

BC Geological Survey
Assessment Report
38019



Assessment Report
Title Page and Summary

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

TOTAL COST: 10558.43

AUTHOR(S): DEV RISHY-MAHARAJ (281925)

SIGNATURE(S): *Dev Rishy-Maharaj*

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): 5720878

YEAR OF WORK: 2018

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

PROPERTY NAME: OLIVER

CLAIM NAME(S) (on which the work was done): 1052283, 1059871, 1060858, 1060880, 1061451, 1063665

COMMODITIES SOUGHT: COPPER, GOLD, SILVER

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 103I 155 , 103I 243

MINING DIVISION: OMINECA

NTS/BCGS: 103I.016

LATITUDE: 54 ° 81 '17 " LONGITUDE: -128 ° 24 '81 " (at centre of work)

OWNER(S):

1) DEV RISHY-MAHARAJ (281925)

2) ADAM P. ADSHEAD (285272)

MAILING ADDRESS:

950 MUNRO STREET, KAMLOOPS BC V2C 1G4

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

1) PROPERTY OWNERS

2)

MAILING ADDRESS:

950 MUNRO STREET, KAMLOOPS BC V2C 1G4

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

HAZELTON GROUP, TELKWA FORMATION, PORPHYRY COPPER, TWO GOAT, OLIVER NORTH, KITSUMKALUM

INTRUSIVE SUITE, BOWSER LAKE GROUP, DIABASE, RHYOLITE, DACITE, CHALCOPYRITE, MALACHITE, ALKALIC

PORPHYRY, SUB-VOLCANIC PORPHYRY

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 08133, 30463, 31303, 37700

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 15 SAMPLES ICP-MS 36 ELEMENT		AS LISTED ABOVE	895.00
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area) OLIVER NORTH SHOWING		AS LISTED ABOVE	
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	10558.43

2018 GEOCHEMICAL ASSESSMENT REPORT

ON THE

OLIVER PROPERTY

**LOCATED IN THE
OMINECA MINING DIVISION
BRITISH COLUMBIA**

NTS: 103I.016

**CENTERED AT:
Latitude: 54 81 17 N
Longitude: 128 24 81 W**

**UTM: 548,324 mE; 6,074,092 mN
NAD 83, Zone 09N**

**OWNERS: Dev Rishy-Maharaj (281925) (75%),
Adam P. Adshead (285272) (25%)**

OPERATOR:

**DRM Exploration Consulting
950 Munro Street
Kamloops, BC, V2C 3G1**

AUTHOR:

Dev Rishy-Maharaj, *B.Sc.* Geology

Date: April 3rd 2019

The Oliver Copper-Gold-Silver Prospect

Omineca Mining Division



Figure 1 – Prospecting near the Oliver North Showing in a stand of old growth Cedar

Oliver Property, October 6th 2018

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1.0 SUMMARY

The Oliver Property (the “Property”) is a 2573-hectare grassroots-stage mineral exploration project, staked in 2017 following the compilation of historic assessment reports and subsequent identification of an unclaimed high-priority Cu-Au-Ag target in the Terrace, BC area. The project is located in northwestern British Columbia, about 47 km northeast of Terrace, BC. The Property has good road access and is located 2.8 km east of Highway 16, roughly midway between Terrace and Kitwanga. The Property is reached by following numerous forest roads which run eastward from the highway along the south bank of the Little Oliver Creek drainage.

Mineralization has been characterized as both low-grade porphyry-style copper-gold-silver, and high-grade lode mesothermal Au-Qtz veining, based on the observed lithologies, ore assemblages, alteration, and multi-element Cu-Ag-Au geochemical signature. The conceptual deposit type at the Property has yet to be fully determined.

Mineralization is observed as Sub-volcanic Cu-Ag-Au (L01) or Alkalic Porphyry (L03) deposit type, along with rare high-grade Au-Qtz veining (I01). Rocks collected on the Property have disseminated and vein-hosted polymetallic mineralization, contained in pervasively altered volcanic and intrusive rocks, attributed to the Hazelton and Bowser Lake Groups. The early-2018 program was successful, with assays up to 2.94 % Cu and 133 g/t Ag in rock sampling.

The Property was identified as a viable target area in late 2016 after an exhaustive review of known MINFILE showings in the Terrace area. Of particular interest were two separate showings termed the Two Goat (No. 103I 155) and Oliver North (No. 103I 243) showings, located north of Little Oliver Creek, discovered in 1980 and 2008 respectively.

This report details a small program of geochemical sampling and prospecting completed during late-2018 from October 6th - 8th 2018, with the primary goal of reaching the Oliver North showing, and visiting the southern part of Property, where newly acquired mineral tenures were sampled.

Fifteen total rock samples were collected, with seven total samples being taken proximal to the Oliver North showing. An additional eight rock samples were taken in the southern portion of the Property. This southern traverse consisted of the initial reconnaissance and sampling of this area which had not been previously visited by the author, and had no historical data.

The sampling in late-2018 failed to locate rock which contained significant metal content, with the highest copper and gold values at 342 ppm Cu and 234 ppb Au, respectively.

A follow-up multi-day program of Property-wide prospecting is recommended as the first course of action, as the Property has numerous relatively unexplored areas where anomalous copper and gold values have been found. Future work at the Property will also consist of a high-resolution magnetic survey over the entire Two Goat - Oliver North area. Historic reports indicate a correlation between magnetite and gold, which was confirmed by the October 2018 program.

2.0 INTRODUCTION

The Oliver Property (the “Property”) is a 2573-hectare grassroots-stage mineral exploration project, staked in 2017 following the compilation of historic assessment reports and identification of an unclaimed high-priority Cu-Au-Ag target in the Terrace, BC area. The project is located in northwestern British Columbia, about 47 km northeast of Terrace, BC. The tenure group has good road access and is located 2.8 km east of Highway 16, roughly midway between Terrace and Kitwanga.

This report details geochemical sampling and prospecting completed during the late-2018 field season from October 6th–8th 2018, with the primary goal of locating and resampling the historical Oliver North showing as described in 2008 report (ARIS 30463) by Ron Bilquist. A newly claimed area in the southern section of the Property was also visited and sampled during the October 2018 field program.

3.0 LOCATION AND ACCESS

The Oliver Property is a 2573-hectare contiguous set of mineral claims located in northwestern British Columbia in the Omineca Mining Division (NTS 103I.016), approximately 47 km northeast of Terrace, BC.

The tenure group sits roughly midway between Terrace and Kitwanga is located 2.8 km east of Highway 16, covering the lower portion Little Oliver Creek drainage and surrounding ridgelines. The Property is generally bounded by the Skeena River to the west and by the Seven Sisters Provincial Park to the North. To the east the Property is bounded by the J2 Syndicate Empire Claims.

The Property can be reached by two separate Forest Service Roads which extend east from Highway 16:

- ❖ The R18243 A0 forest road provides access to the northern tenure group, eastward from the Highway 16 along the southern bank of the Little Oliver Creek drainage. This road allows efficient access and comes to within 500 meters of the Two Goat showing, which was main target area sampled during the May 2018 program.
- ❖ The R16688 A0 Forest Road provides access to the southern tenure group, from Highway 16 via switchbacks up and along a north-south ridgeline adjacent to the Skeena River. This road provided access for the October 2018 program (this report).

Crews parked along FSR access roads daily and proceeded to the target area on foot traverse. The Oliver North showing was visited on October 6th and the southern tenure group was visited on October 7th 2018.

Generally, terrain on the Property is moderate to steep and consists of north, south, and westward facing slopes segmented by Little Oliver Creek. The Little Oliver Creek drainage is canyonized in the center of the claims, which provides excellent outcrop exposure but slows access. Terrain challenges are also present in other areas on the Property, with some steeper slopes requiring mountaineering gear for safe access.

Extreme terrain is present which may require helicopter charter to access. Numerous helipad locations have been found during foot traverse and marked by GPS positioning. For future work programs these sites may be used for daily helicopter charter to the upper elevations to maximize crew coverage. Helicopter charter operators are available from Terrace and Smithers, BC.

4.0 PHYSIOGRAPHY, CLIMATE, AND LOCAL SERVICES

The Oliver Property is located along the western slopes of the Bulkley Ranges, on the eastern side of the valley containing the Skeena River. The Property covers the lower section of Little Oliver Creek including ridges to the north and south of the deeply incised and canyonized central drainage.

Mountainous terrain dominates the region and the topography within the tenure ranges from moderate slopes to extremely steep, from 180 meters ASL at Little Oliver Creek to 1650 meters ASL near the tenure southern boundary.

Nearby peaks include Mt. Sir Robert (2388m) 6.8 km to the southeast and Mt. Quinlan (2095m) 3.8 km to the northeast.

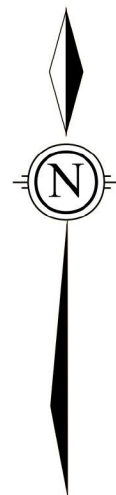
The region is characterized by cold, very snowy winters and short, warm to cool summers. Precipitation is variable throughout the year and can be heavy with frequent storms crossing the region from the Pacific Ocean. The typical exploration season runs from late-May to late-October. The Property is heavily forested with mature stands of spruce, fir and cedar. In poorly-drained areas and creek gullies are thickets of alder and devils club.

A logging road traverses the Property along the south bank of Little Oliver Creek, providing access to a few widely-spaced cut blocks on the slopes in the valley containing the upper Little Oliver Creek tributaries immediately southeast and east of the Property.

