

BC Geological Survey  
Assessment Report  
38543



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)]:

DRILLING

TOTAL COST:

\$58,937.61

AUTHOR(S):

LARRY LEBEDOFF

SIGNATURE(S):

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

APPROVAL #17-0101640-0502 MAY 4 2017

YEAR OF WORK: 2018

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

EVENT #5751463

PROPERTY NAME:

LEBEDOFF / RANT CREEK

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

MOLLY 1 357705, MOLLY 2 357706

COMMODITIES SOUGHT:

GOLD

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION:

ATLIN

NTS/BCGS:

104N053

LATITUDE:

59 ° 56 ' 139 "

LONGITUDE:

-133 ° 44 ' 640 "

(at centre of work)

OWNER(S):

1) LARRY LEBEDOFF

2)

MAILING ADDRESS:

90906 ALASKA HIGHWAY  
WHITEHORSE, Y.T., Y1A5S8

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

1) AS ABOVE

2)

MAILING ADDRESS:

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

TERTIARY, TILL, ANDESITE, LISOWANITE, SILTSTONE

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

3121050, 3135219, 3213522,  
4040245, 4089794, 4157935, 4225101, 5390590, 5751463

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (Incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping			
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Selsmic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core	<i>NQ 127.38 METERS</i>	<i>357705, 357706</i>	<i>55,197.61</i>
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying	<i>PROCESSING/SIEVING/PANNING</i>	<i>357705, 357706</i>	<i>3,000.00</i>
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other	<i>DRILL PAD PREPARATION / RECLAMATION OF DRILL SITES</i>	<i>357705, 357706</i>	<i>740.00</i>
			<b>TOTAL COST:</b>
			<i>58,937.61</i>

Event #5751463  
Rant Creek Drill Program  
Rant Creek, Atlin Mining Division, B.C.  
Tenure # 357705, 357706  
Centered at 59°33.4'North, 133°26.1' West  
NTS Mapsheet 104/N11



Rant Creek Looking North

Report by: Larry Lebedoff, Prospector  
90906 Alaska Highway  
Whitehorse, Y.T., Y1A5S8  
Tel: 867-668-2414  
Field work Sept. 5-24, 2018

38,543

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## INTRODUCTION

This report is written by Larry Lebedoff (FMC# 115334) who is the Placer Claim owner (357705, 357706) and author of this report.

## SUMMARY

The Lebedoff/Rant Creek Drill Program was conducted on Placer Claims Molly 1, 357705 and Molly 2, 357706 through the period of September 5, 2018 to September 24, 2018. These Placer Claims are 100% owned by Larry Lebedoff of Whitehorse Y.T.

It was conducted to provide a known depth to bedrock as well as to provide a bedrock profile with the hope of discovering a bedrock depression or fault that had escaped glaciation.

## LOCATION AND ACCESS

Atlin is the most northerly community in British Columbia. It is accessed from Whitehorse via the Alaska Highway and the Atlin road a distance of 180 km. Rant Creek is accessed by travelling along a gravel road for 5 km via the Surprise Lake road to Halfway Bridge, then up Spruce Creek another 10.6 km on gravel road then a

placer mining road to the Rant Creek turnoff. Turn left (north), then 1000 meters on existing placer mining road to first Drill Collar #1.

The Lebedoff/Rant Creek Drill Program is located approximately mid creek in it's length. Rant Creek is approximately 5 km long and flows into upper Spruce Creek below Blue Canyon, which in turn flows generally westward into Atlin Lake, south of the town of Atlin.

#### PROPERTY HISTORY

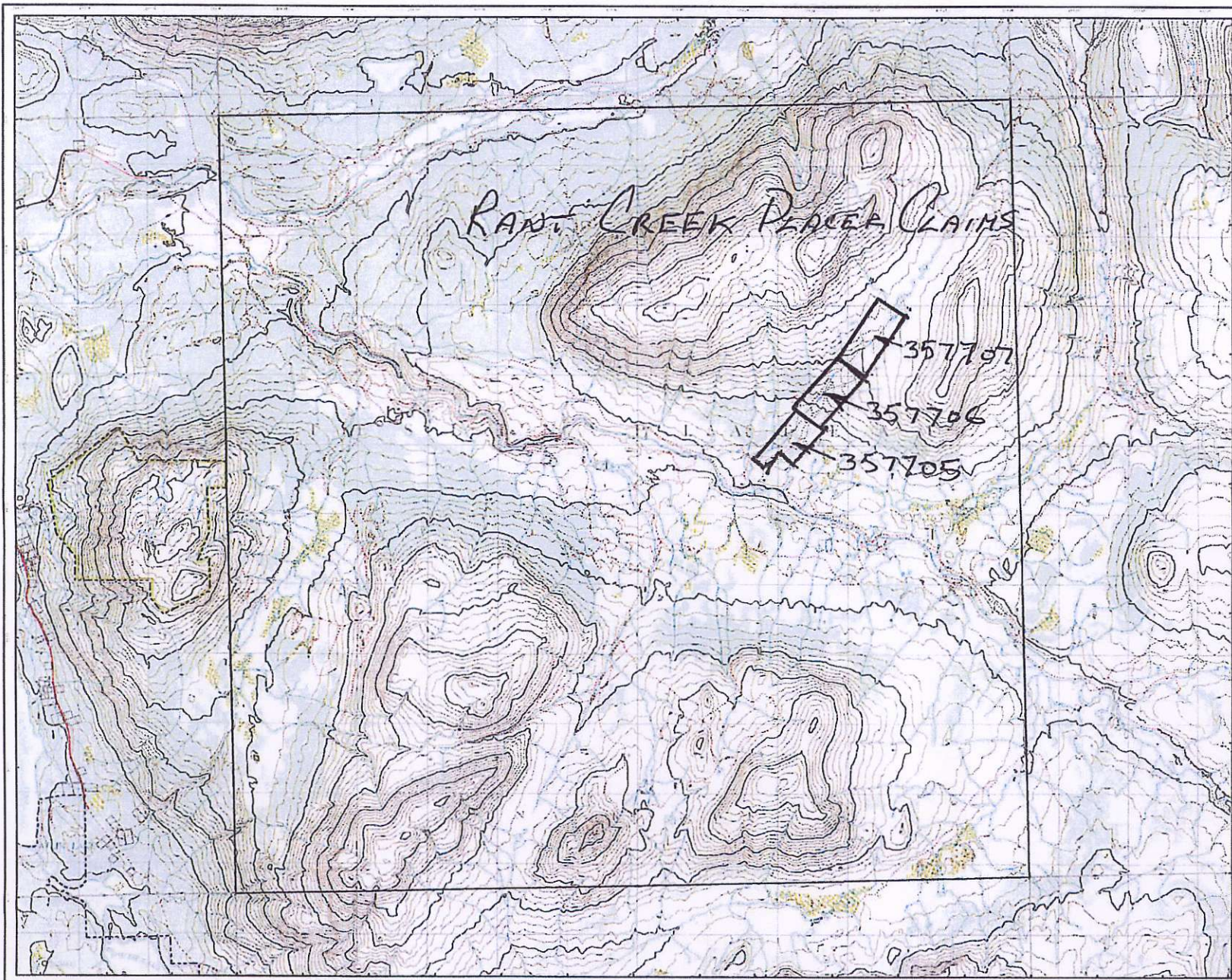
These Placer Claims have been held in good standing since July 15, 1997 with periodic testing and test mining being conducted throughout this period with varying degrees of success.

