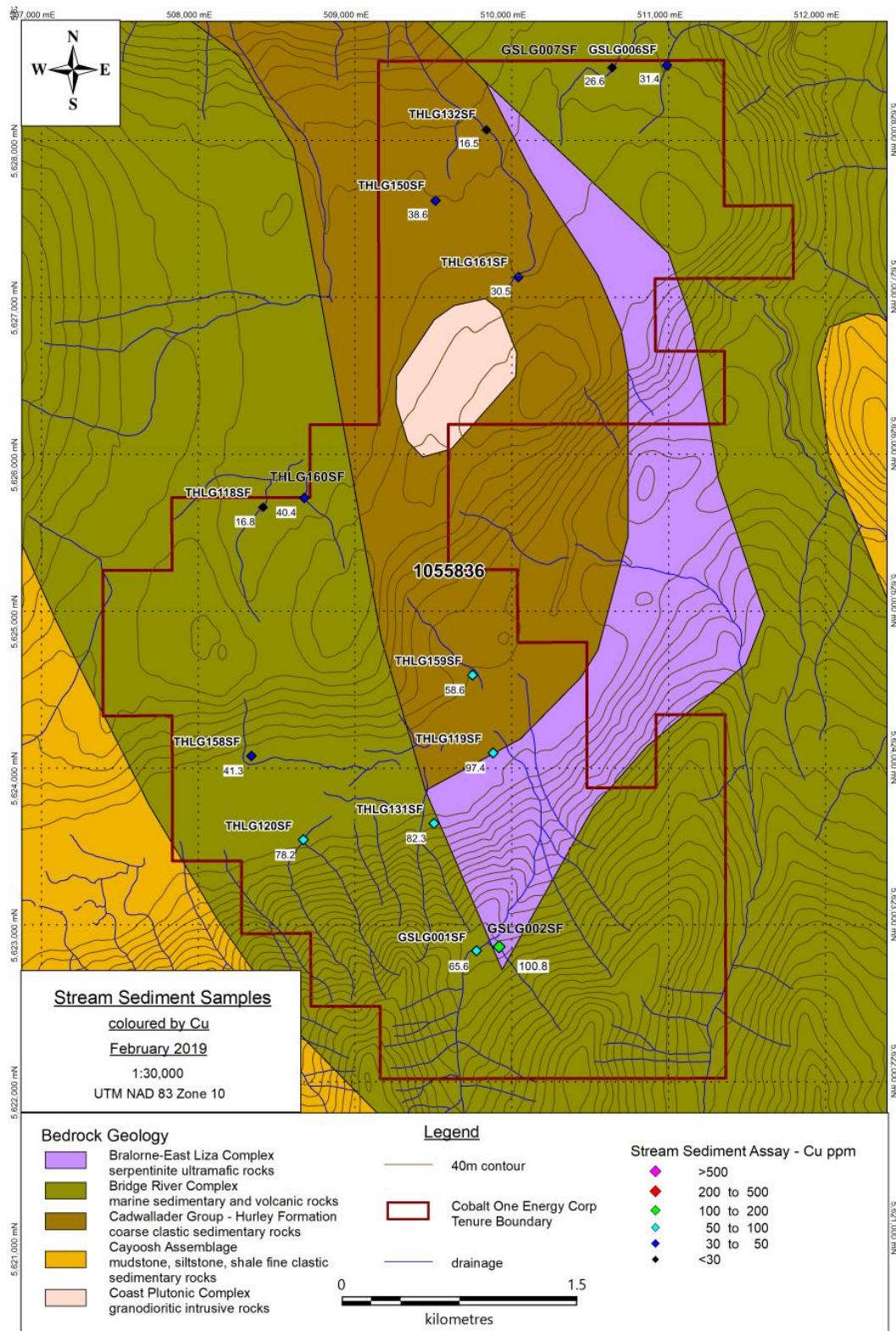


Figure 17. Stream Sediment Assay Results – Sb ppm

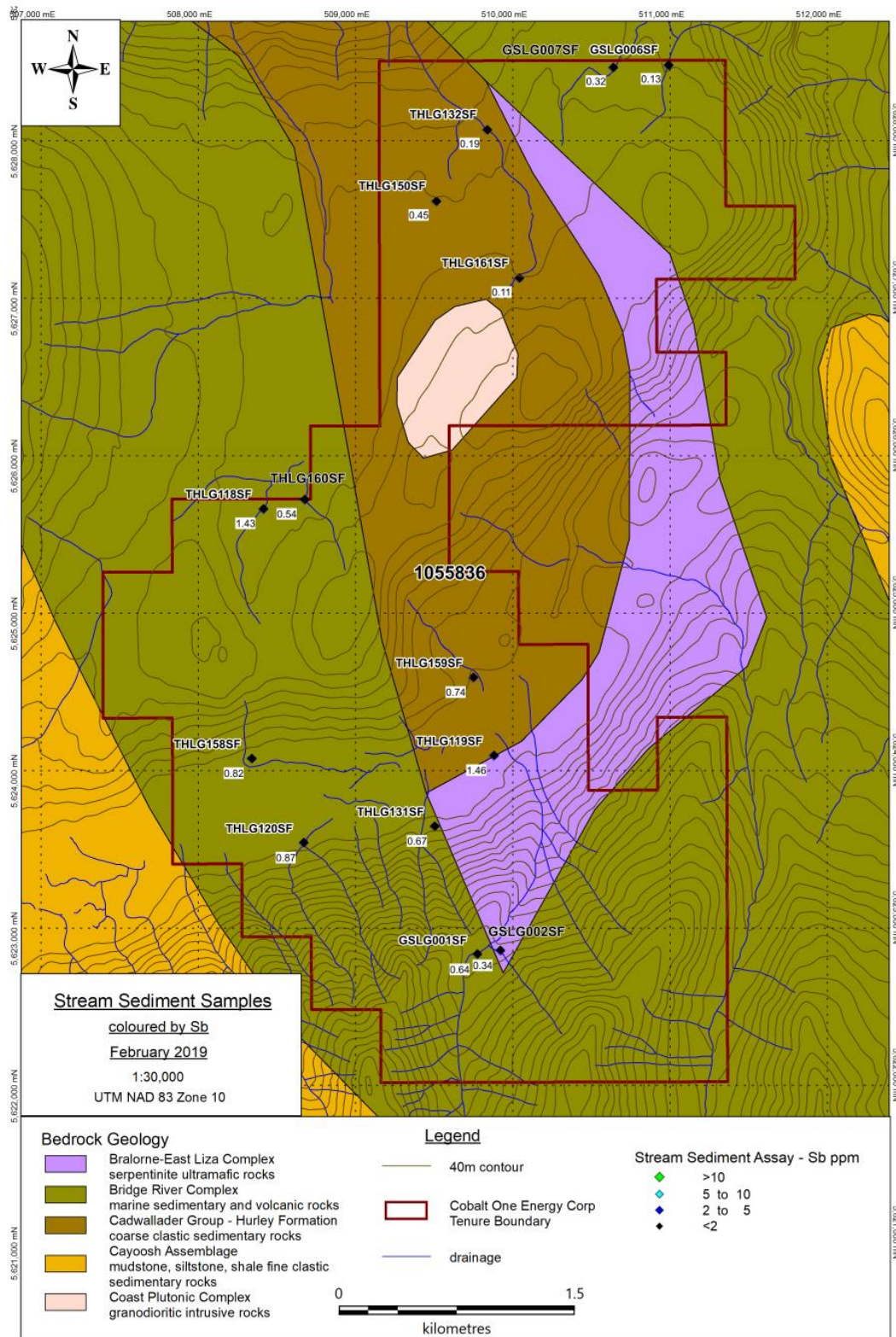


Figure 18. Stream Sediment Assay Results – La ppm

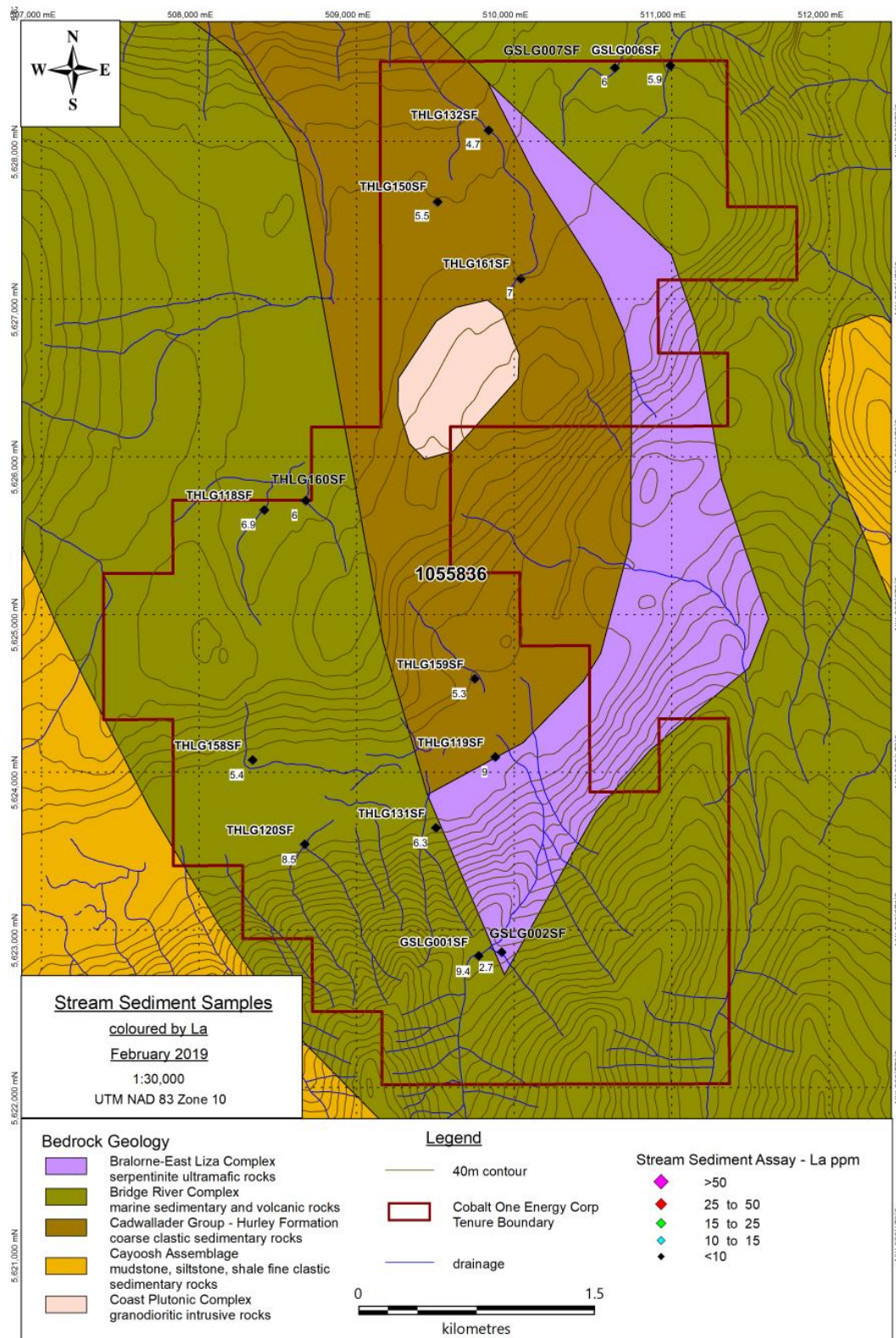
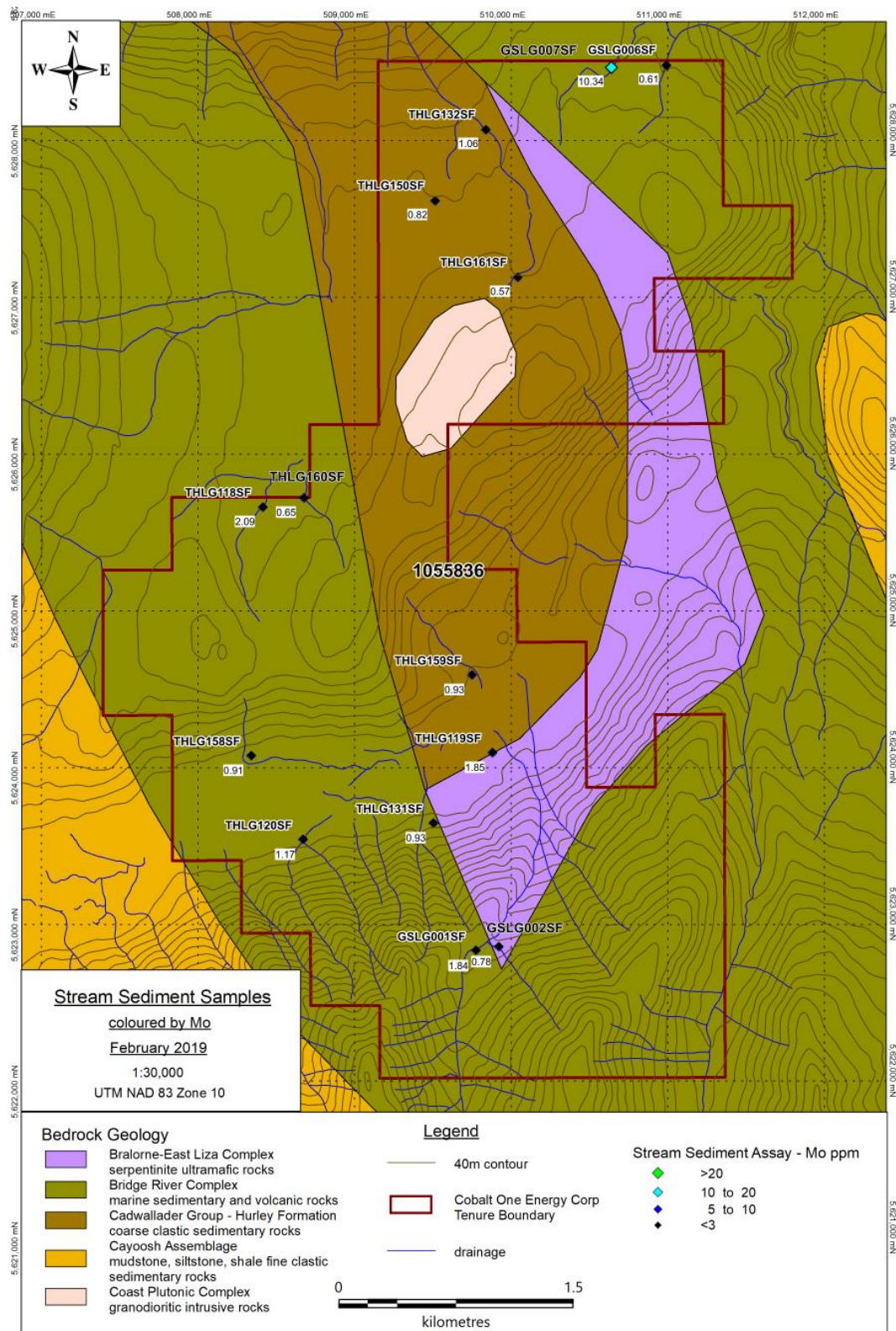


