

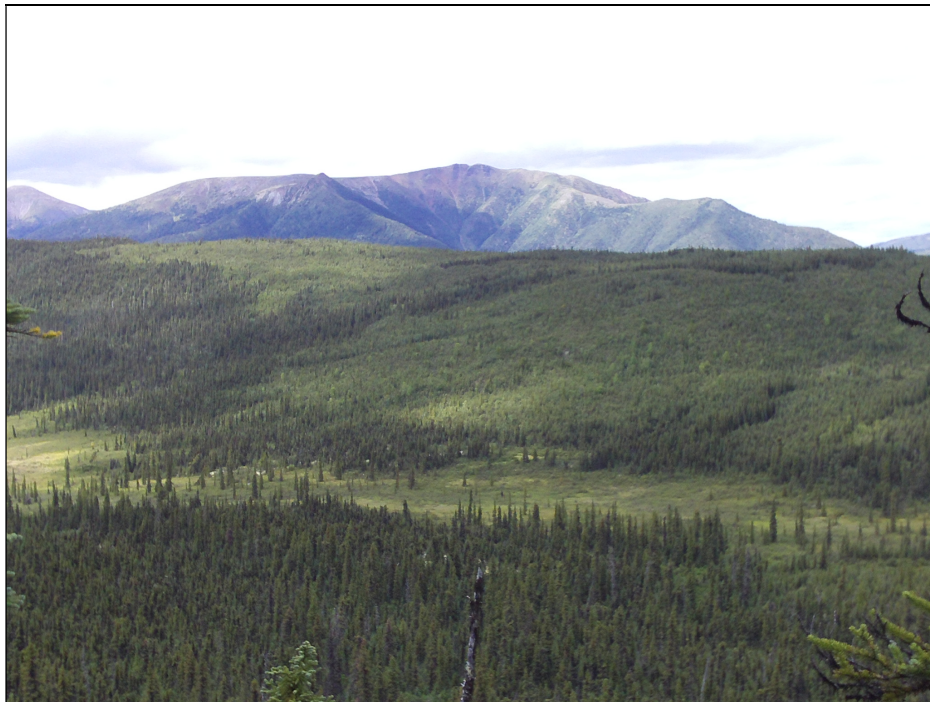
**YMEP 2019-13**

**GOLDORAK PROJECT**

WHITEHORSE MINING DISTRICT

NTS 105L/15

UTM NAD 83 ZONE 8: 517500E, 6971500N



BY: JEROME DE PASQUALE

&

ROGER HULSTEIN, P. GEO.

NOVEMBER 29, 2019

2019 Goldorak Report

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Frontispiece photo; looking west at Dromedary Mountain on horizon, 2019 camp area in clearing in foreground.

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## SUMMARY

The Goldorak Project (YMEP 2019-13) is located in central Yukon, 240 kilometres north of Whitehorse, on the west side of the Selwyn Basin east of the Tintina Trench. The project is centered over Dromedary Mountain. Anaconda Canada Exploration Ltd. in 1980 staked and explored the area (1980-1982) for sedimentary exhalative (Sedex) Pb-Zn-Ag deposits. Anaconda drilled ten holes 1,900 m in 1981 testing an 18 km long thrust fault bounded belt of prospective Earn Group rocks consisting of variably calcareous argillite, siltstone, and siliceous argillite. In the 1990's Dromedary Exploration Company Ltd and Blackstone Resources Inc. diamond drill tested the Francoise Zone, on the west side of Dromedary Mountain, and intersected syngenetic and replacement style massive and semi-massive sulfide mineralization in the same belt of Earn Group rocks. The upper sulphide lens returned up to 8.4% Zn, 2.4 % Pb and 29.8 ppm Ag over two meters while the lower horizon is characterized by its gold-rich signature (up to 2.2 g/t Au over 4.4m) and a strong gold-arsenic correlation.

Goldorak is a gold project focusing on a previously unrecognized intrusive related gold target. The gold target includes the 18 km long northwest trending mineralized belt as defined by Anaconda and others plus anomalous soil, stream sediment and rock (Au, Cu, Pb, Zn, Sb, As) geochemistry surrounding a poorly exposed Cretaceous granitoid centered on Dromedary Mountain. The 18 km belt is bounded to the south by the Twopete Fault that may have served as a conduit for mineralizing fluids. The magnetic high surrounding the annular magnetic low at Dromedary Mountain is evidence of a large shallowly buried intrusion, possibly a reduced intrusion, similar to that of Tombstone intrusions that host or are integral to distal disseminated - replacement style gold mineralization. The Keg deposit, approximately 75 km to SE (on trend) shares a similar geological setting; similar granitoid intrusion, metasedimentary host rocks and thrust faulting.

The 2019 exploration program was carried out from a two person fly camp from July 23 – 30. A total of 14 quartz claims were staked; four each over the Francoise and Dromedary Creek Zones, historic Sedex – gold targets and both previously tested by diamond drilling, and six claims over the La Liga and Nagai Zones.

With the exception of some widespread geochemistry carried out by Inform Resources Corp. the belt has never been explored solely as a gold target. Anaconda, did not analyze systematically for Au or pathfinders (pre ICP analysis) and geochemistry carried out by later workers only targeted the Francoise and Dromedary Creek Zones.

The 2019 program focused on the east side of the belt on the La Liga, Nagai, Ksf zones that are on trend with the Dromedary Creek Zone located in the hanging wall of the Twopete thrust. Other targets examined included the RGS Sb Anomaly on the east side of the belt, two magnetic anomalies, of which one is adjacent to the Dromedary Creek Zone, and a Copper Target, a soil anomaly identified by Anaconda.

Sampling and prospecting at the La Liga Zone located the sample site reported by Inform Resources Corp. containing 0.99 gpt Au in outcrop. Resampling in 2019 (samples W641851, W641901) obtained results up to 0.606 ppm from a 17cm, true thickness, weathered gossanous sulfide lens. This area was

covered by the Orak 1-4 claims. A similar lens located about 150 m to the north, down the creek, was sampled and returned 0.310 ppm Au and 84 ppm As. Both sample sites are hosted by calcareous shales.

The nearby Nagai Zone found in 2019 consisting of rusty weathering weakly sheared siliciclastic (siltstone) with minor chlorite and crosscutting quartz veining. Samples returned up to 0.572 ppm Au from five samples collected. Other rock samples returned up to 0.206 ppm gold, 4100 ppm arsenic and 10 ppm antimony. Discontinuous outcrop at the Nagai Zone can be traced for about 150 m.

Anomalous values for antimony and arsenic were returned over the northern Mag Anomaly for several soil samples with values up to 49 ppm and 61.0 ppm respectively. In addition the sample with high antimony (W641990) contained 297 ppm lead and 300 ppm zinc indicating a near bedrock source. This sample is within the prospective fault bounded Earn Group horizon identified by Anaconda and is on trend with the Dromedary Creek Zone. Two other soil samples to the west contained 62.29 – 141 ppm lead and 260 - 322 ppm zinc indicating a belt of untested lead – zinc, +/- gold potential. A stream sediment sample from the RGS Sb Anomaly area, collected downstream from the fault bounded prospective belt, returned 500 ppm Zn indicating undiscovered Pb-Zn mineralization upstream.

As no indications of significant mineralization were found at the southern Mag Anomaly and the Copper Target, no further work is recommended on these targets. Anomalous copper values in soil reported by Anaconda did not serve as a proxy for either gold or base metal mineralization at the Copper Target area.

Overall the terrain proved to be difficult to traverse and the Anaconda cut line grid although readily locatable is largely overgrown. Soil sampling was greatly hindered by extensive ash, loess, till cover and permafrost. Most stream sediment sampling results are likely diffused due to samples being diluted with excessive amounts of eroded glacial till cover.

Further work is warranted and recommended on the Francoise, Dromedary Creek Zone, northern Mag Anomaly, La Liga, Nagai and the RGS Sb Anomaly. The Francoise Zone needs to be drill tested laterally from known mineralization. Additional geochemical sampling (soil and rock), geological mapping, hand trenching and prospecting are recommended for the Nagai and La Liga Zones and the same for the Dromedary Creek – north Mag Anomaly. Given the dangerous steep slope in the canyon at the La Liga Zone a traverse up the creek is recommended. High soil geochemical values (for Sb, As, Pb and Zn) at the north Mag Anomaly and Dromedary Creek need to be followed up with additional samples and hand trenching where appropriate. Geological mapping, prospecting and geochemical sampling is required upstream of the 500 ppm Zn stream sediment anomaly at the RGS Sb Anomaly.

## INTRODUCTION

The purpose of this report on the Goldorak project (YMEP 2019-13) is to fulfill obligations arising from funding obtained through the Yukon Mineral Exploration Program (YMEP). The report describes and summarizes the geological and geochemical results obtained in 2019 from an eight day program carried out from July 23 – July 30, 2019. An exploration program of prospecting, reconnaissance geological mapping and geochemical sampling was carried out within a portion of the recently mapped (Cobbett, 2018) Dromedary Mountain area. The principals behind the Goldorak project, Roger Hulstein and Jerome de Pasquale, were attracted to the area by the results of the recent mapping, open ground, lack of exploration for gold in what is believed to be a prospective target area for gold deposits.

This report also describes the location, access, history, geological setting, known mineral occurrences and outlines a proposed exploration program to further explore the project area for intrusive hosted and intrusive related gold deposits.

## LOCATION, ACCESS AND LAND STATUS

The Goldorak project is centered over the Dromedary Mountain, located approximately 73 miles from Carmacks, 65 miles from Mayo, 68 miles from Faro, and the area is accessible by helicopter. (Figure 1). The main portion of the target area examined in 2019 lies to the east of Dromedary Mountain.

The 2019 target area is located on the east slope of Dromedary Mountain and continues east south east for approximately 10 km towards Earn Lake. The bulk of the target is on a ridge located south of Dromedary Creek.

The entire target area lies within the Traditional Territory of the Selkirk First Nation Territory. First Nations Settlement Lands of Category A (Surface and Subsurface Rights, no staking permitted) are located on the west side of Dromedary Mountain (west of Clarke Creek) and Category B (Surface Rights) land is located to the south.

No active claims other than the Fran 1-4 and Orak 1-10, owned by Hulstein and De Pasquale and described within this report, are recorded in the area as of October 22, 2019.

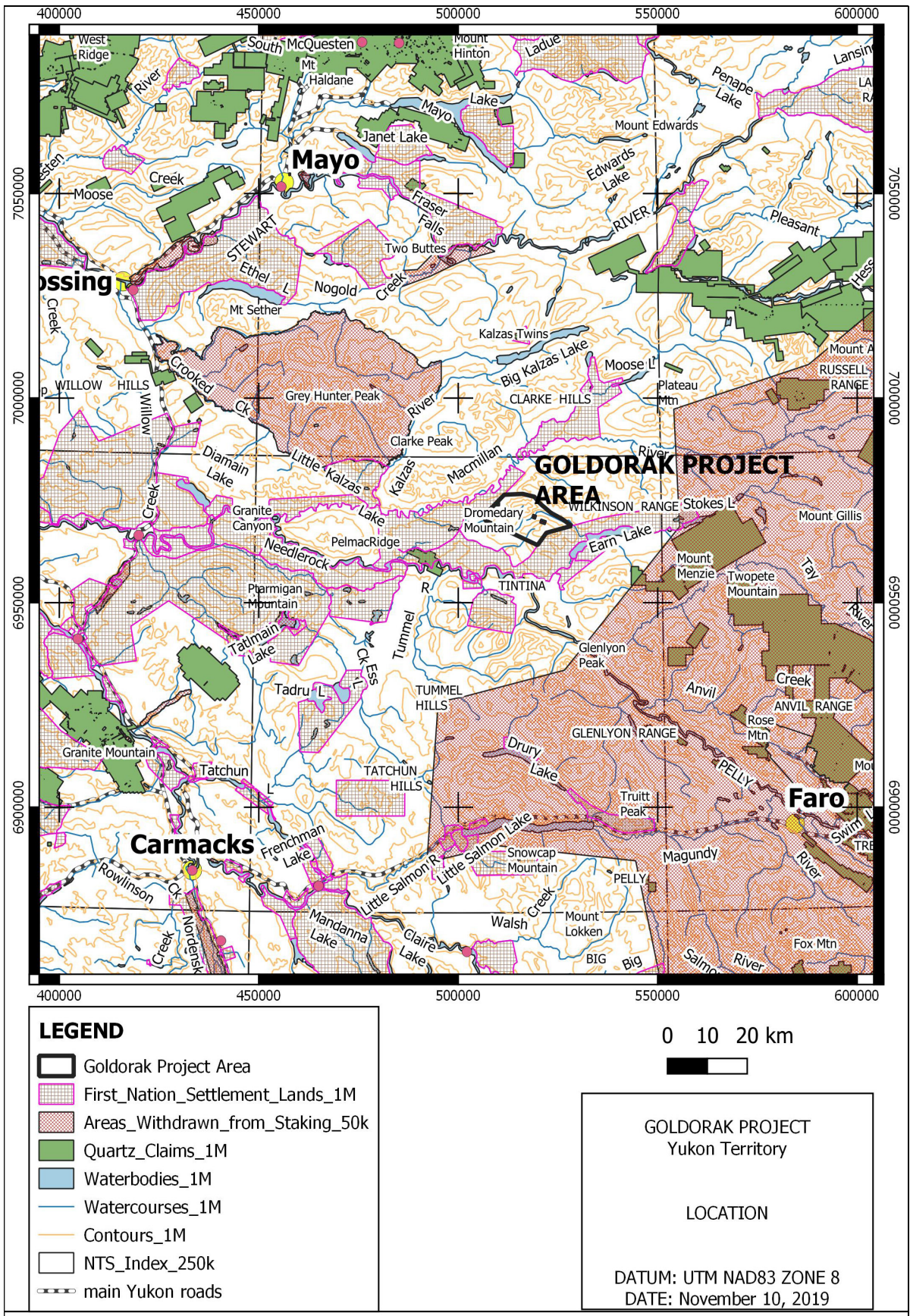


Figure 1. Goldorak Project Location – centered over Dromedary Mountain.

## TOPOGRAPHY, VEGETATION AND CLIMATE

Topography in the region is typical of central Yukon, incised valleys with steep hillsides and rounded crests. Elevations range from approximately 650 800 m in the McMillan River valley to about 1800 m at the crest of Dromedary Mountain. Areas of high elevation locally consist of rugged alpine terrain with rare patches of stagnant ice and abundant evidence of recently departed alpine glaciers. Areas of lower elevation and the valleys, approximately below 1350 m elevation are moderately to densely vegetated. Larger valleys such as the McMillan River valley and Dromedary Creek are broad and filled with glacial debris.

The climate in the project area is variable with warm summers and long cold winters. Precipitation is light, with moderate snowfalls during the winter months. Depending on the elevation the typical field season extends from late May to middle - late September. Permafrost can be expected anywhere within the project area, particularly on northerly facing slopes. Permafrost, thick ash and organic horizons and glacial till cover posed significant problems in 2019 while attempting to collect meaningful soil and stream sediment samples.

## PREVIOUS WORK

The area was explored intermittently for SEDEX Pb-Zn deposits in the 1980's to late 1990's. The latest work in the area was by Inform Resources in 2012 that carried out a ridge line soil traverse and some prospecting, likely exploring for gold. The gold potential was recognized during lead – zinc exploration but this was never consistently followed up on. Anaconda carried out work from the Cave mineral showing, west and north of the McMillan River to Earn Lake. A summary of summary of previous work is as follows (work outside the immediate Goldorak target area carried out by Anaconda and others is included):

1980 Program by Anaconda Canada Exploration Ltd., Assessment report 090888 (Carlson, 1981):

- Prospecting and mapping
- Discovery of Fe, Zn and Pb sulfides on Dromedary Mountain
- Staked Ace 1-724 and Earn 1-4 claims

1981 Program by Anaconda Canada Exploration Ltd., Assessment report 090888 (Carlson, 1981), and internal Anaconda report (Carlson, 1982):

- 3500 line km airborne magnetometer and EM survey
- Geological mapping, prospecting (Cave showing discovery)
- Geochemical survey (rock, soil, drill core)
- Seven diamond drill holes on Dromedary Mountain and three drill holes on Dromedary Creek totaling of 1950 metres NQ core,

1982 Program by Anaconda Canada Exploration Ltd., Assessment report 091468 (Hall, 1983):



- 123 km Line-cutting and surveyed grid establishment
- Gravity survey, 45 line km of gravity level survey
- 3500 soil samples on grid at 25m centers
- 156 km of ground horizontal loop EM and magnetic geophysics survey
- Geological mapping
- Overburden mechanical hand drill soil sampling

1984-Anaconda Canada Exploration Ltd. ceased exploration activities

1985-Fleck Resources Ltd. acquired 1,436 claims from Anaconda

1988 Program by Dromedary Exploration Company Ltd. acquired the Ace and Bum claims by option agreement from Fleck Resources Ltd.

1988 Program by Dromedary Exploration Company Ltd., company prospectus (Regabliati, 1988 ):

- Claim staking
- Geological mapping, prospecting
- Geochemical survey (rock and soil)
- Ground geophysics
- Trenching

Data was reviewed by Rebagliati Geological Consulting Ltd. and work program was conducted by Aurum Geological Consultants Inc.

1990 Program by Dromedary Exploration Company Ltd., Assessment report 092882 (Hulstein 1990):

- Two diamond drill holes on the Ace Clams (Francois grid) totalizing 434 metres
- Geochemical survey (drill core)

1990-Placer Dome Inc. examined the property, sampled limited drill core and, recommended a large drill program which was not undertaken.

1992-Kennecott Canada Inc. examined the property.

- Soil sampling (Cave grid)

1993-Energold Minerals Inc. optioned the property.

1993 Program by Energold Minerals Inc.:

- Geological mapping
- Soil sampling
- Ground Mag geophysics

Due to insufficient financing, the proposed drilling program was not undertaken.

1996 Blackstone Resources Ltd. optioned the property

1996 Program by Blackstone Resources Ltd., program conducted by Equity Engineering Ltd., Assessment report 093595 (Caulfield, 1997):

- Geological mapping, prospecting (DMC claims)
- One diamond drill hole at Dromedary creek and four on the Fran Zone totaling 936 metres,
- Geochemical survey (rock and drill core)

1997 Program by Blackstone Resources Ltd., program funded by Geologix Explorations Inc. and conducted by Equity engineering Ltd., Assessment reports 093755 and 093764 (Jones, 1998a, Jones 1998b):

- Additional claim stacking
- Geological mapping, prospecting (Francois grid, King claims, DMS claims)
- Gravity and Mag geophysical survey
- Geochemical survey (rock and soil sampling)
- Hand trenching

1998 Program by Blackstone Resources Ltd., program conducted by Equity Engineering Ltd. Assessment report 093945 (Jones, 1999)

- Three diamond drill holes totalizing 354.6 metres on the Fran Zone
- Geochemical survey (drill core)
- X-ray fluorescence analysis

2012 Program by Inform Resources Corp., Assessment report 096377 (Gibson, 2013).

- Ridge and spur soil sampling
- Limited rock sampling

No work has been recorded in the Dromedary Mountain area since 2012 until this year's program carried out by De Pasquale and Hulstein.

## TENURE

A total of 14 claims were staked in 2019 in three groups, all on NTS map sheet 105L/15. The claims and zone names are shown on Figures 2 to 4.

The Fran 1-4 claims (Figure 3) covers the area of diamond drilling carried out by Blackstone Resources Ltd. and Dromedary Exploration Company Ltd. Additional historic drilling is found to the west of the Fran Zone but that is now located within Category A land belonging to the Selkirk First Nation.

The Orak 1-4, 9 and 10 claims cover the La Liga Zone located on the creek banks of a steep northerly drainage, the newly identified Nagai Zone and the Ksf zone (Figure 4). The Orak 5-8 claims cover the historic Dromedary Creek zone previously drilled by Anaconda and Blackstone.

Table 1. Claims held within the Goldorak project area.

Grant Number	Name	Number	Registered owner	Recording Date	Staking Date	Expiry Date
YD18081	ORAK	1	Roger Hulstein - 100%	8/15/2019	7/24/2019	8/15/2020
YD18082	ORAK	2	Roger Hulstein - 100%	8/15/2019	7/24/2019	8/15/2020
YD18083	ORAK	3	Roger Hulstein - 100%	8/15/2019	7/24/2019	8/15/2020
YD18084	ORAK	4	Roger Hulstein - 100%	8/15/2019	7/24/2019	8/15/2020
YD18085	ORAK	5	Roger Hulstein - 100%	8/15/2019	7/26/2019	8/15/2020
YD18086	ORAK	6	Roger Hulstein - 100%	8/15/2019	7/26/2019	8/15/2020
YD18087	ORAK	7	Roger Hulstein - 100%	8/15/2019	7/26/2019	8/15/2020
YD18088	ORAK	8	Roger Hulstein - 100%	8/15/2019	7/26/2019	8/15/2020
YD18089	ORAK	9	Roger Hulstein - 100%	8/15/2019	7/28/2019	8/15/2020
YD18090	ORAK	10	Roger Hulstein - 100%	8/15/2019	7/28/2019	8/15/2020
YC94546	FRAN	1	Roger Hulstein - 100%	8/15/2019	7/23/2019	8/15/2020
YC94547	FRAN	2	Roger Hulstein - 100%	8/15/2019	7/23/2019	8/15/2020
YC94548	FRAN	3	Roger Hulstein - 100%	8/15/2019	7/23/2019	8/15/2020
YC94549	FRAN	4	Roger Hulstein - 100%	8/15/2019	7/23/2019	8/15/2020

Although the Fran and Goldorak claims are registered in Roger Hulstein's name he holds them in a 49% / 51% partnership with Jerome De Pasquale.

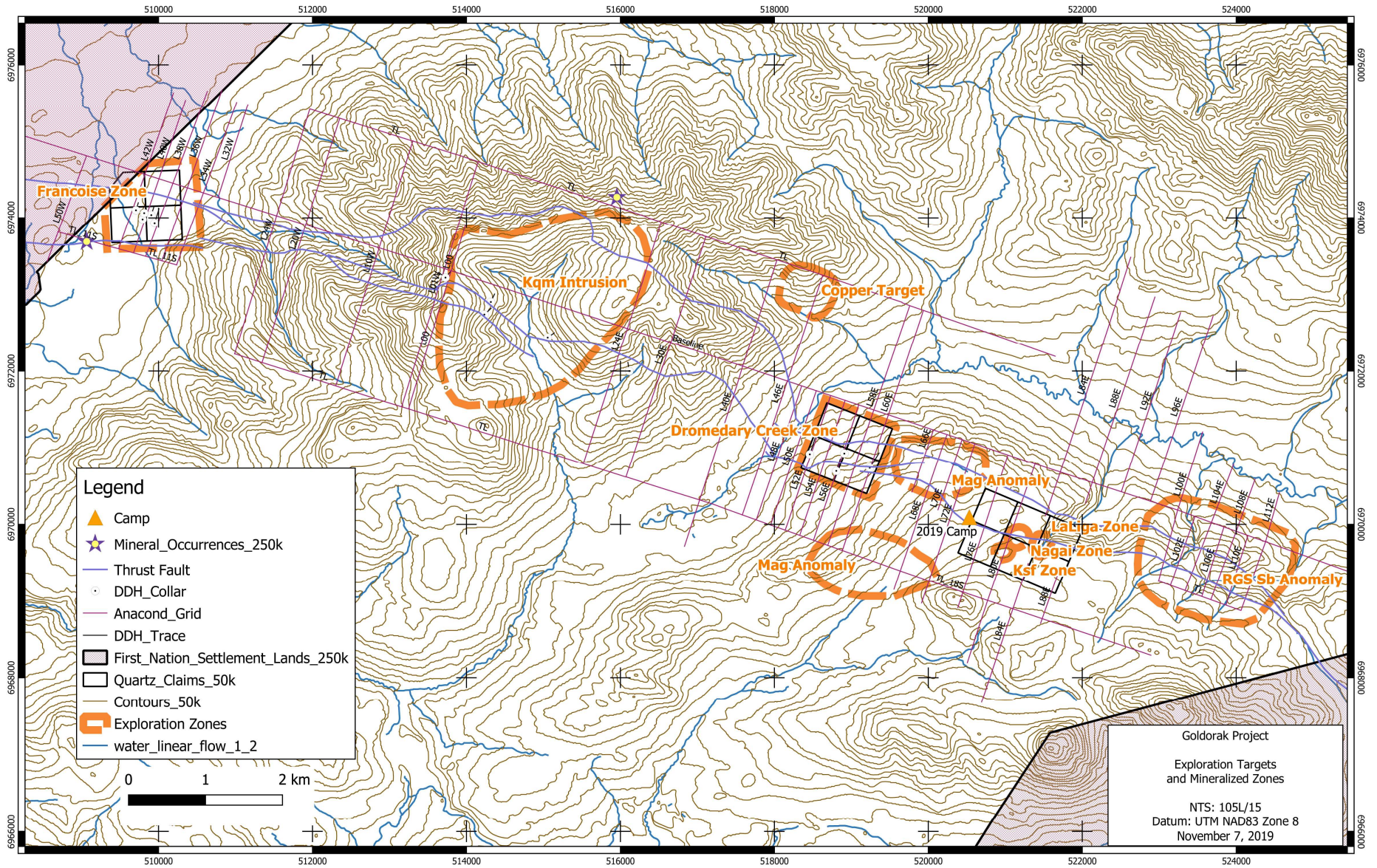


Figure 2. Fran and Orak claims, zones and anomalies within 2019 project area.

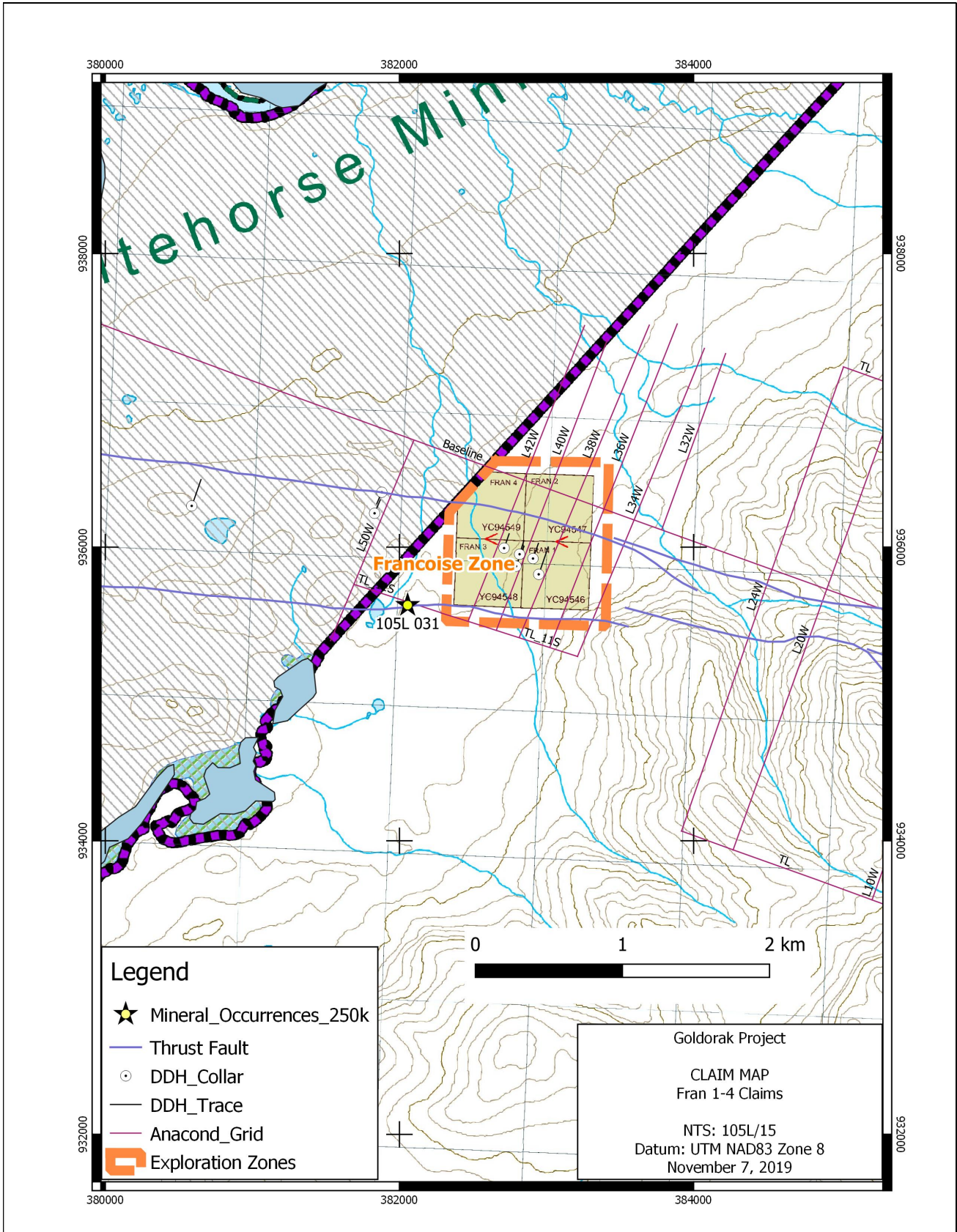


Figure 3. Fran 1-4 claims, NTS 105L/15.

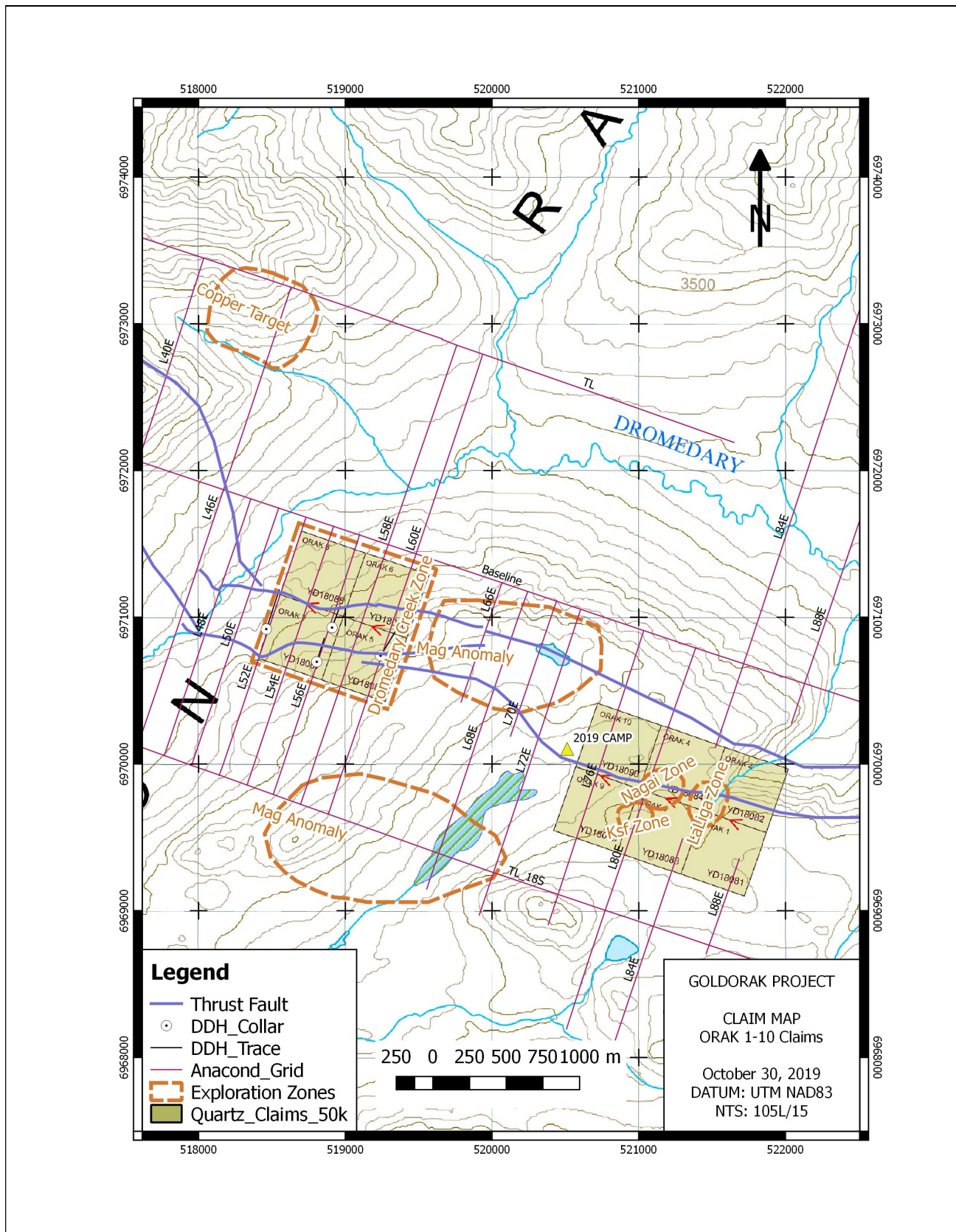


Figure 4. Orak 1-10 claims, NTS 105L/15.