Testing in past years in some areas on these claims with a 20 ton excavator has indicated economically viable ground in some test pits without contacting any bedrock. Following up with higher volume test mining (~500 cubic meters) indicated test pit values were erratic.

In 2011 following up on previous economically viable test pits a test mining program was conducted on Placer Claim



Rant Creek Project Location Map



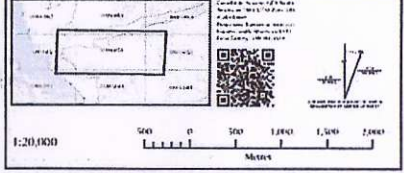
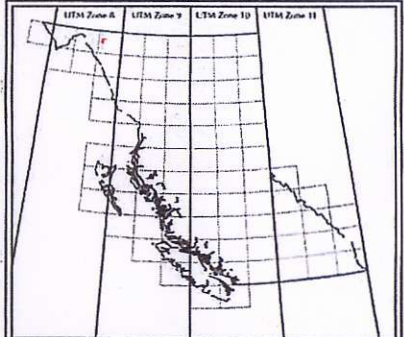
# MAP 104N053

- ADMINISTRATIVE BOUNDARIES**
- Metropolitan Regional District
  - Park or Protected Area
  - Private Parcel
  - Indian Reserve
  - First Nations Treaty Land
  - Provincial Water

- TRANSPORTATION AND INFRASTRUCTURE**
- Freeway or Highway
  - Metrolink
  - Local Road
  - Unpaved Road
  - Ferry Route
  - Railway
  - Trail
  - Access
  - Transmission Line or Pipeline
  - Railway Crossing
  - Highway Road Stop
  - Airport
  - Helipad

- LAND USE and LAND COVER FEATURES**
- Memory of Forest Land and Natural Resource Operations (Kuhn Reporters)
  - BC Recreation Sites (Campgrounds and Picnic Areas)
  - Pancrey, Orchard, or Vineyard
  - Swamp or Marsh
  - Washed Area
  - Path Up Area
  - Unsettled Properties
  - Building
  - Polygon
  - Tree Hill
  - Artificiality
  - Shopping or Terminal
  - Port or Harbour

- ELEVATION CONTOURS**
- 100 Metre Interval
  - 20 Metre Interval
  - Contour Depression
  - Spot Height



**GeoBC**

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### Mineral Titles

#### Legend

-  National Parks - Outlined
-  National Parks - Colour Fill
-  Ecological Reserves - Tantal
-  Protected Areas - Tantal
-  Recreation Areas - Tantal
-  Conservancy Areas - Tantal
-  Mapsheet Grid (1:20,000)
-  Mapsheet Grid (1:250,000)
-  Land Act Primary Parcels - Filled

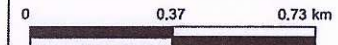
#### Contours - (1:20,000)