Figure 19. Stream Sediment Assay Results – Mo ppm



6.0 Discussion and Conclusions

Cobalt One/Blackstone Minerals has a strong focus on cobalt exploration but is also interested in other deposits of economic value on their claim package. Results from the 2017 field program at Little Gem concluded that fine fraction stream sediment samples effectively identified Little Gem style gold + cobalt sulpharsenide mineralisation within a close perimeter and this method is considered a relatively fast way of assessing a large project area in difficult terrain. Au and As were the notable pathfinders for the Little Gem deposit itself. Co is elevated in the single drainage clearly emanating from the Little Gem deposit, but it is also apparent that barren ultramafic basement may give a similar strong Co in stream sediment response. Co to Ni and Cr ratios may provide a useful discriminant, being >1 in the Little Gem catchment and <1 in ultramafic bedrock catchments, although not for ultramafic-hosted Au ± Co mineralisation such as the Jewel deposit. La and Sb may also be useful pathfinder elements for Little Gem style mineralisation.

Historic work in the Bridge River area has not assayed for Cobalt regularly and hence any future geochemical work in the region should assay for cobalt as well as other pathfinder elements.

Based on the results from the 2017 stream sediment sampling program on the Little Gem claim package, results from the 2018 stream sediment sampling program on Gwentyth Claim can be assessed.

Stream sediment samples in the southern portion of the Gwentyth tenement have elevated Co but also Ni and Cr, indicating a likely ultramafic source for the Co. There is a modest As in stream sediment anomaly in the southern part of the tenure, coincident with weak-modest Co, Ni and Cr anomalism and mapped ultramafic. The Cr anomalism indicates that the ultramafic unit is more extensive in the southern part of the claim than currently mapped (likely extends the full extent of the steep slopes south of the East Hurley within the Gwentyth claim). While the As anomalism is weak it is worth of some infill stream sediment sampling. Very low Au values in stream sediments is not very encouraging, yet the two rock samples collected in the center of the tenement came back with anomalous gold values. It is possible that the catchment streams in the middle of the tenure were not sampled (since they would have been off tenure) to produce a positive anomaly vectoring to the mineralized quartz veins.

Based on initial results of a modern first pass of the mineral potential on the Gwentyth Claim, the southern portion of the tenement warrants infill stream sediment samples and the two rock chip samples are of interest to follow up.

7.0 Recommendations

Follow-up work on the Gwentyth Claim is recommended as follows:

1. Compile the historic work on the claim into digital format.
2. Infill stream sediment sampling on southern portion of tenure
3. Further investigation of outcrop in the vicinity of MMLG005 and JSLG136 rock chip samples.

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9.0 Statement of Qualifications

I, Lisa Fodor, do hereby certify that:

1. I am a member in good standing of Engineers and Geoscientists of British Columbia (licence #47554).
2. I am a graduate of the University of Victoria (2013) with a Bachelor of Science in Earth Science.
3. I have been actively involved in the mining industry since graduation and have 6 years of mineral exploration and mining experience in British Columbia, the Northwest Territories, and Saskatchewan.
4. I am familiar with the district. This report is based on my supervision of the 2018 field program described above. I am the author of this report and verify the costs as reported to be true.

Dated in Victoria, B.C., the 15th day of February, 2019.

Submitted by:



Lisa Fodor, P.Ge, B.Sc.

February 15, 2019

Appendix 1. Flocculant Stream Sampling SOP

FLOCCULANT SAMPLING and PROCESSING Standard Operating Procedure

This modified BLEG (Bulk Leach Extractable Gold) sampling technique is designed to target and analyse the *finest size fraction material* within a drainage which represents the most homogenous and representative materials from throughout the upstream catchment. Such materials have greater repeatability and are more likely to indicate the presence of major mineralised systems and are less likely to be unduly influenced by narrow, high grade mineralisation. Narrow, high grade mineralisation can provide misleading indications of the mineralisation potential of a catchment, if for example panned concentrates or trap sites are sampled. When carried out correctly the technique described here yields analytical results that are more robust, repeatable and less likely to find the distracting small lodes. This standard operating procedure (SOP) does not include how to plan a stream sediment program, but instead documents the field aspects of sample collection and packaging.

Before beginning a campaign, take note of the following:

- 1) Prepare the flocculant **at least 12 hours** before going to the field (see Appendix I for the recipe). Note **jewellery should be removed when preparing the flocculant solution – as per field collection.**
- 2) **Remove ALL jewellery, especially gold and silver, and consider ANYTHING metallic as a possible source of contamination (staples, metal sieves, bracelets/watches, rings, galvanised bucket handles, brass sieves/ nails etc).**

- 3) The field sampling kit should include:

Numbered sample tickets – printed on water resistant paper

Stream Sediment log sheet and codes

Flocculant concentrate (see recipe – Appendix I).

3 x 20 Litre plastic buckets (per sampling team)

Plastic trowels (2-3) for collecting small scoops of material. Available from Bunnings.

Calico sample bags (for BLEG and rock chips) – ideally pillow case size.

Plastic Sieve (approx. **1cm holes** to sieve out coarse material). Ideally the sieve should fit on the top of the bucket. Available from Bunnings.

Winn's Geo: **210micron** white nylon mesh & **100micron** white nylon mesh. **1mm** plastic Bunnings mesh. All mesh cut to ~1m sq pieces so that they fit over the top of the bucket.

Spring balance for weighing samples

GPS (and spare batteries!)

Compass

Geological hammer

Camera (to record site)

First Aid kit

Wellington boots or waders

Long rubber gloves are advisable.

MINSAM bags & ziplock sandwich bags. Permanent markers for labelling calico bags.

Part 1 Sampling:

- i) Make sure you are in the right drainage! Is it the size you expected it to be? Is the stream flowing in the direction you expected it to? Is your GPS working properly? **Your GPS should be set to track mode** throughout the day with these points downloaded at the end of each day – these assist with verifying sample locations and access routes for follow-up.
- ii) Wherever safe and practical sample the active stream. Collect the finest grained material (mud) from at least 10 different locations along a length of the channel taking small scoops that go no deeper than 5 cm. **Avoid** collecting sand as much as possible. **Avoid** stagnant pools rich in organic material. Overbank (flood plain material) is OK to collect where the channel is too dangerous to sample, but record that this has been done on the log sheet. **Avoid organic material as much as possible and keep in mind that the ultimate aim is to have NO SAND, thereby limit the amount of these materials collected.**
- iii) Put material in one or more buckets as you go along the stream bed, but gather all the material into a **single** bucket before processing.
- iv) Collect sufficient material (**3-5 kilograms in total**) to generate 600 grams (when dry) of flocculated fines.
- v) **Duplicate samples should be collected every 12th site.** These should be collected after processing of the first sample. The sample number for the field duplicate should not be the next number in the sequence, but instead it should have been pre-assigned and randomly located within the total batch. **Duplicate sample numbers need to be out of sequence.**
- vi) Field logs should be recorded at the time the sample was collected, as per the codes contained in Appendix II.

Part 2 Processing:

- i) **Add local stream water** to the fines sufficient to cover the material and swirl in order for material to get in suspension, breaking-up any clay balls with your fingers. The aim is to get **as many clay particles as possible into suspension**. If you have lots of roots or leaves then wash these in the bucket and jettison before sieving. The overall aim at this stage is to get as much of the clay into suspension as possible. More water may need to be added if the water becomes particularly thick/viscous with clay.
- ii) When all the clay has been disaggregated, swirl the water around quickly, without spilling water over the top of the container, but with sufficient vigour to lift sand off the bottom of the bucket.
- iii) Tip the muddy water through the **1cm Bunnings sieve** and into the second bucket to decant off the fines and to remove the coarser materials. Decant **ALL** material through sieve.
- iv) Then proceed to sieve the material from one bucket to another following the guidelines below:
- v) **Processing detail:**
 - a. **(1 run with 1cm plastic sieve (Bunnings) already done in iii) above)**. Decant remainder of bucket.
 - b. **2 runs with 1mm plastic mesh (Bunnings)**. Add small amount of water to bucket and swirl to decant remainder of bucket, **except sand in very bottom**.
 - c. **1 run with fine white plastic mesh (Winn's 210micron)**, decant remainder of bucket, **except sand**.
 - d. **1 final run with superfine white plastic mesh (Winn's 100micron) count to 20** to let sand settle, **DO NOT** decant remainder of bucket.
- vi) Add a decent squirt of flocculant concentrate to the muddy water and swirl to mix. If floccs form, stop swirling and allow the floccs to sink to the bottom. (Signs of floccs forming are clumps of clays and the water goes a darker colour).



