BC Geological Survey
Assessment Report
38614

# ASSESSMENT REPORT TITLE PAGE AND SUMMARY

**TITLE OF REPORT:** REPORT ON PROSPECTING AND ROCK GEOCHEMISTRY
MEACHEN BEND PROPERTY

**TOTAL COST: $** 4591.44

AUTHOR(S):S Kennedy
SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S ): 5751122

YEAR OF WORK: 2019

PROPERTY NAME: Meachen Bend

CLAIM NAME(S) (on which work was done):

1,051,787 1,064,986 1,062,342

COMMODITIES SOUGHT:Pb-Zn-Ag-Cu

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:

MINING DIVISION: Nelson
NTS / BCGS:82F059
LATITUDE: _____° _____' _____"
LONGITUDE: _____° _____' _____" (at centre of work)
UTM Zone:11 EASTING: 545580 NORTHING: 5489710

OWNER(S): D. Lavoie, F. Cook

MAILING ADDRESS: 2290 DeWolfe Ave, Kimberley BC, V1A 1P5

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

MAILING ADDRESS: Suite 1650 - 1075 West Georgia Street.
Vancouver, British Columbia
Canada V6E 3C9

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**) Base metal fracture mineralization related to northwest structures in Middle Aldridge Fm

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:


- Magrum, M. M. and Crowe, G. G. 1984. Geological report on the Whitefish and Goodhope claims, BC Geological Survey Branch Assessment Report 12825, 24pp.

- McCartney, I. D. 1993. Geological and geochemical report of the Mea 1, 2, 3, 4, claims, BC Geological Survey Branch Assessment Report 23049, 14pp.
- Ransom, P. W. 1997. Assessment report: Tow property, BC Geological Survey Branch Assessment Report 25177, 30pp
- Kennedy, S. 2007. Rock Geochemistry report, Whopper claims, Alisa Lake area, BC Geological Survey Branch Assessment Report 29315, 10pp
- Cook, F. A. 2017. Integration of Geophysical and Geological Data in the Meachen Creek area: Meachen Bend (MB 01-16) Property, BC Geological Survey Branch Assessment Report 36666, 36 pp.
- Cook, F. A. 2018. Acquisition, Processing and Inversion of a Magnetotelluric Profile Across the Meachen Bend (MB 01-16, MB 02-17) Property, BC Geological Survey Branch Assessment Report 37566, 27 pp.


| TYPE OF WORK IN THIS REPORT | EXTENT OF WORK (in metric units) | ON WHICH CLAIMS | PROJECT COSTS APPORTIONED (incl. support) |
|---|---|---|---|
| GEOLOGICAL (scale, area) | | | |
| Ground, mapping | | | |
| Photo interpretation | | | |
| GEOPHYSICAL (line-kilometres) | | | |
| Ground | | | |
| Magnetic | | | |
| Electromagnetic | | | |
| Induced Polarization | | | |
| Radiometric | | | |
| Seismic | | | |
| Other | | | |
| Airborne | | | |
| GEOCHEMICAL (number of samples analysed for …) | | | |
| Soil | | | |
| Silt | | | |
| Rock | 14 samples | 1,051,787<br>1,064,986<br>1,062,342 | $420 |
| Other | | | |
| DRILLING (total metres, number of holes, size, storage location) | | | |
| Core | | | |
| Non-core | | | |
| RELATED TECHNICAL | | | |
| Sampling / Assaying | | | |
| Petrographic | | | |
| Mineralographic | | | |
| Metallurgic | | | |
| PROSPECTING (scale/area) | 1:5000<br>3x3 km | 1,051,787<br>1,064,986<br>1,062,342 | $3135 |

| | | |
|---|---|---|
| PREPATORY / PHYSICAL | | |
| Line/grid (km) | | |
| Topo/Photogrammetric (scale, area) | | |
| Legal Surveys (scale, area) | | |
| Road, local access (km)/trail | | |
| Trench (number/metres) | | |
| Underground development (metres) | | |
| Report | | $800 |
| Other | | |
| | **TOTAL COST** | $4355.00 |

# REPORT ON PROSPECTING AND ROCK GEOCHEMISTRY

# MEACHEN BEND PROPERTY

MEACHEN CREEK AREA

SOUTHEAST BC

MAPSHEET 082F059

NELSON MINING DIVISION

UTM NAD 83 ZONE 11

545580/5489710

REPORT WRITTEN BY S. KENNEDY

NOVEMBER, 2019

TABLE OF CONTENTS

## SUMMARY

Prospecting and rock geochemistry were conducted on portions of the MB property during the field season of 2019. The area is prospective for base and precious metal SEDEX and vein deposits. The area is transected by numerous NNW trending structures which show evidence of syn-depositional and late activity. These faults appear to have localized base and precious metal mineralization.

## LOCATION AND ACCESS

The property is located approximately 30 km southwest of the City of Kimberley, BC in the Meachen Creek drainage centered on White Boar Creek and Fiddler Creek.

Access is provided by driving the St. Mary Lake road southwest of Kimberley and turning south immediately east of the lake on to the St Mary River FSR and proceeding from there up the Hellroaring Creek FSR for 1 km before turning onto the Meachen Creek FSR and proceeding up the valley to the property.

## PHYSIOGRAPHY

The property covers mountainous terrain that ranges from 1280 m to 2240 m in elevations. Slopes are generally steep and cliffy and covered by standing and burnt timber to an elevation of near 2000 m. Avalanche paths are common.

## PROPERTY

The property consists of five mineral claims covering approximately 1700 hectares.

| Title Number | Claim Name/Property | Issue Date | Good To Date | New Good To Date | # of Days For-ward | Area in Ha | Applied Work Value | Sub-mission Fee |
|---|---|---|---|---|---|---|---|---|
| 1041043 | MB 01-16 | 2016/JAN/06 | 2027/JAN/06 | 2027/JAN/06 | 0 | 83.83 | $ 0.00 | $ 0.00 |
| 1051787 | MB 02-17 | 2017/MAY/03 | 2023/SEP/21 | 2023/SEP/21 | 0 | 670.60 | $ 0.00 | $ 0.00 |
| 1055800 | MB 03-17 | 2017/OCT/26 | 2020/SEP/22 | 2020/Dec/15 | 84 | 293.38 | $ 538.15 | $ 0.00 |
| 1062342 | MB 04-18 | 2018/AUG/13 | 2019/AUG/13 | 2020/Dec/15 | 490 | 461.17 | $ 3089.21 | $ 0.00 |
| 1064986 | | 2018/DEC/07 | 2019/DEC/07 | 2020/Dec/15 | 374 | 188.68 | $ 964.08 | $ 0.00 |

*Table 1 Mineral title details.*

## HISTORY

The area has been targeted in the past for base metal mineralization. Old workings targeting copper sulphides associated with gabbroic intrusions as well as sediment-hosted polymetallic veins have been documented on the property. More recent work including; rock and soil geochemistry, geological mapping, and ground and airborne geophysics have been conducted on portions of the property from 1984 to present during erratic periods of exploration. The summary of documented assessment work for the property is detailed below.