FCODE

— Contour - Index

— Contour - Index Indefinite

— Contour - Index Depression



1: 18,055

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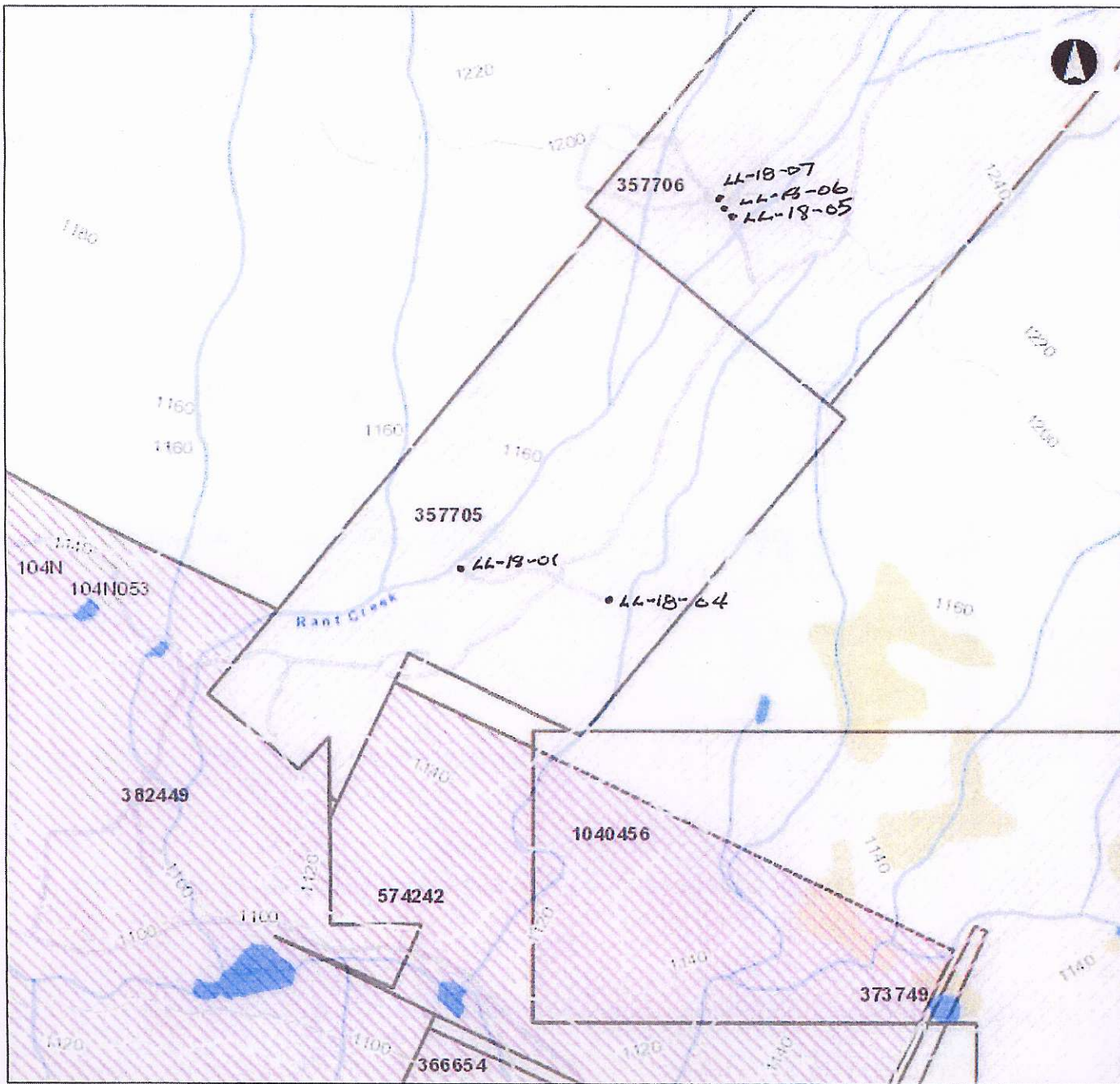
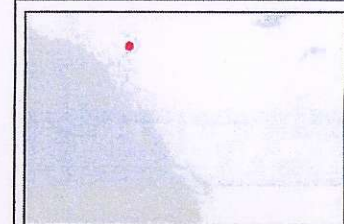
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Datum: NAD83

Projection: Web Mercator

#### Key Map of British Columbia



RANT CREEK CLAIM MAP

357706 where the cut was excavated to bedrock and remnants of tertiary age gravels were followed and mined until being abruptly cut off (~500 cubic meters). Bedrock was at a depth of 9 to 12 meters.

### TOPOGRAPHY

The Rant Creek watershed is located in semi-alpine to alpine terrain primarily vegetated with Willow growth and a few stunted Spruce, Pine and Alpine Balsam. The creek is surrounded by rounded mountain tops, generally gently rising mountain slopes and a broad valley floor. The valley bottom is overlain with overburden and glacial/fluvial tills.

## Regional Geology

Regional geology is excerpt from Ash, 2001. The Atlin region lies within the north-western corner of the Cache Creek Terrane (Figure 3). In this area of the terrane is a fault-bounded package of late Paleozoic and early Mesozoic oceanic lithospheres, which are intruded by post-collisional Middle Jurassic, Cretaceous and Tertiary felsic plutonic rocks.

