

Ministry of Energy, Mines & Petroleum Resources  
Mining & Minerals Division  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Rock Assay & Soil Geochemistry

TOTAL COST: \$7,920.00

AUTHOR(S): Daniel Merkley

SIGNATURE(S): *Daniel Merkley*

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

YEAR OF WORK: 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5720946

PROPERTY NAME: HD

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

COMMODITIES SOUGHT: Zn, Au, Ag, Pb, Cu, Mo

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093L - 203, 093L - 204, 093L - 205

MINING DIVISION: OMINECA

NTS/BCGS: 093L/7E

LATITUDE: 54 ° 26 ' 19 " LONGITUDE: 126 ° 39 ' 40 " (at centre of work)

OWNER(S):

1) Daniel Morice Merkley

2) William Ray Merkley

MAILING ADDRESS:

3313 Hwy 16 E

5038 MERKLEY FRTG. RD.

HOUSTON, BC; V0J 1Z2

HOUSTON, BC; V0J 1Z2

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

1) Daniel Morice Merkley

2) JOHN WESLEY MOLL

MAILING ADDRESS:

3313 Hwy 16 E

BOX 1182

HOUSTON, BC; V0J 1Z2

HOUSTON, BC; V0J 1Z0

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

Rhyolitic flows, Andesitic tuffs, Basalt, Gabbro, Sediments (Chert, mudstone, siltstone, limestone, dolomite, jasper, jasperoid),

Jurassic Hazelton Group, Telkwa Formation, Mineralized sedimentary beds and exhalite horizons similar to the Eskay Creek occurrence outcrop over a strike of 4 km. Crests and troughs of sedimentary beds suggest a series of 7 folds with strike of 35 northwest.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 10976, 14157, 18864, 18360A, 18360B, 18911,

23232, 26288, 26577, 26887, 27195, 27456, 27810, 28456, 29129, 29567, 30313, 31324, 31845, 33073, 33847, 34495, 10796, 14157

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl support)
<b>GEOLOGICAL</b> (scale, area) <b>Ground, mapping</b> _____ <b>Photo interpretation</b> _____			
<b>GEOPHYSICAL</b> (line-kilometres) <b>Ground</b> <b>Magnetic</b> _____ <b>Electromagnetic</b> _____ <b>Induced Polarization</b> _____ <b>Radiometric</b> _____ <b>Seismic</b> _____ <b>Other</b> _____ <b>Airborne</b> _____			
<b>GEOCHEMICAL</b> (number of samples analysed for...) <b>Soil</b> 8 ICP-MS Analysis <b>Silt</b> _____ <b>Rock</b> 1 Fire Assay/AAS finish <b>Other</b> _____		Tenure 516488 Cell 093L07J043A  Tenure 516488 Cell 093L07J043A	
<b>DRILLING</b> (total metres; number of holes, size) <b>Core</b> _____ <b>Non-core</b> _____			
<b>RELATED TECHNICAL</b> <b>Sampling/assaying</b> _____ <b>Petrographic</b> _____ <b>Mineralographic</b> _____ <b>Metallurgic</b> _____			
<b>PROSPECTING</b> (scale, area) _____			
<b>PREPARATORY / PHYSICAL</b> <b>Line/grid (kilometres)</b> _____ <b>Topographic/Photogrammetric (scale, area)</b> _____ <b>Legal surveys (scale, area)</b> _____ <b>Road, local access (kilometres)/trail</b> Brushing & Debris <b>Trench (metres)</b> _____ <b>Removal</b> <b>Underground dev. (metres)</b> _____ <b>Other</b> _____		Tenure 516488 Cell 093L07J043A	
		<b>TOTAL COST:</b>	<b>\$7,920.00</b>

# HD MINERAL PROSPECT

## SOIL GEOCHEMISTRY & ROCK ANALYSIS

2018

OMINECA MINING DIVISION, BRITISH COLUMBIA  
NTS: 093L047  
LATITUDE: 54° 26' 55.4" N    LONGITUDE: 126° 39' 32.1" W  
GPS: NAD 83    UTM ZONE 9  
NORTHING: 651788    EASTING: 6035971

OWNERS: JOHN WESLEY MOLL, WILLIAM RAY MERKLEY & DANIEL MORICE MERKLEY

REPORT BY DANIEL MERKLEY

FEBRUARY 2019

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## HISTORY

**1908:** Melvin McQuatt, a Houston prospector, discovers an old claim post on the east slope of Mt. Harry Davis. The name "Fraser" was carved into one squared face of the post above the date "1908".

**1918 and 1920's:** Paul Tickoles, a Houston prospector, holds the Mammoth, Mison and B.C. Leader claims. This prospector digs several test pits and two adits, one at the north slope of the mountain and the other a short distance down the south slope of the mountain. As stated in the Minister of Mines dual Report, 1929: "The northeast of the claim was known as the B. C. Leader property in the 1920's. Work consisted of a series of open cuts which encountered zinc, silver and copper mineralization". The 1931 Report of the Minister of Mines, pg. A74-A75 also states: "Paul Tickoles has accomplished a great deal, single-handed, at this property, in the way of open-cuts and one tunnel 30 feet in length".

**1924:** Andrew Martenson and Martin Bellicini of Houston sink a 6-foot shaft at the south-east sector of the mountain on high grade copper-silver mineralization. A log cabin is erected near the workings.

**1950's and early 60's:** Mel McQuatt and William Merkley prospect the old diggings. William Merkley stakes the Eagle claim over the east sector of the mountain.

**1960's:** Edward Westgarde stakes claims on the southern portion of the mountain when logging road construction uncovers copper-silver mineralization on what became known as "The North Road". Edward Westgarde and William Merkley option their claims to Molybdenum Exploration Ltd. The company completes an extensive exploration program which includes 13 trenches totaling 440 meters, and stripping 38 trenches totaling 1737 meters: Mines and Petroleum Report 1967, pg. 108.

