

Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

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

TOTAL COST: \$ 8,192.00

AUTHOR(S): Laurence Sookochoff, PEng

SIGNATURE(S): *Laurence Sookochoff*

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): YEAR OF WORK: 2019

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5748101, July 16, 2019

PROPERTY NAME: Stump Lake

CLAIM NAME(S) (on which the work was done): 1069388

COMMODITIES SOUGHT: Gold, Copper, Silver, Lead, Zinc

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092ISE028 / 029 / 108 / 109 / 110 / 111 / 112 / 175 / 176 / 177

MINING DIVISION: Nicola

NTS/BCGS: 093I.039

LATITUDE: 50 ° 20 ' 39 " LONGITUDE: 120 ° 23 ' 01 " (at centre of work)

OWNER(S):

1) John Bakus

2)

MAILING ADDRESS:

3-1572 Lorne Street East

Kamloops, BC V2C 1X6

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

1) John Bakus

2)

MAILING ADDRESS:

3-1572 Lorne Street East

Kamloops, BC V2C 1X6

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

Triassic, Jurassic, Nicola Group, Eastern Volcanic Facies, Volcanics, Mudstone, Siltstone, Shale, Limestone, Granodiorite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 24499, 24923A, 25450, 25892, 25968,
27,409, 31405, 35538,

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 _____ 10		_____	285.00
Silt _____		_____	_____
Rock _____		_____	_____
Other _____		_____	_____
DRILLING (total metres; number of holes, size)			
Core _____		_____	_____
Non-core _____		_____	_____
RELATED TECHNICAL			
Sampling/assaying _____ 24 samples		1069388	3,953.50
Petrographic _____		_____	_____
Mineralographic _____		_____	_____
Metallurgic _____		_____	_____
PROSPECTING (scale, area) _____ 1:5000 5 hectares		1069388	3,953.50
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:	\$ 8,192.00

John Nick Bakus

(Owner and Operator)

Geological & Prospecting Report

(Event 5748101)

Work done on Tenure

1069388

of the

Stump Lake Property

Nicola Mining Division

BCGS Map 093I.039

Centre of Work

5,580,162N, 686,149E
(Zone 11U NAD 83)

work done from

July 1, 2019 to July 15, 2019

Author & Consultant

Laurence Sookochoff, PEng
Sookochoff Consultants Inc.

Report Submitted

November 1, 2019

Revised Report Submitted

November 6, 2019

TABLE OF CONTENTS

	page
Summary -----	4.
Introduction -----	5.
Property Location and Description -----	5.
Accessibility, Climate, Local Resources, Infrastructure and Physiography -----	5.
Water and Power -----	7.
History -----	7.
History: Stump Lake Property -----	9.
092ISE028 – ENTERPRISE -----	9.
092ISE029 – PLANET NO 1 -----	9.
092ISE108 – TUBAL CAIN -----	9.
092ISE109 – JOSHUA -----	10.
092ISE110 – KING WILLIAM -----	10.
092ISE111 – SILVER KING NO.2 -----	10.
092ISE112 – EMULATOR -----	10.
092ISE175 – NO SURRENDER -----	11.
092ISE176 – MAYBELLE FRACTION -----	11.
092ISE177 – MARION C FRACTION -----	11.
Geological Setting -----	11.
Geology: Stump Lake Property -----	15.
092ISE028 – ENTERPRISE -----	15.
092ISE029 – PLANET NO 1 -----	17.
092ISE108 – TUBAL CAIN -----	17.
092ISE109 – JOSHUA -----	17.
092ISE110 – KING WILLIAM -----	18.
092ISE111 – SILVER KING NO.2 -----	18.
092ISE112 – EMULATOR -----	19.
092ISE175 – NO SURRENDER -----	19.
092ISE176 – MAYBELLE FRACTION -----	19.
092ISE177 – MARION C FRACTION -----	19.
Mineralization -----	20.
Mineralization: Stump Lake Property -----	20.
092ISE028 – ENTERPRISE -----	20.
092ISE029 – PLANET NO 1 -----	20.
092ISE108 – TUBAL CAIN -----	20.
092ISE109 – JOSHUA -----	20.
092ISE110 – KING WILLIAM -----	21.
092ISE111 – SILVER KING NO.2 -----	21.
092ISE112 – EMULATOR -----	21.
092ISE175 – NO SURRENDER -----	21.
092ISE176 – MAYBELLE FRACTION -----	22.
092ISE177 – MARION C FRACTION -----	22.

Table of Contents (cont'd)

2019 Exploration Program: -----	22.
Interpretation and Conclusions -----	24.
Recommendations -----	24.
Selected References -----	25.
Statement of Costs -----	26.
Certificate -----	27.
Field Crew Qualifications -----	28.

TABLES

Table 1. Tenures of the Stump Lake Property -----	5.
Table 2. Reported assays from samples of vein material -----	15.

ILLUSTRATIONS

Figure 1. Stump Lake Property: Location Map -----	5.
Figure 2. Claim Map showing reverted Crown Grants -----	7.
Figure 3. Claim Map showing Minfiles -----	9.
Figure 4. Longitudinal workings of the Enterprise and King William veins -----	13.
Figure 5. Property Geology -----	16.
Figure 6. Index Map -----	23.
Figure 7. Sample Locations -----	23.
Figure 8. Epithermal-Porphyry mineral deposit relationship model	24.

APPENDICES

Appendix 1. Sample Locations and Descriptions
Appendix 2. Photos
Appendix 3. Sample Assays

SUMMARY

The 350-hectare Stump Lake Property ("Property") is located within the historic Stump Lake mining camp 429 kilometres east-northeast of Vancouver, 37 kilometres northeast of Merritt, and 37 kilometres south of Kamloops.

The Property includes 10 designated polymetallic vein silver, lead, zinc, +/- gold type deposits which was comprised of six mineral showings, two mineral prospects, and two past producers. The Enterprise mine was the most productive having produced 7,781,650 grams (250,186 ounces) silver, 1,040,296 kilograms (2,293,460 pounds) lead, and 254,783 grams (8,191 ounces) gold, in addition to zinc and copper.

The workings were extensive, comprised of a 98-metre-deep shaft, a 232 metre adit, and six levels of approximately 1,950 metres (Figure 4) in the development of both the Enterprise and King William veins and intersecting the adjacent Tubal Cain and the Joshua veins.

The Mineral Hill veins and associated mineralization are primarily controlled by the north-northeast trending Quilchina and Stump Lake regional faults. With numerous associated conjugate smaller faults, which form a complex fracture pattern, the alteration and mineralization controls were established. Increased vein mineralization appears to be related to variations in the structure; primarily localized arcuate and/or cross structures. The large ore zone in the northern part of the Enterprise workings fits this structural picture. Here, the ore is localized on an arcuate section of vein which would tend to open with north-south strike slip movement to form a wider, mineralized section.

The mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

Mineralization consists of pyrite, galena, sphalerite, chalcopyrite and tetrahedrite in variable amounts.

The 2019 exploration program of sampling, and prospecting exploration program on the Stump Lake Property was successful in that the assayed samples from the Enterprise dumps not only confirmed the polymetallic nature of the "ore" source but provided an indication of the level to a mineral-bearing porphyry from which the polymetallic veins were derived.

As a general conclusion, it appears that there was a multi-episodic mineralization sequence with some indication of an epithermal zone within a heavily mineralized polymetallic zone which would be the intermediate zone adjacent to the porphyry. The porphyry may be less than 200 metres below the Enterprise underground workings.

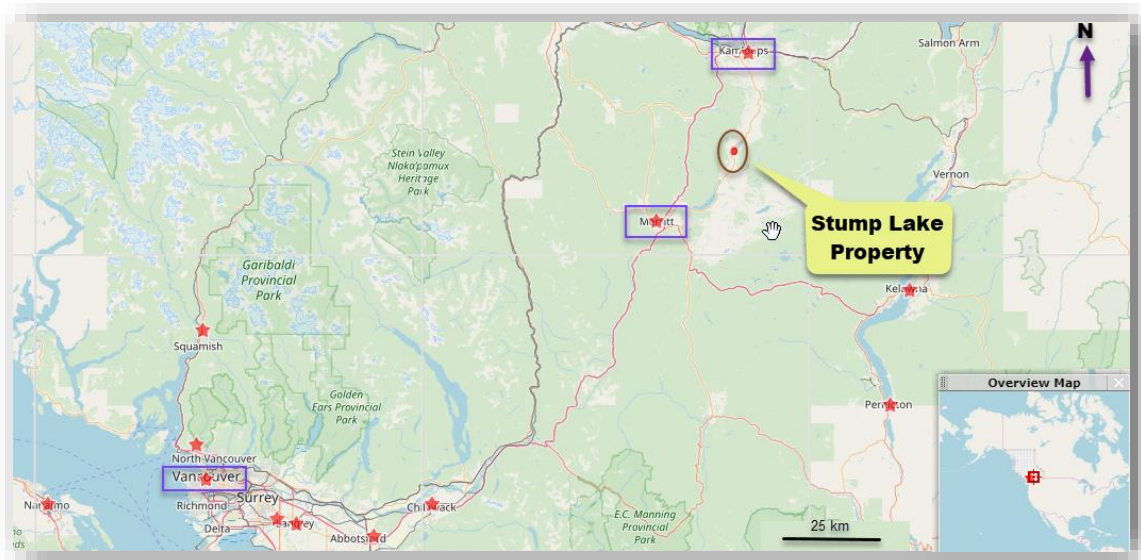
A four-line Induced Potential (IP) survey is recommended which could reveal the mineralized porphyry or provide the information to the location of a potential porphyry resource.

INTRODUCTION

During July 2019, a prospecting and sampling program was completed on the Stump Lake Property ("Property"). The purpose of the prospecting and sampling program was to prospect and take samples within any prospective mineralized zone in order to gather geological information for future exploration.

Information for this report was obtained from sources as cited under Selected References, from previous and reports done on the particular claim and in the Aspen Grove area, and from information on the procedures and results on the prospecting and sampling program provided the author.

Figure 1. Location Map
(Base Map from MapPlace)



PROPERTY LOCATION & DESCRIPTION

Location

The Stump Lake Property is located 429 kilometres east-northeast of Vancouver British Columbia and 37 kilometres south of Kamloops within BCGS Map 0921.039.

Description

The Stump Lake Property is comprised of one mineral claim covering an area of 350.579 hectares. Particulars are as follows:

Table 1, Tenures of the Stump Lake Property

Tenure number	Claim name	Expire date*	Area in hectares
1069388	STUMPLK ENTERPRISE PLANET	27/06/2023*	350.5794

*Upon the approval of the assessment work filing Event Number 5745285.