Swirling material and allowing material to settle.



Figure 2 showing pouring in of flocculant and swirling



Figure 3 showing early sign of flocculation at edges of plastic container.

- vii) If floccs do not form add the same amount of flocculant concentrate again – the amount needed varies from place to place, depending upon factors such as clay and organics content.
- viii) Once floccs form, stop swirling and allow the floccs to sink to the bottom – this may take 5 minutes or more. While waiting for this to happen, complete the sample log sheet. [If flocculation is working then you will feel a layer building by inserting your hand after a few minutes. You will see a darker layer of floccs forming on the bottom of the bucket, with a lighter coloured layer of water above. If no layer is felt, then swirl again and add more flocculant).
- ix) Once the floccs have settled pour the entire bucket into a calico bag. The water will drain through, leaving the ultrafine sediment in the bag. Pour carefully trying to only get the finest

material into the sample bag, leaving behind any sand particles at the bottom of the bucket. Large calico bags (pillow case size) work well for this – you should fit it all in.



Figure 4 showing decanting process



Figure 5

- x) Securely tie the calico bag. Do not squeeze bag too much – you may force the fines through the calico material and lose them.
- xi) Complete the log sheet
- xii) Collect any rock samples.
- xiii) Double check that you have everything, especially the samples, before leaving the site.

Part 3. Back at the camp:

- xiv) Air dry the samples by hanging them up in a rain protected area – be sure to sort and check new samples immediately upon return to the camp at the end of each days sampling. The samples should be squeezed and massaged **twice a day** when drying to prevent them from drying and forming as a hard block. (If they do form a hard brick then the samples need to be ‘pulverised’ before sending to the lab, being careful not to introduce any contamination.

- Prevention is better than the cure, so be restrained in using the flocculant and be sure to fondle and massage the samples twice a day!)
- xv) Once dry, repackage **250-270 grams** (not more than 280g due to cost of freight) into a MINSAM type paper sample bag, and write the number in water proof pen on the outside of the bag. This paper bag should then be sealed in a plastic zip lock bag prior to packing in a clean box to be freighted to the lab. The plastic zip lock bag is necessary to preserve the sample in the case of where the paper bags rot in transit, or the cardboard packaging becomes wet or is damaged in some way during transport. Samples should be **fully dry before transporting.** Do **NOT** use staples in the packing as these can be source of contamination. Label MINSAM bags and ziplock bags with sample ID.
- xvi) **Under no circumstances package the samples into boxes or bags which have been used for fruit, vegetables, animal foods or animal products as these could lead to the entire batch of samples being destroyed by Australian Quarantine and Customs (AQIS) on arrival in Australia.** It is recommended that DHL Jumbo boxes be used as these are one of the most secure and cost effective ways to ship samples out of Africa to Australia.

Appendix I

Envirofloc 3003 Recipe.

- **REMOVE ALL JEWELLERY/METALLIC ITEMS THAT MAY CONTAMINATE THE MIXTURE.**
- 2.5 litres of warm (+/- 60°C) clean BOTTLED water poured into a plastic bucket and stirred vigorously to create a whirlpool. Bottled water should be used to avoid contamination.
- 1 heaped teaspoon (~5g) of powdered Envirofloc 3003 is slowly added to the swirling water, avoiding blobs or globules to form. Be sure to do this SLOWLY – once globs/clumps form it is difficult to break them up.
- Stir vigorously for 2 minutes
- Allow to settle for 15 minutes.
- Then stir again vigorously.
- Leave to settle for ~2 hours, then stir again and leave to settle for several hours, ideally overnight.
- You should end up with a gloopy mixture that can be decanted into plastic bottles and taken out into the field.
The polymer is expected to remain stable for up to a month, after which it should be replaced with fresh stock disposing of the concentrate in landfill – not in waterways.

USE:

Use as the concentrated flocculant.

When using the concentrate, very slowly add about 30ml (a decent squirt!) initially, stirring vigorously it to disperse the flocculant into the sample.

IF floccs form within 1 minute allow these to settle.

If floccs do not form then add another squirt, stir, wait and watch for floccs... repeat again if necessary.

The flocculant is non-Toxic. Information on the chemical is available from:

www.ovivowater.com.au/en/chemicals-powder-australia

Appendix II

Stream Sediment Logs

The purpose of the field log sheet and codes is to ensure recording of pertinent information in a systematic way. The logs record information about the sample location, hydrology, bedload materials, chemistry, possible contamination and the geology. The logs should only take a few minutes to complete – this can often be completed while waiting for the floccs to settle.

The logging information needs to be added to the sample results in the database so they can all be available and used in the GIS.

Appendix 2. Rock Sample Location Collection Information and Assays

Sample ID	Location	Easting	Northing	Grid	Sample type	Lithology	Description	Au_ppm	Ag_ppm	Co_ppm	Ni_ppm	Cr_ppm	Cu_ppm	As_ppm	Sb_ppm	Bi_ppm	Mo_ppm
JSLG117	JSLG117	508993	5625385	UTM Zone10 NAD83	outcrop	ST	highly silicious weakly foliated ST w/ minor icg rusted euh sx (py?) grains spotty foliation planes.	-0.01	-0.5	6	13	77	49	-5	-5	-2	1
JSLG120	JSLG120	508960	5625245	UTM Zone10 NAD83	outcrop	qzV	icg qz vein in SST. Minor lm-staining and bk-bn mineral coating on some qz grains	-0.01	-0.5	10	25	332	20	-5	-5	-2	3
JSLG121	JSLG121	509016	5625243	UTM Zone10 NAD83	outcrop	qzV	qz vein w/ some conc. lfg gn-bn mi (ph?) + trace Fe-staining & spk, after sx?	-0.01	-0.5	15	91	147	3	43	-5	6	-1
JSLG124A	JSLG124	508894	5625206	UTM Zone10 NAD83	outcrop	qzV	slightly vuggy icg qz vein w/ gn (am? lfg mi/ph?) patches and bk streaks in places	-0.01	-0.5	21	31	181	15	-5	5	-2	-1
JSLG124B	JSLG124	508894	5625206	UTM Zone10 NAD83	outcrop	SCG	gn volc-lithic gravel-pebble SCG w/ sfg ep+ph?-rich matrix + trace dis euh rusted sx (py). Minor qz-ph-tu? Vein.	-0.01	-0.5	33	54	86	47	-5	-5	-2	-1
JSLG126	JSLG126	508744	5625218	UTM Zone10 NAD83	outcrop	MA	ifg gn rock riddled with fine (<1mm) vesicles(?) + other small voids. Sig bright gn ifg euh ep streaks. Trace dis sx + moderate Fe-staining. Trace soft wt HCL-ve mineral. MA?	-0.01	-0.5	21	30	78	69	-5	-5	-2	-1
JSLG129	JSLG129	508609	5625046	UTM Zone10 NAD83	outcrop	qzV	lensing he-stained qz cc vein offset by minor faults in ifg lgy-lgn MA(?)	-0.01	-0.5	19	36	109	41	-5	-5	-2	7
JSLG130	JSLG130	508642	5625101	UTM Zone10 NAD83	subcrop	MA	gn weakly vesicular (1mm-scale; weathering feature?) i/svfg rock w/ spk bn rusted sx & sig. patches of img radiating bk needles (1-2mm long). Needles are hard but brittle and streak is lgy not stibnite. Tu? Am?	-0.01	-0.5	37	96	236	46	-5	8	-2	-1
JSLG133	JSLG133	508677	5624837	UTM Zone10 NAD83	float	qzV	icg qz-vein float w/ minor cc & hard dgy-gn mineral coating and infill in places (am?). Crystal forms look like coarse quartz crystals grew around other large crystals that have weathered out. Trace needle texture; hard mineral w/ wt streak.	-0.01	-0.5	2	6	301	6	-5	-5	2	2
JSLG134A	JSLG134	508688	5624855	UTM Zone10 NAD83	float	qzV	cg wt+og qz vein float with gn-bn mineral infill (H<5, wt streak)	-0.01	-0.5	5	12	317	30	-5	-5	-2	3

Sample ID	Location	Easting	Northing	Grid	Sample type	Lithology	Description	Au_ppm	Ag_ppm	Co_ppm	Ni_ppm	Cr_ppm	Cu_ppm	As_ppm	Sb_ppm	Bi_ppm	Mo_ppm
JSLG134B	JSLG134	508688	5624855	UTM Zone10 NAD83	outcrop	qzV	cg wt qz vein float w/ minor gn + bn mineral infill between some crystals, coarse radiating tourmaline in places, minor gn am? + ph?	-0.01	-0.5	7	12	254	16	-5	-5	-2	2
JSLG134C	JSLG134	508688	5624855	UTM Zone10 NAD83	outcrop	STUF	gy-bl-gn vfg ?dacite, minor fg-mg cc lenses & veinlets and trace bn spk (after sx?), wall rock to JSLG134B sampled vein	-0.01	0.6	34	75	217	26	-5	9	-2	-1
JSLG136	JSLG136	508929	5625449	UTM Zone10 NAD83	outcrop	qzV	sfg felsic og-wt SS w/ cross-cutting wt qz veins and minor lm-stained voids. Minor img euh py near vein wall & dis in wall rock.	0.3	4.4	3	6	204	23	6	6	60	1
MMLG005	MMLG005	509331	5626199	UTM Zone10 NAD83	outcrop, subcrop	qzV	15cm wide qz vein 68>056 mag, cl alt and a bit of kspar in wall rock. Tr py in vn + wall rock	2.11	22.3	5	9	162	102	14	-5	74	41

Appendix 3. Stream Sediment Sample Location Collection Information and Assays

Sample ID	Easting	Northing	Grid	Outcrop lith	Float lith	Description	Land_use	Contaminati on	Flood channel width_m	Current channel width_m	Flow direction	Water depth now_cm	Water depth max_m	Slope deg	Discharge litres per_sec
GSLG001SF	509775	5622835	UTM Zone10 NAD83	na	IAND, SMA	nr	Alpine	na	8	150	NE	12	1.5	8	20
GSLG002SF	509920	5622860	UTM Zone10 NAD83	na	IAND, UM	2 small dry streams, fan	Alpine	na	20	0	NW	0	0.75	20	0
GSLG006SF	510990	5628480	UTM Zone10 NAD83	FTONA	qtzIDIO	nr	Alpine	na	10	10	NE	1	0.3	5	0.05
GSLG007SF	510640	5628465	UTM Zone10 NAD83	na	qtzIDIO	Low FF, Orange fine clays	Forestry	Forestry	30	0	NE	0	0.2	5	0
THLG118SF	508415	5625663	UTM Zone10 NAD83	nr	nr	nr	Forestry	nr	15	1	NE	10	1	3	2
THLG119SF	509880	5624097	UTM Zone10 NAD83	nr	UM	nr	Forestry	road dust	5	2	N	40	2.5	25	15
THLG120SF	508671	5623543	UTM Zone10 NAD83	nr	UM	base of wide debris fan	Forestry	road dust	150	15	N	3	1	22	2
THLG131SF	509504	5623648	UTM Zone10 NAD83	nr	UM IDIO	base of wide debris fan	Forestry	cutblock	200	dry	NE	dry	0.5	38	dry
THLG132SF	509839	5628069	UTM Zone10 NAD83	nr	nr	nr	Forestry	nr	5	30	NW	5	1.5	10	2
THLG150SF	509514	5627617	UTM Zone10 NAD83	nr	IDIO	No fine fraction above logging road in well washed water	Forestry	Sampled from ditch only	10	10	N	5	1	3	0.5
THLG158SF	508341	5624078	UTM Zone10 NAD83	nr	IDIO MA	nr	Forestry	nr	7	100	S	dry	1.5	20	dry
THLG159SF	509750	5624593	UTM Zone10 NAD83	nr	SM F	nr	Forestry	nr	15	15	SE	5	1	22	4
THLG160SF	508677	5625722	UTM Zone10 NAD83	nr	nr	nr	Forestry	nr	5	5	NW	1	1	6	0.25
THLG161SF	510042	5627129	UTM Zone10 NAD83	nr	IDIO UM	nr	Forestry	nr	25	25	NE	1	1	20	0.1