Texas Gulf Sulphur Company explores the southern base of the mountain. Work diamond drilling: Exploration and Mining 1969, pg.121 and 1970 pg. 151.

**1976:** Wes Moll discovers greater than 30 meters of zinc mineralization in a road cut on Grouse and HiUtop mineral claims. Grouse and HiUtop mineral claims.

**1977:** Noranda Exploration soil samples around the mineralization

discovered by Wes Moll in 1976 with an east-west oriented soil grid: Exploration and Mining 1977 pg.195. 1981-Placer Development Ltd., Endako Mines Division options the claims from Wes mineral claims named HD-1, HD-2, HD-3, HD-4. The company carries out geological mapping, geochemical soil and rock sampling, and VLF-EM surveys.

**1981:** Placer Development Ltd., Endako Mines Division options the claims from Wes Moll, Gloria Merkley and Dan Merkley and restakes the mountain with four post mineral claims named HD-1, HD-2, HD-3, HD-4. The company carries out geological mapping, geochemical soil and rock sampling, and VLF-EM surveys.

**1985:** Eldor Resources Ltd. Options the claim from the previous owners. The company performs a gravity survey over the central area of the claims and samples some trenches, pits and showings. Two drill holes are drilled with a W& drill several hundred meters north of the Switch Back Showing where a north-west striking fault is evident on magnetometer maps. The results are negative. The core is an apple-green, chloritized siliceous breccia. 1988-Equity Silver Mines options the HD claims from the previous owners and stakes the HD-5 claims. 776 meters are drilled in 6 holes; 2 holes are drilled west of the Switchback Zone and 4 at the south-west sector of the claims. Approximately 15 meters of subeconomic copper-silver mineralization is intercepted in the 2 holes west of the Switchback Zone; narrow widths of copper-silver mineralization-generally less than 6 feet-are intercepted in the holes at the south-west sector of the claims. Equity also completes several hundred meters of trenching, IP surveys, soil geochemistry and rock analysis. includes geological mapping, soil geochemistry, induced polarization and the side of the VOR antenna access road. Wes Moll and Dan Merkley stake the Moll, Gloria Merkley and Dan Merkley and restakes the mountain with four-post

**1988:** Equity Silver Mines options the HD claims from the previous owners and stakes the HD-5 claims. 776 meters are drilled in 6 holes; 2 holes are drilled west of the Switchback Zone and 4 at the south-west sector of the claims. Approximately 15 meters of subeconomic copper-silver mineralization is intercepted in the 2 holes west of the Switchback Zone; narrow widths of copper-silver mineralization-generally less than 6 feet-are intercepted in the holes at the south-west sector of the claims. Equity also completes several hundred meters of trenching, IP surveys, soil geochemistry and rock analysis. includes geological mapping, soil geochemistry, induced polarization and the side of the VOR antenna access road. Wes Moll and Dan Merkley stake the Moll, Gloria Merkley and Dan

Merkley and restakes the mountain with four-post

**1993:** Teck Exploration Ltd. Drills 4 holes of NQ size totaling 649 meters on the HD-2 claim near the top of the mountain.

**1999:** Wes Moll, Dan Merkley and Bill Merkley drill 6 holes (86.9 meters) of EX size with an X-ray drill.

**2000 to 2006:** Wes Moll, Mary Jean Moll, Bill Merkley and Dan Merkley carried out diamond drilling programs at various locations on the property.

**2007:** Wes Moll, Mary Jean Moll, Bill Merkley and Dan Merkley performed road rehabilitation and rock geochemistry surveys over various locations on the property.

**2008:** Wes Moll, Mary Jean Moll, Bill Merkley and Dan Merkley carried out a diamond drilling program on the property.

**2009:** Wes Moll, Mary Jean Moll, Bill Merkley and Dan Merkley performed rock geochemistry surveys on the property and road rehabilitation.

**2010 to 2018:** Wes Moll, Mary Jean Moll, Bill Merkley and Dan Merkley carried out diamond drilling, rock geochemical surveys, soil geochemical surveys, and road and trail rehabilitation work.

## LOCATION & ACCESS:

The HD mineral property is located approximately 5 km north of the village of Houston in west-central British Columbia. Access to the property is provided by four routes. The usual access route used by the owners departs from highway 16 a couple hundred metres east of the Bulkley River overpass at the easterly outskirts of Houston. This road takes one north for approximately 700 metres where it crosses the North Road, a major logging road between the Houston sawmills and Babine Lake area. A couple hundred metres beyond this point—while driving north—one enters onto the HD property.

The second route provides access to the northern sector of the property via highway 16. From Houston one travels west for approximately 13 km. At this point one turns east of highway 16 onto Summit Lake Road and travels for approximately 6 km (accessible by 2-wheel drive vehicle; during the winter months the road is maintained if there are logging operations in progress). Near the eastern end of Summit Lake a rough road strikes south and enters onto the Hydro Transmission Line right-of-way. The northern border of the HD property lays to the south, at the foot of Mt. Harry Davis.

The third route provides access to the HD property from the east. Departure from Highway 16 is made across from the Knockholt Road turnoff; from there the route crosses the North Road and joins the Summit Lake Road. This route has not been traveled by the owners for several years and may not be presently serviceable.

The fourth access route to the HD property branches from the North Road north of Houston at a point between Knockholt Road entrance onto the North Road and Mt. Davis Way road onto the North Road. This road accesses a clear-cut logging show near the eastern border of the HD claim.



