

TITLE PAGE

BC Geological Survey  
Assessment Report  
37582



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)]: TECHNICAL - PROSPECTING

TOTAL COST: \$2498.55

AUTHOR(S): KEN ELLERBECK

SIGNATURE(S):

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

YEAR OF WORK: 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): Event 5697867 MAY 21, 2018

PROPERTY NAME: BRASSIE CREEK

CLAIM NAME(S) (on which the work was done): 1050121 BRASSIE JOIN

COMMODITIES SOUGHT: Au Ag Pb Zn Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092INW018

MINING DIVISION: KAMLOOPS

NTS/BCGS: 921.075

LATITUDE: 50 ° 44 '28.1 " LONGITUDE: -121 ° 1 '15.7 " (at centre of work)

OWNER(S):

1) KEN ELLERBECK

2)

MAILING ADDRESS:

255 BATTLE STREET WEST KAMLOOPS BC V2C 1G8

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

1) KEN ELLERBECK

2)

MAILING ADDRESS:

255 BATTLE STREET WEST KAMLOOPS BC V2C 1G8

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

Limestone, Marble, Diorite, Basalt, Skarn, Magnetite, Hematite, Garnet, Epidote, Calcite, Silica, Malachite, Azurite

Skarn-type magnetite-copper mineralization, Skarn, Silicification, Oxidation

Massive, Vein, Disseminated Skarn, Industrial Min. Type: K03: Fe skarn, K02: Pb-Zn skarn

Cu Zn Pb Silver, Gold, Iron, Magnetite.Upper Triassic Nicola Undefined Formation riassic-Jurassic Guichon Creek Batholith

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

2476, 2772, 2773, 3506, 3743, 5730, 7531, 10148, 13329, 21625, \*24809, 25285, 25502

Next Page

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			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area) 200M X 400M</b>		1050121	\$2498.55
<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			
<b>TOTAL COST:</b>			<b>\$2498.55</b>

**KEN ELLERBECK**

(Owner & Operator)

**TECHNICAL EXPLORATION REPORT**

(Event 5697867)

on

**PROSPECTING and EXPLORING**

Work done on

Tenures 1050121

of the 4 Claim

**BRASSIE CLAIM GROUP**

Kamloops Mining Division  
BCGS Maps  
092I.075

Centre of Work  
UTM 10 639632E 5622901N

**AUTHOR KEN ELLERBECK, PMP**

**REPORT SUBMITTED June 20, 2018**

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**TABLE OF CONTENTS**

<i>Introduction</i>	3
<b>Purpose</b>	3
<b>Access and Location</b>	3
<b>Property Description</b>	3
<b>History</b>	7
<b>Summary of Work Done</b>	8
<i>Regional and Property Geology</i>	36
<i>Technical Data and Interpretation</i>	42
<i>Interpretation and Conclusions</i>	42
<i>Summary and Recommendations</i>	42
<i>Itemized Cost Statement</i>	44
<i>Statement of Qualifications</i>	45
<i>Selected References</i>	46

**ILLUSTRATIONS**

<i>Figure 1 Location Map</i>	4
<i>Figure 2 Claim Location Google Earth</i>	5
<i>Figure 3 Regional Location Map Google Earth</i>	5
<i>Figure 4 Claim and Index - Map ARIS MapBuilder</i>	6,7
<i>Figure 5 Sample Location Area</i>	10,11
<i>Figure 6 Location and Typical Rock Pictures</i>	13
<i>Figure 7 BRASSIE Regional Geology</i>	36
<i>Figure 8 BRASSIE Local Geology</i>	38
<i>Figure 9</i>	

**TABLES**

<i>Table I: Particulars of Grab Samples 2018</i>	12,40
<i>Table II: Summarized Assay Results- Grab Samples-Ellerbeck (2018) – BRASSIE</i>	41

**APPENDIX**

<i>Sample Preparation and Method of Analysis</i>	47
<i>Certificate of Analysis-Assay Results</i>	49

## INTRODUCTION

### PURPOSE

In May 2018, a prospecting program was completed on Tenure 1050121 of the 4 Claim BRASSIE CLAIM GROUP. The purpose of the prospecting program was to locate, if possible, historic reported geological features (typical Cu, Au, Ag bearing structures in particular) as well as to prospect for unidentified outcrops and showings of significance. Information for this report was obtained from sources cited under Selected References and from a property examination made on May 06, 2018.

### ACCESS AND LOCATION

Road access to the Property from Kamloops is westward via Highway #1 for 40 kilometres to the Wallachin junction. Tenure 105021, is six (6) kilometres south of the junction and is accessible via a series of graveled and dirt roads and crossing the Thompson River and both the Canadian National Railroad main line and the Canadian Pacific Railway railroad main line from Vancouver to Kamloops and beyond. Secondary roads provide access to the northern and the southern portions of the Property.

The Property is located 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°C and average 25°C with the winter temperatures reaching a low of -10°C and averaging 8°C. On the Brassie Claim Group light to moderate snow cover on the ground could be from December to April and would not hamper a year-round exploration program.

Kamloops, an historic mining center could 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.

### PROPERTY DESCRIPTION

#### BRASSIE Claim Group

Tenures were acquired by staking by the Owner. \*Good Until dates are after assessment filed.

Title Number	Claim Name/Property	Issue Date	Good To Date	New Good To Date	# of Days Forward	Area in Ha	Applied Work Value	Submission Fee
1039494	1014024 East	2012/OCT/27	2019/FEB/01	2019/DEC/08	310	81.79	\$ 1088.53	\$ 0.00
1039496	1011864 Brassie	2011/OCT/26	2019/FEB/01	2019/DEC/08	310	40.91	\$ 694.57	\$ 0.00
1050121	BRASSIE JOIN	2017/FEB/18	2019/FEB/01	2019/DEC/08	310	102.26	\$ 434.25	\$ 0.00
1056913	BRASSIE WESTOF	2017/DEC/08	2018/DEC/08	2019/DEC/08	365	40.91	\$ 204.53	\$ 0.00

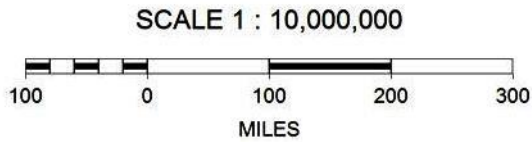


Figure 1 BRASSIE CLAIM LOCATION MAP

Figure 2 BRASSIE CLAIM LOCATION MAP

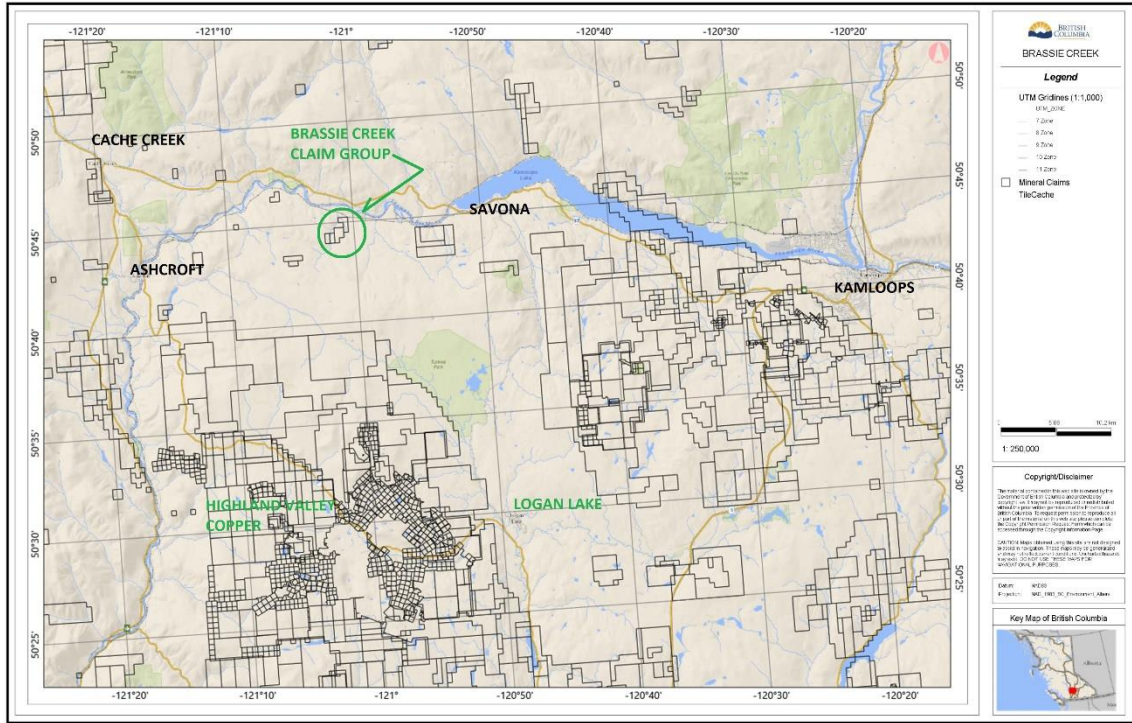


Figure 3 Regional Location Map (Base Map GOOGLE EARTH)