The Property lies 47 km from the service town of Terrace, BC with all-year lodging available and fuel, food, and machine shop. Limited grid-power is available within the Skeena River valley, which services a few widely spaced residential and commercial properties in the valley bottom.

Charter helicopter services in the region are provided by Yellowhead Helicopters out of Terrace, BC and Silver King Helicopters, out of Smithers, BC with estimated flight time from the helicopter base to the Property at less than one hour.

YUKON TERRITORY



BRITISH COLUMBIA

ALBERTA

QUEEN CHARLOTTE ISLANDS

PACIFIC OCEAN

VANCOUVER ISLAND

100 0 100 200 km



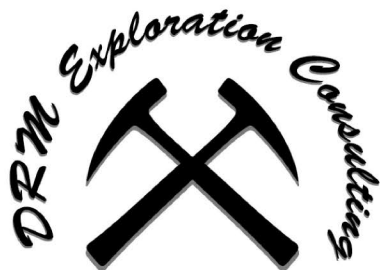
U.S.A.

LOCATION MAP OLIVER PROPERTY

1 : 6,000,000

BC Albers Projection
UTM Zone 9N

DRM Exploration Consulting



 **Oliver Property**

LOCATION MAP

OLIVER PROPERTY

1 : 250,000

NAD 83 Projection

UTM Zone 9N

DRM Exploration Consulting

LEGEND

BC Parks

OLIVER PROPERTY

MINERAL TENURES

OTHER MINERAL TENURES BY OWNER

ARGONAUT EXPLORATION INC.

BCM RESOURCES CORPORATION

CASA MINERALS INC.

DECADE RESOURCES LTD.

EAGLE PLAINS RESOURCES LTD.

EASTFIELD RESOURCES LTD.

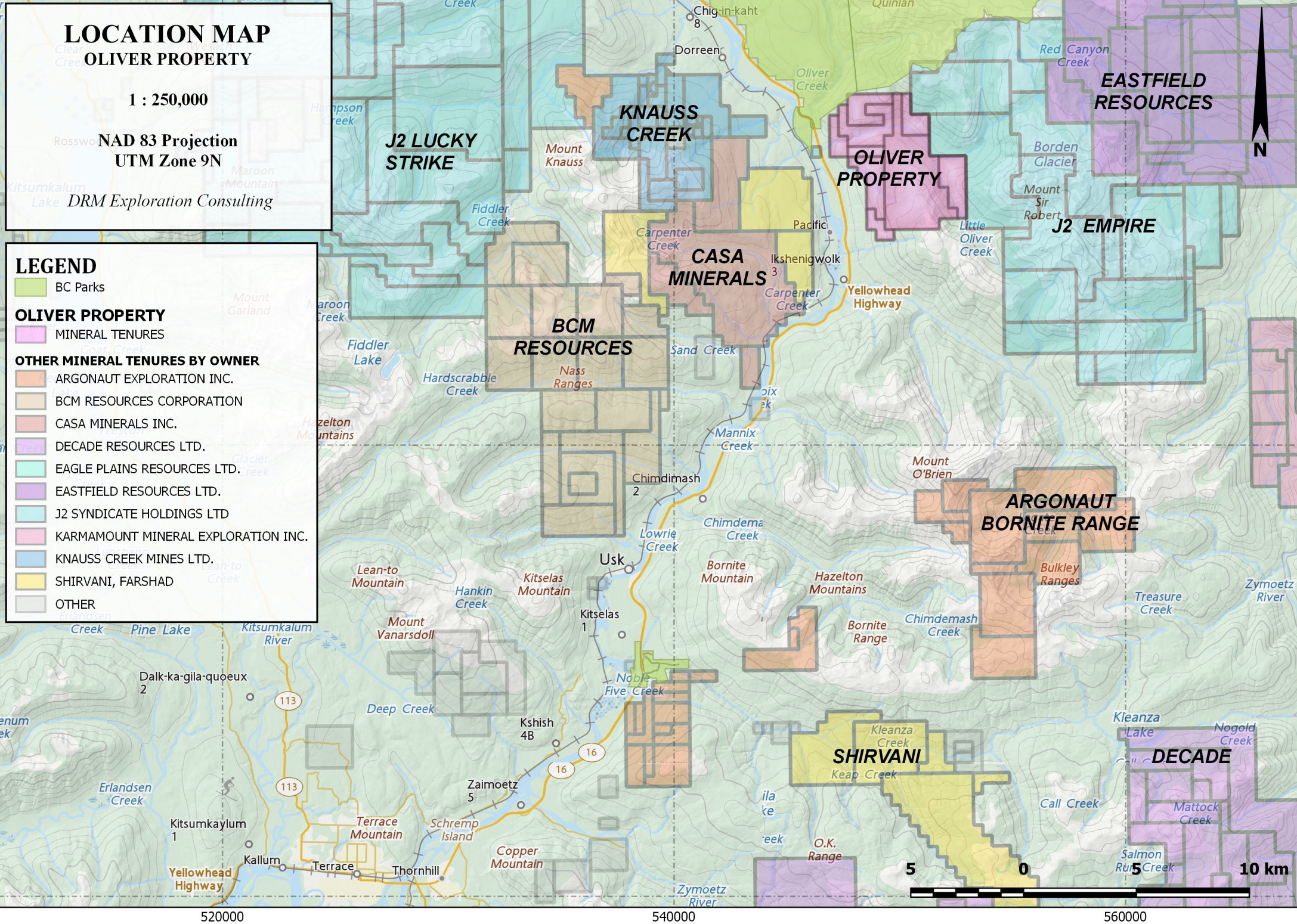
J2 SYNDICATE HOLDINGS LTD

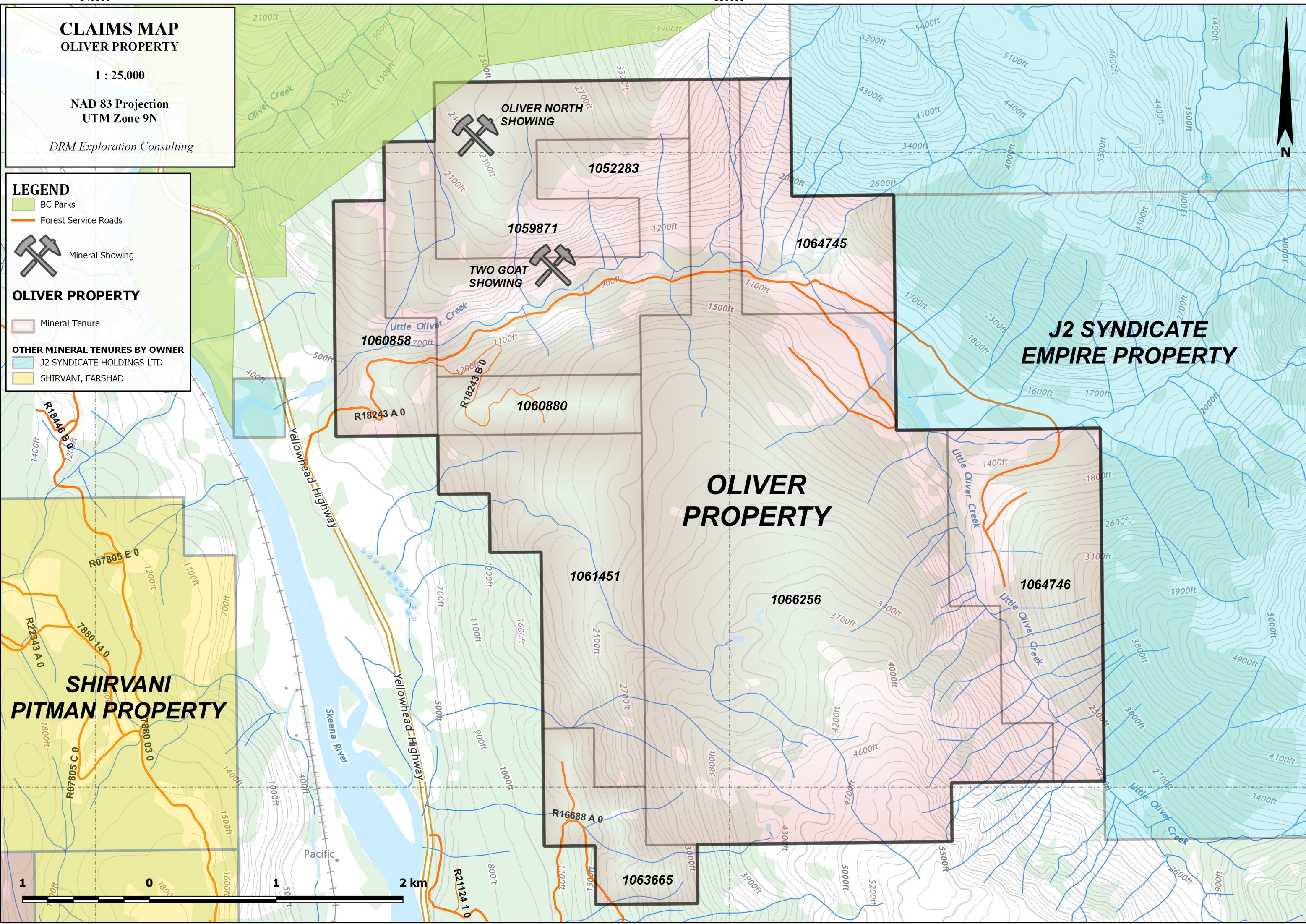
KARMAMOUNT MINERAL EXPLORATION INC.

