2016 Field Season
Geochemical Sampling And Prospecting Report
On The
Grabben Gold Focused Regional Project
Claims
Basal 1-10, Uran 1-8, Sask 1-20, Glow 1-24
Located In
Dawson Mining District
On
NTS 115-O-11
$63^{\circ} 39^{\prime}$ north and $139^{\circ} 10$ ' west
By
Bernic Kreft
November $23^{\text {rd }}, 2016$

## Table Of Contents

| Location | Page 1 |
| :---: | :---: |
| Access | Page 1 |
| Topography And Vegetation | Page 1 |
| Claims And Land Status | Page 1 |
| History And Previous Work | Page 1 |
| Yukon Map (figure 1) | Page 2 |
| Regional Map (figure 2) | Page 3 |
| Claim Map (figure 3) | Page 4 |
| Geology Metallogeny Mineralization | Page 6 |
| Geology Map (figure 4) | Page 7 |
| Geolgy Map Legend (figure 4A) | Page 8 |
| Airborne Geophysical Data | Page 9 |
| Current Work And Results | Page 9 |
| FVD Overview Map (figure 5) | Page 10 |
| FVD Detail Map (figure 6) | Page 11 |
| RTF Detail Map (figure 7) | Page 12 |
| Potassium Detail Map (figure 8) | Page 13 |
| Conclusions | Page 15 |
| Recommendations | Page 16 |
| Sample Labels and Results Maps (figure 9 to 17) | Pages 17-25 |
| Rock Sample Table | Pages 26-28 |
| Soil Sample Table | Pages 29-31 |
| Statement Of Qualifications | Page 32 |
| Statement Of Costs | Page 33 |
| Assay Sheets | At Back |

Location - The Grabben Gold Project is located in the Dawson Mining District on NTS mapsheet 115-O-11 roughly centred on Haystack Mountain which is located at approximately $63^{\circ} 39^{\prime}$ north and $139^{\circ} 10^{\prime}$ west.

Access - Access for much of the program was achieved by helicopter from Dawson City a one-way distance of approximately 46 kilometres which resulted in an approximate 20 minute one-way flight. Two shutdown style helicopter pads and two toe-in pads were constructed proximal to the main work area. There is a road to an active placer mine on Stowe Creek approximately 5.2 kilometres southeast of the main work area (Grabben M), which provided access to work on the southern portion (Grabben S) of the project. Old poor quality bulldozer roads extend from the Indian River placer workings up both Mackinnon Creek and Ruby Creek with the Mackinnon Creek road ending approximately 4.5 kilometres from the main work area and 3.25 kilometres from northern-most area that saw significant exploration during 2016 (Grabben N).

Topography And Vegetation - The property lies within the un-glaciated Klondike Plateau, which is characterized by low rolling hills dissected by deeply incised stream valleys. This region experienced strong surficial weathering during the early and mid-Tertiary, as a result, bedrock exposure is extremely limited with the effects of surface weathering extending to depths of as much as 80 metres or more. Where hand trenches were completed, overburden and regolithic averaged about 1.0 metre in most areas which allowed for effective soil sampling (via hand held augers) and hand trenching at most sites. Permafrost is widespread on north facing slopes, but rarely occurs in other areas. Although snow cover is mostly gone by early May, frost does not leave the ground sufficiently for exploration purposes until about mid-June. The property is below tree line, higher elevations are covered by mixed spruce, birch, poplar and brush, with tree cover generally increasing at lower elevations and on south facing slopes, with brush and stunted trees predominating on north facing slopes, at higher elevations and in areas of permafrost. Much of the project area was burnt by a recent forest fire, which destroyed moss cover particularly in dry areas, with the effect of providing somewhat more bedrock exposure than is typically present in the Dawson area.

Claims And Land Status - Numerous quartz claims were staked in the area during the White Gold staking rush and subsequent exploration "boom" that followed. Although numerous active claims remain in the area, the bulk of the target area is open and available for exploration. The project is located within Trondek Hwichin (Dawson) traditional territory, with no active First Nation land claim blocks in the area prospected.

History And Previous Work - Hardrock exploration efforts in the area date back to early 1899 when the Mackinnon brothers, Donald and Archibald, first discovered gold in the area. Over an approximate 20 year period they sank a total of 3 shafts, drove 3 adits and cut numerous trenches. At the peak of activity over 3,000 claims were staked to cover the conglomerates which were thought to have similarities to the Witwatersrand Goldfields discovered in 1886 . Although numerous promising assays of up to $48 \mathrm{oz} / \mathrm{T}$ gold were reported, and a small mill was erected on the Mackinnon Property, no significant gold was produced and the exploration "play" eventually died.

Numerous assessment reports and scientific studies, most of which relate to work completed in the immediate area of the Mackinnon Property (currently covered by the Glow 1-24 claims), just north of Haystack Mountain, are available in the public domain. Short summaries of each report are as follows:

AR 060902 - T.Lisle p.Eng for Andac Resources - 1973 - Mapping, prospecting and soil sampling was conducted on the Mackinnon Property. Geology consists of a conglomerate unit, intruded and overlain by andesite and rhyolite dykes and flows, sitting on a bed of Nasina series schist. Although rock sampling failed to outline any significant gold-silver trends or anomalies within the conglomerate, several areas of silicification were noted in association with a NNW trending fault paralleling Mackinnon Creek.




AR 061474 - Don Tully p.Eng for Yukon Revenue Mines - 1973 - Exploration on the Mackinnon Property returned grab samples of conglomerate with up to $0.07 \mathrm{oz} /$ ton Au while silicification and a potential fault zone along Mackinnon Creek were also noted.

AR 061475 - Ron Granger for Yukon Revenue Mines - 1974 - A rotary drilling program consisting of 4 five inch in diameter holes totalling 920 feet was completed in an effort to test the gold potential of the conglomerate outcrops of the Mackinnon Property. Assays returned a maximum of $0.005 \mathrm{oz} / \mathrm{T}$ gold and 0.64 $\mathrm{oz} / \mathrm{T}$ silver from a 10 foot interval of white quartz pebble conglomerate. Several sections of black conglomerate were noted, with the dark coloring due to abundant fine graphite within the conglomerate matrix. It was also noted that significant gold was produced when samples of conglomerate were processed using placer recovery methods and that gold may exist within the conglomerate but not report to traditional fire assay procedures.

AR091354 - Paul Richardson for Dome Exploration - 1979 - Dome completed a total of 4 diamond drill holes ( 4,135 feet) in the area of the historical shafts of the Mackinnon Property. Drilling encountered a mixed sequence of mudstone to conglomerate with rare occurrences of Carmacks group volcanics. Assaying was focused almost entirely on intersections of conglomerate which returned only background values except for one intersection of $0.18 \mathrm{~g} / \mathrm{t} \mathrm{Au}$ over 4 feet of quartz pebble conglomerate. Only drill logs exist for this report.

AR 091406 - R.D. Cruickshank for Eldorado Nuclear - 1981 - Eldorado Nuclear completed exploration designed to locate a basal-type uranium deposit, with limited exploration for epithermal precious metals also completed. Work was conducted in the area south of Haystack Mountain and consisted of mapping, aeromagnetic interpretation, scintilometer readings, thin section work and a total of 20 rock samples. Mapping showed that the late Cretaceous to Eocene sedimentary to volcanic rocks in the project area occupy a presumed graben setting cut by numerous high angle normal faults active during the period of vulcanism. Interpretation of regional aeromagnetic data suggests that the graben straddles a major WNW trending discontinuity interpreted to be a major basement structure. Rock sampling returned values of up to 100 ppb gold from a sample of conglomerate and samples of rhyolite which returned weakly anomalous mercury to 1400 ppb and arsenic to 22 ppm .