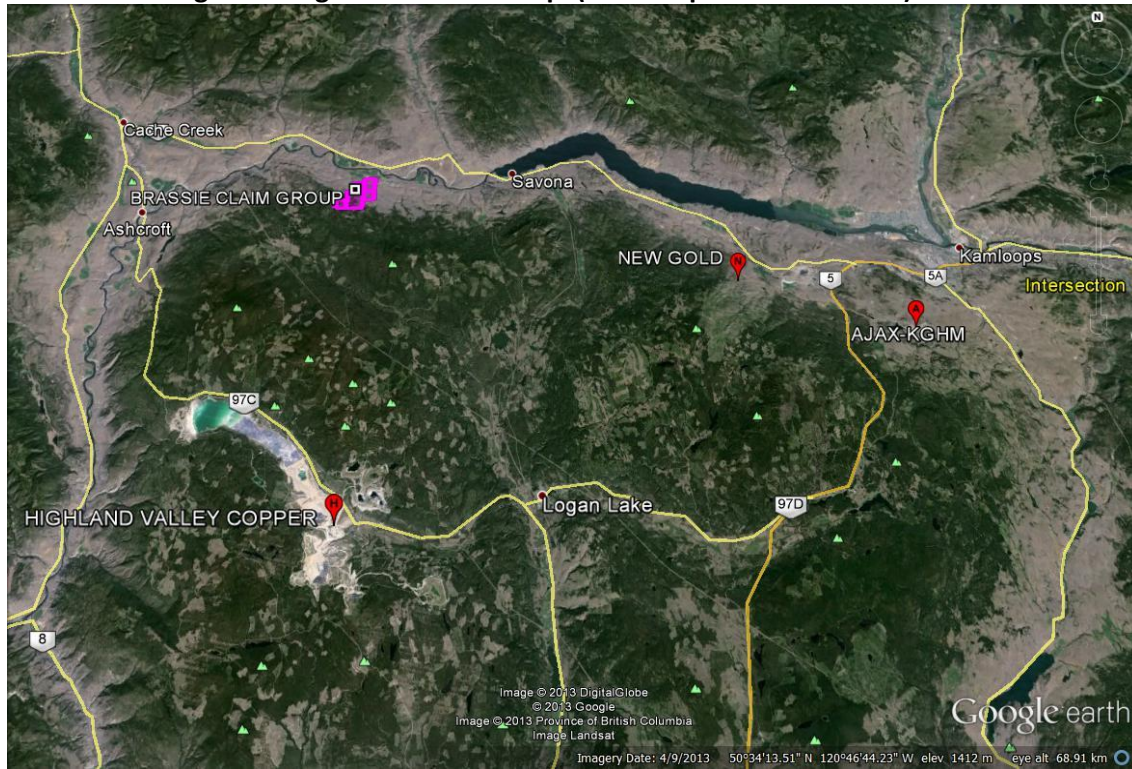


Figure 4 BRASSIE Claim Map and Index Map – UTM 10 – iMapBC

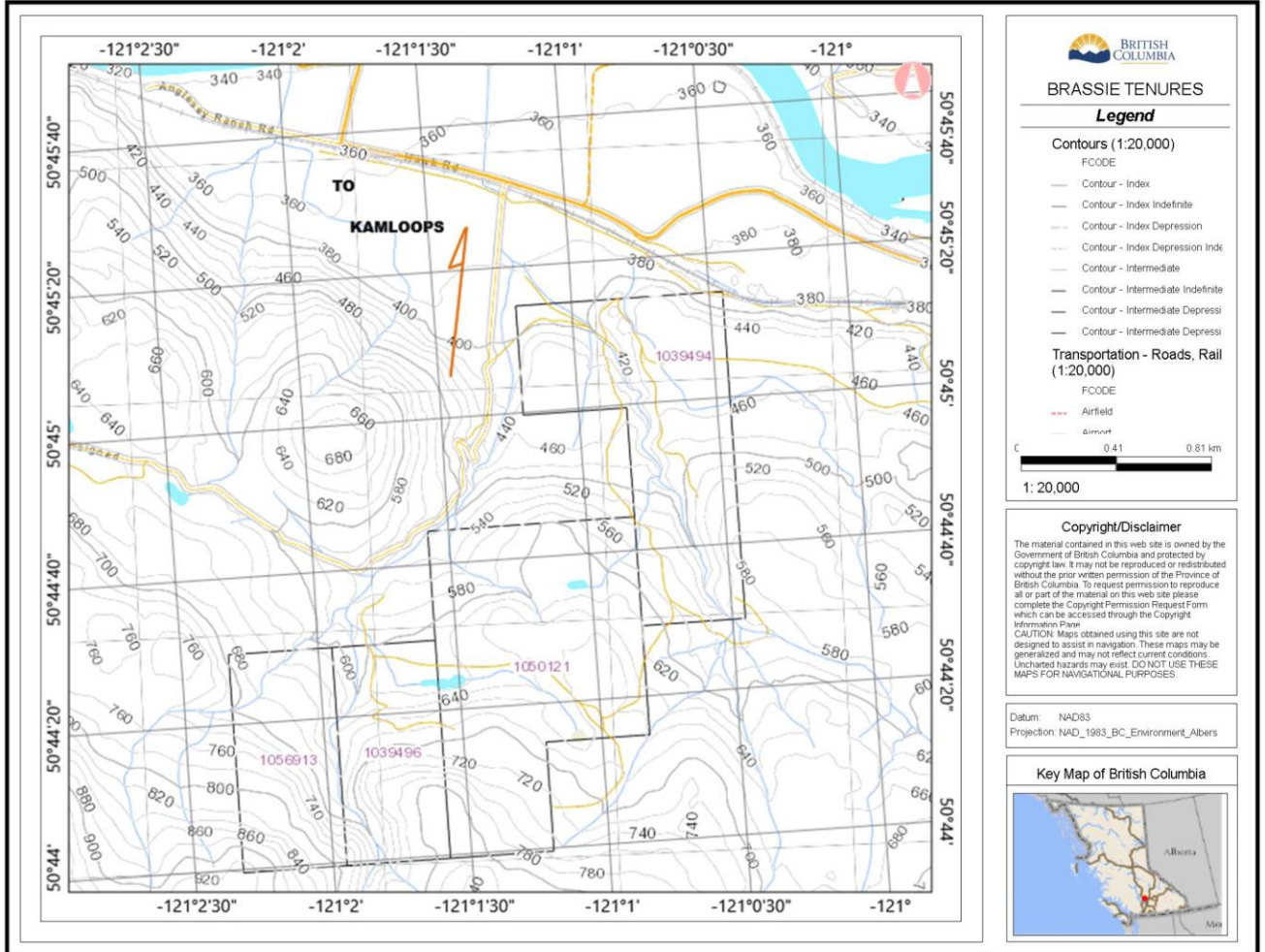
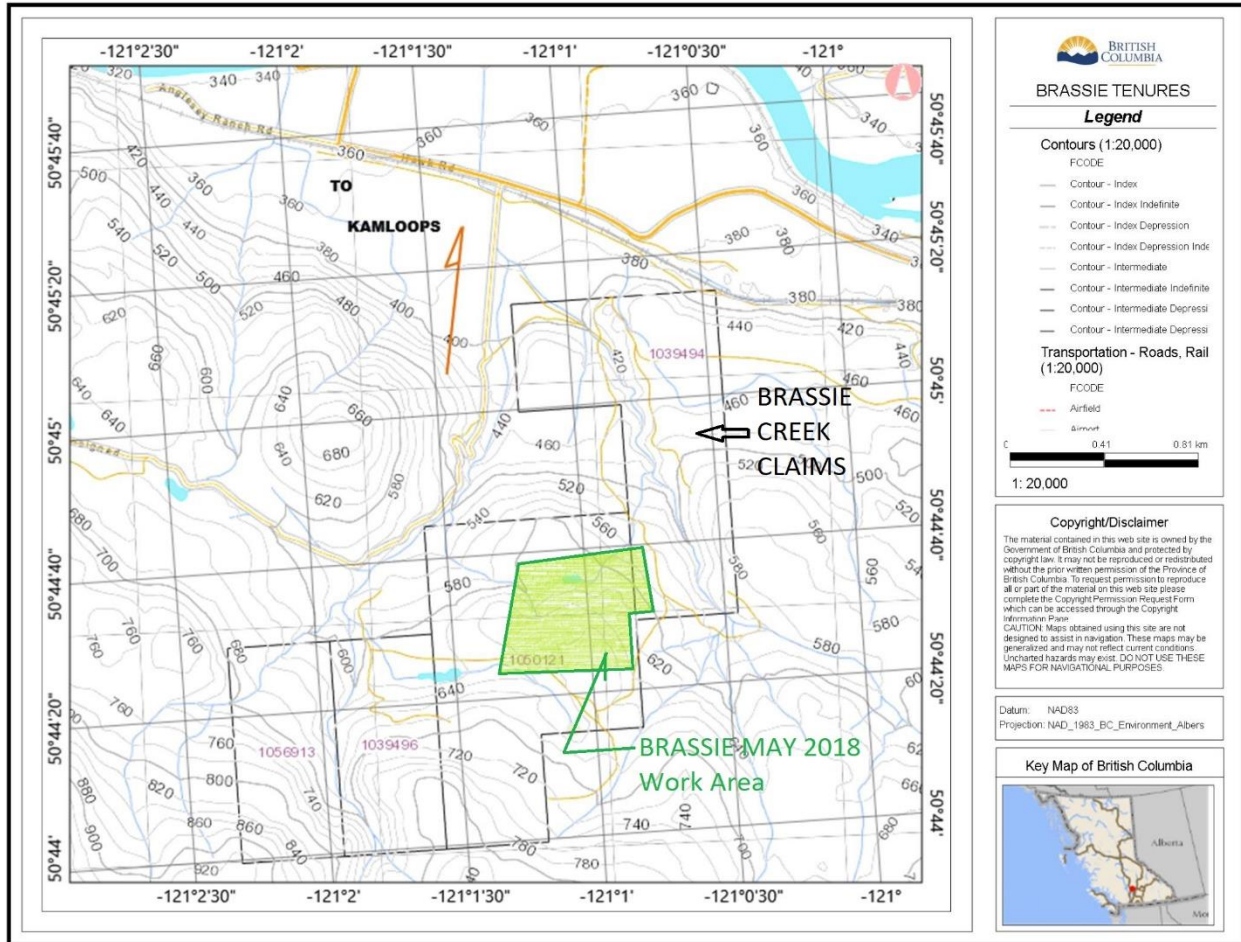




Figure 4 BRASSIE Claim Map and Index Map – UTM 10 – iMapBC



**HISTORY**

Exploration by others on land near the current BRASSIE Claim Group has been reported. Brassie Claim Group was acquired by online staking by the Author and Current Owner. Tenure 1039494 was acquired October 27, 2012, Tenure 1039496 was acquired October 26, 2011. Tenure 1050121 was acquired February 18, 2017. Tenure 1056913. In 2012 a Geological Assessment report (AR33229) was filed covering Structural Analysis conducted on areas contained in the current claims. Prospecting was conducted on areas within the current tenures in September 2013 (AR 34217).

**Mineral File Number:** 092INW055

**Name:** CHIEF

**Mineral File Number:** 092INW061

**Name:** WAL

**Mineral File Number:** 092INW018

**Name:** BRASSIE CREEK

The above MINFILE occurrences are within the BRASSIE CLAIM GROUP.

*From Sookochoff Consultants Inc. August 26, 2012;*

**BRASSIE CREEK** prospect (*Fe skarn: Pb-Zn skarn*)

**MINFILE 092INW018; Within Tenure 1039496**

*Previous work consisted of a VLF-EM survey, induced polarization survey, geological mapping, three diamond-drill holes totalling 230 metres and a ground magnetometer survey in 1970-71 on behalf of Supertest Investments and Petroleum Ltd. BP Minerals diamond drilled six holes in 1973 but no report was filed. Between the period 1974 to 1987, work on behalf of Bethlehem Copper Corporation, BP Minerals Limited, Ninja Resources Ltd., MineQuest Exploration Associates Ltd. and QPX Minerals Inc., consisted of ground and/or airborne electromagnetic and magnetic surveys, induced polarization surveys, percussion drilling, soil geochemistry and geological mapping mainly focused on the Chief (092INW055) claims area which were adjacent to the Geo claims (now called the Brassie Creek showing). In 1991, geological mapping was carried out on the Brassie Creek showing area on behalf of Amex Exploration Services Ltd. In 1996 and 1997, geological mapping, soil geochemistry, IP and magnetic surveys were carried out on behalf of Christopher James Gold Corp. on the Brassie Creek property. The property was drilled in 1998 where the first hole drilled intersected 3.62 metres grading 11.02 grams per tonne silver, 0.24 per cent copper and 5.9 per cent zinc. A 2.35-metre interval above this intersection yielded 1.24 grams per tonne gold (Press Release, Christopher James Gold Corp., June 10, 1999). The first hole intersected 14 metres grading 0.23 gram per tonne gold, 7.25 grams per tonne silver, 0.24 per cent copper and 1.9 per cent zinc.*

**CHIEF** showing (*Alkalic porphyry Cu-Au*)

**MINFILE 092INW055; Within Tenure 1039494**

*Previous work on the Geo claims (now called Brassie Creek (092INW018) and which adjoined the Chief claims) consisted of a VLF-EM survey, induced polarization survey, geological mapping, three diamond-drill holes totalling 230 metres and a ground magnetometer survey in 1970-71 on behalf of Supertest Investments and Petroleum Ltd. BP Minerals diamond drilled 6 holes in 1973 but no report was filed. Between the period 1974 to 1987, work on the Chief property on behalf of Bethlehem Copper Corporation, BP Minerals Limited, Ninja Resources Ltd., MineQuest Exploration Associates Ltd. and QPX Minerals Inc. consisted of ground and/or airborne electromagnetic and magnetic surveys, induced polarization surveys, percussion drilling, soil geochemistry and geological mapping.*

**WAL** showing (*Porphyry Cu +/- Mo +/- Au*)

**MINFILE 092INW061; Within Tenure 1039494**

*A six-hole, 597 metre percussion drilling program was carried out in 1979 by Bethlehem Copper Corporation on the Wal property in order to assess the mineral potential around the periphery of a gossan and to attempt to intersect a mineralized intrusive breccia (Chief, 092INW055) which crops out on the west bank of a creek near the south part of the Wal claim. Hole W-79-1, the northernmost hole, was drilled in the bed of a creek north of the first gossan outcrop. It intersected dark green Nicola volcanics and felsic intrusive quartz porphyry. Both units show strong pyrite mineralization with traces of chalcopyrite and malachite. Copper contents vary from 0.004 to 0.192 per cent with higher grades near the intrusive contact (Assessment Report 7736).*

*In 1978, Bethlehem Copper Corporation performed geological mapping, an electromagnetic survey over 5.6 kilometres and a geochemical survey.*

## **SUMMARY OF WORK DONE 2018**

Prospecting was conducted within Tenure 1050121 on May 06, 2018. (Figure 4 Index - Work Areas) to explore for reported geological features and mineral showings. Specifically, the writer was looking for evidence of some trenching carried out in 2005 by Dawson (Christopher James Gold) on areas of combined Mag High, IP interest and Cu Au geochemical.