## GEOLOGY:

Rocks underlying the HD tenure are assigned to the Hazelton Group, Telkwa Formation, which is of Lower Jurassic Age (Tipper and Richards 1976). At a broader scale, these rocks are part of the Stikine Terrain, Babine Shelf Facies, which vary from thick sedimentary units in the eastern region of the terrain in the Babine Lake area to generally aerial volcanics in the Telkwa Range area approximately 75 kilometres to the west. More specifically, the HD tenure is underlain by rhyolite, andesite, basalt, limestone, dolomite, chert, jasper and jasperoid of the Hazelton Group, Telkwa Formation deposited in a shallow subaqueous environment. Although the HD property and the Eskay Creek property (located 80 km north of Stewart, British Columbia and several hundred kilometres north of the HD property; assigned to the Triassic Stihini Group and the Jurassic Hazelton Group sediments and volcanics) are underlain by rocks of differing ages the properties have some striking similarities: Mudstone adjacent to banded sphalerite-bearing chert underlain by rhyolite; an oolitic unit, confirmation of a shallow water environment of deposition; large beds of limestone, further evidence of a subaqueous environment; and a “feeder zone” of bleached rhyolitic breccia in a black matrix anomalous for zinc, arsenic and antimony similar to Eskay Creek specimen photographs.

Following this subaqueous era of mineralization the terrain rose, creating a subaerial environment during which mineralization continued. This latter event produced stockworks, veins and veinlets of copper with silver values. This latter event also produced copious amounts of silica and iron oxides, which resulted in large beds of jasper/jasperoid. One of these “red beds” outcrops over an area approximately 15 metres thick and 200 metres long. The jasperoid grades into a volcanic sandstone and analysis has shown the jasperoid is anomalous for arsenic, antimony, mercury, copper, zinc and molybdenum. The surface of the outcrop bears malachite. Hand specimens appear similar to Carlin Type gold ore.

Subsequent transcurrent faulting with northeast strike moved blocks of rock several tens of metres: a major transverse fault at the mountain apex appears to have transferred the contained block to the south about 100 metres southwest from its original position.

Large plutons underlay the area north of the HD tenure. The plutons are of Cretaceous age and are assigned to the Bulkley Intrusions. Large orebodies are associated with these intrusions. Apophysis of these plutons intrude the HD property at its northern sector and they include Gabbro and Syenite, a rare rock for the area.

As alluded to previously, there were two mineralizing periods, one during a subaqueous environment and one that followed during subareal conditions. Subaqueous mineralization consists of Sphalerite, Gold, Galena, Cadmium, Arsenic, Mercury and Molybdenum in bedded laminae and clots. Minerals emplaced during subareal conditions consist of Copper, Silver and Antimony in veins, veinlets and stockworks. The two mineral suits are distinct in their location and host rock: subaqueous mineralization is associated with bedded chert, waterlain rhyolite and limestone; subareal mineralization is associated with quartz and calcite veining, or flooding in rhyolitic and andesitic subareal host rock.

## PURPOSE:

The access road to the proposed sampling programs was seen to be restricted by willows and brush, so the route was cleared to provide pickup truck passage.

A representative rock sample of rhyolite bearing what appeared to be approximately 8% - 10% zinc was collected from the rock sample site location to find if the mineralization bore gold. The sample consisted of several smaller pieces of rock from the area of mineralization: The site was drilled in the past and core analysis resulted in a zinc value approximately equal to the rock sample, as judged by a hand lens. Past exploration has found zinc on the property hostes gold and the appreciable zinc values at the site bore the possibility it should also have gold content.

The soil sample survey was run perpendicular to the possible strike of the previously explored mineralization at several different locations. At least three of the zinc mineralized locations appear to strike approximately N35°W: The soil survey line was run between this strike of these mineralized locations to find if the present rock sample site was on strike with the other mineralization.

## EXPLORATION AND ANALYTICAL PROCEDURE:

To provide access for the work program, on October 4, 5 & 12 of 2018, Wes Moll, Bill Merkley and Dan Merkley travelled from Houston and cleared the access road and trail to the proposed rock sample and soil sample sites of debris and encroaching brush. The trail which led from the road to the rock sample site remained in good condition and required minor work. No trail was brushed out for the soil sample survey. Only part of October 12 was involved in preparing access to the sample sites.

On the 12<sup>th</sup> of October, Wes Moll, Bill Merkley and Dan Merkley travelled from Houston and collected a rock sample from the previously drilled surface area. The sample consisted of large chips from an area of approximately 8 square metres, with the old drill hole collar central to the samples. The samples were fairly well mineralized with honey-coloured sphalerite and were judged to be representative of the zinc content in the drill core from the site.

The soil sample program was run as near as possible perpendicular to the envisioned strike of the zinc mineralization in the area, with the rock sample site marked as a reference. The soil survey line uniformity was hindered by many windfalls, but the resulting survey line sufficed to determine if the mineralization traversed beneath the soil survey line.