During 1983 Grant Lowey conducted a study of the Mackinnon Creek conglomerates in the area of the Mackinnon Property in an effort to ascertain whether the gold bearing conglomerate was a result of epithermal processes or a paleoplacer deposit. He noted the presence of fine gold within the conglomerate in the vicinity of the Britannia adit and based on various studies concluded that the faulting and alteration, fine gold particle size and close proximity to intermediate to felsic intrusions suggested a likely epithermal origin for the gold.

AR 091941 - Dave Waugh for Volcano Resources - 1986 - Mapping confirmed the presence of visible gold within the Mackinnon Property area but associated sampling and assaying failed to return strongly supportive gold assays. Silicification suggesting hydrothermal alteration and the potential for a Carlin-type low-grade gold deposit was noted in the vicinity of the old workings while the black conglomerate "McKinnon Conglomerate Unit" with abundant graphite in the matrix was considered a favourable host for an epigenetic hydrothermal type gold deposit.

AR 092082 - Dave Waugh for Volcano Resources - 1987 - A nine-hole 1521 foot drill program was designed to test bedrock in the area of the Mackinnon Property showings, specifically the potential for the conglomerates to host epithermal style precious metals mineralization. Drilling encountered numerous intersections of weakly anomalous gold with a program high of $0.195 \mathrm{~g} / \mathrm{t}$ Au over 24 feet from an interval consisting of intensely argillic altered and brecciated limonitic quartz pebble conglomerate in contact with a similarly altered and brecciated felsic volcanic body.

AR 093167 - Graham Davidson for Richlode Investments - 1993 - A total of six 500 kilogram bulk samples were extracted from conglomerate in the immediate vicinity of the Mackinnon Property showings. The samples were processed for both fine gold and coarse gold using industry accepted methodology with the best result being $0.118 \mathrm{~g} / \mathrm{t}$ gold.

During 2006-07 Bond and Chapman from the University of Leeds conducted a study on the origins of gold hosted by the conglomerates of the Indian River formation (Mackinnon Creek conglomerate). Results were generally inconclusive mostly due to a failure to definitively locate gold within the conglomerate unit; however the chemical and mineral signature of gold derived from unconsolidated areas of the conglomerate unit is consistent with that of gold grains obtained from Eureka Creek hardrock project, which has been characterized as a low sulphidation precious metals enriched epithermal system.

2009 - Minconsult for Westar Resources - A limited soil sampling program consisting of two parallel soil lines totalling 167 samples was completed at the time of staking. Results show numerous moderate to highly anomalous gold values of up to 70 ppb along with highly anomalous arsenic values of up to 240 ppm found clustered in two areas northeast of Haystack Mountain. No follow up work was conducted.

2009 - Mark Fekete for Taku Gold - A limited soil sampling program consisting of several reconnaissance ridge and spur sample lines returned values of up to 88.8 ppb Au and numerous samples with greater than 66.3 ppm arsenic to a high of 257 ppm arsenic existing as two clusters, one in the general vicinity of the Westar anomalies and one east of Haystack Mountain. No follow up work appears to have been conducted.

This historical exploration data shows that although significant amounts of advanced work such as drilling, trenching and bulk-sampling have been completed within the project area only a small amount of soil sampling, which is the prime mineral exploration vectoring method in this terrain, has been completed with this work concentrated in a $2 \mathrm{~km}^{2}$ area distal to and completed well after all of the advanced work. It should also be noted that the advanced work was focused almost entirely on the economic potential of the conglomerate unit.

Geology Metallogeny And Mineralization - Based on the above reports, academic studies, government mapping efforts and results of the 2016 field season, the geological setting of the Grabben Gold Project is thought to consist of a graben filled with presumed early Cretaceous Indian River Group clastic sedimentary rocks comprised predominantly of conglomerates and sandstones intruded and overlain by late Cretaceous presumably Carmacks Group (age dates of 64.8 to 69 ma ) rhyodacite, dacite, andesite and intermediate intrusive units as well as early Eocene rhyolite to rhyodacite stocks, dykes and flows. This package is cut by numerous normal faults and overlies a possible major basement structure within the bounding Nasina series schists and gneisses. The outline of this presumed graben complex highlights well using the first vertical derivative ("FVD") aeromagnetic map from the Stewart River regional multi-parameter airborne geophysical survey. As can be seen from the FVD overview map accompanying this report, the Grabben Gold complex is one of several presumed complexes within the immediate area.

The Carmacks Group is an approximate $72-64 \mathrm{Ma}$ volcanic succession, generally including a lower fragmental unit and an upper flood basalt unit, dominated by basic volcanic strata including augite-olivine basalt and breccia, hornblende feldspar porphyry andesite and dacite flows, and trachyte, but also including intermediate and locally felsic volcanic rocks. The thickest and coarsest volcaniclastic sections are occasionally cored by small high-level potassic plugs likely belonging to the Prospector Mountain Suite (7268 Ma ) or possibly representing late stage Casino Suite ( $79-74 \mathrm{Ma}$ ) activity. This geological setting is correlative with the metallogenically significant Bulkley Suite intrusives located in central BC. Bulkley Suite ( $88-70 \mathrm{Ma}$ ) intrusives are highly prospective for porphyry copper targets such as Huckelberry, while significant epithermal precious metal deposits such as Blackwater ( $70-67 \mathrm{Ma}$; reserves of 8.6 million ounces


of gold and 57.5 million ounces of silver) are associated with the waning stages of Bulkley Suite magmatism. Worldwide, shoshonitic and high-K calc-alkaline magmatism is associated with world-class hydrothermal gold and copper-gold mineralization. Examples are: 1) Ladolam gold mine, Lihir Island, Papua New Guinea; 2) Bingham copper-gold mine, Utah; 3) Grasberg copper-gold mine, Indonesia; 4) Oyu Tolgoi copper-gold mine, Mongolia.

Numerous geologically similar mixed sedimentary to volcanic early Cretaceous to early Eocene sequences occur throughout the area south and west of Dawson. Of these similar Yukon sequences, the only one which has received significant amounts of hardrock exploration work is located in the Sixtymile placer district approximately 85 kilometres to the northwest. Exploration by Erwin Kreft during 1986 located a zone (Per occurrence) of variably clay altered, silicified, pyritic and sheared Carmacks Group andesitic volcanics in the floor of a placer mining cut near the mouth of Miller Creek. In 1988 Klondike Gold Mining Corporation optioned this occurrence from Mr. Kreft and drilled 7 holes ( 765 m ) with a program best intersection of 8.76 $\mathrm{g} / \mathrm{t}$ Au over 10.5 m in DDH D4/88-02.