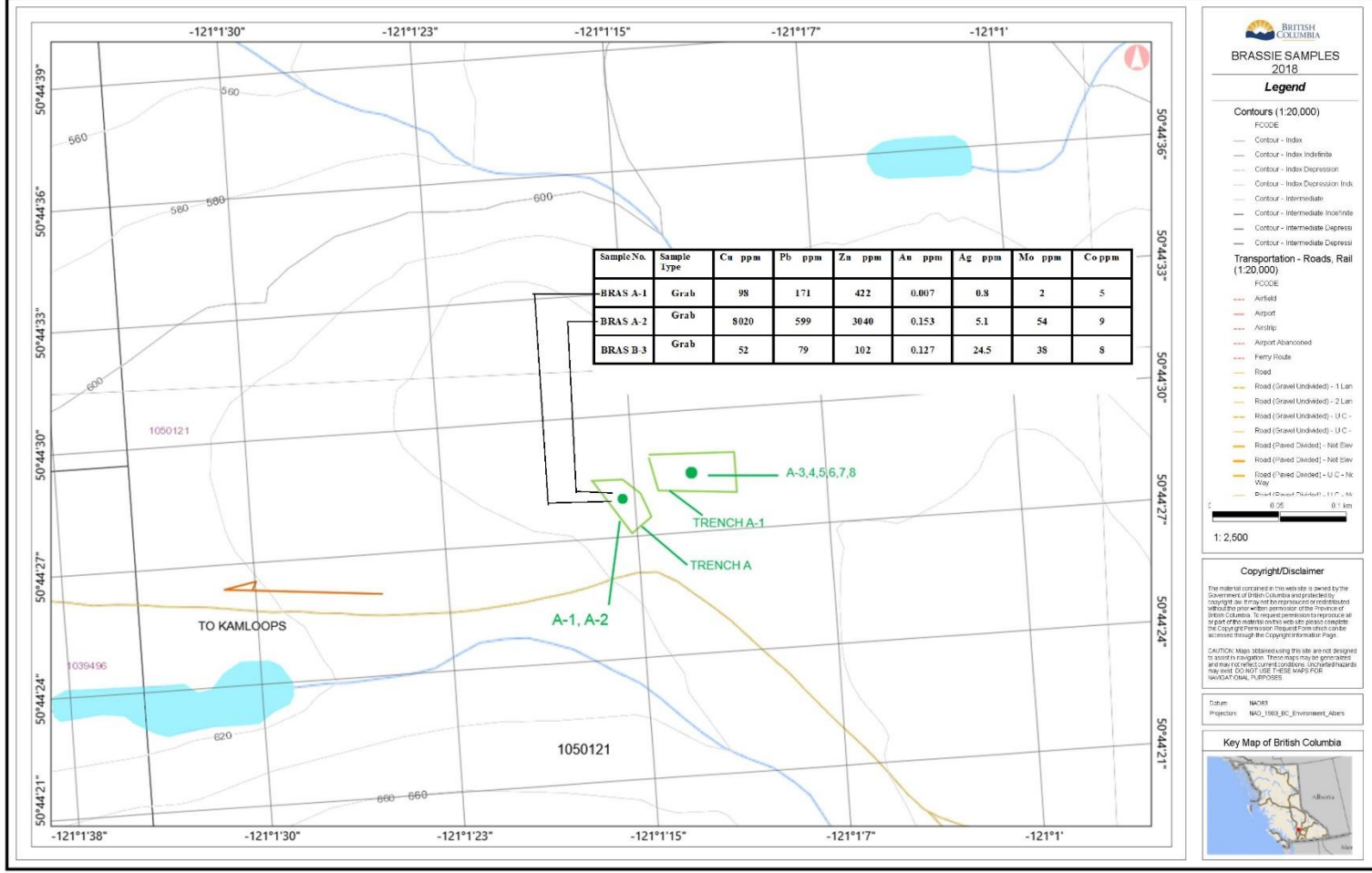
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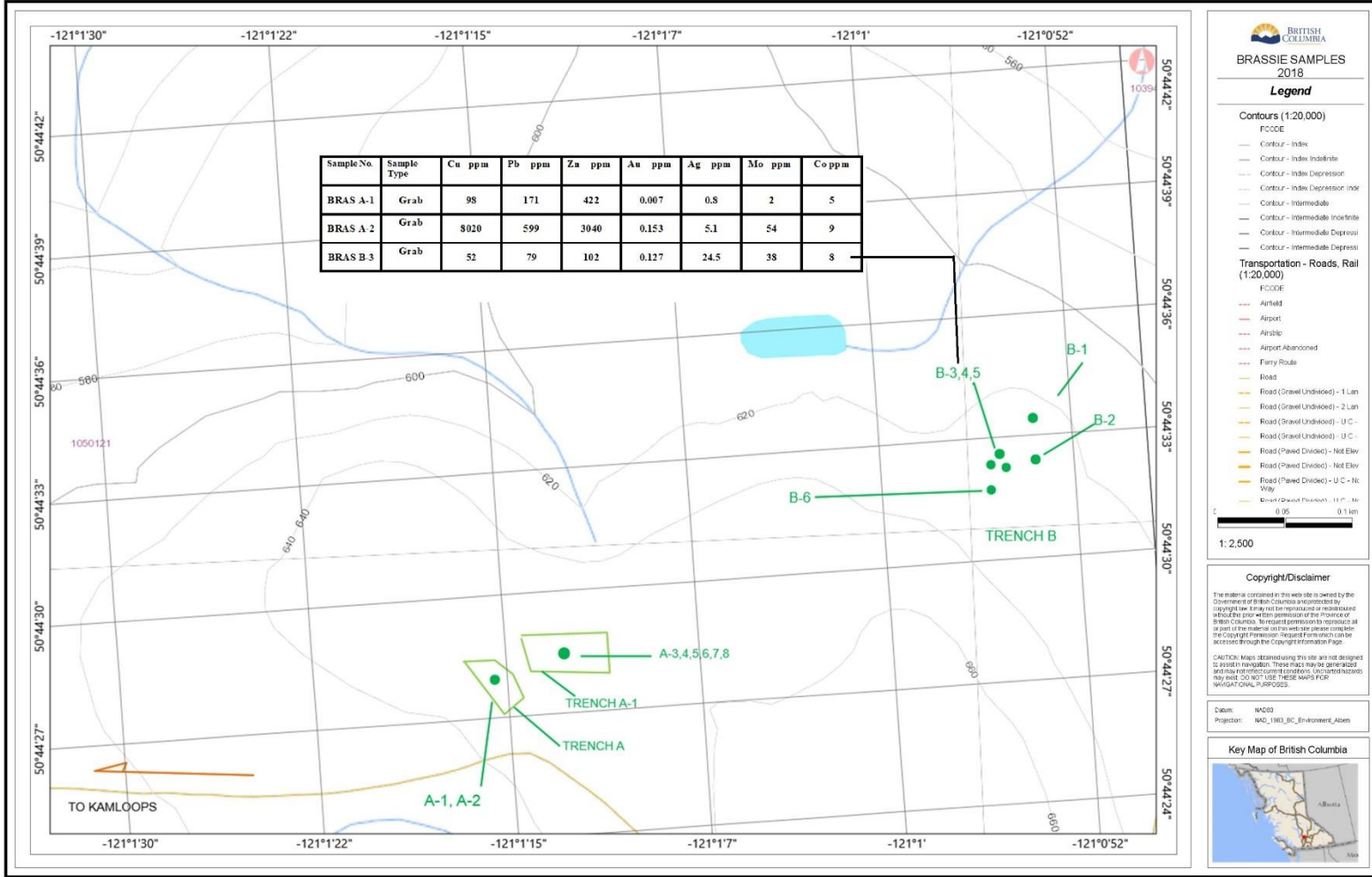
The trench locations had been successfully reclaimed and locating the trenches required extensive traverse of the suggested trench locations area in the 2018 Work Area. Of interest was rock outcrop adjacent the trenches, as well as any float remaining from the 2005 trenching work.

Three (3) of the locations of a 2005 trenching program were located and some float and bedrock were observed and sampled.

One (1) field day was spent on 1050121 including prospecting and travelling to and from the property. One (1) day was spent researching reference material, and a further two (2) days were spent compiling data, drafting and writing this report.

Figure 5 Sample Location Area Maps





**2018 WORK PROGRAM**

**Sampling Program** - The author was on the BRASSIE Claim Group in May 2018 to select rock samples for verification of the reported mineralization and geology on the Property and to explore unidentified outcrops near reported 2005 Trenching.

Fourteen (14) rock grab samples were taken within the 2018 work area and three (3) grab samples were submitted for assay.

**Table I. Particulars of 14 Grab Samples taken by ELLERBECK (2018) BRASSIE Group**

LOCATION / SAMPLE #	UTM LOCATION		DESCRIPTION
	All OUTCROP unless indicated		
BRAS A-1 To Lab	639632	5622901	Trench "A" Skarn, Float, Hematite, extremely hard, highly altered, siliceous, garnet? No visible metal, heavy
BRAS A-2 To Lab	639632	5622901	Trench "A" Skarn, Float, Highly altered, visible metal, magnetite, iron, spalerite, malachite stain, highly siliceous, heavy
BRAS A-3	639655	5622911	Trench "A-1", Float, Skarn, highly altered limestone, visible metal, iron veinlets, magnetite, hematite
BRAS A-4	639655	5622911	Trench "A-1", Float, Skarn, highly altered limestone, quartz veins, iron stain
BRAS A-5	639655	5622911	Trench "A-1", Float, Skarn, highly altered limestone, iron stain, bleached to white/green, contact with diorite (pink/green)
BRAS A-6	639655	5622911	Trench "A-1", Float, very heavy pink diorite? In contact with magnetite/hematite, highly siliceous
BRAS A-7	639687	5622917	Trench "A-1", Float, very heavy, very hard, fractured, magnetite-hematite, contact with diorite, highly altered, vuggy
BRAS A-8	639687	5622917	Trench "A-1", Float, limestone, minor iron staining
BRAS B-1	640050	5623083	Trench "B", Diorite, gray-green, siliceous, E-W strike, 20°S dip
BRAS B-2	640049	5623050	Trench "B", Diorite, gray-green, siliceous, E-W strike, 20°S dip, pink diorite veining
BRAS B-3 To Lab	640040	5623040	Trench "B", Float, limestone, highly altered, iron veining, visible metal, quartz inclusions, magnetite, hematite
BRAS B-4	640038	5623040	Trench "B", Float, rotten/crumbly, iron stain, visible metal, highly altered, accreted/conglomerate, quartz inclusions, hematite
BRAS B-5	640026	5623040	Trench "B", Float, Diorite, quartz veining, brown/pink, homogenous
BRAS B-6	640016	5623038	Trench "B", Float, highly altered diorite, quartz inclusions, no visible metal, contact with volcanic/andesite

Sample No.	Sample Type	Cu ppm	Pb ppm	Zn ppm	Au ppm	Ag ppm	Mo ppm	Co ppm
BRAS A-1	Grab	98	171	422	0.007	0.8	2	5
BRAS A-2	Grab	8020	599	3040	0.153	5.1	54	9
BRAS B-3	Grab	52	79	102	0.127	24.5	38	8