## REGIONAL GEOLOGY

The project area was remapped by Rosie Cobbett in 2018 on behalf of the Yukon Geological Survey and the results are shown in Figure 5. Following information is extracted from: *Preliminary observations on the geology of northeastern Glenlyon area, Central Yukon* (Cobbett, 2019, Cobbett and Keevil, 2019).

- Three structural panels separate subparallel thrust faults (Duo fault on the south/Twoopete fault on the north) and subdivide the stratigraphy as shown diagrammatically in the legend, Figure 6.
- The Southern Panel consists of volcanic and volcanoclastic rocks and sedimentary strata and are assigned to Vangorda Formation (interpreted to be metamorphic equivalent to Rabbitkettle formation (Jennings, 1986, Godfrey and Anderson, 1994, Pigage, 2004) and Menzie Creek.
- The Central Panel (fault bounded) comprised of siliciclastic and carbonate rocks and phyllites. Rocks exposed in the Dromedary Mountain area are assigned to Rabbitkettle Formation based on lithology similarities to the other parts of the Selwyn basin. It underlays rocks from Road River Group. The contact is to date considered as unconformable based on observations made in Nahanni, Flat River and Glacier lake areas (Gabrielse et al., 1973; Gordey and Anderson, 1993).
- Late Devonian dioritic intrusions (364 Ma) outcrop within the Central Panel. They are laterally cut-out where the Duo fault merges with the Twoopete fault.
- The Northern Panel consists of Mid to Upper Paleozoic siliciclastic rocks, carbonate and chert assigned to Road River Group/Steel Formation, Earn Group, Tay River Formation, and Mount Christie Formation unconformably overlain by Jones Lake Formation.
- Intrusive rocks are represented by Mid-Cretaceous MacArthur batholith to the west of the target area. It is considered as part of the Mayo suite based on U-Pb zircon dating (98-93 Ma) on a sample collected near 30 km to the northwest (Colpron et al., 2016). A similar intrusion is thought to underlie Dromedary Mountain
- The area is deformed by a northwest-trending fold and post-Triassic thrust belt. Thrust faults are offset by steeply dipping, north-south oriented faults that have both strike-slip and dip-slip displacement.

The Goldorak project area can be said to straddle the northerly directed Twoopete fault. The Rabbitkettle Formation of the Road River Group makes up the upper panel and the Earn Group the lower panel on the west side (Dromedary Mountain and Françoise Grid) of Dromedary Creek. East of the northeast trending fault in Dromedary Creek the Mount Christie and Tay Formations form the lower plate with the Road River Group, missing the Rabbitkettle Formation, forms the upper plate. From Cobbett (2018);

*Detailed mapping along the Twoopete fault provides evidence that it was a synsedimentary fault that controlled deposition of Upper Devonian clastic sedimentary and volcanic rocks. Fossils collected during mapping provide constraints on the position of the Twoopete fault; Ordovician fossils were found in its hangingwall and Late Devonian fossils in the footwall. This in turn shows that known mineralization is hosted in Upper Devonian sedimentary strata in the immediate footwall of the Twoopete fault, suggesting a genetic link between mineralization and the fault, a relationship that can be traced for approximately 100 km to the southeast.*

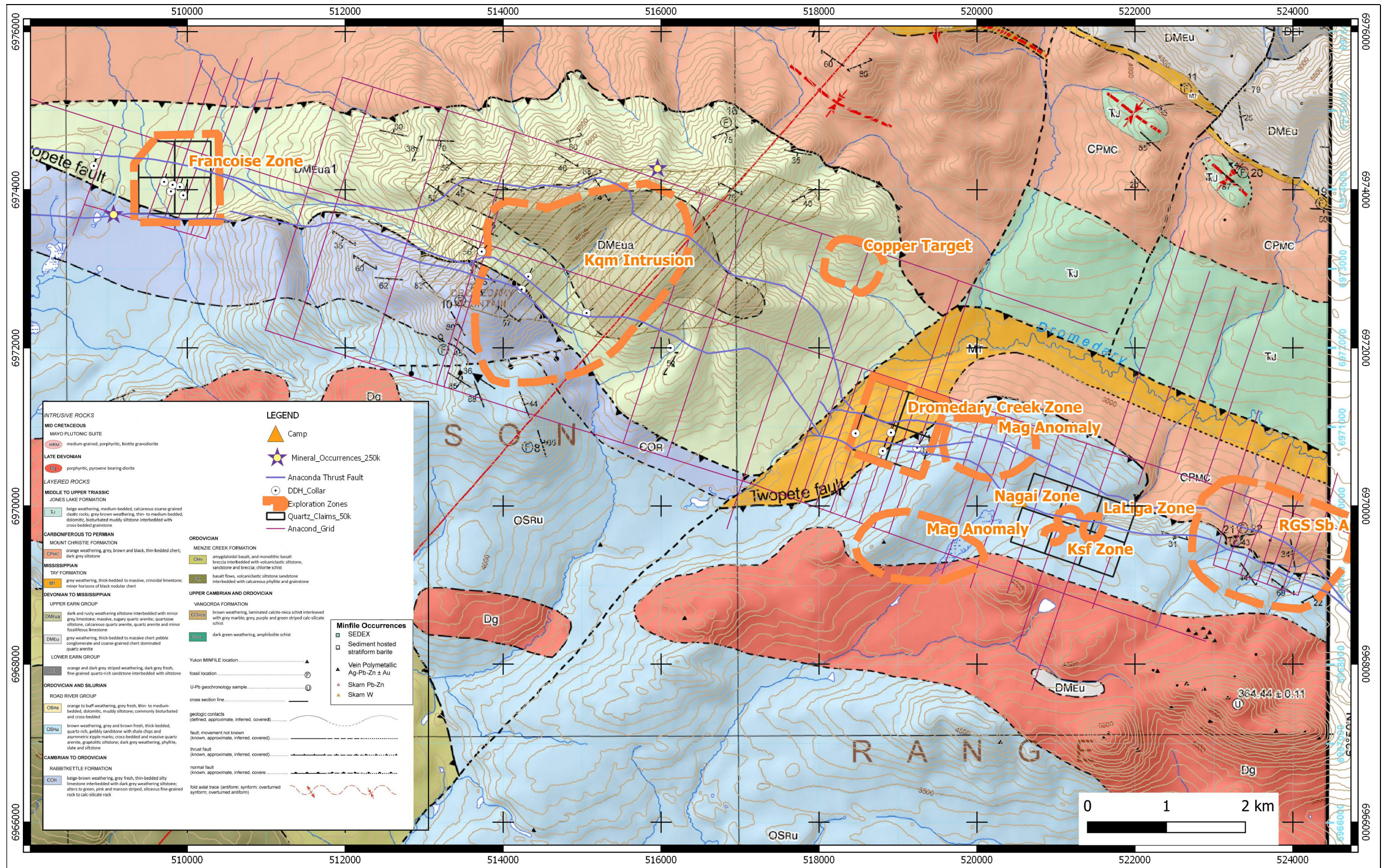
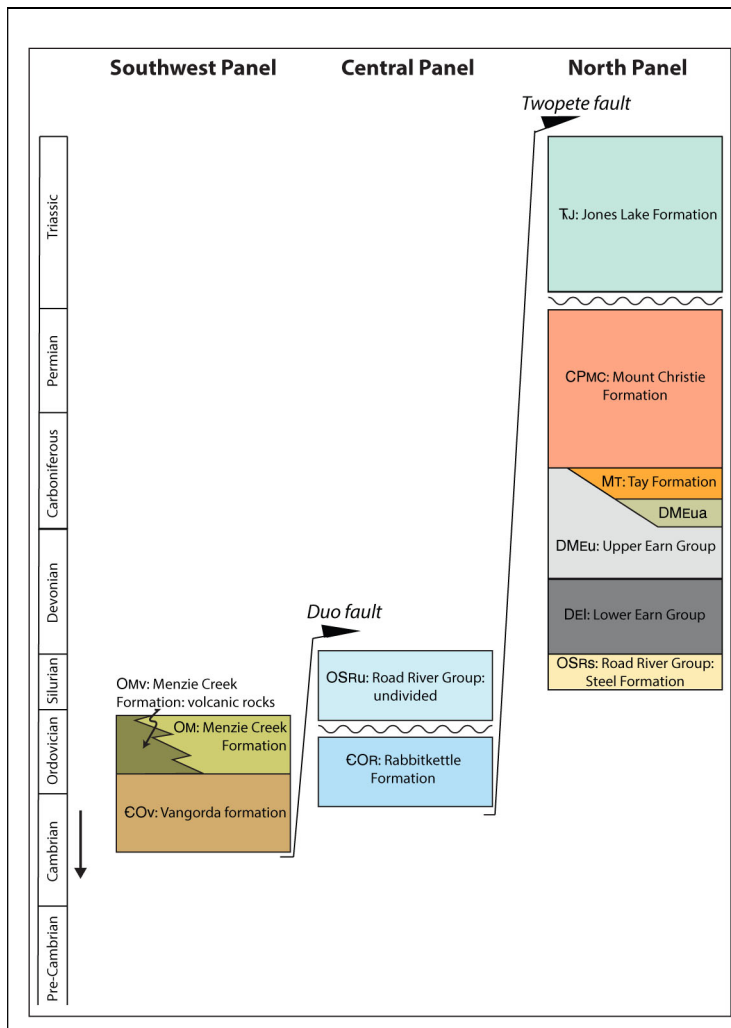


Figure 5. Regional Geology, Goldorak Project, hatch pattern is metamorphic contact aureole (from Cobbett and Keevil, 2019).





**Figure 6. Diagrammatic stratigraphic column for Glenlyon area, from Cobbett, 2019.**

*Mid-Cretaceous plutons exposed in the footwall of the Twopete fault are locally coincident with mineral occurrences. At Dromedary Mountain, a buried intrusion is imaged in regional aeromagnetic surveys and coincides with occurrences of polymetallic veins and a pyrrhotite-pyrite halo at surface. This relationship between epigenetic mineralization and Cretaceous intrusions continues to the southeast.*

*These features suggest that the Twopete fault is a long-lived, crustal-scale structure that defines a prospective corridor with potential for Late Devonian syngenetic mineralization similar to Macmillan Pass, replacement-style mineralization, and mid-Cretaceous vein-style mineralization similar to the Keno Hill district.*

Further afield the Keg deposit located approximately 75 km to the southeast shares some similarities with the geological setting at the Goldorak Project. Namely; structural complexity involving thrust faults, normal faults, juxtaposition of siliciclastic rocks and perhaps most importantly the proximity to a small Cretaceous granitoid, within two kilometers at the Keg, that may have provided heat and or fluids to the mineralizing system (Giroux and Melis, 2014).

## LOCAL PROJECT AREA GEOLOGY

According to the YGS Geology map, the target area comprises five units described by Cobbett, 2019 and shown on maps by Cobbett and Keevil (2019):

1. Middle to Upper Triassic Jones Lake formation consisting of calcareous coarse grained clastic rocks, bedded dolomite and siltstone interbedded with cross-bedded grainstone (TJ)
2. Carboniferous to permian Mount Christie formation consisting of thinly bedded chert and grey siltstone (CPMC)
3. Mississippian Tay formation consisting of thick bedded to massive crinoidal limestone with minor chert horizon (MT)
4. Upper Devonian Group siltstone interbedded with gray limestone, calcareous quartz arenite and quartz arenite of the (DMEua) intruded by Cretaceous (?) plug (Carlson, 1980)
5. Ordovician Road River Group silica rich pebbly sandstone and cross-bedded quartz arenite with phyllite, slate and siltstone (OSru) intruded by prophyritic diorite.

A south-west/north-east fault (trending approx. 050 degrees) divides the prospective area into two blocks. As the result, the Mississippian Tay formation is in contact for over 2.5 km with the Upper Devonian Earn Group.

Mapping by Anaconda in 1980 and 1981 (Carlson 1981 and Hall, 1983) has geological discrepancies when compared to Cobbett's 2019 map (Cobbett, 2019). Most geological units are similar but geological contacts do differ significantly between Anaconda and Cobbett's mapping and Anaconda's work included more subunits. Significantly they both recognize the Twopete Fault although Cobbett has it offset by a significant NE trending fault in the upper section of Dromedary Creek.

### **2019 Geological Mapping**

Outcrops were examined, given a station number, data recorded in notebooks and locations recorded by GPS. With the exception of the creek canyon at the La Liga Zone outcrop is mostly sparse. Field station data is presented in Appendix D and shown on Figure 7. Most outcrops consisted of foliated siltstone to shale, locally calcareous or limy. Locally limestones were noted in the La Liga and Dromedary Creek Zones. Foliations and rare bedding generally strike approximately east – west and dip moderately to the south. Geological observations are further described under '2019 Exploration Results'.

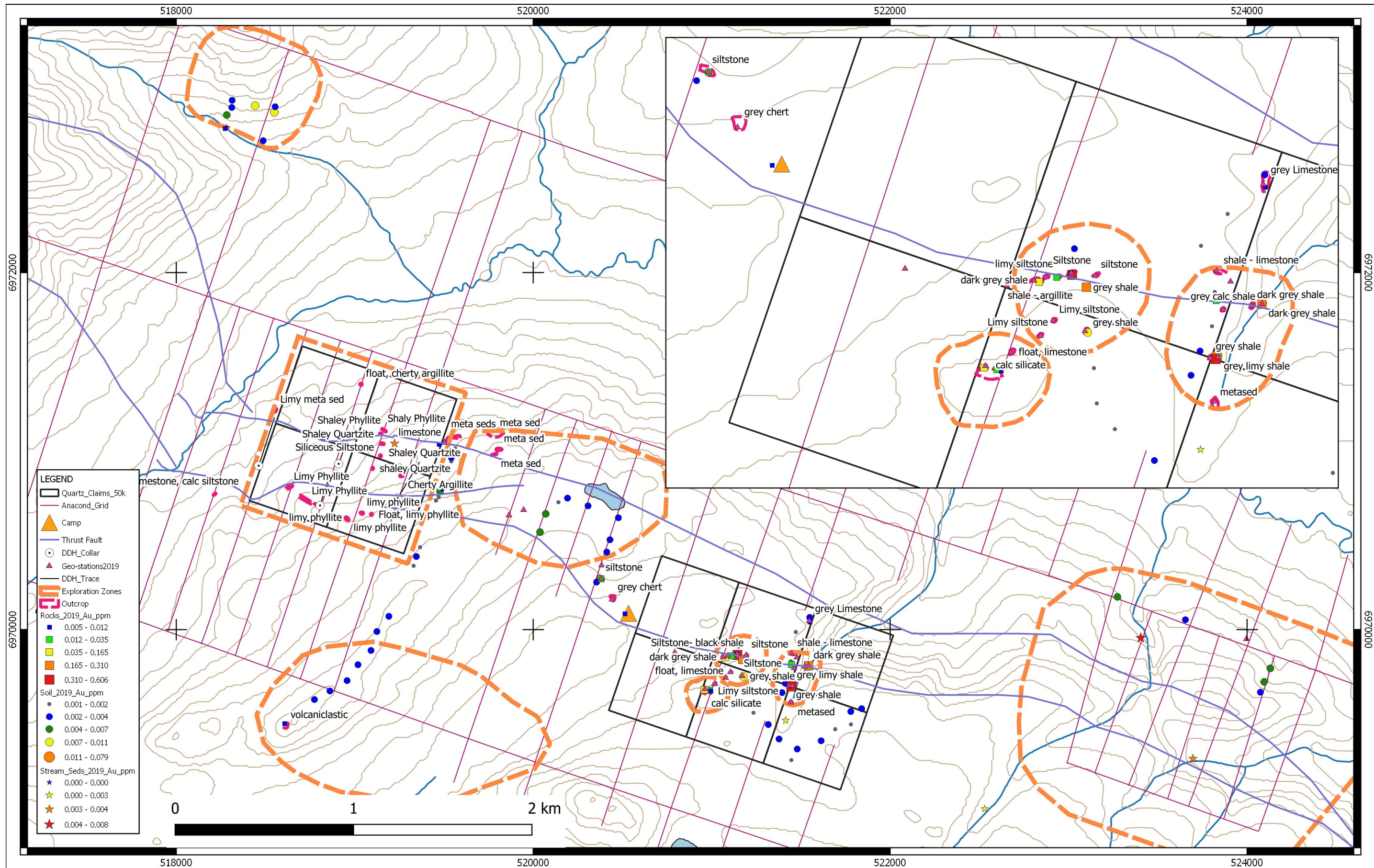


Figure 7. 2019 Geology, field stations, gold geochemistry (field station labels shown on Figure 10).

## GEOCHEMICAL DATA

Results from the Geological Survey of Canada's Regional Geochemical Survey (GSC, RGS) for the project area for Au, As, Cu and Sb are shown in Figure 8. It can be seen that the four elements define an anomalous NW trend, parallel to stratigraphy and thrust faults that also appear to be boundaries for SEDEX style mineralization. This is the same belt of rocks that was identified by Anaconda as being prospective for SEDEX deposits and tested by diamond drilling in the 1980's and 1990's.

In 1981 Anaconda Canada Exploration Ltd. established a surveyed cut line grid east and west of Dromedary Mountain from Earn Lake to McMillan River that was used for access and location (Figure 9). The grid was used for a soil geochemical survey and geophysical surveys and for location during geological mapping.

A limited ridge and spur soil sampling and rock sampling program was conducted in 2012 (La Liga Project) by Inform Resources Corp. (Gibson, 2013). One rock sample collected from outcrop, from what is now named the La Liga Zone, described as a 3-8 cm thick lens of FeOx/gossan containing 5% pyrrhotite returned 0.99g/t gold. This sample site was located and resampled (samples W641851, W641852, W641901) and results are similar with up to 0.606 ppm gold over a 17cm thick lens. This area was covered by the Orak 1-4 claims in 2019.

A total of 18 rock, 66 soil and 6 stream sediment samples were collected in 2019 (Figure 10). All samples were submitted to ALS Canada Ltd. preparation laboratory in Whitehorse and analyzed in Vancouver. Rock samples were analyzed for gold (50 gram fire assay and AA finish) and 32 other elements by ME-ICP61. Soil and stream sediment samples were analyzed for gold and 43 other elements by ALS Global method AuME-TL44. This method for Au + Multi-Element package employs a single Aqua Regia digest with 50g charge weight to combat nugget effect. Gold, in conjunction with a wide range of base metal and pathfinder elements, are determined from the same digested solution via a combination of ICP-MS and ICP-AES.

All soil samples were collected by 'Dutch' soil augers at depths of up to 1.0 m but more commonly around a depth of 50 cm. Soil samples show a high correlation between gold and copper (see Appendix C) and soil sample below the La Liga showing returned 0.079 ppm gold and 277 ppm copper, the highest values returned for both elements in 2019. Anomalous arsenic and gold also show a close correlation. The highest lead in soil value (277 ppm, sample W641990) was from a sample testing an aeromagnetic high to the east and on trend with the drill tested Dromedary Creek lead-zinc occurrence. Significantly this sample was collected below 80 cm of White River volcanic ash. This same sample contained 300 ppm Zn and two samples also located on trend and immediately east of the Dromedary Creek Zone contained 260 ppm and 322 ppm from samples W895611 and W895612. A strong (>85 ppm) Cu anomaly was on the south facing slope of a ridge east of Dromedary Mountain was identified by Anaconda (Hall, 1983). Anaconda did not analyze soil samples for gold and it was hoped that the anomalous Cu might serve as a proxy for anomalous Au. This was tested in 2019 by seven soil samples with negative results.

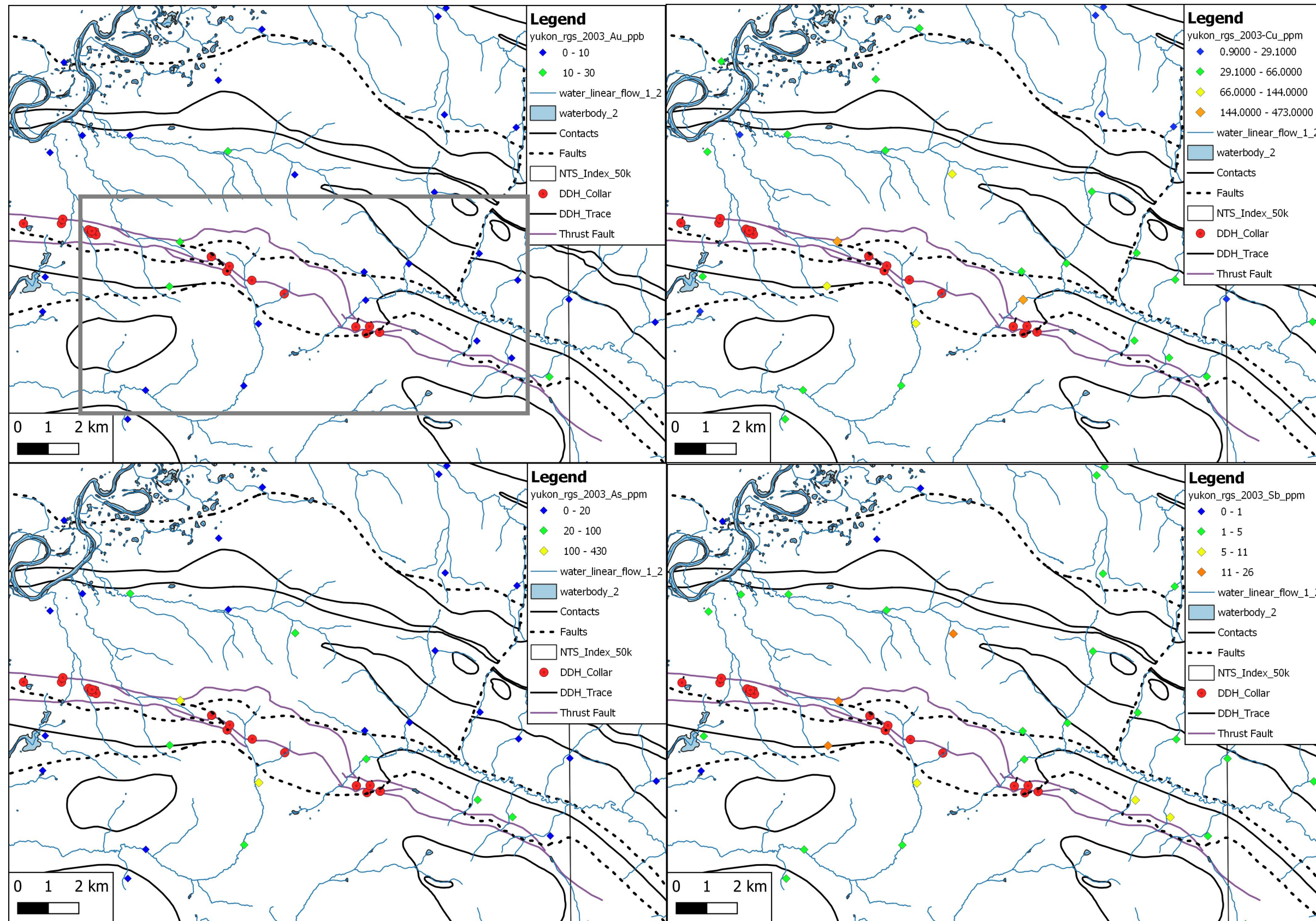
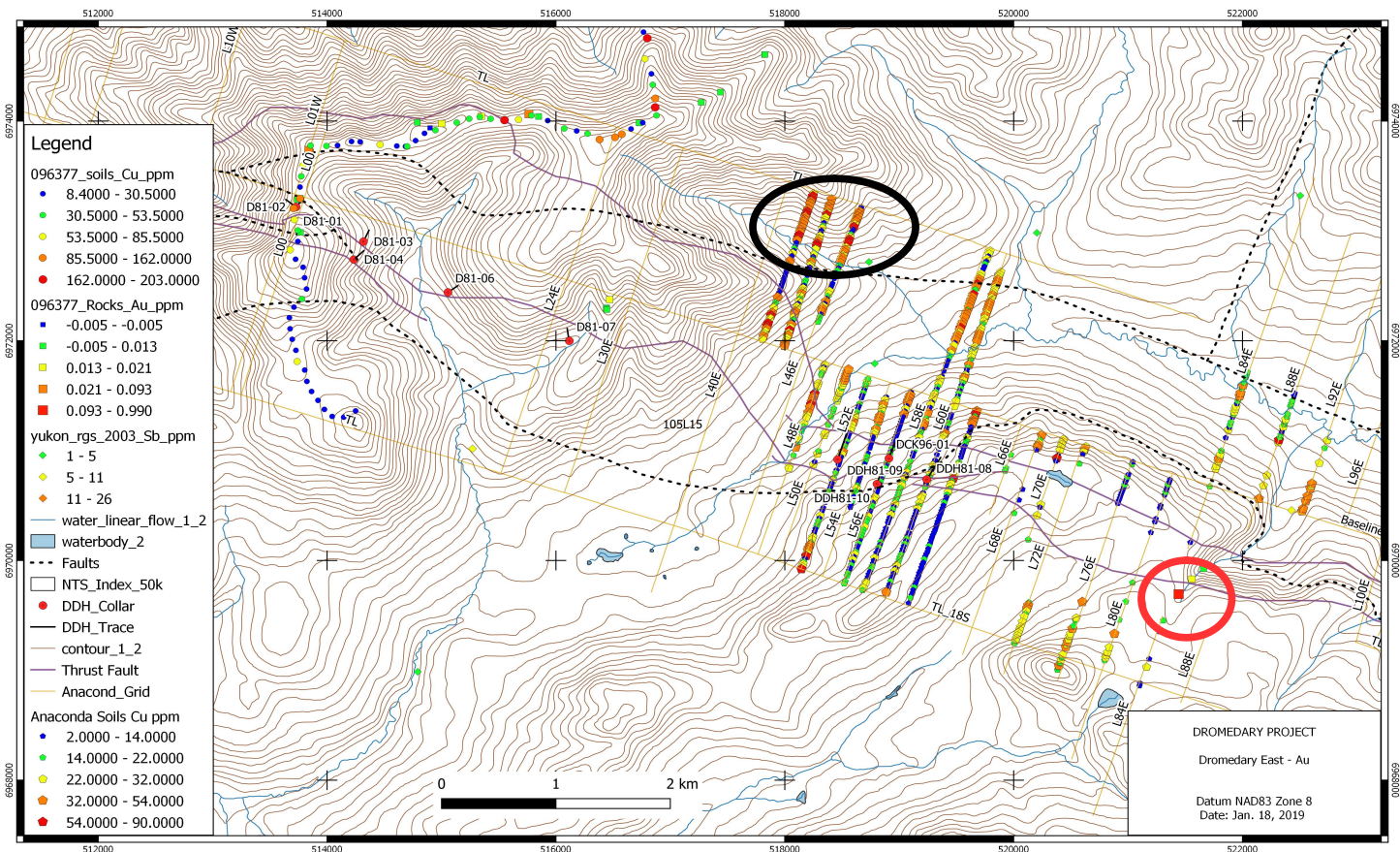


Figure 8. GSC Regional Stream Sediment Geochemical Data (Au, As, Cu and Sb), grey rectangle is approximate target area.

Stream sediment sample W641960 located within the Sb RGS Anomaly area returned 500 ppm zinc, the highest zinc value returned in 2019. The sample site was below the projected trend of the prospective horizon identified by Anaconda that includes both the Francoise and Dromedary Creek Zones.

Geochemical results for Au, As, Sb, Cu, Pb and Zn are shown on Figures 11 to 16 respectively in the map pocket. Sample locations, sample numbers and gold results are shown on Figure 10. Analytical certificates are presented in Appendix B, sample results merged with location and sample description data are presented in Appendix C.



**Figure 9. Significant historic soil and rock sample geochemistry, Copper Target (black ellipse) and La Liga (red ellipse) are highlighted.**

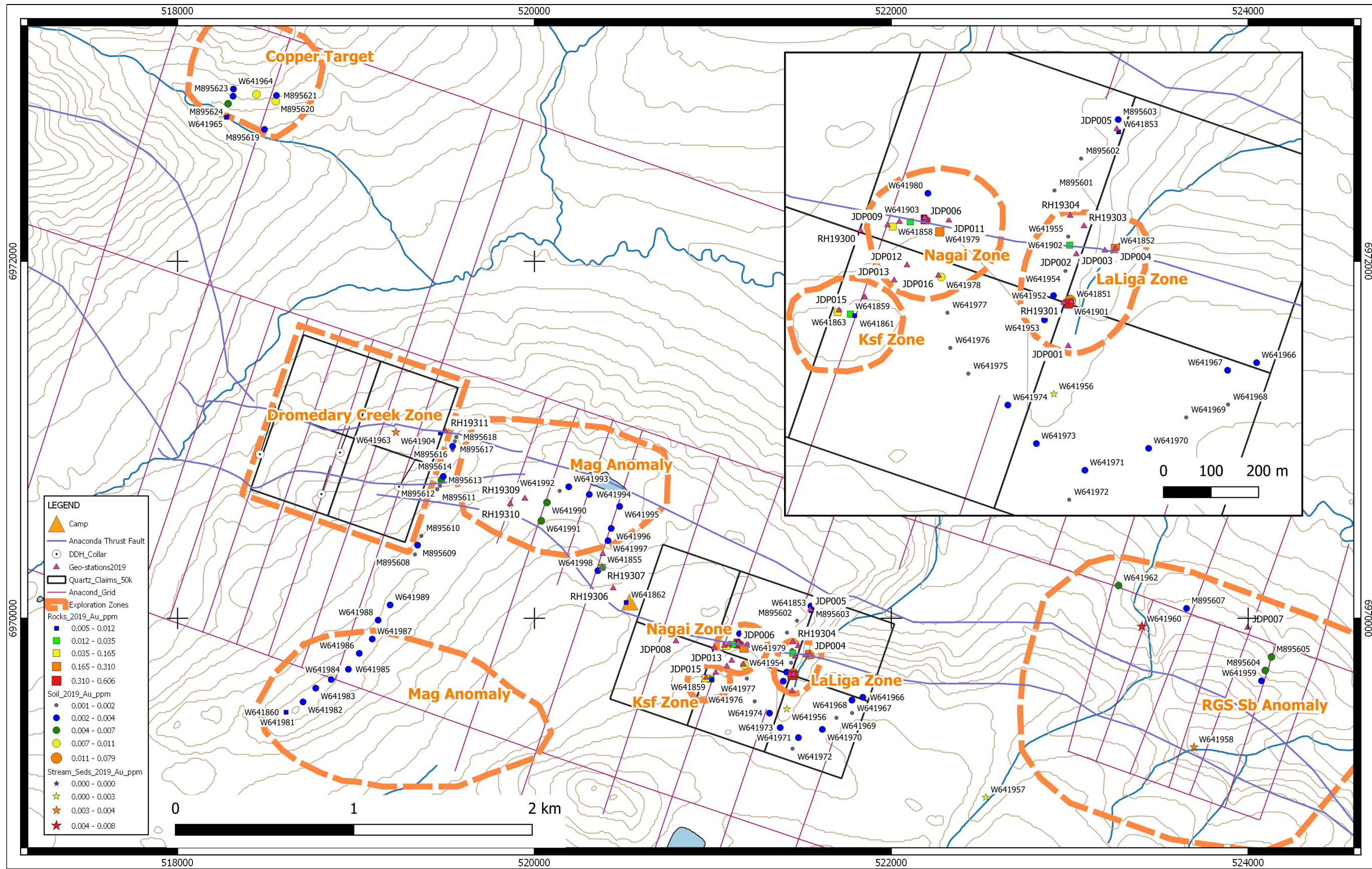


Figure 10. 2019 Sample numbers, field stations and gold geochemistry.

## GEOPHYSICAL DATA

Regionally the aeromagnetic signature over Dromedary Mountain is similar to the McArthur batholith (Figures 17 and 18). It is imaged as a magnetic low (blue) surrounded by an oval-shaped (extended along the Twopete fault) magnetic high (maroon) that corresponds to a pyrrhotite-rich contact aureole. Based on this characteristic, Dromedary Mountain is interpreted as a buried pluton assigned to the Mayo Suite.

Among the mid-Cretaceous Tintina Gold Belt plutonic suites, the Tombstone, Mayo and Tungsten are considered as the most metallogenically prolific. The Mayo suite intrusions are characteristically gold-enriched, with As-Bi-Te and W associations (Hart, 2007).