In 2010 Radius Gold/Rackla Resources recognized the epithermal precious metal potential in the Sixty Mile River valley and acquired much of the ground in the area. Their work identified the presence of a down dropped half graben within which the Carmacks group andesites are variably silicified, sheared and clay altered. Subsequent exploration included drilling of the historic Per showing which lies within a broad zone of illite alteration. DDH11-08 intersected strongly bleached and sericite altered Carmacks Group andesite crosscut by narrow dolomite pyrite veins that returned an interval of $19.0 \mathrm{~g} / \mathrm{t} \mathrm{Au}$ over 1.0 m . Drill hole DDH11-10 intersected $132.0 \mathrm{~g} / \mathrm{t}$ Au over 1.5 m . This hole was drilled 1.4 km east northeast of hole DDH1108 . The interval consisted of bleached, hematized and sericite altered quartz feldspar biotite schist cross cut by minor quartz/pyrite veins. Several holes also cut a blind, potassic and sericitically altered feldspar porphyry body as part of a Cretaceous volcanic-intrusive package located in a pull-apart basin located along the Sixty Mile River valley bottom. The porphyry body contains disseminated pyrite and pyrite $+/-$ chalcopyrite-molybdenite bearing fractures and stockworks with silica-sericite alteration haloes yielding a best interval of 542 ppm Cu and 41 ppm Mo over 271.27 m starting at 8.8 m to EOH in DDH11-05.

Airborne Geophysical Survey - During 2000 the GSC and Yukon Geological Survey co-sponsored an airborne geophysical survey (Multisensor Airborne Geophysical Survey; GSC Open File 3992) covering much of the Klondike Goldfields including the Grabben Gold project area. Results of the airborne survey in conjunction with government mapping efforts and 2016 fieldwork appear to suggest that areas underlain by Carmacks Group volcanics correlate well with FVD aeromagnetic highs of $0.300 \mathrm{nT} / \mathrm{m}$ or greater while RTF aeromagnetic data suggests large or smaller unaltered volcanic bodies represent strong positive highs while smaller or more altered bodies manifest as weak to moderate positive anomalies. Areas with strong potassium response likely represent large, fresh and relatively un-altered volcanic bodies while areas of moderate potassium response may represent altered volcanics, bodies with a small surficial expression or perhaps sediments metasomatically altered by intrusive activity. Ultimately the data contained in Open File 3992 will prove of great value when used in conjunction with a field mapping project.

Current Work And Results - The 2016 field program on the Grabben project consisted of prospecting, soil sampling, rock sampling, hand trenching and staking yielding a total of 116 soil samples, 80 rock samples and 62 quartz claims. The soil samples were generally taken from the C horizon, except at a few sites where overburden was frozen in which case B horizon material was taken, using hand held augers. Rock samples were sourced from occasional bedrock exposures as well as small hand dug pits and trenches. Sample sites were marked in the field using flagging inscribed with the sample code, with the soil samples placed in an industry standard soil sample envelope and the rock samples in industry standard poly sample bags. All samples were analyzed by Bureau Veritas, with soils prepped by SS80 ( 100 g to -80 mesh assay), rocks prepped by PRP70-250 ( 250 g split and pulverize), with analyses on most samples consisting of FA430 (30




gram fire assay) and AQ300 ( 0.5 gram 35 element aqua regia ICP-MS) packages while some samples were analyzed by AQ201 ( 15 gram 36 element aqua regia ICP-MS).

Work was concentrated in 3 main areas designated Grabben N (north), Grabben M (central) and Grabben S (south).

Grabben N - Work at Grabben N consisted of prospecting and reconnaissance style soil sampling together yielding 11 rock samples and 31 soil samples.

Geology is predominantly sedimentary in nature and consists of mudstone, fine to coarse sandstone, and pebble conglomerate ranging from polymictic to quartz dominant with matrix through to clast supported varieties. Intruding the sedimentary units is a quartz biotite andesite or intermediate intrusive varying from massive and relatively fresh or unaltered generally away from contacts, gradational to variably limonitic bleached and fractured or brecciated as the presumed contact with the sedimentary units is approached. All sedimentary units are typically weakly hornfelsed and variably silicified. The effects of faulting, including fracturing and brecciation, have been noted in finer clastic units and likely occur in the conglomerate unit as well but are much less obvious.

Visible fresh sulphides are very limited within most units except for sections of the conglomerate which contain up to $3 \%$ pyrite in the matrix as well as trace fine disseminated pyrite in fine clastics. Grey to black patches, presumed to be very fine grained sulphides, have been noted within both narrow quartz veins and mudstone to sandstone wallrock. The presence of brecciated mudstone partially cemented by goethite and limonite as well as fractured and brecciated intermediate intrusive with limonite veins and fracture fillings suggests that a significant amount of sulphide was present prior to weathering.

Several of the rock samples taken in the Grabben N area returned interesting geochemical values. Sample CONR-15 consisting of a grab sample of a quartz limonite vein with dark patches cutting mudstone with -dark patches and mineralized with trace disseminated pyrite returned $20.6 \mathrm{ppm} \mathrm{Ag}, 189.8 \mathrm{ppb} \mathrm{Au}, 8,484.9$ $\mathrm{ppm} \mathrm{As}, 196.1 \mathrm{ppm} \mathrm{Pb}, 98.3 \mathrm{ppm} \mathrm{Sb}$ and 113 ppm Bi . Sample CONR-18 consisting of a grab sample of a limonitic coarse sandstone with dark patches and trace disseminated pyrite cut by a quartz lined fracture and a 1 cm wide quartz vein with dark patches returned $8.4 \mathrm{ppm} \mathrm{Ag}, 134.8 \mathrm{ppb} \mathrm{Au}, 2,350 \mathrm{ppm} \mathrm{As}, 46.8 \mathrm{ppm} \mathrm{Pb}$, 13.1 ppm Sb and 2.4 ppm Bi . Sample CONR-19 consisting of brecciated mudstone cemented with limonite and goethite returned $17.7 \mathrm{ppm} \mathrm{Ag}, 69 \mathrm{ppb} \mathrm{Au}, 3,614.9 \mathrm{ppm} \mathrm{As}, 107.4 \mathrm{ppm} \mathrm{Pb}, 55.4 \mathrm{ppm} \mathrm{Sb}$ and 28.8 ppm Bi . Based on the geochemical results it is very likely that the dark patches in these samples represent extremely fine-grained sulphide mineralization such as arsenopyrite with the anomalous amounts of bismuth suggesting mineralization may be intrusive related. Analytical results from reconnaissance style soil sampling help define an approximate $110 \mathrm{~m} \times 180 \mathrm{~m}$ area variably anomalous in $\mathrm{Au}-\mathrm{Ag}-\mathrm{As}-\mathrm{Pb}-\mathrm{Sb}-\mathrm{Bi}$ associated with the anomalous rock geochemistry detailed above, while scattered weak to moderately anomalous soil geochemistry with values of up to $0.033 \mathrm{ppm} \mathrm{Au}, 0.9 \mathrm{ppm} \mathrm{Ag}$ and 97 ppm As extend up to 700 m north of the main anomalous area.

Grabben M - Work at Grabben M consisted of prospecting, hand trenching and a small soil sample grid together yielding 64 rock samples and 77 soil samples.

Geology consists of a pebble conglomerate ranging from polymictic to quartz dominant with matrix through to clast supported varieties and lesser amounts of fine to coarse sandstone. Intruding the sedimentary units is a quartz biotite andesite or intermediate intrusive varying from massive and relatively fresh or unaltered generally away from presumed contacts, gradational to variably limonitic, bleached and fractured or brecciated as the presumed contact with the sedimentary units is approached. All sedimentary units are
typically weakly hornfelsed and variably silicified with the conglomerate matrix occasionally weakly clay altered.