**FIGURE 6 LOCATION AND TYPICAL ROCK PICTURES  
BRAS A-1 TYPICAL ROCK PICTURE**





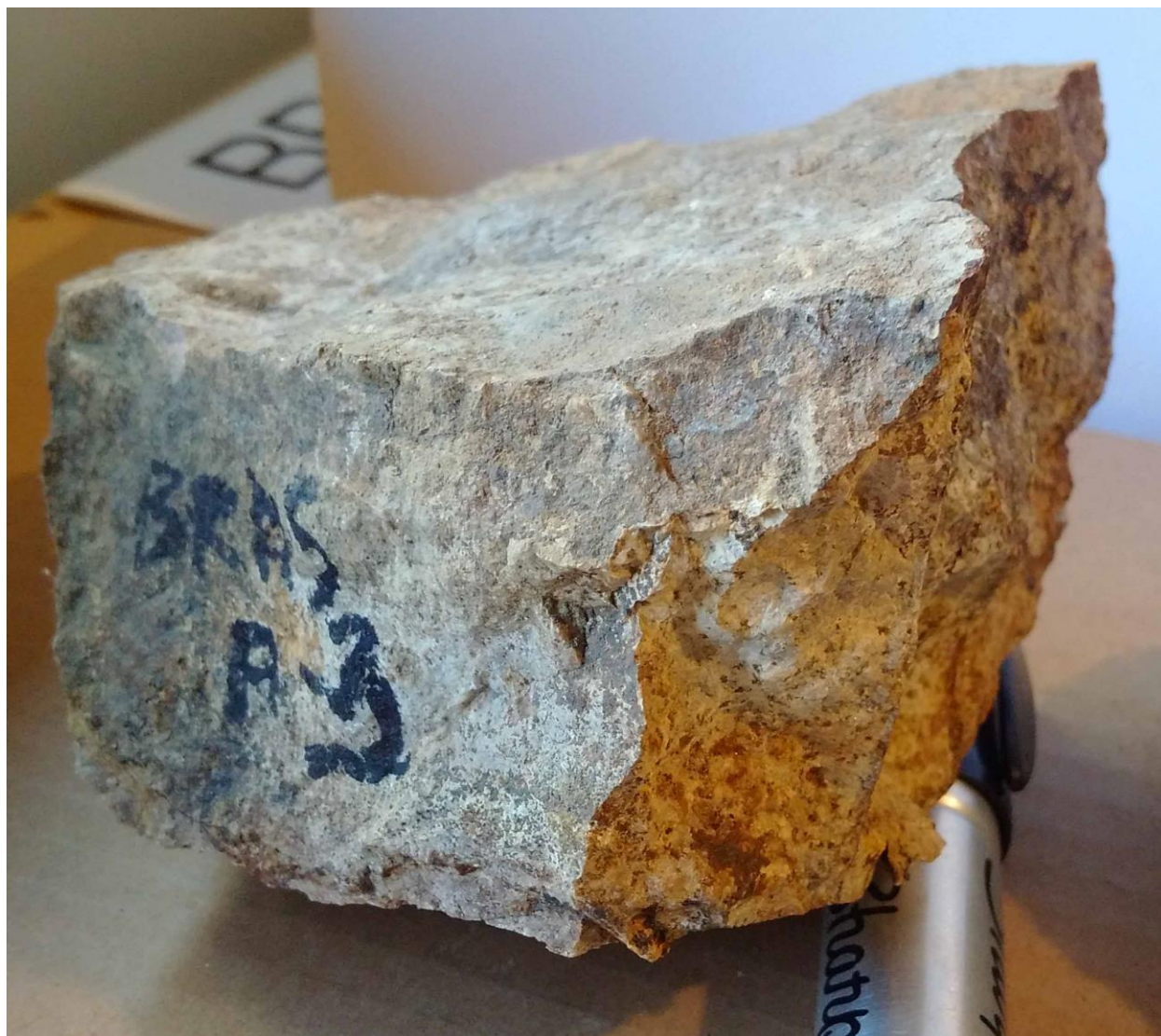


**BRAS A-2 TYPICAL ROCK PICTURE**





**BRAS A-3 TYPICAL ROCK PICTURE**



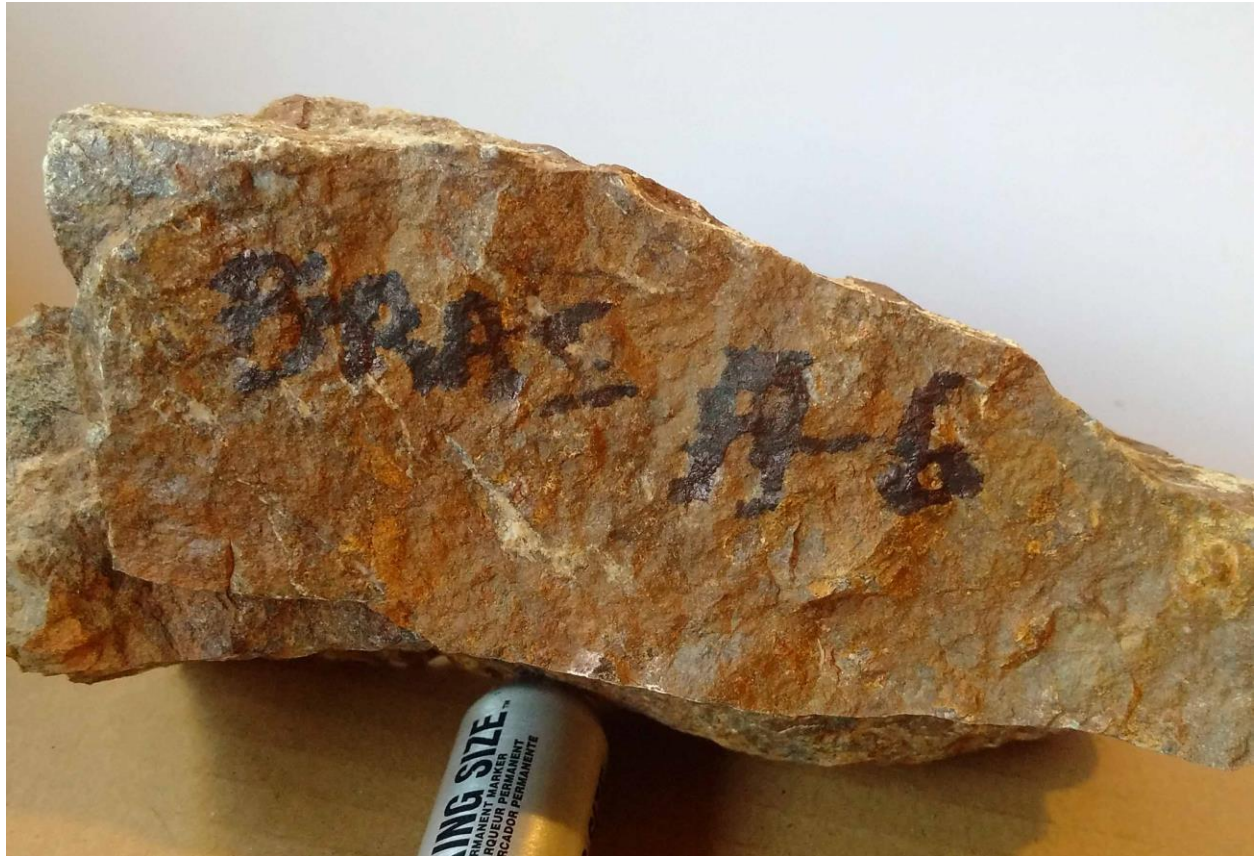
**BRAS A-4 TYPICAL ROCK PICTURE**



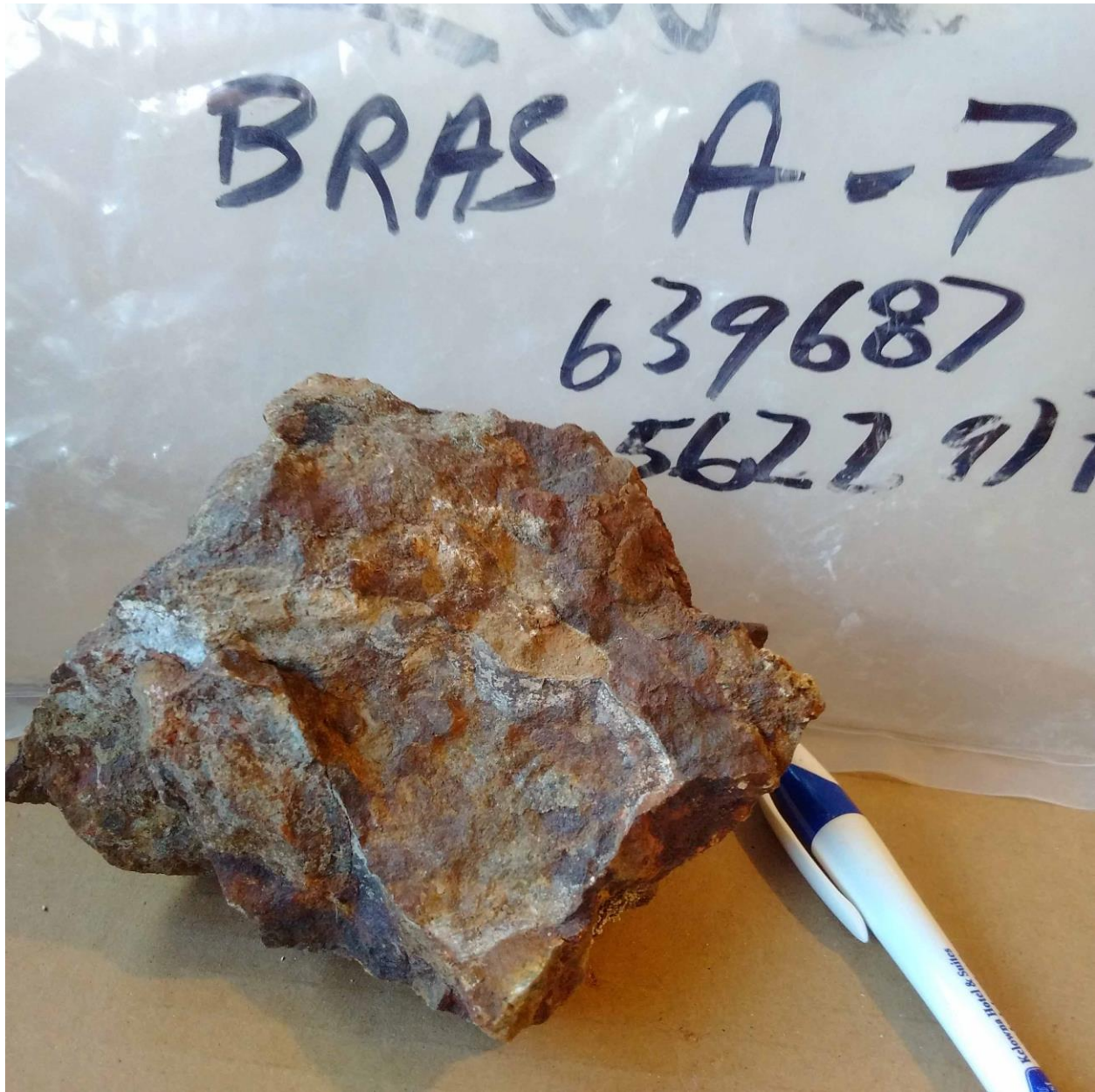
**BRAS A-5 TYPICAL ROCK PICTURE**



**BRAS A-6 TYPICAL ROCK PICTURE**



BRAS A-7 TYPICAL ROCK PICTURE



**BRAS A-8 TYPICAL ROCK PICTURE**  
**LIMESTONE**





**LIMESTONE ABOVE TRENCH "A"**



**LIMESTONE ABOVE TRENCH "A-1"**



**LIMESTONE ABOVE TRENCH "A-1"**

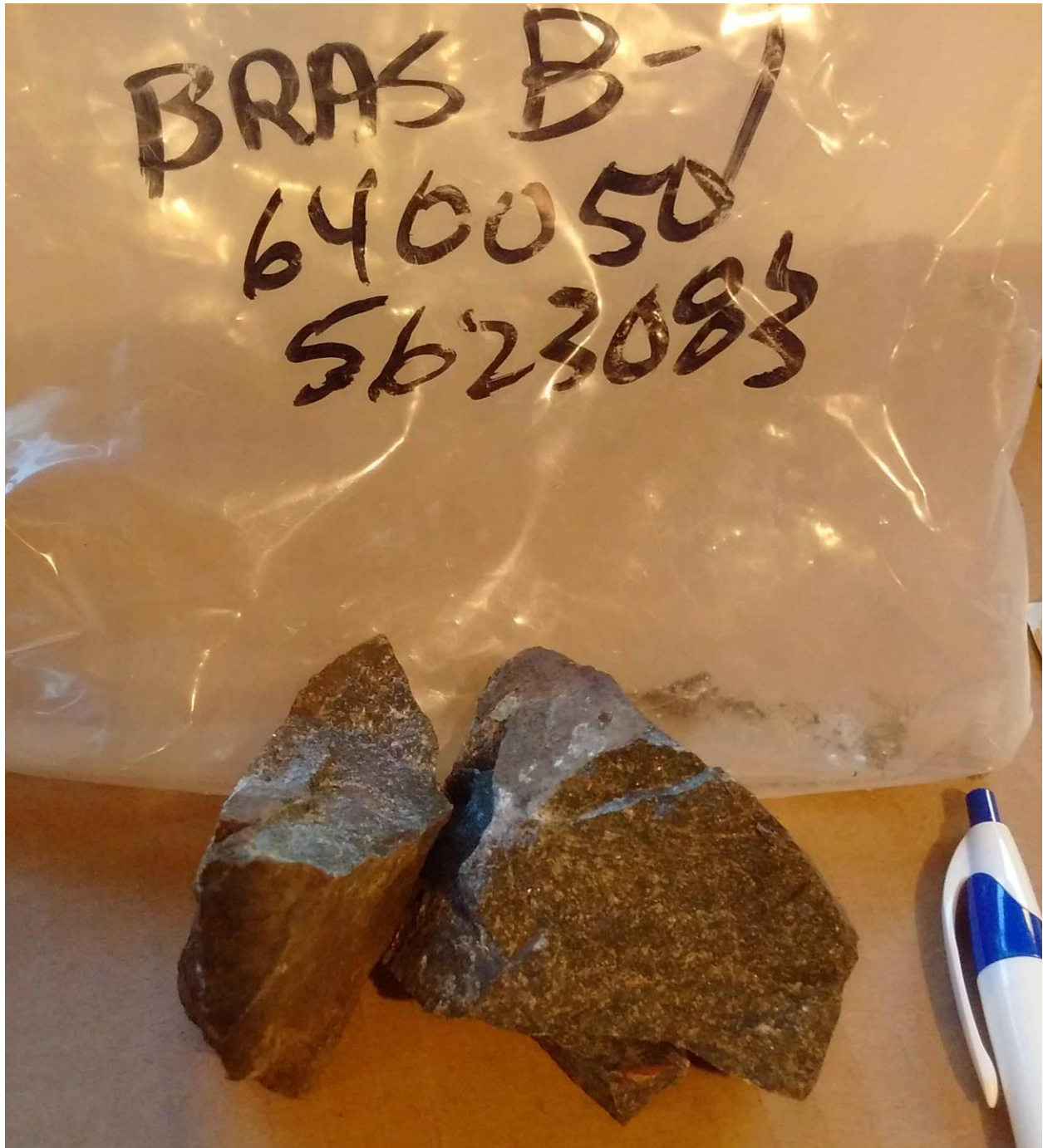


**BRAS TRENCH "B"**



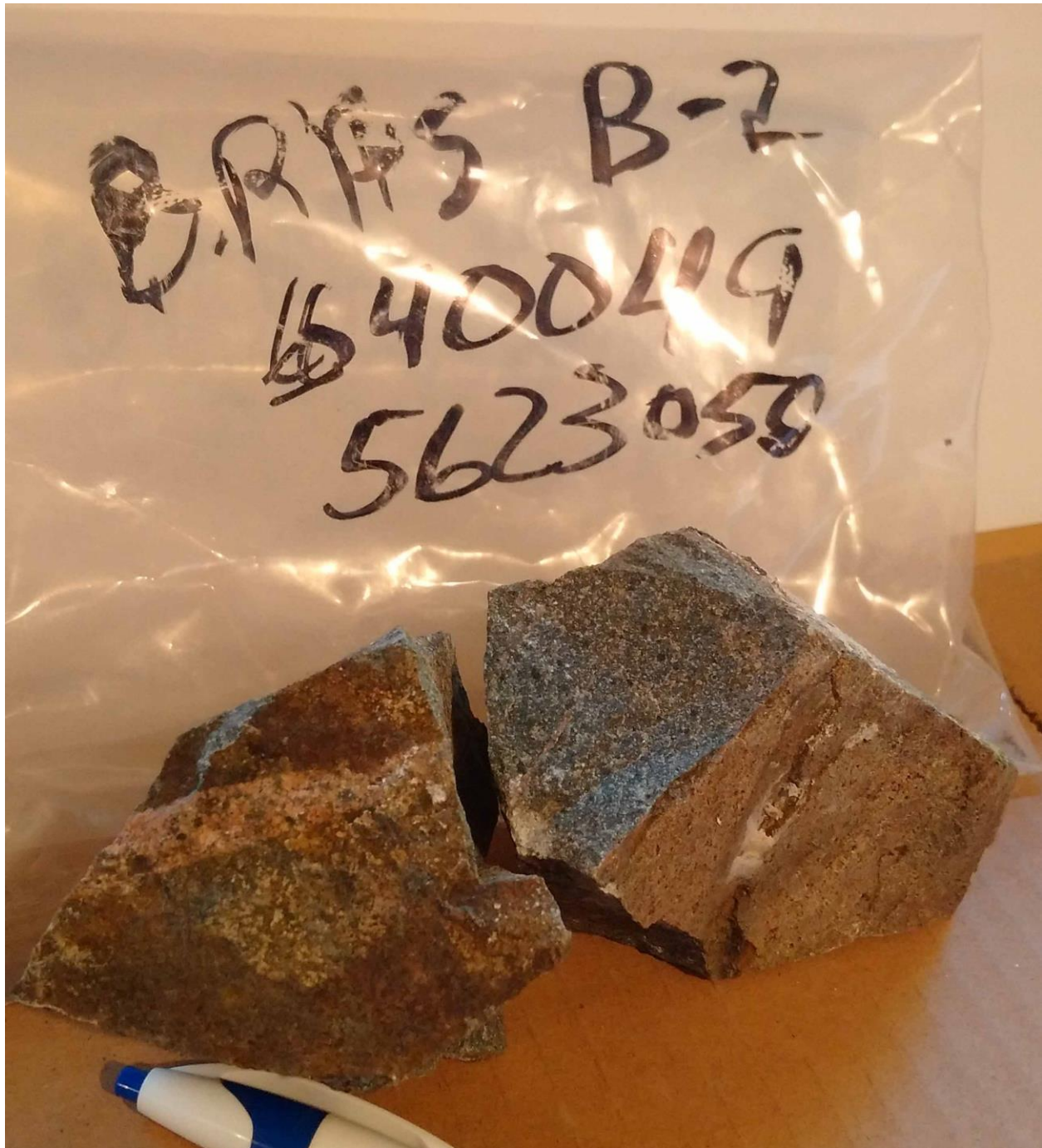
**BRAS B-1 TYPICAL ROCK PICTURE**





**BRAS B-2 TYPICAL ROCK PICTURE**

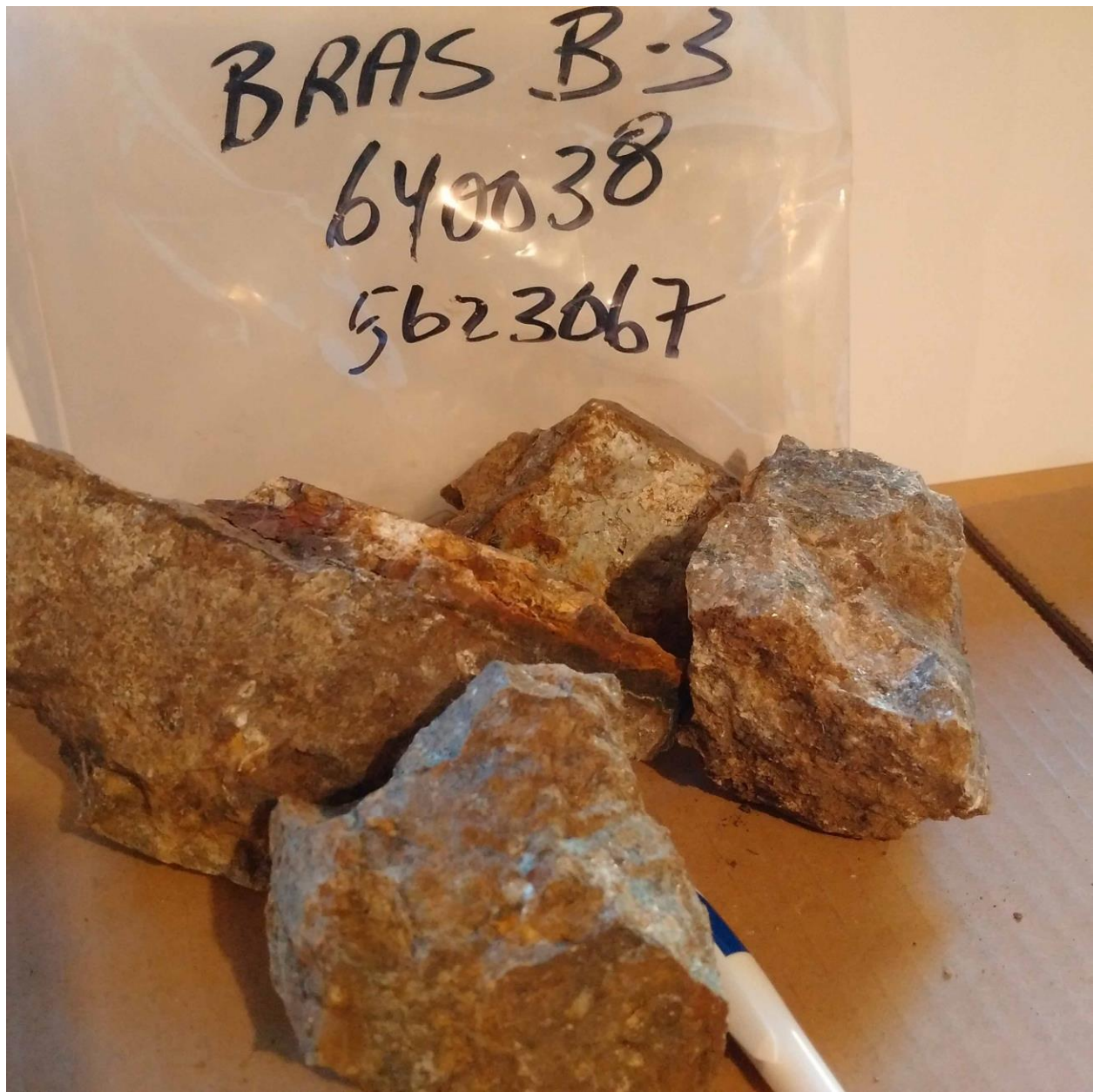






**BRAS B-3 TYPICAL ROCK PICTURE**

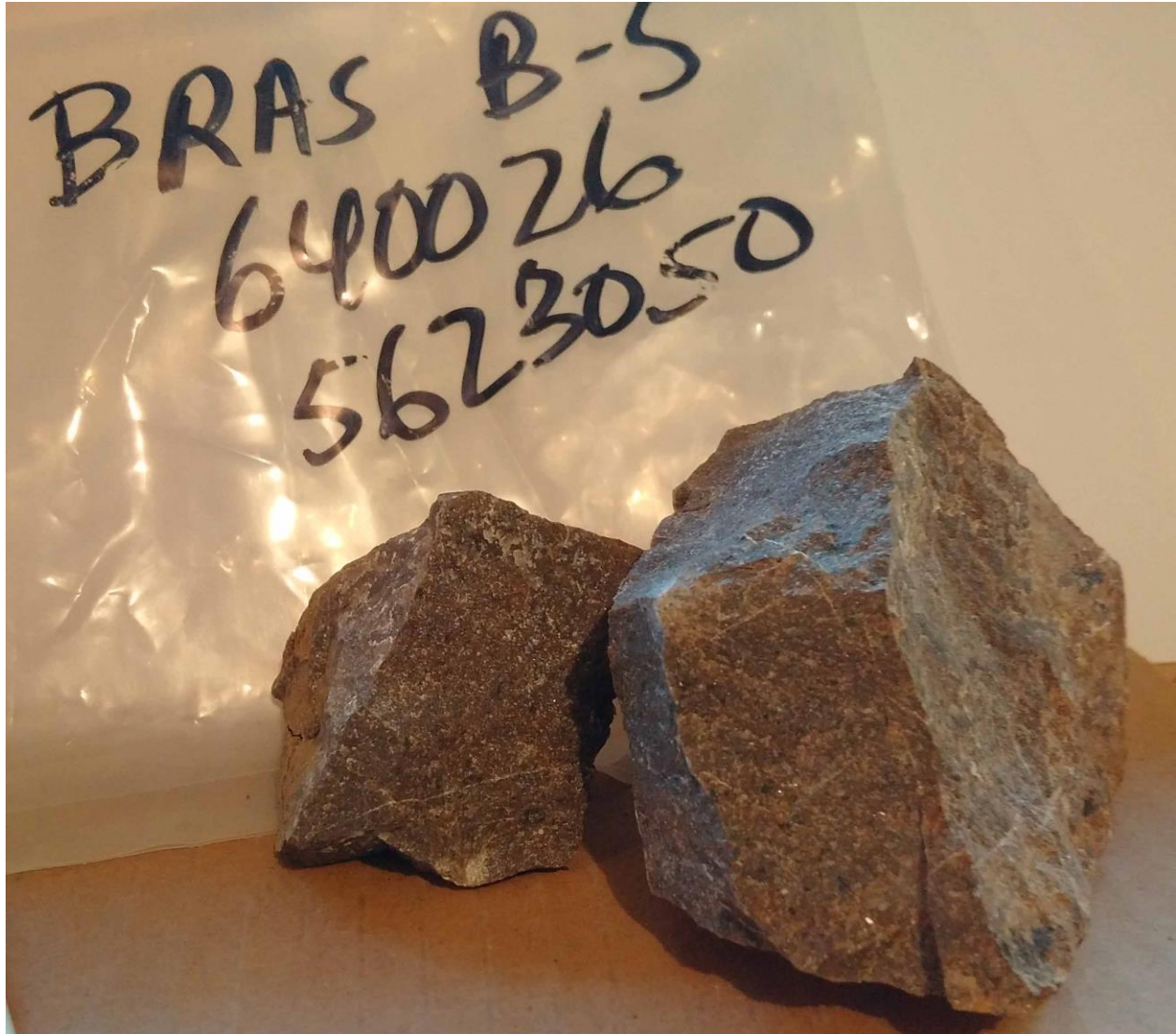




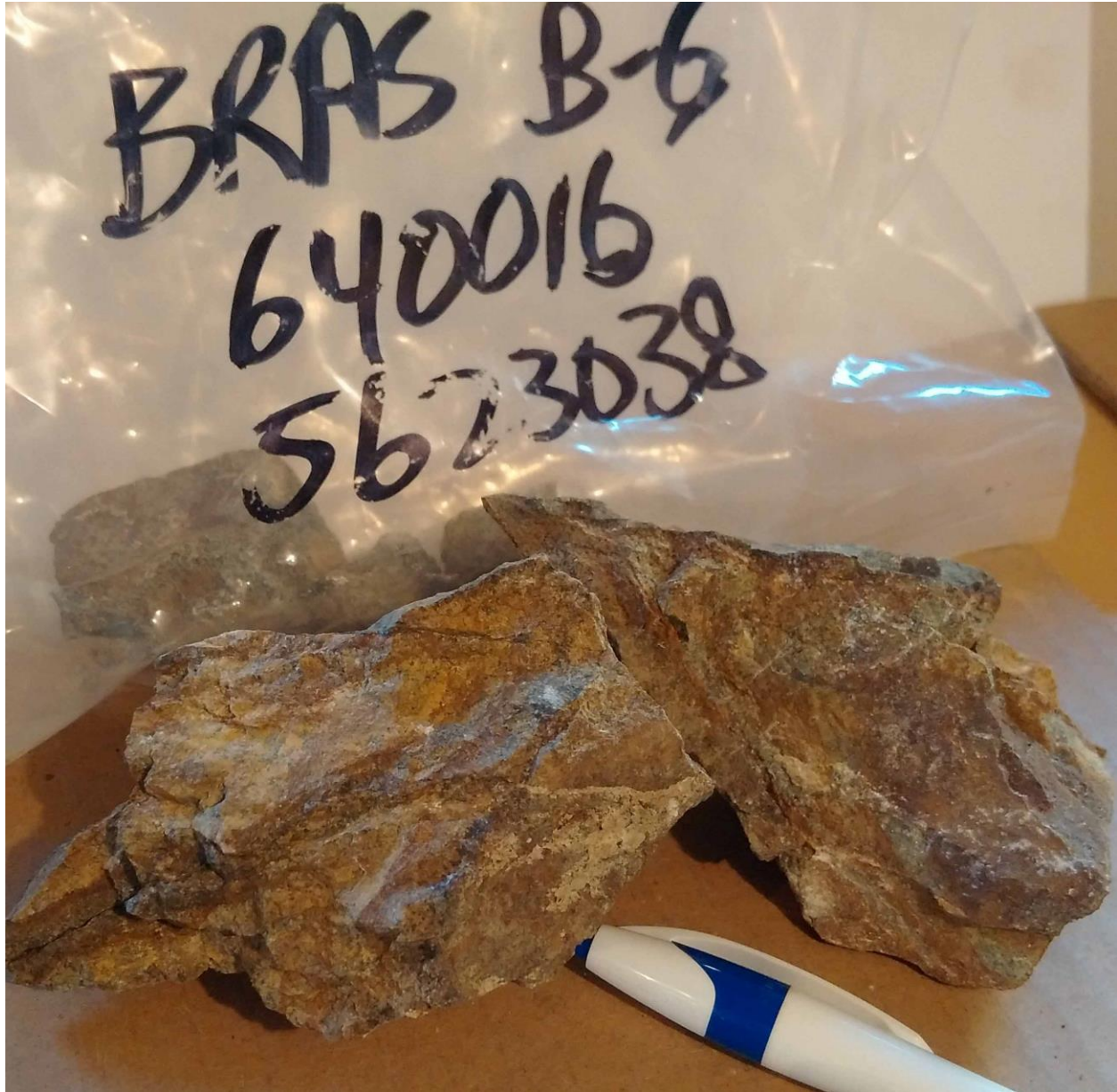
**BRAS B-4 TYPICAL ROCK PICTURE**



BRAS B-5 TYPICAL ROCK PICTURE



**BRAS B-6 TYPICAL ROCK PICTURE**



SUMMARY OF REGIONAL AND PROPERTY GEOLOGY