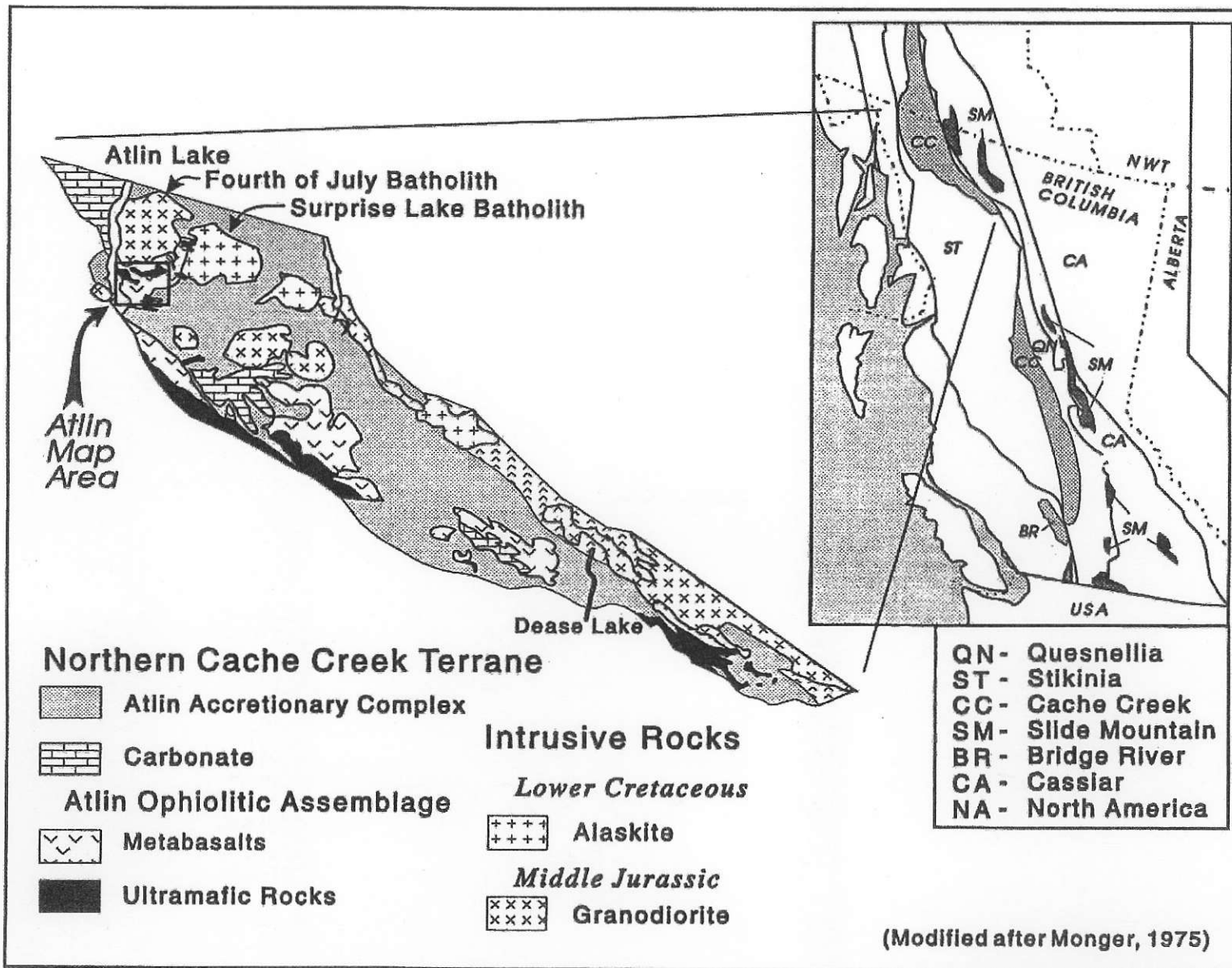
The Cache Creek terrane is comprised predominately of graphitic argillite and pelagic sedimentary rocks, which also contain minor amounts of metabasalt and limestone occurrences in the form of pods and slivers. Oceanic crust and upper mantle lithological remnants are concentrated along the western margin of the terrane.

From north to south, the Atlin, Naitin and King Mountain assemblages have been described as dismembered ophiolitic packages. Each package contains imbricated mantle harzburgite, crustal plutonic ultramafic cumulates, gabbros and diorite, together with hypabyssal and extrusive basaltic volcanic rocks. The western part of the terrane is dominated by thick sections of late Paleozoic shallow-water limestone that are associated with alkali basalts. The limestone is interpreted as carbonate accumulations that formed ancient marine islands within the former Cache Creek oceanic basin. A combination of plutonic and stratigraphic evidence shows that the Northern Cache Creek Terrane was positioned over the Nahlin Fault-bounded Whitehorse Trough sediments (late Triassic to lower Jurassic) during the middle Triassic. The youngest sediments deformed by the King Salmon Fault are Bajocian rocks that are underlain by organic-rich sediments of Aalenian age. The deformed sediments are interpreted to reflect loading along the western margin of Stikinia by the Cache Creek Terrane during its initial emplacement.

The oldest post-collisional plutons that intrude the Cache Creek Terrane to the west of Dease Lake are dated at  $173 \pm 4$  Ma by K-Ar methods and in the Atlin area they are dated at  $172 \pm 3$  Ma by U-Pb zircon analyses. Considering the age of these plutons and its relationship with the orogenic event, the descriptive term late syn-collisional is preferable. The eastern portion of the Northern Cache Creek Terrane is bordered mainly by the Thibert Fault that trends northward along the Teslin lineament. Discontinuous exposures of altered ultramafite along the fault suggest that it has previously undergone significant reverse motion and may be a reactivated thrust or transpressional fault zone. The latest movement along this fault during the prelate Cretaceous is believed to be dextral strike-slip.

The Northern Cache Creek Terrane is mainly made up of sub-greenschist, prehnite-pumpellyite facies rocks. Local greenschist and blueschist metamorphism are recorded. The terrane is characterized by a northwesterly trending structural grain fabric. In the Atlin-Sentinel Mountain area there is a marked deviation from this regional orientation with a dominant northeasterly trend. Reasons for the difference in structural grain fabric are poorly understood.