Visible fresh sulphides are very limited within most units except for sections of the conglomerate which contain up to $0.5 \%$ pyrite in the matrix as well as trace fine disseminated pyrite in fine clastics. Grey to black patches, presumed to be very fine grained sulphides, have been noted in the matrix of silicified conglomerate generally wrapping around, or partially enveloping, clasts. All rocks units are weakly to rarely moderately limonitic with one area of heavily weathered and likely sheared intrusive highly limonitic and weakly scoroditic. The effects of weathering and surface oxidation have resulted in a near complete lack of outcrop within the area prospected.

Significant precious metals values have been found in both the conglomerate as well as the intermediate intrusive. Conglomerate hosted mineralization consists of a sub cm -scale fracture controlled grey quartz sulphide vein with values of up to $810 \mathrm{ppm} \mathrm{Ag}, 4.362 \mathrm{ppm} \mathrm{Au},>10,000 \mathrm{ppm} \mathrm{As},>10,000 \mathrm{ppm} \mathrm{Pb},>2,000$ ppm Sb and 104 ppm Bi . Several areas of conglomerate are silicified, have a weak to moderately clay altered matrix and contain dark patches, likely consisting of very fine grained sulphide, which wrap or partially envelope clasts. Maximum metal values from samples of altered conglomerate with no obvious veining are $4.6 \mathrm{ppm} \mathrm{Ag}, 0.021 \mathrm{ppm} \mathrm{Au}, 1,724.3 \mathrm{ppm} \mathrm{As}, 699 \mathrm{ppm} \mathrm{Pb}$ and 27.4 ppm Sb . Although only a few fragments of sulphide vein material have been encountered to date, soil geochemistry suggests similar sulphide veining is somewhat more widespread than prospecting results suggest.

Values of up to $62.4 \mathrm{ppm} \mathrm{Ag}, 7,911.7 \mathrm{ppb} \mathrm{Au},>10,000 \mathrm{pm} \mathrm{As}, 2,419.8 \mathrm{ppm} \mathrm{Pb}$ and 300.9 ppm Sb were returned from a 0.65 m channel sample of variably fractured or sheared limonitic and weakly scoroditic bleached intermediate intrusive. Although only a single precious metals enriched shear/fracture system has been encountered to date, soil geochemistry suggests the presence of other similarly mineralized structures in the overburden covered area surrounding this showing.

Soil geochemistry results approximately define a weakly anomalous to highly anomalous gold and occasional arsenic anomaly coincident with the mineralized showings described above and which is approximately 150 metres wide and 450 metres long with potential for extensions to the southeast and northwest.

Grabben S - Work on the southern portion of the project was designed to prospect and samples areas of outcrop or bedrock exposures within or peripheral to the placer mined drainage basins in the area. Geology at lower elevations such as the placer mined valley bottoms of Stowe, Montana and Bismark Creeks consists of Nasina Assemblage carbonaceous schist, quartzite and lesser marble. Slightly higher elevations are covered by Indian River Group clastic sediments intruded by rhyolitic to andesitic volcanic rocks. A total of 8 soils and 11 rock samples were taken, with no significantly anomalous areas defined.

Conclusions - The Grabben Gold project represents the first significant precious metals discovery within the historically heavily explored MacKinnon Creek/Haystack Mountain area, and one of the few Yukon based discoveries in this geological setting. Mineralization consists of extremely fine-grained sulphides, with a Au-$\mathrm{Ag}-\mathrm{As}-\mathrm{Pb}-\mathrm{Sb}-\mathrm{Bi}$ signature, hosted within veins, shears and breccia zones developed in both early-mid Cretaceous clastic sediments and late Cretaceous Carmacks Group (69-64.8 Ma) andesite and intermediate intrusives with these units occupying a presumed graben setting. Mineralization appears to be best developed within fine clastics and the intrusive bodies, with only minor amounts occurring within conglomerate bodies, and may be associated with waning stages of Prospector Mountain Suite ( $72-68 \mathrm{Ma}$ ) magmatism which is thought to be the sub-volcanic equivalent of the Carmacks Group. Late Cretaceous intrusives such as the Casino and Prospector Mountain Suites in the Yukon and the Bulkley Suite in BC are highly prospective for both porphyry (Casino deposit and Huckleberry Mine) and epithermal style deposits such as Blackwater in
central BC where reserves of 8.6 million ounces of gold and 57.5 million ounces of silver are associated with the waning stages ( $70-67 \mathrm{Ma}$ ) of Bulkley Suite magmatism. Although significant amounts of advanced work such as drilling, trenching and bulk-sampling have been conducted in the Grabben Gold area, the vast majority of this work was focused on the economic potential of the conglomerate bodies and the amount of preliminary vectoring methods such as soil sampling was extremely limited in both scale and extent, thereby leaving significant potential for a grassroots discovery especially in areas underlain by volcanic to intrusive bodies and fine clastics.

Recommendations - Further work is recommended for the Grabben Gold project. Reconnaissance style soil sampling, mapping and prospecting should be completed in all areas of the presumed graben complex not yet covered by this type of work. Detailed soil sampling, prospecting and hand trenching should be completed over the mineralized showings at Grabben M and Grabben N . The results of this work should be used to guide a short excavator trenching or rotary air blast drilling program.