Sample	Au_ppm	Ag_ppm	Cu_ppm	Ni_ppm	Co_ppm	Cr_ppm	As_ppm	Zn_ppm	Sb_ppm	Bi_ppm	La_ppm	Mo_ppm
GSLG001SF	0.0055	0.11	65.6	222.6	36.1	258	39.1	110	0.64	0.10	9.4	1.84
GSLG002SF	0.0043	0.08	100.8	61.7	33.6	155	13.5	111	0.34	0.06	2.7	0.78
GSLG006SF	0.0015	0.13	31.4	29.0	4.9	55	2.9	28	0.13	0.10	5.9	0.61
GSLG007SF	0.0015	0.13	26.6	17.7	11.5	41	28.5	21	0.32	0.09	6.0	10.34
THLG118SF	0.0019	0.11	16.8	8.8	7.3	41	32.3	22	1.43	0.09	6.9	2.09
THLG119SF	0.0033	0.12	97.4	222.2	41.9	272	65.6	130	1.46	0.10	9.0	1.85
THLG120SF	0.0027	0.07	78.2	471.7	58.6	717	51.1	109	0.87	0.05	8.5	1.17
THLG131SF	0.0042	0.08	82.3	307.0	41.1	321	79.0	93	0.67	0.10	6.3	0.93
THLG132SF	0.0011	0.09	16.5	18.9	6.4	66	2.6	29	0.19	0.13	4.7	1.06
THLG150SF	0.0014	0.08	38.6	23.4	11.5	78	12.4	52	0.45	0.10	5.5	0.82
THLG158SF	0.001	0.06	41.3	28.8	12.7	127	43.1	76	0.82	0.11	5.4	0.91
THLG159SF	0.0019	0.12	58.6	56.8	13.6	132	11.2	79	0.74	0.09	5.3	0.93
THLG160SF	0.0015	0.08	40.4	29.4	10.8	64	11.4	39	0.54	0.08	6.0	0.65
THLG161SF	-0.0005	0.19	30.5	10.3	4.8	73	2.1	39	0.11	0.13	7.0	0.57

Appendix 4. Certificates of Analysis



An A2 Global Company

MS Analytical

MS Analytical
Unit 1, 20120 102nd Avenue
Langley, BC V1M 4B4
Phone: +1-604-888-0875

To: **Blackstone Minerals Ltd.**
Suite 3, Level 3, 24 Outram Street
West Perth, Western Australia, WA 6005
Australia

CERTIFICATE OF ANALYSIS:	YVR1810577
---------------------------------	-------------------

Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Number of Samples: 18
Report Version: Final

COMMENTS:

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to MS Analyticals' *Schedule of Services and Fees* for our complete Terms and Conditions

SAMPLE PREPARATION	
METHOD CODE	DESCRIPTION
PRP-910	Dry, Crush to 70% passing 2mm, Split 250g, Pulverize to 85% passing 75µm

ANALYTICAL METHODS	
METHOD CODE	DESCRIPTION
FAS-221	Au, Fire Assay, 50g fusion, AAS, Ore Grade
PER-7Sb	Sb, 0.15g, Sodium Peroxide Fusion, ICP-AES
ICF-6As	As, 0.2g, 4-Acid, ICP-AES, Ore Grade
ICF-6Cu	Cu, 0.2g, 4-Acid, ICP-AES, Ore Grade
ICP-230	Multi-Element, 0.2g, 4-Acid, ICP-AES, Trace Level
PER-700	Multi-Element, 0.15g, Sodium Peroxide Fusion, ICP-AES

Signature:

Yvette Hsi, BSc.
Laboratory Manager
MS Analytical

CERTIFICATE OF ANALYSIS:	YVR1810577
---------------------------------	-------------------

Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Sb Sb %	ICF-6As As %	ICF-6Cu Cu %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm	ICP-230 Bi ppm
Granite Blank	QC-P-BK	--	LOR	<0.01	0.01	0.005	0.001	<0.5	7.21	<5	919	0.9	<2
MMLG005	Rock	1.53		2.11				22.3	4.10	14	357	<0.5	74
Granite Blank	QC-P-BK	--		0.01				<0.5	7.09	> 22	757	1.0	<2

CERTIFICATE OF ANALYSIS:	YVR1810577
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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	FAS-221 Au ppm 0.01	PER-7Sb Sb % 0.01	ICF-6As As % 0.005	ICF-6Cu Cu % 0.001	ICP-230 Ag ppm 0.5	ICP-230 Al % 0.01	ICP-230 As ppm 5	ICP-230 Ba ppm 10	ICP-230 Be ppm 0.5	ICP-230 Bi ppm 2
STD BLANK													
STD BLANK				<0.01									
STD BLANK													
STD BLANK													
STD MP-1b													
STD Oxl120													
STD GBM908-10				2.21									
STD MP-1b													
STD GSB-03													

CERTIFICATE OF ANALYSIS:	YVR1810577
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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Report Version: Final

	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-130 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1
Granite Blank	1.74	<0.5	5	73	8	2.29	15	1.69	<10	<10	0.74	670	1
MMLG005	0.53	<0.5	5	162	102	1.58	11	0.59	<10	<10	0.42	245	41
Granite Blank	1.58	<0.5	3	61	3	1.92	15	1.57	<10	<10	0.51	591	2

CERTIFICATE OF ANALYSIS:	YVR1810577
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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Report Version: Final

	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-130 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1
STD BLANK													
STD BLANK													
STD BLANK													
STD MP-1b													
STD Oxl120													
STD GBM908-10	3.61	1.9	24	138	3502	5.66	28	2.23	30	<10	1.89	760	62
STD MP-1b													
STD GSB-03													

CERTIFICATE OF ANALYSIS:	YVR1810577
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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Report Version: Final

	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10
Granite Blank	3.30	4	419	10	0.02	<5	9	209	<8	0.22	<10	51	<10
MMLG005	1.55	9	355	67	0.02	<5	4	224	<8	0.13	<10	52	<10
Granite Blank	3.36	2	403	10	0.03	<5	7	195	<8	0.21	<10	33	<10

CERTIFICATE OF ANALYSIS:	YVR1810577
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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
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Sample ID	ICP-230 Na % 0.01	ICP-230 Ni ppm 1	ICP-230 P ppm 10	ICP-230 Pb ppm 2	ICP-230 S % 0.01	ICP-230 Sb ppm 5	ICP-230 Sc ppm 2	ICP-230 Sr ppm 1	ICP-230 Th ppm 8	ICP-230 Ti % 0.01	ICP-230 Tl ppm 10	ICP-230 V ppm 1	ICP-230 W ppm 10
STD BLANK STD BLANK													
STD BLANK STD BLANK STD MP-1b STD Oxl120	0.02	<1	<10	<2	<0.01	<5	<2	<1	<8	<0.01	<10	<1	<10
STD GBM908-10 STD MP-1b STD GSB-03	2.28	2186	990	1865	0.37	<5	18	297	16	0.66	<10	139	<10

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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
Job Report Date: 07-Jul-2018
Report Version: Final

	ICP-230 Zn ppm	ICP-230 Zr ppm	PER-700 Al %	PER-700 As %	PER-700 Ca %	PER-700 Co %	PER-700 Cr %	PER-700 Cu %	PER-700 Fe %	PER-700 K %	PER-700 Li %	PER-700 Mg %	PER-700 Mn %
Sample ID	2	5	0.01	0.01	0.05	0.002	0.01	0.005	0.05	0.1	0.01	0.01	0.01
Granite Blank	34	61											
MMLG005	31	<5											
Granite Blank	33	65	7.53	0.01	1.65	<0.002	0.01	<0.005	2.18	1.6	<0.01	0.51	0.07

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Project Name: Little Gem Regional
Job Received Date: 25-Jun-2018
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	ICP-230 Zn ppm	ICP-230 Zr ppm	PER-700 Al %	PER-700 As %	PER-700 Ca %	PER-700 Co %	PER-700 Cr %	PER-700 Cu %	PER-700 Fe %	PER-700 K %	PER-700 Li %	PER-700 Mg %	PER-700 Mn %
Sample ID	2	5	0.01	0.01	0.05	0.002	0.01	0.005	0.05	0.1	0.01	0.01	0.01
STD BLANK			<0.01	<0.01	<0.05	<0.002	<0.01	<0.005	<0.05	<0.1	<0.01	<0.01	<0.01
STD BLANK	<2	<5											
STD BLANK													
STD MP-1b			3.40	2.26	2.41	<0.002	<0.01	3.013	7.94	0.2	<0.01	0.01	0.05
STD Oxl120													
STD GBM908-10	960	147											
STD MP-1b													
STD GSB-03													

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Project Name: Little Gem Regional
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	PER-700 Ni %	PER-700 Pb %	PER-700 S %	PER-700 Si %	PER-700 Sn %	PER-700 Ti %	PER-700 Zn %
Sample ID	0.005	0.01	0.01	0.1	0.01	0.01	0.01
Granite Blank							
MMLG005							
Granite Blank	<0.005	0.04	0.11	32.0	0.01	0.30	<0.01

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Project Name: Little Gem Regional
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	PER-700 Ni %	PER-700 Pb %	PER-700 S %	PER-700 Si %	PER-700 Sn %	PER-700 Ti %	PER-700 Zn %
Sample ID	0.005	0.01	0.01	0.1	0.01	0.01	0.01
STD BLANK	<0.005	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
STD BLANK							
STD BLANK							
STD MP-1b	<0.005	2.04	13.26	15.8	1.57	0.08	15.77
STD Oxl120							
STD GBM908-10							
STD MP-1b							
STD GSB-03							



MS Analytical

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Phone: +1-604-888-0875

To: **Blackstone Minerals Ltd.**
PO Box #1
Gold Bridge, BC
V0K 1P0

CERTIFICATE OF ANALYSIS: YVR1810777

Project Name: Little Gem
Job Received Date: 16-Aug-2018
Job Report Date: 20-Sep-2018
Number of Samples: 178
Report Version: Final

COMMENTS:

Coarse gold may be present in some samples. The observed presence of precipitate may have an effect on the final sample results.