KNAUSS CREEK MINES LTD.

SHIRVANI, FARSHAD

OTHER





CLAIMS MAP
OLIVER PROPERTY

1 : 25,000

NAD 83 Projection
UTM Zone 9N

DRM Exploration Consulting

LEGEND

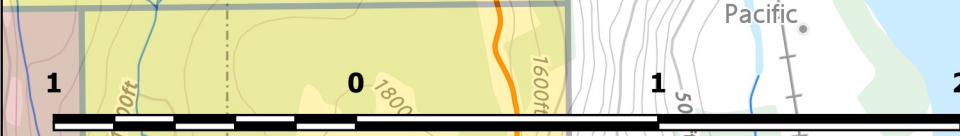
- BC Parks
- Forest Service Roads
- Mineral Showing

OLIVER PROPERTY

- Mineral Tenure

OTHER MINERAL TENURES BY OWNER

- J2 SYNDICATE HOLDINGS LTD
- SHIRVANI, FARSHAD



5.0 CLAIMS AND OWNERSHIP

The Oliver Property consists of nine mineral titles covering 2573.18 hectares in a northwest trending block measuring 6.5 x 6.5 km. Information from British Columbia's Mineral Titles Online (MTO) website indicates that all of the claims listed in Table 1 are owned 75% by Dev Rishy-Maharaj (281925), 25% by Adam P. Adshead (285272).

Exploration work during the October 2018 program was conducted on the claims highlighted below in pink.

Table 1 – Oliver Property Claims

Title Number	Claim Name	Owner	Issue Date	Good To Date	Status	Area (ha)
1052283	OLIVER2017B	281925 (75%)	2017/MAY/31	2022/FEB/28*	GOOD	298.23
1059871	OLIVER2018A	281925 (75%)	2018/APR/07	2022/FEB/28*	GOOD	205.00
1060858	OLIVER2018B	281925 (75%)	2018/MAY/30	2022/FEB/28*	GOOD	111.86
1060880	OLIVER2018C	281925 (75%)	2018/MAY/31	2022/FEB/28*	GOOD	74.58
1061451	OLIVER2018C	281925 (75%)	2018/JUN/29	2022/FEB/28*	GOOD	261.09
1063665	OLIVER2018D	281925 (75%)	2018/OCT/07	2022/FEB/28*	GOOD	93.29
1064745	OLIVER2018E	281925 (75%)	2018/NOV/28	2019/NOV/29	GOOD	149.10
1064746	OLIVER2018F	281925 (75%)	2018/NOV/28	2019/NOV/29	GOOD	261.09
1066256	OLIVER2019A	281925 (75%)	2019/FEB/02	2020/FEB/02	GOOD	1118.94
*pending acceptance of this report						TOTAL
						2573.18

	Claims worked during October 2018 Program (This report)
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6.0 EXPLORATION HISTORY

- **NO PRIOR EXPLORATION HISTORY BEFORE 1980**
- **1980 – TOM RICHARDS (ARIS 08133)**
- INITIAL DISCOVERY OF TWO GOAT SHOWING
- A 1000 meter long area of extensive chalcopryite + malachite mineralization is discovered by Dr. Tom Richards in cliffs to the north of Little Oliver Creek.
- Copper mineralization is contained in rusty rhyolite and diabase rock units
- Best mineralized zones appear to be fracture controlled.
- Copper distribution is erratic and appears in four zones (A, B, C, and D)
- Two Goat Mineral Showing recorded in MINFILE database as No. 103I 155
- No assays are listed

- **1988 SEASON – ATNA EXPLORATION “BRYANNE CLAIMS”**
- PROSPECTING, SOIL SAMPLING, ROCK SAMPLING
- **Rock sampling returns high gold values, up to 22.8 g/t Au in Rock (float) along southern slopes above Little Oliver Creek. Copper values up to 1.3 %.**
- North side of Oliver Creek (Two Goat?) rock samples return modest gold numbers (170 ppb Au). It is unclear if these samples are from the Two Goat showing.
- Two types of mineralization are documented:
 - South of Oliver Creek, Qtz-Cpy-Mt-Chl assemblage in foliated rocks, which appear representative of an Au-bearing major east-west trending cross fault
 - North of Oliver Creek, Qtz-Cpy assemblage in non-foliated extrusives
- Planned follow up on gold bearing structure south of Little Oliver Creek.
- No documented follow up, claims are allowed to lapse.
- **2008 SEASON – RON BILQUIST (ARIS 30463)**
- PROSPECTING, SILT SAMPLING, ROCK SAMPLING
- Claims are staked due to rumored gold values associated with copper and magnetite both north and south of Little Oliver Creek.
- A number of traverses are attempted to cross the creek to the north but high water limits crew access.
- Only one traverse is completed across the creek, resulting in the discovery of the Oliver North MINFILE No. 103I 243
- **Oliver North showing rock sampling up to 1.226 % Cu and 3.62 g/t Au in pervasively altered volcanic and sub-volcanic dacites / rhyolites.**
- Mineralization assemblage similar to previous workers with Qtz-Cpy-Mt.
- Elevated Cu-Au values show strong correlation with magnetite replacement, seen as the “Signature of Mineralization”
- Evidence of a possible intrusive located proximal to Oliver North showing is noted.
- **2009 SEASON – RON BILQUIST AND JAMES DAWSON (ARIS 31303)**
- SILT SAMPLING, “BASE OF SLOPE” SOIL GRID, ROCK SAMPLING
- 12 silts collected (6 moss mats, 6 stream sediments), 184 soil samples at base of slope. below and proximal to ATNA 22.8 g/t historic sample site. 6 rock samples collected.
- **Rock samples range from 146 ppm up to 7394 ppm Cu, collected on south side of Little Oliver Creek. Moss mat samples in Little Oliver creek up to 4579.4 ppb Au.**
- Soil survey results negative, no gold anomaly identified.
- Claims are allowed to lapse.

- **2018 SEASON – DRM EXPLORATION CONSULTING (ARIS 37700)**
- **ROCK SAMPLING, MAPPING AND PROSPECTING**
- 10 rock samples collected from outcrops near the Two Goat showing, which had no publicly available assay data. **Rock samples range up to 2.94 % Cu and 133 g/t Au.**
- **Out of 10 samples collected, only a single sample less than 0.25 % Cu.**
- Results highly positive, ~500 m long mineralized zone confirmed as a viable target area.

7.0 REGIONAL GEOLOGY

Dawson (2009) has succinctly described the Regional Geology in the Oliver project area as follows:

“The northeastern part of the Terrace area is located immediately east of an important geological boundary; that between the Coast and Intermontane belts.

The area around the Oliver Property encompasses two geological domains: the southern tip of the Bowser Basin and a late Paleozoic to Middle Jurassic portion of the Stikine Terrane (the Hazelton Group). The Bowser Lake Group of mid Jurassic to mid Cretaceous age has been interpreted as a back-arc and foredeep clastic wedge on Stikinia, composed of marine and non-marine sediments shed from uplifts to the north, east and south.

The Hazelton Group is a Lower to Middle Jurassic volcanic assemblage of the Stikine Terrane. In the northeast part of Terrace map sheet (103I), it is composed of the Smithers and Telkwa Formations. The Smithers Formation consists of greenish volcanic sandstone, siltstone, tuff, tuffaceous sediments and tuff breccia of lower Middle Jurassic age.

Telkwa formation is comprised of a sequence of Late Triassic to early Jurassic calc-alkaline basalt to rhyolite breccia, tuff and flows with minor intra-volcanic sediments. Locally red and green tuff and lesser breccia are noted.

Rocks of the Bowser Lake and Hazelton groups are relatively unmetamorphosed considering their proximity to large plutonic bodies and high-grade metamorphic rocks of the Coast Plutonic Complex. Nelson and Kennedy (2007) note that the geology, structure and mineralization observed in the Terrace area results from the conjunction of two fundamental provinces within the British Columbia Cordillera.

Stratigraphically and in terms of its older (Early Jurassic) plutons, the area is part of the Stikine Terrane. Structurally it shows a strong influence of the eastern Coast Belt Orogen.”

The geology as described above is shown in the following Regional Geology map (Figure 5, shown below). A Paleocene aged Kitsumkalum Intrusive Suite, appears to intrude the center of the claim group, although this unit were not observed during the October 2018 field program.