Grabben Gold Rock Sample Table
$=0$
$=0$









## Grabben Gold Soil Sample Table

| Area | Name | Easting | Northing | Description | Ag | Au | As | Pb | Sb | Bi | Sr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grab M | BGGD-01 | 594193 | 7060879 |  | 1.8 | 0.016 | 275 | 256 | 4 | <3 | 10 |
| Grab M | BGGD-02 | 594201 | 7060874 |  | 1 | 0.027 | 172 | 43 | <3 | <3 | 16 |
| Grab M | BGGD-03 | 594209 | 7060869 |  | 12.6 | 0.164 | 2015 | 1638 | 52 | 4 | 38 |
| Grab M | BGGD-04 | 594217 | 7060864 |  | 5.4 | 0.197 | 1967 | 1074 | 24 | <3 | 20 |
| Grab M | BGGD-05 | 594225 | 7060859 |  | 1.3 | 0.035 | 541 | 259 | 8 | $<3$ | 19 |
| Grab M | BGGD-06 | 594234 | 7060855 |  | 3.3 | 0.141 | 537 | 223 | 5 | <3 | 16 |
| Grab M | BGGD-07 | 594221 | 7060816 |  | 0.3 | 0.031 | 171 | 180 | <3 | <3 | 20 |
| Grab M | GKID-01 | 593323 | 7060857 |  | $<0.3$ | 0.005 | 11 | 6 | $<3$ | $<3$ | 42 |
| Grab M | GKID-02 | 593353 | 7060788 |  | 0.3 | <0.005 | 10 | 6 | <3 | $<3$ | 33 |
| Grab M | GKID-03 | 593395 | 7060725 |  | $<0.3$ | <0.005 | 8 | 5 | <3 | $<3$ | 36 |
| Grab M | GKID-04 | 593435 | 7060657 |  | $<0.3$ | 0.006 | 7 | $<3$ | $<3$ | $<3$ | 39 |
| Grab M | GKID-05 | 593468 | 7060590 |  | $<0.3$ | 0.005 | 7 | $<3$ | $<3$ | $<3$ | 31 |
| Grab M | GKID-06 | 593497 | 7060520 |  | <0.3 | <0.005 | 7 | 5 | <3 | $<3$ | 35 |
| Grab M | GKID-07 | 593537 | 7060460 |  | $<0.3$ | $<0.005$ | 8 | $<3$ | $<3$ | $<3$ | 35 |
| Grab M | GKID-08 | 593565 | 7060416 |  | $<0.3$ | <0.005 | 10 | 13 | $<3$ | $<3$ | 36 |
| Grab M | GKID-09 | 593584 | 7060371 |  | $<0.3$ | 0.008 | 9 | 5 | $<3$ | $<3$ | 34 |
| Grab M | GKID-10 | 593613 | 7060330 |  | $<0.3$ | <0.005 | 8 | 5 | $<3$ | $<3$ | 30 |
| Grab M | GKID-11 | 593640 | 7060286 |  | $<0.3$ | 0.006 | 7 | 4 | <3 | <3 | 29 |
| Grab M | GKID-12 | 593670 | 7060248 |  | $<0.3$ | <0.005 | 8 | 4 | $<3$ | <3 | 33 |
| Grab M | GKID-13 | 593690 | 7060202 |  | $<0.3$ | 0.005 | 10 | 6 | $<3$ | $<3$ | 62 |
| Grab M | GKID-14 | 593778 | 7060298 |  | $<0.3$ | <0.005 | 8 | 5 | $<3$ | $<3$ | 33 |
| Grab M | GKID-15 | 594000 | 7060760 |  | $<0.3$ | 0.008 | 23 | 8 | $<3$ | $<3$ | 50 |
| Grab M | GKID-16 | 594000 | 7060800 |  | 0.3 | 0.01 | 23 | 9 | <3 | <3 | 41 |
| Grab M | GKID-17 | 594000 | 7060849 |  | $<0.3$ | 0.006 | 19 | 7 | <3 | $<3$ | 45 |
| Grab M | GKID-18 | 594000 | 7060901 |  | 0.3 | 0.01 | 24 | 10 | $<3$ | $<3$ | 60 |
| Grab M | GKID-19 | 594000 | 7060950 |  | $<0.3$ | 0.007 | 19 | 19 | <3 | $<3$ | 74 |
| Grab M | GKID-20 | 594000 | 7060999 |  | $<0.3$ | 0.006 | 14 | 17 | <3 | <3 | 30 |
| Grab M | GKID-21 | 594000 | 7061051 |  | $<0.3$ | 0.031 | 99 | 20 | $<3$ | <3 | 30 |
| Grab M | GKID-22 | 594000 | 7061100 |  | $<0.3$ | 0.012 | 23 | 19 | $<3$ | <3 | 78 |
| Grab M | GRD-13 | 594180 | 7061175 | frozen | $<0.3$ | 0.009 | 69 | 23 | $<3$ | <3 | 28 |
| Grab M | GRD-14 | 594184 | 7061047 | frozen | 0.6 | 0.031 | 271 | 61 | $<3$ | <3 | 180 |
| Grab M | GRD-15 | 594155 | 7060912 |  | $<0.3$ | 0.015 | 20 | 13 | 3 | $<3$ | 24 |
| Grab M | GRD-16 | 594192 | 7060880 |  | 0.4 | <0.005 | 135 | 94 | <3 | <3 | 5 |
| Grab M | GRD-17 | 594217 | 7060862 |  | 10.8 | 0.124 | 438 | 201 | 5 | $<3$ | 12 |
| Grab M | GRD-18 | 594229 | 7060857 |  | 1.6 | 0.042 | 116 | 90 | <3 | <3 | 15 |
| Grab M | GRD-19 | 594322 | 7060814 |  | $<0.3$ | 0.032 | 98 | 191 | <3 | <3 | 15 |
| Grab M | GRD-20 | 594368 | 7060792 |  | 0.4 | 0.013 | 35 | 36 | <3 | <3 | 31 |
| Grab M | GZD-01 | 594102 | 7060953 |  | <0.3 | 0.031 | 385 | 85 | 23 | <3 | 281 |
| Grab M | GZD-02 | 594092 | 7060959 |  | 0.3 | 0.104 | 217 | 47 | 21 | <3 | 244 |
| Grab M | GZD-03 | 594090 | 7060952 |  | $<0.3$ | 0.296 | 26 | 48 | <3 | <3 | 246 |
| Grab M | GZD-04 | 594081 | 7060944 |  | <0.3 | 0.025 | 39 | 29 | <3 | <3 | 442 |
| Grab M | GZD-05 | 594089 | 7060935 |  | $<0.3$ | 0.271 | 44 | 18 | <3 | <3 | 191 |
| Grab M | GZD-06 | 594096 | 7060930 |  | $<0.3$ | 0.019 | 27 | 28 | <3 | <3 | 150 |
| Grab M | GZD-07 | 594107 | 7060942 |  | $<0.3$ | 0.035 | 602 | 44 | 10 | <3 | 82 |
| Grab M | GZD-08 | 594112 | 7060950 |  | $<0.3$ | 0.019 | 40 | 33 | $<3$ | <3 | 144 |
| Grab M | JGGD-01 | 594402 | 7060752 |  | $<0.3$ | 0.022 | 73 | 95 | <3 | <3 | 26 |
| Grab M | JGGD-02 | 594401 | 7060802 |  | 0.6 | 0.363 | 139 | 160 | 3 | <3 | 33 |
| Grab M | JGGD-03 | 594402 | 7060852 |  | $<0.3$ | 0.012 | 21 | 12 | $<3$ | <3 | 34 |
| Grab M | JGGD-04 | 594401 | 7060900 | wet B horizon | $<0.3$ | 0.014 | 26 | 31 | $<3$ | <3 | 36 |
| Grab M | JGGD-05 | 594401 | 7060949 |  | $<0.3$ | 0.009 | 15 | 16 | $<3$ | <3 | 38 |
| Grab M | JGGD-06 | 594401 | 7060001 | frozen B | $<0.3$ | 0.006 | 15 | 15 | <3 | <3 | 46 |
| Grab M | JGGD-07 | 594399 | 7060049 | frozen B | <0.3 | 0.006 | 15 | 24 | $<3$ | <3 | 41 |