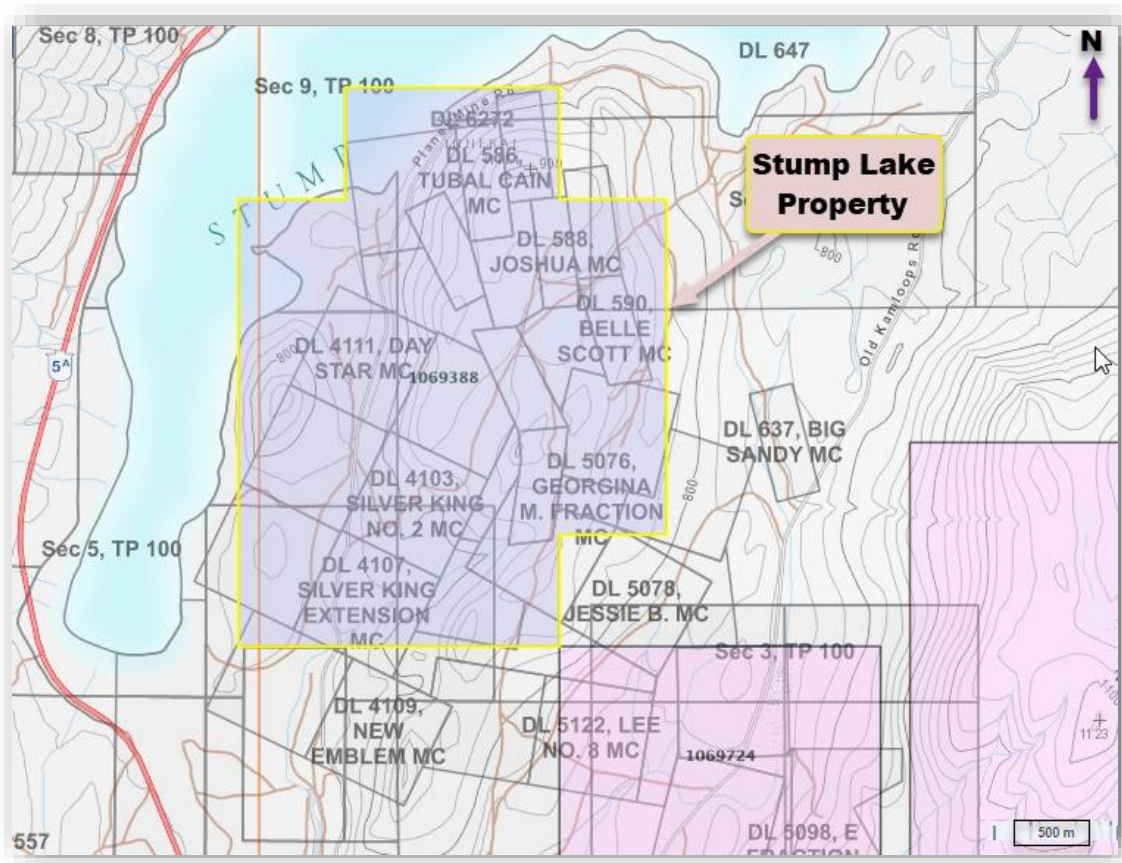
ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

Access

Access to the Property is from the Planet road, a dirt road branching northward from Highway #5 at the southern end of Stump Lake to the area of the formerly productive Stump Lake Mine. Secondary roads provide access to most areas of the Property.

Accessibility, Climate, Local Resources, Infrastructure and Physiography (cont'd)

Figure 2. Claim Map showing Reverted Crown Grants
(Base Map from MapPlace & Google)



Climate

The region is situated within the dry belt of British Columbia with rainfall between 25 and 30 cm per year. Temperatures during the summer months could reach a high of 35° and average 25°C with the winter temperatures reaching a low of -10° and averaging 8°. On the Property, the permanent snow on the ground may be from December to April and would not hamper a year-round exploration program.

Local Resources and Infrastructure

Kamloops, a historic mining centre would be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment. Kamloops is serviced daily by commercial airline and is a hub for road and rail transportation. Vancouver, a port city on the southwest corner of, and the largest city in the Province of British Columbia is four hours distant by road and less than one hour by air from Kamloops.

Electrical power may be available from a high voltage transmission line that is within six kilometres east of the property.

Physiography

The property is situated at the western edge of the Douglas Plateau, within the physiographic area designated as the Interior Plateau of British Columbia. Gentle to moderate slopes prevail with relief in the order of 180 meters from Stump Lake. Vegetation is grassland with pine groves and thickets of fir at higher elevations.

WATER AND POWER

Sufficient water for all phases of the exploration program could be available from many small lakes and watercourses on/or draining the property.

HISTORY

1890

The Nicola Mining and Milling Company performed the first major development on the property beginning in 1890 with the sinking of the Joshua, Tubal Cain, and King William Shafts. During the same time period, the Star Company sank the Star (Enterprise) and Planet shafts.

1916

Donahue Mines Company Limited began to develop the Joshua and Tubal Cain veins at which time a mill was constructed.

1929 to 1931

Planet Mines and Reduction Company began work on the Enterprise vein. The shaft was deepened to 320 feet and the crosscut adit was excavated. A mill was constructed and operated from 1929 to 1931.

1931

Nicola Mines and Metals Company acquired the property and continued development work and began production from the Enterprise, Joshua, and Tubal Cain veins.

1916 to 1944

Production figures from 1916 to 1944 as compiled by the British Columbia Department of Mines are as follows:

77,605 tons of ore yielding: 8,494 oz. Au; 252,939 oz. Ag; 40,822 lbs. Cu; 2,205,444 lbs. Pb; 367,869 lbs. Zn.

Production was exclusively from the Enterprise, King William, Tubal Cain and Joshua Veins.

1942 to 1974

Various companies performed work on the property, including surface work by Stump Lake Mines Limited and Copper Hill Mining and Exploration.

1974

The property was geologically mapped at a scale of 1:400' by Juniper Mines Limited.

1975 to 1983

Various companies controlled the Property.

1984

Celebrity Energy Corp conducted a program of geological mapping, soil sampling, ground electromagnetic, and ground magnetic geophysics on the southern extent and south of the Property.

An exploration program was completed and covered in part the Stump Lake Property. This program consisted of 12 sq. km. of prospecting, re-sampling all known cuts and adits, stream sediment samples, aerial photo-reconnaissance, 18.75km. of grid, and 6.1km of Mag/VLF over the area of the Jenny Long Camp (within three kilometres east of the Mineral Hill Gold-Silver Property).

This area contains numerous workings, shafts, a head-frame, and the remains of a 35 ton mill

History (cont'd)**1996**

Extensive prospecting carried on outside the grid area reportedly resulted in the discovery of numerous old workings consisting of trenches, pits, adits, and shafts.

Lindinger (1996) reports that some highlights of this program were: 0.828 oz/t Au, 2500 ppm Ag, 21% Pb, >0.4% Zn, and 0.15% Cu from a one metre chip of the King William vein located in the north of the property, 0.537 oz/t Au, 8.6 oz/t Ag, .3% Cu, 1.0% Pb, 0.2% antimony from a mineralized quartz vein located on the Jenny Long system in the middle of the property, and 0.588 oz/t Au, 4.1 oz/t Ag, with anomalous lead and molybdenum from a mineralized vein at the southern edge of the property. Grades up to 0.838 oz/t Au in the -150 mesh and up to 4.50 oz/t Au were realized from the +150 mesh of samples AR13, and JR31, respectively. (AR 24,923).

1997

An exploration program of prospecting and rock sampling program was completed on the G40, G41, G42, G45, G46, 647, 648, 649, G50 mineral claims (within the Mineral Hill Gold-Silver Property).

Lindinger (1997) reports that the prospecting and rocks sampling program were successful in verifying that there was still economic mineralization remaining at and near the old workings, and that buried mineralization exists south of the known mineralization in areas covered by the G45 to G59 claims. Further work was recommended. (AR 25,450).

1999

A geological mapping and rock sampling program was undertaken on the Enterprise and Enterprise 2 Mineral claims (within the Stump Lake Property).

Lindinger (1999) reports that the geological mapping program did not succeed in locating new significant mineralization. However, several structures accompanied by localized alteration and veining with minor mineralization were mapped. These strike into overburden covered areas. (AR 25,968).

2001

Lindinger (2001) reports that a geochemical sampling program of a portion of the Stump Lake Tailings revealed the containment of a significant gold resource that may be economically extractable. Heavy media and floatation testing all produce a pyrite rich concentrate that averages between 17 and 22 g/t gold, with significant silver, lead and zinc values. The overall gold recovery is around 65 to 70% from the 'run of mine' tailings using heavy media and floatation procedures. The dynamic gravity testing of the tailings using a Knelson concentrator indicate that 10.4% of the contained gold in the tailings can be described as free. By inference about 55% to 60% of the remaining gold is associated with readily separable sulphides. (AR26,523).

2003

Three lines of Crone Pulse EM survey were conducted across the valley of the Planet property. Stephenson (2004), in a conclusion on the results of the survey, reports that it appears from the analysis that the area has potential anomalies that are discernible from the PEM data. (AR 27,409).

2014

A limited program of rock sampling and soil sampling was completed. The rock sampling confirmed the historical results. The soil sampling identified areas of weakly anomalous copper values where there is no outcrop, suggesting that this may be a useful exploration tool.

History (cont'd)**2015**

Conclusions derived of a 2015 rock sampling program from sites of polymetallic Au-Ag+/-Cu veining confirmed historical results and may be indicative of a hidden porphyry system.

Figure 3. **Claim Map showing Minfiles**
(Base Map from MapPlace)

**HISTORY: STUMP LAKE PROPERTY**

The history on the MINFILE reported past producers, prospects, and showings within the Stump Lake Property are reported as follows. The descriptions herein are copied from Minfile.

ENTERPRISE past producer (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE028

The historic Enterprise camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

The Enterprise mine consists of a 98-metre-deep shaft, a 232 metre adit and approximately 1950 metres of underground development on six levels. The 97 metre level was extended over 400 metres to the northwest to intersect the Tubal Cain (092ISE108) and Joshua (092ISE109) veins. The Enterprise workings developed both the Enterprise and King William (092ISE110) veins.

PLANET NO. 1 showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE029

The historic Enterprise camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

The Planet showing consists of the original shaft (30 metres deep) and several open cuts which expose a 20 to 45-centimetre-wide quartz vein and several quartz stringers within altered greenstone. The vein strikes north and dips steeply to the east.