REGIONAL GEOLOGY

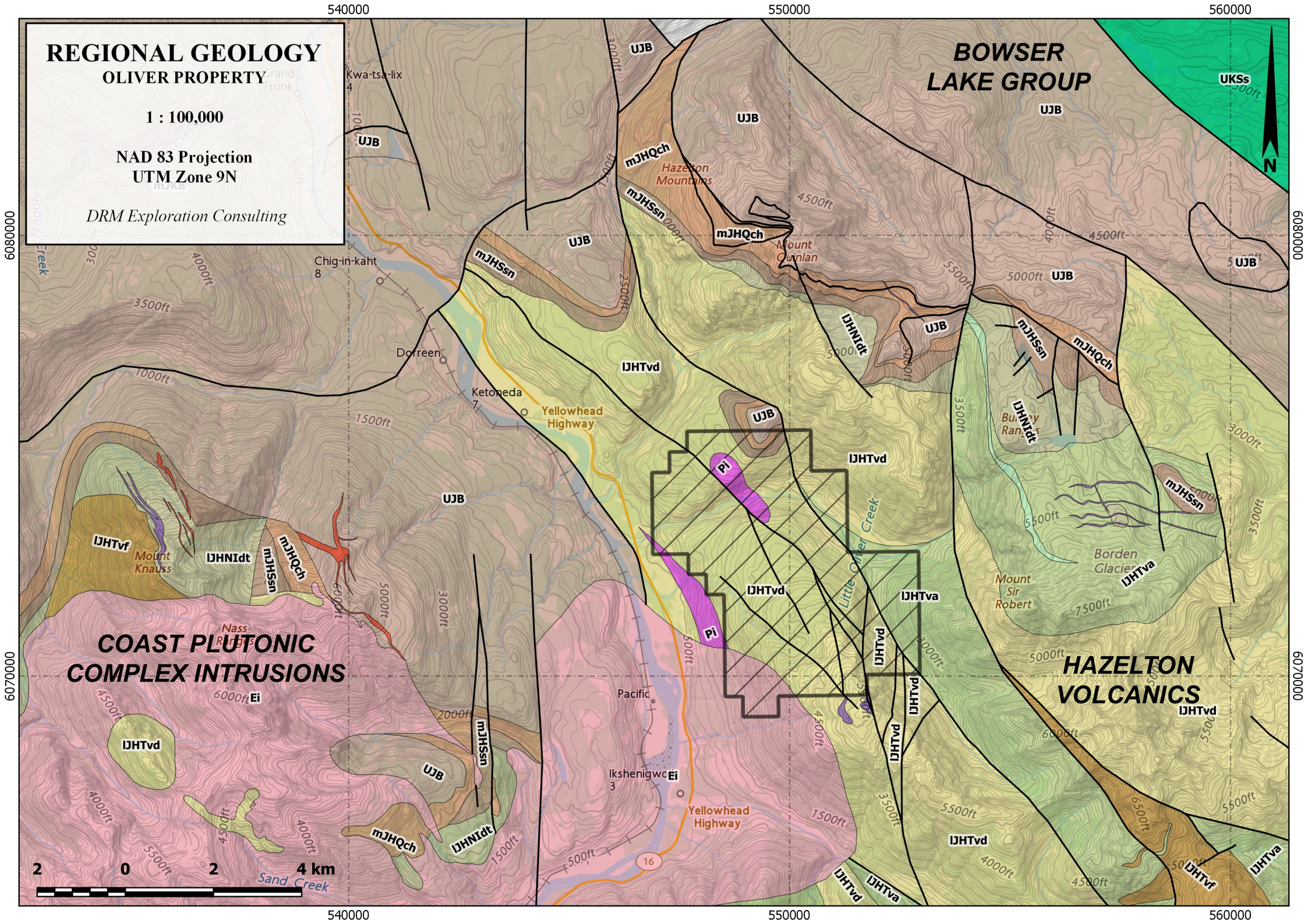
OLIVER PROPERTY

1 : 100,000

NAD 83 Projection

UTM Zone 9N

DRM Exploration Consulting



LEGEND

MINERAL TENURES

 OLIVER PROPERTY

BCGS Faults (2018)


 BCGS Faults (2018)

BCGS Regional Geology (2018)


 Ei - Granite, minor granodiorite; biotite and hornblende; fresh, undeformed or weakly deformed; ca. 52-53 Ma


 Pi - Kitsumkalum plutonic suite. Foliated to unfoliated granite, granodiorite, diorite.

 Er - White rhyolite dyke


 UKSs - Undifferentiated marine sedimentary rocks, sandstone, siltstone, argillite, chert pebble conglomerate

 JKdk - Granodiorite dykes, fine to medium grained

 DJHIdt - Bright maroon-red dacite tuff

 DJHIVb - Basalt flows, dark green, fine grained to aphanitic, aphyric


 DJHTs - Green, thin-bedded tuffaceous interval north of Mt. Sir Robert - in upper Telkwa Fm.

 DJHTva - Andesite flows in upper Telkwa Formation; coherent, variably amygdaloidal, plagioclase-phyric; also basalt, dacite, rhyolite

 DJHTvb - Basalt flows, dark green, fine grained to aphanitic, aphyric


 DJHTvd - Dacite with minor rhyolite in upper Telkwa Formation; coherent, volcaniclastic; welded in places.

 DJHTvf - Rhyolite and minor dacite in upper Telkwa Formation; coherent, volcaniclastic; cream, lavender, pink.

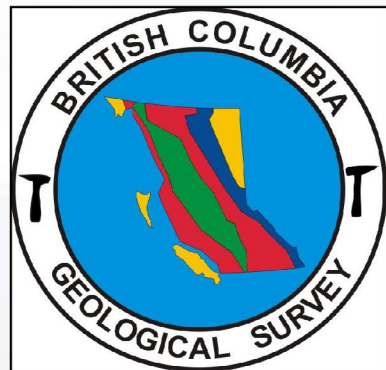
 DJKv - White weathering, light grey rhyolite lapilli tuff, welded tuff, ignimbrite, grey coherent rhyolite; minor basalt; ca 194-195 Ma

 mJHQch - "Pyjama beds" alternating, thin bedded black / dark grey and pale green weathering siliceous siltstone and felsic tuff

 mJHSSn - Marine, shallow water feldspathic sandstone, siltstone, argillite, wacke, locally glauconitic and limy, minor ash, crystal and lapilli tuff, volcaniclastics, limestone

 mJKB - Undivided; interbedded epiclastic feldspathic and volcanic conglomerate, sandstone, siltstone, shale and argillite

 UJB - Bowser Lake Group. Sandstone, siltstone, shale, conglomerate; incipient foliation and hornfels overprints.



8.0 PROPERTY GEOLOGY

The Property is underlain primarily by light to dark colored, massive to banded dacites and lesser rhyolites which are part of the Telkwa Formation of the Hazelton Group. These rocks are overlain by a sequence of andesite, basalt flows and their subsequent fragmentals, also attributed to the Hazelton Group, which are in fault contact with the more felsic units (Dawson, 2009).

A small inlier of younger rocks representing clastic sediments of the Smithers Formation and overlying marine sediments of the Bowser Lake Group are present in one area near the northeastern boundary of the claims (Dawson, 2009). These units were not observed during the October 2018 program.

According to recent BCGS mapping (Nelson, 2007) the Property is intruded by variably to strongly foliated granite and granodiorite of the Paleocene Kitsumkalum Intrusive Suite.

Rock types encountered during the October 2018 work program were primarily silicified volcanic rhyolites, dacites, and associated breccias.

The Kitsumkalum Intrusive Suite was not observed during the 2018 field program, the actual extent of intrusives within the claims is not currently known.

Two elongate, fault bounded lenses of the intrusive suite are shown to occur in BCGS Bedrock Geology mapping near the central part of the Property. These units may correspond to mineralized intrusives described previously by Bilquist in 2009. There was some difficulty in locating the rock types as described by Mr. Bilquist.

Future work programs will consist of detailed mapping to delineate the intrusives within the more widespread Hazelton Group volcanic strata. Additional sampling of any located intrusives will determine if these units have any temporal and spatial connection with the distribution of copper and / or gold mineralization at the Property.



Figure 7 – Old flagging found near the historic Oliver North showing site

9.0 SCOPE OF WORK

The October 2018 field program at the Oliver Property was conducted by DRM Exploration Consulting personnel: geologist Dev Rishy-Maharaj and field assistant Adam Adshead. The work consisted of six man-days of rock sampling and prospecting.

Table 2 – Oliver Property Detailed Schedule – October 2018 Work Program

<u>Personnel</u>	<u>Field Days</u>	<u>Days</u>	<u>Work Performed</u>	<u>Samples Taken:</u>		
				<u>Silt</u>	<u>Rock</u>	<u>Soil</u>
Dev Rishy-Maharaj	October 6 th -8 th 2018	3	Prospecting, sampling	0	9	0
Adam Adshead	October 6 th -8 th 2018	3	Prospecting, sampling	0	6	0
TOTAL		6	TOTAL	0	15	0

Rock sampling during the October 2018 program was focused on the Oliver North showing and the southern newly added tenure area. BCGS regional geology bedrock mapping and the location of the Oliver North showing was uploaded to a handheld GPS-enabled tablet, providing live positioning data superimposed on a GIS map application. This interface directed crews to the individual mineral showings at the Oliver North showing area and helped with navigating the network of unnamed spur roads which extend throughout the southern tenure group.

Samples were collected over two days of field traverses. On the first day of sampling, crews started on the north side of Oliver Creek, proceeded up the lower slopes through stands of mature forest, eventually reaching the Oliver North showing site.

On the second day of sampling, the southern work area was targeted from suitable access roads, with samples collected on small traverses from the access roads. This day of sampling consisted mostly of float, as it was difficult to locate mineralized bedrock on the steep slopes, due to inclement weather and slippery conditions.

Samples were taken at mineralized outcrops varying from 25 to 150 meters apart. Most of the sampling was focused on outcrops where visible sulfide mineralization could be located, with emphasis on sampling proximal to the Oliver North MINFILE site, as an attempt at a duplicate.

Each sample was photographed, described, and categorized in the field according to sample material (float, subcrop, outcrop). Each sample and sample site were photographed.

All sample sites were marked with labeled pink flagging tape. UTM coordinates for sample sites were determined using Garmin GPSMAP 64s units. Sample site UTM coordinates were also recorded on handheld assay booklets as an additional backup.

Fifteen total rock samples were collected from the Oliver Property, with seven taken at the Oliver North target area and an additional eight rock samples taken in the southern tenure group. Sampling material was variable, and included outcrop, subcrop, and a few float samples.