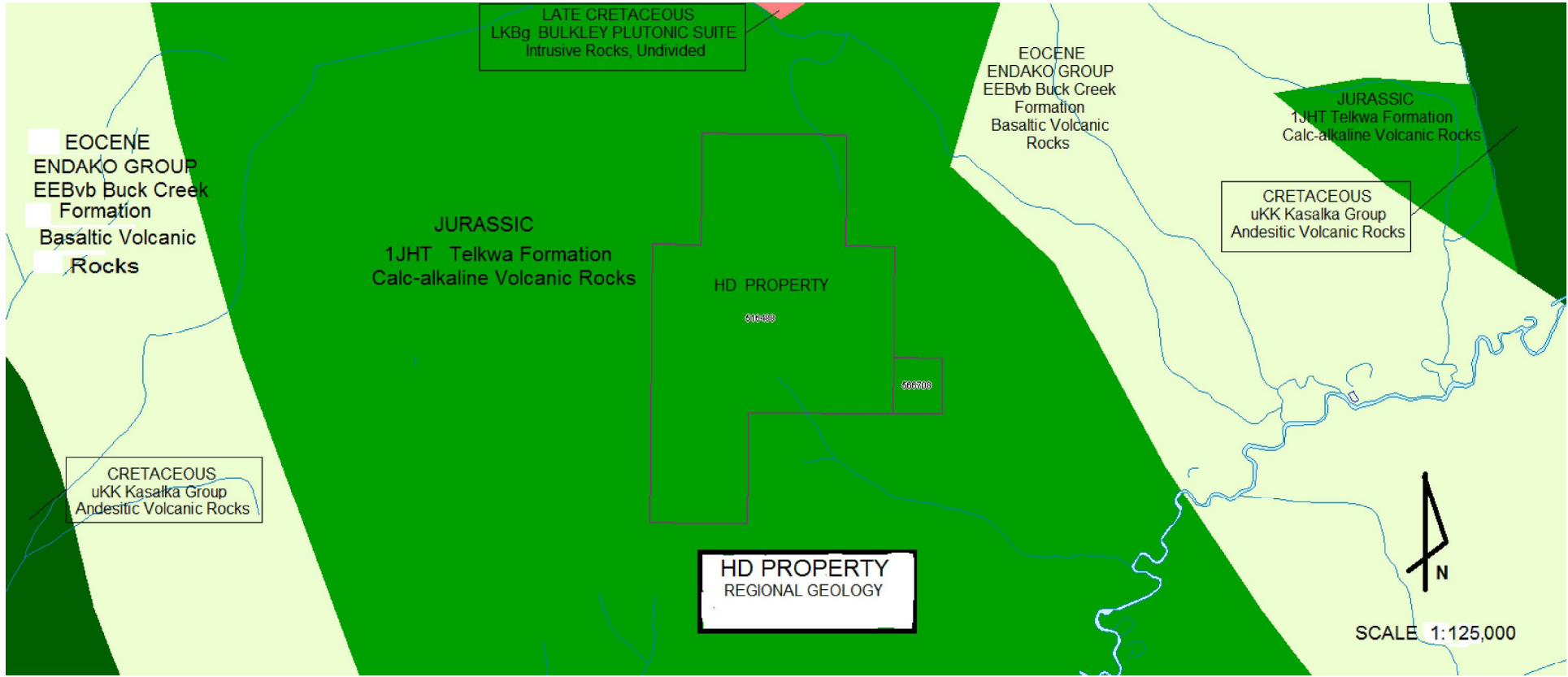
The soil samples were bagged and sent to Bureau Veritas Laboratories in Vancouver BC by Canada Post. The samples were dried at 60 degrees centigrade on arrival (code DY 060), then 100 grams was sieved to 80 mesh (code SS80). The samples underwent Aqua Regia digestion at 1:1:1 dilution, followed by Ultratrace ICP-MS analysis (code AQ250). The pulps were marked for disposal.

A 250 gram rock sample analyzed for gold was crushed, split and pulverized to 200 mesh (code PRP70-250) Fire assay fusion and lead bead collection preceded AAS finish (code FA430). Environmental disposal of fire assay lead waste followed (EN002).

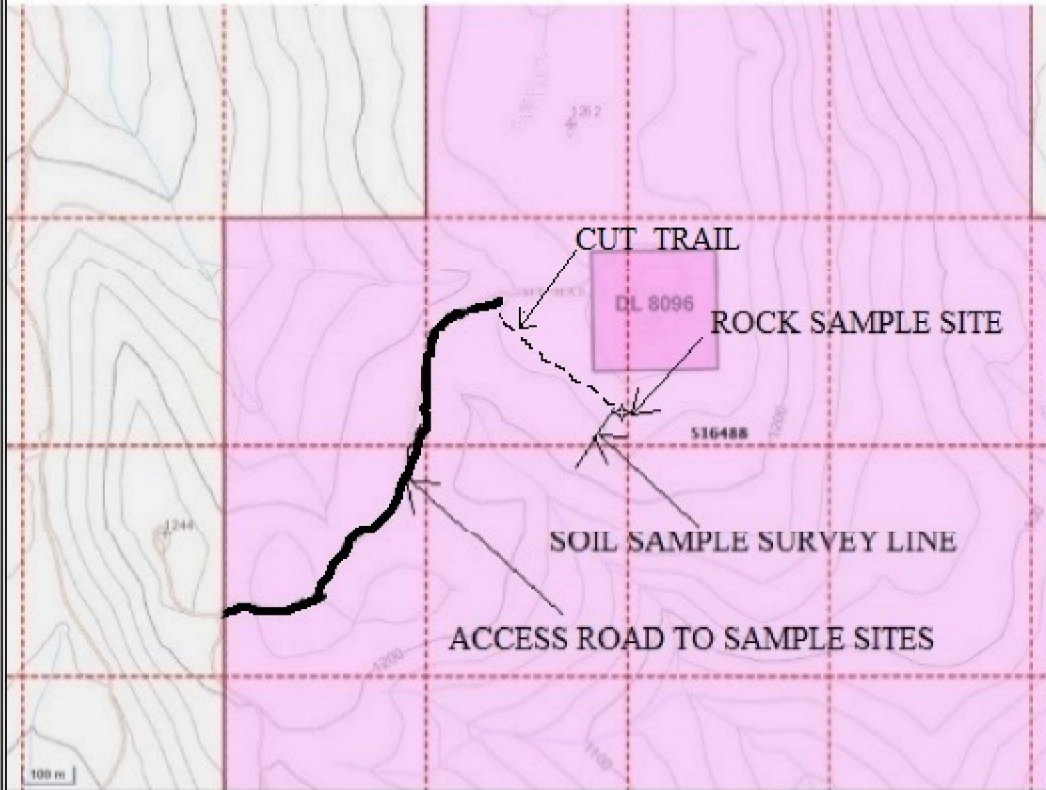
## CONCLUSION:

The rock sample HD-18-R1 gold assay result was not greater than rock for the area.

The soil sample survey resulted in anomalous zinc values for samples HD-18-1 and HD-18-2 with values of 453.2 ppm and 305.8 ppm respectively. The result indicated the zinc mineralization found at the locations previously surmised to be on strike with the sample sites are probably connected.