TUBAL CAIN prospect (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE108

The historic Enterprise camp is located on Mineral Hill, approximately 5.5 kilometres south of the community of Stump Lake

History: Stump Lake Property (cont'd)**Tubal Cain prospect (cont'd)**

The Tubal Cain occurrence is located immediately east of the Enterprise Mine (MINFILE 092ISE028) and a complete exploration history can be found there.

The Tubal Cain mine was developed by a 52-metre-deep shaft and two adits. The vein is also intersected by the 97 metre level of the Enterprise mine (092ISE028) and considerable drifting was reportedly done at that level.

Production from the Enterprise (MINFILE 092ISE028), King William (MINFILE 092ISE110), Tubal Cain and Joshua (MINFILE 092ISE109) veins, from 1916 to 1944, totalled 70,390 tonnes with recovery grades of 3.4 grams per tonne gold, 101.9 grams per tonne silver, 0.026 per cent copper, 1.42 per cent lead and 0.24 per cent zinc (Assessment Report 31405).

JOSHUA past producer (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE109

The Joshua mine originally consisted of a 230-metre-deep shaft with workings on six levels. Production from the Enterprise (MINFILE 092ISE028), King William (MINFILE 092ISE110), Tubal Cain and Joshua (MINFILE 092ISE109) veins, from 1916 to 1944, totalled 70,390 tonnes with recovery grades of 3.4 grams per tonne gold, 101.9 grams per tonne silver, 0.026 per cent copper, 1.42 per cent lead and 0.24 per cent zinc (Assessment Report 31405).

KING WILLIAM prospect (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE110

The historic Enterprise camp is located on Mineral Hill, approximately 5.5 kilometres south of the community of Stump Lake. The King William occurrence is located 900 metres south east of the Enterprise Mine (MINFILE 092ISE028) and a complete exploration history can be found there.

The King William vein has been developed by various workings and is exposed in the Enterprise mine (092ISE028) one kilometre to the northwest and in several stripped areas along strike between the two areas.

Production from the Enterprise (MINFILE 092ISE028), King William, Tubal Cain (MINFILE 092ISE108) and Joshua (MINFILE 092ISE109) veins, from 1916 to 1944, totalled 70,390 tonnes with recovery grades of 3.4 grams per tonne gold, 101.9 grams per tonne silver, 0.026 per cent copper, 1.42 per cent lead and 0.24 per cent zinc (Assessment Report 31405).

SILVER KING NO. 2 showing (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE111

The historic King William camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

The Silver King showing consists of a collapsed shaft, trenches and pits which expose a quartz vein system hosted by massive altered andesite.

EMULATOR showing (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE112

The historic King William camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

The Emulator showing consists of an adit and several open cuts which expose a sparsely mineralized quartz vein (2 metres wide) striking 335 degrees and dipping 75 degrees east.

History: Stump Lake Property (cont'd)**NO SURRENDER** showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE175

The historic King William camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

Workings on the No Surrender showing are situated along strike of the King William vein, between the King William (092ISE110) and Enterprise (092ISE028) mines.

MAYBELLE FRACTION. showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE176

The historic King William camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

The Maybelle Fraction showing is thought to be the extensions of the Joshua (092ISE109) and Tubal Cain (092ISE108) veins.

MARION C FRACTION. showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE177

The historic King William camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

The Marion C showing appears to be the southernmost extension of the King William vein system (092ISE110).

GEOLOGICAL SETTING**Regional Geological Setting**

The regional geology of the district has been mapped by W.E. Cockfield of the Geological Survey of Canada on a scale of 1:250,000 and published as GSC Memoir 249 (1947). In the Stump Lake area the geological framework is basically composed of an underlay of Nicola Volcanic rocks of Upper Triassic age. The Nicola Group is composed of a succession of volcanic flows and pyroclastics with minor sedimentary sections

Nicola Volcanics are dominantly of intermediate composition but variations from basalts to rhyolites do occur. Regionally, the Nicola Group is underlain by the Cache Creek group of Carboniferous to Permian age. The Cache Creek is a sedimentary Group in which argillite predominates. Minor volcanics are interbedded in certain areas and substantial sections of limestone occur in areas to the north. In the Stump Lake area, Cache Creek rocks crop out extensively to the east of the claims and as occasional windows to the south. Extensive intrusive bodies cut the older rocks. These bodies are of batholithic size and are assigned to the Coast Intrusives of Jurassic or later age. Granodiorites and related phases predominate

Property and Local Geology

Structurally, the Stump Lake area lies in a synclinal package of Nicola rocks compressed between Cache Creek sediments and the Pennask Batholith on the east and the Nicola Batholith on the west. Miocene flows of the Kamloops Group overlie the older units. Examples of these largely basaltic volcanics are found just to the north of Stump Lake.

Alteration

All the exposed lithologies have undergone lower greenschist metamorphism giving the rock a greenish cast due to chloritization of the mafic minerals (mostly hornblende).

Geological Setting (cont'd)**Alteration (cont'd)**

There are, however, several structurally controlled hydrothermally altered zones found in the mapped area. These zones are associated with the north-northwest striking steeply east dipping structures and to some degree with easterly trending zones. These alteration zones are characterized by bleaching of the host rock to a pale tan colour due to pervasive ankerite alteration.

Shears with this alteration zone often contain a green fuchsitic? mica that weathers to malachite like green. The more intense zones, often occurring at the intersection of the two dominant mineralized trends contain carbonate and quartz breccia veining.

Alteration adjacent to most veins is typically a carbonate-pyrite+/-mica assemblage .and varies locally; the width of bordering alteration appears to be directly associated with the degree of vein mineralization and/or width of the vein. At a localized King William vein exposure of a cm wide well mineralized vein with galena, chalcopryite, pyrite, and sphalerite, the alteration zone about 2.1-metre-wide; at the Enterprise, the bleached alteration envelope in the underground workings appears generally quite thin.

Mineral controls

The Mineral Hill veins and associated mineralization are primarily controlled by the north-northeast trending Quilchina and Stump Lake regional faults. With numerous associated conjugate smaller faults, which form a complex fracture pattern, the alteration and mineralization controls were established. Increased vein mineralization appears to be related to variations in the structure; primarily localized arcuate and/or cross structures. The large ore zone in the northern part of the Enterprise workings fits this structural picture. Here, the ore is localized on an arcuate section of vein which would tend to open with north-south strike slip movement to form a wider, mineralized section.

Geological mapping by Juniper Mines in 1974 resulted in the conclusion that controls for vein quartz and mineralization are not at all clear from the data at hand. Reportedly, it would seem from the distribution of stoped area in the northern workings that the structures tended to make ore on the north-northwesterly rather than northerly trending vein segments. Examples of this include the southern Enterprise-King William section where the north-northwesterly trending King William vein was stoped while the northerly trending Enterprise was not.

Similarly, on the Tubal Cain system the northerly trending (western) splay is a largely barren shear while the north-northwesterly trending branch to the east makes some ore. This ore distribution suggests that the main regional shear structure may have a northerly trend and a sinistral movement causing areas of low pressure and vein formation on related tensional structures.

Mineral Hill Gold-Silver Property Veins

Most of the major veins in the camp are northerly trending, steeply east dipping and less than a metre in average width, although vein widths of two or three metres have been reported (Dodd, 1887; Thompson, 1917)... " "...They have been followed along strike for up to 500 metres and down dip for 300 meters... ." "... "...and weak chlorite alteration penetrative foliation, apparently associated with localized shears, since this fabric is not widespread in the area.

Veins exposed near the Joshua Shaft strike north-northeast and dip about 50°E. Alteration here is iron carbonate with abundant green mica. At some localities multiple veins 5 to 10 centimetres wide are oriented parallel to prominent north and northwest trending fractures and joints. Similarly, oriented veins with associated iron carbonate and green mica alteration are exposed near the Planet workings.

Early in the development of the camp the Enterprise, No Surrender and King William veins were recognized to be controlled by the same northerly trending structure (Cockfield, 1948).

Geological Setting (cont'd)

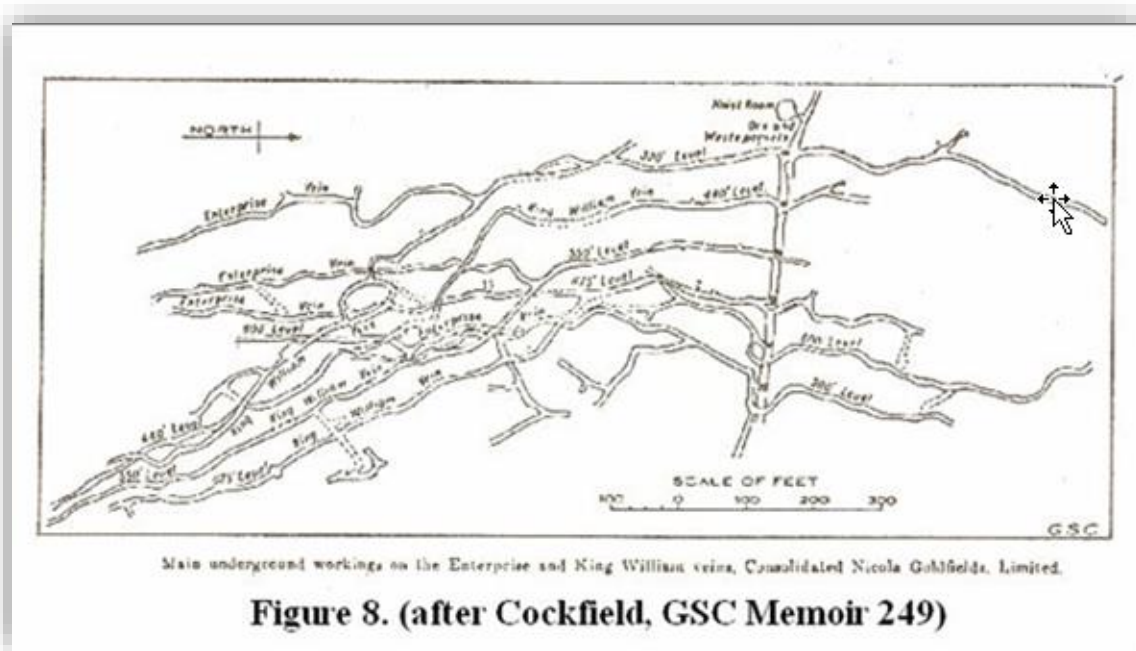
Mineral Hill Gold-Silver Property Veins (cont'd)

As suggested by Moore (1989), the orientation of these and other veins in the camp is subparallel, or conjugate to prominent fractures and faults, such as the early tertiary Quilchena fault, which suggests that they formed during, or soon after, regional brittle faulting in an extensional tectonic environment..."