Rock samples were analyzed by Activation Labs, Kamloops, B.C., an accredited analytical laboratory. The whole sample (<7kg) was crushed up to 80% passing 2 mm, split (250 g) and pulverized (mild steel) to 95% passing 105 µm (RX1 preparation).

A 0.5 g sample of the pulverized material was then digested in aqua regia at 90 °C in a microprocessor-controlled digestion block for 2 hours. Digested samples were diluted and analyzed by ICP/MS, UT1-M Ultra-Trace method, for the detection of the following elements (Figure 8).

Samples were also analyzed by the 1A2 Fire Assay method, with atomic absorption finish for gold and silver, up to a 5000 ppb (5 g/t) detection limit for Au and 100 ppm detection limit for Ag

Ore-grade overlimit silver determinations (>100 ppm) were performed when necessary according to the 8-Ag analytical method, which can detect values up to 1000 g/t Ag.

Code UT-1M - Elements and Detection Limits (ppm, except where noted)

Element	Detection Limit	Upper Limit	Element	Detection Limit	Upper Limit	Element	Detection Limit	Upper Limit
Ag	0.1	100	Fe	0.01 %	30 %	S ⁺	1 %	20 %
Al	0.01 %	8 %	Ga	1	1,000	Sb	0.1	500
As	0.5	10,000	Hg	0.01	50	Sc	0.1	10,000
Au	0.5 ppb	1,000 ppb	K	0.01 %	5 %	Se	0.5	10,000
B	20	2,000	La	1	10,000	Sr	1	5,000
Ba	1	10,000	Mg	0.01 %	10 %	Te	0.2	500
Bi	0.1	2,000	Mn	1	10,000	Th	0.1	200
Ca	0.01 %	50 %	Mo	0.1	10,000	Ti	0.001 %	10 %
Cd	0.1	2,000	Na	0.001 %	5 %	Tl	0.1	500
Co	0.1	5,000	Ni	0.1	10,000	V	2	1,000
Cr	1	10,000	P	0.001 %	5 %	W	0.1	200
Cu	0.2	10,000	Pb	0.1	5,000	Zn	1	5,000

Figure 8 – Act Labs UT-1M assay method: Elements analyzed and detection limits

OLIVER NORTH SAMPLING

OLIVER PROPERTY

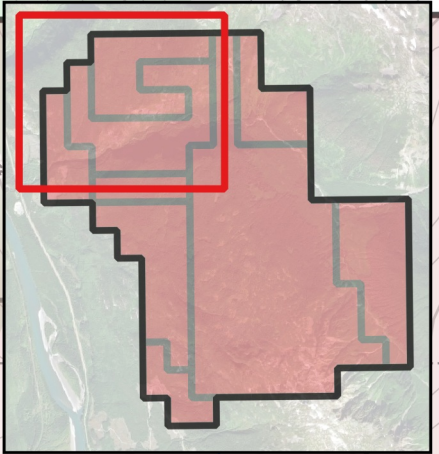
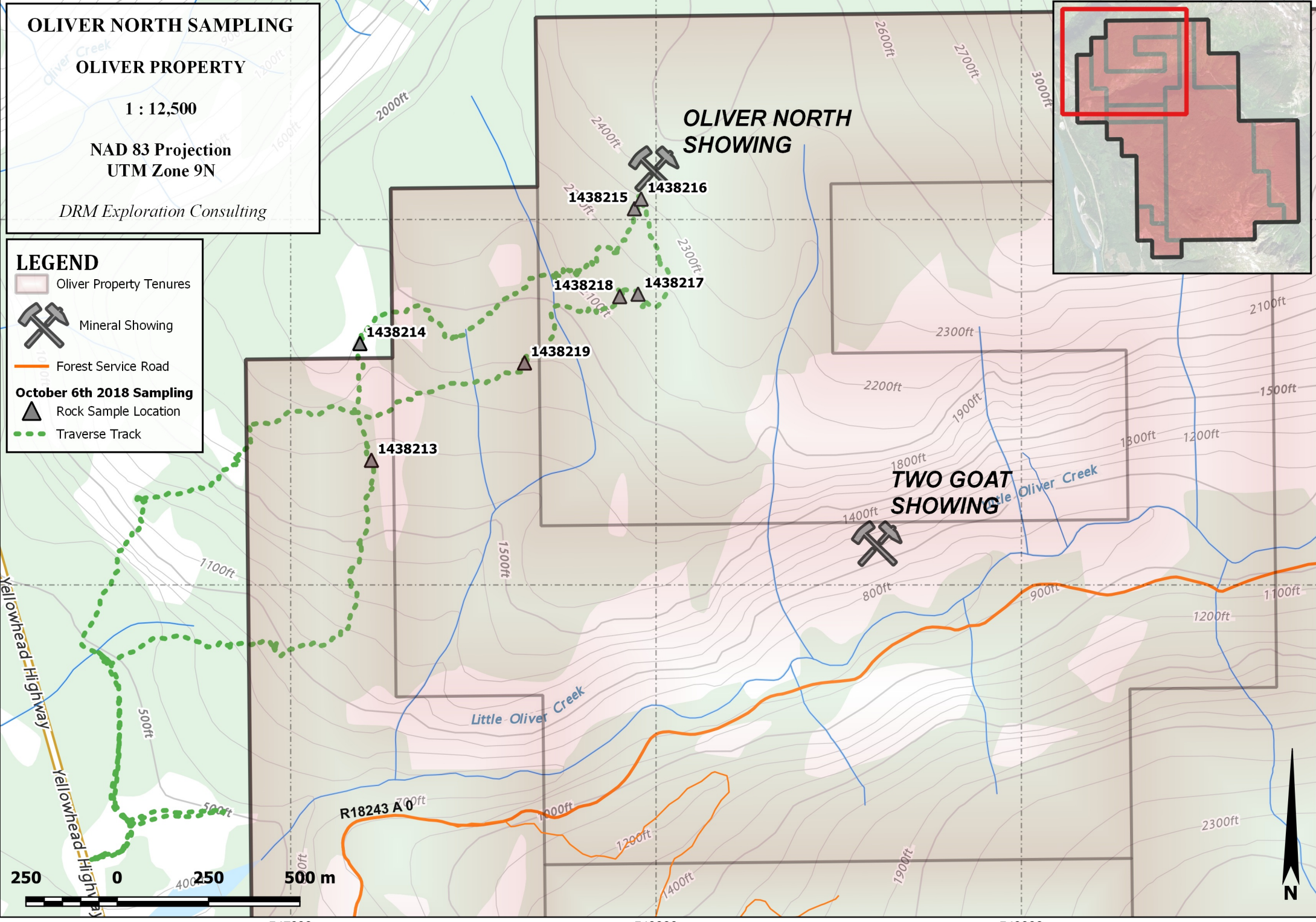
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NAD 83 Projection
UTM Zone 9N

DRM Exploration Consulting

LEGEND

- Oliver Property Tenures
- Mineral Showing
- Forest Service Road
- October 6th 2018 Sampling**
- Rock Sample Location
- Traverse Track



548000

549000

OLIVER SOUTH SAMPLING






OLIVER PROPERTY

1 : 8,500

NAD 83 Projection
UTM Zone 9N

DRM Exploration Consulting

LEGEND

-  Oliver Property Tenures
-  Mineral Showing
-  Forest Service Road
- October 7th 2018 Sampling**
-  Rock Sample Location
-  Traverse Track



6070000

6070000

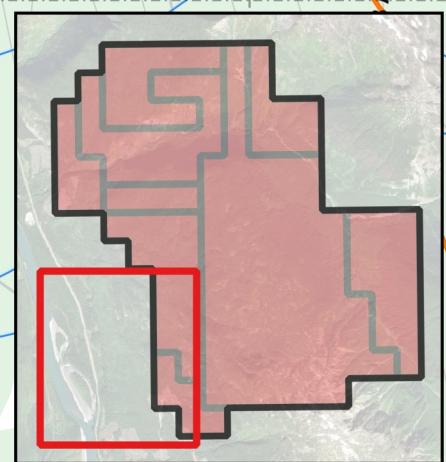
6069000

6069000

250 0 250 500 m

548000

549000



10.0 RESULTS

The late-2018 rock sampling program did not locate rocks with significant mineralization, especially when compared to the strength of mineralization found in the earlier program, where rock samples ran up to 2.94 % Cu and 133 g/t Ag.

The best copper result from the late-program was 342 ppm Cu, contained in sample 1438216. The best gold result was 234 ppb Au, contained in sample 1438218. These results were disappointing, as some of the rock samples contained visible sulfide and copper oxide staining, but did not have elevated values in the assay results.

It is unclear whether the field team actually resampled the Oliver North showing, as the results were much lower than those produced from the assays during the 2008 sampling (Bilquist, 2008).