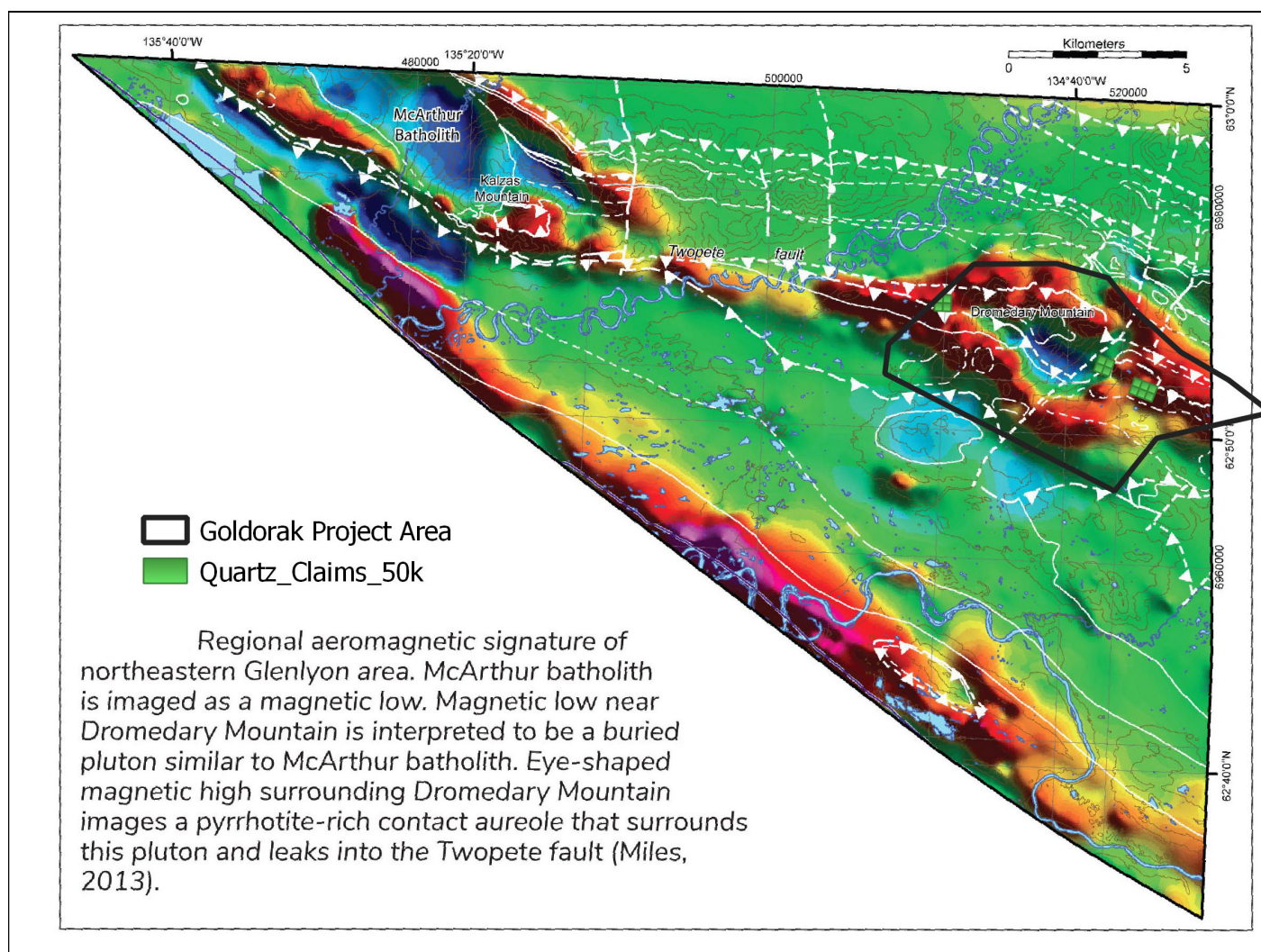
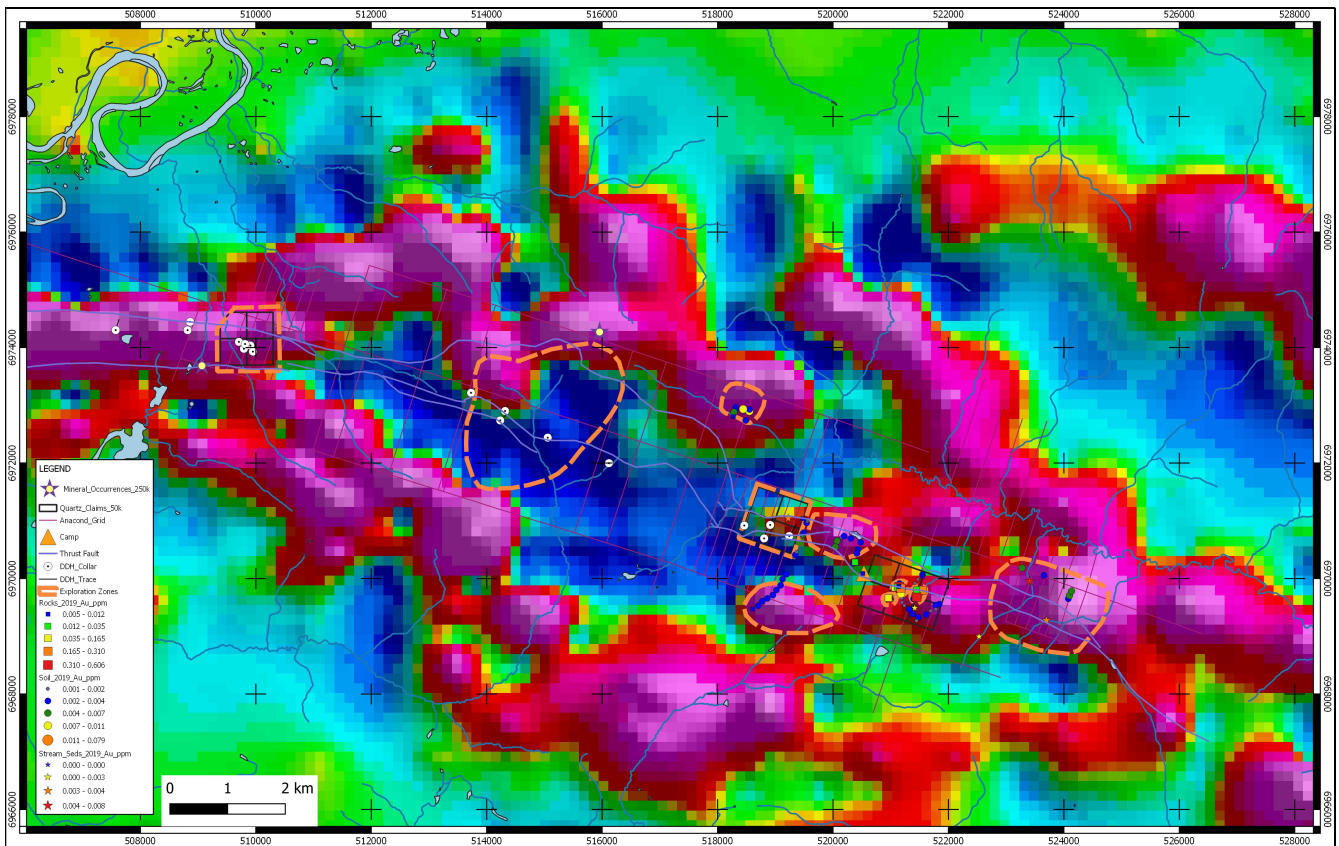


Figure 17. GSC Regional Aeromagnetics (after Cobbett, 2019).





**Figure 18. GSC Aeromagnetic data (first vertical derivative) over project area showing central oval low (blue) over a buried granitoid.**

## 2019 PROGRAM and RESULTS

The previously drilled base and precious metal occurrences, the Francoise Grid and the Dromedary Creek Zones, were each covered by four claims, Fran 1-4 and Orak 5-8 respectively. The La Liga gold occurrence was covered with six claims, Orak 1-4, 9 and 10. Claims, various named zones and anomalies and traverse tracks are shown on Figure 19.

The following is a day by day summary of field activities in 2019;

- July 23; drive to Mayo, mobilize by helicopter and stake the Fran 1-4 claims, set up camp.
- July 24; stake Orak 1-4 claims, examine and sample La Liga, Ksf and Nagai Zones and area.
- July 25; traverse to RGS-Sb Anomaly, prospect, stream sediment and soil sample (greatly hindered by permafrost and glacial till).
- July 26; stake Orak 5-8 claims over the Dromedary Creek Zone, prospect and sample in area.
- July 27; traverse to Copper Target located on east side of Dromedary Creek west of Dromedary Mountain.
- July 28; stake Orak 9 and 10 claims over Nagai and Ksf Zones, sample and prospect in area.
- July 29; soil sample and prospect magnetic anomalies NW and SW of 2019 camp location (east and SE of Dromedary Creek occurrence).
- July 30; sample Ksf Zone and demobilize to Mayo by helicopter and truck to Whitehorse.

Weather was good with intermittent showers during the field program with the exception of July 29 which was very wet, foggy and windy (quite a miserable field day).

Due to extensive forest fires during the summer of 2019 helicopters were not available in Mayo or Carmacks for mobilization or demobilization. The only helicopter available was an Aerospatiale A-Star belonging to Horizon Helicopters based out of the Rau project located north of Mayo. Excellent service was provided by Horizon but there was an extra cost incurred getting the machine to Mayo for our use.

All sample and field stations locations were collected by GPS, Garmin model's 60CSx or better, with an accuracy commonly of +/- 3 m, using a UTM grid, NAD83 Datum in Zone 8v.

Probably one of the most significant conclusions regarding exploration at the Goldorak Project is the difficulty due to the terrain. Outcrop is very limited and the White River ash, loess and till cover hinder geochemical exploration. Of note is that the highest lead value (297 ppm, sample W641990) was collected below 80 cm of White River volcanic ash. Permafrost is also a hindrance and can be expected on all northerly facing slopes and in well vegetated areas such as most of the Sb RGS Anomaly area. The bush comprised of mixed forest and locally extensive alders are difficult to traverse on most slopes. While the Anaconda cut line grid is readily visible from the air it is mostly overgrown and can be more difficult to traverse than virgin bush. The surveyed grid facilitated in the location of drill holes, soil anomalies, geophysical anomalies, etc.

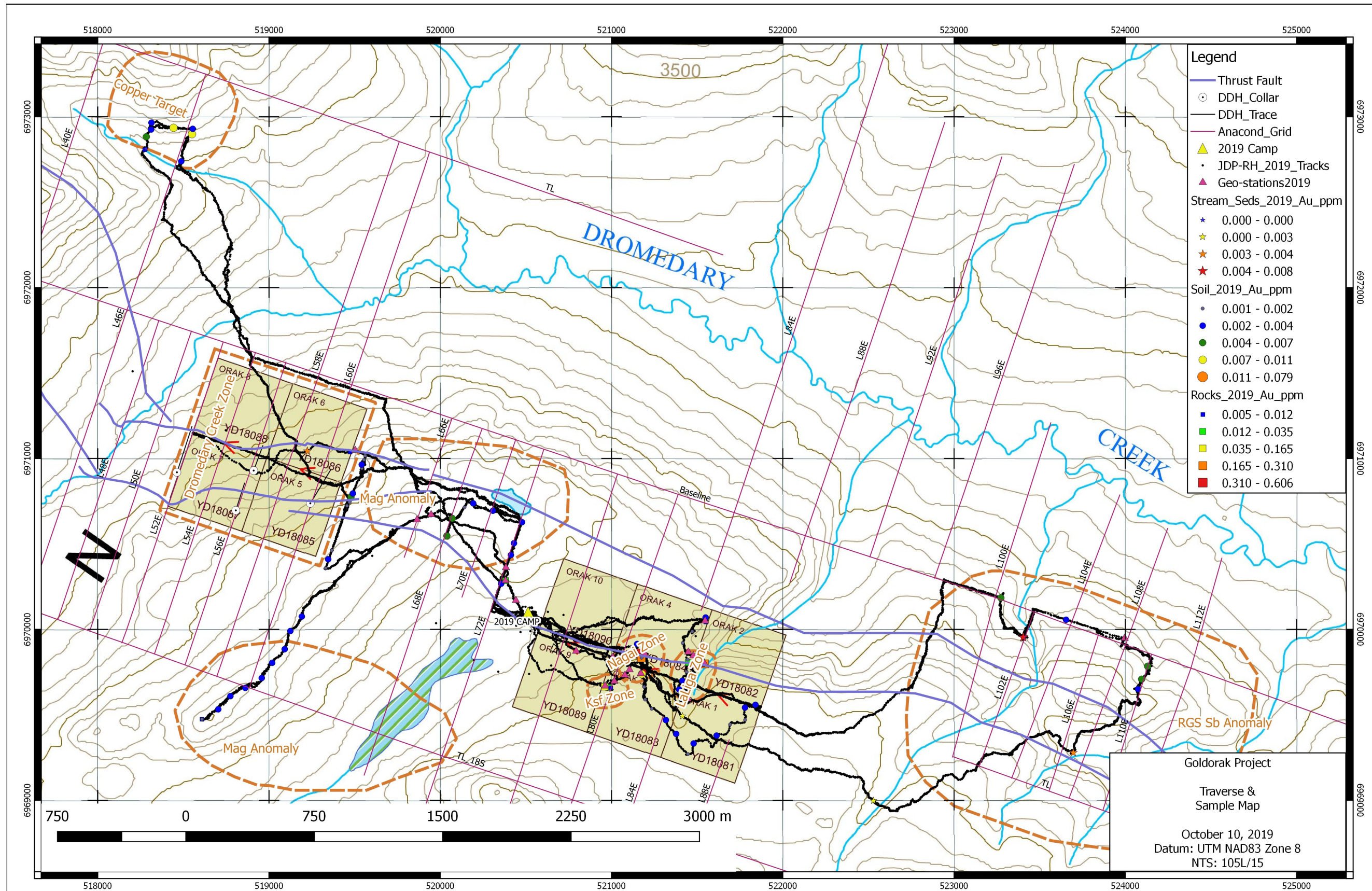


Figure 19. 2019 Traverse location map

### **La Liga Zone**

A priority of the 2019 program was to examine the site of the rock sample collected by Inform Resources (Gibson, 2013) at the La Liga occurrence that returned 0.99 ppm Au (sample A000044574). The original sample flag was located and the gossanous weathered sulfide horizon was resampled. Resampling in 2019 (samples W641851, W641901) obtained results up to 0.606 ppm from a 17cm true thickness lens about 1.0 m long. This area was covered by the Orak 1-4 claims. The gossanous sulfide unit appears to be a discontinuous lens hosted by limy shale.

A soil line immediately above the La Liga occurrence and another on the contour around the headwaters of the creek returned up to 10 ppb Au, up to 205 ppm As, 18.3 ppm Sb and 166 ppm Pb. A soil sample (sample W641951) collected three meters below the La Liga occurrence, the weathered sulfide lens, returned 79 ppm Au, 102.5 ppm As, 277 ppm Cu, 4.55 ppm Sb, 9.6 ppm Pb.

Additional prospecting proved difficult and dangerous due to steep cliffs below and to the north of the anomalous La Liga occurrence. Another gossanous sulfide lens hosted by dark grey shale was located approximately 140 m to the NNE of the original discovery in the stream bank and grab sample W641852 returned 0.310 ppm Au.

### **Nagai Zone**

The Nagai Zone is located within 300 m to the west of the nearby La Liga Zone. The Nagai Zone trends approximately east – west and consists of a series of small outcrops exposed on a resistive glacially scoured hump for a length of about 150 m and width of 50 m. Strikes and dips of the foliated siltstone are approximately east – west to ESE and dip moderately to steeply south. Locally faulting and contorted foliation was observed with accompanying chlorite alteration and white quartz veining.

Five rock samples and 3 soil samples were collected from the zone. Rock grab sample W641854 consisting of rusty weakly sheared siliciclastic with minor chlorite and crosscutting quartz veining returned 0.572 ppm, the highest gold value obtained from the zone. Nearby rock grab samples (W641856 and W641858) of similar material returned up to 0.206 ppm gold, 4100 ppm arsenic and 10 ppm antimony. Given the paucity of outcrop this is very encouraging. Additional outcrop may be exposed by trenching as the overburden cover on the ‘hump’ appears to be shallow. Of the three soil samples one (W641978) contained 0.010 ppm gold and 98.7 ppm As, both are considered anomalous values.

The work in 2019 located this new gold bearing zone and although it is quite different from the nearby La Liga Zone they may both be part of a broader alteration – mineralization zone.

### **Ksf Zone**

The Ksf Zone is named after the granitoid outcrop found on top of a small hill first located and mapped by Anaconda (Hall, 1983). In 2019 three rock grab samples of siliceous hornfelsed to fine grained calc-silicate skarn, locally quartz veined, were collected from the north contact. The highest gold value returned was 0.165 ppm and arsenic values were less than 34 ppm from a grab sample. This mineralization is thought to be related to a Late Devonian porphyritic, pyroxene bearing granite (map

unit Dg) as mapped by Cobbett (2019). Future work should include proper channel sampling (with a saw) as the outcrop is very hard and consequently taking representative samples across the discordant quartz veining is difficult.

### **Copper Target**

The copper in soil anomaly obtained by Anaconda the eastern slope of Dromedary Mountain was examined and soil sampled. Soil quality was poor, float consisted of angular blocky quartzite and geochemical results were low for Cu, Au and other elements of interest.

### **RGS Sb Anomaly**

Soil and stream sediment sampling were carried out in the headwaters of creeks that contained anomalous Sb values reported by the GSC, RGS survey. The highest Zn value reported obtained from stream sediment samples in 2019 was 500 ppm (sample W641960) collected from the west side of the anomaly area below the prospective horizon possibly indicating undiscovered zinc mineralization within the drainage. Soil samples were collected over geophysical anomalies reported by Anaconda in the same area and no significant values were obtained for elements of interest although sampling was greatly hindered by permafrost, ash and significant thicknesses of glacial till

### **Dromedary Creek Zone**

Four diamond drill holes have diamond drill tested the Dromedary Creek Zone to date, three by Anaconda in 1981 and one by Blackstone in Resources Inc. in 1996 (Caulfield and Weber, 1997). These drill holes intersected argillite, calcareous argillite and limestone with anomalous lead-zinc-silver values constrained to narrow chert-sulphide- graphitic argillite horizons. No significant gold values have been reported from the drilling at Dromedary Creek Zone.

Of the 11 soil samples collected on Anaconda line 62E in 2019 two returned over 70 ppm As and three between 5.11 and 7.71 ppm Sb. One of these coincident anomalous samples (M895612) also contained 141 ppm lead and 260 ppm Zn indicating a near bedrock source. A poor quality stream sediment sample from a small gully on the east side of the target contained 26.6 ppm lead, 150 ppm zinc and 47 ppm arsenic, all anomalous values indicating potential mineralization up slope.

### **Mag Anomaly (north and south)**

Two aeromagnetic anomalies are located east and south east of the Dromedary Creek Zone. The eastern anomaly, the northernmost of the two anomalies, is on trend with the Dromedary Creek Zone according to the mapping and geophysical conductors located by Anaconda. Of the nine soil samples and one rock sample collected from the zone all returned low to background gold values. Anomalous values for antimony and arsenic were returned for several soil samples with values up to 49 ppm and 61.0 ppm respectively. In addition the sample with high antimony (W641990) contained 297 ppm lead and 300 ppm zinc indicating a near bedrock source. This sample was collected below 80 cm of White River volcanic ash and gives an indication of the sampling difficulties encountered. As Anaconda's samples were mostly collected at shallow depths, <30cm, caution is required to interpret their results.

A nearby sample (W641992) contained 9.02 ppm molybdenum possibly indicating the presence of a metalliferous shale unit. The only outcrops are on the margins of the magnetic anomaly and are composed of siltstones and metamorphosed siliciclastics. The above anomalous geochemistry indicates the potential for lead-zinc-silver, likely constrained by the thrust faults and possible gold potential is indicated by the anomalous pathfinder elements arsenic and antimony. As the overburden is relatively thin in this area additional soil sampling in this area is warranted.

The southern Mag Anomaly was tested by a line of 100m spaced soil samples collected on the ridgetop within the anomaly. These samples returned low values for gold, lead, zinc and moderately anomalous values (5.51 ppm and 6.54 ppm) for antimony from two of the samples. These same samples returned 6.31 ppm and 9.32 ppm molybdenum indicating a possible nearby metalliferous shale or argillite horizon. Notwithstanding the above weakly anomalous values obtained in 2019 the area is not considered overly prospective.

### **Kqm Intrusion**

The intrusion mapped on Dromedary Mountain by Anaconda Canada Exploration (1981) was not located or examined in 2019 as the hiking distance from the 2019 campsite proved to be too great and lack of helicopter availability precluded a camp move or field visit to the target area.

### **Francoise Zone**

No work beyond staking the Fran 1-4 claims was carried out at the Francoise Zone in 2019 due to extensive overburden which was confirmed visually during staking. Figure 20 below shows the gold and base metal potential of the prospective pyrrhotite bearing Earn Group rocks found between the thrust faults mapped by Anaconda in the vicinity of the Dromedary Mountain granitoid intrusion. Five diamond drilled holes have been drilled to date on this zone (Caulfield and Weber, 1997).

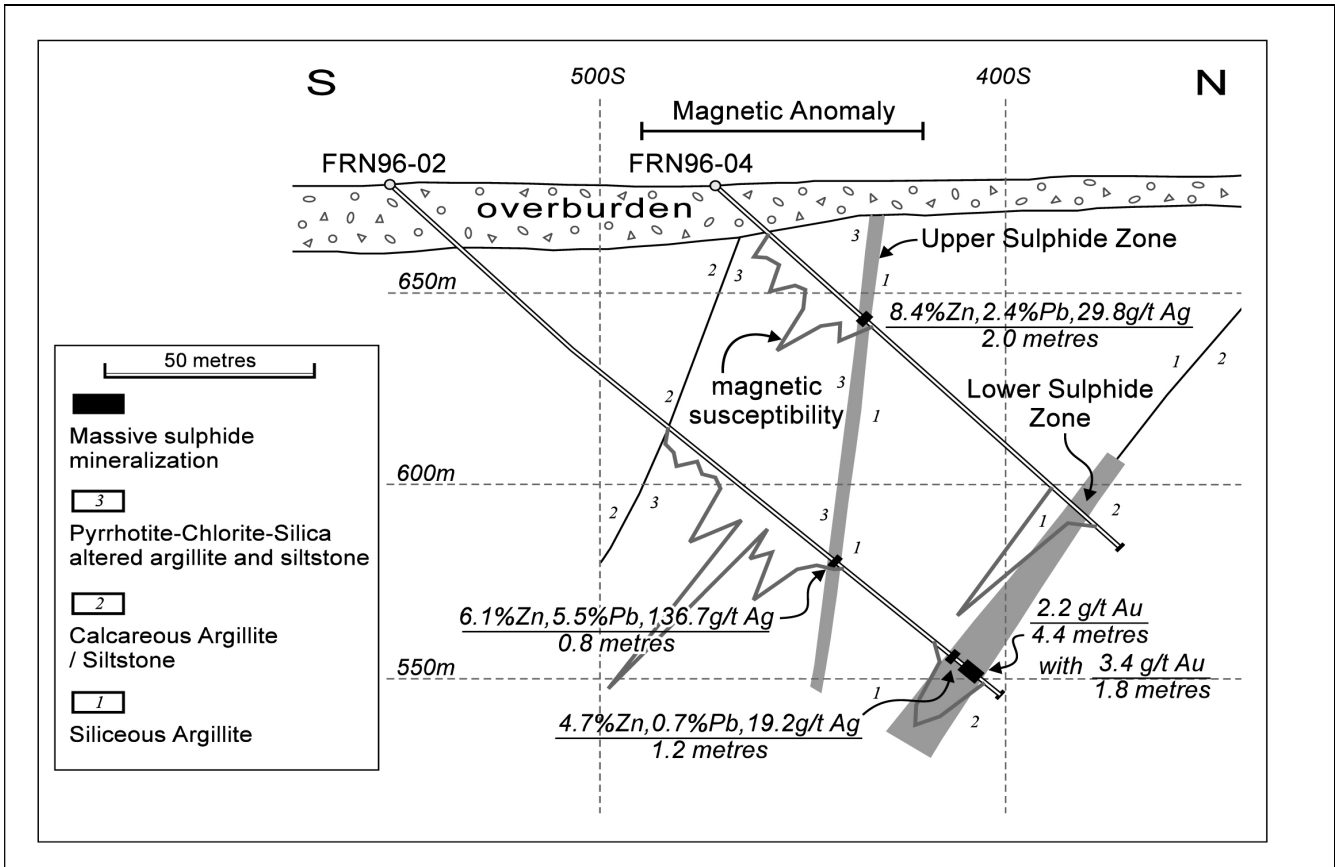


Figure 20. Cross section, looking west, Line 4000W (from Butterworth and Jones, 1998).

## CONCLUSIONS and RECOMMENDATIONS

The 2019 field program confirmed that the area has potential to host significant gold and lead – zinc mineralization. Gold values reported by La Liga (Gibson, 2013) from rock samples were confirmed in 2019 and a new zone, the Nagai Zone, was located 300 m west of the La Liga Zone. The presence of carbonate horizons within Mississippian and Devonian aged formations confers a significant geochemical reactive stratum – a potential host for gold mineralization. Mineralization located to date at the Francoise, Dromedary Creek, northern Mag Anomaly, Nagai and La Liga Zones are found within regional aeromagnetic highs, presumed to be due to the pyrrhotite aureole surrounding Dromedary Mountain – Kqm Intrusion.

The Twopete fault appears to control gold, pathfinder, and base metal geochemical anomalies insofar that the anomalies and mineralization found to date are found along the fault. The fault is thought to serve as a mineralizing fluid conduit. The prospective fault bounded Earn Group horizon identified by Anaconda links the significant lead – zinc, +/- gold, Francoise and Dromedary Creek Zones and the anomalous lead – zinc values returned from soil and stream sediment samples collected from the north Mag Anomaly and the RGS Sb Anomaly

No indications of significant mineralization were found at the southern Mag Anomaly and the Copper Target. Anomalous copper values in soil reported by Anaconda at the Copper Anomaly did not serve as a proxy for either gold or base metal mineralization.

The terrain proved to be difficult to traverse and the Anaconda cut line grid although readily locatable is largely overgrown. Soil sampling was greatly hindered by extensive ash, loess, till cover and permafrost. Stream sediment sampling results are likely diffused due to samples being diluted with excessive amounts of eroded glacial till cover.

Further work is warranted and recommended on the La Liga, Nagai, northern Mag Anomaly and Dromedary Creek Zone. No further work is recommended on the south Mag Anomaly and the Copper Target and the field examination and geochemical sample results were not encouraging. Geological mapping, prospecting and geochemical sampling is required upstream of the 500 ppm Zn stream sediment anomaly at the RGS Sb Anomaly.

Additional geochemical sampling (soil and rock), geological mapping, hand trenching and prospecting are recommended for the Nagai and La Liga Zones and the same for the Dromedary Creek – north Mag Anomaly. Given the dangerous steep slope in the canyon at the La Liga Zone a traverse up the creek is recommended. High soil geochemical values at the Mag Anomaly and Dromedary Creek need to be followed up with additional samples and hand trenching where appropriate. The Francoise Zone can be considered drill ready as known mineralization previously intersected mineralization (2.2 g/t Au over 4.4 m and 8.4% Zn, 2.4% Pb, 29.8 g/t Ag over 2.0 m) may extend laterally and additional offset drill holes are required to test the zone.



## BUDGET

The table below (Table 2) details the 2019 project expenditures. Compared to the proposed budget helicopter costs are higher than anticipated due to lack of helicopter availability due to forest fires in 2019. Geochemical costs are lower than anticipated due to a paucity of outcrop and lack of appropriate medium for soil and stream sediment samples.

Table 2. 2019 Expenditures.

<b>Goldorak Project YMEP 2019-013</b>					
<b>Exploration Goldorak Target (fieldwork July 23-29, 2019)</b>					
<b>Labour</b>	<b>Person/Item</b>	<b>Activity</b>	<b>unit(s)</b>	<b>Rate \$</b>	<b>Total \$</b>
	Roger Hulstein	Field prep mob and demob	1	\$500	\$500
	Jerome DePasquale	Field prep mob and demob	1	\$500	\$500
	Roger Hulstein	Prospecting/sampling/staking/travel	7	\$500	\$3,500
	Jerome DePasquale	Prospecting/sampling/staking/travel	7	\$500	\$3,500
<b>Field Costs</b>	\$100 per worker-day		14	\$100	\$1,400
<b>Helicopter</b>	Positioning; Mayo -property; return				\$10,539
<b>Truck</b>	\$0.60 per km	Whitehorse to Mayo; return	810	\$1	\$486
<b>Assays</b>	ALS Canada Ltd.	Soils	72		\$3,305
		Rocks	18		\$940
<b>Maps</b>	Integraphics	Map plotting			\$142
<b>Report</b>	J. De Pasquale, R. Hulstein		4	500	\$2,000
		Subtotal			\$26,813
		<b>TOTAL</b>			<b>\$26,813</b>

Respectfully submitted,

\_\_\_\_\_  
Jerome De Pasquale

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Roger Hulstein, P.Geo.

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## STATEMENT of QUALIFICATIONS (RH)

I, Roger W. Hulstein, of:

106 Wilson Drive

Whitehorse, Yukon Territory

Y1A 0C9,

do hereby certify that:

1. I am an independent, self-employed, mineral exploration geologist with over 30 years of experience working in the Yukon.
2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since 1978.
3. I am a fellow of the Geological Association of Canada (F3572).
4. I am registered as a professional geoscientist (No. 19127) with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
5. I am the author of this application report on the Goldorak Project in the Whitehorse Mining District, Yukon.
6. The report is based on personal examination of selected areas within the project area in 2019, 1993, 1994 and on referenced sources.

**Roger Hulstein, P.Geo.**

**November 29, 2019**

## STATEMENT of QUALIFICATIONS (JdP)

I, Jérôme de Pasquale, of:

Box 21201

Whitehorse, Yukon Territory

Y1A 6R8,

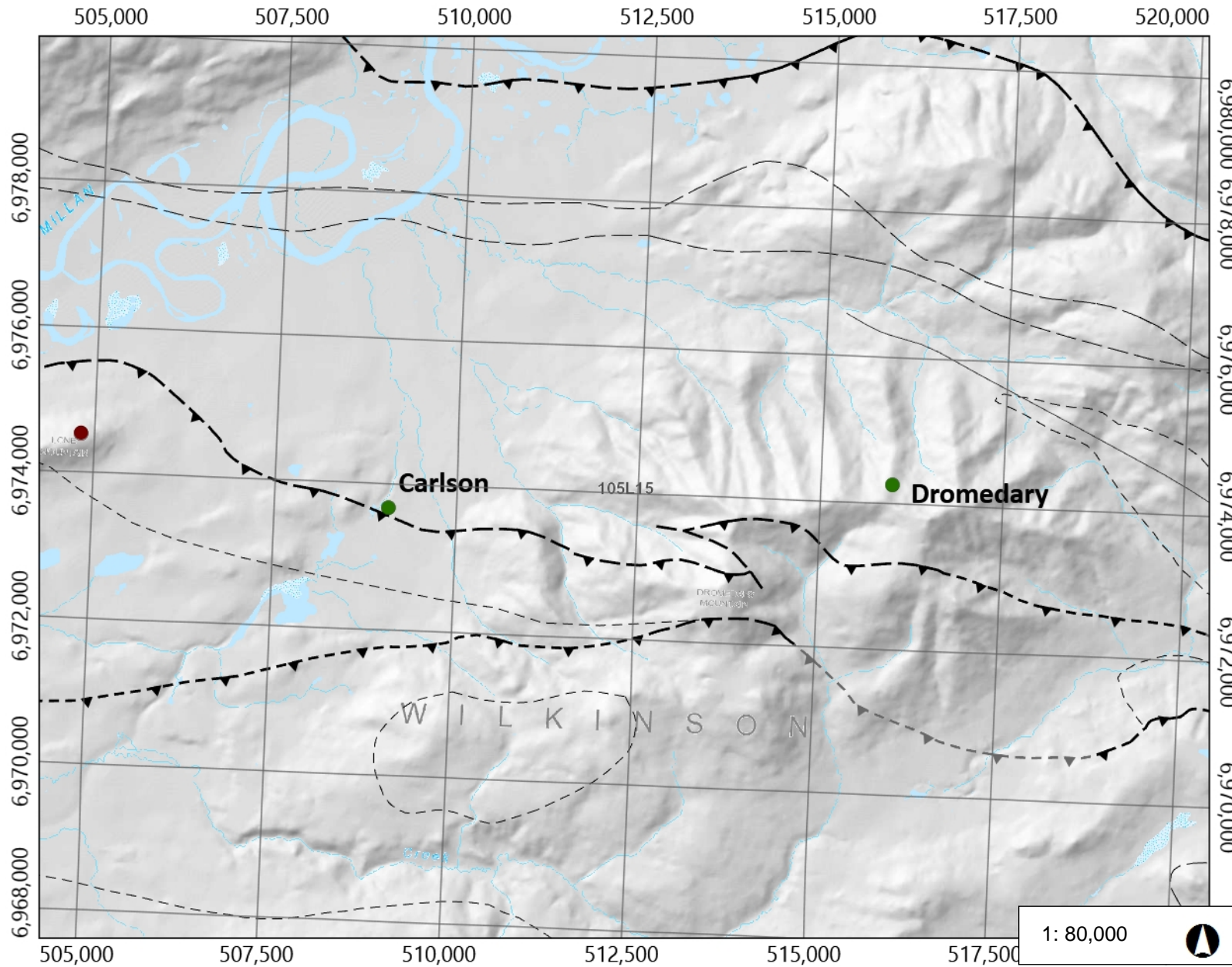
do hereby certify that:

1. I am an independent, self-employed, geologist with over 8 years of experience working in Canada.
2. I am a graduate of Université d'Orléans-La-Source, with a Maitrise des Sciences de la Terre Option Géologie and have been involved in geology and mineral exploration continuously since 2011.
3. I am the co-author of this application report on the Goldorak Project in the Whitehorse Mining District, Yukon.