- Magrum, M. M. and Crowe, G. G. 1984. Geological report on the Whitefish and Goodhope claims, BC Geological Survey Branch Assessment Report 12825, 24pp.
- McCartney, I. D. 1993. Geological and geochemical report of the Mea 1, 2, 3, 4, claims, BC Geological Survey Branch Assessment Report 23049, 14pp.

- Ransom, P. W. 1997. Assessment report: Tow property, BC Geological Survey Branch Assessment Report 25177, 30pp
- Kennedy, S. 2007. Rock Geochemistry report, Whopper claims, Alisa Lake area, BC Geological Survey Branch Assessment Report 29315, 10pp
- Cook, F. A. 2017. Integration of Geophysical and Geological Data in the Meachen Creek area: Meachen Bend (MB 01-16) Property, BC Geological Survey Branch Assessment Report 36666, 36 pp.
- Cook, F. A. 2018. Acquisition, Processing and Inversion of a Magnetotelluric Profile Across the Meachen Bend (MB 01-16, MB 02-17) Property, BC Geological Survey Branch Assessment Report 37566, 27 pp.

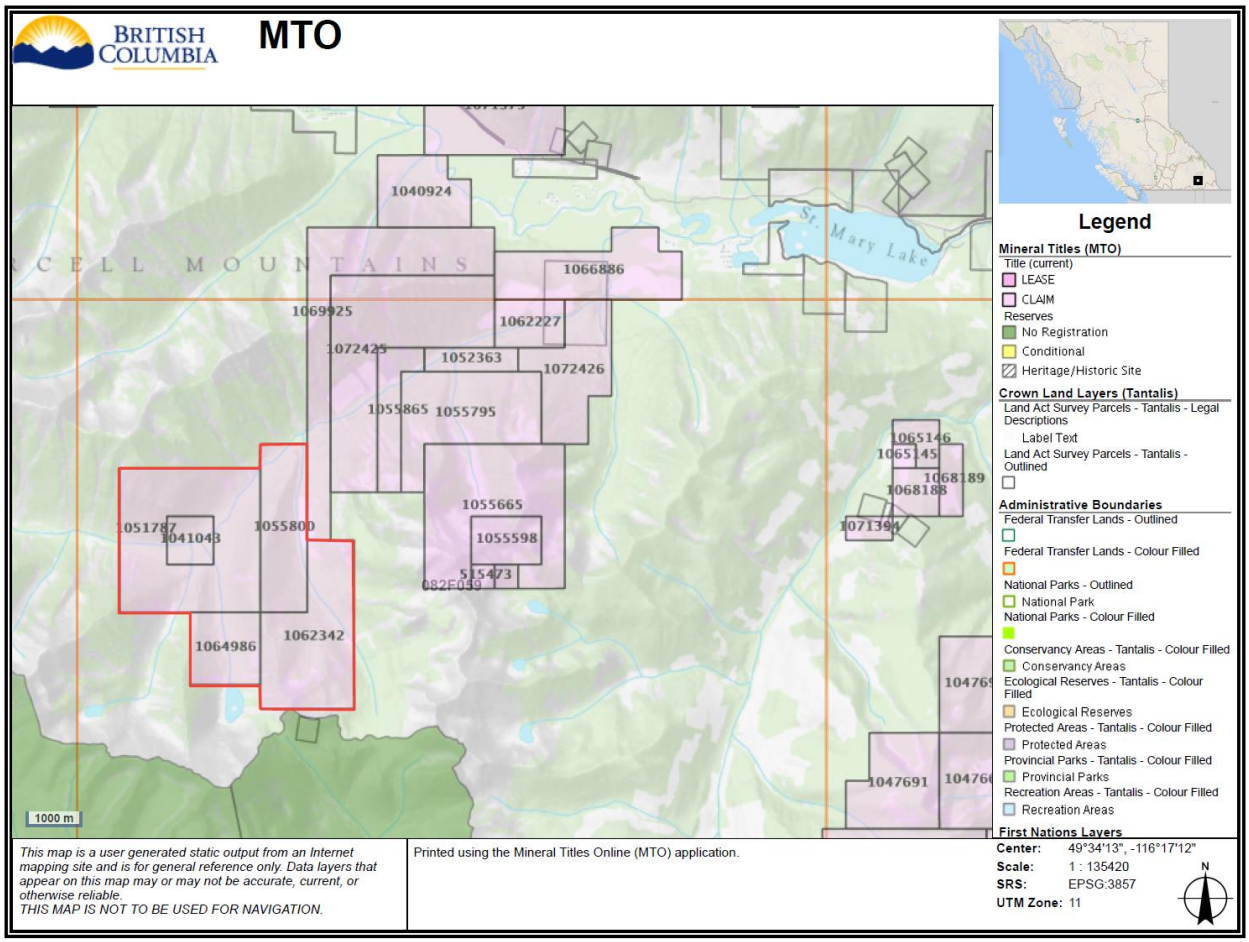


*Figure 1. Meachen Bend claim and regional location map (mineral claim is outlined in red).*

## PROPERTY GEOLOGY

The claims are underlain entirely by the Aldridge Formation of the meso-Proterozoic Purcell Supergroup. Rock units consist of medium to thick bedded quartzites and lesser dark siltite/argillite that have been intruded by syn-depositional gabbro-diorite dykes and sills. A late Cretaceous (78 Ma) intrusion crops out west of the property at Ailsa Lake.