Table 3 – Late-2018 Rock Sample Locations with Copper, Gold, Silver Values

Sample_ID	UTM_E_9N	UTM_N_9N	OCCURRENCE	Cu (ppm)	Au (ppb)	Ag (ppm)
1438213	547221	6074341	OUTCROP	10.4	2.9	0.2
1438214	547189	6074661	OUTCROP	10.2	2.5	0.05
1438215	547941	6075030	OUTCROP	149	10.7	0.5
1438216	547959	6075056	SUBCROP	342	7.5	0.4
1438217	547951	6074796	OUTCROP	23.6	3.8	0.1
1438218	547900	6074789	OUTCROP	128	234	0.2
1438219	547640	6074608	OUTCROP	5.2	4	0.1
1438220	548626	6069093	OUTCROP	26.2	3	0.1
1438221	548693	6069729	FLOAT	17.9	0.025	0.1
1438222	548699	6070069	FLOAT	22.9	5.9	0.1
1438223	548702	6070365	OUTCROP	35.3	2.9	0.2
1438224	548697	6070379	FLOAT	83.1	0.025	0.1
1438225	548702	6070529	SUBCROP	12.3	4.5	0.1
1438226	548696	6070183	FLOAT	31.3	0.025	0.1
1438227	548692	6070176	FLOAT	26.5	28.4	1.1

In the future at the Property, longer trips with a higher overall sample count will be completed. Prospecting and sampling coverage will also be greatly expanded, as the tenure group has grown in size and the majority of the ground has seen little to no prior sampling. The author was profoundly disappointed in the results from the Oliver North showing, especially considering that this was a primary target area preceding this work program. Another traverse with more time to carefully locate the showing should be completed to try and determine if the historic showing does contain mineralization as described in the previous 2008 report. The late-2018 sampling took place in October, and time spent on the tenure and the showing area was limited by available sunlight.

Table 4 – Rock Sample Descriptions

Sample_ID	UTM_E_9N	UTM_N_9N	OCCURRENCE	DESCRIPTION
1438213	547221	6074341	OUTCROP	Magnetite silica altered volcanic with trace peacock sulfides and 1-2cm smoky qtz veining from roadside outcrop along FSR
1438214	547189	6074661	OUTCROP	Oxidized clay altered bleached volcanic. 15% qtz. Trace CuOx on surfaces. Abundant iron oxides and magnetite. Sampled from roadside outcrop. Moderately magnetic due to hydrothermal magnetite?
1438215	547941	6075030	OUTCROP	Silica altered volcanic with trace peacock sulfide. Moderately magnetic. CuAu1 duplicate from upper showing location. Subcrop.
1438216	547959	6075056	SUBCROP	Silica altered volcanic with 3% mixed Cpy-Py sulfide as f.g mg disseminations. Rock is very magnetic. Well mineralized from near upper showing (CuAu1). Subcrop.
1438217	547951	6074796	OUTCROP	Silica altered greyish white rhyolite. Trace sulfide as fg disseminations. Abundant iron oxide coat.
1438218	547900	6074789	OUTCROP	Silica and magnetite altered volcanic. Trace sulfides. Probable volcaniclastic due to textures but obscured by pervasive alteration. Strongly magnetic (10% ~ Mt)
1438219	547640	6074608	OUTCROP	Silica altered volcanic breccia. Contains subangular chlorite altered diorite clasts within volcaniclastic / fragmental matrix. Minors sulfide stringers throughout rock py + cpy + bn?

1438220	548626	6069093	OUTCROP	Magnetite silica altered volcanic from roadside outcrop along switchback south side of tenure access. Minor sulfides f.g disseminations + stringers
1438221	548693	6069729	FLOAT	Magnetite silica altered volcanic. >10% Magnetite as replacement intergrown with 5% mixed sulfides showing minor peacock luster. Mineralized. Strongly magnetic and high SG
1438222	548699	6070069	FLOAT	Silica altered rhyolite. White with orange iron oxide streaks. Pyrite as stringers and f.g to cg disseminations. 5% sulfide pyrite + trace cpy. Well mineralized.
1438223	548702	6070365	OUTCROP	Silica altered volcanic. Weakly foliated with stratiform purplish black magnetite veins and coarse pyrite clots up to 1cm. Well mineralized.
1438224	548697	6070379	FLOAT	Silica and magnetite altered volcanic. 5% sulfides py >> cpy. Strongly magnetic (>10% Mt)
1438225	548702	6070529	SUBCROP	Chlorite altered mg diorite intrusive? Chlorite after hbl. Minor silica overprint. Mineralized with 3% sulfides py > cpy as f.g mg disseminations association with chloritized mafic sites. Mm scale py stringers xcut. Mineralized.
1438226	548696	6070183	FLOAT	Well mineralized black grey volcanic with abundant peacock oxide coating and CuOx surface coat. Silica altered with chlorite overprint. No magnetic response. This one gonna run.
1438227	548692	6070176	FLOAT	White grey silica altered rhyolite. Pyrite as stringers and f.g to cg disseminations. 10% sulfide pyrite + trace cpy. Well mineralized.



Figure 11 – Sample 1438216 (Best copper result, 342 ppm Cu)

Silica altered volcanic with 3% mixed Cpy-Py sulfide as f.g mg disseminations. **Rock is very magnetic.** Well mineralized from near upper showing (CuAu1). Subcrop.



Figure 12 – Sample 1438218 (Best gold result, 234 ppb Au)

Silica and magnetite altered volcanic. Trace sulfides. Probable volcanoclastic due to textures but obscured by pervasive alteration. **Strongly magnetic (10% ~ Mt)**

COPPER-IN-ROCK

OLIVER PROPERTY

1 : 12,500

NAD 83 Projection

UTM Zone 9N

DRM Exploration Consulting

LEGEND

Oliver Property Tenures

Mineral Showing

Forest Service Road

October 6th 2018 Sampling

Traverse Track

Copper-in-Rock (ppm)

5 - 12

12 - 27

27 - 83

83 - 149

149 - 342

OLIVER NORTH
SHOWING

TWO GOAT
SHOWING

250 0 250 500 m

N

GOLD-IN-ROCK OLIVER PROPERTY

1 : 12,500

NAD 83 Projection
UTM Zone 9N

DRM Exploration Consulting

LEGEND

 Oliver Property Tenures


 Mineral Showing

 Forest Service Road


October 6th 2018 Sampling


 Traverse Track

Gold-in-Rock (ppb)

 0 - 10

 10 - 25

 25 - 50

 50 - 150

 150 - 234

**OLIVER NORTH
SHOWING**

**TWO GOAT
SHOWING**

Yellowhead Highway

Little Oliver Creek

Little Oliver Creek

250 0 250 500 m

N

548000

549000

COPPER-IN-ROCK OLIVER PROPERTY

1 : 8,500

NAD 83 Projection
UTM Zone 9N

DRM Exploration Consulting

LEGEND

 Oliver Property Tenures


 Mineral Showing


 Forest Service Road


October 7th 2018 Sampling


 Traverse Track

Copper-in-Rock (ppm)

 5 - 12

 12 - 27

 27 - 83

 83 - 149

 149 - 342



6070000

6070000

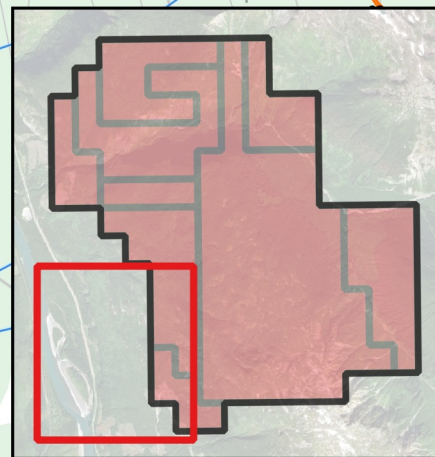
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250 0 250 500 m

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GOLD-IN-ROCK OLIVER PROPERTY

1 : 8,500

NAD 83 Projection
UTM Zone 9N

DRM Exploration Consulting

LEGEND

 Oliver Property Tenures


 Mineral Showing

 Forest Service Road


October 7th 2018 Sampling


 Traverse Track

Gold-in-Rock (ppb)

 0 - 10

 10 - 25

 25 - 50

 50 - 150

 150 - 234



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250

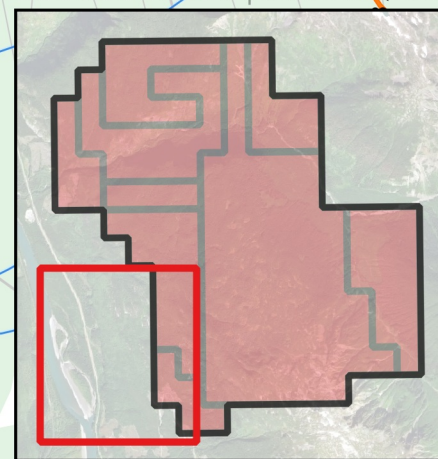
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250

500 m

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11.0 CONCLUSION AND RECOMMENDATIONS

The late-2018 rock sampling program did not locate rocks with significant mineralization, especially when compared to the strength of mineralization found in the early-2018 program, where rock samples ran up to 2.94 % Cu and 133 g/t Ag.

The best copper result from the late-2018 program was 342 ppm Cu, contained in sample 1438216. The best gold result was 234 ppm Au, contained in sample 1438218. These results were disappointing, as some of the rock samples contained visible sulfide and copper oxide staining, but did not show elevated values in the assay results.

It is unclear whether the field team actually resampled the Oliver North showing, as the results were much lower than the assays from the 2008 sampling, which ran up to 1.226 % Cu and 3.62 g/t Au.

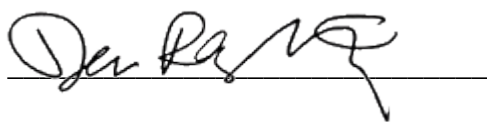
In the future at the Property, longer trips with a higher overall sample count should be completed. Coverage area of prospecting and sampling will be greatly expanded, as the tenure group has recently grown in size, with the majority of the ground having little to no prior sampling.

Another traverse with more time to carefully locate the Oliver North showing should be completed to try and determine if the historic site, as located by BC Ministry of Mines, does contain mineralization as described in the previous report. The late-2018 sampling took place in October, and time on the tenure was limited by available sunlight.