The Enterprise and King William structures were originally explored as separate properties. The Enterprise vein was initially developed from surface by an inclined shaft sunk along the vein for 97 metres (320 feet). An adit driven from near the bottom of the shaft intersected the Tubal Cain and the Joshua veins. All three veins were drifted on extensively on this level designated as the 320 level.

Six principal veins are known each of which has received development. These are the Enterprise, King William, Joshua, Tubal Cain, Planet, and the Silver King.

Figure 4. Main longitudinal workings on the Enterprise and King William veins
(after Cockfield, GSC Memoir 249)



ENTERPRISE

Most of the development on the vein was below the 320 level where an internal shaft was sunk to below the 900-foot level from which levels and drifts were driven at the 440, 550, 675, and the 800 foot levels. The Enterprise vein as exposed in these workings varies in width; at the 320 level it is from one to three feet wide, the unstoped areas it is only about one-foot-wide with considerable pinching and swelling.

The vein is quite continuous over its exposed length. The strike is variable, generally about 350° with variations from 40° to 80°

KING WILLIAM

The vein strikes $N20^\circ W$ and dips $80^\circ E$ where opened up by a shaft at an elevation of 884 metres. Levels exist at 40 and 100 feet, and stoping on a hanging-wall split was carried to the surface. The quartz is 31 to 91 cm wide at the shaft, the greater width being related to the above-mentioned splitting. Immediately south of the shaft, a car-load of ore was mined from a nine metre cut to an average depth of 2.55 metres. In the cut the vein averages 46 cm in width.

Geological Setting (cont'd)**Mineral Hill Gold-Silver Property Veins (cont'd)****King William (cont'd)**

Eight hundred feet northerly from the King William is an open-cut on the No Surrender claim which is very likely on the same vein. In this cut a 9.1 metre vein length is exposed with a steep northerly dip; in the north end of the cut the strike is N15°W and in the south end N25°W. A parallel strand 20 cm wide lies 101 cm in the foot-wall.

JOSHUA

The Joshua Vein lies some 250 meters to the east of the Tubal Cain. It is a northerly striking structure with a steep easterly dip. It has been developed by a shaft and various levels to a depth of 228 metres. It is also connected to the 320 level crosscut from the Enterprise workings which cut the Joshua vein just above the Joshua 400-foot level.

On the 320 level the vein has been drifted on for about 300 meters. The structure is very continuous throughout this length but widths are nowhere impressive. Widths up to 1.1 meters were noted but most of the structure would average 0.3 meters or less. On the north end of the 320 level a length of about 35 meters has been stoped in one area. In the development to the south the vein seems to weaken in width and sulphide content although continuity is still good. Also in the drift to the south the vein has been displaced to the west a few meters by low angle faults at two points. The faults seem to have been readily solved by the mine staff and the displaced vein is picked up with a minimum of dead work.

TUBAL CAIN

The Tubal Cain vein lies some 250 metres to the east of the Enterprise vein. The vein strikes N20°W and dips 65° to 80° eastward near the surface and splits at depth into two branches which diverge to the south. One of these branches is the almost vertical extension of the vein at surface, and the other, the more easterly, has an average dip of 75° easterly and a north-northwesterly strike. A shaft is reported to be 52 metres deep with a short level at the 18 metre depth. An adit driven to intersect the vein is 33.5 metres long.

The vein in this adit attains a width of 0.6 to 0.9 metres in a number of shoots, usually not more than 6.1 metres long between which widths may be 10 inches or less; one swelling in the vein near the shaft reaches a maximum of 1.5 metres. The sulphide content is consistently low. Wallrocks are strongly altered and shearing is fairly strong. An andesite dyke follows the vein throughout the length of the adit and crosses the vein three times; this dyke follows down on the steeper branch of the vein.

Various workings explore the upper part of the vein. The best exposures are on the Enterprise 320 cross-cut level. On this level the western branch of the vein is a strong zone of shearing but of very little vein filling. About 325 metres of drifting has developed this structure but no sections have been stoped.

PLANET

Located some 853 metres south-west of the Enterprise workings, the planet vein as seen only and close to the shaft, strikes N03°E and dips 80°E. The shaft is said to be about 30.5 metres deep. A zone of alteration, 1.4 metres wide, contains a hanging-wall band of quartz 33 cm to 46 cm wide as well as two stringers. In the shaft and 3.3 metres south of the collar the vein is narrow, and the quartz pinches down locally to a width of 20 cm.

West and south-west of the Planet shaft are two veins which dip north-easterly. On the northerly of these a 3.3 metre shaft discloses irregular quartz to a maximum width of 81 cm and a minimum width of 25 cm, containing sporadic sulphide mineralization.

Geological Setting (cont'd)**Mineral Hill Gold-Silver Property Veins (cont'd)****SILVER KING**

On the Silver King claim is a vein which strikes N20°E and dips 60°E upon which a small shaft has been sunk. An alteration zone 1.3 to 2.6 metres wide or more, is poorly exposed. The vein is five cm in width with an additional few stringers in the zone. Mineralization is weak and the quartz contains rock fragments.

Table 2. Reported assays from samples of vein material

Vein	Location	Sample width	oz/t Au	oz/t Ag	%Pb	%Zn
Enterprise*		0.15 m	0.102	10.05	1.07	1.29
Enterprise*		grab	0.938	7.01	3.11	1.76
Enterprise^	320 level	37 in	0.20	4.2	4.0	5.2
Enterprise^	320 level	14 in	0.30	1.5	0.5	0.3
Enterprise^	440 level	29 in	0.12	9.0	1.5	2.0
Enterprise^	550 level; sill pillar	17 in	0.10	2.0	3.0	1.5
Joshua*		1.1m	0.08	11.80	1.95	4.00
Tubal Cain*		1.5m	0.029	1.11	1.01	0.66
Tubal Cain*		0.6m	0.029	0.99	1.29	6.45
Planet*	10 ft below collar	14 in	0.10	5.2	Tr	0.02
Planet*	15 ft below collar	9 in	0.02	3.2	Tr	0.06
Planet*	25 ft below collar	12 in	0.80	5.0	Tr	0.02
No Surrender*			0.07	2.23	2.14	0.04
No Surrender*			0.32	26.10		
No Surrender*	Dump	Grab	0.44	36.7	38.0	2.88
Silver King*	Pit	Grab	0.01	0.43		
Silver King*			0.13	7.26	14.0	0.23

GEOLOGY: STUMP LAKE PROPERTY

The geology on the MINFILE reported past producers, prospects, and showings within the Stump Lake Property are reported as follows. The descriptions herein are copied from Minfile.

ENTERPRISE past producer (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE028

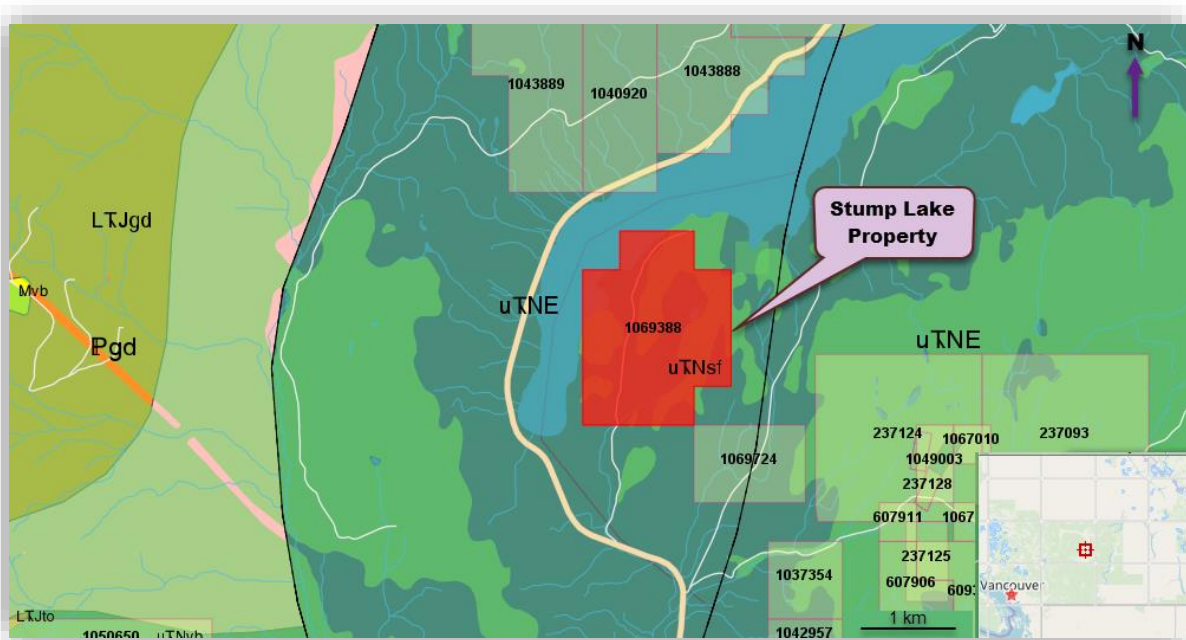
The historic Enterprise camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group. These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, and minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill.

Geology: Stump Lake Property (cont'd)**Enterprise past producer (cont'd)**

Both west and north- east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp. Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

The orientation of the Enterprise vein varies from 335 to 015 degrees, with an average dip of 50 degrees eastward. Its width is generally less than 60 centimetres, but swells up to 2 metres. Mineralization consists of galena, sphalerite and pyrite, with associated gold and silver values.

Figure 5. **Property Geology**
(from MapPlace)

**LEGEND****Upper Triassic: Nicola Group****Eastern Volcanic Facies**

uTrNE

undivided volcanic rocks; minor
limestone and argillite

uTtNsf

mudstone, siltstone, shale, fine
clastic sedimentary rocks

Late Triassic to Early Jurassic

LTrJgd

unnamed granodioritic intrusive
rocks

Geology: Stump Lake Property (cont'd)**PLANET NO. 1** showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE029

These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, and minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill. Both west and north- east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp.

Secondary to the north-northeast trending Quichena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply east.

The Planet showing consists of the original shaft (30 metres deep) and several open cuts which expose a 20 to 45-centimetre-wide quartz vein and several quartz stringers within altered greenstone.