**Jérôme de Pasquale**

**November 29, 2019**

**APPENDIX A**  
**Yukon Minfile Reports**



### Legend

#### Mineral Occurrences (MINFILE)

- Anomaly
- Deposit
- Drilled Prospect
- Open Pit Past Producer
- Open Pit Producer
- Prospect
- Showing
- Staked - No Work Recorded
- Underground Past Producer
- Unknown

#### Faults

- normal, <Null>, approximate
- normal, <Null>, covered
- normal, <Null>, defined
- normal, <Null>, inferred
- normal, low-angle detachment, infer
- strike slip, dextral, approximate
- strike slip, dextral, covered
- strike slip, dextral, defined
- strike slip, dextral, inferred
- strike slip, sinistral, approximate
- strike slip, sinistral, covered
- strike slip, sinistral, defined
- strike slip, sinistral, inferred
- thrust, <Null>, approximate
- thrust, <Null>, covered
- thrust, <Null>, defined

### Notes

4.1 0 2.03 4.1 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 28-Mar-2019



## MINFILE DETAILS

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**Occurrence Number:** 105L 031

**Occurrence Name:** CARLSON

**Occurrence Type:** Hard-rock

**Status:** Drilled Prospect

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**Deposit Type(s):** Skarn Pb-Zn

**Location(s):** 62°53'35" N - -134°49'18" W

**NTS Mapsheet(s):** 105L15

**Location Comments:** 1 Kilometres

**Hand Samples Available:** No

**Last Reviewed:**

### Work History

Date	Work Type	Comment
12/31/1998	Drilling	Three holes, 534.6 m.
12/31/1997	Geology	
12/31/1997	Ground Geophysics	Also magnetic survey.
12/31/1997	Other	
12/31/1997	Trenching	
12/13/1997	Geochemistry	Also rock sampling.
12/31/1996	Drilling	Five holes, 939 m.
12/31/1993	Geochemistry	Used auger to collect samples.
12/31/1993	Geology	
12/31/1993	Ground Geophysics	
12/31/1990	Drilling	Two holes, 434.6 m.
12/31/1990	Geochemistry	
12/31/1990	Geology	
12/31/1990	Ground Geophysics	
12/31/1988	Geochemistry	
12/31/1988	Ground Geophysics	Also VLF-EM surveys.
12/31/1988	Trenching	
12/31/1983	Geochemistry	
12/31/1983	Geology	
12/13/1983	Ground Geophysics	Also EM and gravity surveys.
12/31/1982	Geology	
12/31/1982	Ground Geophysics	Also magnetic survey.
12/13/1982	Geochemistry	

12/31/1981	Airborne Geophysics	Also magnetic survey.
12/31/1981	Drilling	Ten holes, 1,900 m.
12/31/1981	Geochemistry	Also soil.
12/13/1981	Geology	
12/13/1981	Ground Geophysics	Maxmin survey.
12/31/1967	Airborne Geophysics	Also magnetic survey.
12/31/1967	Geochemistry	
12/31/1967	Other	

## Capsule

### Work History

Staked as Lone cl 1-28 (YI2683) in Apr/67 by Conwest Explorations Ltd, following airborne magnetometer and EM surveying. Conwest carried out prospecting and geochemical sampling later in the year.

Restaked as part of a large block of Ace claims in Oct/80 following regional silt sampling carried out by Anaconda Canada Exploration Ltd, which staked a total of 724 Ace claims, between September and Dec/80, covering 27.5 km along strike from this occurrence southeast to Earn Lake. Airborne magnetometer and EM surveying was carried out over an area approximately three times the size of the Ace claim group between February and Mar/81 and prompted Anaconda to stake Clare cl 1-64 (YA59696) and Bush cl 1-32 (YA59895) contiguous to the west and north of the Ace claim group, respectively in Apr/81. Anaconda established a line grid over the west central (including this occurrence) and southeastern portions of the Ace claim group and carried out geochemical soil sampling, Max-Min EM surveying and detailed geological mapping of the gridded areas and regional scale geological mapping elsewhere in the claim block and drilled 10 holes (1 900 m) during the summer of 1981. During May to Oct/82, Anaconda carried out property wide grid geochemical soil sampling, geological mapping, geophysical surveying and staked Ace cl 719B-754 (YA74825), Clare cl 65B-76 (YA74841) and Bush cl 33-48 (YA74809) in Jul/82 contiguous with the existing claim block. In 1983 Anaconda carried out additional geological mapping, soil geochemical and geophysical surveying within the claim group.

In 1985 Anaconda's interest was transferred to Fleck Minerals Inc, which optioned the property to Dromedary Exploration Company Ltd in Jun/88. Dromedary carried out geochemical and geophysical surveying and hand trenching on the remaining 311 Ace claims later that year and staked Nora cl 1-12 (YB26763) and Nora cl 13-34 (YB26775) contiguously to the north and south, respectively, in Sep/89. Dromedary carried out further mapping, soil sampling, magnetometer surveying, trenching and drilled two holes ( 434 m) on this occurrence in 1990. A third hole was abandoned at a depth of 15 m.

G. Carlson, a principal in Dromedary, took over the option from Fleck and in turn optioned the Ace and Nora claims to Energold Minerals Inc in 1993. Energold carried out auger sampling, magnetometer surveying and geological mapping between the existing grid lines and over this showing in Aug/93. In Sep/93, the Nora claims were transferred to Fleck Minerals Inc.

In 1995 G. Carlson acquired 100% interest in the Ace and Nora claims from Fleck Minerals. In Jun/96 Carlson optioned the property to Blackstone Resources Inc which drilled 4 holes (734.8 m) to test various coincident geophysical targets on Ace cl 279 and 280. In Oct/96 Blackstone staked Queen cl 1-46 (YB96665) contiguously to the northwest.

In Jun/97 Blackstone optioned the property to Geologix Exploration Inc which carried out magnetic and gravity geophysical surveying, hand trenching, prospecting, geological mapping and rock and soil geochemical sampling of this and the adjoining Queen claims (Minfile Occurrence #105L 057).

Blackstone staked Nora cl 37-40 (YC07961) adjoining the claim group to the north in Jul/97 and in 1998 the company drilled 3 holes (534.6 m) to further test the continuity of mineralization intersected during drilling in 1996.

Blackstone Resources changed its name to Blackstone Ventures Inc in Apr/2001.

### Capsule Geology

The occurrence was originally explored for skarn mineralization. Minor galena-sphalerite mineralization was found in erratic skarn-like zones in Upper Paleozoic sedimentary rocks near a small rhyolite porphyry plug of Tertiary age on the Lone claims. Anaconda named this area the Francois grid and traced thrust panels on Dromedary Mountain through this largely overburden-covered area using geophysics.

G. Carlson acquired the claims for their potential to host syngenetic mineralization, specifically sedimentary exhalative. Earlier geological mapping by Anaconda and others outlined a 18 km long favorable succession of Devonian to Mississippian Earn Group stratigraphy which crossed through the occurrence area. Dromedary's 1990 drill holes both intersected siliceous argillite containing laminated to massive pyrite and pyrrhotite with traces of galena and sphalerite. DDH90-1 intersected 4.8 m of massive sulphides consisting of 80% pyrrhotite, 5-10% pyrite and 10-15% silica with galena in fractures. A 0.68 m interval within the 4.8 m

intersection returned 1.32% Pb, 0.39% Zn and 0.15% As.

Blackstone's drill holes tested coincident gravity, electromagnetic (EM) and magnetic geophysical anomalies previously outlined on the Francois



grid. All four holes, FRN96 1- 4, intersected sulfide mineralization, with holes 2 and 4 intersecting significant sulphide intersections. Similar to the Dromedary Creek area (Minfile Occurrence #105L 051), the sulphide zones were intersected at the upper and lower contacts of a siliceous sedimentary section. The upper zone consists of stringer and massive pyrite, pyrrhotite, sphalerite and galena, and returned 5.48% Zn, 6.13% Pb, 136.7 g/t Ag over 0.8 m in FRN96-02 and 8.42% Zn, 2.43% Pb, 29.8 g/t Ag over 2.0 m in FRN96-4. The lower mineralized zone is comprised of massive and laminated pyrrhotite-pyrite with minor sphalerite and galena. The lower zone intersection was 9.8 m long in hole 2 and 4.6 m in hole 4. Other results from the lower zone include unusually high gold and PGE's; up to 3.5 g/t Au over 1.8 m and 40 ppm platinum + palladium.

Work completed in 1997 by Geologix provided important refinements of the interpretation of the coincident gravity, EM and magnetic anomalies, some of which were the target of the 1996 drilling by Blackstone.

Drilling in 1998 intersected the upper and lower mineralized zones, extending the zones 200 m along strike and 60m (upper zone) and 90 m (lower zone) down-dip. Assay results from this drilling indicate continuity of the base and precious metal mineralization previously intersected and an increase in the thickness of alteration and sulfide mineralization to the west in both zones.

#### References

ANACONDA CANADA EXPLORATION LTD, Nov/81. Assessment Report #090888 by G.G. Carlson.

ANACONDA CANADA EXPLORATION LTD, Jun/83. Assessment Report #091468 by R.D. Hall.

BLACKSTONE RESOURCES LTD, Mar/97. Assessment Report #093595 by D.A. Caulfield and J. Weber

BLACKSTONE RESOURCES LTD, Feb/97. Assessment Report #093618 by D.A. Caulfield and J. Weber.

BLACKSTONE RESOURCES LTD, Jan/98. Assessment Report \*#093764 by M.I. Jones.

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BLACKSTONE RESOURCES LTD, Feb/99. Assessment Report #093945 by M.I. Jones.

BLACKSTONE RESOURCES LTD, 21 Jun/96, 29 Aug/96, 21 Sep/96, 4 Nov/96, 8 Nov/96, 12 Nov/96, 10 Jun/97, 14 Aug/97, 6 Oct/97. News Release.

BUTTERWORTH, B.P. and JONES, M., Geology and mineralization on the Dromedary property, central Yukon. In: Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 121-124.

DROMEDARY EXPLORATION COMPANY LTD, Oct/90. Assessment Report #092882 by R. Hulstein.

ENERGOLD MINERALS INC., Dec/93. Assessment Report #093148 by H. Sellmer and R. Zuran.

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YUKON EXPLORATION AND GEOLOGY 1981, p. 160-163; 1982, p. 149; 1983, p. 196-197; 1996, p. 21-22, 32; 1997, p. 22, 35; 1998, p. 21, 27, 30.

#### Map Location



## MINFILE DETAILS

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**Occurrence Number:** 105L 051

**Occurrence Name:** DROMEDARY

**Occurrence Type:** Hard-rock

**Status:** Drilled Prospect

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**Deposit Type(s):** Skarn W

**Location(s):** 62°53'53" N - -134°41'10" W

**NTS Mapsheet(s):** 105L15

**Location Comments:** 1 Kilometres

**Hand Samples Available:** No

**Last Reviewed:**

### Work History

Date	Work Type	Comment
12/31/1997	Geology	
12/31/1997	Ground Geophysics	Also magnetic survey.
12/31/1997	Other	
12/31/1997	Trenching	
12/13/1997	Geochemistry	Also soil sampling.
12/31/1996	Drilling	Five holes, 939 m. Only 1 hole drilled on this occurrence.
12/13/1993	Geochemistry	Used auger to collect samples.
12/13/1993	Geology	
12/13/1993	Geology	
12/13/1993	Ground Geophysics	
12/31/1990	Drilling	Two holes, 434 m.
12/13/1983	Geochemistry	
12/13/1983	Ground Geophysics	Also HLEM and gravity surveys.
12/31/1982	Geochemistry	
12/31/1982	Geology	
12/31/1982	Ground Geophysics	Max-Min survey. Also magnetic survey.
12/31/1981	Drilling	Ten holes, 1,900 m.
12/31/1981	Geochemistry	
12/31/1981	Geology	
12/31/1981	Ground Geophysics	Max-Min survey.
12/31/1980	Airborne Geophysics	Also magnetic survey.
12/31/1980	Geochemistry	

## Related References

Number	Title	Page(s)	Reference Type	Document Type
<a href="#">ARMC003339</a>	News clipping - Drilling intersects - Dromedary property		Property File Collection	News Release
<a href="#">ARMC003343</a>	Drill hole location and geophysical compilation map - Dromedary property		Property File Collection	Geophysical Map
<a href="#">ARMC005809</a>	Property update report - Dromedary Mountain		Property File Collection	Report
<a href="#">ARMC005810</a>	Summary report - Dromedary Mountain exploration project		Property File Collection	Report
<a href="#">ARMC005811</a>	Report - Dromedary project		Property File Collection	Report
<a href="#">ARMC005812</a>	Project proposal - Dromedary property - Ace claims		Property File Collection	Report

## Capsule

### Work History

Originally staked as Ace cl 1-192 (YA52055), covering Dromedary Mountain, in Sep/80 by Anaconda Canada Exploration Ltd following regional silt sampling and airborne magnetometer and EM surveying. In Oct/80 Anaconda staked Ace cl 193-504 (YA52251) to surround the original claim block, extending it to the northwest and southeast and added Earn cl 1-2 (YA59031) at the same time, 18.5 km to the southeast at Earn Lake, probably to cover their camp location. Anaconda staked Ace cl 505-724 (YA59089) in Dec/80 to form a contiguous block of claims covering 27.5 km of strike length from Earn Lake to the west of Dromedary Mountain. The company added Earn cl 3-4 (YA59309) by the camp location at the same time in Dec/80.

Airborne magnetometer and EM surveying was carried out over an area approximately three times the size of the Ace claim group between February and Mar/81 prompting Anaconda to stake Clare cl 1-64 (YA59696) and Bush cl 1-32 (YA59895) contiguously to the west and north of the Ace claim group, respectively, in Apr/81. Anaconda established a line grid over the west central (including this occurrence) and the southeastern portions of the Ace claim group and carried out geochemical soil sampling, Max-Min EM surveying and detailed geological mapping of the gridded areas and regional scale geological mapping elsewhere in the claim block and drilled 10 holes (1 900 m) during the summer of 1981. Grid development followed by Max-Min EM and magnetometer surveying of the Bush claims was carried out in the spring of 1982.. During May to Oct/82, Anaconda carried out property wide grid geochemical soil sampling, geological mapping, geophysical surveying and staked Ace cl 719B-754 (YA74825), Clare cl 65B-76 (YA74841) and Bush cl 33-48 (YA74809) in Jul/82 contiguous with the existing claim block. In 1983 Anaconda carried out additional geological mapping, soil geochemical sampling and geophysical surveying within the claim group.

Anaconda's interest was transferred in 1985 to Fleck Minerals Inc, which optioned the property to Dromedary Exploration Company Ltd in Jun/88. Dromedary staked Nora cl 1-12 (YB26763) and Nora cl 13-34 (YB26775) contiguously to the north and south, respectively, in Sep/89 and drilled 2 holes (434 m) 7 km to the west on the Francois grid (Minfile Occurrence #105L 031) in 1990.

G. Carlson, a principal in Dromedary, took over the option from Fleck and in turn optioned the Ace and Nora claims to Energold Minerals Inc in 1993. Energold carried out auger sampling, magnetometer surveying and geological mapping between the existing grid lines and over this showing in Aug/93. In Sep/93, the Nora claims were transferred to Fleck Minerals Inc.

In 1995 G. Carlson acquired 100% interest in the Ace and Nora claims from Fleck Minerals. In Jun/96 Carlson optioned the property to Blackstone Resources Inc which drilled 4 holes (734.8 m) to test various coincident geophysical targets on the Francois grid. Blackstone staked King cl 1-16 (YB96649) 4 km to the southeast in Oct/96.

In Jun/97 Blackstone optioned the property to Geologix Exploration Inc which carried out prospecting, geological mapping and rock and soil geochemical sampling on the King claims. In Jul/97 Blackstone staked King cl 17-20 (YC07965) to cover fractions left during staking in 1996.

### Capsule Geology

The claims are underlain by a southwest-dipping sequence of Proterozoic to Paleozoic-Triassic (?) strata cut by northwest-trending normal faults and intruded by Cretaceous andesitic sub-volcanic plugs and granodiorite-quartz monzonite intrusives. Stratabound lenses of massive pyrrhotite with sphalerite, chalcopyrite, pyrite and galena occur in cherty pyritic argillite of the Devonian to Mississippian Earn Group and their metamorphosed equivalent. The sulphide lenses are inferred to be submarine exhalites, probably related to Devonian rifting. Four areas of mineralization have been previously identified, and are labeled, from east to west Dromedary Creek, Dromedary Mountain, Francois Grid (Minfile Occurrence #105L 031) and Kal-Cave ( Minfile Occurrence #105L 054). All are situated on strike along 18 km of favorable stratigraphy.

Dromedary Creek hosts syngenetic sulphide mineralization consisting of laminated to massive pyrrhotite, pyrite, sphalerite, galena and minor arsenopyrite. Airborne geophysics and geological mapping carried out by Anaconda outlined numerous mineralized lenses, the largest which is a barren pyrrhotite lens about 800 m long and 50 m thick on the east slope of Dromedary Mountain. Drilling carried out in the Dromedary Creek area in 1981 outlined two distinct zones of syngenetic sulphide mineralization both of which returned low base metal values.

In 1996 Blackstone targeted a coincident gravity and magnetic anomaly located between 1981 drill holes 8 and 9. The hole (DCK96-01) intersected two zones of sulphide mineralization. The upper zone (104.3 to 115.3 m) consists of chert-sulphide-graphitic argillite and contains pyrite, pyrrhotite, trace sphalerite and chalcopyrite as laminations and folded sulphide layers. The lower zone (137.5 to 138.8 m) comprises a silicified argillite-sulphide unit containing approximately 40% combined pyrrhotite>pyrite mineralization. Only the lower zone contained anomalous Pb, Zn and Ag values. Examination of the core indicates that the sulphide mineralization in DCK96-01 occurs at a different stratigraphic level than

that encountered in the 1981 drill holes. Best results came from the lower zone; 2340 ppm Zn over 1.3 m, 137.5 m down the hole. Dromedary Mountain hosts bedded barite and skarn mineralization. Bedded barite was noted within the upper chert unit (Unit 13 Caulfield and Webber, 1997) of the Earn Group. The Ace barite showing located on the northeast slope of Dromedary Mountain hosts one massive bed over 10 m thick within a 50 m thick unit. The barite outcrops over a strike length of 400 m, is finely crystalline, relatively pure (about 33 wt% Ba) but barren of sulphides.

Anaconda focused the bulk of their 1981 drilling towards testing various zones of skarn mineralization located in the Dromedary Mountain area. The skarn mineralization consists of pod-like masses of quartz and one of the following minerals: tremolite/actinolite, chlorite, magnetite, calcite, garnet, pyrrhotite, pyrite, sphalerite, galena and minor chalcopyrite. The skarn bodies are small, ranging up to one metre in thickness and several tens of metres in strike length. Contacts with unmineralized rock can be either sharp or gradational. Scheelite is present in the creeks draining to the south side of Dromedary Mountain but was not found in place. Information regarding individual drill holes is sketchy but the best drill intersection is reported to have returned 2% Zn, 0.5% Pb, 31.2 g/t Ag and 0.2% Cu over 1.05 m. Anaconda's best chip sample (location unknown) returned 7.2% Zn, 3.5% Pb, 58 g/t Ag and 0.5% Cu over 1.05 m. The economic potential of the skarn bodies is thought to be low due to their lack of continuity and low grade.

All of the 1997 work was carried out around Minfile Occurrences #105L 031 and #105L 054. The geophysical surveys provided important refinements of the interpretation of the coincident gravity, EM and magnetic anomalies, which were targeted by the 1996 drilling.

#### References

ANACONDA CANADA EXPLORATION LTD, Nov/81. Assessment Report #090888 by G.G. Carlson.

ANACONDA CANADA EXPLORATION LTD, May/82. Assessment Report #091039 by A.R. Scott.

ANACONDA CANADA EXPLORATION LTD, Jun/83. Assessment Report #091468 by R.D. Hall.

BLACKSTONE RESOURCES LTD, Mar/97. Assessment Report #093595 by D.A. Caulfield and J. Weber.

BLACKSTONE RESOURCES LTD, Feb/97. Assessment Report #093618 by D.A. Caulfield and J. Weber.

BLACKSTONE RESOURCES LTD, Jan/98. Assessment Report \*#093764 by M.I. Jones.

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BUTTERWORTH, B.P. and JONES, M., Geology and mineralization on the Dromedary property, central Yukon. In: Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 121-124.

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WHITEHORSE STAR, 14 Aug/90.

YUKON EXPLORATION 1990, p. 9, 11.

YUKON EXPLORATION AND GEOLOGY 1981, p. 160-163; 1982, p. 149; 1983, p. 196-197; 1996, p. 21-22, 32; 1997, p. 22, 35.

## Map Location

**APPENDIX B**  
**Analytical Certificates**



ALS Canada Ltd.  
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Page: 1  
 Total # Pages: 2 (A - C)  
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 This copy reported on  
 23-AUG-2019  
 Account: HULGEO

**CERTIFICATE WH19190840**

Project: Goldorak

This report is for 18 Rock samples submitted to our lab in Whitehorse, YT, Canada on 3-AUG-2019.

The following have access to data associated with this certificate:


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

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
Au-AA24	Au 50g FA AA finish	AAS

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

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

**Signature:**   
 Colin Ramshaw, Vancouver Laboratory Manager



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Project: Goldorak

**CERTIFICATE OF ANALYSIS WH19190840**

Sample Description	Method Analyte Units LOD	WEI-21	Au-AA24	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
W641851		1.98	0.042	<0.5	5.39	80	360	0.9	<2	0.79	0.6	8	46	83	15.35	20
W641852		1.08	0.310	<0.5	1.62	84	60	<0.5	4	4.39	0.7	14	9	73	29.8	10
W641853		1.42	<0.005	<0.5	0.81	5	290	<0.5	3	14.80	<0.5	<1	31	9	1.15	<10
W641854		1.44	0.572	<0.5	3.20	69	50	<0.5	6	0.05	0.6	4	36	112	21.4	10
W641855		1.40	0.017	<0.5	4.30	<5	7450	1.2	<2	0.09	<0.5	1	101	26	1.96	10
W641856		1.57	0.058	<0.5	4.03	809	230	0.5	<2	1.81	<0.5	12	41	127	11.05	10
W641857		1.61	0.035	0.5	4.03	5	30	<0.5	3	0.27	<0.5	6	46	185	25.9	10
W641858		1.45	0.206	<0.5	6.82	4100	570	0.9	<2	0.05	<0.5	12	64	49	11.70	20
W641859		1.66	0.022	<0.5	5.84	34	4400	1.1	<2	7.54	<0.5	10	51	45	3.02	20
W641860		1.09	<0.005	<0.5	9.31	7	1570	1.4	<2	0.85	<0.5	10	29	9	2.91	20
W641861		2.46	0.009	<0.5	5.49	6	2040	1.8	<2	9.32	0.5	11	41	51	3.29	10
W641862		1.65	<0.005	<0.5	0.89	15	1030	<0.5	<2	0.52	<0.5	7	29	32	1.09	<10
W641863		1.35	0.165	<0.5	7.56	11	2680	0.8	<2	2.37	<0.5	13	19	235	3.84	20
W641901		1.42	0.606	2.0	3.63	66	310	0.5	<2	0.44	<0.5	2	35	265	29.0	10
W641902		1.66	0.027	<0.5	4.03	46	490	0.9	<2	0.04	<0.5	3	41	21	3.66	10
W641903		1.26	<0.005	<0.5	7.00	23	650	1.6	<2	3.12	<0.5	14	61	79	7.94	20
W641904		1.09	<0.005	<0.5	3.28	17	880	0.8	<2	1.59	<0.5	3	37	5	0.92	10
W641905		1.19	0.012	0.6	4.68	118	2320	1.5	<2	4.34	0.6	9	112	143	1.83	10



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Sample Description	Method Analyte Units LOD	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	20	0.01	
W641851		1.68	30	1.18	5990	<1	0.01	21	680	3	0.11	<5	8	28	<20	0.25
W641852		0.03	10	0.53	5330	<1	0.01	15	90	9	1.07	<5	14	134	<20	0.05
W641853		0.24	10	0.14	304	1	0.01	19	1330	<2	0.02	<5	2	382	<20	0.07
W641854		0.07	20	0.47	1830	<1	0.01	9	280	6	0.22	<5	6	3	<20	0.18
W641855		2.09	20	0.55	138	1	0.11	8	420	5	0.04	<5	11	84	<20	0.28
W641856		0.52	50	0.90	483	1	0.04	12	260	5	0.10	9	7	51	<20	0.18
W641857		0.02	30	0.62	2320	1	<0.01	14	330	10	0.89	<5	7	8	<20	0.21
W641858		1.12	50	1.37	212	<1	0.39	9	380	4	0.17	10	9	58	<20	0.30
W641859		1.84	30	2.23	520	<1	0.74	27	530	4	0.02	<5	8	292	<20	0.25
W641860		3.36	10	0.95	388	<1	0.72	6	420	5	0.03	<5	23	32	<20	0.35
W641861		0.62	30	2.39	670	2	2.22	22	660	5	0.07	<5	8	179	<20	0.24
W641862		0.33	<10	0.15	983	1	0.02	16	140	<2	0.18	5	4	28	<20	0.04
W641863		1.92	10	1.81	669	<1	1.57	10	280	6	0.39	<5	19	183	<20	0.23
W641901		1.07	30	0.96	2760	1	0.01	18	580	6	0.17	5	6	33	<20	0.20
W641902		1.74	20	0.24	282	<1	0.03	1	320	2	0.05	6	4	18	<20	0.20
W641903		2.15	30	0.88	420	1	0.06	30	550	6	0.22	<5	10	105	<20	0.30
W641904		2.01	10	0.25	112	<1	0.03	10	220	5	0.04	<5	3	74	<20	0.18
W641905		2.64	30	2.24	197	4	0.51	86	1310	<2	0.74	<5	17	322	<20	0.29





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Project: Goldorak

**CERTIFICATE OF ANALYSIS WH19190840**

Sample Description	Method Analyte Units LOD	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Tl	U	V	W	Zn
		ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
W641851		<10	<10	38	<10	89
W641852		<10	<10	15	<10	9
W641853		<10	<10	28	<10	66
W641854		<10	<10	38	<10	83
W641855		<10	<10	95	<10	25
W641856		<10	<10	30	<10	71
W641857		<10	<10	46	<10	99
W641858		<10	<10	66	<10	95
W641859		<10	<10	86	<10	90
W641860		<10	<10	134	<10	51
W641861		<10	<10	62	<10	108
W641862		<10	<10	14	<10	46
W641863		<10	<10	152	<10	73
W641901		<10	<10	31	<10	58
W641902		<10	<10	35	<10	14
W641903		<10	<10	66	<10	28
W641904		<10	<10	135	<10	60
W641905		<10	<10	135	<10	95



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**CERTIFICATE OF ANALYSIS WH19190840**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.			
	CRU-31	CRU-QC	LOG-21	PUL-31
	PUL-QC	SPL-21	WEI-21	
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	Au-AA24	ME-ICP61		



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This copy reported on  
26-AUG-2019  
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**CERTIFICATE WH19190833**

Project: Goldorak

This report is for 72 Soil samples submitted to our lab in Whitehorse, YT, Canada on 3-AUG-2019.