**Figure 3: Atlin Regional Geology**  
 (Northern Cache Creek Terrane map after Monger, 1977A)



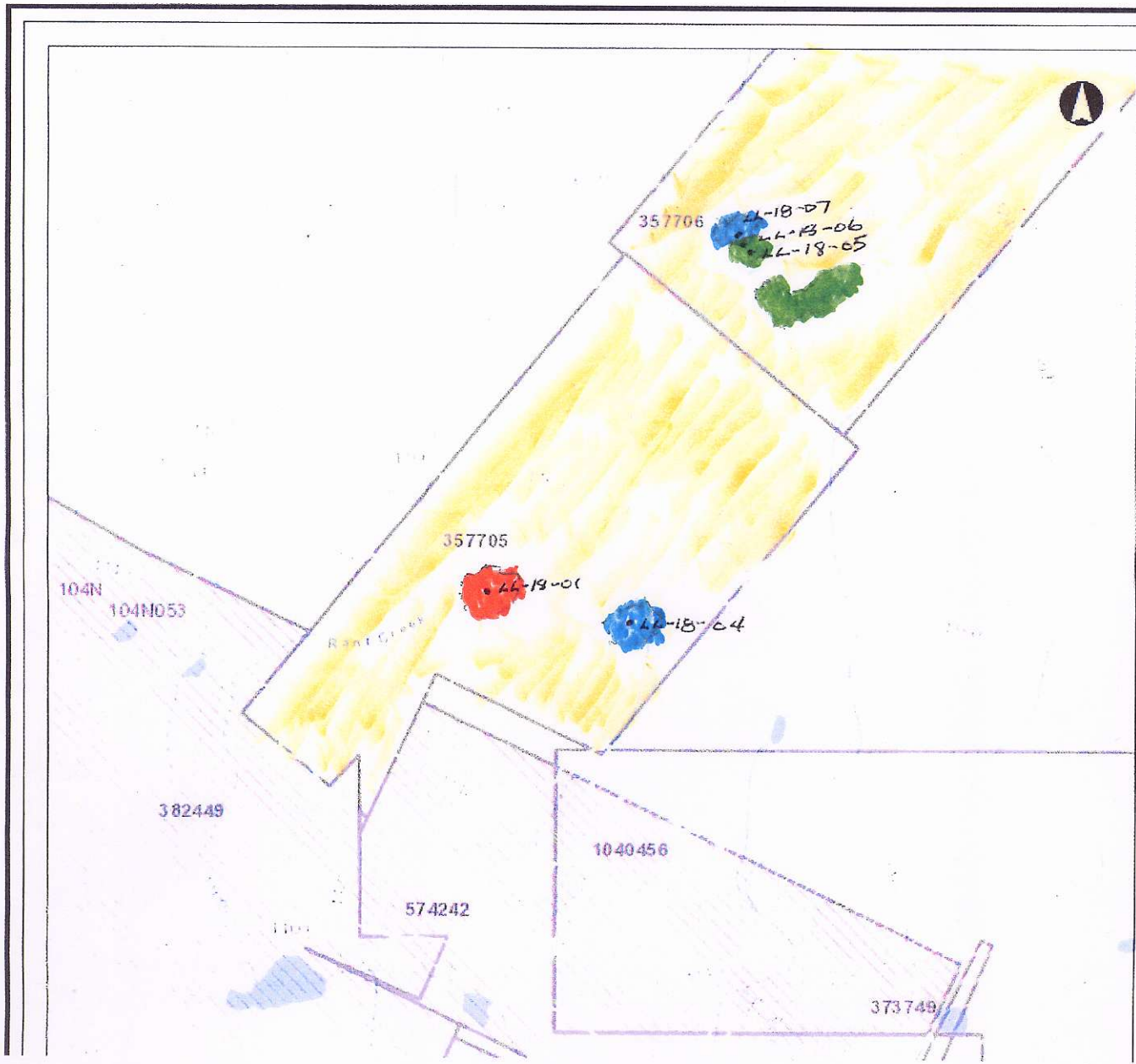
(Modified after Monger, 1975)

## Property Geology

There is no visible bedrock outcrop on Claims 357705 and 357706 where the drilling took place. Glacial till gravels overlie the lower reaches of Rant Creek as well as the valley slopes.

Mapping by Mihalynuk\*, et al 2017 indicates Cache Creek Sedimentary rocks on the Southeast side of the current Rant Creek drainage. This has been partially verified by Cache Creek Sediments that were intersected during test mining on 357706 on the east side of Rant Creek, as well as Drillholes LL-18-05 and LL-18-06 where Cache Creek Sediments were intersected. Yet Drillhole LL-18-07 intersected Andesite directly to the west. Dark grey Andesite was the bedrock intersection on 357705 in Drillhole LL-18-04 again on the east side of the drainage.

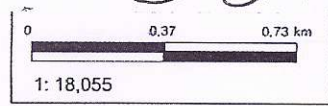
Carbonated Serpentinite (Listwanite) was encountered at the till bedrock interface in Drillhole LL-18-01.



Property Geology

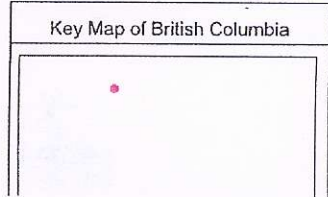
- SILTSTONE
- ANDESITE
- LISTWANITE
- GLACIAL TILL

*S.J.*



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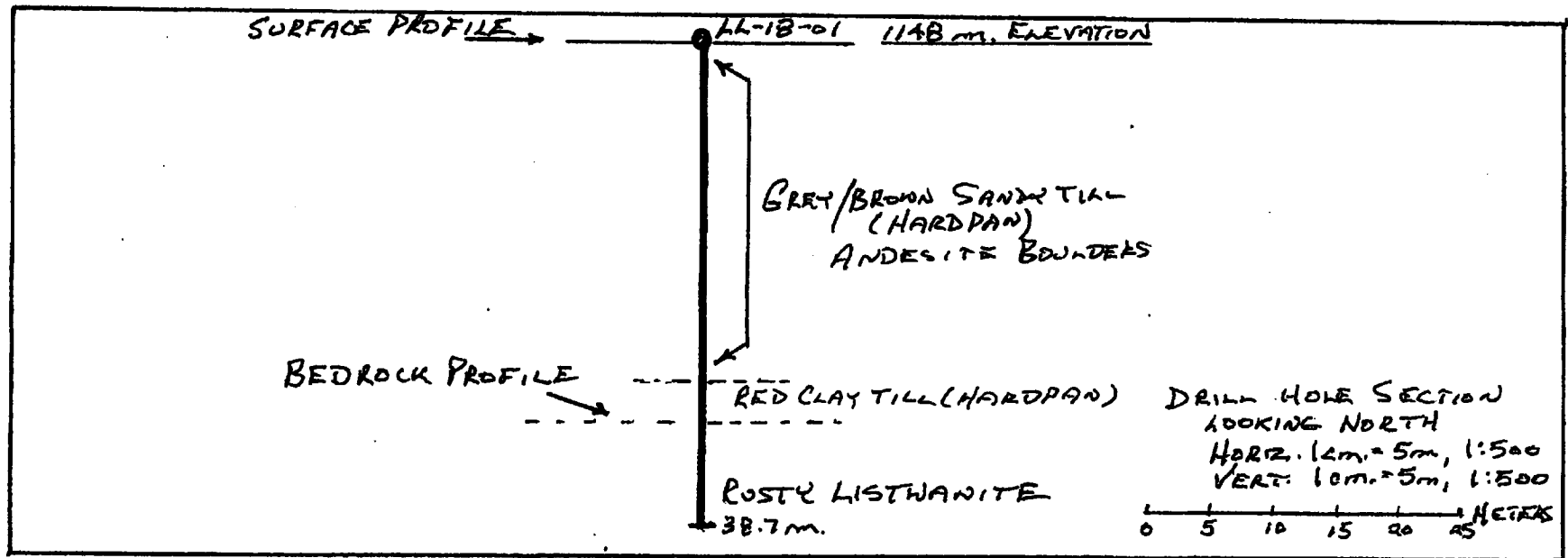
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 Projection: Web Mercator