# HD PROPERTY SAMPLE SITE ACCESS



- Legend**
- Mineral Titles (MTO)**
- MTO Grid
- Title (current)**
- LEASE
  - CLAIM
  - No Registration
  - Conditional
  - Heritage/Historic Site
- Green Land Layers (Tentative)**
- Land Act Survey Parcels - Tentative - Legal Descriptions
- Label Text
- Land Act Survey Parcels - Tentative - Outlined
- Administrative Boundaries**
- Federal Transfer Lands - Outlined
  - Federal Transfer Lands - Colour Filled
  - National Parks - Outlined
  - National Park
  - National Parks - Colour Filled
  - Conservancy Areas - Tentative - Colour Filled
  - Conservancy Areas
  - Ecological Reserves - Tentative - Colour Filled
  - Ecological Reserves
  - Protected Areas - Tentative - Colour Filled
  - Protected Areas
  - Provincial Parks - Tentative - Colour Filled
  - Provincial Parks

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

SCALE 1:17,000

Center: 54°27'3", -126°39'17"  
Scale: 1 : 16927  
SRG: EPSG:3857  
UTM Zone: 9



The map above shows the road and trail, which were cleared of brush and debris to permit access to the soil sample survey line and the rock sample site.

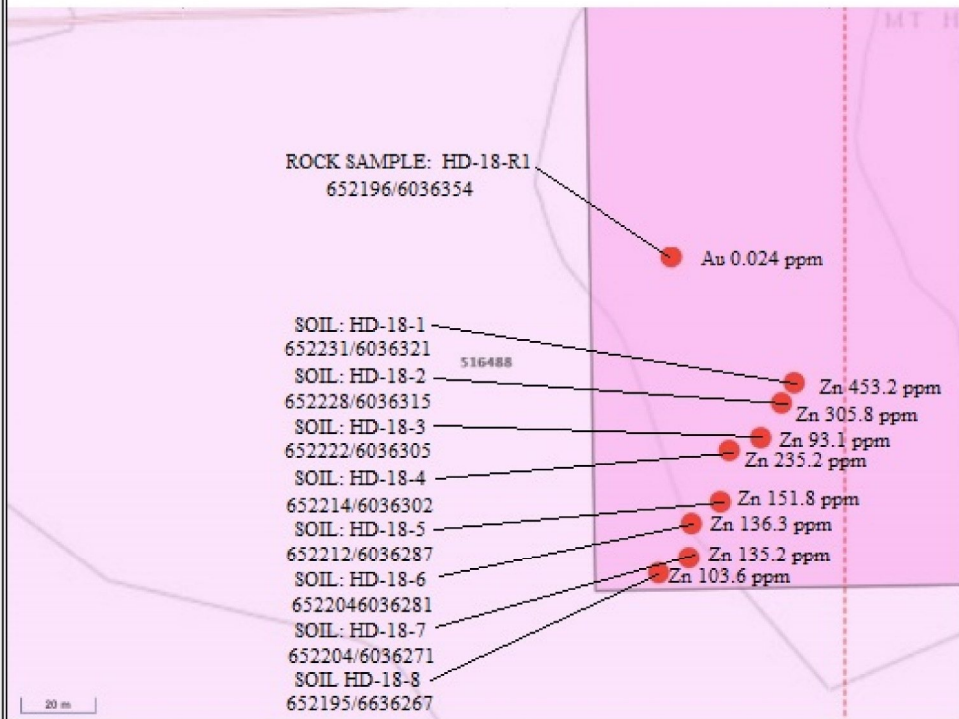


# ROCK & SOIL LOCATIONS



## Legend

- Mineral Titles (MTO)**
- MTO Grid
- Title (current)
  - LEASE
  - CLAIM
- Reserves
  - No Registration
  - Conditional
  - Heritage/Historic Site
- Crown Land Layers (Tantalis)**
- Land Act Survey Parcels - Tantalis - Legal Descriptions
  - Label Text
  - Land Act Survey Parcels - Tantalis - Outlined
- Administrative Boundaries**
- Federal Transfer Lands - Outlined
- Federal Transfer Lands - Colour Filled
- National Parks - Outlined
- National Park
- National Parks - Colour Filled
- Conservancy Areas - Tantalis - Colour Filled
- Conservancy Areas
- Ecological Reserves - Tantalis - Colour Filled
- Ecological Reserves
- Protected Areas - Tantalis - Colour Filled
- Protected Areas
- Provincial Parks - Tantalis - Colour Filled
- Provincial Parks



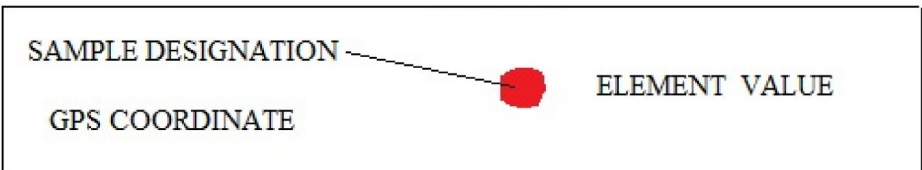
This map is a user generated static output from an internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.  
THIS MAP IS NOT TO BE USED FOR NAVIGATION.

SCALE 1:2,116

Center: 54°27'6", -126°39'12"  
Scale: 1 : 2116  
SRS: EPSG:3857  
UTM Zone: 9



## LEGEND





**BUREAU VERITAS** MINERAL LABORATORIES  
Canada

[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

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

**Client:** **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2 Canada

Submitted By: Dan Merkley  
Receiving Lab: Canada-Vancouver  
Received: November 01, 2018  
Report Date: November 19, 2018  
Page: 1 of 2

# CERTIFICATE OF ANALYSIS

VAN18003074.1

## CLIENT JOB INFORMATION

Project: None Given  
Shipment ID:  
P.O. Number  
Number of Samples: 1

## 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.

Invoice To: Merkley, Dan  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2  
Canada

CC:

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
BAT01	1	Batch charge of <20 samples			VAN
PRP70-250	1	Crush, split and pulverize 250 g rock to 200 mesh			VAN
FA430	1	Lead Collection Fire Assay Fusion - AAS Finish	30	Completed	VAN
EN002	1	Environmental disposal charge-Fire assay lead waste			VAN