The following have access to data associated with this certificate:

JEROME DE PASQUALE

ROGER HULSTEIN

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SCR-41	Screen to -180um and save both

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION
AuME-TL44	50g Trace Au + Multi Element PKG

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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**CERTIFICATE OF ANALYSIS WH19190833**

Sample Description	Method Analyte Units LOD	WEI-21	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm
W641951		0.35	0.079	1.11	2.29	102.5	10	240	0.94	0.19	0.94	0.19	22.1	22.8	19	27.3
W641952		0.31	0.003	0.35	1.52	42.5	10	420	0.75	0.21	0.34	0.42	43.5	11.7	19	3.39
W641953		0.27	0.003	0.45	1.69	37.0	10	270	0.73	0.30	0.47	0.58	34.8	12.1	21	3.45
W641954		0.30	0.001	0.07	1.30	22.7	10	210	0.34	0.33	0.22	0.20	26.4	15.1	22	2.21
W641955		0.39	0.001	0.07	1.47	14.1	10	170	0.43	0.25	0.34	0.24	38.3	13.6	21	3.44
W641956		0.48	0.001	0.20	0.96	27.6	10	240	0.36	0.10	0.65	1.06	24.6	9.4	13	1.84
W641957		0.41	0.003	0.36	0.97	14.8	20	370	0.50	0.17	1.13	0.97	29.2	8.3	17	2.08
W641958		0.59	0.004	0.28	0.87	37.1	20	260	0.58	0.18	1.37	0.73	26.0	23.2	15	3.47
W641959		0.13	0.004	0.96	0.58	25.1	10	760	0.39	0.17	0.51	0.28	20.6	7.8	11	1.82
W641960		0.89	0.008	1.22	0.83	56.3	20	590	0.70	0.19	1.98	2.40	27.2	26.0	15	4.06
W641961		0.27	0.008	1.91	0.80	49.5	20	1060	0.90	0.24	0.62	0.70	35.7	8.9	21	2.97
W641962		0.30	0.007	1.88	1.05	22.3	10	180	0.37	0.23	0.25	0.22	24.4	6.5	21	2.05
W641963		0.56	0.004	0.53	0.86	47.1	10	360	0.39	0.17	0.54	0.84	21.2	7.0	17	2.18
W641964		0.33	0.004	0.84	1.31	20.3	10	460	0.74	0.22	0.37	0.96	27.0	8.1	36	2.31
W641965		0.55	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
W641966		0.36	0.003	0.14	1.28	24.3	10	380	0.58	0.22	0.20	0.63	34.3	12.7	23	2.29
W641967		0.31	0.004	0.36	1.96	81.4	10	320	1.04	0.31	0.25	1.42	68.4	16.9	26	4.99
W641968		0.34	0.002	0.65	1.90	117.0	10	170	0.74	0.18	5.12	1.81	25.9	16.5	19	5.77
W641969		0.37	0.002	0.18	1.78	52.8	10	190	0.58	0.21	0.22	0.43	36.2	13.9	22	3.69
W641970		0.39	0.003	0.90	1.65	205	10	190	0.78	0.23	0.31	1.13	44.4	14.6	20	4.97
W641971		0.43	0.003	0.35	0.95	36.6	10	340	0.51	0.20	0.30	1.05	32.8	12.7	14	1.37
W641972		0.54	0.002	0.80	1.21	98.8	10	350	0.79	0.49	0.37	1.88	41.2	24.3	18	6.79
W641973		0.42	0.004	0.45	1.35	45.7	20	220	0.97	0.34	0.41	0.86	50.6	17.1	20	6.01
W641974		0.42	0.003	0.18	1.71	65.0	10	280	0.85	0.29	0.32	0.47	49.0	13.8	21	4.31
W641975		0.46	0.001	0.32	1.74	25.1	10	220	0.81	0.15	0.29	0.81	32.0	14.9	26	4.83
W641976		0.40	0.002	0.12	1.48	40.1	10	180	1.00	0.18	0.24	0.20	34.9	19.3	19	7.63
W641977		0.45	0.002	0.04	1.53	16.7	10	210	1.42	0.20	0.17	0.66	50.6	21.7	23	6.03
W641978		0.39	0.010	0.09	4.58	98.7	10	370	0.86	0.42	0.04	0.13	8.55	16.7	40	35.2
W641979		0.60	0.002	0.11	2.29	24.7	10	280	1.67	0.30	0.19	0.41	62.9	24.6	25	4.98
W641980		0.40	0.003	0.16	0.97	18.2	10	270	0.93	0.24	0.32	0.25	55.4	14.6	16	3.64
W641981		0.26	0.002	0.06	1.61	52.8	10	170	0.69	0.32	0.15	0.63	28.9	12.1	22	1.35
W641982		0.39	0.003	0.23	1.31	51.7	10	280	0.83	0.21	0.18	0.59	36.7	9.2	17	1.68
W641983		0.44	0.004	0.17	1.11	52.4	10	320	0.65	0.32	0.11	0.56	37.1	10.7	16	1.33
W641984		0.44	0.003	0.15	1.01	43.1	10	570	0.92	0.22	0.10	0.60	37.8	10.2	17	1.14
W641985		0.52	0.004	0.30	1.01	39.7	10	390	0.62	0.20	0.34	0.43	30.4	9.0	16	1.19
W641986		0.46	0.004	0.17	1.25	49.3	10	350	0.72	0.20	0.19	0.31	34.1	10.0	17	1.74
W641987		0.49	0.003	0.19	1.16	38.4	10	320	0.71	0.30	0.16	0.34	38.8	10.5	18	1.41
W641988		0.39	0.004	0.08	1.36	45.7	10	200	0.81	0.50	0.09	0.41	35.6	13.4	18	1.77
W641989		0.40	0.004	0.13	1.37	56.6	10	230	0.68	0.20	0.15	0.19	41.3	11.5	18	1.71
W641990		0.43	0.006	3.12	0.70	41.7	10	120	0.56	0.27	0.08	0.18	33.9	8.6	12	1.70



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 Account: HULGEO

Project: Goldorak

**CERTIFICATE OF ANALYSIS WH19190833**

Sample Description	Method Analyte Units LOD	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
		ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
		0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
W641951		277	7.32	6.02	0.05	0.07	0.04	0.303	0.25	11.5	38.7	1.19	5000	0.78	0.01	0.54
W641952		34.6	3.28	4.15	0.07	0.04	0.05	0.043	0.09	27.4	33.9	0.90	676	1.72	<0.01	0.15
W641953		26.3	3.50	4.58	0.05	0.05	0.04	0.037	0.07	17.5	30.7	1.03	630	1.63	0.01	0.38
W641954		14.1	2.94	5.04	<0.05	<0.02	0.02	0.029	0.05	13.4	21.3	0.46	475	2.40	<0.01	0.44
W641955		16.2	2.74	5.28	<0.05	0.02	0.02	0.023	0.07	18.9	25.9	0.89	498	1.22	<0.01	0.41
W641956		23.6	2.20	2.96	<0.05	0.04	0.07	0.022	0.04	13.1	18.2	0.60	253	1.48	<0.01	0.20
W641957		26.8	2.34	2.86	0.05	0.06	0.13	0.028	0.05	14.8	13.9	0.48	815	1.62	0.01	0.37
W641958		86.1	2.77	2.62	<0.05	0.06	0.08	0.037	0.05	14.0	13.9	0.41	560	1.25	0.01	0.36
W641959		37.7	1.75	1.63	<0.05	0.06	0.10	0.028	0.04	11.4	7.9	0.08	611	3.38	0.01	0.24
W641960		69.1	6.38	2.09	0.06	0.09	0.11	0.054	0.05	16.0	12.8	0.33	1080	3.24	<0.01	0.31
W641961		96.5	3.62	2.01	0.07	0.07	0.12	0.059	0.09	23.0	18.8	0.19	367	5.23	<0.01	0.11
W641962		21.6	2.02	3.57	<0.05	<0.02	0.08	0.024	0.04	12.7	25.5	0.34	144	2.70	<0.01	0.65
W641963		25.6	2.04	2.69	<0.05	0.03	0.06	0.035	0.05	11.1	15.8	0.29	703	2.25	0.01	0.57
W641964		56.9	2.18	4.77	0.06	0.03	0.13	0.034	0.09	15.1	27.8	0.89	343	5.78	0.01	0.37
W641965		NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
W641966		31.0	2.79	3.56	<0.05	0.04	0.05	0.029	0.05	14.6	12.2	0.43	475	1.92	<0.01	0.48
W641967		35.9	4.03	4.65	0.08	0.08	0.05	0.066	0.09	27.6	27.8	0.92	1110	1.43	<0.01	0.34
W641968		43.7	2.74	5.23	0.05	0.06	0.05	0.072	0.09	12.6	30.4	2.24	512	3.92	<0.01	0.05
W641969		20.8	3.26	4.70	0.05	0.05	0.03	0.044	0.07	15.9	25.7	1.16	691	1.41	<0.01	0.28
W641970		33.3	3.53	4.56	0.06	0.05	0.05	0.146	0.08	21.7	28.4	1.29	483	1.30	<0.01	0.12
W641971		38.0	2.49	2.73	0.05	0.02	0.08	0.033	0.06	14.8	13.1	0.47	530	2.73	<0.01	0.18
W641972		136.5	5.33	3.44	0.07	0.05	0.15	0.067	0.08	20.5	20.0	0.83	657	6.28	<0.01	<0.05
W641973		90.7	4.68	3.84	0.08	0.05	0.04	0.048	0.07	24.0	22.2	0.92	865	4.90	<0.01	0.14
W641974		37.3	3.92	4.89	0.08	0.05	0.03	0.044	0.07	23.5	30.7	1.21	795	1.55	<0.01	0.13
W641975		30.2	3.71	4.95	0.05	0.06	0.03	0.034	0.07	15.2	32.0	1.21	554	1.26	<0.01	0.15
W641976		38.1	4.67	4.08	0.06	0.04	0.04	0.071	0.10	15.1	28.0	0.90	800	1.41	<0.01	0.10
W641977		32.5	3.99	3.28	0.05	0.10	0.04	0.053	0.04	16.7	16.0	0.37	1490	1.29	<0.01	0.36
W641978		34.4	18.65	14.95	0.10	0.16	0.02	0.248	1.36	3.2	63.3	0.86	4690	0.99	<0.01	1.62
W641979		40.8	4.99	4.99	0.07	0.08	0.03	0.050	0.06	24.3	45.5	0.97	800	1.44	<0.01	0.18
W641980		60.6	3.44	2.78	0.07	0.07	0.07	0.036	0.08	25.4	20.0	0.38	724	2.06	<0.01	0.13
W641981		34.2	2.61	4.13	<0.05	0.09	0.03	0.037	0.05	12.1	17.3	0.51	525	3.37	<0.01	0.64
W641982		69.5	2.85	3.37	0.05	0.04	0.06	0.038	0.07	18.2	18.3	0.57	341	6.31	<0.01	0.14
W641983		42.7	2.51	3.03	<0.05	0.03	0.06	0.031	0.06	16.5	14.6	0.47	471	2.53	<0.01	0.22
W641984		44.0	2.64	2.67	0.05	0.04	0.06	0.030	0.05	17.7	12.9	0.37	367	9.32	0.01	0.25
W641985		52.9	2.51	3.09	0.05	0.03	0.08	0.027	0.06	14.8	14.3	0.57	468	2.32	<0.01	0.18
W641986		37.6	2.71	3.71	0.05	0.03	0.03	0.031	0.07	16.4	18.6	0.74	515	1.38	<0.01	0.16
W641987		36.7	2.59	3.71	0.05	0.02	0.05	0.029	0.06	18.4	15.0	0.57	506	1.73	<0.01	0.26
W641988		35.5	3.00	3.52	<0.05	0.05	0.04	0.043	0.07	14.2	15.3	0.60	1140	2.05	<0.01	0.33
W641989		32.3	2.80	3.95	0.06	0.04	0.03	0.029	0.07	18.5	17.7	0.82	671	1.41	<0.01	0.28
W641990		54.3	4.33	1.52	0.08	0.02	0.03	0.102	0.05	22.2	9.3	0.12	440	5.76	<0.01	0.35



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Project: Goldorak

**CERTIFICATE OF ANALYSIS WH19190833**

Sample Description	Method Analyte Units LOD	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44		
		Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	
		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
		0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.1	0.01	0.01	0.2	0.005
W641951		34.0	600	9.6	28.6	<0.001	0.07	4.55	5.0	0.6	0.7	67.2	<0.01	0.02	7.1	0.054	
W641952		35.3	1010	18.7	9.6	<0.001	0.01	5.56	4.7	0.8	0.3	26.4	<0.01	0.04	7.7	0.017	
W641953		36.7	960	23.1	9.8	<0.001	0.01	3.99	3.4	0.9	0.4	31.8	<0.01	0.03	5.1	0.021	
W641954		17.3	690	16.7	13.6	<0.001	0.01	2.03	1.4	0.5	0.5	17.3	<0.01	0.05	1.3	0.009	
W641955		23.7	480	10.2	9.6	<0.001	0.01	1.88	2.3	0.2	0.4	20.9	<0.01	0.02	4.0	0.015	
W641956		28.6	1220	16.2	5.8	0.004	0.06	2.30	1.6	0.9	0.2	40.9	<0.01	0.02	2.9	0.012	
W641957		25.0	1100	14.8	6.3	0.005	0.06	2.56	2.4	2.2	0.4	54.2	<0.01	0.04	2.1	0.010	
W641958		26.5	810	20.6	6.0	<0.001	0.05	3.48	2.2	1.3	0.4	71.6	<0.01	0.02	2.2	0.011	
W641959		26.3	700	11.3	5.2	0.003	0.05	3.90	1.5	3.1	0.3	43.0	<0.01	0.07	1.2	<0.005	
W641960		100.5	1150	20.2	5.9	0.002	0.20	5.49	2.3	5.6	0.4	112.0	<0.01	0.08	2.7	0.008	
W641961		69.4	1360	19.8	6.2	0.003	0.12	8.58	2.8	4.7	0.3	130.0	<0.01	0.10	4.3	<0.005	
W641962		20.5	700	14.4	7.0	0.001	0.01	3.91	1.7	2.2	0.5	20.7	<0.01	0.05	2.1	0.010	
W641963		25.8	830	26.6	9.4	0.001	0.03	3.55	1.5	1.9	0.4	37.3	<0.01	0.04	1.5	0.016	
W641964		41.3	760	11.3	11.8	0.001	0.02	3.42	5.8	2.7	0.5	33.4	<0.01	0.07	3.5	0.027	
W641965		NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	
W641966		35.3	670	13.4	8.0	0.001	<0.01	2.30	3.5	0.7	0.5	19.5	<0.01	0.06	3.9	0.024	
W641967		43.6	980	82.0	12.4	<0.001	<0.01	3.78	4.8	0.7	0.5	23.0	<0.01	0.03	7.0	0.016	
W641968		42.5	880	66.0	10.5	<0.001	<0.01	18.30	4.8	0.5	0.3	221	<0.01	0.03	6.1	0.015	
W641969		29.3	550	44.2	10.0	<0.001	<0.01	2.53	3.4	0.5	0.4	17.4	<0.01	0.03	5.8	0.022	
W641970		36.9	640	166.0	8.8	<0.001	<0.01	4.28	4.8	0.5	0.3	19.3	<0.01	0.02	7.9	0.014	
W641971		33.6	850	26.8	7.0	0.001	0.01	2.87	3.2	0.9	0.3	27.8	<0.01	0.05	4.3	0.008	
W641972		102.5	1250	53.0	7.6	0.001	0.02	13.30	4.9	1.6	0.3	30.8	<0.01	0.07	7.3	<0.005	
W641973		55.1	1730	37.3	6.6	0.001	0.01	10.50	3.7	2.2	0.4	33.6	<0.01	0.07	6.3	0.008	
W641974		39.2	850	37.7	8.6	0.001	<0.01	4.08	4.6	0.6	0.3	22.1	<0.01	0.04	8.4	0.020	
W641975		40.2	690	64.4	7.9	0.001	<0.01	1.93	4.5	0.4	0.4	19.0	<0.01	0.02	7.6	0.016	
W641976		42.9	780	18.4	11.4	<0.001	<0.01	3.28	5.8	0.5	0.2	14.5	<0.01	0.02	9.1	0.016	
W641977		51.9	700	21.9	6.7	<0.001	<0.01	3.19	3.8	0.6	0.4	14.9	<0.01	0.03	5.7	0.008	
W641978		13.0	550	10.9	141.0	<0.001	0.04	1.82	7.7	0.9	1.8	16.5	<0.01	0.04	5.1	0.154	
W641979		50.9	650	24.6	13.0	<0.001	0.01	2.95	4.8	0.7	0.3	16.2	<0.01	0.04	7.9	<0.005	
W641980		45.2	330	17.5	10.2	<0.001	0.01	6.70	4.7	0.7	0.4	18.1	<0.01	0.07	5.8	0.008	
W641981		36.9	680	14.7	8.2	0.001	0.01	2.99	2.7	1.1	0.5	17.8	<0.01	0.05	4.3	0.017	
W641982		42.6	960	17.6	9.1	0.001	0.03	6.54	2.5	2.2	0.3	27.3	<0.01	0.07	4.1	0.005	
W641983		30.8	610	14.8	7.9	0.001	0.01	3.74	2.7	1.2	0.4	14.9	<0.01	0.06	4.4	0.011	
W641984		37.7	570	21.1	6.3	0.001	0.01	5.51	3.0	1.8	0.4	14.1	<0.01	0.08	4.7	0.011	
W641985		30.5	1470	12.7	6.1	<0.001	0.01	3.79	3.2	1.2	0.3	33.3	<0.01	0.05	5.1	0.016	
W641986		28.3	460	12.7	8.2	<0.001	0.01	3.71	3.2	0.7	0.3	13.2	<0.01	0.04	5.9	0.018	
W641987		27.5	610	13.6	7.4	<0.001	<0.01	3.03	3.6	0.9	0.4	15.5	<0.01	0.04	4.6	0.019	
W641988		31.1	580	14.0	9.1	0.001	<0.01	3.62	2.7	1.0	0.4	13.4	<0.01	0.04	5.1	0.016	
W641989		25.9	480	11.6	9.4	<0.001	0.01	3.00	2.9	0.8	0.3	12.6	<0.01	0.04	5.5	0.024	
W641990		95.0	1170	297	5.4	0.001	0.08	49.0	1.1	4.2	1.1	31.5	<0.01	0.27	3.4	0.005	



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Sample Description	Method Analyte Units LOD	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm
		0.02	0.05	1	0.05	0.05	2 0.5
W641951		0.23	0.52	18	<0.05	21.3	38 2.9
W641952		0.18	0.78	23	0.09	19.50	89 2.1
W641953		0.16	0.88	26	0.12	10.55	94 1.9
W641954		0.13	0.84	43	0.22	3.60	92 <0.5
W641955		0.12	0.56	33	0.19	5.50	65 0.9
W641956		0.09	1.25	24	0.18	7.71	129 1.5
W641957		0.09	0.86	25	0.18	11.95	131 2.1
W641958		0.07	0.59	21	0.13	10.20	96 2.1
W641959		0.11	1.40	18	0.09	7.84	76 2.0
W641960		0.23	1.68	24	0.12	15.80	504 3.4
W641961		0.20	2.55	26	0.09	13.10	196 3.6
W641962		0.17	1.98	34	0.27	5.61	59 0.5
W641963		0.16	1.02	35	0.21	7.56	150 1.1
W641964		0.32	1.59	68	0.20	19.55	127 1.4
W641965		NSS	NSS	NSS	NSS	NSS	NSS
W641966		0.17	1.13	39	0.19	8.18	96 1.2
W641967		0.17	1.11	26	0.10	19.50	121 2.4
W641968		0.22	1.18	76	0.05	14.20	150 4.3
W641969		0.15	0.76	27	0.13	6.56	92 1.8
W641970		0.16	0.82	21	0.08	17.00	131 2.2
W641971		0.18	0.95	30	0.11	9.95	124 0.8
W641972		0.45	1.75	28	0.06	17.70	214 3.9
W641973		0.21	1.88	25	0.06	12.90	119 2.1
W641974		0.15	1.10	21	0.09	11.60	88 2.5
W641975		0.12	1.15	23	0.13	11.65	92 2.1
W641976		0.32	0.84	20	0.07	13.85	71 1.9
W641977		0.09	1.20	24	0.16	14.00	142 3.0
W641978		1.27	0.44	47	0.09	4.98	67 6.8
W641979		0.14	1.09	22	0.06	17.35	70 2.5
W641980		0.16	1.09	18	0.07	17.80	86 1.0
W641981		0.12	0.91	42	0.21	5.41	122 3.1
W641982		0.20	1.69	45	0.07	9.96	189 1.5
W641983		0.15	0.98	28	0.15	8.20	118 1.3
W641984		0.15	1.72	28	0.15	9.08	107 1.5
W641985		0.12	1.01	25	0.11	10.05	106 1.8
W641986		0.13	0.67	19	0.09	10.90	78 1.7
W641987		0.15	0.96	29	0.24	13.40	87 0.7
W641988		0.17	1.00	27	0.34	6.59	87 1.8
W641989		0.13	0.76	21	0.13	8.12	58 1.6
W641990		0.13	1.88	37	0.21	9.88	300 1.0



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Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg	AuME-TL44 Au ppm	AuME-TL44 Ag ppm	AuME-TL44 Al %	AuME-TL44 As ppm	AuME-TL44 B ppm	AuME-TL44 Ba ppm	AuME-TL44 Be ppm	AuME-TL44 Bi ppm	AuME-TL44 Ca %	AuME-TL44 Cd ppm	AuME-TL44 Ce ppm	AuME-TL44 Co ppm	AuME-TL44 Cr ppm	AuME-TL44 Cs ppm
W641991		0.56	0.006	0.70	0.89	58.1	10	260	0.55	0.20	0.06	0.53	29.9	12.0	16	1.57
W641992		0.32	0.002	0.17	1.05	34.4	10	280	0.69	0.21	0.14	0.72	33.5	12.2	18	1.13
W641993		0.53	0.003	0.27	1.21	53.9	10	350	0.58	0.21	0.09	0.68	31.2	8.6	18	1.65
W641994		0.46	0.004	1.39	0.57	53.7	10	290	0.39	0.18	0.07	0.24	27.6	3.5	13	5.91
W641995		0.49	0.004	0.33	0.96	74.8	10	190	0.50	0.17	0.06	0.33	28.6	9.1	16	1.52
W641996		0.39	0.004	0.32	1.00	75.7	10	140	0.39	0.23	0.02	0.38	20.3	7.9	17	1.44
W641997		0.49	0.004	0.29	1.27	46.2	10	430	0.60	0.19	0.08	0.44	28.7	9.0	21	1.93
W641998		0.62	0.004	0.32	0.98	61.9	10	460	0.49	0.14	0.17	0.33	24.8	7.0	16	2.35
M895601		0.33	0.002	0.16	1.45	27.8	10	340	0.58	0.23	0.50	0.48	31.8	12.6	22	2.10
M895602		0.27	0.001	0.25	1.29	21.4	10	320	0.52	0.17	0.19	0.27	19.15	8.6	21	1.56
M895603		0.29	0.004	0.18	1.49	22.6	10	300	0.62	0.20	0.08	0.32	33.7	10.8	21	1.22
M895604		0.32	0.006	0.51	0.76	34.0	10	710	0.45	0.19	0.10	0.51	26.6	6.1	15	1.31
M895605		0.32	0.006	1.27	0.57	34.2	10	230	0.43	0.23	0.07	0.58	21.9	8.1	14	1.19
M895606		0.36	0.007	2.24	0.63	36.0	10	230	0.35	0.60	0.36	0.42	22.7	5.8	21	3.88
M895607		0.37	0.003	0.92	0.54	27.1	10	420	0.43	0.16	0.29	0.42	27.9	7.2	13	2.93
M895608		0.30	0.002	0.19	1.19	30.7	10	180	0.43	0.18	0.28	0.17	25.7	7.6	22	2.14
M895609		0.37	0.003	0.42	1.24	29.4	10	250	0.58	0.16	0.71	0.19	26.4	8.9	18	2.48
M895610		0.35	0.001	0.08	1.49	21.6	10	180	0.67	0.26	0.27	0.24	35.4	11.7	23	2.69
M895611		0.19	0.002	0.90	1.66	23.6	10	260	0.73	0.16	1.50	1.29	14.00	8.4	34	4.27
M895612		0.20	0.002	1.60	2.52	24.7	10	720	1.03	0.16	1.42	1.09	12.70	11.1	34	8.46
M895613		0.33	0.005	0.90	1.09	72.7	10	520	0.57	0.19	0.75	1.52	31.7	10.3	15	2.75
M895614		0.48	0.004	0.80	1.97	43.5	10	340	0.67	0.17	1.22	0.77	21.9	9.5	23	3.78
M895615		0.25	0.002	0.62	1.03	23.8	10	330	0.34	0.15	0.63	0.27	20.1	8.9	16	1.51
M895616		0.31	0.003	0.40	1.22	73.9	10	290	0.55	0.20	0.32	0.67	32.0	9.8	26	1.66
M895617		0.25	0.001	0.28	0.80	15.5	10	190	0.42	0.13	0.88	0.45	21.0	7.7	14	1.16
M895618		0.35	0.002	0.23	0.85	12.1	10	240	0.34	0.13	1.09	0.24	22.5	6.9	16	0.66
M895619		0.25	0.004	0.89	1.13	27.0	10	500	0.59	0.21	0.28	1.40	22.4	11.6	27	2.08
M895620		0.32	0.008	0.72	1.21	32.9	10	500	0.60	0.24	0.20	2.66	27.7	13.3	28	2.44
M895621		0.20	0.004	0.79	1.17	25.7	10	240	0.43	0.25	0.12	1.23	21.2	7.4	27	2.29
M895622		0.22	0.011	0.65	1.31	65.2	10	490	0.71	0.24	0.20	1.16	27.0	19.5	28	3.06
M895623		0.33	0.004	0.86	1.36	16.3	10	310	0.63	0.21	0.38	1.16	22.0	13.1	38	2.64
M895624		0.35	0.006	1.00	1.11	22.0	10	690	0.69	0.21	0.65	3.02	24.1	11.5	28	2.80





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Sample Description	Method Analyte Units LOD	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Tl	U	V	W	Y	Zn	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.02	0.05	1	0.05	0.05	2	0.5
W641991		0.21	1.18	30	0.18	6.42	121	1.1
W641992		0.38	1.61	62	0.15	8.15	154	1.6
W641993		0.22	0.98	41	0.12	6.34	141	1.8
W641994		0.24	1.22	16	0.05	6.34	73	1.3
W641995		0.18	0.80	29	0.15	4.98	126	1.6
W641996		0.17	0.63	33	0.14	3.71	127	2.0
W641997		0.16	1.00	33	0.18	5.36	129	1.8
W641998		0.23	0.81	27	0.09	5.74	129	1.3
M895601		0.18	1.06	33	0.12	7.28	122	1.0
M895602		0.12	0.71	39	0.23	4.43	97	1.5
M895603		0.15	1.07	41	0.16	6.16	88	1.7
M895604		0.22	1.08	40	0.14	9.80	124	0.8
M895605		1.46	1.11	42	0.11	6.96	113	1.1
M895606		1.42	1.24	36	0.21	8.72	86	1.1
M895607		0.14	1.33	20	0.15	9.60	143	0.9
M895608		0.14	0.78	31	0.20	5.00	74	<0.5
M895609		0.16	0.79	30	0.14	9.31	72	<0.5
M895610		0.15	0.86	30	0.32	7.56	81	1.2
M895611		0.30	3.57	87	0.30	9.25	322	7.0
M895612		0.55	2.14	67	0.14	7.68	260	3.2
M895613		0.24	1.34	40	0.11	13.25	165	3.7
M895614		0.23	1.78	38	0.11	10.25	135	2.8
M895615		0.16	1.01	33	0.17	6.09	82	<0.5
M895616		0.21	0.89	52	0.22	6.77	148	1.6
M895617		0.10	1.13	25	0.16	7.11	77	0.9
M895618		0.08	1.25	29	0.29	7.91	50	0.9
M895619		0.22	1.26	58	0.14	7.82	136	<0.5
M895620		0.24	1.26	59	0.17	10.90	187	0.7
M895621		0.23	0.85	58	0.21	5.40	126	0.8
M895622		0.30	1.46	64	0.13	8.94	199	1.2
M895623		0.30	1.16	69	0.18	9.14	139	2.6
M895624		0.38	1.38	61	0.17	13.10	203	1.5



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**CERTIFICATE COMMENTS**

**ANALYTICAL COMMENTS**

Applies to Method: NSS is non-sufficient sample.  
ALL METHODS

**LABORATORY ADDRESSES**

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.  
LOG-21 SCR-41 WEI-21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.  
AuME-TL44

**APPENDIX C**  
**Analytical Results**  
**(sample locations, descriptions and geochemistry)**

2019 Goldorak Project - Rock Sample Descriptions and Geochemistry																				
Station	Date	Time	Grid	Datum	Zone	East	North	Elev	m	Sampler	Type	Type2	Structure_Type	Strike-Dip	Lithology	Min1	Min1Per	Min2	Min2Per	Description
W641851	24/Jul/19		UTM	NAD83	8V	521446	6969682			JDP	rock	chip			Siltstone					30 cm chip sample perpendicular to foliation: 5 cm rusty vuggy pods within weakly calcareous siltstone, crosscutting calcite veinlets. Sampled spatially 2 metres above outcrop initially discovered and sampled by La Ligua in 2012 (sample returned 0.99g/t Au)
W641852	24/Jul/19		UTM	NAD83	8V	521543	6969798			JDP	rock	Grab	foliation	125/60S	Shale	PY	0.5			Gossany-lensy-rusty vein parallel to dominant foliation, vuggy, associated with calcite- disseminated pyrite within dark grey-black well foliated shale on outcrop (125/60). Two pictures. Station JPD004.
W641853	24/Jul/19		UTM	NAD83	8V	521550	6970043			JDP	rock	Grab	foliation	160/70S	Limestone	PY	0.1			Outcrop 10*5 m in steep gully. Foliaform rusty vuggy calcite vein-pod within weakly brecciated grey fine grained limestone (160/70) containing trace pyrite. Station JDP005.
W641854	25/Jul/19		UTM	NAD83	8V	521144	6969859			JDP	rock	Grab			Siltstone					Outcrop 2*3 m. Rusty siliciclastic -vuggy, weakly sheared, foliated (phacoidal texture?) siltstone, weakly chortic, showing cross cutting quartz veinlets. No mineralization observed. Fresh rock on outcrop observed 20 m apart consists of dark grey shale, thinly foliated, 10% calcite in matrix and calcite veinlets.
W641855	26/Jul/19	10:19:07 AM	UTM	NAD83	8V	520380	6970285	1232	m	RH/JDP	rock	Grab			Siltstone	py	0.1			mini cliff outcrop 5*10m, grey weathering fine grained siliceous metasiltstone, poorly foliated, X/C by white sucrosic qtz veinlets <= 1-2mm wide with vuggy open spaces and tr fine grained py.
W641856	28/Jul/19		UTM	NAD83	8V	521075	6969844			JDP	rock	Grab			Shale					Quartz vein/fracture filled within rusty, vuggy, fractured to weakly brecciated shale (argillite). Weak chlorite alteration (?) limited in extent. Disrupted outcrop, 4*3 m, showing faulted contact between limy siltstone and shale. No visible mineralization.
W641857	28/Jul/19		UTM	NAD83	8V	521112	6969854			JDP	rock	Grab			Shale	PY	3			0.5*1 m outcrop consisting of shale or black siltstone. Rusty, brecciated, disrupted quartz veined, moderate chlorite alteration (?), medium grained anhedral pyrite.
W641858	28/Jul/19		UTM	NAD83	8V	521174	6969833			JDP	rock	Grab	foliation	120/40S	Shale	PY	2			1*2 m outcrop consisting of black shale (?) -protolith uncertain. Rusty, vuggy, moderately chlorite altered (?), limonite in fracture, quartz fragments, no calcite, within Measurement estimated: 120/42.
W641859	28/Jul/19		UTM	NAD83	8V	520986	6969660			JDP	rock	Grab			Hornfeld	PO	0.5	PY	0.1	Light grey-green (skarny aspect), fine grained to glassy, 5-10% calcite in matrix and fracture, fine grained pyrrhotite and possibly anhedral pyrite trace. Fractured, jointed outcrop. Intrusion mapped at regional scale, interpreted calc-silicate unit related to metamorphic contact.
W641860	29/Jul/19	11:19:14 AM	UTM	NAD83	8V	518608	6969474	1357	m	JDP/RH	rock	grab			Volcaniclastic?	py	1			Angular outcrop - subcrop on ridge top of grey volcaniclastic - volcanic? Possible epiclastic?, Fresh surface has grey green color, glassy, diss py and minor py in fracture.
W641861	28/Jul/19		UTM	NAD83	8V	520995	6969657			JDP	rock	Grab			Hornfeld	PO	2	PY	0.5	Light grey-green (skarny aspect), fine grained to glassy, 5-10 % calcite in matrix and fractures, 1-3 mm quartz veinlets, pyrrhotite-pyrite (?) veinlets. Interpreted calc-silicate unit related to metamorphic contact.
W641862	28/Jul/19		UTM	NAD83	8V	520514	6970089			JDP	rock	Float			Chert	PY	2			Angular float in hand dug pit. Cherty aspect, pyrite in fracture and disseminated pyrite in matrix (syngenetic ?).
W641863	28/Jul/19		UTM	NAD83	8V	520959	6969664			JDP	rock	Grab			Hornfeld	PO	3	PY	0.5	Light green-grey (skarny aspect), calc-silicate unit related to contact metamorphism (?). Crosscutting quartz-pyrite veinlets, calcite in fracture, disseminated fine grained pyrrhotite possibly replacing feldspar (suggested by intrusive rock mapped at a regional scale).
W641901	24/Jul/19	11:13:52 AM	UTM	NAD83	8V	521446	6969682	1200	m	RH	rock	chip	foliation	118/48S	Siltstone	py	0.1			26cm chip across 17cm thick punky boxwork vuggy FeOx horizon. Horizon pinches and swells, sample includes 9 cm of HW and FW of grey limy shale with sparse diss fine grained sulfide (py?). Gossanous horizon composed of striated - columnar boxworked qtz with light brown - limonite and dark brown FeOx filling.