# UTM COORDINATE:

LL-18-01: UTM 587039 6602994

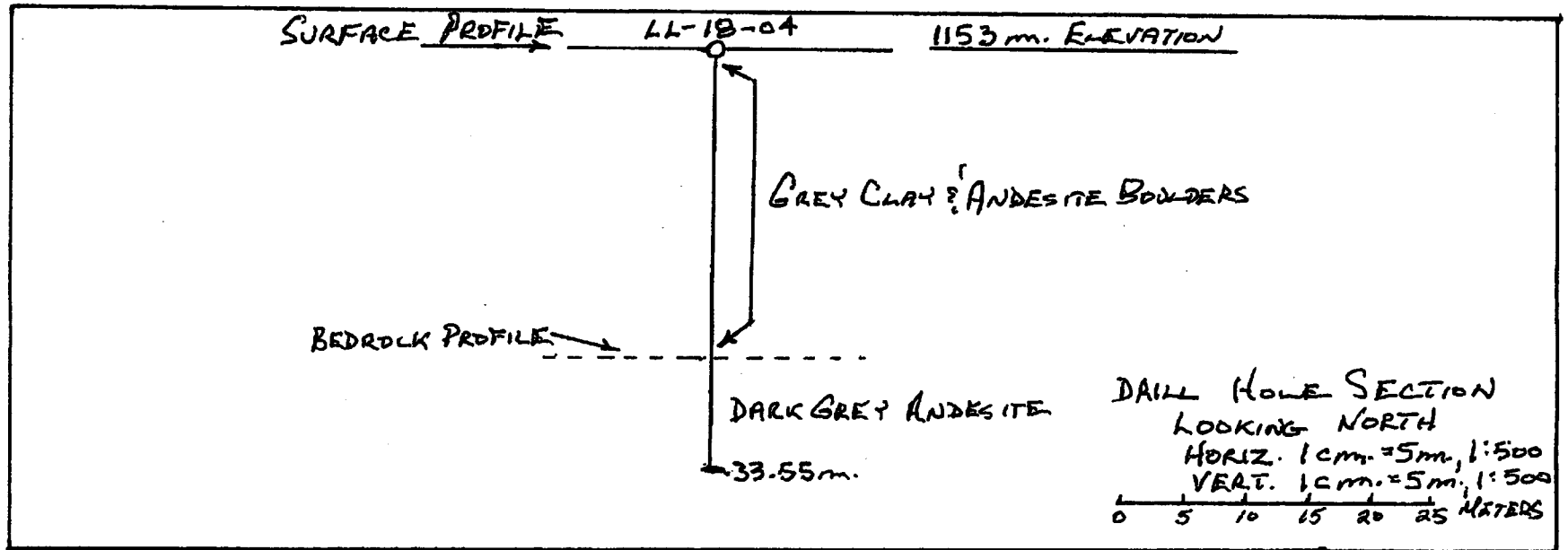
DRILLED VERTICAL



UTM COORDINATE:

LL-18-04: UTM 587269 6602953

DRILLED VERTICAL





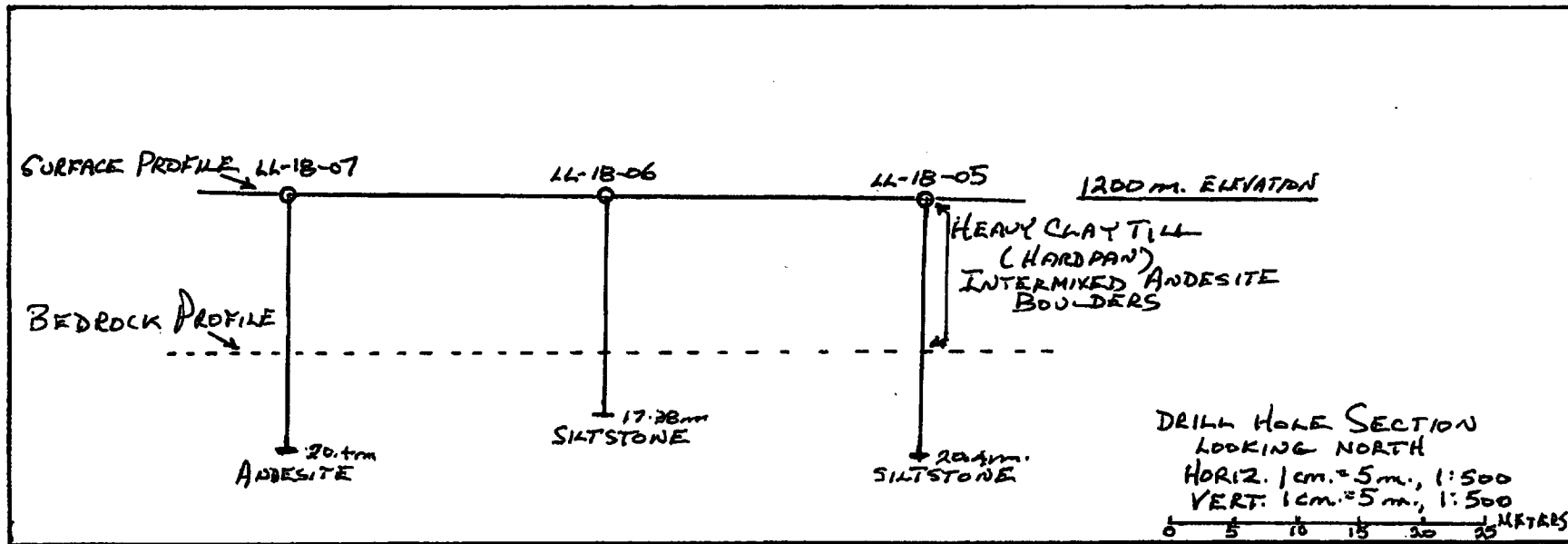
UTM COORDINATES:

LL-18-07: UTM 587439 6603590

LL-18-06: UTM 587448 6603576

LL-18-05: UTM 587455 6603560

ALL DRILL HOLES ARE VERTICAL



*L.S.*

Rant Creek Drilling Project

Processed Samples

Hole # LL-18-01

From	To	Description
0	12.2 m	CASED, POOR RECOVERY IN OLD BACKFILLED PIT - NO SAMPLE
12.2 m	12.8 m	GREY/BROWN SANDY TILL W/ TINY PEBBLES HARD TO SCREEN NO BLACK SAND OR GOLD VALUES
12.8 m	14.03 m	GREY/BROWN SANDY TILL W/ TINY PEBBLES HARD TO SCREEN, NO BLACK SAND - NO GOLD VALUES
14.03 m	14.64 m	GREY/BROWN SANDIER HARD PAN (TILL) HARD TO SCREEN, NO BLACK SAND - NO GOLD VALUES
14.64 m	26.23 m	POOR RECOVERY, GROUND UP ANDESITE BOULDERS W/ NO GRAVELS NO SAMPLES
26.23 m	27.45	IRON STAINED CLAY HARD PAN W/ SHARP ANGULAR STONES (ANDESITE & LISTWANITE) HARD TO SCREEN MINOR BLACK SAND - 15 FINE COLOR SPECKS GOLD
27.45 m	28.67 m	GREYISH RED TO RED HARD PAN, ANGULAR ANDESITE PEBBLES WITH REDDISH COLOR TINY PEBBLES, MINOR BLACK SAND - 4 FINE COLOR SPECKS GOLD
28.67 m	29.28 m	RED CLAY HARD PAN, SMALL ANGULAR ANDESITE & RED PEBBLES, HARD TO SCREEN MINOR BLACK SAND - NO GOLD VALUES
29.28 m	30.50	BROWN/RED CLAY HARD PAN TILL, ANGULAR ANDESITE & ROUNDED RED PEBBLES, HARD TO SCREEN, NO BLACK SAND - NO GOLD VALUES

BED ROCK AT 30.5 m.

RUSTY RED - QUARTZ LISTWANITE

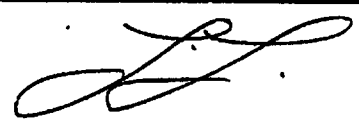
*L.L.*

Rant Creek Drilling Project

Processed Samples

Hole # LL-18-04

From	To	Description
0	15.25m	CASED THROUGH GREY CLAY
15.25m	24.705m	GREY CLAY & ANDESITE BOULDER MIX. NO GRAVELS - NO SAMPLE
		BED ROCK 24.705m. GREY ANDESITE
		EOH 33.55m.



Rant Creek Drilling Project

Processed Samples

Hole # LL-18-05

From	To	Description
0	4.575m	CASED TO 4.575m. NO GRAVEL SAMPLE GROUND UP ANDESITE PEBBLES
4.575m	6.1m	BROWN CLAY TILL, GROUND UP ANDESITE PEBBLES, ROUNDED TO SUB ANGULAR MINOR BLACK SAND, 1 FINE COLOR SPECK GOLD
6.1m	7.32m	GREY CLAY TILL GROUND UP ANDESITE PEBBLE ROUNDED TO ANGULAR. NO BLACK SAND - NO GOLD VALUES
7.32m	8.54m	POOR RECOVERY, ALL BLOCKAGE NO GRAVEL RECOVERED TO SAMPLE
8.54m	9.76m	POOR RECOVERY, ALL BLOCKAGE NO GRAVEL RECOVERED TO SAMPLE
9.76m	10.96m	BROWN CLAY TILL W/ ANDESITE PEBBLES ROUNDED & SUB ANGULAR, HARD SCREENING MINOR BLACK SAND - 2 FINE COLOR SPECKS GOLD
10.96m	12.2m	BROWN CLAY TILL W/ ANDESITE PEBBLES ROUNDED & SUB ANGULAR, HARD SCREENING MINOR BLACK SAND - NO GOLD VALUES
		BED ROCK 12.2m. RED / BUFF SILTSTONE
		EO H 20.435m

Rant Creek Drilling Project

Processed Samples

Hole # LL-18-06

From	To	Description
0	9.15m	CASED POOR RECOVERY, NO GRAVELS JUST GROUND UP ANDESITE ROCKS.
9.15m	10.98m	GROUND UP GREY ANDESITE ROCKS W/NO GRAVELS RECOVERED
10.98m	11.59m	GREY CLAY TILL W ANGULAR & ROUNDED ANDESITE PEBBLES. HARD TO SCREEN NO GOLD VALUES
11.59m	12.2m	GREY CLAY GRADING TO RED CLAY TILL, ANGULAR & ROUNDED ANDESITE PEBBLES HARD TO SCREEN, NO GOLD VALUES
		EOH AT 17.385 m.
		BEDROCK AT 12.2 m.
		RED, OXIDIZED SILTSTONE.