## ADDITIONAL COMMENTS

  
SCOTT INGLIS  
Fire Assay 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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**Client:** **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2 Canada

Project: None Given  
Report Date: November 19, 2018

Page: 2 of 2

Part: 1 of 1

## CERTIFICATE OF ANALYSIS

VAN18003074.1

Method	WGHT	FA430
Analyte	Wgt	Au
Unit	kg	ppm
MDL	0.01	0.005
HD-18-R1	Rock	0.56 0.024



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Canada

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

**Client:** **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2 Canada

Submitted By: Dan Merkley  
Receiving Lab: Canada-Vancouver  
Received: November 01, 2018  
Report Date: November 19, 2018  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN18003075.1

### CLIENT JOB INFORMATION

Project: None Given  
Shipment ID:  
P.O. Number  
Number of Samples: 26

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

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

Invoice To: **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2  
Canada

CC:

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
DY060	26	Dry at 60C			VAN
SS80	26	Dry at 60C sieve 100g to -80 mesh			VAN
AQ250	26	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
DISPL	26	Disposal of pulps			VAN

### ADDITIONAL COMMENTS

  
KERRY JAY  
Geochem Project Specialist

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





Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2 Canada

Project: None Given  
Report Date: November 19, 2018

Page: 2 of 2

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

## VAN18003075.1

Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL		0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	1	0.01	0.001
ADY-18-1	Soil	0.55	23.74	17.25	79.9	267	10.3	6.3	353	2.43	6.3	0.6	2.4	0.8	30.5	0.27	0.19	0.46	46	0.61	0.030	
ADY-18-2	Soil	0.61	18.69	19.22	112.4	448	9.0	7.0	473	2.67	5.5	0.4	1.1	1.3	51.4	0.33	0.16	0.41	55	0.95	0.020	
ADY-18-3	Soil	1.58	36.78	15.12	95.0	378	17.1	10.6	297	3.52	9.9	0.3	2.6	1.1	33.6	0.13	0.33	0.42	72	0.42	0.022	
ADY-18-4	Soil	0.89	18.03	11.85	102.5	219	9.8	6.0	203	2.29	5.2	0.3	1.6	0.8	14.6	0.19	0.24	0.27	47	0.15	0.017	
ADY-18-5	Soil	1.04	11.66	10.66	59.5	115	7.6	4.8	224	2.05	5.2	0.3	0.8	0.7	17.8	0.08	0.21	0.32	43	0.22	0.013	
ADY-18-6	Soil	1.10	11.61	10.69	70.2	137	8.2	6.0	275	2.28	6.2	0.3	0.8	0.9	15.9	0.11	0.17	0.27	48	0.18	0.009	
ADY-18-7	Soil	3.64	96.80	12.29	99.8	193	12.3	13.8	580	3.33	6.0	0.5	1.3	1.4	29.7	0.24	0.26	0.42	86	0.44	0.029	
ADY-18-8	Soil	2.63	26.77	11.99	41.5	323	5.5	3.8	166	2.64	16.7	0.3	2.6	0.9	7.4	0.09	0.53	0.44	63	0.09	0.020	
ADY-18-9	Soil	10.98	68.17	8.25	85.9	150	12.3	11.4	323	3.87	8.7	0.3	1.6	0.9	13.2	0.12	0.45	0.37	97	0.18	0.030	
ADY-18-10	Soil	6.75	52.13	10.58	57.7	254	8.0	5.6	181	2.07	5.7	0.3	0.6	1.0	8.6	0.10	0.35	0.33	42	0.07	0.032	
ADY-18-11	Soil	3.77	21.89	10.22	50.4	108	6.1	4.3	166	2.85	7.9	0.3	<0.2	0.9	9.2	0.09	0.37	0.26	63	0.08	0.044	
ADY-18-12	Soil	1.69	7.32	7.67	19.5	99	2.1	1.5	69	0.89	1.8	0.2	<0.2	0.8	7.3	0.03	0.20	0.15	24	0.06	0.014	
ADY-18-13	Soil	7.51	63.56	17.69	97.6	323	10.3	6.8	506	3.72	16.6	0.3	2.4	1.0	9.6	0.15	0.96	0.42	70	0.11	0.089	
ADY-18-14	Soil	3.55	64.69	12.97	104.4	207	9.9	7.8	360	3.22	11.5	0.3	1.4	1.0	11.5	0.14	0.61	0.32	58	0.15	0.051	
ADY-18-15	Soil	3.50	65.57	13.60	105.0	189	10.2	7.9	369	3.31	11.7	0.3	0.9	1.0	12.7	0.13	0.63	0.33	57	0.17	0.052	
ADY-18-16	Soil	3.02	38.21	10.74	143.9	185	8.0	5.9	322	2.38	7.5	0.3	0.9	1.0	14.2	0.16	0.35	0.22	43	0.21	0.026	
ADY-18-17	Soil	0.50	10.40	10.53	89.5	433	5.7	3.8	359	1.62	3.5	0.3	0.6	0.9	34.0	0.25	0.21	0.29	33	0.29	0.010	
ADY-18-18	Soil	4.68	32.09	13.70	147.3	366	8.8	6.5	433	2.56	8.0	0.3	1.0	1.2	9.3	0.32	0.30	0.26	47	0.11	0.076	
HD-18-1	Soil	2.77	24.58	52.51	453.2	135	22.5	12.7	2251	4.32	14.5	0.4	0.4	0.8	12.2	1.06	0.37	0.13	72	0.18	0.042	
HD-18-2	Soil	2.78	30.18	35.28	305.8	124	25.9	15.0	3207	4.58	14.7	0.4	0.9	0.9	13.6	0.79	0.37	0.12	73	0.22	0.039	
HD-18-3	Soil	1.01	14.89	8.94	93.1	57	19.3	8.0	367	2.98	6.2	0.2	1.1	0.6	13.7	0.33	0.29	0.10	58	0.16	0.018	
HD-18-4	Soil	1.03	9.87	53.65	235.2	46	13.9	5.6	268	3.73	9.8	0.2	0.4	0.7	8.4	0.44	0.20	0.14	77	0.11	0.064	
HD-18-5	Soil	0.83	11.33	12.22	151.8	46	14.7	6.4	313	2.87	6.3	0.2	<0.2	0.9	8.2	0.25	0.18	0.11	58	0.10	0.075	
HD-18-6	Soil	0.85	17.14	11.05	136.3	44	18.0	7.3	377	3.00	8.0	0.2	0.5	0.8	11.1	0.38	0.26	0.10	57	0.15	0.072	
HD-18-7	Soil	1.05	11.90	13.04	135.2	55	13.8	6.0	308	3.94	11.2	0.2	<0.2	0.7	7.9	0.44	0.27	0.12	80	0.09	0.090	
HD-18-8	Soil	1.03	6.18	11.17	103.6	63	9.6	4.3	202	2.92	39.3	0.2	0.8	0.7	7.0	0.43	0.23	0.11	70	0.07	0.031	