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to MS Analytical's *Schedule of Services and Fees* for our complete Terms and Conditions

SAMPLE PREPARATION

METHOD CODE	DESCRIPTION
PLG-100	Log Sample - No preparation required
PRP-910	Dry, Crush to 70% passing 2mm, Split 250g, Pulverize to 85% passing 75µm

ANALYTICAL METHODS

METHOD CODE	DESCRIPTION
FAS-221	Au, Fire Assay, 50g fusion, AAS, Ore Grade
PER-7Co	Co, 0.15g, Sodium Peroxide Fusion, ICP-AES
ICA-6Ag	Ag, 0.4g, 3:1 Aqua Regia, ICP-AES, Ore Grade
ICF-6Ag	Ag, 0.2g, 4-Acid, ICP-AES, Ore Grade
ICF-6As	As, 0.2g, 4-Acid, ICP-AES, Ore Grade
ICF-6Ni	Ni, 0.2g, 4-Acid, ICP-AES, Ore Grade
ICP-230	Multi-Element, 0.2g, 4-Acid, ICP-AES, Trace Level

Signature:

Yvette Hsi, BSc.
Laboratory Manager
MS Analytical



To: **Blackstone Minerals Ltd.**
PO Box #1
Gold Bridge, BC
V0K 1P0

Project Name:	Little Gem
Job Received Date:	16-Aug-2018
Job Report Date:	20-Sep-2018
Report Version:	Final

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CERTIFICATE OF ANALYSIS:	YVR1810777
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Project Name: Little Gem
Job Received Date: 16-Aug-2018
Job Report Date: 20-Sep-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5

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Project Name: Little Gem
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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5

CERTIFICATE OF ANALYSIS:	YVR1810777
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Project Name: Little Gem
Job Received Date: 16-Aug-2018
Job Report Date: 20-Sep-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5



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Project Name: Little Gem
Job Received Date: 16-Aug-2018
Job Report Date: 20-Sep-2018
Report Version: Final

	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
Sample ID		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5

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CERTIFICATE OF ANALYSIS:	YVR1810777
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Project Name: Little Gem
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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5

CERTIFICATE OF ANALYSIS:	YVR1810777
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Project Name: Little Gem
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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5
JSLG117	Rock Chip	0.88		<0.01						<0.5	5.56	<5	347	0.6
JSLG120	Rock Chip	0.44		<0.01						<0.5	1.84	<5	113	<0.5
JSLG121	Rock Chip	0.48		<0.01						<0.5	5.93	43	198	<0.5
JSLG124A	Rock Chip	0.50		<0.01						<0.5	5.16	<5	68	0.6

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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
JSLG124B	Rock Chip	1.06		<0.01						<0.5	8.86	<5	71	1.1
JSLG126	Rock Chip	0.70		<0.01						<0.5	9.37	<5	72	0.7
JSLG129	Rock Chip	0.59		<0.01						<0.5	6.76	<5	86	0.7
JSLG130	Rock Chip	0.98		<0.01						<0.5	8.74	<5	79	<0.5
JSLG133	Rock Chip	1.06		<0.01						<0.5	0.62	<5	<10	<0.5
JSLG134A	Rock Chip	0.65		<0.01						<0.5	3.10	<5	127	1.2
JSLG134B	Rock Chip	0.95		<0.01						<0.5	4.73	<5	65	2.2
JSLG134S1	Pulp	0.07		16.16										
JSLG134S2	Pulp	0.03						1.663		0.7	1.72	<5	161	<0.5
JSLG134C	Rock Chip	0.26		<0.01						0.6	7.75	<5	88	0.5
JSLG136	Rock Chip	0.32		0.30						4.4	4.08	6	361	<0.5



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To: **Blackstone Minerals Ltd.**
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V0K 1P0

CERTIFICATE OF ANALYSIS: YVR1810777

Project Name: Little Gem
Job Received Date: 16-Aug-2018
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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	FAS-221 Au ppm	PER-7Co Co %	ICA-6Ag Ag ppm	ICF-6Ag Ag ppm	ICF-6As As %	ICF-6Ni Ni %	ICP-230 Ag ppm	ICP-230 Al %	ICP-230 As ppm	ICP-230 Ba ppm	ICP-230 Be ppm
STD BLANK		0.01	LOR	0.01	0.002	1	1	0.005	0.001	0.5	0.01	5	10	0.5
STD BLANK				<0.01										
STD BLANK				<0.01										
STD BLANK				<0.01										
STD BLANK				<0.01										
STD BLANK										<0.5	<0.01	<5	<10	<0.5
STD BLANK										<0.5	<0.01	<5	<10	<0.5
STD BLANK										<0.5	<0.01	<5	<10	<0.5
STD BLANK										<0.5	<0.01	<5	<10	<0.5
STD BLANK										<0.5	<0.01	<5	<10	<0.5
STD BLANK														
STD BLANK														
STD BLANK														
STD OxA131				0.06										
STD OxD127				0.43										
STD OxD120				2.23										
STD OxD124				0.87										
STD OxD120				2.21										
STD OREAS 24b										<0.5	7.79	<5	695	2.5
STD OREAS 601										48.0	6.47	319	279	2.0
STD OREAS 24b										<0.5	7.74	8	675	2.6
STD OREAS 601										47.1	6.44	318	275	2.1
STD OREAS 24b										<0.5	7.84	9	674	2.5
STD GBM917-4							68	2.035	4.662					
STD OREAS 605						973								
STD GBM917-4					1.117									

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Project Name: Little Gem
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	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1
Granite Blank	<2	2.00	<0.5	4	143	4	2.04	15	1.75	<10	<10	0.47	586	1
Granite Blank	<2	2.07	<0.5	4	139	4	2.11	16	1.70	<10	<10	0.49	605	2

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	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1



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	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1

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Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1

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	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1



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	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1

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	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1
JSLG117	<2	0.25	<0.5	6	77	49	3.42	16	1.17	<10	15	1.64	722	1
JSLG120	<2	0.21	<0.5	10	332	20	2.10	<10	0.87	<10	<10	0.23	513	3
JSLG121	6	2.67	0.6	15	147	3	6.11	22	0.40	<10	40	3.95	982	<1
JSLG124A	<2	2.08	<0.5	21	181	15	4.88	24	0.93	<10	15	1.98	765	<1

***Please refer to the cover page for comments
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An AZ Global Company

MS Analytical
Unit 1, 20120 102nd Avenue
Langley, BC V1M 4B4
Phone: +1-604-888-0875

To: **Blackstone Minerals Ltd.**
PO Box #1
Gold Bridge, BC
V0K 1P0

CERTIFICATE OF ANALYSIS: YVR1810777

Project Name: Little Gem
Job Received Date: 16-Aug-2018
Job Report Date: 20-Sep-2018
Report Version: Final

	ICP-230 Bi ppm	ICP-230 Ca %	ICP-230 Cd ppm	ICP-230 Co ppm	ICP-230 Cr ppm	ICP-230 Cu ppm	ICP-230 Fe %	ICP-230 Ga ppm	ICP-230 K %	ICP-230 La ppm	ICP-230 Li ppm	ICP-230 Mg %	ICP-230 Mn ppm	ICP-230 Mo ppm
Sample ID	2	0.01	0.5	1	1	1	0.01	10	0.01	10	10	0.01	5	1
JSLG124B	<2	4.73	<0.5	33	86	47	8.84	36	1.46	<10	13	3.04	1121	<1
JSLG126	<2	8.29	<0.5	21	78	69	10.70	53	0.68	<10	<10	2.43	1111	<1
JSLG129	<2	13.31	<0.5	19	109	41	4.27	22	0.38	<10	<10	0.92	665	7
JSLG130	<2	5.04	<0.5	37	236	46	7.80	25	0.59	<10	17	3.41	1008	<1
JSLG133	2	0.32	<0.5	2	301	6	0.77	<10	0.02	<10	<10	0.20	128	2
JSLG134A	<2	1.69	<0.5	5	317	30	1.74	<10	0.53	<10	<10	0.52	531	3
JSLG134B	<2	2.66	<0.5	7	254	16	2.02	<10	0.50	<10	<10	0.61	945	2
JSLG134S1														
JSLG134S2	12	0.49	<0.5	2182	7184	50	19.92	41	0.06	15	<10	3.04	3431	<1
JSLG134C	<2	4.98	<0.5	34	217	26	7.75	26	0.69	<10	<10	3.76	995	<1
JSLG136	60	0.32	<0.5	3	204	23	1.27	12	0.73	<10	<10	0.09	281	1

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CERTIFICATE OF ANALYSIS:	YVR1810777
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Project Name:	Little Gem
Job Received Date:	16-Aug-2018
Job Report Date:	20-Sep-2018
Report Version:	Final

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CERTIFICATE OF ANALYSIS:	YVR1810777
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Project Name: Little Gem
Job Received Date: 16-Aug-2018
Job Report Date: 20-Sep-2018
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	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm	ICP-230 Zn ppm	ICP-230 Zr ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5
Granite Blank	3.24	2	409	7	0.01	6	7	210	<8	0.21	<10	35	<10	37	54
Granite Blank	3.20	2	413	7	0.01	<5	7	208	<8	0.22	<10	37	<10	36	54

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	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm	ICP-230 Zn ppm	ICP-230 Zr ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5

CERTIFICATE OF ANALYSIS:	YVR1810777
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	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm	ICP-230 Zn ppm	ICP-230 Zr ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5

CERTIFICATE OF ANALYSIS:	YVR1810777
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Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5

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Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5

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	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm	ICP-230 Zn ppm	ICP-230 Zr ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5

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	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm	ICP-230 Zn ppm	ICP-230 Zr ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5
JSLG117	1.06	13	423	10	0.14	<5	15	105	<8	0.25	<10	74	<10	67	12
JSLG120	0.14	25	411	<2	<0.01	<5	8	32	<8	0.39	<10	57	<10	65	<5
JSLG121	0.73	91	198	8	<0.01	<5	5	278	<8	0.05	<10	94	<10	118	7
JSLG124A	1.16	31	813	3	0.02	5	13	175	<8	0.90	<10	118	<10	66	28



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	ICP-230 Na %	ICP-230 Ni ppm	ICP-230 P ppm	ICP-230 Pb ppm	ICP-230 S %	ICP-230 Sb ppm	ICP-230 Sc ppm	ICP-230 Sr ppm	ICP-230 Th ppm	ICP-230 Ti %	ICP-230 Tl ppm	ICP-230 V ppm	ICP-230 W ppm	ICP-230 Zn ppm	ICP-230 Zr ppm
Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5
JSLG124B	2.02	54	1834	12	<0.01	<5	26	462	<8	1.83	15	246	<10	102	63
JSLG126	0.76	30	631	14	0.18	<5	18	1856	<8	0.93	11	329	<10	71	38
JSLG129	3.23	36	1113	8	0.18	<5	20	349	<8	0.89	<10	181	<10	43	36
JSLG130	3.07	96	985	9	<0.01	8	36	298	<8	1.00	<10	209	<10	93	27
JSLG133	0.18	6	50	<2	<0.01	<5	<2	23	<8	0.03	<10	15	<10	13	<5
JSLG134A	1.06	12	19	<2	<0.01	<5	3	99	<8	0.01	<10	53	<10	37	<5
JSLG134B	1.50	12	119	<2	<0.01	<5	4	98	<8	0.09	<10	66	<10	62	<5
JSLG134S1															
JSLG134S2	0.17	>10000	11	31	0.45	32	17	54	46	0.09	26	76	<10	227	18
JSLG134C	3.01	75	969	13	<0.01	9	36	259	8	0.93	<10	236	<10	73	26
JSLG136	1.95	6	747	24	0.27	6	3	169	<8	0.09	<10	32	<10	17	17

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Sample ID	0.01	1	10	2	0.01	5	2	1	8	0.01	10	1	10	2	5
STD BLANK															
STD BLANK															
STD BLANK															
STD BLANK															
STD BLANK															
STD BLANK	<0.01	<1	<10	<2	<0.01	<5	<2	<1	<8	<0.01	<10	<1	<10	<2	<5
STD BLANK	<0.01	<1	<10	<2	<0.01	<5	<2	<1	<8	<0.01	<10	<1	<10	<2	<5
STD BLANK	<0.01	<1	<10	<2	<0.01	<5	<2	<1	<8	<0.01	<10	<1	<10	<2	<5
STD BLANK	<0.01	<1	<10	<2	<0.01	<5	<2	<1	<8	<0.01	<10	<1	<10	<2	<5
STD BLANK	<0.01	<1	<10	<2	<0.01	<5	<2	<1	<8	<0.01	<10	<1	<10	<2	<5
STD BLANK															
STD BLANK															
STD BLANK															
STD OxA131															
STD OxD127															
STD OxD120															
STD OxD124															
STD OxD120															
STD OREAS 24b	0.87	59	682	26	0.19	5	15	123	17	0.46	<10	106	<10	105	133
STD OREAS 601	1.47	23	463	328	1.02	35	5	228	<8	0.19	<10	27	11	1329	159
STD OREAS 24b	0.87	62	675	27	0.19	<5	15	118	13	0.45	<10	104	<10	102	130
STD OREAS 601	1.41	24	435	335	0.99	31	5	225	<8	0.19	<10	26	<10	1333	157
STD OREAS 24b	0.86	59	657	28	0.18	<5	15	120	13	0.45	<10	103	<10	102	131
STD GBM917-4															
STD OREAS 605															
STD GBM917-4															