TUBAL CAIN prospect (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE108

The camp is hosted within a north trending belt of Upper Triassic intermediate volcanics, volcaniclastics and sediments belonging to the Nicola Group. These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill.

Both west and north- east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp. Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

The Tubal Cain mine was developed by a 52-metre-deep shaft and two adits. The vein is also intersected by the 97 metre level of the Enterprise mine (092ISE028) and considerable drifting was reportedly done at that level. In these workings the Tubal Cain vein varies markedly in width, orientation and amount of sulphide mineralization. The Tubal Cain shear is a zone of intensely fractured quartz veins and lenses within sheared, carbonatized and pyritic country rock. Fifty metres north of the shaft, trenching exposed a quartz vein 33 centimetres wide striking 340 degrees and dipping 60 degrees east.

JOSHUA past producer (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE109

The camp is hosted within a north trending belt of Upper Triassic intermediate volcanics, volcaniclastics and sediments belonging to the Nicola Group. These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill.

Both west and north- east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp.

Geology: Stump Lake Property (cont'd)**Joshua past producer (cont'd)**

Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

The Joshua vein follows a shear zone striking 356 degrees and dipping 60 to 65 degrees to the east, though intense fracturing causes changes in orientation. The vein varies in width from 5 to 75 centimetres with numerous smaller veins and stringers feathering out.

KING WILLIAM prospect (Polymetallic veins Ag-Pb-Zn+/-Au)**Minfile 092ISE110**

The camp is hosted within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group.

These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill.

Both west and north- east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp. Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated.

The King William vein generally strikes north-northwest, dips 65 to 85 degrees to the east and is regarded as a branch of the Enterprise vein. The King William vein pinches and swells considerably and carries variable amounts of pyrite, chalcopyrite, galena and sphalerite. Diamond drilling revealed that the altered andesite hosts numerous quartz stringers on either side of the vein.

SILVER KING NO. 2 showing (Polymetallic veins Ag-Pb-Zn+/-Au)**Minfile 092ISE111**

Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill. Both west and north- east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp. Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

The shaft intersects narrow quartz stringers (5 centimetres wide) carrying galena, sphalerite and pyrite. Arsenopyrite was encountered in more recent trenches. The orientation of the vein zone strikes from 360 to 020 degrees and the dips vary from 70 degrees east to 65 degrees west. Grab samples assay up to 4.45 grams per tonne gold, 248.87 grams per tonne silver, 14 per cent lead, 0.23 per cent zinc and 0.01 per cent copper (Assessment Report 5152).

Geology: Stump Lake Property (cont'd)**EMULATOR** showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE112

The historic King William camp is located on Mineral Hill within a north trending belt of Upper Triassic intermediate volcanics, volcanoclastics and sediments belonging to the Nicola Group. These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill.

Both west and north-east of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp. Secondary to the north-northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated.

NO SURRENDER showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE175

These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill. Both west and northeast of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp.

Secondary to the north-northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

MAYBELLE FRACTION. showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE176

These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill. Both west and northeast of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp.

Secondary to the north-northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated.

MARION C FRACTION. showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE177

These greenstones consist of massive, chlorite-epidote altered andesite and basalt, augite porphyry, andesitic flow breccia and tuff, minor interbedded argillite, conglomerate and limestone. Attitudes of tuff horizons and sedimentary bedding suggest that a north plunging axis of a syncline passes through Mineral Hill. Both west and northeast of Stump Lake, the Nicola Group volcanics are intruded by Lower Jurassic granitic batholiths; scattered granodiorite outcrops have been mapped in the vicinity of the camp.

Geology: Stump Lake Property (cont'd)**Marion C Fraction showing (cont'd)**

Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated.

MINERALIZATION

The veins at Stump Lake consist of polymetallic quartz-sulphide and quartz-carbonate-sulphide assemblages that are mesothermal to epithermal in character. The most abundant metallic minerals are pyrite, chalcopyrite, galena, sphalerite and tetrahedrite, with small amounts of bornite, scheelite, arsenopyrite, pyrrhotite and native gold. Quartz is massive to weakly banded, milky white with metallic minerals distributed on partings and in crudely developed, sulphide-rich bands of layers' parallel to vein walls.

MINERALIZATION: STUMP LAKE PROPERTY

The mineralization on the MINFILE reported past producers, prospects, and showings within the Stump Lake Property are reported as follows. The descriptions herein are copied from Minfile.

ENTERPRISE past producer (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE028

Mineralization consists of galena, sphalerite and pyrite, with associated gold and silver values.

PLANET NO. 1 showing (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE029

Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply east.

Ore minerals include pyrite, chalcopyrite and grey sulphides (probably galena, sphalerite, arsenopyrite or tetrahedrite).

TUBAL CAIN prospect (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE108

Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

Mineralization in the vein consists of pyrite, galena, sphalerite, tetrahedrite and chalcopyrite. Fifty metres north of the shaft, trenching exposed a quartz vein 33 centimetres wide striking 340 degrees and dipping 60 degrees east.

Production from the Enterprise (MINFILE 092ISE028), King William (MINFILE 092ISE110), Tubal Cain and Joshua (MINFILE 092ISE109) veins, from 1916 to 1944, totalled 70,390 tonnes with recovery grades of 3.4 grams per tonne gold, 101.9 grams per tonne silver, 0.026 per cent copper, 1.42 per cent lead and 0.24 per cent zinc (Assessment Report 31405).

JOSHUA past producer (Polymetallic veins Ag-Pb-Zn+/-Au)

Minfile 092ISE109

Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

Mineralization consists of pyrite, galena, sphalerite, chalcopyrite and tetrahedrite in variable amounts. Trenching has exposed similar mineralization within the altered andesitic unit northwest and southeast of the Joshua shaft. Scheelite masses up to 10 centimetres in diameter is found in dump material.

Mineralization: Stump Lake Property (cont'd)**Joshua past producer (cont'd)**

Production from the Enterprise (MINFILE 092ISE028), King William (MINFILE 092ISE110), Tubal Cain and Joshua (MINFILE 092ISE109) veins, from 1916 to 1944, totalled 70,390 tonnes with recovery grades of 3.4 grams per tonne gold, 101.9 grams per tonne silver, 0.026 per cent copper, 1.42 per cent lead and 0.24 per cent zinc (Assessment Report 31405).

KING WILLIAM prospect (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE110

Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

Diamond drilling revealed that the altered andesite hosts numerous quartz stringers on either side of the vein. Drill core samples assayed up to 1.64 grams per tonne gold and 55.82 grams per tonne silver with trace lead and zinc values (Assessment Report 5565).

Production from the Enterprise (MINFILE 092ISE028), King William, Tubal Cain (MINFILE 092ISE108) and Joshua (MINFILE 092ISE109) veins, from 1916 to 1944, totalled 70,390 tonnes with recovery grades of 3.4 grams per tonne gold, 101.9 grams per tonne silver, 0.026 per cent copper, 1.42 per cent lead and 0.24 per cent zinc (Assessment Report 31405).

Mineralization: Stump Lake Property (cont'd)**SILVER KING NO. 2** showing (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE111

The shaft intersects narrow quartz stringers (5 centimetres wide) carrying galena, sphalerite and pyrite. Arsenopyrite was encountered in more recent trenches. The orientation of the vein zone strikes from 360 to 020 degrees and the dips vary from 70 degrees east to 65 degrees west. Grab samples assay up to 4.45 grams per tonne gold, 248.87 grams per tonne silver, 14 per cent lead, 0.23 per cent zinc and 0.01 per cent copper (Assessment Report 5152).

EMULATOR showing (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE112

The Emulator showing consists of an adit and several open cuts which expose a sparsely mineralized quartz vein (2 metres wide) striking 335 degrees and dipping 75 degrees east. Diamond-drill holes intersected veins 10 to 80 centimetres in width carrying pyrite and galena and minor blebs of sphalerite and chalcopyrite. One of these assayed 10.21 grams per tonne gold, 219.39 grams per tonne silver, 0.62 per cent lead and 0.35 per cent zinc over 80 centimetres (Assessment Report 13152). The wallrock is grey altered andesitic rock with up to 5 per cent finely disseminated pyrite and occasional blebs of grey sulphides. This material returned values of 1.1 grams per tonne gold and 7.8 grams per tonne silver. Trenching exposed similar mineralization within the altered andesitic unit.

NO SURRENDER showing (Polymetallic veins Ag-Pb-Zn+/-Au)
Minfile 092ISE175

Several trenches and bulldozer cuts expose mineralized quartz veins within altered greenstone. The veins pinch and swell up to 50 centimetres in width, swing from north- northeast to northwest orientations and carry variable amounts of pyrite, chalcopyrite, galena and sphalerite. Chip samples assayed up to 3.51 grams per tonne gold and 198.14 grams per tonne silver (Assessment Report 5565).

Mineralization: Stump Lake Property (cont'd)**MAYBELLE FRACTION.** *showing (Polymetallic veins Ag-Pb-Zn+/-Au)*

Minfile 092ISE176

Secondary to the north-northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

The Maybelle Fraction showing is thought to be the extensions of the Joshua (092ISE109) and Tubal Cain (092ISE108) veins. Drill holes (1983) intersected mineralized quartz veins and veinlets within highly altered and brecciated greenstone. The wallrock contains up to 5 per cent pyrite, minor galena and chalcopyrite and assayed up to 71.99 grams per tonne silver, 1.75 per cent lead, 0.66 per cent zinc, 0.06 per cent copper and 0.75 grams per tonne gold over 1.2 metres (Assessment Report 13152). The sulphides also occur as blebs in the quartz veins but have returned poor assay values.

MARION C FRACTION. *showing (Polymetallic veins Ag-Pb-Zn+/-Au)*

Minfile 092ISE177

Secondary to the north- northeast trending Quilchena and Stump Lake regional faults are numerous smaller faults which form a complex fracture pattern and appear to control alteration and mineralization. Andesitic rocks are bleached, pervasively silicified, pyritic and brecciated. Mineralization occurs in numerous quartz, and less commonly calcite veins which strike generally to the north and dip steeply eastward.

The Marion C showing appears to be the southernmost extension of the King William vein system (092ISE110). The quartz vein, as exposed in old open cuts, is 10 centimetres wide, carries minor pyrite, galena, sphalerite and chalcopyrite and is hosted in altered andesite. Grab samples from vein material assayed 17.82 grams per tonne silver, 0.09 per cent lead, 0.03 per cent zinc, 0.01 per cent copper and 0.1 grams per tonne gold (Assessment Report 5152).