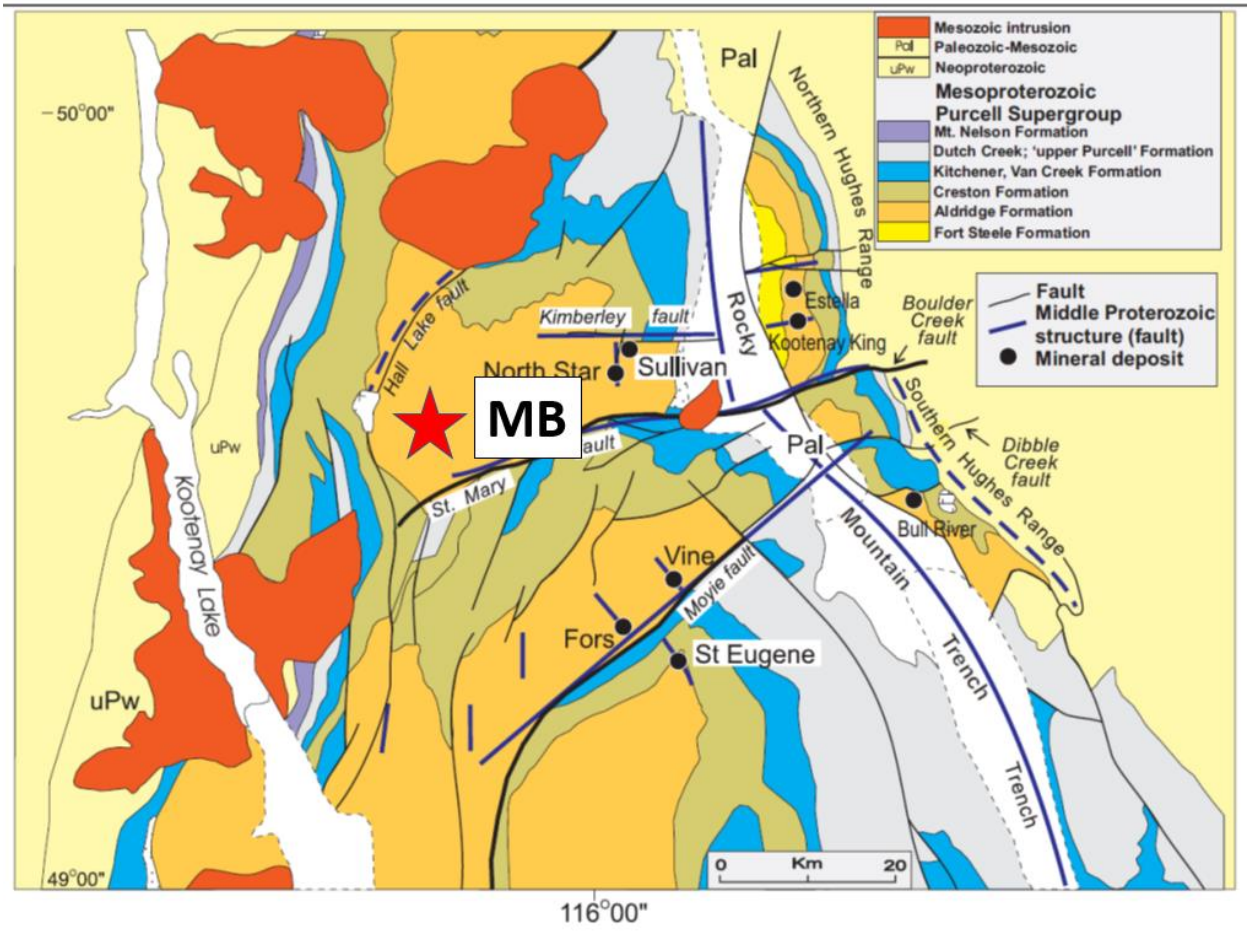


*Figure 2 Regional geology*

# PROSPECTING

Prospecting was conducted on the ridge between White Boar Creek and Fiddler Creek, near the headwaters of the west side of Fiddler Creek and north of Meachen Creek adjacent to the mouth of White Boar Creek.

## LITHOLOGIES

The dominant rock type encountered during traverses consisted of medium to thickly bedded quartzites and dark siltite of the Middle Aldrdidge Fm with lessor medium to coarse grained gabbroic intrusive sills. Syn-sedimentary deformation was identified in two areas. The first consists of slump folded siltite units east of White Boar Creek near the Meadowbrook time-stratigraphic marker unit, the second consists of a narrow clastic-dyke and slump folded units in the hanging-wall of a gabbroic sill north of Meachen Creek.

## STRUCTURE

Bedding attitudes show gentle to moderate dips in most areas except near high-angle faults where tight, almost isoclinal folding becomes prevalent. Folds are generally upright to slightly overturned to the west and plunge shallowly to the NNW. Amplitude on individual folds would likely measure in the tens of meters. Axial plane cleavage related to thrusting is ubiquitous throughout the area and forms a

penetrative NNW-west dipping high-angle fabric in most siltier units. Both NW and NE trending (300° and 50°) monoclinal warps occur adjacent to major fault zones (ie Fiddler Creek Fault). Late NE trending sub-vertical minor faults near the headwaters of Fiddler Creek show minor right-lateral movement which cuts the dominant axial planar cleavage and is therefore presumed to be young.

## ALTERATION

Two distinct alteration packages were identified in 2019. The first is designated as a sericite-pyrite alteration. It appears strata-bound and occurs with the Meadowbrook time-stratigraphic marker unit east of White Boar Creek. It is within a thick sequence of sedimentary units that weather extremely rusty (>20 m thick). It consists of sericitic bleaching (fine flakes and halos adjacent to thin fractures), disseminated/patchy iron sulphides (flooding), patchy albitization+/-silicification, Fe carbonate fractures, and calcareous concretions. The sequence was partially traced across the cliffy slope for over 1.5 km but remains open along strike. The alteration is spatially associated with localized slump folding (syn-sedimentary deformation).

The second alteration assemblage, categorized as Fe-oxide type, is widespread on the property. It is associated with jig-saw type breccias adjacent and within NNW trending fault structures. The alteration consists of a combination of chlorite veinlets/breccia fills, pervasive albite/cherty silicification, fracture and disseminated pyrite, magnetite (specularite) veinlets/breccia fills and lessor Fe-carbonate veins. Distally this alteration tends to feather out into a more widespread/diffuse Fe-carbonate halo with pale mauve (hematization?) and pale greenish/grey colouration/mottling.

## MINERALIZATION

Mineralization on the property consists chiefly of: weakly disseminated sphalerite typically associated with sericitic alteration east of White Boar Creek, poly-metallic quartz-sulphide veins (galena-arsenopyrite-pyrite+/-sphalerite) associated with nose folds and Fe-oxide alteration north of Meachen Creek and fracture-controlled chalcopyrite (malachite) associated with Fe-oxide breccias adjacent to fault structures (ie Fiddler Fault). As both polymetallic veins and fracture-controlled chalcopyrite occupy similar structural trends and are associated with Fe-oxide alteration it is likely the two are related and may reflect a zonation of a shared mineralizing process.

## TRAVERSES

Two traverses were made east of White Boar Creek into a prominent cliffy section that forms a semi-continuous band of cliffs along the west facing portion of the ridge between White Boar and Fiddler valleys. On both traverses the top of a gabbro sill was encountered as the lowest exposure. Overlying the sill was the sericite-pyrite alteration zone with trace disseminated sphalerite and vein-controlled galena described above. Disruption and slumping of the Meadowbrook time-stratigraphic marker was best developed on the northern most traverse. The area is transected by numerous topographic draws oriented around 80 degrees which commonly contain zones of brecciation with chlorite and carbonate. Offset of lithologies along these draws was not easily discernable.

A single traverse was made north of Meachen Creek near the mouth of White Boar Creek. Here two gabbro sills were encountered. A narrow NNW oriented clastic dyke and zone of slump-folding was found in the hanging-wall of the higher of the two sills. Quartz-calcite veins (+/-py/Cpy) were fairly common in the better exposed upper sill. While traversing across the sedimentary rocks, hanging-wall to the upper sill, a zone of tight NNW trending (isoclinal) folding was encountered. The total width of

deformation was in the tens of meters with at least two syncline-anticline pairs. Fe-oxide-type alteration as described above was developed within the fold zone, typically along fold noses and in fracture zones which followed the dominant NNW structural trend. Quartz-sulphide (py-PbS-AsPy) veins up to 30 cm are locally developed within certain lithologies in fold hinge zones and can be traced for tens of meters. Prospecting in 2016 discovered a series of copper rich quartz veins cutting a gabbro sill downslope and along trend of the veins sampled in 2019 indicating a strike length to the mineralized system in excess of 950 meters.