		Au-AA24	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
Station	SAMPLE Number	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm
W641851	W641851	0.042	<0.5	5.39	80	360	0.9	<2	0.79	0.6	8	46	83	15.35	20	1.68	30	1.18	5990	<1	0.01	21
W641852	W641852	0.31	<0.5	1.62	84	60	<0.5	4	4.39	0.7	14	9	73	29.8	10	0.03	10	0.53	5330	<1	0.01	15
W641853	W641853	<0.005	<0.5	0.81	5	290	<0.5	3	14.8	<0.5	<1	31	9	1.15	<10	0.24	10	0.14	304	1	0.01	19
W641854	W641854	0.572	<0.5	3.2	69	50	<0.5	6	0.05	0.6	4	36	112	21.4	10	0.07	20	0.47	1830	<1	0.01	9
W641855	W641855	0.017	<0.5	4.3	<5	7450	1.2	<2	0.09	<0.5	1	101	26	1.96	10	2.09	20	0.55	138	1	0.11	8
W641856	W641856	0.058	<0.5	4.03	809	230	0.5	<2	1.81	<0.5	12	41	127	11.05	10	0.52	50	0.9	483	1	0.04	12
W641857	W641857	0.035	0.5	4.03	5	30	<0.5	3	0.27	<0.5	6	46	185	25.9	10	0.02	30	0.62	2320	1	<0.01	14
W641858	W641858	0.206	<0.5	6.82	4100	570	0.9	<2	0.05	<0.5	12	64	49	11.7	20	1.12	50	1.37	212	<1	0.39	9
W641859	W641859	0.022	<0.5	5.84	34	4400	1.1	<2	7.54	<0.5	10	51	45	3.02	20	1.84	30	2.23	520	<1	0.74	27
W641860	W641860	<0.005	<0.5	9.31	7	1570	1.4	<2	0.85	<0.5	10	29	9	2.91	20	3.36	10	0.95	388	<1	0.72	6
W641861	W641861	0.009	<0.5	5.49	6	2040	1.8	<2	9.32	0.5	11	41	51	3.29	10	0.62	30	2.39	670	2	2.22	22
W641862	W641862	<0.005	<0.5	0.89	15	1030	<0.5	<2	0.52	<0.5	7	29	32	1.09	<10	0.33	<10	0.15	983	1	0.02	16
W641863	W641863	0.165	<0.5	7.56	11	2680	0.8	<2	2.37	<0.5	13	19	235	3.84	20	1.92	10	1.81	669	<1	1.57	10
W641901	W641901	0.606	2	3.63	66	310	0.5	<2	0.44	<0.5	2	35	265	29	10	1.07	30	0.96	2760	1	0.01	18

	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
Station	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Certificate
W641851	680	3	0.11	<5	8	28	<20	0.25	<10	<10	38	<10	89	WH19190840
W641852	90	9	1.07	<5	14	134	<20	0.05	<10	<10	15	<10	9	WH19190840
W641853	1330	<2	0.02	<5	2	382	<20	0.07	<10	<10	28	<10	66	WH19190840
W641854	280	6	0.22	<5	6	3	<20	0.18	<10	<10	38	<10	83	WH19190840
W641855	420	5	0.04	<5	11	84	<20	0.28	<10	<10	95	<10	25	WH19190840
W641856	260	5	0.1	9	7	51	<20	0.18	<10	<10	30	<10	71	WH19190840
W641857	330	10	0.89	<5	7	8	<20	0.21	<10	<10	46	<10	99	WH19190840
W641858	380	4	0.17	10	9	58	<20	0.3	<10	<10	66	<10	95	WH19190840
W641859	530	4	0.02	<5	8	292	<20	0.25	<10	<10	86	<10	90	WH19190840
W641860	420	5	0.03	<5	23	32	<20	0.35	<10	<10	134	<10	51	WH19190840
W641861	660	5	0.07	<5	8	179	<20	0.24	<10	<10	62	<10	108	WH19190840
W641862	140	<2	0.18	5	4	28	<20	0.04	<10	<10	14	<10	46	WH19190840
W641863	280	6	0.39	<5	19	183	<20	0.23	<10	<10	152	<10	73	WH19190840
W641901	580	6	0.17	5	6	33	<20	0.2	<10	<10	31	<10	58	WH19190840

2019 Goldorak Project - Rock Sample Descriptions and Geochemistry																				
Station	Date	Time	Grid	Datum	Zone	East	North	Elev	m	Sampler	Type	Type2	Structure_Type	Strike-Dip	Lithology	Min1	Min1Per	Min2	Min2Per	Description
W641902	24/Jul/19	2:45:22P M	UTM	NAD83	8V	521447	6969805	1202	m	RH	rock	grab	foliation	086/50S	shale					Representative grab from small outcrop of grey shale cross cut by irregular white-granular qtz vein flooding and brx filling (shale clasts). Minor FeOx, shale is non calcareous.
W641903	25/Jul/19		UTM	NAD83	8V	521144	6969859			RH/JDP					Siltstone					Shaley siltstone, rusty-vuggy fractures, disrupted foliation, 10 to 20% coarse quartz (recrystallized?), possible fine grained pyrite. Trace green mica and/or chlorite. Same outcrop as W641854.
W641904	26/Jul/19	3:58:10P M	UTM	NAD83	8V	519473	6971038	1152	m	RH	rock	float			limy siltstone	py	0.1			Small (<1x2m) subcrop of grey limy siltstone- possibly fossiliferous - worm tubes, tr diss fine grained bright pyrite, <1% vuggy limonite FeOx filled voids, rare hairline cross cutting calcite veinlets.
W641905	27/Jul/19	2:17:23P M	UTM	NAD83	8V	518274	6972807	1063	m	RH	rock	float			siltstone	py	2			Float from creek bank of compacted alluvium. 15x10x10cm piece of rusty weathered fractured - weakly qtz veined siltstone. White bleaching around fractures with <5% fine grained diss pyrite.

		Au-AA24	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
Station	SAMPLE Number	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm
W641902	W641902	0.027	<0.5	4.03	46	490	0.9	<2	0.04	<0.5	3	41	21	3.66	10	1.74	20	0.24	282	<1	0.03	1
W641903	W641903	<0.005	<0.5	7	23	650	1.6	<2	3.12	<0.5	14	61	79	7.94	20	2.15	30	0.88	420	1	0.06	30
W641904	W641904	<0.005	<0.5	3.28	17	880	0.8	<2	1.59	<0.5	3	37	5	0.92	10	2.01	10	0.25	112	<1	0.03	10
W641905	W641905	0.012	0.6	4.68	118	2320	1.5	<2	4.34	0.6	9	112	143	1.83	10	2.64	30	2.24	197	4	0.51	86



	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
Station	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Certificate
W641902	320	2	0.05	6	4	18	<20	0.2	<10	<10	35	<10	14	WH19190840
W641903	550	6	0.22	<5	10	105	<20	0.3	<10	<10	66	<10	28	WH19190840
W641904	220	5	0.04	<5	3	74	<20	0.18	<10	<10	135	<10	60	WH19190840
W641905	1310	<2	0.74	<5	17	322	<20	0.29	<10	<10	135	<10	95	WH19190840

2019 Goldorak Project - Soil Sample Descriptions and Geochemistry																
Sample Number	Date	Time	Grid	Datum	Zone	East	North	Elev m	Sampler	Type	Slope	Drainage	Horizon	Depth-cm	Color	Quality
W641951	24/Jul/19	10:52:14AM	UTM	NAD83	8V	521448	6969689	1201	RH	Soil				20	brown	mod
W641952	24/Jul/19	1:57:11PM	UTM	NAD83	8V	521413	6969699	1211	RH	Soil				60	olive brown	good
W641953	24/Jul/19	2:06:43PM	UTM	NAD83	8V	521394	6969648	1210	RH	Soil				70	olive brown	good
W641954	24/Jul/19	2:24:36PM	UTM	NAD83	8V	521438	6969751	1208	RH	Soil				40	olive brown	good
W641955	24/Jul/19	3:02:59PM	UTM	NAD83	8V	521444	6969823	1207	RH	Soil				50	light grey	good
W641956	25/Jul/19	10:11:30AM	UTM	NAD83	8V	521414	6969492	1222	RH	Silt - stream					grey	mod
W641957	25/Jul/19	11:06:43AM	UTM	NAD83	8V	522529	6968997	1204	RH	Silt - stream					grey	poor
W641958	25/Jul/19	12:44:00PM	UTM	NAD83	8V	523696	6969278	1025	RH	Silt - stream					grey brown	good
W641959	25/Jul/19		UTM	NAD83	8V	524074	6969650		JDP	Soil	Steep	Wet	B	30	brown	Poor
W641960	25/Jul/19	4:34:17PM	UTM	NAD83	8V	523404	6969954	960	JDP	Silt - stream					Grey	Good
W641961	25/Jul/19		UTM	NAD83	8V	523403	6969944		JDP	Soil	Steep	Dry	B	40	grey	Poor
W641962	25/Jul/19		UTM	NAD83	8V	523273	6970184		JDP	Soil	Moderate	Dry	B	60	grey	Medium
W641963	26/Jul/19	3:24:35PM	UTM	NAD83	8V	519223	6971043	1112	RH	Silt - stream					grey brown	good
W641964	27/Jul/19		UTM	NAD83	8V	518313	6972965			Soil				60	brown	mod
W641965	27/Jul/19	2:08:20PM	UTM	NAD83	8V	518281	6972814	1083	RH	Silt - stream					brown	good
W641966	28/Jul/19	1:16:31PM	UTM	NAD83	8V	521840	6969558	1235	RH	Soil				50	olive brown	good
W641967	28/Jul/19	1:32:15PM	UTM	NAD83	8V	521779	6969542	1233	RH	Soil				50	brown	good
W641968	28/Jul/19	1:46:42PM	UTM	NAD83	8V	521780	6969470	1246	RH	Soil			C	50	grey	good
W641969	28/Jul/19	2:06:11PM	UTM	NAD83	8V	521692	6969443	1249	RH	Soil				50	grey	good
W641970	28/Jul/19	2:20:59PM	UTM	NAD83	8V	521613	6969378	1251	RH	Soil				50	olive brown	good
W641971	28/Jul/19	2:52:13PM	UTM	NAD83	8V	521479	6969332	1232	RH	Soil				70	brown	poor
W641972	28/Jul/19	3:06:48PM	UTM	NAD83	8V	521446	6969270	1231	RH	Soil				80	brown	poor
W641973	28/Jul/19	3:36:28PM	UTM	NAD83	8V	521377	6969388	1225	RH	Soil			C	75	grey brown	good
W641974	28/Jul/19	3:52:59PM	UTM	NAD83	8V	521317	6969469	1228	RH	Soil			C	50	grey brown	good
W641975	28/Jul/19	4:07:53PM	UTM	NAD83	8V	521234	6969535	1233	RH	Soil			C	60	light brown	good

Sample Number	Description	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	
W641951	Located 3 m below limy shale outcrop with Fe-oxide horizon, loamy light brown soil, grey limy shale scree.	0.079	1.11	2.29	102.50	10.00	240.00	0.94	0.19	0.94	0.19	22.10	22.80	19.00	27.30	277.00	
W641952	silty - clay with grey shale pebbles, 3% rusty limonite specks. Non calc.	0.003	0.35	1.52	42.50	10.00	420.00	0.75	0.21	0.34	0.42	43.50	11.70	19.00	3.39	34.60	
W641953	silty - clay with grey shale pebbles, 3% rusty limonite specks. Non calc.	0.003	0.45	1.69	37.00	10.00	270.00	0.73	0.30	0.47	0.58	34.80	12.10	21.00	3.45	26.30	
W641954	silty - clay with grey shale pebbles, 3% rusty limonite specks. Non calc.	0.001	0.07	1.30	22.70	10.00	210.00	0.34	0.33	0.22	0.20	26.40	15.10	22.00	2.21	14.10	
W641955	shaley, non calc, 5% rusty specks	0.001	0.07	1.47	14.10	10.00	170.00	0.43	0.25	0.34	0.24	38.30	13.60	21.00	3.44	16.20	
W641956	<1m x 0.1 m deep creek, sandy silt, Small pieces <5cm float of grey - black shale, qtz siltstone	0.001	0.20	0.96	27.60	10.00	240.00	0.36	0.10	0.65	1.06	24.60	9.40	13.00	1.84	23.60	
W641957	0.4m and 0.3 m deep creek, grey mud and shale pebbles, big rounded boulders.	0.003	0.36	0.97	14.80	20.00	370.00	0.50	0.17	1.13	0.97	29.20	8.30	17.00	2.08	26.80	
W641958	silt, shaley, 25x10 cm boulder float of siltstone, lst, minor chert pebble conglomerate.	0.004	0.28	0.87	37.10	20.00	260.00	0.58	0.18	1.37	0.73	26.00	23.20	15.00	3.47	86.10	
W641959	Gravelly-silt, mixed with organic material. Moss covered-North facing slope, frozen soil. Sandy silt. Narrow gully, steep on both side.	0.004	0.96	0.58	25.10	10.00	760.00	0.39	0.17	0.51	0.28	20.60	7.80	11.00	1.82	37.70	
W641960	Outcrop consists of black shale. Sample taken on line 102E.	0.008	1.22	0.83	56.30	20.00	590.00	0.70	0.19	1.98	2.40	27.20	26.00	15.00	4.06	69.10	
W641961	Grey, sandy, 20% pebble and slate chips. Moss covered.	0.008	1.91	0.80	49.50	20.00	1060.00	0.90	0.24	0.62	0.70	35.70	8.90	21.00	2.97	96.50	
W641962	Sandy-clay containing 10% angular shale chips. Intersection between Baseline and 100E.	0.007	1.88	1.05	22.30	10.00	180.00	0.37	0.23	0.25	0.22	24.40	6.50	21.00	2.05	21.60	
W641963	small gully with alders, overbank deposit - pool. Silty -sandy sample, shale - siltstone pebbles.	0.004	0.53	0.86	47.10	10.00	360.00	0.39	0.17	0.54	0.84	21.20	7.00	17.00	2.18	25.60	
W641964	Sandy -pebble-silty soil, rounded metamorphic and QFBio porphyry pebbles (glacial?).	0.004	0.84	1.31	20.30	10.00	460.00	0.74	0.22	0.37	0.96	27.00	8.10	36.00	2.31	56.90	
W641965	bar sample, silt, grey shale - siltstone, white light grey brx chert with qtz veining and filling - 1-2% fine grained diss py. Few pieces biot granodiorite.	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	
W641966	sandy silt, rounded metamorphic pebbles, looks glacial	0.003	0.14	1.28	24.30	10.00	380.00	0.58	0.22	0.20	0.63	34.30	12.70	23.00	2.29	31.00	
W641967	sandy silt, angular grey shale frags, rare rounded pebbles, minor specks FeOx	0.004	0.36	1.96	81.40	10.00	320.00	1.04	0.31	0.25	1.42	68.40	16.90	26.00	4.99	35.90	
W641968	C horizon, limy calc shale, minor rounded metamorphic pebbles	0.002	0.65	1.90	117.00	10.00	170.00	0.74	0.18	5.12	1.81	25.90	16.50	19.00	5.77	43.70	
W641969	sandy silt, some rounded pebbles, mostly meta siltstone - fairly angular.	0.002	0.18	1.78	52.80	10.00	190.00	0.58	0.21	0.22	0.43	36.20	13.90	22.00	3.69	20.80	
W641970	sandy silt, some rounded pebbles, mostly meta siltstone - fairly angular. Frozen ground	0.003	0.90	1.65	205.00	10.00	190.00	0.78	0.23	0.31	1.13	44.40	14.60	20.00	4.97	33.30	
W641971	alluvial material, rounded pebbles including qtz, grey shale,	0.003	0.35	0.95	36.60	10.00	340.00	0.51	0.20	0.30	1.05	32.80	12.70	14.00	1.37	38.00	
W641972	alluvial material, rounded pebbles including qtz, grey shale, rusty specks	0.002	0.80	1.21	98.80	10.00	350.00	0.79	0.49	0.37	1.88	41.20	24.30	18.00	6.79	136.50	
W641973	sandy silt with few rounded shale frags, possible C horiz <5% rusty specks.	0.004	0.45	1.35	45.70	20.00	220.00	0.97	0.34	0.41	0.86	50.60	17.10	20.00	6.01	90.70	
W641974	sandy silt - clay with few rounded shale frags, possible C horiz <5% rusty specks.	0.003	0.18	1.71	65.00	10.00	280.00	0.85	0.29	0.32	0.47	49.00	13.80	21.00	4.31	37.30	
W641975	silt - clay with lots shale frags, possible C horiz	0.001	0.32	1.74	25.10	10.00	220.00	0.81	0.15	0.29	0.81	32.00	14.90	26.00	4.83	30.20	

Sample Number	AuME-TL44 Fe %	AuME-TL44 Ga ppm	AuME-TL44 Ge ppm	AuME-TL44 Hf ppm	AuME-TL44 Hg ppm	AuME-TL44 In ppm	AuME-TL44 K %	AuME-TL44 La ppm	AuME-TL44 Li ppm	AuME-TL44 Mg %	AuME-TL44 Mn ppm	AuME-TL44 Mo ppm	AuME-TL44 Na %	AuME-TL44 Nb ppm	AuME-TL44 Ni ppm	AuME-TL44 P ppm	AuME-TL44 Pb ppm	AuME-TL44 Rb ppm	AuME-TL44 Re ppm
W641951	7.32	6.02	0.05	0.07	0.04	0.30	0.25	11.50	38.70	1.19	5000.00	0.78	0.01	0.54	34.00	600.00	9.60	28.60	<0.001
W641952	3.28	4.15	0.07	0.04	0.05	0.04	0.09	27.40	33.90	0.90	676.00	1.72	<0.01	0.15	35.30	1010.00	18.70	9.60	<0.001
W641953	3.50	4.58	0.05	0.05	0.04	0.04	0.07	17.50	30.70	1.03	630.00	1.63	0.01	0.38	36.70	960.00	23.10	9.80	<0.001
W641954	2.94	5.04	<0.05	<0.02	0.02	0.03	0.05	13.40	21.30	0.46	475.00	2.40	<0.01	0.44	17.30	690.00	16.70	13.60	<0.001
W641955	2.74	5.28	<0.05	0.02	0.02	0.02	0.07	18.90	25.90	0.89	498.00	1.22	<0.01	0.41	23.70	480.00	10.20	9.60	<0.001
W641956	2.20	2.96	<0.05	0.04	0.07	0.02	0.04	13.10	18.20	0.60	253.00	1.48	<0.01	0.20	28.60	1220.00	16.20	5.80	0.00
W641957	2.34	2.86	0.05	0.06	0.13	0.03	0.05	14.80	13.90	0.48	815.00	1.62	0.01	0.37	25.00	1100.00	14.80	6.30	0.01
W641958	2.77	2.62	<0.05	0.06	0.08	0.04	0.05	14.00	13.90	0.41	560.00	1.25	0.01	0.36	26.50	810.00	20.60	6.00	<0.001
W641959	1.75	1.63	<0.05	0.06	0.10	0.03	0.04	11.40	7.90	0.08	611.00	3.38	0.01	0.24	26.30	700.00	11.30	5.20	0.00
W641960	6.38	2.09	0.06	0.09	0.11	0.05	0.05	16.00	12.80	0.33	1080.00	3.24	<0.01	0.31	100.50	1150.00	20.20	5.90	0.00
W641961	3.62	2.01	0.07	0.07	0.12	0.06	0.09	23.00	18.80	0.19	367.00	5.23	<0.01	0.11	69.40	1360.00	19.80	6.20	0.00
W641962	2.02	3.57	<0.05	<0.02	0.08	0.02	0.04	12.70	25.50	0.34	144.00	2.70	<0.01	0.65	20.50	700.00	14.40	7.00	0.00
W641963	2.04	2.69	<0.05	0.03	0.06	0.04	0.05	11.10	15.80	0.29	703.00	2.25	0.01	0.57	25.80	830.00	26.60	9.40	0.00
W641964	2.18	4.77	0.06	0.03	0.13	0.03	0.09	15.10	27.80	0.89	343.00	5.78	0.01	0.37	41.30	760.00	11.30	11.80	0.00
W641965	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
W641966	2.79	3.56	<0.05	0.04	0.05	0.03	0.05	14.60	12.20	0.43	475.00	1.92	<0.01	0.48	35.30	670.00	13.40	8.00	0.00
W641967	4.03	4.65	0.08	0.08	0.05	0.07	0.09	27.60	27.80	0.92	1110.00	1.43	<0.01	0.34	43.60	980.00	82.00	12.40	<0.001
W641968	2.74	5.23	0.05	0.06	0.05	0.07	0.09	12.60	30.40	2.24	512.00	3.92	<0.01	0.05	42.50	880.00	66.00	10.50	<0.001
W641969	3.26	4.70	0.05	0.05	0.03	0.04	0.07	15.90	25.70	1.16	691.00	1.41	<0.01	0.28	29.30	550.00	44.20	10.00	<0.001
W641970	3.53	4.56	0.06	0.05	0.05	0.15	0.08	21.70	28.40	1.29	483.00	1.30	<0.01	0.12	36.90	640.00	166.00	8.80	<0.001
W641971	2.49	2.73	0.05	0.02	0.08	0.03	0.06	14.80	13.10	0.47	530.00	2.73	<0.01	0.18	33.60	850.00	26.80	7.00	0.00
W641972	5.33	3.44	0.07	0.05	0.15	0.07	0.08	20.50	20.00	0.83	657.00	6.28	<0.01	<0.05	102.50	1250.00	53.00	7.60	0.00
W641973	4.68	3.84	0.08	0.05	0.04	0.05	0.07	24.00	22.20	0.92	865.00	4.90	<0.01	0.14	55.10	1730.00	37.30	6.60	0.00
W641974	3.92	4.89	0.08	0.05	0.03	0.04	0.07	23.50	30.70	1.21	795.00	1.55	<0.01	0.13	39.20	850.00	37.70	8.60	0.00
W641975	3.71	4.95	0.05	0.06	0.03	0.03	0.07	15.20	32.00	1.21	554.00	1.26	<0.01	0.15	40.20	690.00	64.40	7.90	0.00

Sample Number	AuME-TL44 S %	AuME-TL44 Sb ppm	AuME-TL44 Sc ppm	AuME-TL44 Se ppm	AuME-TL44 Sn ppm	AuME-TL44 Sr ppm	AuME-TL44 Ta ppm	AuME-TL44 Te ppm	AuME-TL44 Th ppm	AuME-TL44 Ti %	AuME-TL44 Tl ppm	AuME-TL44 U ppm	AuME-TL44 V ppm	AuME-TL44 W ppm	AuME-TL44 Y ppm	AuME-TL44 Zn ppm	AuME-TL44 Zr ppm	Certificate
W641951	0.07	4.55	5.00	0.60	0.70	67.20	<0.01	0.02	7.10	0.05	0.23	0.52	18.00	<0.05	21.30	38.00	2.90	WH19190833
W641952	0.01	5.56	4.70	0.80	0.30	26.40	<0.01	0.04	7.70	0.02	0.18	0.78	23.00	0.09	19.50	89.00	2.10	WH19190833
W641953	0.01	3.99	3.40	0.90	0.40	31.80	<0.01	0.03	5.10	0.02	0.16	0.88	26.00	0.12	10.55	94.00	1.90	WH19190833
W641954	0.01	2.03	1.40	0.50	0.50	17.30	<0.01	0.05	1.30	0.01	0.13	0.84	43.00	0.22	3.60	92.00	<0.5	WH19190833
W641955	0.01	1.88	2.30	0.20	0.40	20.90	<0.01	0.02	4.00	0.02	0.12	0.56	33.00	0.19	5.50	65.00	0.90	WH19190833
W641956	0.06	2.30	1.60	0.90	0.20	40.90	<0.01	0.02	2.90	0.01	0.09	1.25	24.00	0.18	7.71	129.00	1.50	WH19190833
W641957	0.06	2.56	2.40	2.20	0.40	54.20	<0.01	0.04	2.10	0.01	0.09	0.86	25.00	0.18	11.95	131.00	2.10	WH19190833
W641958	0.05	3.48	2.20	1.30	0.40	71.60	<0.01	0.02	2.20	0.01	0.07	0.59	21.00	0.13	10.20	96.00	2.10	WH19190833
W641959	0.05	3.90	1.50	3.10	0.30	43.00	<0.01	0.07	1.20	<0.005	0.11	1.40	18.00	0.09	7.84	76.00	2.00	WH19190833
W641960	0.20	5.49	2.30	5.60	0.40	112.00	<0.01	0.08	2.70	0.01	0.23	1.68	24.00	0.12	15.80	504.00	3.40	WH19190833
W641961	0.12	8.58	2.80	4.70	0.30	130.00	<0.01	0.10	4.30	<0.005	0.20	2.55	26.00	0.09	13.10	196.00	3.60	WH19190833
W641962	0.01	3.91	1.70	2.20	0.50	20.70	<0.01	0.05	2.10	0.01	0.17	1.98	34.00	0.27	5.61	59.00	0.50	WH19190833
W641963	0.03	3.55	1.50	1.90	0.40	37.30	<0.01	0.04	1.50	0.02	0.16	1.02	35.00	0.21	7.56	150.00	1.10	WH19190833
W641964	0.02	3.42	5.80	2.70	0.50	33.40	<0.01	0.07	3.50	0.03	0.32	1.59	68.00	0.20	19.55	127.00	1.40	WH19190833
W641965	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	WH19190833
W641966	<0.01	2.30	3.50	0.70	0.50	19.50	<0.01	0.06	3.90	0.02	0.17	1.13	39.00	0.19	8.18	96.00	1.20	WH19190833
W641967	<0.01	3.78	4.80	0.70	0.50	23.00	<0.01	0.03	7.00	0.02	0.17	1.11	26.00	0.10	19.50	121.00	2.40	WH19190833
W641968	<0.01	18.30	4.80	0.50	0.30	221.00	<0.01	0.03	6.10	0.02	0.22	1.18	76.00	0.05	14.20	150.00	4.30	WH19190833
W641969	<0.01	2.53	3.40	0.50	0.40	17.40	<0.01	0.03	5.80	0.02	0.15	0.76	27.00	0.13	6.56	92.00	1.80	WH19190833
W641970	<0.01	4.28	4.80	0.50	0.30	19.30	<0.01	0.02	7.90	0.01	0.16	0.82	21.00	0.08	17.00	131.00	2.20	WH19190833
W641971	0.01	2.87	3.20	0.90	0.30	27.80	<0.01	0.05	4.30	0.01	0.18	0.95	30.00	0.11	9.95	124.00	0.80	WH19190833
W641972	0.02	13.30	4.90	1.60	0.30	30.80	<0.01	0.07	7.30	<0.005	0.45	1.75	28.00	0.06	17.70	214.00	3.90	WH19190833
W641973	0.01	10.50	3.70	2.20	0.40	33.60	<0.01	0.07	6.30	0.01	0.21	1.88	25.00	0.06	12.90	119.00	2.10	WH19190833
W641974	<0.01	4.08	4.60	0.60	0.30	22.10	<0.01	0.04	8.40	0.02	0.15	1.10	21.00	0.09	11.60	88.00	2.50	WH19190833
W641975	<0.01	1.93	4.50	0.40	0.40	19.00	<0.01	0.02	7.60	0.02	0.12	1.15	23.00	0.13	11.65	92.00	2.10	WH19190833

2019 Goldorak Project - Soil Sample Descriptions and Geochemistry																
Sample Number	Date	Time	Grid	Datum	Zone	East	North	Elev m	Sampler	Type	Slope	Drainage	Horizon	Depth-cm	Color	Quality
W641976	28/Jul/19	4:25:34PM	UTM	NAD83	8V	521196	6969589	1235	RH	Soil			C	50	mod brown	good
W641977	28/Jul/19	4:42:45PM	UTM	NAD83	8V	521190	6969663	1228	RH	Soil			C	40	brown	good
W641978	28/Jul/19	4:53:39PM	UTM	NAD83	8V	521177	6969738	1224	RH	Soil				40	brown	good
W641979	28/Jul/19	5:15:56PM	UTM	NAD83	8V	521175	6969834	1221	RH	Soil			C	50	brown	good
W641980	28/Jul/19	5:33:30PM	UTM	NAD83	8V	521149	6969914	1209	RH	Soil				30	brown	good
W641981	29/Jul/19	11:19:14AM	UTM	NAD83	8V	518608	6969474	1357	RH	Soil				25	tan	poor
W641982	29/Jul/19	11:49:33AM	UTM	NAD83	8V	518703	6969532	1362	RH	Soil			C	40	olive-green-grey	good
W641983	29/Jul/19	11:58:26AM	UTM	NAD83	8V	518774	6969609	1353	RH	Soil				40	brown	moderate
W641984	29/Jul/19	12:09:58PM	UTM	NAD83	8V	518861	6969657	1343	RH	Soil				50	brown	moderate
W641985	29/Jul/19	12:17:25PM	UTM	NAD83	8V	518957	6969715	1338	RH	Soil				60	light brown	moderate
W641986	29/Jul/19	12:50:59PM	UTM	NAD83	8V	519018	6969804	1318	RH	Soil				50	tan- green	poor
W641987	29/Jul/19	1:04:35PM	UTM	NAD83	8V	519091	6969884	1316	RH	Soil				80	light brown	moderate
W641988	29/Jul/19	1:12:52PM	UTM	NAD83	8V	519124	6969990	1314	RH	Soil				40	medium brown	moderate
W641989	29/Jul/19	1:23:21PM	UTM	NAD83	8V	519191	6970075	1312	RH	Soil				30	green brown	moderate
W641990	29/Jul/19	2:04:11PM	UTM	NAD83	8V	520070	6970649	1271	RH	Soil			C	100	brown-grey	good
W641991	29/Jul/19	2:17:45PM	UTM	NAD83	8V	520038	6970547	1257	RH	Soil				25	light brown	poor
W641992	29/Jul/19	2:34:29PM	UTM	NAD83	8V	520141	6970714	1268	RH	Soil				60	brown	poor
W641993	29/Jul/19	2:49:33PM	UTM	NAD83	8V	520192	6970737	1273	RH	Soil				50	brown	mod
W641994	29/Jul/19		UTM	NAD83	8V	520307	6970694		JDP	Soil	Moderate	Dry	C	60	Dark grey	Good
W641995	29/Jul/19	3:27:05PM	UTM	NAD83	8V	520477	6970627	1265	RH	Soil				50	brown	poor
W641996	29/Jul/19	3:42:23PM	UTM	NAD83	8V	520430	6970504	1260	RH	Soil				40	brown	moderate
W641997	29/Jul/19	3:54:19PM	UTM	NAD83	8V	520412	6970435	1256	RH	Soil				40	brown	poor
W641998	29/Jul/19	4:19:20PM	UTM	NAD83	8V	520355	6970267	1220	RH	Soil				30	brown	poor
M895601	2019/07/24		UTM	NAD83	8V	521415	6969920		JDP	Soil	Steep	Dry	B	30	Brown-orange	Good
M895602	2019/07/24		UTM	NAD83	8V	521471	6969987		JDP	Soil	Steep	Dry	C	30	Grey	Poor
M895603	24/Jul/19	5:08:12PM	User	Waypoint	8V	521549	6970069	1183	JDP/RH	Soil				50	brown	mod
M895604	2019/07/25		UTM	NAD83	8V	524095	6969708		JDP	Soil	Steep	Dry	B	60	Light brown	Medium
M895605	2019/07/25		UTM	NAD83	8V	524130	6969784		JDP	Soil	Steep	Dry	B	40	Light brown	Good
M895606	2019/07/25		UTM	NAD83	8V	523833	6996998		JDP	Soil	Moderate	Dry	C	80	Dark grey	Good
M895607	2019/07/25		UTM	NAD83	8V	523654	6970056		JDP	Soil	Moderate	Dry	C	60	Dark grey	Good