2019 EXPLORATION PROGRAM**Prospecting and Sampling****Purpose**

The purpose of the program was to locate any location of a geological prospect that may have the potential to be developed to an economic resource. Any indication of mineralization may indicate a potential mineral deposit.

Prospecting

Prospecting of area; orange flagging and marking of sample sites. Photos taken of samples, and areas. GPS coordinates were taken, and all samples recorded and mapped. Prospecting notes, operating with equipment (Truck, GPS, Tools and sampling). Twenty-four samples were taken. Field notes on the samples are shown in Appendix I

Sampling

UTM's and samples were taken from various locations throughout the property area. Sampling consisted of the collection of mill-site fine, tailings float, and in-situ. These samples were then examined by Stewart Jackson PhD PGeo. Points of interest (access) were also noted. Ten selected samples were assayed.

Results

Prospecting descriptions, and mapping are included within the attached physical report. The assays are included in Appendix 3 as Certificate of Analysis VAN19002558.

2019 Exploration Program (cont'd)

Figure 6 Sample location Index Map
(Base map: MapPlace)

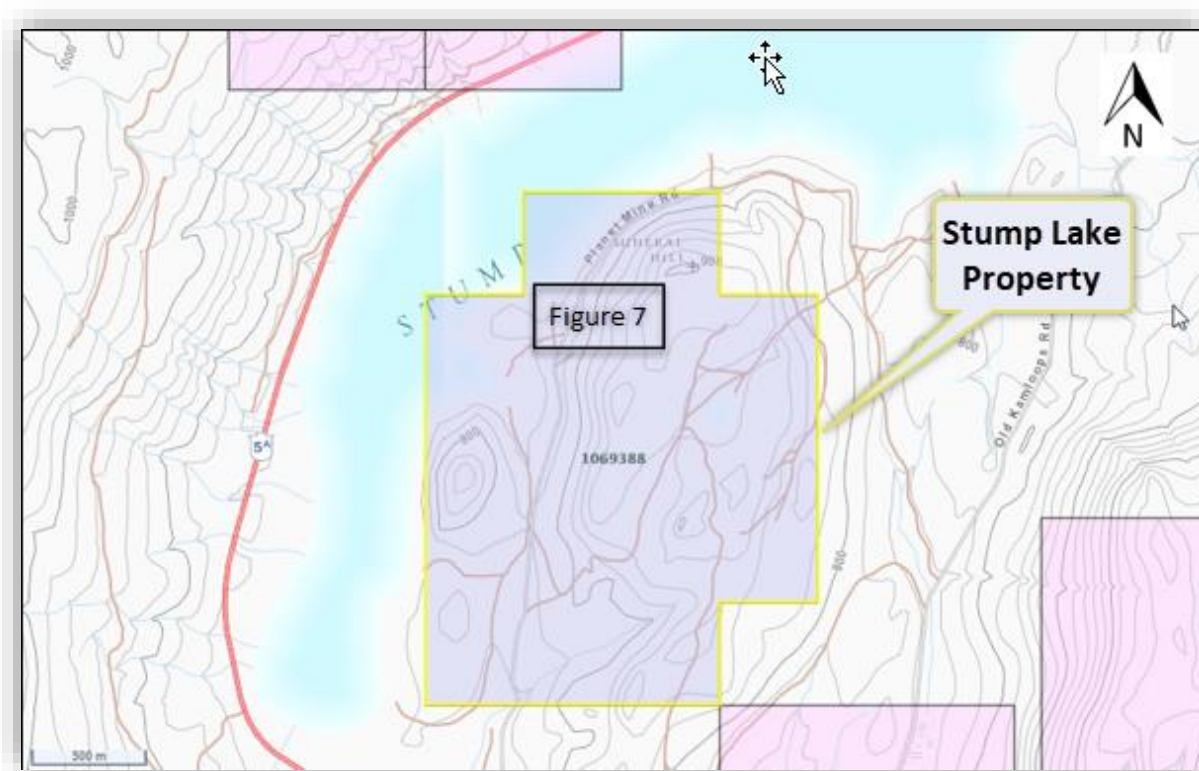
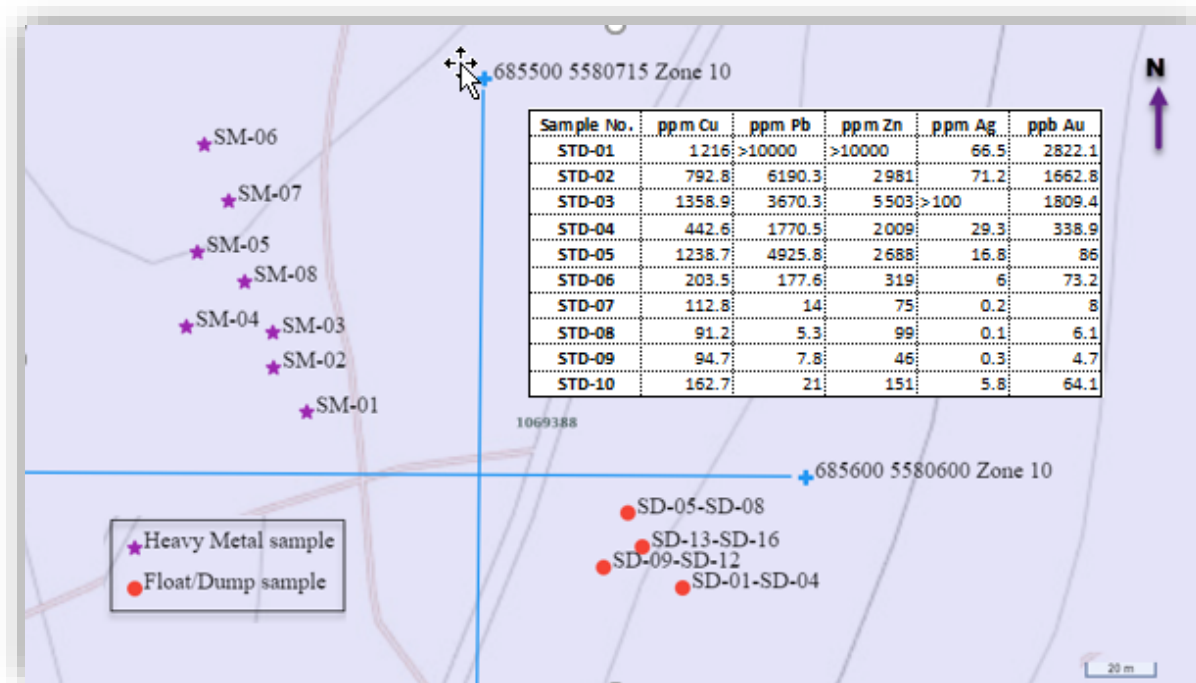


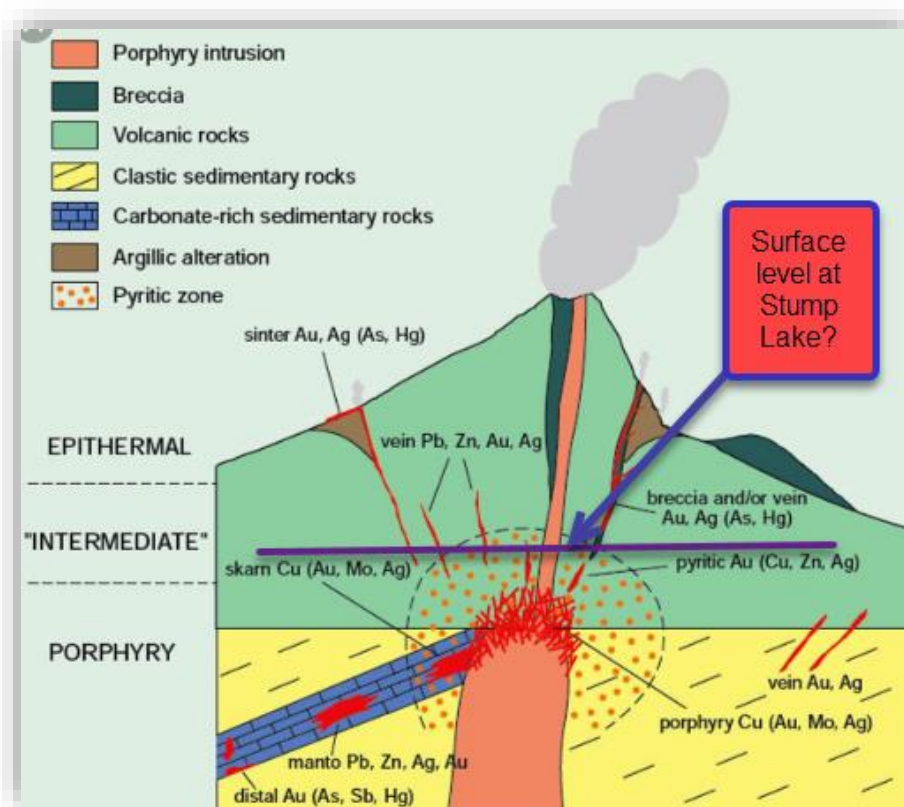
Figure 7. Sample locations* and selected assays**
(Base map from MapPlace)



* see Figure 6 for location on Stump Lake Property

**see Appendix 3 for complete assays

Figure 8. **Epithermal-Porphyry Mineral Deposit Relationship Model**
(Base map from Camus, 2013)



INTERPRETATION & CONCLUSIONS

The 2019 exploration program of sampling, and prospecting exploration program on the Stump Lake Property was successful in that the assayed samples from the Enterprise dumps not only confirmed the polymetallic nature of the “ore” source but provided an indication of the level to a mineral-bearing porphyry from which the polymetallic veins were derived.

As a general conclusion, it appears that there was a multi-episodic mineralization sequence with some indication of an epithermal zone within a heavily mineralized polymetallic zone which would be the intermediate zone adjacent to the porphyry. The porphyry may be less than 200 metres below the Enterprise underground workings.

RECOMMENDATIONS

A four-line Induced Potential (IP) survey could reveal the mineralized porphyry or provide the information to the location of a potential porphyry resource.

Respectfully submitted
Sookochoff Consultants Inc.



Laurence Sookochoff, PEng

SELECTED REFERENCES

Cockfield, W.E. - Geology and Mineral Deposits of Nicola Map Area, Memoir 249, G.S.C. 1961.

MapPlace – Map downloads.

Cockfield, W.E. - Geology and Mineral Deposits of Nicola Map Area, Memoir 249, G.S.C. Memoir 249.

Geological Survey of Canada -Bedrock Geology of Ashcroft (92I) map area, Open File 980.