A single traverse was made near the headwaters of Fiddler Creek across an east flowing tributary-cirque. Here the Fiddler Fault was investigated. The fault forms a strongly deformed 340°-350°/sub-vertical shear zone that is intensely brecciated/foliated with strong albite-silica-chlorite alteration and local zones of Fe-oxides and sulphides (Fe-oxide-type). Chalcopyrite was found within the fault structure where there was an increase in pyrite. Exposures of the fault were up to 10 meters wide and could be traced in outcrop for tens of meters. Individual outcrops patterns of the fault appear to indicate the development of en-echelon and or anastomizing structures. The fault appears to be localized near an anticline hinge with a well-defined syncline formed around 250 meters to the west. Sedimentary units immediately west of the fault are subtly Fe-carbonate/hematitically altered. The upper portions of the cirque west of the Fiddler Fault contained fairly uniform Middle Aldridge sediments and one narrow gabbro sill six meters thick.

## ROCK GEOCHEMISTRY

A total of 14 rock samples were collected and analyzed for a 36 element ICP including Au in ppb. All samples were selective grabs.

Samples SK19-05 to 08 were from the polymetallic quartz veins north of Meachen Creek. The veins contain appreciable galena and arsenopyrite but returned low values in assays for precious metals.

Samples MK19-16, IC19-17-19 and SK19-12 were collected from altered sedimentary rocks east of White Boar Creek. Values for base and precious metals were low with only MK19-16 showing elevated values for Pb and Zn.

Samples TK19-106-109 were collected from the Fiddler Fault near the headwaters of Fiddler Creek. Only one sample contained elevated values for base metals (TK19-106, 540 ppm Cu). Tk19-108 assayed 247 ppb Au.

## CONCLUSIONS AND RECOMMENDATIONS

A modest program of prospecting and rock geochemistry was conducted on portions of the Meachen Bend property in 2019. Significant alteration (+weak Pb-Zn mineralization) and syn-sedimentary deformation was found within a broad stratigraphic interval near the Meadowbrook time-stratigraphic marker east of White Boar Creek. Polymetallic quartz veins were found localized along fold noses north of Meachen Creek and the Fiddler Fault was investigated near the headwaters of Fiddler Creek where it was found to carry anomalous values for Cu and Au. Both mineralized fracture systems (north of Meachen Creek and along the Fiddler Fault) were associated with Fe-oxide alteration.

The relationship of mineral timing is unclear. However, it seems plausible that the altered and weakly mineralized strata east of White Boar Creek may be related to an early (syn-sedimentary?) process. The

second style of mineralization (fracture controlled polymetallic) is spatially associated with Fe-oxide type alteration and is localized along NNW faults. This mineralization may be related to late Cretaceous intrusive activity analogous to other mineralized vein systems in the region. As the 78 Ma granitic Ailsa Lake stock is exposed less than 2 km west of the property boundary it seems likely there may be a relationship between the Fe-oxide related polymetallic veins and the intrusive event. The area is therefore prospective for both SEDEX and intrusive related polymetallic mineralization.

An MT survey was conducted along the Meachen Creek FSR in 2018 which identified a conductive anomaly near the mouth of Fiddler Creek (Cook, 2018). Additional MT should be completed to 'pin' the anomaly down and determine its relationship to the altered and slump-folded stratigraphic section at Meadowbrook-time as well as its relationship to a synclinal fold-closure immediately west of the metal-bearing Fiddler Fault and a magnetic anomaly near the Meachen Creek valley bottom. If the anomaly is shown to be localized within the fold closure and is within a permissive drilling depth it should be tested.

## STATEMENT OF COSTS

| Meachen Bend Geology Program Spring & Summer 2019 | | |
|---|---|---|
| | | |
| | | |
| Mike Kennedy: May 8, 23, Jun 19 | | |
| | 3 Man days @ 400 | $ 1,200.00 |
| | 3 Truck days @ 150 | 450.00 |
| | | |
| Sean Kennedy: May 8, 23, Jun 19 | | |
| | 3 Man days @ 400 | 1,200.00 |
| | | |
| Isaac Crombach: Jun 19 | | |
| | 1 Man day @ 285 | 285.00 |
| | | |
| 14 Sample Acme BV | | 420.00 |
| Sean Kennedy Report | | 800.00 |
| | **Total Costs** | **$4,355.00** |

# STATEMENT OF QUALIFICATIONS

I, Sean Kennedy, certify that:

1. I am an independent consulting prospector residing at 107 6th Ave, Kimberley, BC.

2. I have been actively prospecting and mapping throughout BC, Nevada, and Mexico for the past 18 years

3. I have been employed as a professional prospector by junior mineral exploration companies.

4. I have been employed as a field mapper by junior mineral exploration companies.

5. I have supervised and managed various levels of exploration programs.

6. I own and maintain mineral claims in BC.

| Station | Utm East | Utm North | Description |
|---|---|---|---|
| MK19-16 | 546491 | 5489302 | 2 inch crackle breccia with lim. |
| IC19-17 | 546455 | 5489308 | Sericitic quartzite with limonitic mottling |
| IC19-18 | 546499 | 5489244 | Sericitic quartzite with limonitic mottling |
| IC19-19 | 546495 | 5489237 | Sericitic quartzite with limonitic mottling |
| IC19-20 | 546511 | 5489135 | Sericitic quartzite with limonitic mottling |
| TK19-106 | 548234 | 5487109 | Blocks of talus material albitic silica breccia with pyrite and limonite with malachite staining and reddish oxide |
| TK19-107 | 548233 | 5487057 | Block of silica material with weathered out boxworks |
| TK19-108 | 548220 | 5487015 | Massive magnetite and quartz breccia material with pyrite |
| TK19-109 | 548226 | 5486995 | Pyrite flooded silica material |
| SK19-05 | 544867 | 5490558 | Qtz vein stockwork on fold hinge with limonite and carbonate |
| SK19-06 | 544845 | 5490553 | Old pit, cleavage parallel qtz veins to 60 cm with poddy PbS and AsPy, cutting mixed Middle Ald. |
| SK19-07 | 544798 | 5490615 | Same as above, vein is mostly weathered out |
| SK19-08 | 544759 | 5490682 | En-echelon zone to last, quartz veins with limonite and carbonate punk |
| SK19-12 | 546687 | 5488006 | Zone of albite and silicification with goethite rich carbonate altered quartz veins, patchy chlorite |

BUREAU VERITAS MINERAL LABORATORIES Canada

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Submitted By: Email Distribution List - Soil & Rock
Receiving Lab: Canada-Vancouver
Received: June 14, 2019
Report Date: June 27, 2019
Page: 1 of 2