Sample Number	Description	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm
W641976	silt - clay with lots shale frags, possible C horiz, up to 10% rusty specks.	0.002	0.12	1.48	40.10	10.00	180.00	1.00	0.18	0.24	0.20	34.90	19.30	19.00	7.63	38.10
W641977	silt - clay with lots shale frags, possible C horiz, 5% rusty specks, angular non calc shale	0.002	0.04	1.53	16.70	10.00	210.00	1.42	0.20	0.17	0.66	50.60	21.70	23.00	6.03	32.50
W641978	silt - clay with lots shale frags, possible alluvial component, non calc.	0.010	0.09	4.58	98.70	10.00	370.00	0.86	0.42	0.04	0.13	8.55	16.70	40.00	35.20	34.40
W641979	silt - clay with lots shale frags, possible C horiz, 5%rusty specks, grey shale fragments,	0.002	0.11	2.29	24.70	10.00	280.00	1.67	0.30	0.19	0.41	62.90	24.60	25.00	4.98	40.80
W641980	shaley sandy silt soil, some rusty specks.	0.003	0.16	0.97	18.20	10.00	270.00	0.93	0.24	0.32	0.25	55.40	14.60	16.00	3.64	60.60
W641981	ash rich sandy silt, few rounded pebbles, shale	0.002	0.06	1.61	52.80	10.00	170.00	0.69	0.32	0.15	0.63	28.90	12.10	22.00	1.35	34.20
W641982	sandy - silt, shale frags, some limonite specks	0.003	0.23	1.31	51.70	10.00	280.00	0.83	0.21	0.18	0.59	36.70	9.20	17.00	1.68	69.50
W641983	transported soil, rounded pebbles, silty.	0.004	0.17	1.11	52.40	10.00	320.00	0.65	0.32	0.11	0.56	37.10	10.70	16.00	1.33	42.70
W641984	angular shale fragments, sandy silt	0.003	0.15	1.01	43.10	10.00	570.00	0.92	0.22	0.10	0.60	37.80	10.20	17.00	1.14	44.00
W641985	silty soil, grey shale frags	0.004	0.30	1.01	39.70	10.00	390.00	0.62	0.20	0.34	0.43	30.40	9.00	16.00	1.19	52.90
W641986	silty, ash rich, shale frags, rounded pebbles,	0.004	0.17	1.25	49.30	10.00	350.00	0.72	0.20	0.19	0.31	34.10	10.00	17.00	1.74	37.60
W641987	silty, angular shale fragments,	0.003	0.19	1.16	38.40	10.00	320.00	0.71	0.30	0.16	0.34	38.80	10.50	18.00	1.41	36.70
W641988	mixed angular - rounded shale pebbles, sandy - silt, minor rusty specks	0.004	0.08	1.36	45.70	10.00	200.00	0.81	0.50	0.09	0.41	35.60	13.40	18.00	1.77	35.50
W641989	silty, 20% angular shale fragments, some rounded pebbles.	0.004	0.13	1.37	56.60	10.00	230.00	0.68	0.20	0.15	0.19	41.30	11.50	18.00	1.71	32.30
W641990	top 80 cm is ash, sandy soil, few shale pebbles	0.006	3.12	0.70	41.70	10.00	120.00	0.56	0.27	0.08	0.18	33.90	8.60	12.00	1.70	54.30
W641991	all rounded pebbles, sandy silt	0.006	0.70	0.89	58.10	10.00	260.00	0.55	0.20	0.06	0.53	29.90	12.00	16.00	1.57	43.70
W641992	sandy - silt, mixed rounded pebbles, likely outwash.	0.002	0.17	1.05	34.40	10.00	280.00	0.69	0.21	0.14	0.72	33.50	12.20	18.00	1.13	39.10
W641993	mixed rounded - angular pebbles, some red brown stained soil, dark grey angular shale,	0.003	0.27	1.21	53.90	10.00	350.00	0.58	0.21	0.09	0.68	31.20	8.60	18.00	1.65	29.40
W641994	Sandy, decomposed black shale. Subrounded pebble on the top of the soil profile.	0.004	1.39	0.57	53.70	10.00	290.00	0.39	0.18	0.07	0.24	27.60	3.50	13.00	5.91	27.20
W641995	mixed rounded and angular shale pebbles, sandy silt soil	0.004	0.33	0.96	74.80	10.00	190.00	0.50	0.17	0.06	0.33	28.60	9.10	16.00	1.52	26.70
W641996	silty soil, angular black shale pebbles, some rounded	0.004	0.32	1.00	75.70	10.00	140.00	0.39	0.23	0.02	0.38	20.30	7.90	17.00	1.44	32.00
W641997	silty clay soil, mixed rounded - angular pebbles	0.004	0.29	1.27	46.20	10.00	430.00	0.60	0.19	0.08	0.44	28.70	9.00	21.00	1.93	35.70
W641998	mixed angular - rounded shale pebbles, sandy - silt	0.004	0.32	0.98	61.90	10.00	460.00	0.49	0.14	0.17	0.33	24.80	7.00	16.00	2.35	36.90
M895601	Silty-sand.	0.002	0.16	1.45	27.80	10.00	340.00	0.58	0.23	0.50	0.48	31.80	12.60	22.00	2.10	24.30
M895602	Mixed with organic material, gravelly-silty. Proximity of shale outcrop.	0.001	0.25	1.29	21.40	10.00	320.00	0.52	0.17	0.19	0.27	19.15	8.60	21.00	1.56	24.50
M895603	looks till like, rounded grey pebbles of grey siliceous meta sed. Clay rich, nearby o/c of grey brx lst with cal veinlets and tr fine grained py.	0.004	0.18	1.49	22.60	10.00	300.00	0.62	0.20	0.08	0.32	33.70	10.80	21.00	1.22	31.80
M895604	Mixed with ash. Sandy silt. Moss covered. Edge of gully.	0.006	0.51	0.76	34.00	10.00	710.00	0.45	0.19	0.10	0.51	26.60	6.10	15.00	1.31	42.50
M895605	Silty-sand containing angular shale fragments. Tree area.	0.006	1.27	0.57	34.20	10.00	230.00	0.43	0.23	0.07	0.58	21.90	8.10	14.00	1.19	39.60
M895606	Sand, rusty speck, angular black shale frangement (20%). Moss covered. Intersection between Baseline and 106E.	0.007	2.24	0.63	36.00	10.00	230.00	0.35	0.60	0.36	0.42	22.70	5.80	21.00	3.88	23.80
M895607	Black, sandy, 10-20% subrounded shale pebble. Moss covered. Intersection between Baseline and 104E.	0.003	0.92	0.54	27.10	10.00	420.00	0.43	0.16	0.29	0.42	27.90	7.20	13.00	2.93	31.00

Sample Number	AuME-TL44 Fe %	AuME-TL44 Ga ppm	AuME-TL44 Ge ppm	AuME-TL44 Hf ppm	AuME-TL44 Hg ppm	AuME-TL44 In ppm	AuME-TL44 K %	AuME-TL44 La ppm	AuME-TL44 Li ppm	AuME-TL44 Mg %	AuME-TL44 Mn ppm	AuME-TL44 Mo ppm	AuME-TL44 Na %	AuME-TL44 Nb ppm	AuME-TL44 Ni ppm	AuME-TL44 P ppm	AuME-TL44 Pb ppm	AuME-TL44 Rb ppm	AuME-TL44 Re ppm
W641976	4.67	4.08	0.06	0.04	0.04	0.07	0.10	15.10	28.00	0.90	800.00	1.41	<0.01	0.10	42.90	780.00	18.40	11.40	<0.001
W641977	3.99	3.28	0.05	0.10	0.04	0.05	0.04	16.70	16.00	0.37	1490.00	1.29	<0.01	0.36	51.90	700.00	21.90	6.70	<0.001
W641978	18.65	14.95	0.10	0.16	0.02	0.25	1.36	3.20	63.30	0.86	4690.00	0.99	<0.01	1.62	13.00	550.00	10.90	141.00	<0.001
W641979	4.99	4.99	0.07	0.08	0.03	0.05	0.06	24.30	45.50	0.97	800.00	1.44	<0.01	0.18	50.90	650.00	24.60	13.00	<0.001
W641980	3.44	2.78	0.07	0.02	0.07	0.04	0.08	25.40	20.00	0.38	724.00	2.06	<0.01	0.13	45.20	330.00	17.50	10.20	<0.001
W641981	2.61	4.13	<0.05	0.09	0.03	0.04	0.05	12.10	17.30	0.51	525.00	3.37	<0.01	0.64	36.90	680.00	14.70	8.20	0.00
W641982	2.85	3.37	0.05	0.04	0.06	0.04	0.07	18.20	18.30	0.57	341.00	6.31	<0.01	0.14	42.60	960.00	17.60	9.10	0.00
W641983	2.51	3.03	<0.05	0.03	0.06	0.03	0.06	16.50	14.60	0.47	471.00	2.53	<0.01	0.22	30.80	610.00	14.80	7.90	0.00
W641984	2.64	2.67	0.05	0.04	0.06	0.03	0.05	17.70	12.90	0.37	367.00	9.32	0.01	0.25	37.70	570.00	21.10	6.30	0.00
W641985	2.51	3.09	0.05	0.03	0.08	0.03	0.06	14.80	14.30	0.57	468.00	2.32	<0.01	0.18	30.50	1470.00	12.70	6.10	<0.001
W641986	2.71	3.71	0.05	0.03	0.03	0.03	0.07	16.40	18.60	0.74	515.00	1.38	<0.01	0.16	28.30	460.00	12.70	8.20	<0.001
W641987	2.59	3.71	0.05	0.02	0.05	0.03	0.06	18.40	15.00	0.57	506.00	1.73	<0.01	0.26	27.50	610.00	13.60	7.40	<0.001
W641988	3.00	3.52	<0.05	0.05	0.04	0.04	0.07	14.20	15.30	0.60	1140.00	2.05	<0.01	0.33	31.10	580.00	14.00	9.10	0.00
W641989	2.80	3.95	0.06	0.04	0.03	0.03	0.07	18.50	17.70	0.82	671.00	1.41	<0.01	0.28	25.90	480.00	11.60	9.40	<0.001
W641990	4.33	1.52	0.08	0.02	0.03	0.10	0.05	22.20	9.30	0.12	440.00	5.76	<0.01	0.35	95.00	1170.00	297.00	5.40	0.00
W641991	2.59	2.44	<0.05	0.03	0.04	0.04	0.06	12.70	12.20	0.24	548.00	2.47	<0.01	0.23	30.70	610.00	58.30	8.70	0.00
W641992	2.83	2.81	0.05	0.05	0.08	0.03	0.07	13.90	9.50	0.24	516.00	9.02	<0.01	0.31	44.00	890.00	17.20	8.80	0.00
W641993	2.80	2.72	<0.05	0.05	0.05	0.04	0.06	13.40	14.80	0.23	438.00	3.76	<0.01	0.25	28.00	690.00	21.80	8.80	0.00
W641994	2.05	1.49	0.05	0.02	0.04	0.03	0.10	14.30	15.10	0.24	267.00	2.40	<0.01	0.08	16.10	630.00	26.30	11.40	0.00
W641995	2.23	2.16	<0.05	0.05	0.03	0.04	0.05	12.90	10.40	0.19	544.00	1.93	<0.01	0.25	26.10	650.00	39.10	7.60	<0.001
W641996	2.91	2.70	<0.05	0.05	0.02	0.05	0.05	9.70	12.00	0.14	629.00	2.92	<0.01	0.37	23.00	610.00	29.90	7.00	<0.001
W641997	2.51	3.11	<0.05	0.06	0.03	0.04	0.06	12.30	15.60	0.32	442.00	2.10	<0.01	0.34	27.70	560.00	17.50	6.90	<0.001
W641998	2.29	2.25	<0.05	0.04	0.03	0.03	0.08	12.20	13.20	0.22	338.00	2.88	0.01	0.24	29.70	750.00	35.80	9.50	<0.001
M895601	3.25	4.33	<0.05	0.03	0.03	0.03	0.09	13.60	31.80	0.85	928.00	2.19	<0.01	0.30	28.00	960.00	15.20	12.10	<0.001
M895602	3.07	3.59	<0.05	0.05	0.03	0.03	0.07	8.40	13.90	0.31	321.00	2.18	0.01	0.71	23.90	600.00	11.00	9.80	<0.001
M895603	2.51	3.76	<0.05	0.05	0.05	0.03	0.05	16.90	11.90	0.32	355.00	2.39	<0.01	0.40	30.00	580.00	14.40	8.80	<0.001
M895604	2.32	2.59	<0.05	0.02	0.10	0.03	0.07	15.40	9.70	0.14	659.00	3.43	<0.01	0.28	33.70	560.00	42.10	5.60	0.00
M895605	2.62	2.05	<0.05	0.02	0.14	0.04	0.12	11.50	6.50	0.11	335.00	4.75	<0.01	0.17	26.50	650.00	29.30	8.00	0.00
M895606	2.32	4.17	0.05	0.02	0.24	0.10	0.09	12.80	8.50	0.14	348.00	3.24	0.01	0.41	20.50	780.00	105.50	8.80	0.00
M895607	2.11	1.67	<0.05	0.02	0.06	0.03	0.05	15.80	10.20	0.14	210.00	3.57	<0.01	0.20	42.10	920.00	17.80	5.70	0.00



Sample Number	AuME-TL44 S %	AuME-TL44 Sb ppm	AuME-TL44 Sc ppm	AuME-TL44 Se ppm	AuME-TL44 Sn ppm	AuME-TL44 Sr ppm	AuME-TL44 Ta ppm	AuME-TL44 Te ppm	AuME-TL44 Th ppm	AuME-TL44 Ti %	AuME-TL44 Tl ppm	AuME-TL44 U ppm	AuME-TL44 V ppm	AuME-TL44 W ppm	AuME-TL44 Y ppm	AuME-TL44 Zn ppm	AuME-TL44 Zr ppm	Certificate
W641976	<0.01	3.28	5.80	0.50	0.20	14.50	<0.01	0.02	9.10	0.02	0.32	0.84	20.00	0.07	13.85	71.00	1.90	WH19190833
W641977	<0.01	3.19	3.80	0.60	0.40	14.90	<0.01	0.03	5.70	0.01	0.09	1.20	24.00	0.16	14.00	142.00	3.00	WH19190833
W641978	0.04	1.82	7.70	0.90	1.80	16.50	<0.01	0.04	5.10	0.15	1.27	0.44	47.00	0.09	4.98	67.00	6.80	WH19190833
W641979	0.01	2.95	4.80	0.70	0.30	16.20	<0.01	0.04	7.90	<0.005	0.14	1.09	22.00	0.06	17.35	70.00	2.50	WH19190833
W641980	0.01	6.70	4.70	0.70	0.40	18.10	<0.01	0.07	5.80	0.01	0.16	1.09	18.00	0.07	17.80	86.00	1.00	WH19190833
W641981	0.01	2.99	2.70	1.10	0.50	17.80	<0.01	0.05	4.30	0.02	0.12	0.91	42.00	0.21	5.41	122.00	3.10	WH19190833
W641982	0.03	6.54	2.50	2.20	0.30	27.30	<0.01	0.07	4.10	0.01	0.20	1.69	45.00	0.07	9.96	189.00	1.50	WH19190833
W641983	0.01	3.74	2.70	1.20	0.40	14.90	<0.01	0.06	4.40	0.01	0.15	0.98	28.00	0.15	8.20	118.00	1.30	WH19190833
W641984	0.01	5.51	3.00	1.80	0.40	14.10	<0.01	0.08	4.70	0.01	0.15	1.72	28.00	0.15	9.08	107.00	1.50	WH19190833
W641985	0.01	3.79	3.20	1.20	0.30	33.30	<0.01	0.05	5.10	0.02	0.12	1.01	25.00	0.11	10.05	106.00	1.80	WH19190833
W641986	0.01	3.71	3.20	0.70	0.30	13.20	<0.01	0.04	5.90	0.02	0.13	0.67	19.00	0.09	10.90	78.00	1.70	WH19190833
W641987	<0.01	3.03	3.60	0.90	0.40	15.50	<0.01	0.04	4.60	0.02	0.15	0.96	29.00	0.24	13.40	87.00	0.70	WH19190833
W641988	<0.01	3.62	2.70	1.00	0.40	13.40	<0.01	0.04	5.10	0.02	0.17	1.00	27.00	0.34	6.59	87.00	1.80	WH19190833
W641989	0.01	3.00	2.90	0.80	0.30	12.60	<0.01	0.04	5.50	0.02	0.13	0.76	21.00	0.13	8.12	58.00	1.60	WH19190833
W641990	0.08	49.00	1.10	4.20	1.10	31.50	<0.01	0.27	3.40	0.01	0.13	1.88	37.00	0.21	9.88	300.00	1.00	WH19190833
W641991	0.02	6.07	2.50	1.20	0.40	16.60	<0.01	0.07	3.30	0.01	0.21	1.18	30.00	0.18	6.42	121.00	1.10	WH19190833
W641992	0.01	3.41	3.20	2.30	0.50	18.20	<0.01	0.09	4.70	0.01	0.38	1.61	62.00	0.15	8.15	154.00	1.60	WH19190833
W641993	0.01	4.83	2.60	1.90	0.40	16.60	<0.01	0.07	3.70	0.01	0.22	0.98	41.00	0.12	6.34	141.00	1.80	WH19190833
W641994	0.14	7.84	1.70	3.00	0.20	65.90	<0.01	0.06	4.10	<0.005	0.24	1.22	16.00	0.05	6.34	73.00	1.30	WH19190833
W641995	0.01	6.61	1.70	1.40	0.40	18.80	<0.01	0.07	2.60	0.01	0.18	0.80	29.00	0.15	4.98	126.00	1.60	WH19190833
W641996	0.02	6.56	1.60	2.40	0.40	12.30	<0.01	0.09	2.20	0.01	0.17	0.63	33.00	0.14	3.71	127.00	2.00	WH19190833
W641997	0.01	3.61	2.70	1.30	0.40	15.30	<0.01	0.06	3.50	0.01	0.16	1.00	33.00	0.18	5.36	129.00	1.80	WH19190833
W641998	0.04	6.48	1.60	1.80	0.30	30.70	<0.01	0.08	1.90	0.01	0.23	0.81	27.00	0.09	5.74	129.00	1.30	WH19190833
M895601	0.01	3.48	3.40	0.80	0.40	28.20	<0.01	0.05	3.90	0.02	0.18	1.06	33.00	0.12	7.28	122.00	1.00	WH19190833
M895602	0.07	1.86	2.40	1.00	0.50	18.40	<0.01	0.06	2.60	0.01	0.12	0.71	39.00	0.23	4.43	97.00	1.50	WH19190833
M895603	0.01	2.50	3.10	1.20	0.50	14.20	<0.01	0.05	4.60	0.01	0.15	1.07	41.00	0.16	6.16	88.00	1.70	WH19190833
M895604	0.04	5.48	2.50	2.40	0.40	61.80	<0.01	0.09	2.70	0.01	0.22	1.08	40.00	0.14	9.80	124.00	0.80	WH19190833
M895605	0.18	6.61	2.30	4.70	0.40	49.00	<0.01	0.09	2.90	<0.005	1.46	1.11	42.00	0.11	6.96	113.00	1.10	WH19190833
M895606	0.14	5.41	1.80	6.20	0.60	87.80	<0.01	0.58	2.00	<0.005	1.42	1.24	36.00	0.21	8.72	86.00	1.10	WH19190833
M895607	0.02	4.66	2.00	2.80	0.30	46.90	<0.01	0.06	2.70	0.01	0.14	1.33	20.00	0.15	9.60	143.00	0.90	WH19190833

2019 Goldorak Project - Soil Sample Descriptions and Geochemistry																
Sample Number	Date	Time	Grid	Datum	Zone	East	North	Elev m	Sampler	Type	Slope	Drainage	Horizon	Depth-cm	Color	Quality
M895608	2019/07/26		UTM	NAD83	8V	519330	6970358		JDP	Soil	Moderate	Dry	B	50	Brown-grey	Good
M895609	2019/07/26		UTM	NAD83	8V	519345	6970410		JDP	Soil	Moderate	Dry	B	50	Brown-grey	Good
M895610	2019/07/26		UTM	NAD83	8V	519366	6970462		JDP	Soil	Moderate	Dry	B	60	Brown-grey	Medium
M895611	2019/07/26		UTM	NAD83	8V	519455	6970723		JDP	Soil	Moderate	Dry	B	50	Dark grey	Poor
M895612	2019/07/26		UTM	NAD83	8V	519470	6970744		JDP	Soil	Moderate	Wet	B	50	Dark brown	Medium
M895613	2019/07/26		UTM	NAD83	8V	519478	6970774		JDP	Soil	Steep	Wet	B	70	Brown	Good
M895614	2019/07/26		UTM	NAD83	8V	519489	6970795		JDP	Soil	Steep	Wet	B	80	Dark brown	Medium
M895615	2019/07/26		UTM	NAD83	8V	519541	6970943		JDP	Soil	Moderate	Dry	B	60	Brown	Poor
M895616	2019/07/26		UTM	NAD83	8V	519541	6970964		JDP	Soil	Moderate	Dry	B	40	Brown	Medium
M895617	2019/07/26		UTM	NAD83	8V	519554	6970992		JDP	Soil	Moderate	Wet	B	50	Brown	Good
M895618	2019/07/26		UTM	NAD83	8V	519561	6971016		JDP	Soil	Moderate	Dry	B	40	Brown	Medium
M895619	2019/07/27		UTM	NAD83	8V	518487	6972739		JDP	Soil	Moderate	Dry	B	50	Brown	Poor
M895620	2019/07/27		UTM	NAD83	8V	518550	6972898		JDP	Soil	Steep	Dry	B	50	Brown	Poor
M895621	2019/07/27	12:49:14PM	UTM	NAD83	8V	518554	6972929	1123	RH/JDP	Soil				50 tan		poor
M895622	2019/07/27	1:11:55PM	UTM	NAD83	8V	518442	6972935	1139	RH/JDP	Soil				40 tan		mod
M895623	2019/07/27		UTM	NAD83	8V	518311	6972925		JDP	Soil	Steep	Dry	B	60	Brown	Poor
M895624	2019/07/27		UTM	NAD83	8V	518283	6972883		JDP	Soil	Steep	Dry	B	40	Brown-grey	Poor

Sample Number	Description	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44	AuME-TL44
		Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm
M895608	Brown-grey, sandy-silt, 10% angular shale fragments, ash on the top of the soil profile. Moss covered.	0.002	0.19	1.19	30.70	10.00	180.00	0.43	0.18	0.28	0.17	25.70	7.60	22.00	2.14	20.00
M895609	Brown-grey, sandy-silt, 10% angular shale fragments, ash on the top of the soil profile. Moss covered.	0.003	0.42	1.24	29.40	10.00	250.00	0.58	0.16	0.71	0.19	26.40	8.90	18.00	2.48	29.70
M895610	Brown-grey, gravelly-sand, 20% angular shale fragments, ash on the top of the soil profile. Moss covered.	0.001	0.08	1.49	21.60	10.00	180.00	0.67	0.26	0.27	0.24	35.40	11.70	23.00	2.69	21.60
M895611	Mixed with organic material, sandy silt, 5% black shale fragments, ash and organic material on top of the soil profile. Moss covered.	0.002	0.90	1.66	23.60	10.00	260.00	0.73	0.16	1.50	1.29	14.00	8.40	34.00	4.27	47.50
M895612	Gravelly-sand, 20% subrounded pebble. Frozen soil encountered around, moss and organic material.	0.002	1.60	2.52	24.70	10.00	720.00	1.03	0.16	1.42	1.09	12.70	11.10	34.00	8.46	69.10
M895613	Sand, 5% angular shale fragment. Moss covered.	0.005	0.90	1.09	72.70	10.00	520.00	0.57	0.19	0.75	1.52	31.70	10.30	15.00	2.75	52.70
M895614	Gravelly-sand, 20% pebble up to 2cm wide. Observation made at camp shows that the fragments contain very fine grained pyrite in fracture. Moss covered.	0.004	0.80	1.97	43.50	10.00	340.00	0.67	0.17	1.22	0.77	21.90	9.50	23.00	3.78	34.90
M895615	Sandy-silt, 1% angular fragments, mixed with ash.	0.002	0.62	1.03	23.80	10.00	330.00	0.34	0.15	0.63	0.27	20.10	8.90	16.00	1.51	24.80
M895616	Sandy, 10% subangular to angular fragments. Ash on top of the soil profile.	0.003	0.40	1.22	73.90	10.00	290.00	0.55	0.20	0.32	0.67	32.00	9.80	26.00	1.66	37.00
M895617	Gravelly-sand, 10% angular fragments. Subcrop at proximity consist and thinly bedded, blocky siltstone (?).	0.001	0.28	0.80	15.50	10.00	190.00	0.42	0.13	0.88	0.45	21.00	7.70	14.00	1.16	18.40
M895618	Sandy-silt, 10% angular fragments., mixed with ash. Subcrop at proximity consists of limy siltstone.	0.002	0.23	0.85	12.10	10.00	240.00	0.34	0.13	1.09	0.24	22.50	6.90	16.00	0.66	14.60
M895619	Gravelly-silt, bellow fresh ash, 10-20% subrounded pebble. Old ash layer observed at depth suggesting sliding.	0.004	0.89	1.13	27.00	10.00	500.00	0.59	0.21	0.28	1.40	22.40	11.60	27.00	2.08	69.30
M895620	Silt, mixed with ash. Probably soil sliding.	0.008	0.72	1.21	32.90	10.00	500.00	0.60	0.24	0.20	2.66	27.70	13.30	28.00	2.44	137.50
M895621	mixed ash - siltstone pebbles, rounded pebbles, scree in area is slatey grey fine grained siltstone with rare FeOx on surfaces.	0.004	0.79	1.17	25.70	10.00	240.00	0.43	0.25	0.12	1.23	21.20	7.40	27.00	2.29	82.60
M895622	as M895621 but slightly better looking, mixed ash - siltstone pebbles, rounded pebbles, scree in area is slatey grey fine grained siltstone with rare FeOx on surfaces.	0.011	0.65	1.31	65.20	10.00	490.00	0.71	0.24	0.20	1.16	27.00	19.50	28.00	3.06	89.00
M895623	Silty-sand, 20% subrounded pebble.	0.004	0.86	1.36	16.30	10.00	310.00	0.63	0.21	0.38	1.16	22.00	13.10	38.00	2.64	41.10
M895624	Silty-sand, 20% subrounded pebble (1 to 3 cm wide). Profile description: organics/soil/organic+ash/frozen soil.	0.006	1.00	1.11	22.00	10.00	690.00	0.69	0.21	0.65	3.02	24.10	11.50	28.00	2.80	79.80

Sample Number	AuME-TL44 Fe %	AuME-TL44 Ga ppm	AuME-TL44 Ge ppm	AuME-TL44 Hf ppm	AuME-TL44 Hg ppm	AuME-TL44 In ppm	AuME-TL44 K %	AuME-TL44 La ppm	AuME-TL44 Li ppm	AuME-TL44 Mg %	AuME-TL44 Mn ppm	AuME-TL44 Mo ppm	AuME-TL44 Na %	AuME-TL44 Nb ppm	AuME-TL44 Ni ppm	AuME-TL44 P ppm	AuME-TL44 Pb ppm	AuME-TL44 Rb ppm	AuME-TL44 Re ppm
M895608	2.07	4.03	<0.05	<0.02	0.04	0.02	0.06	12.80	16.90	0.50	270.00	1.38	<0.01	0.35	21.90	630.00	11.90	9.00	<0.001
M895609	2.13	3.86	<0.05	<0.02	0.05	0.03	0.06	14.20	17.00	0.54	365.00	1.44	0.01	0.47	24.50	710.00	14.60	10.20	<0.001
M895610	2.67	4.28	<0.05	0.03	0.03	0.03	0.07	15.60	20.30	0.56	374.00	1.32	<0.01	0.69	35.00	530.00	12.40	11.20	<0.001
M895611	2.43	5.87	<0.05	0.15	0.07	0.05	0.05	7.50	42.90	1.10	458.00	2.01	0.05	1.05	39.10	2710.00	62.30	10.00	0.00
M895612	2.84	8.49	0.07	0.08	0.05	0.06	0.14	6.60	60.70	2.19	1200.00	2.40	0.04	1.02	39.50	1120.00	141.00	18.30	0.00
M895613	2.40	3.30	0.05	0.10	0.06	0.04	0.08	16.40	15.80	0.31	1340.00	3.29	0.07	0.71	35.10	840.00	34.00	10.50	0.00
M895614	2.63	5.89	<0.05	0.07	0.06	0.04	0.07	12.10	33.90	0.72	1010.00	2.07	0.11	1.43	35.50	770.00	25.90	11.70	0.00
M895615	1.70	3.54	<0.05	<0.02	0.08	0.02	0.04	10.30	13.60	0.25	844.00	1.91	0.04	0.57	19.90	750.00	11.70	7.20	0.00
M895616	3.07	3.41	<0.05	0.05	0.04	0.06	0.05	17.30	24.30	0.31	516.00	2.80	<0.01	1.43	42.30	920.00	53.70	9.10	0.00
M895617	1.46	2.75	<0.05	0.02	0.05	0.02	0.04	10.50	14.20	0.19	281.00	0.83	0.03	0.77	24.20	500.00	9.90	6.00	<0.001
M895618	1.65	2.84	<0.05	0.02	0.05	0.02	0.03	11.20	10.00	0.22	325.00	0.76	0.03	0.76	22.70	610.00	9.10	4.50	<0.001
M895619	2.31	4.12	<0.05	<0.02	0.07	0.03	0.07	11.50	26.10	0.51	457.00	4.96	0.02	0.59	34.90	780.00	12.40	11.20	0.00
M895620	2.31	4.36	0.05	0.02	0.08	0.03	0.09	14.20	30.90	0.56	326.00	5.78	0.01	0.53	48.70	750.00	10.70	11.40	0.00
M895621	2.02	4.23	<0.05	0.02	0.05	0.03	0.07	11.20	28.50	0.54	243.00	4.40	0.01	0.57	31.00	660.00	9.60	10.60	<0.001
M895622	3.00	4.24	0.05	0.03	0.07	0.05	0.12	13.70	34.20	0.57	551.00	6.64	0.01	0.44	44.60	1070.00	13.60	12.80	0.00
M895623	2.14	5.33	0.05	0.06	0.07	0.03	0.10	10.90	40.60	1.02	576.00	5.17	0.01	0.71	33.10	750.00	12.50	12.90	0.00
M895624	2.22	3.94	0.05	0.03	0.14	0.04	0.13	12.60	32.70	0.64	421.00	6.70	0.01	0.50	48.80	940.00	11.70	14.00	0.00

Sample Number	AuME-TL44 S %	AuME-TL44 Sb ppm	AuME-TL44 Sc ppm	AuME-TL44 Se ppm	AuME-TL44 Sn ppm	AuME-TL44 Sr ppm	AuME-TL44 Ta ppm	AuME-TL44 Te ppm	AuME-TL44 Th ppm	AuME-TL44 Ti %	AuME-TL44 Tl ppm	AuME-TL44 U ppm	AuME-TL44 V ppm	AuME-TL44 W ppm	AuME-TL44 Y ppm	AuME-TL44 Zn ppm	AuME-TL44 Zr ppm	Certificate
M895608	0.01	1.79	1.40	0.80	0.40	18.60	<0.01	0.04	0.80	0.02	0.14	0.78	31.00	0.20	5.00	74.00	<0.5	WH19190833
M895609	0.02	2.64	1.70	1.00	0.40	43.80	<0.01	0.04	0.80	0.02	0.16	0.79	30.00	0.14	9.31	72.00	<0.5	WH19190833
M895610	0.01	1.86	2.70	0.60	0.40	18.00	<0.01	0.03	3.90	0.02	0.15	0.86	30.00	0.32	7.56	81.00	1.20	WH19190833
M895611	0.10	5.11	3.10	1.90	0.40	103.50	<0.01	0.05	2.70	0.02	0.30	3.57	87.00	0.30	9.25	322.00	7.00	WH19190833
M895612	0.07	4.62	4.00	2.10	0.60	79.10	<0.01	0.07	2.50	0.05	0.55	2.14	67.00	0.14	7.68	260.00	3.20	WH19190833
M895613	0.10	5.11	1.90	1.90	0.40	47.30	<0.01	0.07	1.40	0.01	0.24	1.34	40.00	0.11	13.25	165.00	3.70	WH19190833
M895614	0.07	3.47	2.50	1.50	0.50	81.90	<0.01	0.05	1.90	0.04	0.23	1.78	38.00	0.11	10.25	135.00	2.80	WH19190833
M895615	0.07	1.81	0.80	1.00	0.40	35.20	<0.01	0.05	0.20	0.01	0.16	1.01	33.00	0.17	6.09	82.00	<0.5	WH19190833
M895616	0.04	7.71	2.00	2.00	0.50	96.50	<0.01	0.12	2.00	0.01	0.21	0.89	52.00	0.22	6.77	148.00	1.60	WH19190833
M895617	0.04	1.27	1.30	0.50	0.30	31.40	<0.01	0.03	0.70	0.01	0.10	1.13	25.00	0.16	7.11	77.00	0.90	WH19190833
M895618	0.05	0.94	1.50	0.50	0.30	37.90	<0.01	0.02	0.90	0.01	0.08	1.25	29.00	0.29	7.91	50.00	0.90	WH19190833
M895619	0.04	2.97	2.00	3.00	0.40	35.70	<0.01	0.11	0.60	0.01	0.22	1.26	58.00	0.14	7.82	136.00	<0.5	WH19190833
M895620	0.02	3.04	3.30	2.00	0.40	49.60	<0.01	0.12	1.90	0.02	0.24	1.26	59.00	0.17	10.90	187.00	0.70	WH19190833
M895621	0.02	2.44	2.60	1.70	0.40	28.90	<0.01	0.09	1.20	0.02	0.23	0.85	58.00	0.21	5.40	126.00	0.80	WH19190833
M895622	0.06	3.90	3.40	2.60	0.40	86.30	<0.01	0.17	2.90	0.03	0.30	1.46	64.00	0.13	8.94	199.00	1.20	WH19190833
M895623	0.03	2.88	5.30	3.00	0.50	30.30	<0.01	0.07	3.50	0.03	0.30	1.16	69.00	0.18	9.14	139.00	2.60	WH19190833
M895624	0.04	3.47	4.30	3.30	0.40	54.60	<0.01	0.10	2.40	0.02	0.38	1.38	61.00	0.17	13.10	203.00	1.50	WH19190833