A follow-up multi-day program of Property-wide prospecting is recommended as the first course of action, as the Property has numerous relatively unexplored areas where anomalous copper and gold values have been found by previous workers, up to 2.94 % Cu and 22.8 g/t Au, respectively.

Future work at the Property will also consist of a high-resolution magnetic survey over the entire Two Goat - Oliver North area. Historic reports indicate a possible correlation between magnetite and Cu-Au mineralization, which is confirmed in the late-2018 sampling.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Dev Rishy-Maharaj', is written over a horizontal line.

Dev Rishy-Maharaj, *BSc. Geology*

Principal Geologist, Prospector
DRM Exploration Consulting

April 3rd 2019

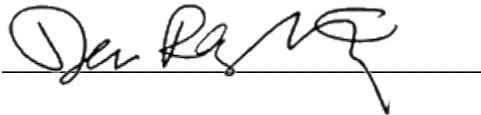
Oliver Property - Statement of Costs

FIELD WORK				
Personnel (Title)	Dates	Days	Rate	Subtotal
Dev Rishy Maharaj BSc. Project Geologist	October 6-8 2018	3	\$600	\$ 1,800.00
Adam Adshead, Senior Field Assistant	October 6-8 2018	3	\$450	\$ 1,350.00
	SUBTOTAL:	6		\$ 3,150.00
OFFICE STUDIES				
	Personnel	Days	Rate	Subtotal
Pre-field: Historical Data Comp. and digitize, Plan field program, prepare equipment, supplies	Dev Rishy-Maharaj	2	\$500	\$ 1,000.00
Post-field: Interpret data, draft maps, prepare assessment report	Dev Rishy-Maharaj	3	\$500	\$ 1,500.00
	SUBTOTAL:	5		\$ 2,500.00
ANALYTICAL				
	Lab	No.	Rate	Subtotal
Rock Sample Prep: Dry, crush to 2mm, split 250g, pulverize to 95% passing 105 µm (RX-1)	ACT Labs Kamloops BC	15	\$11.00	\$ 165.00
Analysis - Multi-Element, Aqua Regia, UT-1M (Trace level ICP-MS)	ACT Labs Kamloops BC	15	\$17.00	\$ 255.00
Analysis - Gold / Silver, Aqua Regia, 1A1 (Fire Assay 30g Sample)	ACT Labs Kamloops BC	15	\$25.00	\$ 375.00
Freight				\$ 100.00
	SUBTOTAL:			\$ 895.00
GEOPHYSICAL				
	Hours	Days	Rate	Subtotal
	0			\$ -
	0			\$ -
	0			\$ -
	SUBTOTAL:			\$ -
TRAVEL				
	Quantity	Km's	Rate	Subtotal
Fuel and mileage, 1410 km total. Houston BC -> Smithers, BC to Property and return trip to Kamloops BC. Plus daily trips from Terrace to Property access road, 42 km west of Kitwanga, BC.		1410	\$0.65	\$ 916.50
4x4 Truck rental days	3		\$100.00	\$ 300.00
	SUBTOTAL:			\$ 1,216.50
MEALS & ACCOMMODATION				
	Man-days	Days	Rate	Subtotal
Meals (Field+Travel)	6		\$60.00	\$ 360.00
Accommodation		3	\$150.00	\$ 450.00
	SUBTOTAL:			\$ 810.00
MISCELLANEOUS				
	Man-days	Days	Rate	Subtotal
Consumables: sample bags, flagging, batteries, etc.	6		\$35.00	\$ 210.00
Equipment Rental: iCom radios, satellite phone, tablets, Garmins, sampling tools etc.	6		\$60.00	\$ 360.00
	SUBTOTAL:			\$ 570.00
CORPORATE				
			Rate	Subtotal
Project Management Fee (includes insurance, first aid training, safety certifications)			10%	\$ 914.15
	SUBTOTAL			\$ 10,055.65
	GST			\$ 502.78
	TOTAL			\$ 10,558.43

13.0 QUALIFICATIONS

I, Dev A. Rishy-Maharaj, do hereby certify that:

- I am a graduate in Geology from Simon Fraser University (*B.Sc. Geology*, 2016) and have practiced in my profession continuously since 2012.
- Since 2012, I have been involved in mineral exploration for precious and/or base metals in Canada.
- I am presently a Principal Geologist with DRM Exploration Consulting.
- I hold a 75 % ownership in the Oliver Property.
- I am the author of this report.
- This report is based on the geological and geochemical data, collected during the 2018 exploration season at the Oliver Property.

A handwritten signature in black ink, appearing to read 'Dev Rishy-Maharaj', is written over a horizontal line.

Dev Rishy-Maharaj, *BSc. Geology*

Principal Geologist, Prospector
DRM Exploration Consulting

14.0 REFERENCES

- Bilquist, R.J. 2008. Report on Geochemical Sampling on the Little Oliver Property, B.C. Omineca Mining Division, B.C.; Ministry of Energy Mines and Petroleum Resources, Assessment Report 30463
- Bilquist, R.J and Dawson, J.M. 2009. Geochemical Survey on the Little Oliver Property. Omineca Mining Division, B.C.; Ministry of Energy Mines and Petroleum Resources, Assessment Report 31303
- Nelson, J.L. et al., 2007. Geology of the Terrace Map Area, British Columbia, NTS 1031/9, 10, 15, 16; BC Ministry of Energy, Mines and Petroleum Resources, Open File 2007-4
- Richard, T., 1988. Summary Report on the Bryanne Claim; Private Report to Atna Resources Ltd.
- Richards, T., 1980. Assessment Report on the Two Goat Mineral Claims, Omineca Mining Division, B.C.; Ministry of Energy Mines and Petroleum Resources, Assessment Report 08133



Date Submitted: 16-Nov-18

Invoice No.: A18-17861

Invoice Date: 04-Dec-18

Your Reference: Oliver

DRM Exploration

950 Munro St.

Kamloops BC

Canada

ATTN: Dev Rishy Maharaj

CERTIFICATE OF ANALYSIS

18 Rock and Soil samples were submitted for analysis.

The following analytical package(s) were requested:

Code UT-1M-Kamloops Aqua Regia ICP/MS

REPORT A18-17861

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Note: Au by this package is not reliable and you should have Au by Fire Assay done if you need accurate Au values.

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé". The signature is stylized with a large, looped initial 'E' and a trailing flourish.

Emmanuel Esemé , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
9989 Dallas Drive, Kamloops, British Columbia, Canada, V2C 6T4
TELEPHONE +250 573-4484 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Kamloops@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Activation Laboratories Ltd.

Report: A18-17861

Analyte Symbol	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P
Unit Symbol	ppm	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	%
Lower Limit	0.1	0.01	0.5	0.5	20	0.5	0.1	0.01	0.1	0.1	1	0.2	0.01	1	0.01	0.01	1	0.01	1	0.1	0.001	0.1	0.001
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
1438213	0.2	0.94	0.9	2.9	< 20	76.6	< 0.1	0.85	< 0.1	3.3	19	10.4	3.47	4	< 0.01	0.39	6	0.32	501	1.6	0.052	1.3	0.092
1438214	< 0.1	0.39	< 0.5	2.5	< 20	46.3	< 0.1	0.05	< 0.1	1.4	6	10.2	2.52	2	< 0.01	0.12	11	0.05	520	0.6	0.082	1.5	0.039
1438215	0.5	1.07	6.4	10.7	< 20	98.7	0.2	< 0.01	< 0.1	2.7	6	149	2.77	3	< 0.01	0.76	9	0.07	123	3.8	0.018	0.4	0.009
1438216	0.4	2.07	1.3	7.5	< 20	152	< 0.1	0.04	0.1	7.1	3	342	5.06	7	< 0.01	1.41	2	0.17	623	0.3	0.018	0.5	0.007
1438217	0.1	0.58	< 0.5	3.8	< 20	130	< 0.1	< 0.01	< 0.1	0.9	7	23.6	1.80	2	< 0.01	0.41	23	0.03	241	1.0	0.024	0.5	0.010
1438218	0.2	1.73	1.6	234	< 20	236	0.1	0.07	< 0.1	8.0	4	128	4.25	8	< 0.01	1.22	12	0.38	382	0.5	0.040	0.8	0.039
1438219	0.1	0.68	< 0.5	4.0	< 20	267	< 0.1	< 0.01	0.3	2.7	10	5.2	2.76	4	< 0.01	0.46	35	0.04	352	1.1	0.031	0.6	0.006
1438220	0.1	2.29	0.6	3.0	< 20	297	< 0.1	3.03	0.3	26.1	62	26.2	6.05	10	< 0.01	0.16	47	2.31	593	1.9	0.220	46.8	0.351
1438221	0.1	1.92	0.7	< 0.5	< 20	531	< 0.1	2.67	0.1	20.5	54	17.9	5.37	8	< 0.01	0.50	53	2.23	556	2.1	0.200	36.8	0.286
1438222	0.1	0.40	7.2	5.9	< 20	40.4	0.3	0.12	< 0.1	22.9	10	22.9	1.22	2	< 0.01	0.09	6	0.10	76	9.0	0.070	1.7	0.023
1438223	0.2	2.11	0.8	2.9	< 20	109	< 0.1	0.44	< 0.1	16.7	3	35.3	3.39	12	< 0.01	1.05	13	0.65	538	1.0	0.146	1.8	0.023
1438224	0.1	0.86	2.6	< 0.5	< 20	76.5	0.1	0.33	< 0.1	22.4	6	83.1	3.60	5	< 0.01	0.48	12	0.48	217	2.3	0.157	3.7	0.090
1438225	0.1	0.89	1.4	4.5	< 20	125	0.1	0.22	< 0.1	2.5	5	12.3	3.04	6	< 0.01	0.62	9	0.59	406	1.7	0.113	1.1	0.097
1438226	0.1	2.10	3.4	< 0.5	< 20	48.9	0.1	0.68	0.2	9.8	11	31.3	6.72	6	0.02	0.24	13	0.76	464	6.2	0.050	9.1	0.075
1438227	1.1	0.66	51.0	28.4	< 20	17.1	3.8	0.09	< 0.1	11.8	8	26.5	1.94	3	< 0.01	0.26	14	0.19	97	1.8	0.074	1.1	0.032
1438211	0.2	0.59	1.2	4.4	< 20	64.5	0.2	0.46	0.1	5.4	9	28.9	1.63	2	< 0.01	0.10	7	0.33	291	0.7	0.041	5.0	0.089
1438212	0.1	0.78	1.7	2.9	< 20	106	0.3	0.52	0.2	9.6	39	49.9	7.07	5	< 0.01	0.15	12	0.51	463	3.5	0.033	8.9	0.107
1438213A	0.1	0.47	1.1	4.4	< 20	95.9	0.2	0.30	0.1	3.9	6	40.3	2.17	2	< 0.01	0.09	7	0.26	151	10.2	0.028	3.2	0.093