# CERTIFICATE OF ANALYSIS VAN19001440.1

## CLIENT JOB INFORMATION

Project: MB
Shipment ID:
P.O. Number
Number of Samples: 5

## SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days
DISP-RJT Dispose of Reject After 60 days

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

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| PRP70-250 | 5 | Crush, split and pulverize 250 g rock to 200 mesh | | | VAN |
| AQ201 | 5 | 1:1:1 Aqua Regia digestion ICP-MS analysis | 15 | Completed | VAN |
| AQ370 | 1 | 1:1:1 Aqua Regia digestion ICP-ES analysis | 0.4 | Completed | VAN |

## ADDITIONAL COMMENTS

Invoice To: Kootenay Silver Inc.
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9
Canada

CC:

SOFIA DEVOTA
XRF Manager

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.
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.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

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PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: MB
Report Date: June 27, 2019



# CERTIFICATE OF ANALYSIS VAN19001440.1

| Method | | WGHT | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| Unit | | kg | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| MDL | | 0.01 | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 |
| SK19-05 | Rock | 0.38 | 0.5 | 16.8 | 10.3 | 15 | <0.1 | 11.4 | 6.2 | 579 | 1.73 | 5.1 | <0.5 | 13.2 | 4 | 0.2 | <0.1 | <0.1 | 3 | 0.02 | 0.019 |
| SK19-06 | Rock | 0.38 | 0.3 | 85.2 | >10000 | 24 | >100 | 0.7 | 0.3 | 35 | 0.76 | 6084.2 | 17.5 | 0.8 | 2 | 5.6 | 97.6 | 34.8 | <2 | <0.01 | 0.002 |
| SK19-07 | Rock | 0.54 | 0.9 | 18.1 | 580.7 | 277 | 1.3 | 38.6 | 26.5 | 593 | 5.12 | 160.5 | 6.5 | 8.4 | 3 | 0.4 | 1.8 | 3.0 | 16 | 0.02 | 0.029 |
| SK19-08 | Rock | 0.50 | 0.4 | 2.4 | 227.0 | 120 | 0.3 | 1.7 | 1.4 | 167 | 1.44 | 2080.6 | 20.5 | 0.8 | 7 | 3.8 | 1.3 | <0.1 | <2 | 0.05 | 0.005 |
| SK19-12 | Rock | 0.33 | 0.4 | 8.9 | 24.4 | 14 | 0.2 | 7.6 | 7.2 | 114 | 2.38 | 18.3 | <0.5 | 10.0 | 2 | <0.1 | 0.2 | 0.4 | 6 | <0.01 | 0.015 |

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PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: MB
Report Date: June 27, 2019



# CERTIFICATE OF ANALYSIS VAN19001440.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ374 | AQ374 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Pb | Ag |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % | gm/t |
| | MDL | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 | 0.2 | 0.01 | 2 |
| SK19-05 | Rock | 37 | 4 | 0.06 | 56 | 0.002 | 2 | 0.47 | 0.024 | 0.22 | <0.1 | <0.01 | 1.6 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | |
| SK19-06 | Rock | 1 | 4 | <0.01 | 4 | <0.001 | 1 | 0.03 | 0.004 | 0.01 | <0.1 | 0.04 | 0.1 | 0.1 | 0.95 | <1 | 22.3 | <0.2 | 5.99 | 98 |
| SK19-07 | Rock | 17 | 8 | 0.11 | 21 | <0.001 | 1 | 0.55 | 0.050 | 0.07 | <0.1 | 0.01 | 7.0 | <0.1 | 0.21 | 2 | <0.5 | <0.2 | | |
| SK19-08 | Rock | 1 | 4 | <0.01 | 11 | <0.001 | <1 | 0.06 | 0.003 | 0.02 | <0.1 | <0.01 | 0.6 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | |
| SK19-12 | Rock | 20 | 9 | 0.14 | 12 | <0.001 | <1 | 0.42 | 0.056 | 0.07 | <0.1 | <0.01 | 3.9 | <0.1 | <0.05 | 1 | <0.5 | <0.2 | | |

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**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: MB

Report Date: June 27, 2019



# QUALITY CONTROL REPORT VAN19001440.1

| | Method | WGHT | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | kg | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.01 | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| SK19-06 | Rock | 0.38 | 0.3 | 85.2 | >10000 | 24 | >100 | 0.7 | 0.3 | 35 | 0.76 | 6084.2 | 17.5 | 0.8 | 2 | 5.6 | 97.6 | 34.8 | <2 | <0.01 | 0.002 |
| REP SK19-06 | QC | | | | | | | | | | | | | | | | | | | | |
| SK19-07 | Rock | 0.54 | 0.9 | 18.1 | 580.7 | 277 | 1.3 | 38.6 | 26.5 | 593 | 5.12 | 160.5 | 6.5 | 8.4 | 3 | 0.4 | 1.8 | 3.0 | 16 | 0.02 | 0.029 |
| REP SK19-07 | QC | | 1.0 | 17.5 | 558.0 | 263 | 1.3 | 39.3 | 26.6 | 612 | 5.14 | 147.7 | 5.9 | 8.3 | 3 | 0.5 | 1.9 | 3.0 | 16 | 0.02 | 0.030 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS11 | Standard | | 15.3 | 152.9 | 140.4 | 350 | 1.7 | 84.0 | 14.2 | 1035 | 3.04 | 49.3 | 99.3 | 8.5 | 69 | 2.4 | 9.0 | 11.9 | 47 | 1.06 | 0.072 |
| STD GC-7 | Standard | | | | | | | | | | | | | | | | | | | | |
| STD OREAS133B | Standard | | | | | | | | | | | | | | | | | | | | |
| STD OREAS262 | Standard | | 0.7 | 119.0 | 58.3 | 160 | 0.5 | 65.9 | 28.3 | 541 | 3.22 | 41.0 | 69.8 | 10.2 | 36 | 0.7 | 5.2 | 1.0 | 22 | 3.11 | 0.043 |
| STD DS11 Expected | | | 14.6 | 149 | 138 | 345 | 1.71 | 77.7 | 14.2 | 1055 | 3.1 | 42.8 | 79 | 7.65 | 67.3 | 2.37 | 8.74 | 12.2 | 50 | 1.063 | 0.0701 |
| STD OREAS262 Expected | | | 0.68 | 118 | 56 | 154 | 0.45 | 62 | 26.9 | 530 | 3.284 | 35.8 | 65 | 9.33 | 36 | 0.61 | 5.06 | 1.03 | 22.5 | 2.98 | 0.04 |
| STD GC-7 Expected | | | | | | | | | | | | | | | | | | | | | |
| STD OREAS133B Expected | | | | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | 2.4 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <2 | <0.01 | <0.001 |
| BLK | Blank | | | | | | | | | | | | | | | | | | | | |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| ROCK-VAN | Prep Blank | | 0.9 | 7.6 | 1.2 | 34 | <0.1 | 0.8 | 3.8 | 535 | 1.82 | 2.5 | 0.7 | 2.4 | 27 | <0.1 | <0.1 | <0.1 | 21 | 0.63 | 0.042 |