| Area | Name | Easting | Northing | Description | Ag | Au | As | Pb | Sb | Bi | Sr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grab M | JGGD-08 | 594399 | 7060103 | frozen B | $<0.3$ | <0.005 | 16 | 14 | <3 | <3 | 39 |
| Grab M | JGGD-09 | 594300 | 7060100 |  | 0.4 | 0.011 | 41 | 36 | <3 | $<3$ | 60 |
| Grab M | JGGD-10 | 594293 | 7060039 | wet sample | 0.4 | 0.01 | 38 | 36 | <3 | $<3$ | 73 |
| Grab M | JGGD-11 | 594302 | 7061000 | wet sample | $<0.3$ | 0.011 | 18 | 27 | <3 | <3 | 104 |
| Grab M | JGGD-12 | 594304 | 7060949 |  | 0.3 | 0.011 | 97 | 112 | <3 | <3 | 94 |
| Grab M | JGGD-13 | 594302 | 7060897 |  | $<0.3$ | 0.06 | 21 | 30 | <3 | <3 | 33 |
| Grab M | JGGD-14 | 594300 | 7060852 |  | $<0.3$ | 0.016 | 17 | 20 | <3 | $<3$ | 14 |
| Grab M | JGGD-15 | 594300 | 7060800 |  | $<0.3$ | 0.017 | 46 | 23 | <3 | <3 | 27 |
| Grab M | JGGD-16 | 594301 | 7060749 |  | $<0.3$ | 0.015 | 32 | 21 | $<3$ | $<3$ | 32 |
| Grab M | JGGD-17 | 594200 | 7060750 |  | $<0.3$ | 0.014 | 35 | 39 | <3 | $<3$ | 27 |
| Grab M | JGGD-18 | 594198 | 7060798 |  | $<0.3$ | 0.034 | 104 | 95 | <3 | $<3$ | 16 |
| Grab M | JGGD-19 | 594199 | 7060856 |  | 0.4 | 0.012 | 96 | 50 | <3 | $<3$ | 12 |
| Grab M | JGGD-20 | 594197 | 7060902 |  | $<0.3$ | <0.005 | 21 | 12 | <3 | $<3$ | 13 |
| Grab M | JGGD-21 | 594198 | 7060954 |  | $<0.3$ | 0.01 | 16 | 8 | <3 | $<3$ | 23 |
| Grab M | JGGD-22 | 594199 | 7060002 |  | 0.3 | 0.032 | 221 | 117 | 6 | $<3$ | 505 |
| Grab M | JGGD-23 | 594196 | 7060049 |  | 0.5 | 0.024 | 223 | 89 | <3 | <3 | 155 |
| Grab M | JGGD-24 | 594199 | 7060098 |  | $<0.3$ | 0.013 | 85 | 50 | <3 | $<3$ | 66 |
| Grab M | JGGD-25 | 594100 | 7061098 |  | $<0.3$ | 0.008 | 51 | 17 | <3 | $<3$ | 38 |
| Grab M | JGGD-26 | 594101 | 7061050 |  | 1.2 | 0.01 | 238 | 157 | 7 | $<3$ | 245 |
| Grab M | JGGD-27 | 594102 | 7060999 |  | $<0.3$ | 0.012 | 21 | 32 | <3 | <3 | 93 |
| Grab M | JGGD-28 | 594099 | 7060948 |  | 0.7 | 0.329 | 1690 | 159 | 33 | $<3$ | 312 |
| Grab M | JGGD-29 | 594101 | 7060900 |  | 0.3 | 0.033 | 27 | 23 | <3 | $<3$ | 104 |
| Grab M | JGGD-30 | 594103 | 7060845 |  | $<0.3$ | 0.009 | 18 | 12 | <3 | $<3$ | 33 |
| Grab M | JGGD-31 | 594104 | 7060802 |  | $<0.3$ | 0.011 | 27 | 22 | <3 | <3 | 44 |
| Grab M | JGGD-32 | 594102 | 7060751 |  | $<0.3$ | 0.012 | 23 | 22 | <3 | $<3$ | 45 |
| Grab M | zChopper | 594408 | 7060774 | nice shutdown style pad |  |  |  |  |  |  |  |
| Grab N | COND-01 | 593346 | 7061791 | Au by AQ201 | 0.3 | 14.7 | 203.1 | 8.7 | 6 | 3 | 18 |
| Grab N | COND-02 | 593342 | 7061864 | Au by AQ201 | 0.4 | 26.7 | 174.2 | 15.2 | 5.7 | 2.4 | 32 |
| Grab N | COND-03 | 593315 | 7061878 | Au by AQ201 | 0.3 | 28.5 | 151.8 | 12 | 4.5 | 3.2 | 21 |
| Grab N | COND-04 | 593320 | 7061918 | Au by AQ201 | 0.4 | 43.5 | 93.4 | 11.8 | 3.4 | 1.6 | 25 |
| Grab N | COND-05 | 593317 | 7061944 | Au by AQ201 | 1.1 | 73.6 | 481.5 | 19 | 12.9 | 4.8 | 42 |
| Grab N | COND-06 | 593300 | 7061970 | Au by AQ201 | 0.2 | 65.1 | 67.2 | 9.5 | 3.1 | 1.2 | 23 |
| Grab N | COND-07 | 593334 | 7061968 | Au by AQ201 | 3.6 | 83.1 | 625.9 | 47.6 | 12 | 7.2 | 45 |
| Grab N | COND-08 | 593385 | 7061963 | Au by AQ201 | 2.3 | 31.6 | 354.4 | 19.9 | 8.2 | 2.8 | 25 |
| Grab N | COND-09 | 593381 | 7061889 | Au by AQ201 | 0.3 | 26.4 | 162.4 | 13.6 | 5.8 | 2.5 | 49 |
| Grab N | COND-10 | 593389 | 7061848 | Au by AQ201, 1910 trench spill | 0.4 | 47.1 | 260.9 | 15.1 | 7.3 | 2.9 | 28 |
| Grab N | COND-11 | 593343 | 7061814 | Au by AQ201 | 0.4 | 39.7 | 219.9 | 15.2 | 7.9 | 4.6 | 30 |
| Grab N | COND-12 | 593302 | 7061774 | Au by AQ201 | 0.6 | 8.6 | 53.2 | 17.9 | 4.9 | 5.7 | 27 |
| Grab N | GKD-01 | 593075 | 7063295 |  | $<0.3$ | $<0.005$ | 32 | 22 | <3 | <3 | 16 |
| Grab N | GKD-02 | 593117 | 7063160 | rocky area | <0.3 | <0.005 | 53 | 26 | <3 | <3 | 32 |
| Grab N | GKD-03 | 593151 | 7063104 |  | 0.4 | 0.006 | 20 | 12 | $<3$ | <3 | 23 |
| Grab N | GKD-04 | 593171 | 7063068 |  | $<0.3$ | 0.005 | 34 | 23 | <3 | $<3$ | 20 |
| Grab N | GKD-05 | 593244 | 7062820 |  | $<0.3$ | 0.006 | 16 | 14 | <3 | <3 | 16 |
| Grab N | GKD-06 | 593238 | 7062773 |  | $<0.3$ | $<0.005$ | 17 | 20 | <3 | <3 | 11 |
| Grab N | GKD-07 | 593271 | 7062734 |  | $<0.3$ | 0.007 | 25 | 14 | $<3$ | <3 | 20 |
| Grab N | GRD-01 | 592972 | 7063431 |  | $<0.3$ | 0.009 | 90 | 45 | <3 | <3 | 29 |
| Grab N | GRD-02 | 593090 | 7063319 | super rocky area | $<0.3$ | 0.006 | 35 | 42 | <3 | <3 | 21 |
| Grab N | GRD-03 | 593134 | 7063180 |  | 0.4 | 0.006 | 47 | 27 | <3 | <3 | 36 |
| Grab N | GRD-04 | 593170 | 7063132 |  | 0.3 | 0.008 | 41 | 19 | <3 | <3 | 46 |
| Grab N | GRD-05 | 593270 | 7062832 |  | $<0.3$ | 0.011 | 21 | 13 | <3 | <3 | 13 |
| Grab N | GRD-06 | 593317 | 7062772 |  | 0.3 | <0.005 | 20 | 32 | 11 | $<3$ | 26 |
| Grab N | GRD-07 | 593322 | 7062704 |  | 0.6 | 0.008 | 41 | 16 | <3 | <3 | 18 |
| Grab N | GRD-08 | 593350 | 7062698 | wet sample | 0.7 | 0.008 | 73 | 27 | <3 | <3 | 18 |
| Grab N | GRD-09 | 593363 | 7062682 | frozen | 0.9 | 0.033 | 97 | 16 | <3 | <3 | 19 |