**APPENDIX D**  
**Field Station Data**

2019 Goldorak project - Field Stations Location and Descriptions												
Field Station ID	Geologist	Date	Lithology	Min1	Min1Per	Min2	Min2Per	Description	UTM_E	UTM_N	Coord_System	
JDP001	JDP	July 24, 2019	Shale					Outcrop. Calcareous shale, strongly foliated, calcite veins-pods. Dominant foliation 120/70. Drag fold axis estimated at 320/10.	521444	6969593	NAD83_UTM_Z8N	
JDP002	JDP	July 24, 2019	Limestone	PY	0.1			5*3 m outcrop. Grey, flaggy, calcareous siltstone (?), calcite vein crosscutting foliation, pyrite trace, calcite pods. Dominant foliation oriented 100/65.	521461	6969786	NAD83_UTM_Z8N	
JDP003	JDP	July 24, 2019	Shale					Outcrop. Thinly foliated dark grey-black shale oriented 125/40, containing 5-10% calcite.	521521	6969794	NAD83_UTM_Z8N	
JDP004	JDP	July 24, 2019	Shale	PY	0.5			Outcrop. Sample W641852. Dark grey-black shale oriented 125/60.	521543	6969798	NAD83_UTM_Z8N	
JDP005	JDP	July 24, 2019	Limestone	PY	0.1			Outcrop. Grey limestone oriented 160/70. Calcite pods along the foliation: sample M641853	521546	6970049	NAD83_UTM_Z8N	
JDP006	JDP	July 25, 2019	Siltstone					2*3 m outcrop. Siliciclastic unit, weakly sheared. Sample W641854.	521144	6969859	NAD83_UTM_Z8N	
JDP007	JDP	July 25, 2019	Soil					Intersection baseline and 108E. Shale fragments-ash-organic material. No soil sample taken due to very poor quality.	523996	6969948	NAD83_UTM_Z8N	
JDP008	JDP	July 28, 2019	Siltstone					Subcrop. Grey, fine grained, calcite fracture coating and calcite veinlets randomly oriented, locally rusty stained. Limy siltstone.	520793	6969872	NAD83_UTM_Z8N	
JDP009	JDP	July 28, 2019	Shale					Subcrop. Dark grey-black, thinly foliated shale (1 to 3 mm beds). No calcite, no mineralization observed.	521064	6969847	NAD83_UTM_Z8N	
JDP010	JDP	July 28, 2019	Siltstone					Outcrop, 3*4 m . Thinly foliated limy siltstone (100/80). Rare quartz-calcite-ferrocarbonate foliaform sweat.	521089	6969854	NAD83_UTM_Z8N	
JDP011	JDP	July 28, 2019	Shale					Outcrop, 2*1 m. Moderately chlorite altered (?) shale. Quartz-calcite veinlets averaging 3 mm wide, ferrocarbonate in fracture, poorly foliated.	521193	6969857	NAD83_UTM_Z8N	
JDP012	JDP	July 28, 2019	Siltstone					Outcrop, 2*1 m. Grey, fine grained, limy siltstone. 20-30% calcite in matrix, calcite veinlets (1-2 mm wide), mixed with thinly foliated weakly chlorite altered shale fragments, 3 to 5 cm coarse grained calcite pods.	521105	6969763	NAD83_UTM_Z8N	
JDP013	JDP	July 28, 2019	Siltstone					Outcrop. Limy siltstone, locally folded-deformed (decimetre sized), calcite veined crosscutting dominant foliation.	521078	6969731	NAD83_UTM_Z8N	

2019 Goldorak project - Field Stations Location and Descriptions												
Field Station ID	Geologist	Date	Lithology	Min1	Min1Per	Min2	Min2Per	Description	UTM_E	UTM_N	Coord_System	
JDP014	JDP	July 28, 2019	Limestone	PY	0.1			Float, 10*10*5 cm. Limestone (?) containing fine grained euhedral and anhedral pyrite trace, weakly oxidized, cherty beds.	521016	6969696	NAD83_UTM_Z8N	
JDP015	JDP	July 28, 2019	Hornfeld	PO	5 PY		0.5	Light green-grey, calc-silicate unit related to contact metamorphism (?). Crosscutting quartz-pyrite veinlets, calcite in fracture, disseminated fine grained pyrrhotite possibly replacing feldspar (suggested by intrusive rock mapped at a regional scale).	520962	6969668	NAD83_UTM_Z8N	
JDP016	JDP	July 28, 2019	Shale					Outcrop, 2*3 m. Black-dark grey, fine grained, rusty, possibly chlorite altered shale. Thin-platty foliation (158/78), 3-5% calcite.	521171	6969741	NAD83_UTM_Z8N	
RH19300	RH	July 24, 2019	other					P2 Orak 3 & 4; YD18083, 084	521007	6969836	NAD83_UTM_Z8N	
RH19301	RH	July 24, 2019	Shale					P1 Orak 3 & 4; YD18083, 084 and P2 Orak 1&2 YD18081 & 082. Subcrop of grey fissile shale with 2inch kink folds.	521434	6969684	NAD83_UTM_Z8N	
RH19302	RH	July 24, 2019	Limy Shale					Ligua showing, previous 1 gpt Au sample flag (A000445740). Outcrop of rusty gossanous band <30cm in grey limy fissile shale, of Fe stained qtz boxwork. Abundant calcite veinlets cross cutting grey limy shale. S1 118/48S/48S.	521451	6969686	NAD83_UTM_Z8N	
RH19303	RH	July 24, 2019	other					old claim post: DM 191(?) Oct 2011, Tag P1, YF30891, 30892	521477	6969845	NAD83_UTM_Z8N	
RH19304	RH	July 24, 2019	shale-lst					Top of cliff, (fault?) contact - shear between grey siliceous shale and grey ribbon banded grey limestone. S0 106/90+/-10, shale-lst contact about 108/90	521448	6969867	NAD83_UTM_Z8N	
RH19305	RH	July 25, 2019	siltstone					4x5m outcrop and subcrop of sheared siltstone with leached - vuggy foliaform qtz, contorted, likely fault related, no visible sulfides (JDP sample W641854). Outcrop hump trends 077deg to P2 Orak 3&4. small outcrop of grey calcareous shale 20 m to west.	521142	6969863	NAD83_UTM_Z8N	
RH19306	RH	July 26, 2019	chert	py	0.1			Subcrop of rusty weathering grey chert, tr fine grained diss pyrite and py along hairline fractures. Similar cherty outcrop about 30m upslope.	520441	6970169	NAD83_UTM_Z8N	



2019 Goldorak project - Field Stations Location and Descriptions											
Field Station ID	Geologist	Date	Lithology	Min1	Min1Per	Min2	Min2Per	Description	UTM_E	UTM_N	Coord_System
RH19307	RH	July 26, 2019	Siltstone	py	0.1			mini cliff outcrop about 5x10m, grey weathering fine grained siliceous meta siltstone, poorly foliated, x/cut by white sucrosic qtz veinlets with tr fine gr diss py. JDP grab W641855.	520380	6970285	NAD83_UTM_Z8N
RH19308	RH	July 26, 2019	other					good cut line, next cut line is also ok.	520383	6970361	NAD83_UTM_Z8N
RH19309	RH	July 26, 2019	other					good cut line at about 244 deg.	519946	6970671	NAD83_UTM_Z8N
RH19310	RH	July 26, 2019	other					junction between 244 deg and 20-200deg cut line.	519864	6970641	NAD83_UTM_Z8N
RH19311	RH	July 26, 2019	siltstone - limestone	py	0.1			Large 30m by 5 m high outcrop of grey flaggy fossiliferous limestone and siltstone. Tr diss py. S1 144/54S.	519503	6971047	NAD83_UTM_Z8N
RH19312	RH	July 24, 2019	other					P1 Orak 1&2 YD18081 & 082.			

**APPENDIX E**  
**2019 Photographs**



Picture 1 : Gossanous boxwork - vuggy horizon in limy shale & chip sample at La Liga showing.



Picture 2 : Gossanous rusty podiform horizon in calcareous siltstone at La Liga Zone, Canyon

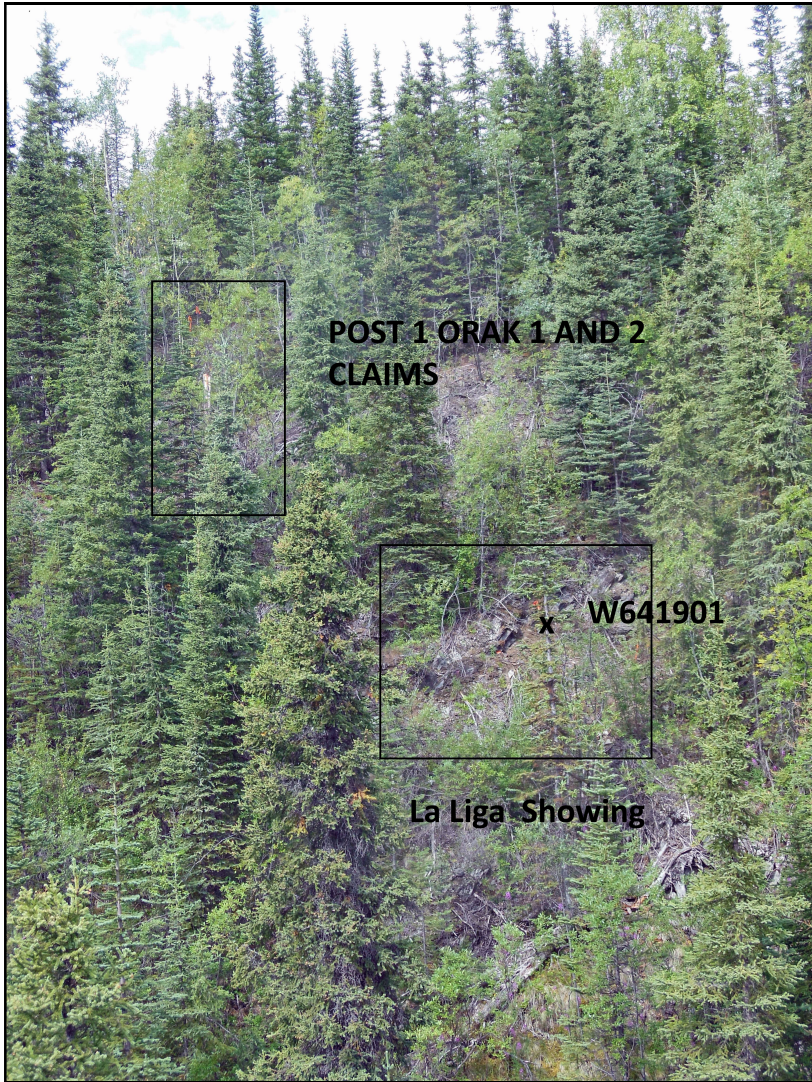
showing.



Picture 3 : Nagai Zone, rusty siliciclastic weakly chlorite altered siltstone outcrop.



Picture 4 : Skarny-siliceous outcrop showing glassy cross-cutting quartz veining at the Ksf Zone.



**Picture 5: La Liga Showing, claim posts and sample site W641901 that returned 0.606 ppm gold.**

**MAP  
POCKET**

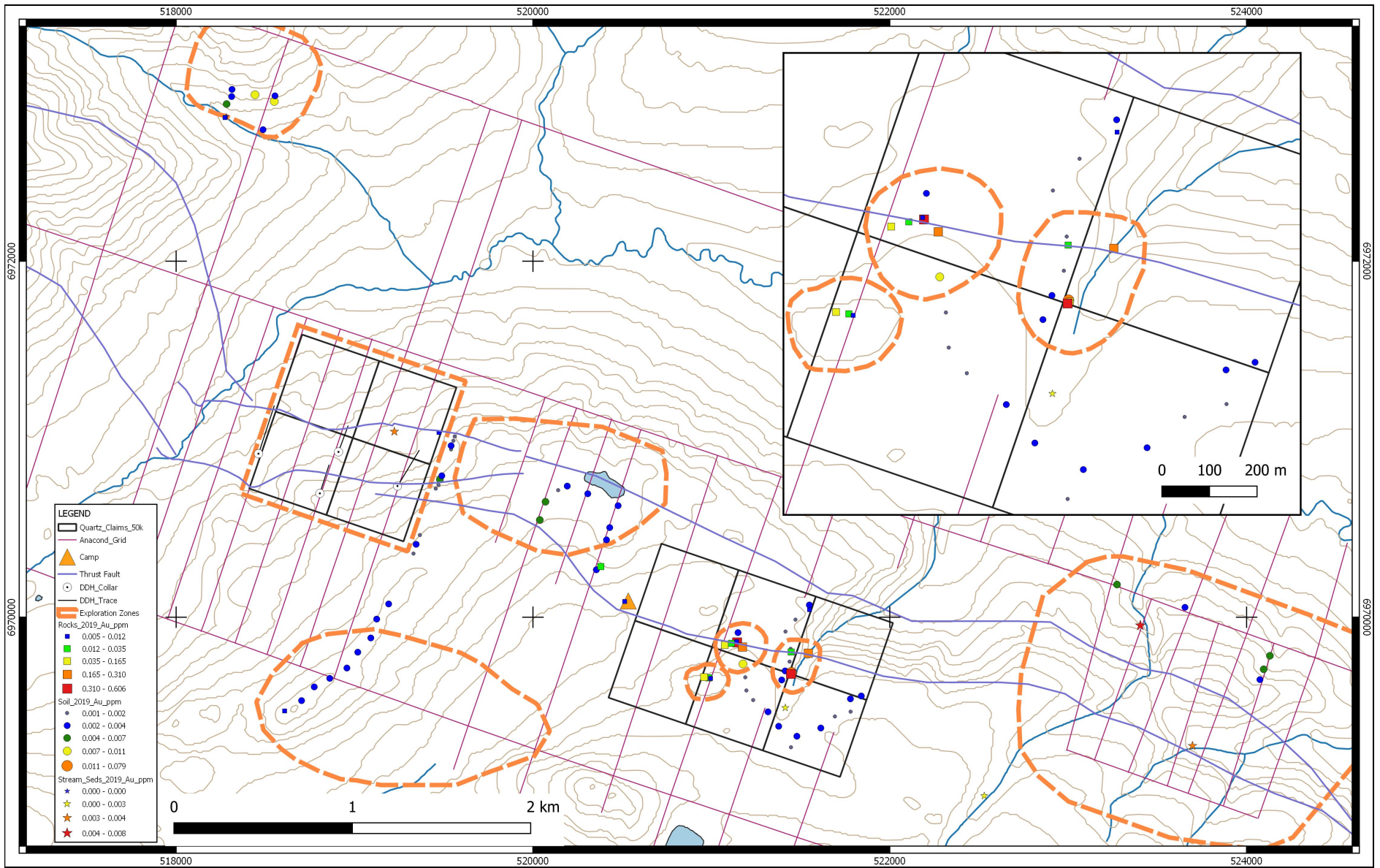


Figure 11. 2019 Goldorak Gold Geochemistry

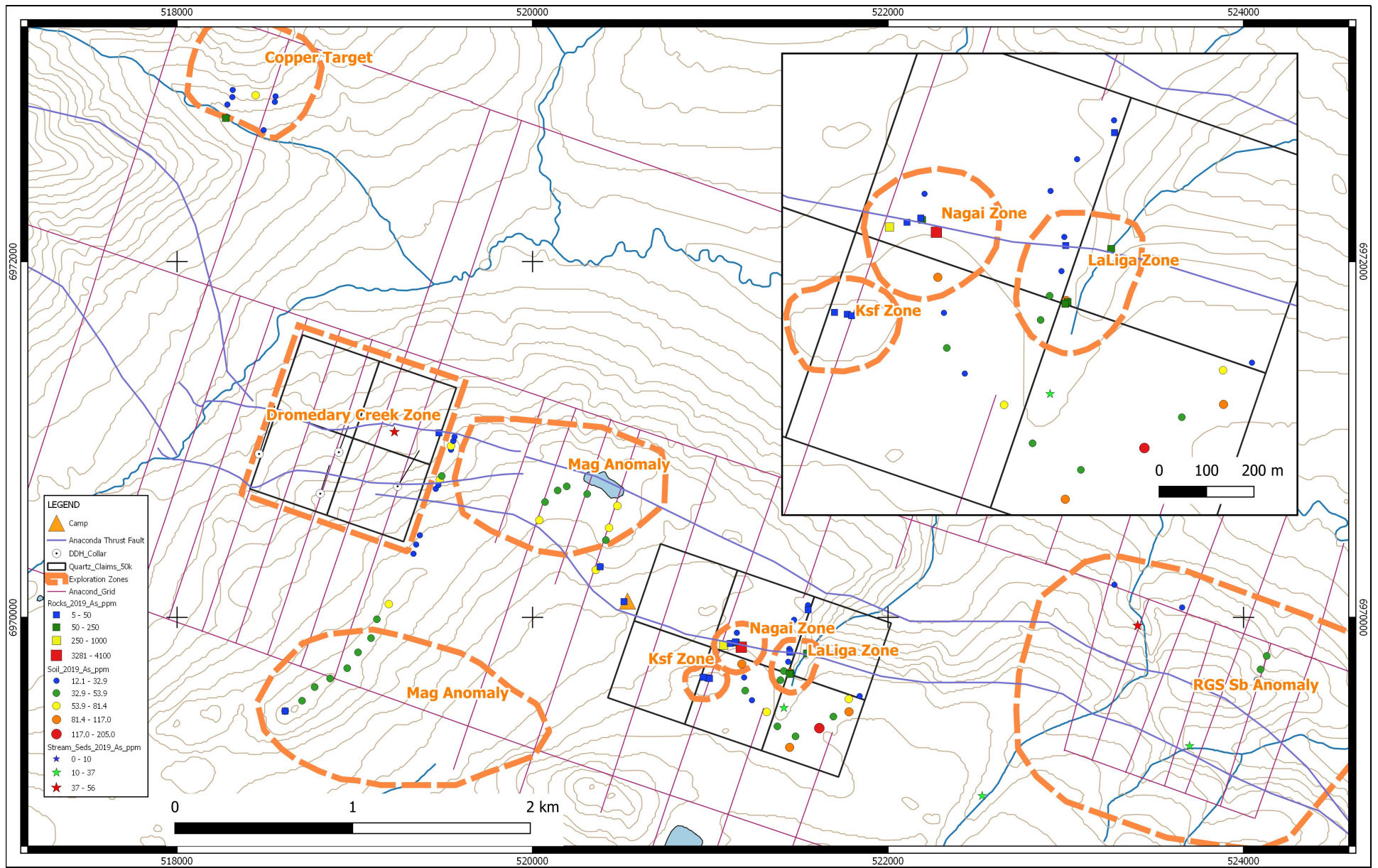


Figure 12. 2019 Goldorak Arsenic Geochemistry



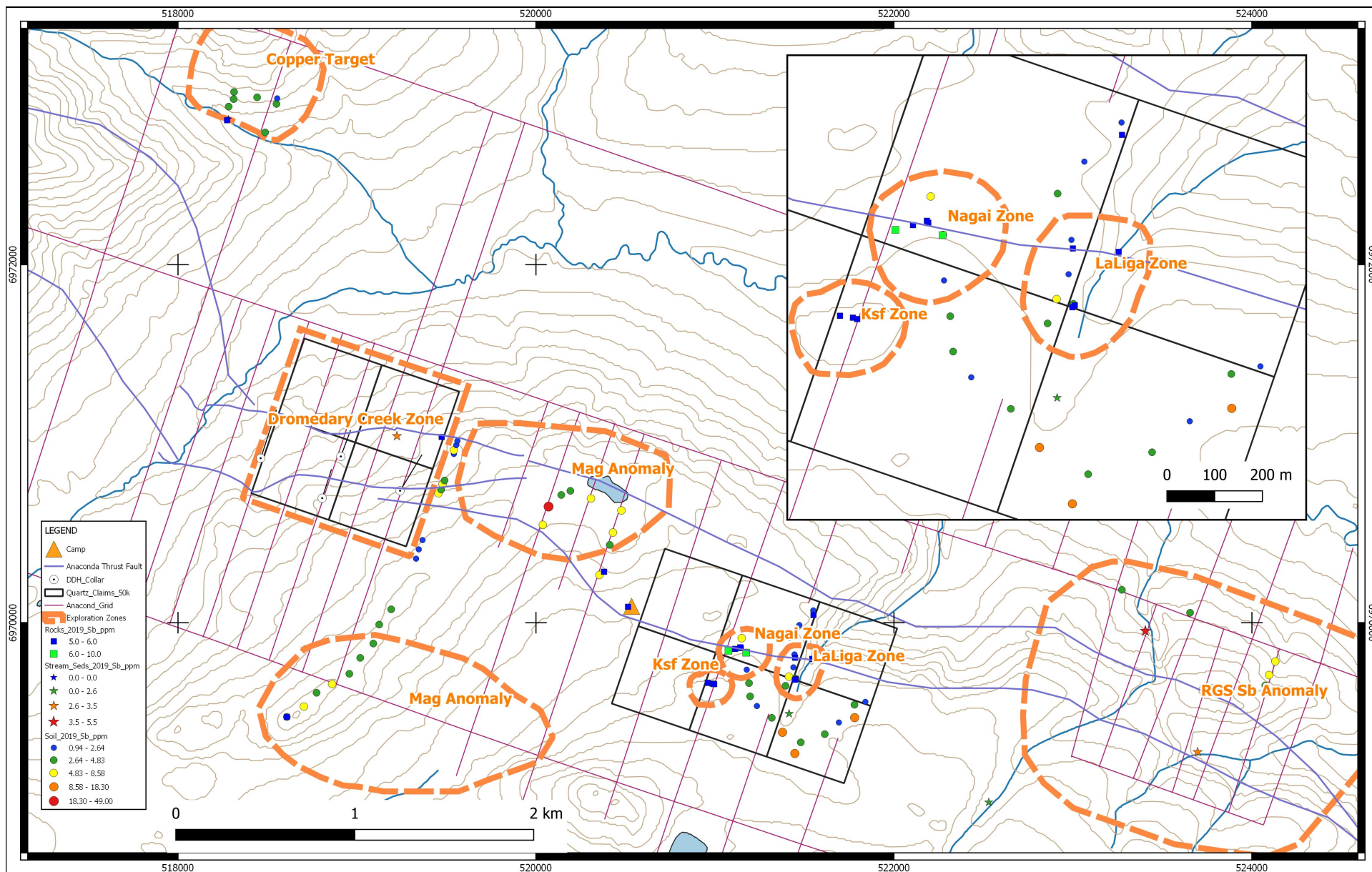
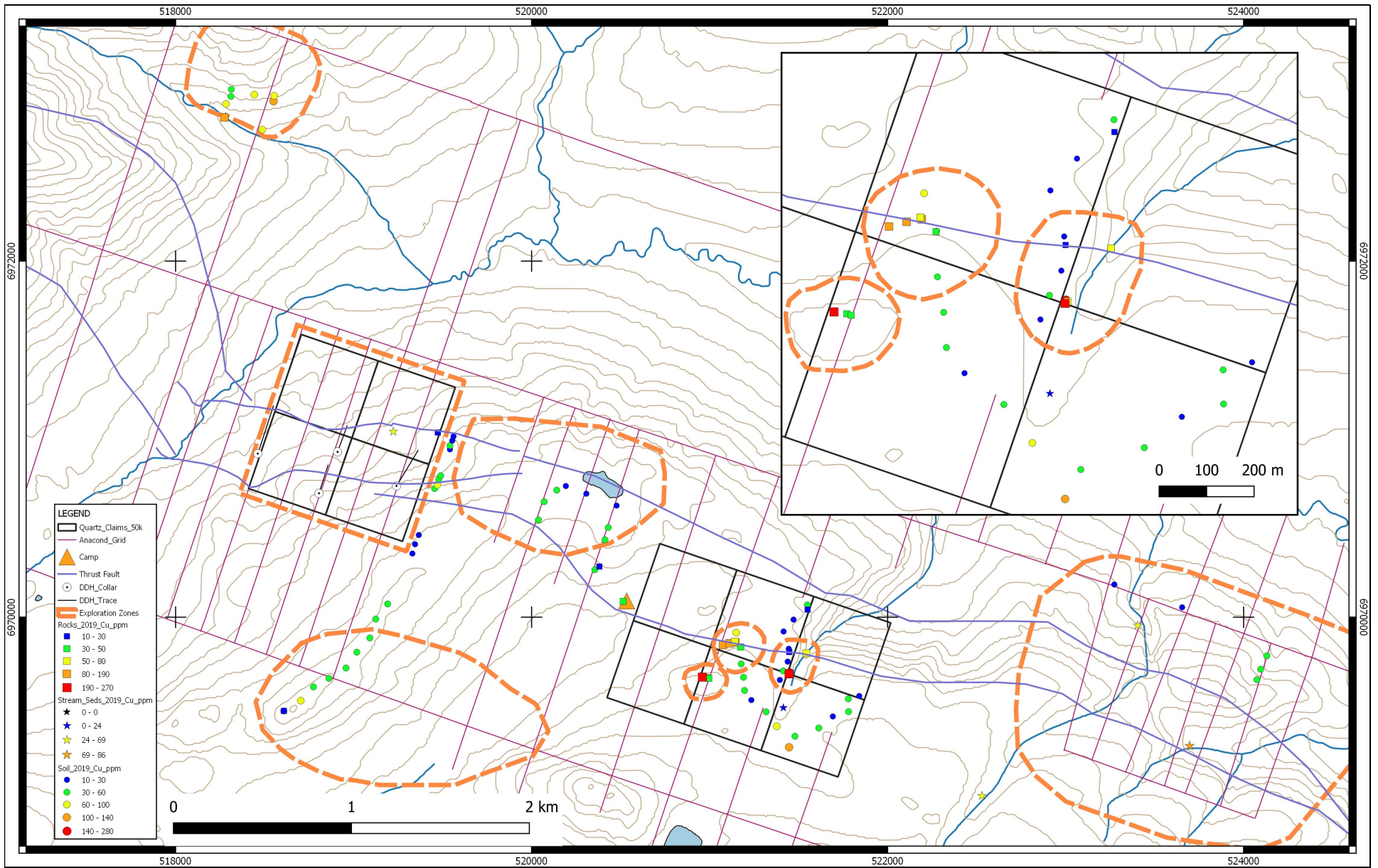


Figure 13. 2019 Goldorak Antimony Geochemistry



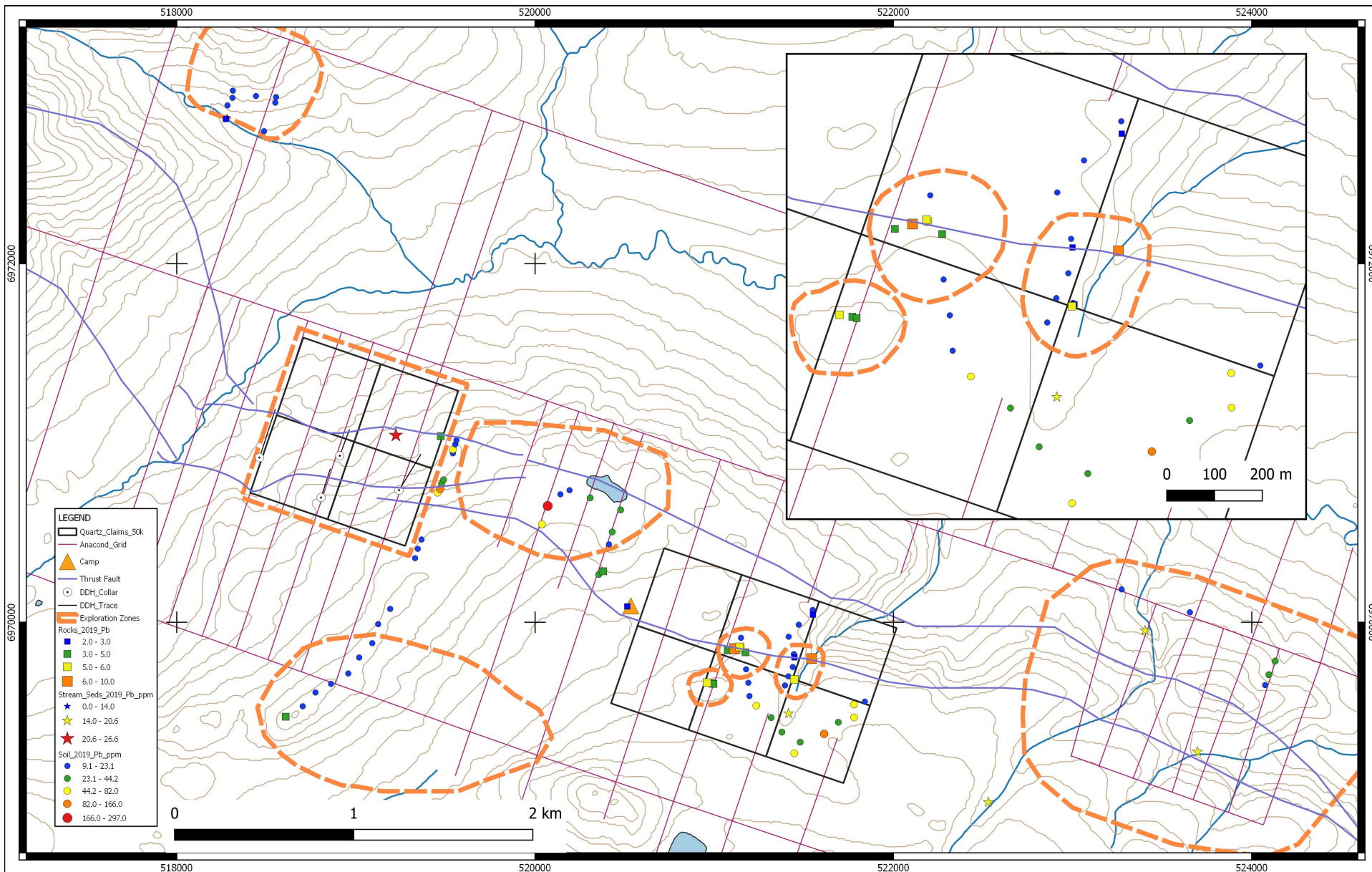


Figure 15. 2019 Goldorak Lead Geochemistry

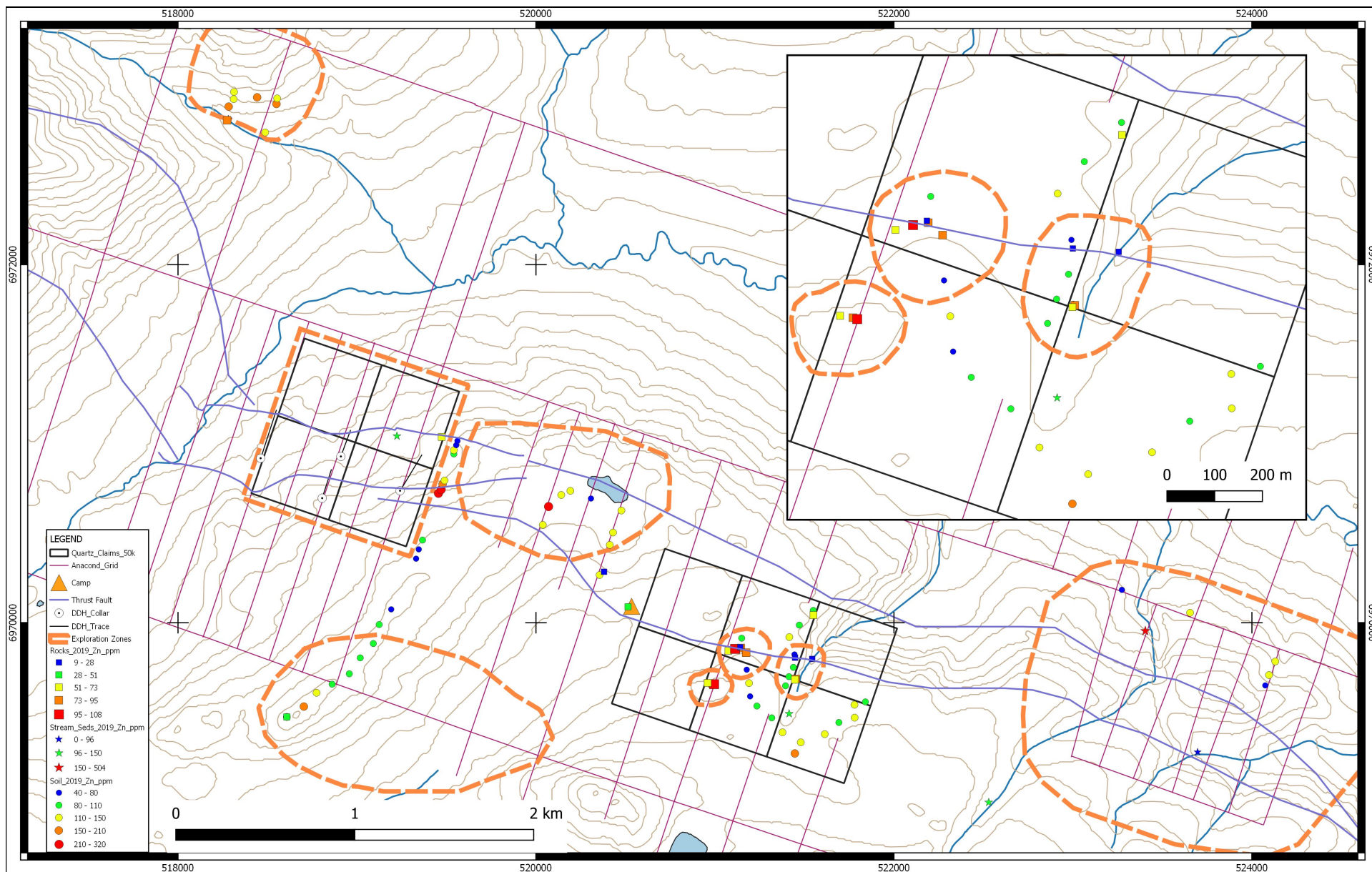


Figure 16. 2019 Goldorak Zinc Geochemistry