Results

Activation Laboratories Ltd.

Report: A18-17861

Analyte Symbol	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	V	W	Zn
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	0.1	1	0.1	0.1	0.5	1	0.2	0.1	0.001	0.1	2	0.1	1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
1438213	2.9	< 1	0.4	5.5	< 0.5	43	< 0.2	1.2	0.206	< 0.1	11	0.5	73
1438214	0.6	< 1	< 0.1	4.6	< 0.5	3	< 0.2	1.1	0.007	< 0.1	18	< 0.1	27
1438215	1.7	< 1	0.7	1.0	< 0.5	1	< 0.2	2.1	0.029	0.1	2	0.2	11
1438216	2.1	< 1	0.4	1.5	< 0.5	3	< 0.2	2.4	0.055	0.2	2	0.2	19
1438217	6.0	< 1	0.1	1.0	< 0.5	3	< 0.2	1.6	0.010	< 0.1	< 2	< 0.1	10
1438218	1.6	< 1	0.2	1.9	< 0.5	2	< 0.2	1.2	0.130	0.3	5	0.3	34
1438219	1.9	< 1	0.8	1.1	< 0.5	9	< 0.2	2.1	0.004	< 0.1	< 2	0.2	123
1438220	3.2	< 1	0.1	9.6	< 0.5	213	< 0.2	1.7	0.111	< 0.1	119	0.2	120
1438221	4.1	< 1	< 0.1	8.7	< 0.5	236	< 0.2	1.8	0.076	0.1	124	0.2	78
1438222	0.7	< 1	< 0.1	2.4	1.1	4	0.5	1.8	0.071	< 0.1	3	0.5	5
1438223	0.9	< 1	0.2	3.3	2.0	8	0.2	2.6	0.124	0.3	15	0.2	36
1438224	1.7	< 1	0.1	8.8	< 0.5	11	< 0.2	2.9	0.227	< 0.1	32	0.3	27
1438225	4.8	< 1	< 0.1	10.3	< 0.5	5	< 0.2	3.3	0.150	0.1	41	0.1	41
1438226	10.4	< 1	0.6	7.5	< 0.5	65	< 0.2	1.7	0.287	< 0.1	32	0.3	168
1438227	1.5	2	0.1	2.4	2.9	3	4.8	2.2	0.057	< 0.1	5	0.2	11
1438211	6.1	< 1	0.1	1.6	< 0.5	28	< 0.2	2.4	0.067	< 0.1	38	0.4	39
1438212	10.0	< 1	0.2	2.0	< 0.5	33	< 0.2	3.1	0.104	< 0.1	167	0.2	61
1438213A	4.7	< 1	0.1	1.3	< 0.5	24	< 0.2	3.2	0.056	< 0.1	25	0.1	25

Analyte Symbol	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P
Unit Symbol	ppm	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	%
Lower Limit	0.1	0.01	0.5	0.5	20	0.5	0.1	0.01	0.1	0.1	1	0.2	0.01	1	0.01	0.01	1	0.01	1	0.1	0.001	0.1	0.001
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-6 Meas	0.3	7.21	234	49.5	< 20	871	0.2	0.13	< 0.1	13.4	76	69.9	5.53	15	0.08	1.12	11	0.40	1060	1.8	0.061	22.0	0.036
GXR-6 Cert	1.30	17.7	330	95.0	9.80	1300	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	13.9	0.609	1010	2.40	0.104	27.0	0.0350
OREAS 45e (Aqua Regia) Meas		3.80	10.1	36.5		136		0.03		49.9	820	681	21.8	12		0.05		0.10	402		0.029	367	0.030
OREAS 45e (Aqua Regia) Cert		3.32	11.4	50.000		139		0.032		52	849.0	709.0	22.650	11.7		0.053		0.095	400.000		0.027	357.0	0.029
OREAS 923 (AQUA REGIA) Meas	1.5	2.78	7.2			50.4	20.2	0.38	0.4	20.8	43	4180	5.62	8		0.37	33	1.39	840	0.8		32.4	0.059
OREAS 923 (AQUA REGIA) Cert	1.62	2.80	7.07			54	21.8	0.326	0.40	22.2	39.4	4248	5.91	8.01		0.322	30.0	1.43	850	0.84		32.7	0.061
OREAS 907 (Aqua Regia) Meas	1.3	1.19	37.1	23.0		243	22.3	0.26	0.5	44.0	9	6320	7.98	16		0.34	37	0.23	325	5.8	0.081	5.4	0.020
OREAS 907 (Aqua Regia) Cert	1.30	0.945	37.0	101		225	22.3	0.280	0.540	43.7	8.59	6370	8.18	14.7		0.286	36.1	0.221	330	5.64	0.0860	4.74	0.0240
Oreas 621 (Aqua Regia) Meas	63.9	1.71	76.6	> 1000			3.8	1.25	257.7	28.1	29	3480	3.30	9	3.77	0.34	18	0.42	513	14.3	0.156	24.6	0.032
Oreas 621 (Aqua Regia) Cert	68.0	1.60	75.0	1230			3.85	1.65	278	27.9	31.3	3660	3.43	9.29	3.93	0.333	19.4	0.436	520	13.3	0.160	25.8	0.0335
1438220 Orig	0.1	2.17	0.6	4.4	< 20	284	< 0.1	2.89	0.3	24.9	59	25.5	5.77	10	< 0.01	0.15	45	2.19	566	1.8	0.211	44.5	0.345
1438220 Dup	0.2	2.40	0.6	1.5	< 20	310	< 0.1	3.17	0.3	27.3	64	27.0	6.33	10	< 0.01	0.16	49	2.43	620	2.0	0.230	49.0	0.357
Method Blank	< 0.1	< 0.01	< 0.5	1.2	< 20	7.9	< 0.1	< 0.01	< 0.1	< 0.1	< 1	< 0.2	< 0.01	< 1	< 0.01	< 0.01	< 1	< 0.01	< 1	< 0.1	0.010	0.1	< 0.001

Analyte Symbol	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	V	W	Zn
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	0.1	1	0.1	0.1	0.5	1	0.2	0.1	0.001	0.1	2	0.1	1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-6 Meas	103	< 1	1.7	21.8	< 0.5	28	< 0.2	4.1		1.9	159	< 0.1	121
GXR-6 Cert	101	0.0160	3.60	27.6	0.940	35.0	0.0180	5.30		2.20	186	1.90	118
OREAS 45e (Aqua Regia) Meas	13.9	< 1		74.8		4		10.0		< 0.1	255		33
OREAS 45e (Aqua Regia) Cert	14.3	0.044		78		4.05		10.70		0.072	295.0		30.6
OREAS 923 (AQUA REGIA) Meas	77.0	< 1	0.6	3.3	5.9	13		13.5		0.1	30	1.9	322
OREAS 923 (AQUA REGIA) Cert	81	0.684	0.58	3.09	5.99	13.6		14.3		0.12	30.6	1.96	335
OREAS 907 (Aqua Regia) Meas	33.9	< 1	2.3	2.2	9.5	12	0.2	8.4	0.020	0.1	5	0.9	139
OREAS 907 (Aqua Regia) Cert	34.1	0.0660	2.28	2.16	9.05	11.7	0.230	8.04	0.0170	0.120	5.12	0.980	139
Oreas 621 (Aqua Regia) Meas	> 5000	4	112	2.1	5.0	15		4.4		0.8	11	1.0	> 5000
Oreas 621 (Aqua Regia) Cert	13600	4.50	107	2.20	5.64	18.9		5.91		0.770	10.9	1.00	51700
1438220 Orig	2.7	< 1	0.1	9.2	< 0.5	206	< 0.2	1.7	0.119	< 0.1	114	0.2	111
1438220 Dup	3.6	< 1	0.1	10.1	< 0.5	220	< 0.2	1.8	0.102	< 0.1	124	0.2	129
Method Blank	< 0.1	< 1	< 0.1	< 0.1	< 0.5	< 1	< 0.2	< 0.1	< 0.001	< 0.1	< 2	< 0.1	< 1