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: MB
Report Date: June 27, 2019



# QUALITY CONTROL REPORT VAN19001440.1

| | | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ374 | AQ374 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Pb | Ag |
| | | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % | gm/t |
| | | MDL | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 | 0.2 | 0.01 | 2 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| SK19-06 | Rock | | 1 | 4 | <0.01 | 4 | <0.001 | 1 | 0.03 | 0.004 | 0.01 | <0.1 | 0.04 | 0.1 | 0.1 | 0.95 | <1 | 22.3 | <0.2 | 5.99 | 98 |
| REP SK19-06 | QC | | | | | | | | | | | | | | | | | | | 6.08 | 99 |
| SK19-07 | Rock | | 17 | 8 | 0.11 | 21 | <0.001 | 1 | 0.55 | 0.050 | 0.07 | <0.1 | 0.01 | 7.0 | <0.1 | 0.21 | 2 | <0.5 | <0.2 | | |
| REP SK19-07 | QC | | 16 | 8 | 0.11 | 20 | <0.001 | 1 | 0.56 | 0.051 | 0.08 | <0.1 | <0.01 | 7.0 | <0.1 | 0.21 | 2 | <0.5 | <0.2 | | |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS11 | Standard | | 19 | 58 | 0.83 | 370 | 0.091 | 7 | 1.22 | 0.071 | 0.39 | 2.9 | 0.26 | 3.3 | 5.0 | 0.27 | 5 | 2.2 | 4.9 | | |
| STD GC-7 | Standard | | | | | | | | | | | | | | | | | | | >10 | 607 |
| STD OREAS133B | Standard | | | | | | | | | | | | | | | | | | | 5.05 | 101 |
| STD OREAS262 | Standard | | 19 | 47 | 1.17 | 261 | 0.003 | 3 | 1.44 | 0.068 | 0.33 | 0.2 | 0.16 | 3.7 | 0.5 | 0.25 | 5 | <0.5 | 0.3 | | |
| STD DS11 Expected | | | 18.6 | 61.5 | 0.85 | 385 | 0.0976 | | 1.1795 | 0.0762 | 0.4 | 2.9 | 0.26 | 3.4 | 4.9 | 0.2835 | 5.1 | 2.2 | 4.56 | | |
| STD OREAS262 Expected | | | 15.9 | 41.7 | 1.17 | 248 | 0.0027 | 4 | 1.3 | 0.071 | 0.312 | 0.2 | 0.17 | 3.24 | 0.47 | 0.253 | 3.73 | 0.4 | 0.23 | | |
| STD GC-7 Expected | | | | | | | | | | | | | | | | | | | | 10.44 | 624 |
| STD OREAS133B Expected | | | | | | | | | | | | | | | | | | | | 5.07 | 104 |
| BLK | Blank | | <1 | <1 | <0.01 | <1 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.01 | <0.1 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | |
| BLK | Blank | | | | | | | | | | | | | | | | | | | 0.01 | 2 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| ROCK-VAN | Prep Blank | | 6 | 3 | 0.50 | 56 | 0.079 | 1 | 0.89 | 0.073 | 0.07 | <0.1 | 0.01 | 3.1 | <0.1 | <0.05 | 4 | <0.5 | <0.2 | | |

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Submitted By: Email Distribution List - Soil & Rock
Receiving Lab: Canada-Vancouver
Received: September 12, 2019
Report Date: September 29, 2019
Page: 1 of 2

# CERTIFICATE OF ANALYSIS VAN19002609.1

## CLIENT JOB INFORMATION

Project: Meachen Bend
Shipment ID:
P.O. Number
Number of Samples: 20

## SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days
DISP-RJT Dispose of Reject After 60 days

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

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| PRP70-250 | 19 | Crush, split and pulverize 250 g rock to 200 mesh | | | VAN |
| AQ201 | 19 | 1:1:1 Aqua Regia digestion ICP-MS analysis | 15 | Completed | VAN |
| Ship | 1 | Shipping charges for collect packages | | | VAN |
| AQ374 | 1 | 1:1:1 Aqua Regia Digestion ICP-ES Finish | 0.4 | Completed | VAN |

## ADDITIONAL COMMENTS

Invoice To: Kootenay Silver Inc.
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
MARCUS LAU
Production Manager

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.
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.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: Meachen Bend
Report Date: September 29, 2019



# CERTIFICATE OF ANALYSIS VAN19002609.1

| Method | WGHT | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | |
| Unit | kg | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | |
| MDL | 0.01 | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.001 | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| TK19-106 | Rock | 0.83 | 0.2 | 542.0 | 8.8 | 8 | 0.4 | 2.7 | 6.2 | 280 | 1.16 | 1.3 | 2.3 | 2.9 | 1 | 0.2 | 8.5 | 1.2 | 1 | 0.16 | 0.003 |
| TK19-107 | Rock | 0.61 | 0.1 | 1.7 | 1.4 | <1 | <0.1 | 0.6 | 0.1 | 43 | 0.43 | 1.7 | 1.7 | 0.3 | <1 | <0.1 | <0.1 | <0.1 | 1 | <0.01 | <0.001 |
| TK19-108 | Rock | 0.83 | 0.1 | 8.0 | 50.8 | 28 | 0.4 | 23.6 | 14.2 | 220 | 20.43 | 26.1 | 247.3 | 2.1 | 2 | <0.1 | 0.5 | 1.9 | 270 | 0.04 | <0.001 |
| TK19-109 | Rock | 0.53 | 0.5 | 8.5 | 59.4 | 4 | 0.4 | 19.5 | 18.4 | 46 | 2.81 | 55.2 | 29.5 | 5.5 | <1 | <0.1 | 0.6 | 2.6 | 5 | <0.01 | 0.003 |
| IC19-17 | Rock | 0.47 | 0.7 | 11.7 | 33.1 | 41 | <0.1 | 5.6 | 2.8 | 201 | 1.66 | 73.0 | 1.6 | 8.2 | 5 | <0.1 | 0.2 | 0.4 | 8 | 0.02 | 0.011 |
| IC19-18 | Rock | 0.92 | 0.4 | 9.3 | 41.6 | 111 | <0.1 | 7.2 | 5.2 | 451 | 3.67 | 12.8 | <0.5 | 8.5 | 6 | <0.1 | 0.2 | <0.1 | 12 | 0.07 | 0.029 |
| IC19-19 | Rock | 0.65 | 0.3 | 5.9 | 16.8 | 12 | <0.1 | 1.7 | 1.1 | 209 | 0.58 | 3.9 | 1.0 | 1.5 | 5 | <0.1 | 0.3 | 0.2 | 2 | 0.07 | 0.039 |
| IC19-20 | Rock | 0.64 | 0.6 | 9.3 | 13.8 | 8 | <0.1 | 2.9 | 2.9 | 196 | 0.76 | 4.6 | 0.5 | 1.8 | 5 | <0.1 | 0.2 | 0.1 | 3 | 0.03 | 0.007 |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| MK19-16 | Rock | 0.30 | 0.5 | 42.1 | 152.2 | 218 | 0.3 | 30.2 | 23.0 | 652 | 1.99 | 41.5 | 3.3 | 8.6 | 5 | 0.6 | 0.5 | 0.8 | 8 | 0.04 | 0.034 |