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Client: **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2 Canada

Project: None Given  
Report Date: November 19, 2018

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# CERTIFICATE OF ANALYSIS

VAN18003075.1

Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	20	0.01	0.01	0.01	0.1	0.1	0.02	5	0.1	0.02	0.1	0.1
ADY-18-1	Soil	7.3	15.9	0.36	224.0	0.017	<20	1.49	0.010	0.05	<0.1	4.2	0.09	<0.02	19	<0.1	0.08	4.5
ADY-18-2	Soil	7.9	15.0	0.30	376.1	0.012	<20	2.02	0.014	0.14	<0.1	3.9	0.11	<0.02	24	<0.1	0.05	6.0
ADY-18-3	Soil	5.2	21.0	0.51	337.1	0.015	<20	2.60	0.012	0.06	<0.1	5.0	0.12	<0.02	43	<0.1	0.09	7.5
ADY-18-4	Soil	4.6	14.7	0.34	139.2	0.017	<20	1.59	0.008	0.04	<0.1	2.7	0.09	<0.02	23	<0.1	0.06	4.9
ADY-18-5	Soil	5.9	12.1	0.37	159.3	0.020	<20	1.31	0.008	0.04	<0.1	2.3	0.12	<0.02	18	<0.1	0.04	4.1
ADY-18-6	Soil	5.2	13.3	0.41	152.4	0.015	<20	1.32	0.009	0.03	<0.1	2.8	0.11	<0.02	16	<0.1	0.03	4.3
ADY-18-7	Soil	8.5	18.3	0.67	285.5	0.047	<20	2.18	0.009	0.09	<0.1	5.9	0.08	<0.02	22	<0.1	0.06	7.3
ADY-18-8	Soil	4.8	12.1	0.25	72.6	0.027	<20	1.33	0.006	0.03	<0.1	2.5	0.10	<0.02	44	<0.1	0.13	5.6
ADY-18-9	Soil	4.7	22.9	0.60	123.4	0.022	<20	1.91	0.007	0.06	0.1	4.6	0.09	<0.02	26	<0.1	0.12	8.5
ADY-18-10	Soil	4.7	13.5	0.28	80.8	0.020	<20	1.50	0.007	0.03	<0.1	2.1	0.10	<0.02	18	<0.1	0.04	4.5
ADY-18-11	Soil	4.5	13.5	0.23	55.0	0.030	<20	1.37	0.007	0.03	0.1	2.0	0.08	<0.02	17	<0.1	0.08	5.5
ADY-18-12	Soil	5.3	5.8	0.08	42.8	0.030	<20	0.70	0.007	0.03	<0.1	1.3	0.08	<0.02	9	<0.1	<0.02	3.7
ADY-18-13	Soil	4.7	16.8	0.40	131.3	0.025	<20	1.52	0.007	0.04	<0.1	3.3	0.10	<0.02	21	<0.1	0.44	6.4
ADY-18-14	Soil	4.5	14.6	0.38	128.3	0.027	<20	1.62	0.006	0.04	<0.1	3.2	0.08	<0.02	21	<0.1	0.13	4.6
ADY-18-15	Soil	4.7	15.5	0.38	139.9	0.025	<20	1.64	0.007	0.04	<0.1	3.1	0.08	<0.02	20	<0.1	0.11	4.9
ADY-18-16	Soil	5.0	13.4	0.28	142.6	0.023	<20	1.45	0.008	0.06	<0.1	2.3	0.07	<0.02	15	<0.1	0.06	4.4
ADY-18-17	Soil	6.0	11.2	0.25	199.9	0.030	<20	0.98	0.010	0.03	<0.1	2.0	0.08	<0.02	11	<0.1	0.03	3.4
ADY-18-18	Soil	5.4	14.2	0.25	101.6	0.029	<20	1.69	0.007	0.05	<0.1	2.2	0.08	<0.02	41	<0.1	0.05	4.9
HD-18-1	Soil	12.3	27.4	0.53	178.3	0.040	<20	2.12	0.005	0.07	0.1	5.5	0.10	<0.02	30	<0.1	<0.02	6.5
HD-18-2	Soil	14.9	30.7	0.61	184.9	0.043	<20	2.31	0.006	0.08	<0.1	6.8	0.10	<0.02	30	<0.1	<0.02	6.4
HD-18-3	Soil	5.1	22.7	0.49	106.6	0.034	<20	1.49	0.006	0.05	<0.1	3.8	0.05	<0.02	26	<0.1	<0.02	5.1
HD-18-4	Soil	5.1	24.0	0.36	72.0	0.037	<20	1.78	0.005	0.04	0.1	3.3	0.06	<0.02	20	<0.1	0.03	7.2
HD-18-5	Soil	5.9	20.9	0.37	90.6	0.037	<20	2.11	0.005	0.04	<0.1	3.8	0.07	<0.02	39	<0.1	<0.02	7.1
HD-18-6	Soil	5.4	23.2	0.47	111.1	0.036	<20	2.02	0.005	0.05	<0.1	4.2	0.06	<0.02	35	<0.1	<0.02	6.6
HD-18-7	Soil	4.9	22.7	0.39	69.5	0.045	<20	1.73	0.005	0.04	0.1	3.5	0.06	<0.02	24	<0.1	0.03	7.1
HD-18-8	Soil	4.6	18.1	0.27	57.9	0.049	<20	1.22	0.005	0.03	<0.1	2.2	0.05	<0.02	54	<0.1	<0.02	6.0