Gourlay, A.W. –Prospecting and Geochemistry Mineral Hill Property for Reva Resources Corp.

July 23, 2015. AR 35538.

Lindinger, J.E.L. - Prospecting Report on the G-40 to G-50 Mineral Claims, Greenstone Group (Stump Lake Planet Mining Camp). March 17, 1998. AR 25,450.

Lindinger, J.E.L., Molnar, A.W. - Prospecting and Sampling Report on the Greenstone Claim Group.

January 21, 1997. AR 24,923A.

Lindinger, J.E.L. - Geological Assessment Report on the Enterprise and Enterprise 2 Mineral Claims (Stump Lake Planet Mining Camp). August 6, 1999. AR 25,968.

MapPlace - Downloads.

Moore, J.M., Pettipas, A. – Nicola Lake Region Geology and Mineral Deposits. Open File 1990-29. Ministry of Energy, Mines and Petroleum Resources. Victoria British Columbia Canada. October 1990.

Mtonline - BC Government on-line information.

Rayner, G.H. - A Report on the Stump Lake Property for Celebrity Energy Corporation, April 14, 1983.

Richardson, P.W. - Report on the Stump Lake Property for Goldbrae Developments Ltd., July 11, 1985.

Sookochoff, L. – Summary Report on the Stump Lake Property for Celebrity Energy Corporation.

July 15, 1993.

- Geological, Geophysical, and Geochemical Report on the Cig 100 Claim for New Hombre Resources Ltd. March 11, 1988. AR 17,489.

- Geochemical Assessment Report on the Peter Hope Lake Property, July 24, 1996. AR 2,499.

- Geophysical Assessment Report on the Peter Hope Lake Property, March 31, 1996 AR 25892.

- Geological Evaluation Report on the Planet 1 Mineral Claim for Atwood Minerals and Mining Corp. July 8, 2005.

Geological Assessment Report on a Structural Analysis on Tenure 533343 the 11 Tenure Stump Lake Property. May 10, 2010. AR 31405.

Stephenson, L., - -Report on a Geochemical and Geophysical Survey on the Planet Property for Guy Delorme. April 2004. AR 27,409.

STATEMENT OF COSTS

Field work was performed on the Stump Lake Property between July 1, 2019 and July 15, 2019 to the value as follows:

Prospecting and Sampling**Labour**

J. Bakus: July 1, 6, 7, 2019		
3 days @ \$450.00/day -----	1,350.00	
B. McKinney: July 6, 7, 2019		
2 days @ \$300.00/day -----	600.00	
S. Jackson: Rock descriptions		
1 day @ \$750.00/day -----	750.00	
J. Newton: July 6, 7, 2019		
2 days @ \$300.00/day -----	<u>600.00</u>	3,300.00

Travel/Transportation

Vancouver to Property return: 685 km

Kamloops to Property return) 170 km x 2 = 680 km

1025 km @ \$0.68 ----- 697.00

Exploration Equipment (5 days @ \$100.00)

GPS, Computer, Clinometer, Electronics radios, etc	40.00	
Spot Locator's safety equipment and supplies -	40.00	
Bear spray, axes, mallets, pry bars, etc	40.00	
Chainsaw -----	<u>40.00</u>	160.00

Assays ----- 285.00

Food/Lodging

6 man days @ \$ 125.00 ----- 750.00

Report

Laurence Sookochoff, PEng ----- 2,500.00

Maps ----- 500.00

\$ 8,192.00

=====

CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with an address at 120 125A-1030 Denman Street, Vancouver, BC V6G 2M6.

I, Laurence Sookochoff, further certify that:

- 1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
- 2) I have been practicing my profession for the past fifty-three years.
- 3) I am registered and in good standing with the Engineers and Geoscientists BC.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report and from exploration work done in the general area of the Stump Lake Mining Camp.
- 5) I have no interest in the Stump Lake Property as described herein.



Laurence Sookochoff, P. Eng.

FIELD CREW QUALIFICATIONS

John Bakus; 10 years prospecting experience.

J. Mewton; five years prospecting experience

B. McKinney; 10 years prospecting experience

Appendix 1

Sample Locations and Descriptions

STUMP LAKE MINE Xump.

BILL MCKINNEY
SEPTEMBER 2019

- ① QUARTZ VEIN FRAGMENT 10 CM THICK.
WHITE QZ, BANDED WITH DARK STREAKS CONTAINING PYRITE
AS DARK POWDERY BANDS, POSSIBLE NAUMANNITE (SILVER SELENIDE)
SCATTERED 0.5 MM PYRITE CUBES
- ② QUARTZ VEIN 8 CM THICK, BANDED AS IN ①, 0.5 MM DARK GREY STREAKS
SEPARATED BY 1 MM - 5 MM BANDS OF WHITE QUARTZ
SPECIES OR FREE GOLD ON EDGE
SCATTERED PYRITE UP TO 1 MM IN DARK BANDS
- ③ QUARTZ WITH ABUNDANT GREEN MARIPOSITE MICA
SCATTERED GOLD MIXED WITH PYRITE SCATTERED ALONG MICACEOUS BAND
1 MM GIVE MULTIBUNCH ASSAY.
- ④ LIGHT GREY BROWN FINE GRAINED VOLCANIC WITH 1 MM - 10 MM QUARTZ VEINETS
ABUNDANT PYRITE IN MINOR QZ VEINLETS. SCATTERED 1 MM
PYRITE SCATTERED IN LARGER VEIN.
- ⑤ MED GRAINED GREY GREEN VOLCANIC WITH 1 CM QUARTZ-CARBONATE VEIN
ON FRACTURE. SIDERITE BAND WEATHERED BROWN 2-3 MM ALONG
SIDE OF QZ VEIN.
FRACTURE SIDE OF QUARTZ WITH GOLD GRAYST BLACK GRAY POSSIBLE
SILVER SULPHIDE
- ⑥ LIGHT GREY-GREEN FINE GRAINED VOLCANIC WITH 1 MM VEINLETS WITH
PYRITE TINY CRYSTALS AND POSSIBLE FREE GOLD, MULTIPLE
ORIENTATIONS ON VEINLETS-
- ⑦ DARK GREEN VOLCANIC (FINE GRAINED), MULTIPLE ORIENTATION
QUARTZ VEINLETS 0.5 MM - 5 MM SCALE OF WHITE QUARTZ.
REVEINED PRECIPITATED IRON CARBONATE VEINLET COMPONENT.
- ⑧ VOLCANIC - MED DARK GREEN, FINE GRAINED, MULTIPLE MINUTE QUARTZ
VEINLETS AND IRON LINE FRACTURES, SOME CARBONATE VEINLETS
MIXED WITH QUARTZ VEINLETS - NO VISIBLE PYRITE
- ⑨ FLOW BANDED RHYOLITE HOST ROCK, MULTIPLE ORIENTATION PYRITE LOADED
QUARTZ LAMELLAE, CARBONATE LAMELLAE. ONE QUARTZ BAND
3 MM THICK ON SIDE OF SAMPLE
- ⑩ MED-DARK BROWN SILICIFIED VOLCANIC, MULTIPLE ORIENTATION 1 MM VEINLETS.
ONE SET WITH SCATTERED PYRITE CRYSTALS 0.5 MM SIZE
SOME IRON CARBONATE ON MARGINS OF QUARTZ VEINLETS.

- ⑪ MASSIVE QUARTZ VEIN MATERIAL. WEATHERED PYRITE IN
GLOB ON OUTSIDE. WHITE OVERGROW WITH DARK PYRITE, BLACK
SMOKEY VEINLETS, MULTIPLE VEINLET DIRECTIONS
SOME LAMELLAE WITH CARBONATE VEINLET.
- ⑫ MASSIVE QUARTZ VEIN, CROSS BRECCIATED WITH IRON ~~CARB~~ CARBONATE
VEINLETTING MULTIPLE DIRECTIONS - OVERALL MED BROWN
APPEARANCE
- ⑬ QUARTZ BRECCIATED CARBONATE MATERIAL. DARK BROWN WEATHERED
CARBONATE VEIN MATERIALS.
MILK WHITE QUARTZ.
- ⑭ BRECCIATED IRON CARBONATE IMPREGNATED WITH WHITE VEIN QUARTZ.
QUARTZ UP TO 1 CM WIDE, MULTIPLE DIRECTIONS, SCATTERED
OCCASIONAL PYRITE SPECIES + BRANS.
- ⑮ SIDERITE SOAKED VOLCANIC, CHOCOLATE BROWN WEATHERED
CARBONATE ROCK, NO VISIBLE PYRITE, NO VEINLETS
- ⑯ MED GRAY GRAY FINE-MED GRAINED VOLCANIC. NO VEINLETS,
NO ALTERATION, NO VEINLETS, "BARREN" WALL ROCK.



Stump Lake	2019	Event	Sample	IS In Situ, HM Heavy Mineral/Dump Fines,
Assayed	Samples	5748101	Types	FB Float/Dump, POI Point of interest/Access
Sample	Lat	Lon		Lithologies/Notes
SD-01	50.3479	-120.39171	FB	Dump Sample (See Jackson Assayed Lithology)
SD-02	50.3479	-120.39171	FB	Dump Sample (See Jackson Assayed Lithology)
SD-03	50.3479	-120.39171	FB	Dump Sample (See Jackson Assayed Lithology)
SD-04	50.3479	-120.39171	FB	Dump Sample (See Jackson Assayed Lithology)
SD-05	50.34809	-120.39193	FB	Dump Sample (See Jackson Assayed Lithology)
SD-06	50.34809	-120.39193	FB	Dump Sample (See Jackson Assayed Lithology)
SD-07	50.34809	-120.39193	FB	Dump Sample (See Jackson Assayed Lithology)
SD-08	50.34809	-120.39193	FB	Dump Sample (See Jackson Assayed Lithology)
SD-09	50.34798	-120.39206	FB	Dump Sample (See Jackson Assayed Lithology)
SD-10	50.34798	-120.39206	FB	Dump Sample (See Jackson Assayed Lithology)
SD-11	50.34798	-120.39206	FB	Dump Sample (See Jackson Assayed Lithology)
SD-12	50.34798	-120.39206	FB	Dump Sample (See Jackson Assayed Lithology)
SD-13	50.34801	-120.39188	FB	Dump Sample (See Jackson Assayed Lithology)
SD-14	50.34801	-120.39188	FB	Dump Sample (See Jackson Assayed Lithology)
SD-15	50.34801	-120.39188	FB	Dump Sample (See Jackson Assayed Lithology)
SD-16	50.34801	-120.39188	FB	Dump Sample (See Jackson Assayed Lithology)
SM-01	50.34837	-120.39329	HM	10 KG Mill Site Fines 12" depth
SM-02	50.34849	-120.39343	HM	10 KG Mill Site Fines 12" depth
SM-03	50.34858	-120.39342	HM	10 KG Mill Site Fines 12" depth
SM-04	50.3486	-120.39379	HM	10 KG Mill Site Fines 12" depth
SM-05	50.34879	-120.39374	HM	10 KG Mill Site Fines 12" depth
SM-06	50.34908	-120.39371	HM	10 KG Mill Site Fines 12" depth
SM-07	50.34893	-120.39361	HM	10 KG Mill Site Fines 12" depth
SM-08	50.34872	-120.39355	HM	10 KG Mill Site Fines 12" depth
POI-01	50.32045	-120.39578	POI	Highway 5A Planet Mine Road North