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MS Analytical

An A2 Global Company

MS Analytical
Unit 1, 20120 102nd Avenue
Langley, BC V1M 4B4
Phone: +1-604-888-0875

To: **Blackstone Minerals Ltd.**
P.O. Box #1
Gold Bridge, BC, V0K 1P0
Canada

CERTIFICATE OF ANALYSIS: YVR1810625

Project Name: Little Gem
Job Received Date: 05-Jul-2018
Job Report Date: 31-Jul-2018
Number of Samples: 69
Report Version: Final

COMMENTS:

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to MS Analyticals' *Schedule of Services and Fees* for our complete Terms and Conditions

SAMPLE PREPARATION

METHOD CODE	DESCRIPTION
PLG-100	Log Sample - No preparation required
PPU-520	Pulverize, 500g, to 85% passing 75µm
PWA-500	Wash Pulverizer with Barren Material Between Each Sample

ANALYTICAL METHODS

METHOD CODE	DESCRIPTION
IMS-132	Multi-Element, 40g, 3:1 Aqua Regia, ICP-AES/MS, Ultra Trace Level

Signature:

Yvette Hsi, BSc.
Laboratory Manager
MS Analytical



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Canada

CERTIFICATE OF ANALYSIS:	YVR1810625
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Project Name: Little Gem
Job Received Date: 05-Jul-2018
Job Report Date: 31-Jul-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units LOR	IMS-132 Ag ppm	IMS-132 Al %	IMS-132 As ppm	IMS-132 Au ppm	IMS-132 B ppm	IMS-132 Ba ppm	IMS-132 Be ppm	IMS-132 Bi ppm	IMS-132 Ca %	IMS-132 Cd ppm	IMS-132 Ce ppm
Sample ID		0.01	LOR	0.01	0.01	0.1	0.0005	10	10	0.05	0.01	0.01	0.01	0.02
Silica Blank	QC-P-BK	--		<0.01	0.02	0.4	0.0005	14	<10	<0.05	<0.01	<0.01	<0.01	6.76
Silica Blank	QC-P-BK	--		<0.01	0.02	0.4	<0.0005	<10	<10	<0.05	<0.01	<0.01	<0.01	6.22
THLG118SF	Sediment	0.41		0.11	1.00	32.3	0.0019	18	88	0.20	0.09	1.68	0.14	15.84
THLG119SF	Sediment	0.94		0.12	3.26	65.6	0.0033	22	115	0.52	0.10	0.70	0.37	21.61
THLG120SF	Sediment	0.76		0.07	4.49	51.1	0.0027	19	124	0.72	0.05	0.91	0.17	19.79
Silica Blank	QC-P-BK	--		<0.01	0.02	0.5	0.0007	<10	<10	<0.05	<0.01	<0.01	<0.01	6.97

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Project Name: Little Gem
Job Received Date: 05-Jul-2018
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Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	IMS-132 Ag ppm 0.01	IMS-132 Al % 0.01	IMS-132 As ppm 0.1	IMS-132 Au ppm 0.0005	IMS-132 B ppm 10	IMS-132 Ba ppm 10	IMS-132 Be ppm 0.05	IMS-132 Bi ppm 0.01	IMS-132 Ca % 0.01	IMS-132 Cd ppm 0.01	IMS-132 Ce ppm 0.02
THLG131SF	Sediment	0.95		0.08	2.72	79.0	0.0042	18	100	0.37	0.10	0.90	0.22	15.31
THLG132SF	Sediment	0.73		0.09	1.14	2.6	0.0011	15	82	0.17	0.13	0.49	0.04	9.77
Silica Blank	QC-P-BK	--		<0.01	0.02	0.4	<0.0005	11	<10	<0.05	<0.01	<0.01	<0.01	6.48
THLG150SF	Sediment	0.64		0.08	1.68	12.4	0.0014	14	104	0.24	0.10	0.64	0.08	16.07

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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units LOR	IMS-132 Ag ppm 0.01	IMS-132 Al % 0.01	IMS-132 As ppm 0.1	IMS-132 Au ppm 0.0005	IMS-132 B ppm 10	IMS-132 Ba ppm 10	IMS-132 Be ppm 0.05	IMS-132 Bi ppm 0.01	IMS-132 Ca % 0.01	IMS-132 Cd ppm 0.01	IMS-132 Ce ppm 0.02
THLG158SF	Sediment	0.39		0.06	1.89	43.1	0.0010	14	136	0.29	0.11	0.66	0.20	14.39
THLG159SF	Sediment	0.40		0.12	1.86	11.2	0.0019	19	113	0.27	0.09	0.88	0.47	12.45
THLG160SF	Sediment	0.83		0.08	1.74	11.4	0.0015	17	59	0.30	0.08	1.02	0.11	14.35
THLG161SF	Sediment	0.42		0.19	1.25	2.1	<0.0005	10	73	0.26	0.13	0.53	0.15	13.53
GSLG002SF	Sediment	0.54		0.08	2.98	13.5	0.0043	20	46	0.27	0.06	0.75	0.32	7.44
GSLG006SF	Sediment	0.48		0.13	0.92	2.9	0.0015	16	74	0.18	0.10	0.72	0.16	10.23

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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	IMS-132 Ag ppm	IMS-132 Al %	IMS-132 As ppm	IMS-132 Au ppm	IMS-132 B ppm	IMS-132 Ba ppm	IMS-132 Be ppm	IMS-132 Bi ppm	IMS-132 Ca %	IMS-132 Cd ppm	IMS-132 Ce ppm
		0.01	LOR	0.01	0.01	0.1	0.0005	10	10	0.05	0.01	0.01	0.01	0.02
DUP THLG150SF				0.08	1.71	12.1	0.0015	15	106	0.24	0.10	0.67	0.08	16.52
STD BLANK				<0.01	<0.01	<0.1	<0.0005	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02
STD BLANK				<0.01	<0.01	<0.1	<0.0005	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02
STD OREAS 601				49.40	0.84	308.6	0.7685	13	145	0.63	22.63	1.05	7.62	45.31
STD OREAS 25a				0.04	5.85	2.7	0.0012	20	56	0.63	0.30	0.15	0.04	33.10

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	IMS-132 Co ppm	IMS-132 Cr ppm	IMS-132 Cs ppm	IMS-132 Cu ppm	IMS-132 Fe %	IMS-132 Ga ppm	IMS-132 Ge ppm	IMS-132 Hf ppm	IMS-132 Hg ppm	IMS-132 In ppm	IMS-132 K %	IMS-132 La ppm	IMS-132 Li ppm	IMS-132 Mg %
Sample ID	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.005	0.005	0.01	0.2	0.1	0.01
Silica Blank	0.5	181	<0.05	2.3	0.39	0.17	<0.05	0.02	0.010	<0.005	0.01	2.8	0.1	<0.01
Silica Blank	0.4	166	<0.05	2.0	0.34	0.16	<0.05	<0.02	0.007	<0.005	<0.01	2.7	0.1	<0.01
THLG118SF	7.3	41	0.70	16.8	2.27	3.79	<0.05	0.04	0.080	0.009	0.04	6.9	6.4	0.19
THLG119SF	41.9	272	5.27	97.4	6.44	13.16	0.19	0.09	0.116	0.040	0.30	9.0	38.6	3.13
THLG120SF	58.6	717	12.12	78.2	7.28	19.31	0.30	0.09	0.223	0.060	0.42	8.5	56.9	6.55
Silica Blank	0.4	188	<0.05	4.4	0.38	0.17	<0.05	<0.02	0.008	<0.005	0.01	2.9	<0.1	<0.01

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Job Report Date: 31-Jul-2018
Report Version: Final

Sample ID	IMS-132 Co ppm 0.1	IMS-132 Cr ppm 1	IMS-132 Cs ppm 0.05	IMS-132 Cu ppm 0.2	IMS-132 Fe % 0.01	IMS-132 Ga ppm 0.05	IMS-132 Ge ppm 0.05	IMS-132 Hf ppm 0.02	IMS-132 Hg ppm 0.005	IMS-132 In ppm 0.005	IMS-132 K % 0.01	IMS-132 La ppm 0.2	IMS-132 Li ppm 0.1	IMS-132 Mg % 0.01
THLG131SF	41.1	321	3.66	82.3	5.41	11.53	0.14	0.07	0.058	0.040	0.35	6.3	30.8	3.04
THLG132SF	6.4	66	1.04	16.5	1.71	6.24	<0.05	0.10	0.023	0.020	0.09	4.7	14.0	0.30
Silica Blank	0.5	157	<0.05	2.3	0.37	0.16	<0.05	0.02	<0.005	<0.005	<0.01	2.7	<0.1	<0.01
THLG150SF	11.5	78	2.34	38.6	2.36	6.01	0.07	0.05	0.043	0.020	0.14	5.5	16.3	0.57

***Please refer to the cover page for comments
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An A2 Global Company

MS Analytical
Unit 1, 20120 102nd Avenue
Langley, BC V1M 4B4
Phone: +1-604-888-0875

To: **Blackstone Minerals Ltd.**
P.O. Box #1
Gold Bridge, BC, V0K 1P0
Canada

CERTIFICATE OF ANALYSIS:	YVR1810625
---------------------------------	-------------------

Project Name: Little Gem
Job Received Date: 05-Jul-2018
Job Report Date: 31-Jul-2018
Report Version: Final

Sample ID	IMS-132 Co ppm 0.1	IMS-132 Cr ppm 1	IMS-132 Cs ppm 0.05	IMS-132 Cu ppm 0.2	IMS-132 Fe % 0.01	IMS-132 Ga ppm 0.05	IMS-132 Ge ppm 0.05	IMS-132 Hf ppm 0.02	IMS-132 Hg ppm 0.005	IMS-132 In ppm 0.005	IMS-132 K % 0.01	IMS-132 La ppm 0.2	IMS-132 Li ppm 0.1	IMS-132 Mg % 0.01
THLG158SF	12.7	127	1.67	41.3	2.40	6.34	0.07	0.06	0.044	0.023	0.18	5.4	22.3	0.63
THLG159SF	13.6	132	1.35	58.6	2.55	6.39	0.08	0.05	0.068	0.024	0.17	5.3	23.8	0.73
THLG160SF	10.8	64	1.46	40.4	2.43	5.88	0.07	0.05	0.039	0.020	0.07	6.0	20.5	0.58
THLG161SF	4.8	73	0.78	30.5	1.13	4.92	0.05	0.05	0.018	0.019	0.07	7.0	9.5	0.21
GSLG002SF	33.6	155	4.25	100.8	4.97	9.02	0.08	0.05	0.117	0.021	0.14	2.7	32.8	2.32
GSLG006SF	4.9	55	0.64	31.4	1.10	3.88	<0.05	0.03	0.031	0.013	0.06	5.9	15.3	0.26

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CERTIFICATE OF ANALYSIS:	YVR1810625
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Project Name: Little Gem
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	IMS-132 Co ppm 0.1	IMS-132 Cr ppm 1	IMS-132 Cs ppm 0.05	IMS-132 Cu ppm 0.2	IMS-132 Fe % 0.01	IMS-132 Ga ppm 0.05	IMS-132 Ge ppm 0.05	IMS-132 Hf ppm 0.02	IMS-132 Hg ppm 0.005	IMS-132 In ppm 0.005	IMS-132 K % 0.01	IMS-132 La ppm 0.2	IMS-132 Li ppm 0.1	IMS-132 Mg % 0.01
Sample ID														
DUP THLG150SF	11.5	80	2.34	38.7	2.37	6.00	0.08	0.05	0.049	0.022	0.14	5.7	16.4	0.58
STD BLANK	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.005	<0.005	<0.01	<0.2	<0.1	<0.01
STD BLANK	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.005	<0.005	<0.01	<0.2	<0.1	<0.01
STD OREAS 601	4.7	45	2.05	1030.4	2.20	5.14	0.14	0.90	0.275	1.683	0.25	21.0	8.1	0.20
STD OREAS 25a	5.9	72	4.40	25.5	6.10	21.25	0.06	0.47	0.060	0.074	0.13	13.2	25.2	0.20