*L.S.*

Rant Creek Drilling Project

Processed Samples

Hole # LL-18-07

From	To	Description
0	9.15m	CASED VERY POOR SAMPLE RECOVERY GROUND UP ANDESITE Boulders, WITH NO GRAVELS
9.15m	9.76m	POOR RECOVERY GROUND UP ANDESITE BROWN/RED CLAY TILL, ROUNDED TO ANGULAR PEBBLES HARD TO SCREEN - NO VALUES
9.76m	10.37m	BROWN/SANDIER TILL, W/ ANDESITE ANGULAR & ROUNDED PEBBLES HARD TO SCREEN MINOR BLACK SANDS - NO GOLD VALUES
10.37m	10.98m	REDDISH/BROWN CLAY TILL, W/ ANDESITE PEBBLES ROUNDED & ANGULAR - HARD TO SCREEN MINOR BLACK SANDS - NO GOLD VALUES
10.98m	11.59m	POOR RECOVERY - SMALL AMOUNT RED CLAY TILL, NO BLACK SANDS - NO GOLD VALUES
11.59m	12.2m	POOR RECOVERY - GROUND UP ANDESITE PEBBLES SMALL - AMOUNT RED CLAY TILL. NO BLACK SANDS - NO GOLD VALUES
		DRILLED TO 20.435m TO ENSURE NOT IN LARGE BOULDER EOB 20.435m
		GREY ANDESITE BEDROCK
		AT 12.2m.

*LL*



Drill hole #1



Sample Recovery



Removing Sample for Sieving and Panning



Sample Processing Station



## RESULTS

The drill program was successful, having completed five drill holes in difficult ground conditions. Bedrock was reached in all five holes providing a known depth to bedrock in all five drill hole locations. Till/gravel samples were processed directly above bedrock to verify whether any gold values were present. All screens utilized fit a 20 liter pail. Samples were processed through a 10 mm. coarse screen and material broken up, then through a #4 mesh then a #8 mesh screen then ultimately panned. Each screens rejects were carefully visually examined for any visible gold particles.

## Conclusions

It would appear that no fault or bedrock depression exists at any of the five drill hole locations and ground conditions consist of glacial/fluvial tills. Through sampling/sieving and panning the tills it has been confirmed that gold values that do exist are microscopic and sub economic as are displayed throughout the Atlin Placer Gold Camp in this type of till material.

## Recommendations

1. Continue to drill/prospect the property specifically where Drill holes #8,9,10,11 and 12 have been proposed. The location of Drill hole #10 is where there has been previous testing with the recovery of economic gold values, as well as being 25 meters downstream from some historic hand workings that were purported to contain coarse gold values.
2. Extend the Drill Program further upstream past proposed Drill holes #11 and #12 dependent on results from these two holes.

## COST STATEMENT

Period: September 5-24, 2018

### Platinum Drilling:

All inclusive charge: Consisting of Mob and Demob, supply of drilling equipment, pumps, hoses etc., 1 ton 4x4 field truck and trailer, bits and casing shoes, experienced driller

\$36,304.61

20 ton Caterpillar Excavator  
30 hour all found rental

2,790.00

Whitehorse Excavator Mob and Demob:

3,000.00

Drill Helper 135.5 hours @\$30.00:

4065.00

Sample processing Labour & Equipment  
\$60.00 per hour x 30 hours

1,800.00

Food and Lodging \$100.00 per day per Person  
12 days x 3

3,600.00

2 x 4x4 Pickup trucks \$100.00 per day per truck  
12 days x 2

2,400.00

SxS ATV c/w winch \$125.00 per day  
12 days

1,500.00

Polymers: 6 x Corewell \$225.00 each  
4 x Sandfix \$185.00 each  
1 x EZ Packer \$170.00 each  
1 x Soda ash \$58.00 each

1,350.00

740.00

170.00

58.00

NQ Rod x 4 x \$150.00 each

600.00

HWT Casing x 4 x \$140.00 each

560.00

Total Costs:

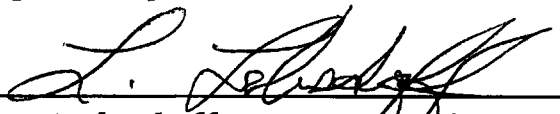
\$58,937.61

## STATEMENT OF QUALIFICATION

I, Larry Lebedoff, of the City of Whitehorse in the Yukon Territory Hereby Certify that:

1. I am a self-employed Prospector/Miner
2. That I completed the B.C. and Yukon Chamber of Mines Prospecting Course in 1973.
2. I have actively worked as a Prospector/Miner for 46 years starting in 1973
3. I managed and carried out the work described in this report.

Respectfully Submitted,

  
\_\_\_\_\_  
Larry Lebedoff, Prospector/Miner

## References Cited

Ash, C.H., Ophiolite Related Gold Quartz Veins in the North American Cordillera: BC Ministry of Energy and Mines Bulletin 108

Mihalynuk, M.G., Zagorevski, A., Devine, F.A.M., and Humphrey, E., 2017A new lode gold discovery at Otter Creek

Monger, J.W.H. 1975. Upper Paleozoic Rocks of the Atlin Terrane. BC Geological Open File 74-47.

Monger, J.W.H., 1977A; Ophiolitic Assemblages in the Canadian Cordillera; in North American Ophiolites, Coleman, R.G. and Irwin, W.P., Editors, State of Oregon, Department of Geology and Mineral Industries, Bulletin 95, pages 59-65.