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: Meachen Bend
Report Date: September 29, 2019



# CERTIFICATE OF ANALYSIS VAN19002609.1

| Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ374 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Pb |
| Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % |
| MDL | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 | 0.2 | 0.01 |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| TK19-106 | Rock | 7 | 4 | 0.07 | 13 | <0.001 | <1 | 0.06 | 0.003 | 0.01 | <0.1 | 0.01 | 1.9 | <0.1 | 0.10 | <1 | <0.5 | 0.2 | |
| TK19-107 | Rock | <1 | 6 | <0.01 | 4 | <0.001 | <1 | 0.03 | 0.002 | 0.02 | <0.1 | <0.01 | <0.1 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | |
| TK19-108 | Rock | <1 | 6 | <0.01 | 27 | 0.004 | <1 | 0.04 | 0.012 | 0.02 | 6.9 | <0.01 | 5.7 | <0.1 | 1.98 | 1 | 0.6 | <0.2 | |
| TK19-109 | Rock | 14 | 7 | <0.01 | 25 | <0.001 | <1 | 0.13 | 0.003 | 0.11 | 0.3 | 0.06 | 0.3 | <0.1 | 2.27 | <1 | 0.9 | <0.2 | |
| IC19-17 | Rock | 5 | 13 | 0.10 | 35 | 0.013 | <1 | 0.48 | 0.041 | 0.14 | <0.1 | <0.01 | 1.0 | <0.1 | <0.05 | 1 | <0.5 | <0.2 | |
| IC19-18 | Rock | 15 | 13 | 0.94 | 55 | 0.005 | 2 | 1.95 | 0.009 | 0.31 | <0.1 | <0.01 | 1.6 | 0.1 | <0.05 | 5 | <0.5 | <0.2 | |
| IC19-19 | Rock | 2 | 8 | <0.01 | 6 | 0.003 | <1 | 0.06 | 0.009 | 0.02 | <0.1 | <0.01 | 0.2 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | |
| IC19-20 | Rock | 3 | 9 | 0.06 | 8 | 0.017 | <1 | 0.16 | 0.021 | 0.04 | <0.1 | <0.01 | 0.5 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | |
| MK19-16 | Rock | 32 | 15 | 0.18 | 39 | 0.013 | <1 | 0.57 | 0.081 | 0.11 | <0.1 | <0.01 | 2.3 | <0.1 | <0.05 | 1 | <0.5 | <0.2 | |

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: Meachen Bend
Report Date: September 29, 2019



# QUALITY CONTROL REPORT VAN19002609.1

| Method | | WGHT | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| Unit | | kg | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| MDL | | 0.01 | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.001 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| Core Reject Duplicates | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | | |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS11 | Standard | | 13.9 | 150.7 | 138.1 | 327 | 1.7 | 76.9 | 13.5 | 1024 | 3.08 | 43.9 | 77.3 | 8.5 | 67 | 2.4 | 8.5 | 11.5 | 49 | 1.03 | 0.074 |
| STD DS11 | Standard | | 13.9 | 132.7 | 128.0 | 322 | 1.7 | 79.5 | 13.2 | 998 | 3.06 | 44.1 | 81.3 | 8.0 | 58 | 2.0 | 8.0 | 10.9 | 48 | 1.02 | 0.066 |
| STD GC-7 | Standard | | | | | | | | | | | | | | | | | | | | |
| STD OREAS133B | Standard | | | | | | | | | | | | | | | | | | | | |
| STD OREAS262 | Standard | | 0.6 | 120.8 | 60.1 | 150 | 0.5 | 65.2 | 28.4 | 556 | 3.23 | 37.4 | 65.4 | 11.2 | 39 | 0.6 | 5.9 | 1.0 | 22 | 2.97 | 0.041 |
| STD OREAS262 | Standard | | 0.7 | 106.3 | 48.4 | 133 | 0.5 | 64.3 | 26.4 | 563 | 3.18 | 36.3 | 74.5 | 8.5 | 32 | 0.5 | 5.3 | 0.9 | 21 | 2.96 | 0.037 |
| STD GC-7 Expected | | | | | | | | | | | | | | | | | | | | | |
| STD OREAS133B Expected | | | | | | | | | | | | | | | | | | | | | |
| STD DS11 Expected | | | 14.6 | 149 | 138 | 345 | 1.71 | 77.7 | 14.2 | 1055 | 3.1 | 42.8 | 79 | 7.65 | 67.3 | 2.37 | 8.74 | 12.2 | 50 | 1.063 | 0.0701 |
| STD OREAS262 Expected | | | 0.68 | 118 | 56 | 154 | 0.45 | 62 | 26.9 | 530 | 3.284 | 35.8 | 65 | 9.33 | 36 | 0.61 | 5.06 | 1.03 | 22.5 | 2.98 | 0.04 |
| BLK | Blank | | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.001 |
| BLK | Blank | | | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.001 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| ROCK-VAN | Prep Blank | | 0.7 | 4.7 | 1.0 | 28 | <0.1 | 0.6 | 3.0 | 441 | 1.75 | 0.9 | 1.9 | 1.9 | 20 | <0.1 | <0.1 | <0.1 | 21 | 1.33 | 0.036 |
| ROCK-VAN | Prep Blank | | 0.9 | 7.2 | 0.9 | 27 | <0.1 | 0.6 | 3.4 | 476 | 1.92 | 0.7 | <0.5 | 2.1 | 18 | <0.1 | <0.1 | <0.1 | 24 | 0.61 | 0.038 |