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CERTIFICATE OF ANALYSIS:	YVR1810625
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Project Name: Little Gem
Job Received Date: 05-Jul-2018
Job Report Date: 31-Jul-2018
Report Version: Final

	IMS-132 Mn ppm	IMS-132 Mo ppm	IMS-132 Na %	IMS-132 Nb ppm	IMS-132 Ni ppm	IMS-132 P ppm	IMS-132 Pb ppm	IMS-132 Rb ppm	IMS-132 Re ppm	IMS-132 S %	IMS-132 Sb ppm	IMS-132 Sc ppm	IMS-132 Se ppm	IMS-132 Sn ppm
Sample ID	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
Silica Blank	43	0.34	<0.01	0.07	3.7	<10	0.4	0.3	<0.001	<0.01	<0.05	0.1	<0.2	0.2
Silica Blank	36	0.31	<0.01	0.07	3.4	<10	0.3	0.3	<0.001	<0.01	<0.05	0.1	<0.2	0.2
THLG118SF	1129	2.09	0.04	1.25	8.8	811	4.7	3.2	0.002	0.13	1.43	1.1	0.9	0.4
THLG119SF	1082	1.85	0.04	1.67	222.2	969	5.1	22.8	<0.001	0.03	1.46	11.8	0.7	0.7
THLG120SF	1087	1.17	0.02	2.33	471.7	1098	3.1	31.8	<0.001	0.03	0.87	13.4	0.7	0.7
Silica Blank	39	0.36	<0.01	0.08	3.8	<10	0.4	0.4	<0.001	<0.01	0.05	0.2	<0.2	0.2

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CERTIFICATE OF ANALYSIS:	YVR1810625
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Project Name: Little Gem
Job Received Date: 05-Jul-2018
Job Report Date: 31-Jul-2018
Report Version: Final

Sample ID	IMS-132 Mn ppm 5	IMS-132 Mo ppm 0.05	IMS-132 Na % 0.01	IMS-132 Nb ppm 0.05	IMS-132 Ni ppm 0.2	IMS-132 P ppm 10	IMS-132 Pb ppm 0.2	IMS-132 Rb ppm 0.1	IMS-132 Re ppm 0.001	IMS-132 S % 0.01	IMS-132 Sb ppm 0.05	IMS-132 Sc ppm 0.1	IMS-132 Se ppm 0.2	IMS-132 Sn ppm 0.2
THLG131SF	905	0.93	0.05	1.44	307.0	931	3.5	23.1	<0.001	0.02	0.67	12.1	0.3	0.6
THLG132SF	245	1.06	0.09	1.85	18.9	135	7.0	9.6	<0.001	0.02	0.19	2.6	<0.2	0.7
Silica Blank	40	0.29	<0.01	<0.05	3.1	<10	0.3	0.2	<0.001	<0.01	<0.05	0.1	<0.2	<0.2
THLG150SF	318	0.82	0.08	1.23	23.4	533	5.4	10.1	<0.001	0.02	0.45	4.9	0.3	0.5

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	IMS-132 Mn ppm	IMS-132 Mo ppm	IMS-132 Na %	IMS-132 Nb ppm	IMS-132 Ni ppm	IMS-132 P ppm	IMS-132 Pb ppm	IMS-132 Rb ppm	IMS-132 Re ppm	IMS-132 S %	IMS-132 Sb ppm	IMS-132 Sc ppm	IMS-132 Se ppm	IMS-132 Sn ppm
Sample ID	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
THLG158SF	581	0.91	0.09	1.19	28.8	1123	6.3	13.5	<0.001	0.02	0.82	4.7	<0.2	0.6
THLG159SF	438	0.93	0.08	1.11	56.8	568	4.9	11.0	0.001	0.03	0.74	5.8	0.9	0.5
THLG160SF	318	0.65	0.06	1.35	29.4	527	3.9	6.8	<0.001	0.04	0.54	4.0	0.6	0.5
THLG161SF	199	0.57	0.10	1.04	10.3	419	7.3	5.5	0.001	0.04	0.11	2.4	0.4	0.5
GSLG002SF	907	0.78	0.03	0.74	61.7	558	4.1	13.3	<0.001	0.05	0.34	7.8	0.3	0.4
GSLG006SF	171	0.61	0.06	0.62	29.0	194	5.8	5.3	0.001	0.04	0.13	1.7	0.6	0.4

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	IMS-132 Mn ppm	IMS-132 Mo ppm	IMS-132 Na %	IMS-132 Nb ppm	IMS-132 Ni ppm	IMS-132 P ppm	IMS-132 Pb ppm	IMS-132 Rb ppm	IMS-132 Re ppm	IMS-132 S %	IMS-132 Sb ppm	IMS-132 Sc ppm	IMS-132 Se ppm	IMS-132 Sn ppm
Sample ID	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
DUP THLG150SF	325	0.84	0.08	1.28	23.5	544	5.4	10.2	<0.001	0.02	0.46	5.0	0.3	0.5
STD BLANK	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2
STD BLANK	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2
STD OREAS 601	448	3.80	0.09	0.45	24.9	355	284.4	15.4	0.001	1.08	21.69	1.8	12.3	2.6
STD OREAS 25a	411	1.43	0.04	0.57	27.4	366	21.3	31.9	<0.001	0.05	0.20	9.1	0.5	2.7

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Project Name: Little Gem
Job Received Date: 05-Jul-2018
Job Report Date: 31-Jul-2018
Report Version: Final

	IMS-132 Sr ppm	IMS-132 Ta ppm	IMS-132 Te ppm	IMS-132 Th ppm	IMS-132 Ti %	IMS-132 Tl ppm	IMS-132 U ppm	IMS-132 V ppm	IMS-132 W ppm	IMS-132 Y ppm	IMS-132 Zn ppm	IMS-132 Zr ppm
Sample ID	0.2	0.01	0.01	0.2	0.005	0.02	0.05	1	0.05	0.05	1	0.5
Silica Blank	0.7	<0.01	<0.01	1.3	<0.005	<0.02	0.18	1	<0.05	0.40	<1	0.6
Silica Blank	0.7	<0.01	<0.01	1.1	<0.005	<0.02	0.16	<1	<0.05	0.32	<1	0.5
THLG118SF	77.5	0.01	<0.01	<0.2	0.049	0.09	1.32	41	0.09	5.45	22	0.8
THLG119SF	46.6	<0.01	0.13	1.5	0.277	0.17	0.57	113	0.11	12.50	130	4.0
THLG120SF	44.5	<0.01	<0.01	1.0	0.384	0.21	0.31	139	0.15	10.71	109	2.3
Silica Blank	0.8	<0.01	<0.01	1.3	<0.005	<0.02	0.19	<1	<0.05	0.38	<1	0.5

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Project Name: Little Gem
Job Received Date: 05-Jul-2018
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	IMS-132 Sr ppm 0.2	IMS-132 Ta ppm 0.01	IMS-132 Te ppm 0.01	IMS-132 Th ppm 0.2	IMS-132 Ti % 0.005	IMS-132 Tl ppm 0.02	IMS-132 U ppm 0.05	IMS-132 V ppm 1	IMS-132 W ppm 0.05	IMS-132 Y ppm 0.05	IMS-132 Zn ppm 1	IMS-132 Zr ppm 0.5
Sample ID												
THLG131SF	41.9	<0.01	<0.01	1.5	0.264	0.15	0.32	109	0.13	8.82	93	2.1
THLG132SF	40.6	<0.01	<0.01	1.1	0.145	0.06	0.25	35	0.12	3.49	29	2.6
Silica Blank	0.7	<0.01	<0.01	1.1	<0.005	<0.02	0.18	1	<0.05	0.37	<1	0.7
THLG150SF	39.2	<0.01	0.08	1.4	0.165	0.10	0.43	59	0.19	6.86	52	1.7

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THLG158SF	40.1	<0.01	0.02	1.5	0.156	0.11	0.56	54	0.16	5.01	76	2.2
THLG159SF	43.9	<0.01	0.02	1.1	0.164	0.10	0.47	59	0.16	7.99	79	1.6
THLG160SF	41.0	<0.01	0.02	0.9	0.166	0.08	0.53	56	0.14	7.54	39	1.5
THLG161SF	42.9	<0.01	<0.01	0.9	0.097	0.06	0.47	26	0.08	6.84	39	2.4
GSLG002SF	22.0	<0.01	0.02	0.4	0.325	0.07	0.22	128	0.10	7.49	111	2.0
GSLG006SF	68.3	<0.01	0.02	0.5	0.066	0.05	0.38	22	0.08	3.77	28	1.3

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	IMS-132 Sr ppm	IMS-132 Ta ppm	IMS-132 Te ppm	IMS-132 Th ppm	IMS-132 Ti %	IMS-132 Tl ppm	IMS-132 U ppm	IMS-132 V ppm	IMS-132 W ppm	IMS-132 Y ppm	IMS-132 Zn ppm	IMS-132 Zr ppm
Sample ID	0.2	0.01	0.01	0.2	0.005	0.02	0.05	1	0.05	0.05	1	0.5
DUP THLG150SF	40.1	<0.01	0.04	1.4	0.177	0.10	0.44	60	0.18	7.15	53	1.7
STD BLANK	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<1	<0.5
STD BLANK	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<1	<0.5
STD OREAS 601	35.0	<0.01	14.99	6.6	0.014	0.75	1.94	9	1.12	5.94	1312	27.3
STD OREAS 25a	17.8	<0.01	0.04	10.8	0.069	0.21	1.52	117	<0.05	4.55	31	19.9

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To: **Blackstone Minerals Ltd.**
PO Box #1
Gold Bridge, BC
V0K 1P0

CERTIFICATE OF ANALYSIS: YVR1810710

Project Name: Little Gem
Job Received Date: 06-Aug-2018
Job Report Date: 31-Aug-2018
Number of Samples: 48
Report Version: Final

COMMENTS:

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to MS Analyticals' *Schedule of Services and Fees* for our complete Terms and Conditions

SAMPLE PREPARATION

METHOD CODE	DESCRIPTION
PPU-520	Pulverize, 500g, to 85% passing 75µm
PWA-500	Wash Pulverizer with Barren Material Between Each Sample

ANALYTICAL METHODS

METHOD CODE	DESCRIPTION
IMS-132	Multi-Element, 40g, 3:1 Aqua Regia, ICP-AES/MS, Ultra Trace Level

Signature:

Yvette Hsi, BSc.
Laboratory Manager
MS Analytical



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CERTIFICATE OF ANALYSIS:	YVR1810710
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Project Name: Little Gem
Job Received Date: 06-Aug-2018
Job Report Date: 31-Aug-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	IMS-132 Ag ppm	IMS-132 Al %	IMS-132 As ppm	IMS-132 Au ppm	IMS-132 B ppm	IMS-132 Ba ppm	IMS-132 Be ppm	IMS-132 Bi ppm	IMS-132 Ca %	IMS-132 Cd ppm	IMS-132 Ce ppm
		0.01	LOR	0.01	0.01	0.1	0.0005	10	10	0.05	0.01	0.01	0.01	0.02
Silica Blank	QC-P-BK	--		<0.01	0.01	0.2	0.0016	<10	<10	<0.05	<0.01	<0.01	0.01	5.99
Silica Blank	QC-P-BK	--		<0.01	0.01	0.2	0.0008	<10	<10	<0.05	<0.01	<0.01	<0.01	6.94
Silica Blank	QC-P-BK	--		<0.01	0.01	0.3	<0.0005	<10	<10	<0.05	<0.01	<0.01	<0.01	6.77