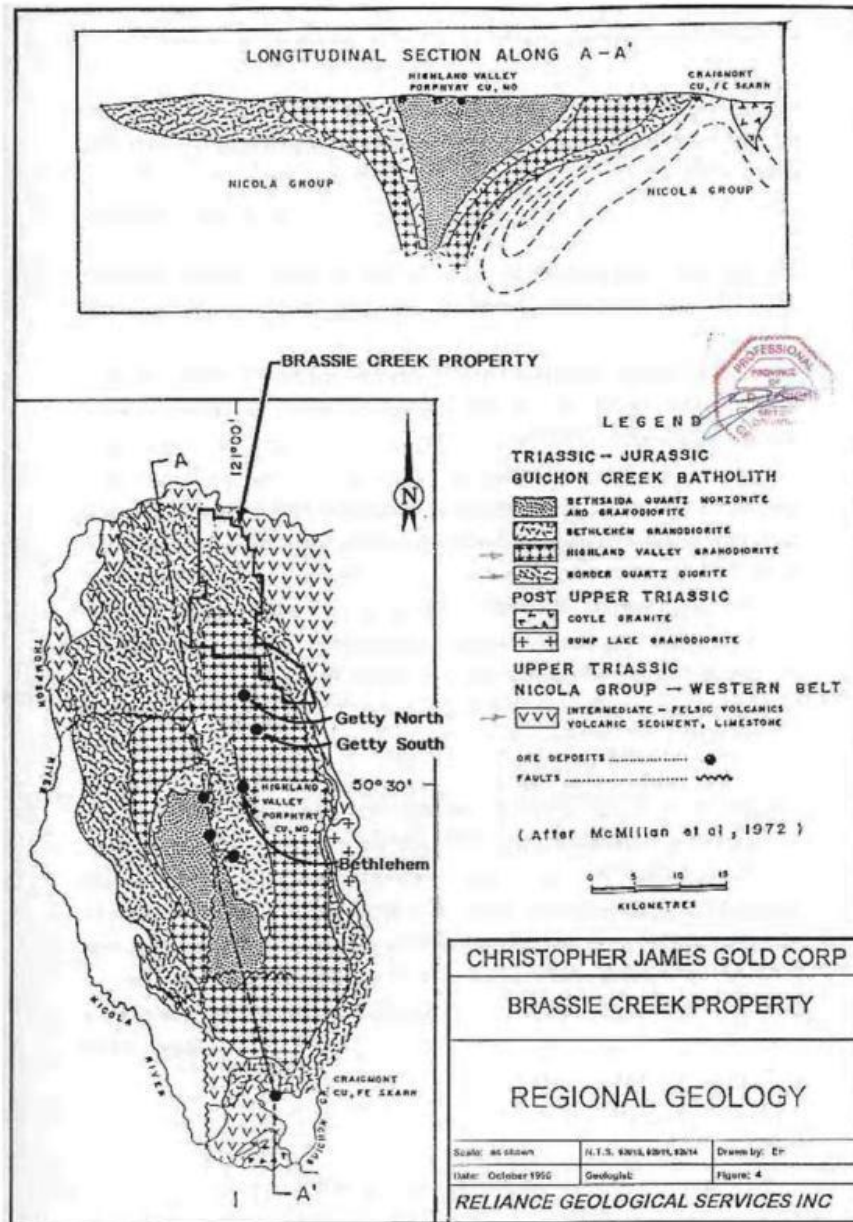
Fig. 7 Regional Geology - BRASSIE CLAIM GROUP

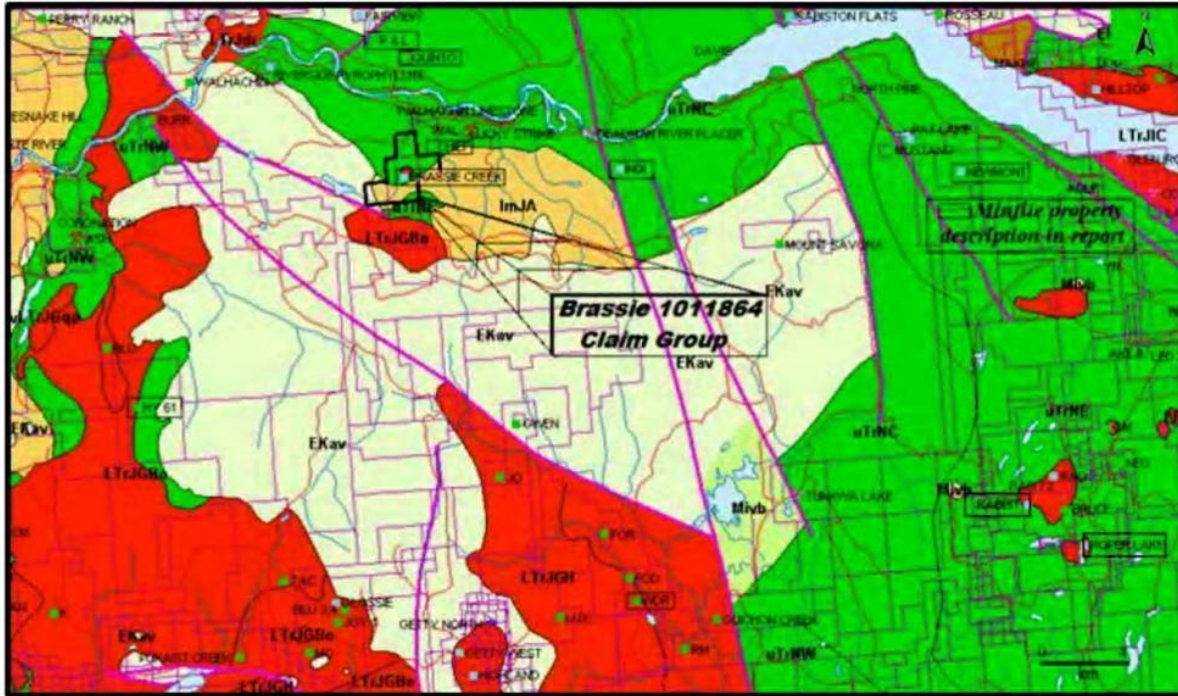
Ken Ellerbeck

Brassie 1011864 Claim Group

Event 5399509

Figure 5. Brassie Creek Property: Regional Geology  
(Figure 4 from Leriche, 1996)





The four (4) claim Brassie Claim Group covers an area of 260 hectares located 222 kilometres east-northeast of Vancouver and 70 kilometres west of Kamloops where within 15 kilometres two past producing mines have been re-explored, and are developed mineral resources.