Appendix 2

Photos

Planet Mine Road North and Highway 5A



View of Mill site "fines" area



Mill site "fines" tailing area



Mine dump and burned mill (South)



Enterprise Mine dump (looking North)



Enterprise Mine dump and burned mill (South)



Appendix 3

Assays



MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

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

Client:

John Bakus
3-1572 Lorne St. East
Kamloops British Columbia V2C 1X6 Canada

Submitted By: John Bakus
Receiving Lab: Canada-Vancouver
Received: September 09, 2019
Report Date: September 23, 2019
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN19002558.1

CLIENT JOB INFORMATION

Project: Stump Lake
Shipment ID:
P.O. Number
Number of Samples: 10

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: John Bakus
3-1572 Lorne St. East
Kamloops British Columbia V2C 1X6
Canada

CC: Bill McKinney

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	10	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ200	10	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS


GEORGE ARCALA
Senior Analyst

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.



www.bureauveritas.com/um

PHONE (604) 253-3158

Kamloops British Columbia V2C 1X6 Canada

September 23, 2019

Part: 1 of 2

VAN19002558.1

		Method	Analyte																			
			WGHT	AG200	AQ200	AQ200	AQ200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	
			Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	3r	Cd	3b	BI	V	Ca	P
			Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	kg	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.6	0.6	0.1	1	0.1	0.1	0.1	0.01	0.001
STD-01	Rock	0.50	3.5	1216.0	>10000	>10000	66.6	4.1	4.9	304	3.89	16.6	2822.1	0.4	53	541.3	5.1	7.8	4	2.40	0.007	
STD-02	Rock	0.43	1.0	792.8	6190.3	2981	71.2	9.4	8.8	1635	3.04	33.9	1682.8	0.2	116	81.2	78.6	2.4	11	2.98	0.014	
STD-03	Rock	0.11	0.6	1358.9	3670.3	5503	>100	48.2	4.4	228	1.76	140.9	1809.4	<0.1	17	136.6	119.9	<0.1	3	0.27	<0.001	
STD-04	Rock	0.26	0.3	442.6	1770.5	2009	29.3	8.9	21.0	3104	4.37	7.5	338.9	0.4	229	46.5	1.1	<0.1	19	4.32	0.100	
STD-05	Rock	0.19	0.2	1238.7	4925.8	2688	18.8	19.2	30.0	1776	5.35	28.1	86.0	0.2	312	72.7	8.6	0.3	53	5.52	0.083	
STD-06	Rock	0.14	0.3	203.5	177.6	319	6.0	8.6	25.5	2931	4.89	14.8	73.3	0.5	305	8.9	0.4	<0.1	23	5.41	0.128	
STD-07	Rock	0.21	0.3	112.8	14.0	75	0.2	23.2	30.4	1195	5.46	1.1	8.0	0.5	259	0.4	0.2	<0.1	223	7.15	0.098	
STD-08	Rock	0.22	0.3	91.2	5.3	99	0.1	21.9	31.8	1220	5.53	1.4	6.1	0.8	176	0.4	0.3	<0.1	163	2.72	0.178	
STD-09	Rock	0.39	0.4	84.7	7.9	46	0.3	7.1	19.9	1126	4.54	6.1	4.7	0.5	279	0.3	2.0	<0.1	29	5.71	0.142	
STD-10	Rock	0.32	0.6	162.7	21.0	151	5.8	9.1	21.6	2420	4.67	28.6	64.1	0.6	266	3.3	3.4	<0.1	25	6.39	0.148	



BUREAU
VERITAS

MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client:

John Bakus

3-1572 Lorne St. East

Kamloops British Columbia V2C 1X5 Canada

Project:

Stump Lake

Report Date:

September 23, 2019

Page:

2 of 2

Part: 2 of 2

CERTIFICATE OF ANALYSIS

VAN19002558.1

	Method Analyte Unit MDL	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Se	Tl	S	Ga	Se	Te
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.06	1	0.6	0.2
STD-01	Rock	<1	4	0.91	22	<0.001	<20	0.06	0.003	0.03	0.9	0.81	0.4	<0.1	4.60	<1	2.3	48.4
STD-02	Rock	<1	4	1.05	41	<0.001	<20	0.06	0.003	0.04	1.7	0.21	1.6	<0.1	1.85	<1	1.2	42.8
STD-03	Rock	<1	14	0.14	71	<0.001	<20	0.05	0.002	0.04	>100	0.25	0.2	<0.1	1.50	<1	<0.5	92.7
STD-04	Rock	2	2	1.56	87	0.001	<20	0.52	0.005	0.40	0.7	0.39	3.8	0.1	3.29	1	0.6	17.3
STD-05	Rock	1	15	2.88	47	0.001	<20	1.02	0.004	0.35	0.6	0.08	16.1	<0.1	2.08	2	0.9	6.4
STD-06	Rock	3	2	1.93	122	0.002	<20	0.72	0.007	0.52	0.6	0.05	4.8	0.2	3.29	2	<0.5	3.9
STD-07	Rock	3	42	3.43	83	0.053	<20	3.25	0.013	0.24	<0.1	<0.01	28.8	0.2	<0.05	9	<0.5	<0.2
STD-08	Rock	6	19	3.13	50	0.015	<20	3.27	0.019	0.13	<0.1	<0.01	13.7	<0.1	<0.05	9	<0.5	<0.2
STD-09	Rock	6	2	2.03	111	0.002	<20	0.73	0.006	0.48	0.3	0.07	6.7	0.1	0.34	1	<0.5	<0.2
STD-10	Rock	4	2	2.08	88	0.002	<20	0.58	0.005	0.45	18.2	0.06	5.8	0.1	2.34	1	<0.5	3.7



**BUREAU
VERITAS**

MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

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

Client: **John Bakus**
3-1572 Lorne St. East
Kamloops British Columbia V2C 1X5 Canada

Project: Stump Lake
Report Date: September 23, 2019

Page: 1 of 1

Part: 1 of 2

QUALITY CONTROL REPORT

VAN19002558.1

	Method	WGHT	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
Pulp Duplicates																					
STD-07	Rock	0.21	0.3	112.8	14.0	75	0.2	23.2	30.4	1195	5.46	1.1	8.0	0.5	259	0.4	0.2	<0.1	223	7.15	0.098
REP STD-07	QC		0.3	114.1	14.9	85	0.2	24.0	32.1	1236	5.54	1.2	5.8	0.5	270	0.4	0.2	<0.1	232	7.37	0.103
Reference Materials																					
STD DS11	Standard		16.1	158.4	155.8	377	1.9	85.6	14.6	1035	3.07	45.4	81.2	8.6	75	2.6	6.8	13.1	49	1.05	0.072
STD OREAS262	Standard		0.7	122.5	62.7	165	0.5	69.0	30.0	580	3.54	40.1	58.9	10.7	40	0.7	2.2	1.3	25	3.27	0.043
STD DS11 Expected			13.9	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.65	67.3	2.37	7.2	12.2	50	1.063	0.0701
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	65	9.33	36	0.61	3.39	1.03	22.5	2.98	0.04
BLK	Blank		<0.1	<0.1	0.3	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.001
Prep Wash																					
ROCK-VAN	Prep Blank		0.9	2.3	1.4	26	<0.1	1.0	3.4	476	1.89	0.7	<0.5	2.7	24	<0.1	<0.1	<0.1	24	0.56	0.039
ROCK-VAN	Prep Blank		1.1	3.0	1.3	29	<0.1	0.9	3.6	539	2.02	0.9	<0.5	2.8	19	<0.1	<0.1	<0.1	23	0.63	0.042



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

Client: **John Bakus**
3-1572 Lorne St. East
Kamloops British Columbia V2C 1X5 Canada

Project: Stump Lake
Report Date: September 23, 2019

Page: 1 of 1

Part: 2 of 2

QUALITY CONTROL REPORT

VAN19002558.1

		Method	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	AG200	
		Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Se	Ti	S	Ga	Se	Te
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
		MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.01	0.05	1	0.5	0.2
Pulp Duplicates																			
STD-07	Rock		3	42	3.43	83	0.053	<20	3.25	0.013	0.24	<0.1	<0.01	28.8	0.2	<0.05	9	<0.5	<0.2
REF STD-07	QC		3	47	3.53	93	0.057	<20	3.29	0.014	0.25	<0.1	<0.01	30.2	0.2	<0.05	10	<0.5	<0.2
Reference Materials																			
STD DS11	Standard		23	65	0.84	459	0.099	<20	1.16	0.073	0.41	2.9	0.30	3.5	5.9	0.28	5	2.4	5.1
STD OREAS252	Standard		17	48	1.29	269	0.003	<20	1.49	0.074	0.35	0.1	0.21	3.9	0.6	0.29	5	0.5	0.3
STD DS11 Expected			18.6	61.5	0.85	417	0.0976		1.129	0.0694	0.4	2.9	0.26	3.1	4.9	0.2835	4.7	2.2	4.56
STD OREAS252 Expected			15.9	41.7	1.17	248	0.003		1.204	0.071	0.312	0.13	0.17	3.24	0.47	0.263	3.73	0.4	0.23
	Blank	BLK	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.01	<0.05	<1	<0.5	<0.2
Prep Wash																			
ROCK-VAN	Prep Blank		7	5	0.41	69	0.095	<20	0.83	0.095	0.10	<0.1	<0.01	2.6	<0.1	<0.05	4	<0.5	<0.2
ROCK-VAN	Prep Blank		7	5	0.45	63	0.089	<20	0.87	0.096	0.10	<0.1	<0.01	2.8	<0.1	<0.05	4	<0.5	<0.2