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**Client:** **Merkley, Dan**  
3313 Hwy 16 E  
Houston British Columbia V0J 1Z2 Canada

Project: None Given  
Report Date: November 19, 2018

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# QUALITY CONTROL REPORT

VAN18003075.1

Method	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	1	0.01	0.001	
Pulp Duplicates																					
HD-18-8	Soil	1.03	6.18	11.17	103.6	63	9.6	4.3	202	2.92	39.3	0.2	0.8	0.7	7.0	0.43	0.23	0.11	70	0.07	0.031
REP HD-18-8	QC	0.94	6.13	10.73	102.5	57	9.4	4.1	209	2.92	37.8	0.2	<0.2	0.7	7.0	0.43	0.28	0.10	67	0.07	0.030
Reference Materials																					
STD DS11	Standard	12.42	143.49	133.25	314.3	1854	73.8	12.9	998	2.98	41.6	2.5	56.9	6.9	62.1	2.31	6.35	11.33	48	1.00	0.071
STD OREAS262	Standard	0.61	115.99	54.03	141.5	458	61.2	27.0	514	3.18	34.1	1.1	56.3	8.6	35.8	0.62	2.61	1.01	21	2.92	0.036
STD OREAS45EA	Standard	1.44	670.19	14.30	28.4	257	361.7	51.4	391	23.07	8.9	1.8	48.4	10.4	3.9	<0.01	0.22	0.26	326	0.03	0.027
STD OREAS45EA Expected		1.6	709	14.3	31.4	260	381	52	400	22.65	11.4	1.73	53	10.7	4.05	0.03	0.32	0.26	303	0.036	0.029
STD DS11 Expected		13.9	149	138	345	1710	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	7.2	12.2	50	1.063	0.0701
BLK	Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<1	<0.01	<0.001



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**Client:** **Merkley, Dan**  
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Houston British Columbia V0J 1Z2 Canada

Project: None Given  
Report Date: November 19, 2018

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Part: 2 of 2

# QUALITY CONTROL REPORT

VAN18003075.1

Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
Pulp Duplicates																		
HD-18-8	Soil	4.6	18.1	0.27	57.9	0.049	<20	1.22	0.005	0.03	<0.1	2.2	0.05	<0.02	54	<0.1	<0.02	6.0
REP HD-18-8	QC	4.7	18.0	0.27	55.2	0.048	<20	1.21	0.005	0.02	<0.1	2.3	0.05	<0.02	17	<0.1	<0.02	5.9
Reference Materials																		
STD DS11	Standard	16.2	55.5	0.80	341.0	0.087	<20	1.04	0.065	0.38	2.8	2.8	4.80	0.27	255	1.7	4.18	4.6
STD OREAS262	Standard	14.0	40.6	1.14	239.8	0.003	<20	1.10	0.067	0.28	0.1	3.0	0.45	0.26	150	0.3	0.21	3.5
STD OREAS45EA	Standard	7.0	870.0	0.10	145.5	0.098	<20	3.03	0.018	0.05	<0.1	74.1	0.06	0.03	6	0.4	0.08	12.4
STD OREAS45EA Expected		7.06	849	0.095	148	0.0984		3.32	0.02	0.053		78	0.072	0.036	10	0.78	0.1	12.4
STD DS11 Expected		18.6	61.5	0.85	417	0.0976		1.129	0.0694	0.4	2.9	3.1	4.9	0.2835	260	2.2	4.56	4.7
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1



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**Client:** **Merkley, Dan**  
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Houston British Columbia V0J 1Z2 Canada

Project: None Given  
Report Date: November 19, 2018

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# QUALITY CONTROL REPORT

VAN18003074.1

Method	WGHT	FA430
Analyte	Wgt	Au
Unit	kg	ppm
MDL	0.01	0.005
Reference Materials		
STD OXC145	Standard	0.211
STD OXH139	Standard	1.299
STD OXN134	Standard	7.491
STD OXN134 Expected		7.667
STD OXC145 Expected		0.212
STD OXH139 Expected		1.312
BLK	Blank	<0.005
BLK	Blank	0.007
Prep Wash		
ROCK-VAN	Prep Blank	<0.005

## EXPENDITURES

3 men @ \$500/day x 3 days (OCT. 2018 – 4,5,12)	\$4,500.00
Pickup truck @ \$100/day x 3 days (2018-10-4,5,12)	\$300.00
2-wheel drive pickup truck @ \$150/day x 3 days (2018-10-4,5,12)	\$450.00
3 Power saws x 3 days @ \$35 ea./day (2018-10-4,5,12)	\$315.00
2 ATVs @ \$125/day ea. x 3 days (2018-10-4,5,12)	\$750.00
Sample preparation, transport, shipping, Assay & Analysis	\$750.00
<u>Report preparation</u>	<u>\$855.00</u>
TOTAL EXPENDITURES	\$7,920.00

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AUTHOR'S QUALIFICATIONS

I, Daniel Merkley, do hereby certify that:

- (1) I am a prospector and reside at 3313 Hwy 16 E, Houston, B. C.
- (2) I have more than 40 years of prospecting experience
- (3) I am familiar with rock and soil geochemical sample collection
- (4) I am familiar with logging and handling diamond drill core
- (5) I prepared this report

Respectfully submitted

*Daniel Merkley*

Daniel Merkley  
Prospector