The **New Afton** mineral reserves are reported as 4.8 million ounces gold, 54.7 million ounces of silver, and 2.75 billion pounds of copper. The **Ajax** mine, is reportedly scheduled for production in early 2018 at 60,000 tonnes per day for a 23-year mine life. The Ajax mineral resource is reported at 365 million tonnes grading 0.31% copper and 0.20 grams per tonne gold.

The **Highland Valley Mine** located 39 kilometres south of the Brassie Claim Group has been in production since 1983 and is processing 120,000 to 130,000 tonnes per day. Reported proven and probable mineral reserves as of December 31, 2011 are reported at 673,000,000 tonnes with a grade of 0.29 % copper. The Reserves are reportedly expected to support a mine life to 2026 (Teck Annual Information Report; March 5, 2012).

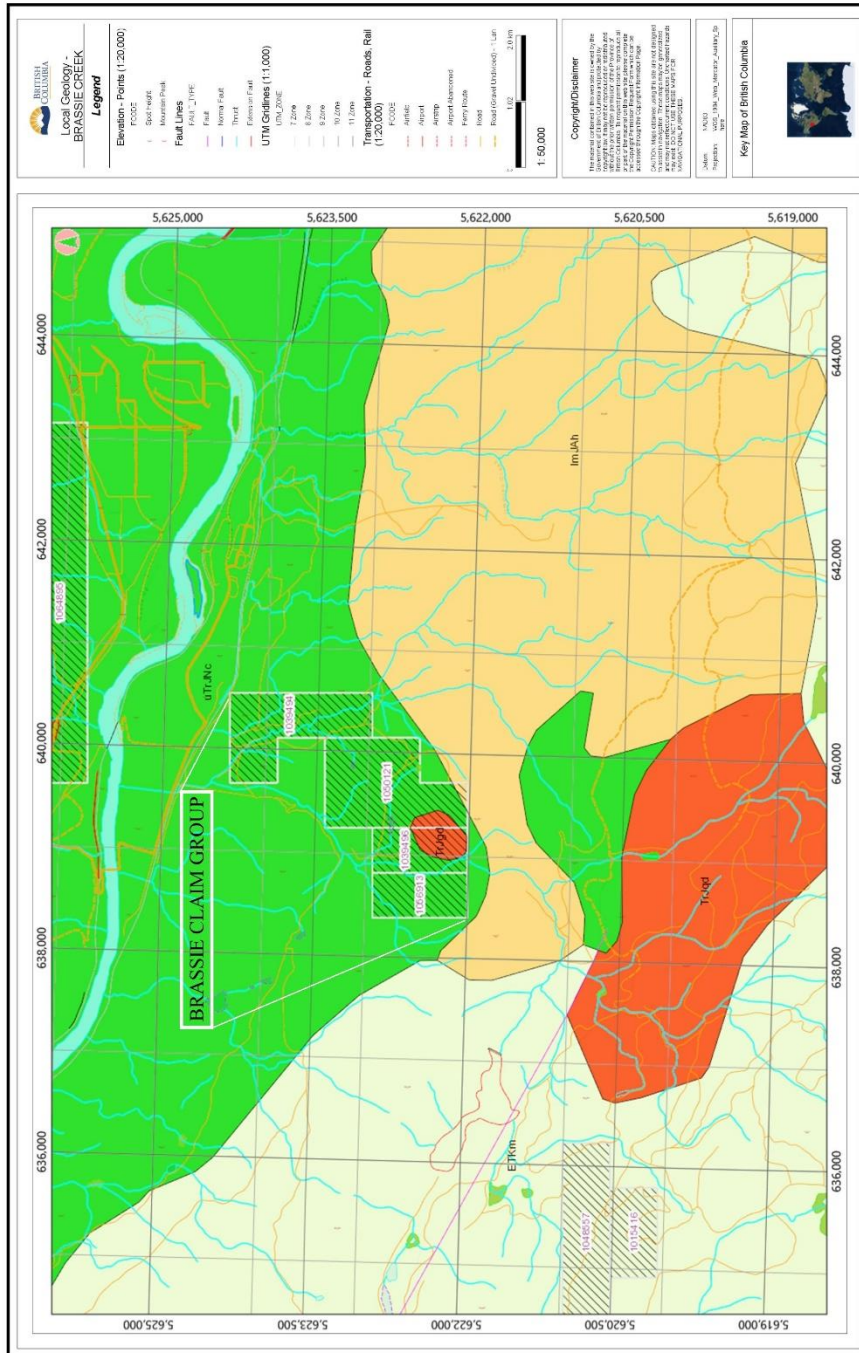
Both the New Afton and the Ajax mineral resources are predominantly hosted by the Late Triassic Iron Mask Batholith; a sub-volcanic multiple intrusion of dioritic to syenitic composition which lies lengthwise northwesterly for 35 kilometres long and up to 10 kilometres wide in a major cross structure of the Quesnel Trough and is emplaced in contemporaneous volcanic rocks of the Upper Triassic Nicola Group

The Valley deposit of the Highland Valley Mine **south of the Brassie Claim Group** is hosted by the Bethsaida porphyritic quartz monzonite and granodiorite phase of the Late Triassic to Early Jurassic Guichon Creek batholith. Leriche (1996) reports that the Guichon Creek batholith is internally divided into segments by northerly and northwest to westerly trending structures where both fault sets played important roles in localizing mineralization.

The Guichon Creek Batholith and Nicola Group rocks are host to several types of copper deposits including the world-class porphyry deposits at Highland Valley within the central portion of the Batholith, the skarn deposits at the Craigmont Mine hosted by Nicola aged

limestones at the south end of the Batholith, and the Getty copper oxide/porphyry deposits hosted by the Guichon Batholith between the Valley deposit and the Brassie Creek Claim Group Property close to a breccia pipe just to the east of a major north-south fault. The Northerly trending faults associated with porphyry copper mineralization in the Getty North and South areas **may project northward into the Brassie Creek area (Dawson, 2005) where stocks, sills and dykes of dioritic to monzonitic composition related to the Guichon Batholith occur.**

**Fig. 8 Local Geology - BRASSIE CLAIM GROUP**





Within the Brassie Claim Group, historical exploration dates from the late 1800's when a 23 metre-long adit was completed to explore a northwesterly trending zone of fracture controlled mineralization. Samples from the Brassie prospect analysed 0.26% copper over one metre and from the Hasso showing of minor disseminated malachite in quartz-carbonate veinlets, a select sample analysed 0.44% copper. A select sample of diorite with malachite stains along fractures, returned values of 5973 ppm (0.59%) copper, 11 ppb gold, and 9.0 ppm silver Leriche (1996). Diamond drilling in 1998 returned assays of up to 0.24% copper, and 1.9% zinc over a 14 m. intersection.

(Wells 2000) The Pennie Lake to Rattlesnake Creek area including the Brassy Creek gorge is geologically quite complex with patchy bedrock exposures. It probably represents a roof zone to border phase monzonitic to dioritic intrusions of the Guichon Creek Batholith (Triassic). Two kilometre scale dioritic stocks occur in this area, one southeast of Pennie Lake and the other beneath the benchland northeast of Brassy gorge (to Rattlesnake Creek). Contact metamorphism is evident over a large area with conversion of limestone to marble and mafic volcanics to variably magnetic hornfels with patchy epidote. This setting is complicated by displacements along northwest trending fault zones. Previous exploration identified several magnetite lenses at marble-volcanic contacts in Brassy Creek gorge. The best known of these are the Brassie (Cu, Au, Ag, Zn) and Hasso (Cu, Ag, Au, Zn, Pb) occurrences. These returned copper and zinc values in the 0.2% to 0.45% range, gold up to 1 g/t and silver up to 200 g/t (Hasso) during 1996 exploration (Piroshco, 1996). Fracture controlled mineralization in the adit area 200 to 300 meters to the north has previously returned silver values up to 19.84 oz/t, 0.31% copper and 0.12% lead (Wendebom, 1970).

In the lower Rattlesnake Creek area BP Minerals identified disseminated copper mineralization in intrusive breccia in an area where diorites are intruded by later quartz monzonite and porphyry bodies (Findlay, 1975). Minequest (Ridley, 1983) suggested that a rhyolite intrusion in this area was Tertiary in age (the quartz porphyry?). The Rattlesnake Creek area has gold mineralization in a variety of settings including silicified Ashcroft conglomerate (up to 335 ppb Au), disseminated in porphyry (100ppb) and quartz veinlet stockworks in diorite (further to south up to 780 ppb Au). Some of this gold mineralization is clearly post-Jurassic (Tertiary age?) and has associated anomalous arsenic and mercury values (epithermal). The Northern Brassy-Rattlesnake Creek area features a mixed sequence of Nicola Group (Triassic) mafic volcanic and sedimentary rocks (mainly thick limestone beds) intruded by dioritic to monzonite composition dikes, sills and stocks. These are overlain with angular unconformity by Ashcroft Formation (Jurassic) elastic sediments with basal conglomerates. (Wells 2000).

**TECHNICAL DATA AND INTERPRETATION**

Prospecting on the BRASSIE CLAIM GROUP in 2018 revealed the presence of mineral bearing rocks in the Work Area.

Elevated levels of Au were found in Sample BRAS A-2, BRAS B-3;

Elevated levels of Ag were found in Samples BRAS A-1, BRAS A-2, BRAS B-3;

Elevated levels of Cu, Pb, Zn, Mo were found in BRAS A-1, BRAS A-2, BRAS B-3;

**Table I. Particulars of Grab Samples ELLERBECK (2018) BRASSIE CLAIM GROUP**

LOCATION / SAMPLE #	UTM LOCATION		DESCRIPTION
	All OUTCROP unless indicated		
BRAS A-1 To Lab	639632	5622901	Trench "A" Skarn, Float, Hematite, extremely hard, highly altered, siliceous, garnet? No visible metal, heavy
BRAS A-2 To Lab	639632	5622901	Trench "A" Skarn, Float, Highly altered, visible metal, magnetite, iron, spalerite, malachite stain, highly siliceous, heavy
BRAS A-3	639655	5622911	Trench "A-1", Float, Skarn, highly altered limestone, visible metal, iron veinlets, magnetite, hematite
BRAS A-4	639655	5622911	Trench "A-1", Float, Skarn, highly altered limestone, quartz veins, iron stain
BRAS A-5	639655	5622911	Trench "A-1", Float, Skarn, highly altered limestone, iron stain, bleached to white/green, contact with diorite (pink/green)
BRAS A-6	639655	5622911	Trench "A-1", Float, very heavy pink diorite? In contact with magnetite/hematite, highly siliceous
BRAS A-7	639687	5622917	Trench "A-1", Float, very heavy, very hard, fractured, magnetite-hematite, contact with diorite, highly altered, vuggy
BRAS A-8	639687	5622917	Trench "A-1", Float, limestone, minor iron staining
BRAS B-1	640050	5623083	Trench "B", Diorite, gray-green, siliceous, E-W strike, 20°S dip
BRAS B-2	640049	5623050	Trench "B", Diorite, gray-green, siliceous, E-W strike, 20°S dip, pink diorite veining
BRAS B-3 To Lab	640040	5623040	Trench "B", Float, limestone, highly altered, iron veining, visible metal, quartz inclusions, magnetite, hematite
BRAS B-4	640038	5623040	Trench "B", Float, rotten/crumbly, iron stain, visible metal, highly altered, accreted/conglomerate, quartz inclusions, hematite
BRAS B-5	640026	5623040	Trench "B", Float, Diorite, quartz veining, brown/pink, homogenous
BRAS B-6	640016	5623038	Trench "B", Float, highly altered diorite, quartz inclusions, no visible metal, contact with volcanic/andesite

**Table II. Summarized Assay Results- Grab Samples-Ellerbeck (2018) – BRASSIE**

Sample No.	Sample Type	Cu ppm	Pb ppm	Zn ppm	Au ppm	Ag ppm	Mo ppm	Co ppm
BRAS A-1	Grab	98	171	422	0.007	0.8	2	5
BRAS A-2	Grab	8020	599	3040	0.153	5.1	54	9
BRAS B-3	Grab	52	79	102	0.127	24.5	38	8

**PURPOSE**

In May 2018 a prospecting program was completed on Tenure 1050121 of the four (4) claim BRASSIE CLAIM GROUP. The purpose of the prospecting program was to locate, if possible, historic reported geological features (typical Cu, Au, Ag bearing structures in particular) as well as to prospect for unidentified outcrops and showings of significance. Information for this report was obtained from sources cited under Selected References and from a property examination made on May 06, 2018.