| Area | Name | Easting | Northing | Description | Ag | Au | As | Pb | Sb | Bi | Sr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grab N | GRD-10 | 593489 | 7062431 |  | 0.4 | 0.02 | 66 | 11 | <3 | <3 | 24 |
| Grab N | GRD-11 | 593582 | 7062265 |  | 0.6 | 0.01 | 105 | 8 | <3 | <3 | 26 |
| Grab N | GRD-12 | 593840 | 7061778 | frozen | <0.3 | 0.007 | 23 | 8 | <3 | <3 | 30 |
| Grab N | zChopper | 593095 | 7061602 | nice shutdown style pad |  |  |  |  |  |  |  |
| Grab N | zChopper | 592968 | 7063426 | toe-in pad |  |  |  |  |  |  |  |
| Grab S | KMD-01 | 597984 | 7056247 |  | 0.3 | 0.037 | 6 | 18 | 0.6 | $<3$ | 24 |
| Grab S | KMD-02 | 597947 | 7056236 |  | 0.6 | $<0.005$ | 5 | 7 | <0.5 | $<3$ | 20 |
| Grab S | KMD-03 | 597901 | 7056209 |  | $<0.3$ | 0.007 | 7 | <3 | $<0.5$ | <3 | 119 |
| Grab S | KMD-04 | 597842 | 7056212 |  | $<0.3$ | <0.005 | <2 | 11 | $<0.5$ | <3 | 11 |
| Grab S | KMD-05 | 597274 | 7056091 |  | $<0.3$ | 0.008 | 7 | 8 | <0.5 | <3 | 12 |
| Grab S | MOND-01 | 599900 | 7055085 |  | 0.4 | <0.005 | 19 | 17 | <3 | <3 | 21 |
| Grab S | MOND-02 | 599923 | 7055051 |  | <0.3 | 0.005 | 10 | 13 | <3 | <3 | 15 |
| Grab S | MOND-03 | 599928 | 7055033 | rocky area | $<0.3$ | <0.005 | 17 | 15 | <3 | <3 | 15 |

## Statement Of Qualifications

I Bernie Kreft directed and participated in the exploration work described herein.
I have 31 years prospecting experience in the Yukon and BC.
This report is based on fieldwork directed or conducted by the author, and includes information from various publicly available assessment reports.

This report is based on fieldwork completed during the 2016 field season.
This report is based on fieldwork completed on the Grabben Gold Project
Respectfully submitted,


Bernie Kreft

## Cost Statement

Helicopter 5.1 hours exploration $\quad=\$ 5,969.04$
Helicopter 2.5 hours staking $\quad=\$ 3,018.75$
Assaying 116 soils and 80 rocks ( 30 g Au fire assay, icp) $\quad=\$ 6,089.06$
Wages Kyle Eide 4 man days x $\$ 300$ /day $\quad=\$ 1,200.00$
Wages Bernie Kreft 6 man days x $\$ 350 /$ day $=\$ 2,100.00$
Wages Justin Kreft 6 man days x $\$ 300 /$ day $\quad=\$ 1,800.00$
Wages Jarret Kreft 6 man days $x \$ 300 /$ day $\quad=\$ 1,800.00$
Wages Andre Pedneault (staking 2 days wages and supplies) $=\$ 898.00$
Wages Alex Axent-Hilton (staking 2 days wages) $=\$ 750.00$
Food and Camp 22 man days $\$ 100$ /day
$=\$ 2,200.00$
Truck Travel 2 round trips Whitehorse-Dawson + around Dawson 2150km x $\$ 0.60 / \mathrm{km}=\$ 1,290.00$
Report Prep
$=\$ 2,200.00$
$=\$ 29,314.85$

 0 O
Bureau Veritas Commodities Canada Ltd．
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA PHONE（604）253－3158

## 

|  | $\begin{array}{r} \text { Method } \\ \text { Analyte } \\ \text { Unit } \\ \text { MDL } \end{array}$ | WGHT Wgt kg 0.01 | $\begin{array}{r} \text { FA430 } \\ \mathrm{Au} \\ \mathrm{ppm} \\ 0.005 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \text { Mo } \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \mathrm{AQ} 300 \\ \mathrm{Cu} \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \mathrm{Pb} \\ \mathrm{ppm} \\ 3 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \mathrm{Zn} \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \mathrm{AQ} 300 \\ \mathrm{Ag} \\ \mathrm{ppm} \\ 0.3 \end{array}$ | $\begin{array}{r} \mathrm{AQ} 300 \\ \mathrm{Ni} \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \text { Co } \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \mathrm{Mn} \\ \mathrm{ppm} \\ 2 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \text { Fe } \\ \% \\ 0.01 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \text { As } \\ \mathrm{ppm} \\ 2 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \text { Th } \\ \mathrm{ppm} \\ 2 \end{array}$ | $\begin{array}{r} \mathrm{AQ} 300 \\ \mathrm{Sr} \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \mathrm{Cd} \\ \mathrm{ppm} \\ 0.5 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \mathrm{Sb} \\ \mathrm{ppm} \\ 3 \end{array}$ | $\begin{array}{r} \mathrm{AQ} 300 \\ \mathrm{Bi} \\ \mathrm{ppm} \\ 3 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \mathrm{V} \\ \mathrm{ppm} \\ 1 \end{array}$ | $\begin{array}{r} \text { AQ300 } \\ \text { Ca } \\ \% \\ 0.01 \end{array}$ | $\begin{array}{r\|} \hline \text { AQ300 } \\ P \\ \% \\ 0.001 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BGR－01 | Rock | 0.73 | $<0.005$ | 2 | 31 | 35 | 55 | 0.4 | 6 | 10 | 1266 | 4.38 | 9 | 9 | 41 | ＜0．5 | ＜3 | $<3$ | 82 | 0.55 | 0.144 |
| BGR－02 | Rock | 0.89 | ＜0．005 | $<1$ | 2 | $<3$ | 9 | $<0.3$ | $<1$ | $<1$ | 34 | 0.40 | 3 | 2 | 7 | $<0.5$ | $<3$ | $<3$ | 6 | 0.01 | 0.004 |
| BGR－03 | Rock | 0.53 | 0.011 | 2 | 38 | 9 | 212 | $<0.3$ | 48 | 38 | 970 | 5.11 | 15 | 8 | 17 | $<0.5$ | ＜3 | ＜3 | 82 | 0.16 | 0.142 |
| BGR－04 | Rock | 0.26 | $<0.005$ | $<1$ | 43 | $<3$ | 91 | $<0.3$ | 15 | 12 | 168 | 3.31 | 23 | 14 | 7 | $<0.5$ | $<3$ | $<3$ | 19 | 0.03 | 0.020 |
| BGR－05 | Rock | 0.42 | $<0.005$ | $<1$ | 6 | 6 | 5 | 0.6 | ＜1 | $<1$ | 60 | 0.54 | 20 | $<2$ | 4 | $<0.5$ | $<3$ | $<3$ | 2 | $<0.01$ | 0.003 |
| BGR－06 | Rock | 0.29 | ＜0．005 | 3 | 15 | 18 | 96 | $<0.3$ | 2 | 7 | 284 | 3.34 | 54 | 8 | 53 | 0.6 | 10 | $<3$ | 78 | 0.75 | 0.179 |
| BGR－07 | Rock | 0.60 | 0.007 | 1 | 36 | 189 | 25 | 1.8 | 1 | 1 | 35 | 0.74 | 1129 | 7 | 9 | 3.8 | 17 | $<3$ | 5 | 0.02 | 0.006 |
| MONR－01 | Rock | 1.18 | ＜0．005 | $<1$ | 5 | 4 | 9 | $<0.3$ | $<1$ | ＜1 | 33 | 0.62 | 13 | 3 | $<1$ | $<0.5$ | ＜3 | $<3$ | $<1$ | $<0.01$ | ＜0．001 |
| MONR－02 | Rock | 1.09 | $<0.005$ | $<1$ | 2 | 4 | 2 | $<0.3$ | $<1$ | $<1$ | 24 | 0.14 | 2 | 24 | ＜1 | $<0.5$ | ＜3 | ＜3 | ＜1 | $<0.01$ | 0.002 |
| MONR－03 | Rock | 0.89 | ＜0．005 | 1 | 5 | 14 | 93 | $<0.3$ | $<1$ | $<1$ | 131 | 3.05 | 20 | 33 | 1 | $<0.5$ | ＜3 | $<3$ | ＜1 | $<0.01$ | 0.005 |
| MONR－04 | Rock | 0.39 | ＜0．005 | $<1$ | 4 | 9 | 13 | $<0.3$ | $<1$ | $<1$ | 102 | 0.36 | 2 | 30 | 1 | $<0.5$ | $<3$ | $<3$ | ＜1 | $<0.01$ | 0.003 |
| MONR－05 | Rock | 0.60 | 0.013 | $<1$ | 3 | $<3$ | 19 | $<0.3$ | ＜1 | $<1$ | 36 | 0.24 | $<2$ | 22 | 3 | $<0.5$ | $<3$ | ＜3 | ＜1 | $<0.01$ | 0.005 |
| MONR－06 | Rock | 0.60 | ＜0．005 | $<1$ | 15 | $<3$ | 18 | $<0.3$ | 9 | 3 | 598 | 0.71 | $<2$ | $<2$ | 67 | $<0.5$ | ＜3 | ＜3 | 23 | 9.71 | 0.005 |
| MONR－07 | Rock | 0.86 | 0.005 | 8 | 5 | 3 | 21 | $<0.3$ | 22 | 3 | 939 | 1.50 | 14 | $<2$ | 154 | 0.7 | $<3$ | $<3$ | 37 | 30.79 | 0.031 |
| MONR－08 | Rock | 0.88 | ＜0．005 | 1 | 38 | $<3$ | 65 | $<0.3$ | 27 | 5 | 147 | 1.96 | 13 | $<2$ | 8 | ＜0．5 | ＜3 | $<3$ | 17 | 0.08 | 0.038 |
| MONR－09 | Rock | 0.64 | 0.008 | 5 | 72 | $<3$ | 179 | $<0.3$ | 73 | 15 | 581 | 5.54 | 38 | $<2$ | 10 | 0.7 | $<3$ | ＜3 | 27 | 0.02 | 0.104 |
| KMR－01 | Rock | 0.66 | ＜0．005 | $<1$ | 3 | $<3$ | 3 | $<0.3$ | 2 | $<1$ | 749 | 0.19 | $<2$ | $<2$ | 258 | $<0.5$ | $<3$ | $<3$ | 8 | 37.38 | 0.044 |
| KMR－02 | Rock | 0.42 | ＜0．005 | $<1$ | 15 | $<3$ | 3 | $<0.3$ | $<1$ | $<1$ | 51 | 0.62 | 5 | $<2$ | 18 | $<0.5$ | $<3$ | $<3$ | 4 | 0.18 | 0.011 |