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

**Client:** **Kootenay Silver Inc.**
1650 - 1075 W. Georgia St.
Vancouver British Columbia V6E 3C9 Canada

Project: Meachen Bend
Report Date: September 29, 2019



# QUALITY CONTROL REPORT VAN19002609.1

| Method | | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ374 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Pb | |
| Unit | | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % | |
| MDL | | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 | 0.2 | 0.01 | |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | |
| Core Reject Duplicates | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | |
| [redacted] | | | | | | | | | | | | | | | | | | | | |
| Reference Materials | | | | | | | | | | | | | | | | | | | | |
| STD DS11 | Standard | 19 | 58 | 0.84 | 355 | 0.084 | 7 | 1.13 | 0.070 | 0.39 | 2.8 | 0.25 | 3.3 | 4.9 | 0.27 | 5 | 2.2 | 4.6 | | |
| STD DS11 | Standard | 15 | 54 | 0.83 | 373 | 0.077 | 10 | 1.10 | 0.070 | 0.38 | 3.5 | 0.28 | 2.9 | 4.8 | 0.27 | 5 | 2.2 | 4.7 | | |
| STD GC-7 | Standard | | | | | | | | | | | | | | | | | | >10 | |
| STD OREAS133B | Standard | | | | | | | | | | | | | | | | | | 5.05 | |
| STD OREAS262 | Standard | 17 | 44 | 1.17 | 252 | 0.002 | 3 | 1.35 | 0.069 | 0.31 | 0.2 | 0.15 | 3.4 | 0.5 | 0.26 | 4 | 0.6 | 0.2 | | |
| STD OREAS262 | Standard | 12 | 40 | 1.17 | 255 | 0.002 | 3 | 1.21 | 0.069 | 0.29 | 0.2 | 0.17 | 2.9 | 0.5 | 0.25 | 4 | <0.5 | 0.2 | | |
| STD GC-7 Expected | | | | | | | | | | | | | | | | | | | 10.44 | |
| STD OREAS133B Expected | | | | | | | | | | | | | | | | | | | 5.07 | |
| STD DS11 Expected | | 18.6 | 61.5 | 0.85 | 385 | 0.0976 | | 1.1795 | 0.0762 | 0.4 | 2.9 | 0.26 | 3.4 | 4.9 | 0.2835 | 5.1 | 2.2 | 4.56 | | |
| STD OREAS262 Expected | | 15.9 | 41.7 | 1.17 | 248 | 0.0027 | 4 | 1.3 | 0.071 | 0.312 | 0.2 | 0.17 | 3.24 | 0.47 | 0.253 | 3.73 | 0.4 | 0.23 | | |
| BLK | Blank | <1 | <1 | <0.01 | <1 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.01 | <0.1 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | |
| BLK | Blank | | | | | | | | | | | | | | | | | | <0.01 | |
| BLK | Blank | <1 | <1 | <0.01 | <1 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.01 | <0.1 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | |
| Prep Wash | | | | | | | | | | | | | | | | | | | | |
| ROCK-VAN | Prep Blank | 5 | 5 | 0.38 | 61 | 0.064 | 2 | 0.88 | 0.136 | 0.12 | <0.1 | <0.01 | 2.2 | <0.1 | <0.05 | 4 | <0.5 | <0.2 | | |
| ROCK-VAN | Prep Blank | 6 | 5 | 0.42 | 61 | 0.065 | 1 | 0.90 | 0.137 | 0.13 | <0.1 | <0.01 | 2.2 | <0.1 | <0.05 | 4 | <0.5 | <0.2 | | |

# Meachen Bend Prospecting Map

KTN

Date: 20/11/2019
Author:
Office:
Drawing:
Scale: 1:10000
Projection: UTM Zone 11 (NAD 83)

0 100 200 400 metres

N

545,000 mE 545,500 mE 546,000 mE 546,500 mE 547,000 mE 547,500 mE 548,000 mE 548,500 mE

5,491,000 mN 5,490,500 mN 5,490,000 mN 5,489,500 mN 5,489,000 mN 5,488,500 mN 5,488,000 mN 5,487,500 mN 5,487,000 mN 5,486,500 mN

1,051,787 1,041,043 1,055,800 1,062,342 1,064,986

Rosen Fault (Ransom, 2019)

Gabbro OC?

Undivided Pa2

chl alt'n + bx'n

Sheared alb Mag bx intensifes on fold hinge

Poddy Mag-alb bx

Narrow fragmental dyke

Qtz vein system along antiline axis Py-PbS-Aspy-alb-sr-hem

shear+1 m qv w/PbS+AsFy

foldsd-ZnS in marker

sheared w/Cpy+Po

1.5 m sheared gab+massive Cpy

talus float+Cpy

flat beds

xstaline Qv + PbS

Cleavage II albite alt'n Py+MoS Magnetite veins

Hornfels? close to granite? Cleavage II qtz veins w/MoS+Py

thinly bdd banded rusty siltite

Py rich varved siltite

very T bdd Qtzite

fine grained non-mag gabbro

Rare diss and fract. (NNW) controlled ZnS

Grey wackes

'pitted' weathering gabbro

Narrow graphitic shears w/Cpy

5 m Po rich grey W greasy NS shears w/Cpy

Narrow Congl. beds

2 m Po rich siltite

carb alt'd py rich float dark sulphidic Siltites

ZnS in rare sericitic fract.

gypsum films

t bdd platy S w/Po trace ZnS in ser. fract.

carbonaceous looking w/Po/Py

1.5 m qtz carb bx w/green Flourite

some bx'n along NW cleavage

still some bx'n along cleavage Patchy silicification

Qtz-chl veins disrupted bedding

Marker float

Qtz-carb vein +Pb-Cu-Zn

Po+/-Cpy rich qvs in sheared zone

silicification +Qv w/Pb +Au

xst. qtz-chl

silicification/bx'n related to bedding cleavage intersections

slumped beds

Sericite and sulphide altered stratigraphy

Fr. Cpy

Fract. Cpy+mag

Qtz fr. zone + Cpy

Talus Cpy in gabbro float

chl bx

Phyllic Alt'n over 20 m trace ZnS

Cu+As in veins Sphene+epidote skarny 10x20 m

Qv+PbS

Alb+sil bx

Biotite rich units

Brecciation and albite alteration along gabbro

Talus blocks of alb + sil bx+ Mal Stain

110 trending qtz bx w/Lim

Py+/-Cpy in siliceous breccia in fault Mag breccia

Minor faults

Syncline Shallow Northwest Plunge

Fiddler Fault

warps

Mag bx trends NS

## Legend

- Alteration Zone
- Gabbro
- Middle Alrdidge Siltite
- Middle Aldridge Quartzite
- Historic Working
- Bedding, cleavage, vein, fault, 2019 traverse

N

545,000 mE | 545,500 mE | 546,000 mE | 546,500 mE | 547,000 mE | 547,500 mE | 548,000 mE

5,491,000 mN | 5,490,500 mN | 5,490,000 mN | 5,489,500 mN | 5,489,000 mN | 5,488,500 mN | 5,488,000 mN | 5,487,500 mN | 5,487,000 mN | 5,486,500 mN

KTN

Meachen Bend

Date:20/11/2019
Author:
Office:
Drawing:
Scale: 1:10000
Projection: UTM Zone 11 (NAD 83)

0 100 200 400
metres

SK19-08
227
SK19-07
580.7
SK19-05
10.3
SK19-06
59,900

1,055,800

,051,787

1,041,043

MK19-16
152.2
IC19-17
33.1
IC19-18
16.8
IC19-19
41.6
IC19-20
13.8

SK19-12
24.4

1,062,342

1,064,986

TK19-106
8.8
TK19-107
1.4
TK19-108
50.8
TK19-109
59.4

MB_2019_Rocks by Pb
Pb in ppm
10,000 to 100,000
500 to 1,000
100 to 500
0 to 100

Legend

Alteration Zone
Gabbro
Middle Alrdidge Siltite
Middle Aldridge Quartzite
Historic Working
Bedding, cleavage, vein, fault, 2019 traverse