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Project Name: Little Gem
Job Received Date: 06-Aug-2018
Job Report Date: 31-Aug-2018
Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg 0.01	Method Analyte Units LOR	IMS-132 Ag ppm 0.01	IMS-132 Al % 0.01	IMS-132 As ppm 0.1	IMS-132 Au ppm 0.0005	IMS-132 B ppm 10	IMS-132 Ba ppm 10	IMS-132 Be ppm 0.05	IMS-132 Bi ppm 0.01	IMS-132 Ca % 0.01	IMS-132 Cd ppm 0.01	IMS-132 Ce ppm 0.02
GSLG001SF	Sediment	0.46		0.11	2.92	39.1	0.0055	12	130	0.52	0.10	0.67	0.31	19.95
GSLG007SF	Sediment	0.24		0.13	0.66	28.5	0.0015	16	187	0.17	0.09	2.46	0.22	14.26

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Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	IMS-132 Ag ppm	IMS-132 Al %	IMS-132 As ppm	IMS-132 Au ppm	IMS-132 B ppm	IMS-132 Ba ppm	IMS-132 Be ppm	IMS-132 Bi ppm	IMS-132 Ca %	IMS-132 Cd ppm	IMS-132 Ce ppm
		0.01	LOR	0.01	0.01	0.1	0.0005	10	10	0.05	0.01	0.01	0.01	0.02
STD BLANK				<0.01	<0.01	<0.1	<0.0005	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02
STD BLANK				<0.01	<0.01	<0.1	<0.0005	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02
STD OREAS 25a				0.04	5.79	2.5	0.0010	<10	56	0.65	0.30	0.15	0.04	33.43
STD OREAS 601				51.17	0.85	310.5	0.7856	<10	64	0.62	20.59	1.07	7.85	44.57

***Please refer to the cover page for comments regarding this certificate. ***



An A2 Global Company

MS Analytical
Unit 1, 20120 102nd Avenue
Langley, BC V1M 4B4
Phone: +1-604-888-0875

To: **Blackstone Minerals Ltd.**
PO Box #1
Gold Bridge, BC
V0K 1P0

CERTIFICATE OF ANALYSIS:	YVR1810710
---------------------------------	-------------------

Project Name: Little Gem
Job Received Date: 06-Aug-2018
Job Report Date: 31-Aug-2018
Report Version: Final

	IMS-132 Co ppm	IMS-132 Cr ppm	IMS-132 Cs ppm	IMS-132 Cu ppm	IMS-132 Fe %	IMS-132 Ga ppm	IMS-132 Ge ppm	IMS-132 Hf ppm	IMS-132 Hg ppm	IMS-132 In ppm	IMS-132 K %	IMS-132 La ppm	IMS-132 Li ppm	IMS-132 Mg %
Sample ID	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.005	0.005	0.01	0.2	0.1	0.01
Silica Blank	0.5	200	<0.05	2.9	0.25	0.14	<0.05	<0.02	<0.005	<0.005	<0.01	2.4	<0.1	<0.01
Silica Blank	0.5	218	<0.05	2.9	0.25	0.14	<0.05	<0.02	<0.005	<0.005	<0.01	2.8	<0.1	<0.01
Silica Blank	0.5	214	<0.05	2.8	0.25	0.15	<0.05	<0.02	<0.005	<0.005	<0.01	2.7	0.1	<0.01

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Project Name:	Little Gem
Job Received Date:	06-Aug-2018
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Job Received Date: 06-Aug-2018
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Sample ID	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.005	0.005	0.01	0.2	0.1	0.01
STD BLANK	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.005	<0.005	<0.01	<0.2	<0.1	<0.01
STD BLANK	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.005	<0.005	<0.01	<0.2	<0.1	<0.01
STD OREAS 25a	5.7	73	4.45	25.6	6.00	20.65	<0.05	0.44	0.061	0.077	0.13	12.9	22.1	0.20
STD OREAS 601	4.7	44	1.97	1020.2	2.23	5.28	0.16	0.80	0.352	1.722	0.25	21.7	8.0	0.20

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	IMS-132 Mn ppm	IMS-132 Mo ppm	IMS-132 Na %	IMS-132 Nb ppm	IMS-132 Ni ppm	IMS-132 P ppm	IMS-132 Pb ppm	IMS-132 Rb ppm	IMS-132 Re ppm	IMS-132 S %	IMS-132 Sb ppm	IMS-132 Sc ppm	IMS-132 Se ppm	IMS-132 Sn ppm
Sample ID	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
Silica Blank	22	0.47	<0.01	0.08	4.2	<10	1.2	0.1	<0.001	<0.01	<0.05	0.1	<0.2	<0.2
Silica Blank	22	0.47	<0.01	0.08	4.3	<10	1.2	0.2	<0.001	<0.01	<0.05	0.1	<0.2	<0.2
Silica Blank	21	0.47	<0.01	0.07	4.4	<10	0.4	0.2	<0.001	<0.01	0.06	0.1	<0.2	<0.2

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Sample ID	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
STD BLANK	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2
STD BLANK	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2
STD OREAS 25a	417	1.91	0.05	0.61	27.2	376	20.9	30.5	<0.001	0.05	0.26	8.7	0.5	2.7
STD OREAS 601	454	3.82	0.08	0.34	23.9	357	283.6	16.1	<0.001	1.06	21.57	1.8	12.4	2.6



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Report Version:	Final

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Project Name: Little Gem
Job Received Date: 06-Aug-2018
Job Report Date: 31-Aug-2018
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	IMS-132 Sr ppm 0.2	IMS-132 Ta ppm 0.01	IMS-132 Te ppm 0.01	IMS-132 Th ppm 0.2	IMS-132 Ti % 0.005	IMS-132 Tl ppm 0.02	IMS-132 U ppm 0.05	IMS-132 V ppm 1	IMS-132 W ppm 0.05	IMS-132 Y ppm 0.05	IMS-132 Zn ppm 1	IMS-132 Zr ppm 0.5
Sample ID												
GSLG001SF	54.1	<0.01	0.08	1.6	0.304	0.12	0.67	97	0.09	10.71	110	4.0
GSLG007SF	167.4	<0.01	0.04	<0.2	0.047	0.10	4.73	75	0.09	4.88	21	1.6

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	IMS-132 Sr ppm	IMS-132 Ta ppm	IMS-132 Te ppm	IMS-132 Th ppm	IMS-132 Ti %	IMS-132 Tl ppm	IMS-132 U ppm	IMS-132 V ppm	IMS-132 W ppm	IMS-132 Y ppm	IMS-132 Zn ppm	IMS-132 Zr ppm
Sample ID	0.2	0.01	0.01	0.2	0.005	0.02	0.05	1	0.05	0.05	1	0.5
STD BLANK	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<1	<0.5
STD BLANK	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02	<0.05	<1	<0.05	<0.05	<1	<0.5
STD OREAS 25a	17.6	<0.01	0.01	10.7	0.058	0.21	1.47	117	<0.05	4.55	31	18.3
STD OREAS 601	35.0	<0.01	15.33	6.8	0.015	0.73	1.98	9	1.06	5.84	1293	26.9

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Appendix 5. Cost Statement

Exploration Work type	Comment	Days			Totals
Rock & Sediment Sampling, Prospecting, Processing					
Personnel (Name)* / Position	Field Days (list actual days)	Days	Rate	Subtotal*	
Gerald Schenk/Geologist	Jun14, Jun21, Aug14	3	\$350.00	\$1,050.00	
Maggie McLennon/Geologist	Jun14, Jun21	2	\$375.00	\$750.00	
Travis Holmes/Geologist	May23, June 9	2	\$370.00	\$740.00	
Kevin Thompson/Local Field Assistant	May23, June 9	2	\$325.00	\$650.00	
Jenny Stein/Geologist	Aug 14,	1	\$415.00	\$415.00	
		10.0		\$3,605.00	\$3,605.00
Office Studies	List Personnel (note - Office only, do not include field days)				
Literature search	Jordan Keelan	1.0	\$350.00	\$350.00	
Database compilation	Lisa Fodor	1.0	\$550.00	\$550.00	
Computer modelling				\$0.00	
Reprocessing of data				\$0.00	
General research				\$0.00	
Report preparation	Lisa Fodor	4.0	\$550.00	\$2,200.00	
Sample Processing at Office	Maggie McLennon	1.0	\$350.00	\$350.00	
Sample Processing at Office	Gerald Schenk	1.0	\$375.00	\$375.00	
				\$3,825.00	\$3,825.00
Airborne Exploration Surveys	Line Kilometres / Enter total invoiced amount				
Aeromagnetics			\$0.00	\$0.00	
Radiometrics			\$0.00	\$0.00	
Electromagnetics			\$0.00	\$0.00	
Gravity			\$0.00	\$0.00	
Digital terrain modelling			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Remote Sensing	Area in Hectares / Enter total invoiced amount or list personnel				
Aerial photography			\$0.00	\$0.00	
LANDSAT			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Ground Exploration Surveys	Area in Hectares/List Personnel				
Geological mapping					
Regional					
Reconnaissance					
Prospect					
Underground	Define by length and width				
Trenches	Define by length and width			\$0.00	\$0.00
Ground geophysics	Line Kilometres / Enter total amount invoiced list personnel				
Radiometrics					
Magnetics					
Gravity					
Digital terrain modelling					
Electromagnetics					
SP/AP/EP					
IP					
AMT/CSAMT					
Resistivity					
Complex resistivity					
Seismic reflection					
Seismic refraction					
Well logging	Define by total length				

Geophysical interpretation					
Petrophysics					
Other (specify)					
				\$0.00	\$0.00
Geochemical Surveying	Number of Samples	No.	Rate	Subtotal	
Drill (cuttings, core, etc.)			\$0.00	\$0.00	
Stream sediment	14	14.0	\$27.80	\$389.20	
Soil			\$0.00	\$0.00	
Rock	14	14.0	\$33.75	\$472.50	
Water			\$0.00	\$0.00	
Biogeochemistry			\$0.00	\$0.00	
Whole rock			\$0.00	\$0.00	
Petrology			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$861.70	\$861.70
Drilling	No. of Holes, Size of Core and Metres	No.	Rate	Subtotal	
Diamond			\$0.00	\$0.00	
Reverse circulation (RC)			\$0.00	\$0.00	
Rotary air blast (RAB)			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Other Operations	Clarify	No.	Rate	Subtotal	
Trenching			\$0.00	\$0.00	
Bulk sampling			\$0.00	\$0.00	
Underground development			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Reclamation	Clarify	No.	Rate	Subtotal	
After drilling			\$0.00	\$0.00	
Monitoring			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
Transportation		No.	Rate	Subtotal	
Airfare			\$0.00	\$0.00	
Taxi			\$0.00	\$0.00	
truck rental		5.00	\$66.00	\$330.00	
kilometers			\$0.00	\$0.00	
ATV			\$0.00	\$0.00	
fuel		5.00	\$10.00	\$50.00	
Helicopter (hours)			\$0.00	\$0.00	
Fuel (litres/hour)			\$0.00	\$0.00	
Other					
				\$380.00	\$380.00
Accommodation & Food	Rates per day				
Hotel			\$0.00	\$0.00	
Camp		8.00	\$25.00	\$200.00	
Meals		8.00	\$35.00	\$280.00	
				\$480.00	\$480.00
Miscellaneous					
Telephone			\$0.00	\$0.00	
Other (Specify)					
				\$0.00	\$0.00

Equipment Rentals					
Field Gear (Specify)		10.00	\$10.00	\$100.00	
Other (Specify)					
				\$100.00	\$100.00
Freight					
			\$0.00	\$0.00	
			\$0.00	\$0.00	
				\$0.00	\$0.00
<i>TOTAL Expenditures</i>					\$9,251.70