**PROSPECTING RESULTS** – Outcrops/Bedrock observance confirmed local/property and regional geological mapping. Mineralization was noted and sampled.

In the 2018 Work Area, the writer identified historically noted mineralization by way of float presumed to have originated from Trench “A”, “A-1”, and “B” of Christopher James Gold Corp. 2005 work (Dawson, Kenneth M.).

*“Trench A in its anomalous central part (Figure 7 and Plate 1) shows garnet-diopside-epidote skarn with magnetite partly oxidized to hematite, and chalcopyrite, pyrite, sphalerite plus limonite, malachite and azurite. A monzo-diorite sill is in intrusive contact with skarn at attitude 230/25 with some endoskarn developed in the intrusive.”*

*“Trench A1 at its eastern end shows a garnet-diopside skarn/marble contact with attitude 320110 (Figure 7). The magnetite-rich skarn in the eastern trench is cut by quartz veins, but lacks abundant sulphide minerals. It exhibits anomalous values in Au, Ag, Pb and Zn Marble and oxidized skarn are overlain by hornfelsed basalt with gentle (ca. 5°) northerly dips.”*

*“Magnetite-sulphide skarn with significantly elevated values in any of the elements Au, Ag, Cu, Pb and Zn was detected in trenches A, Al, C and G, and drill holes were planned accordingly. Elevated values in some of these elements were detected in trenches B, D and F, but were deemed less significant, and the decision to drill these sites was deferred.”*

From R.C. Wells, 2000:

*“On the property, border phase Guichon diorites intrude Nicola Group (upper Triassic age) mafic volcanic flows and volcanoclastic rocks with thick limestone beds. The limey sequence in*

*the Brassy Creek area has been converted to skarn, hornfels and marble in the thermal aureole to the dioritic intrusions. Several polymetallic (from Cu, Pb, Zn, Ag and Au) were encountered by earlier exploration programs in the area. Previous exploration in the property focussed on either Craigmont style Cu-Fe skarn or copper porphyry targets largely ignoring the potential for polymetallic skarns or mantos”.*

### **ASSAY RESULTS**

Elevated levels of Au were found in Sample BRAS A-2, BRAS B-3;

Elevated levels of Ag were found in Samples BRAS A-1, BRAS A-2, BRAS B-3;

Elevated levels of Cu, Pb, Zn, Mo were found in BRAS A-1, BRAS A-2, BRAS B-3;

### **INTERPRETATIONS AND CONCLUSIONS**

The reported presence of various minerals in historic showings in the 2018 work location area was confirmed by the Rock Samples taken within Tenure 1050121.

Prospecting revealed the presence of mineralization in highly altered float from previous trenching work. The potential for economic mineral zones on the Brassie Property could occur as altered/skarn zones in volcanics and limestone related to intrusive related rocks (rhyolites/diorites). The reported (ARIS reports) presence of mineralization in proximity to the BRASSIE CLAIM GROUP was researched, as well as the host rock type for that mineralization. Assays of samples taken during the 2018 Work Program revealed the presence of significant mineralization warranting further investigation.

### **SUMMARY AND RECOMMENDATIONS**

The Brassy Creek Claim Group is geologically complex. It is possibly a border phase monzonitic to dioritic intrusions of the Guichon Creek Batholith (Triassic).

Dioritic stocks occur within the claim group in the area which was prospected in 2013 and 2015 lying beneath the benchland northeast of Brassy gorge and continuing to Rattlesnake Creek.

Contact metamorphism is evident over a large area with conversion of limestone to marble, some containing mineralization, in the prospected area. This setting is complicated by displacements along northwest trending fault zones. Previous exploration by others identified several magnetite lenses at marble-volcanic contacts in Brassy Creek gorge.

Intrusives have introduced gold values associated with rhyolite and with quartz veinlets in sedimentary rocks in Rattlesnake Creek.

An example of recommended work from Christopher James Gold Corp. 2005 work (Dawson, Kenneth M.):

*“Drill hole B-05-0 1 is planned to intersect the mineralized skarn zones under both trenches A and A1. The collar will be located 45 m northwest of trench A1 and 90 m northwest of trench A, at 639952E, 5622975N. The hole will be drilled at azimuth 145° and dip-45° to an estimated depth of 150 m. An access trail about 60 m long will need to be constructed from the vicinity of trench A.”*

Elevated values of mineralization were obtained from float samples taken in Trench "A" and "A-1.

Due to the elevated mineralization found in Sample BRAS B-3, a drill hole in the vicinity of Trench "B" is warranted.

A program of intensive prospecting and mapping of all the outcrops in the vicinity of the Christopher James Gold Corp. 2005 trenching work (Dawson, Kenneth M.) is recommended in order to understand all of the influences of the possible Guichon Batholith intrusive.



**STATEMENT OF AUTHOR'S QUALIFICATIONS**

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**STATEMENT OF AUTHOR'S QUALIFICATIONS**

**KENNETH C. ELLERBECK, PMP**

I hold a BSc in Mechanical Engineering, University of Alberta, Edmonton, 1973.

I have completed University level introductory geology courses.

I hold a Certificate in Project Management from University of British Columbia, Sauder School of Business, 2010.

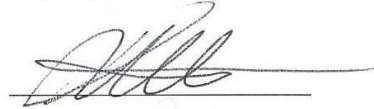
I hold a Project Management Professional designation – PMP – 1391810 – 2011.

I have been actively involved in all aspects of mineral exploration since 1980 in the Province of British Columbia.

I have managed staking and exploration programs since 1980 on my own mineral tenures as well as for tenures held by both private and publicly-held junior exploration companies.

My mineral exploration experience includes staking, prospecting, trenching, trench mapping, line cutting and grid construction, geochemical surveys, geophysical surveys, diamond drilling supervision and general exploration program supervision.

SIGNED



KENNETH C. ELLERBECK

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**LIST OF SELECTED REFERENCES**

BC Geological Survey, Ministry of Energy, Mines & Petroleum Resources – MINFILE

British Columbia Survey Branch, The Map Place.

**Dawson, K.M.** – 2005: Review of 2005 Trenching program and Proposed Drill Program for Brassie Creek Skarn Deposit, Walhachin, B.C. for Christopher Lames Gold Corporation. August 30, 2005.

**Hodgson, G.D.** – 1984 : Thom Claims Geology for Minequest Exploration Associates Ltd., November 1984. AR13329.

**Leriche, P.D., Pirocho, D.** – 1996: Summary Report on the Brassie Creek Property for Christopher James Gold Corp. 2 December 1996.

**Wells, R.C.** – 2000: Report on the 1999 Exploration Program on the Brassie Creek Property for Christopher James Gold Corporation. January 20, 2000. AR 26,155.

**Sookochoff, L.,** - 2012: Report on the 2012 Geological Assessment Report (Event 5399509) on a structural analysis for Ken Ellerbeck, August 2012.

**Solat, Hughes P.,** - 1991: Detailed Geological Mapping Grid Area. August 15, 1991. AR 21625

**LIST OF SOFTWARE PROGRAMS USED**

ADOBE PHOTOSHOP 7.0

PAINT for WINDOWS

ARIS MAPBUILDER – Map Data downloads

Imap BC – Map Data downloads

MtOnline - MINFILE downloads.



APPENDIX 1 SAMPLE PREPARATION AND METHOD OF ANALYSIS



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To: KEN ELLERBECK  
 255 WEST BATTLE STREET  
 KAMLOOPS BC V2C 1G8

Page: 1  
 Total # Pages: 2 (A - C)  
 Plus Appendix Pages  
 Finalized Date: 11 - JUN - 2018  
 Account: ELLERK

CERTIFICATE KL18124587

Project: LD & Brassie  
 This report is for 7 Rock samples submitted to our lab in Kamloops, BC, Canada on 28 - MAY - 2018.  
 The following have access to data associated with this certificate:  
 KEN ELLERBECK

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Cu-OG46	Ore Grade Cu - Aqua Regia	ICP - AES
Au-AA23	Au 30g FA - A Finish	AAS
ME-ICP41	35 Element Aqua Regia ICP - AES	ICP - AES
Ag-OG46	Ore Grade Ag - Aqua Regia	ICP - AES
ME-OG46	Ore Grade Elements - AquaRegia	ICP - AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.  
 \*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Signature:   
 Colin Ramshaw, Vancouver Laboratory Manager



APPENDIX 2 CERTIFICATE OF ANALYSIS - ASSAY RESULTS



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CERTIFICATE OF ANALYSIS KL18124587

Sample Description	Method Analyte Units LOD	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt. kg	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	
LD-18-2		0.84	>100	0.26	2550	10	1720	<0.5	3	0.07	58.9	6	7	>10000	4.12	<10	
LD-18-3		0.49	2.9	0.10	128	<10	3320	<0.5	<2	0.05	19.5	7	9	613	4.15	<10	
LD-18-6		0.46	1.8	0.37	89	10	1240	<0.5	<2	0.13	15.1	4	3	528	3.12	<10	
LD-18-8		0.89	38.2	0.27	12	10	2580	<0.5	3	0.10	<0.5	1	11	8930	1.37	<10	
BRAS-A-1		0.58	0.8	0.40	456	30	100	<0.5	<2	19.8	5.5	5	2	98	13.55	<10	
BRAS-A-2		1.21	5.1	0.29	969	40	160	1.1	6	11.1	3.7	9	9	8020	17.50	<10	
BRAS-B-3		1.13	24.5	0.31	294	10	110	<0.5	<2	11.7	0.6	8	4	52	3.33	<10	

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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Project: LD & Brassie

CERTIFICATE OF ANALYSIS KL18124587

Sample Description	Method Analyte Units LOD	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Hg ppm 1	K % 0.01	La ppm 10	Mg % 0.01	Mn ppm 5	Mo ppm 1	Na % 0.01	Ni ppm 1	P ppm 10	Pb ppm 2	S % 0.01	Sb ppm 2	Sc ppm 1	Sr ppm 1	Th ppm 20
LD-18-2		27	0.16	10	0.02	910	5	0.01	3	330	2020	0.14	523	6	14	<20
LD-18-3		<1	0.08	<10	0.02	4000	3	<0.01	2	550	17	0.06	69	3	27	<20
LD-18-6		<1	0.30	10	0.02	4230	1	<0.01	1	790	9	0.01	24	7	8	<20
LD-18-8		<1	0.19	<10	0.01	106	1	<0.01	1	360	4	0.08	8	3	48	<20
BRAS-A-1		1	0.01	10	0.10	5440	2	0.01	<1	200	171	<0.01	21	2	102	<20
BRAS-A-2		44	<0.01	20	0.11	4640	54	0.01	4	2970	599	1.14	89	5	134	<20
BRAS-B-3		<1	0.13	10	0.28	2170	38	0.02	6	180	79	1.42	4	2	133	<20

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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**CERTIFICATE OF ANALYSIS KL18124587**

Sample Description	Method Analyte Units LOD	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Ag-OG46	Cu-OG46	Au-AA23
		Ti %	Ti ppm	U ppm	V ppm	W ppm	Zn ppm	Ag ppm	Cu %	Au ppm
		0.01	10	10	1	10	2	1	0.001	0.005
LD-18-2		<0.01	<10	<10	27	<10	7380	428	1.185	0.018
LD-18-3		<0.01	<10	<10	18	<10	1810			<0.005
LD-18-6		<0.01	<10	<10	8	<10	1250			<0.005
LD-18-8		<0.01	<10	<10	3	<10	49			<0.005
BRAS-A-1		<0.01	<10	<10	22	10	422			0.007
BRAS-A-2		0.01	<10	<10	103	<10	3040			0.153
BRAS-B-3		<0.01	<10	<10	23	<10	102			0.127

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*