Client：Kreft，Bernie
$\begin{array}{ll}\text { Project：} & \text { None Given } \\ \text { Report Date：} & \text { June 17，2016 }\end{array}$ z！o卜 みed z！oz ：eôed z！o卜 みed z！oz ：eôed

##  <br>  <br> www.bureauveritas.com/um

1 Locust Place
Whitehorse YT Y
Whitehorse YT Y1A 5 G9 CANADA

 BIUREAB $B$ MINERAL LABORATORIES
VERITAS
Canada Bureau Veritas Commodities Canada Ltd.

This report supersedes all previous pretiminary and final reports with this fite number dated prior to the date on this certificate. Signature indicates final approval preliminary reports are unsigned and should be used for reference only.

This report supersedas all previous prelininary and final reports with fhis file number dated prior to the date on this cerificate. Signature indicates final approval: pretiminary reports are unsigned and shoukd be used for reference only.



9050 Shaughnessy St Vancouver British Columbia V6P $6 E 5$ Canada PHONE (604) 253-3158


This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval: preliminary reports are unsigned and should be used for reference only.
EIUREAUI MINERAL LABORATORIES www.bureauveritas.com/um
MERITASI Canada
Bureau Veritas Commodities Canada Lid.
9050 Shaughnessy St Vancouver British Columbia V6P $6 E 5$ Canada
PHONE (604) 253-3158

## 

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES <br> Crush, split and pulverize 250 g rock to 200 mesh 1:1:1 Aqua Regia digestion ICP-MS analysis <br> ADDITIONAL COMMENTS


Kreft, Bernie

1 Locust Place
Whitehorse Yuk

Bureau Veritas does not accept responsibility for samples left at the laboratory
after 90 days without prior written instructions for sample storage or return.

## Kreft, Bernie

Whitehorse Yukon Y1A 5G9
Canada
This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary rep
All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
nos asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.







This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) $253-3158$

## MINERAL LABORATORIES

Bureau Veritas Commodities Canada Ltd.
www.bureauveritas.com/um

This report supersedes all previous pretiminary and final reports wilh this flle number dated prior to the date on this cerrificate. Signature indicates final approval: preliminary reports are unsigned and should be used for reference only.



-
www.bureauveritas.com/um
Kreft, Bernie


This report supersedes all previous prefiminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval: preliminary reports are unsigned and sthould be used for reference only.
MINERAL LABORATORIES
Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA PHONE (604) 253-3158

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this cerificate. Signature indicates final approval, prefimininary reports are unsigned and should be used for reference only.


This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this cerificate. Signature indicates final approval, prelininary reports are unsigned and shoukid be used for reference only. PHONE (604) 253-3158

##  <br> MINERAL LABORATORIES $\frac{\text { BURAEATB }}{\text { VERTTASS }}$

 -
## OERTHCATE OFANALYSIS

 JGGD-02 JGGD-03 01
1
9

9 | 0 | 0 |
| :--- | :--- |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 | त

0
0
0

0 \begin{tabular}{l}
$\infty$ <br>
1 <br>
0 <br>
0 <br>
0 <br>
\hline

 

0 <br>
\hline
\end{tabular} JGGD-11 N

$\vdots$
0
0
0 JGGD-14 $n$
$\vdots$
$\vdots$
0

0 \begin{tabular}{cc}
$\stackrel{\infty}{1}$ <br>
$\vdots$ \& \multicolumn{1}{c}{} <br>
0 <br>
0 \& 0 <br>
0 \& 0 <br>
\hline

 

0 <br>
$\vdots$ <br>
\hline

 

ก <br>
§ <br>
§ <br>
\hline
\end{tabular} $\begin{array}{ll}\text { y } \\ \text { 1 } \\ 0 \\ 0 \\ 0 & 0 \\ 0\end{array}$ y

1
1
0
0
0
0 \#
O
O
0
0
0 N
0
0

0 N | N |
| :--- |
|  |
| 0 |
| 0 |
| 0 | JGGD-30







This roport supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval. preliminary reports are unsigned and should be used for reterence only.


##  <br> MINERAL LABORATORIES

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada


Client: Kreft, Bernie
$\begin{array}{ll}\text { Project: } & \text { None Given } \\ \text { Report Date: } & \text { October 14, } 2016\end{array}$


Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada PHONE (604) 253-3158
www.bureauveritas.com/um
None Given
October 14, 2016 2 of 2

Page:


Kreft, Bernie

Project:
Report Date:

