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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)]: GEOLOGY, MAPPING PROSPECTING

TOTAL COST: 79,933 21

AUTHOR(S): PETER HOLBEK, RICHARD JOYES, PETER DAUBENY

SIGNATURE(S): [signature]

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

YEAR OF WORK: 2012

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5413953

PROPERTY NAMES: SUSTUT, MOT, SAY, PAT, IFT, KIK, OFF

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

COMMODITIES SOUGHT: Cu Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: LIARD

NTS/BCGS: 93D/3

LATITUDE: 56 ° 05 ' 44 " LONGITUDE: 127 ° 08 ' 18 " (at centre of work)

OWNER(S):
1) ELECTRUM RESOURCE CORP.
2)

MAILING ADDRESS:
912-510 W. HASTINGS ST.
VANCOUVER, B.C. V6B1L8

OPERATOR(S) [who paid for the work]:
1) COPPER MOUNTAIN MINING LTD.
2)

MAILING ADDRESS:
1700-700 W. PENDER ST.
VANCOUVER, BC V6C 1G8

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
CRETACEOUS - JURASSIC BOWSER/HAZELTON GROUPS
BABINE INTRUSIVE SUITE, KASTBERG INTRUSIONS,
PORPHYRY COPPER, QUARTZ VEIN, MESOTHERMAL GOLD.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 05946 A/B
20607, 25530, 201999, 22496, 25505, 21791, 6503, 30028

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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		See attached	
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
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:	79,933—

Property	Claims	Type of work	Extent	Costs*
			12 km2	5,900
	563877, 533778, 836541, 839044,	Mapping	38km2	13,800
	659588, 928694, 936717, 837592,	Prospecting	28 samples	9,400
Sustut Porphyry	857094, 855238, 756663, 855814	Geochemistry Other	Other	7,800
		Prospecting	16 km2	5,100
	850100, 905621, 852269, 850213,	Geochemistry	30 samples	4,200
Mot	834539	Other	other	2,300
IFT	855291, 855292, 586372, 865440	Prospecting	10km2	6,800
	851329, 852010, 851483, 851888,	Prospecting	18km2	7,800
PAT	865861, 852384, 852385, 865681	Geochemistry	25 samples	4,800
	853661, 853659, 853360, 855417,	Prospecting	20km2	8,500
SAY	854522, 854516, 855135, 855635	Geochemistry	8 samples	1,300
KIK	840969			1,000
OFF	839066			1,200
Total				79,900

*Costs are apportioned based on total support costs (excluding helicopter)/total field hours*hours/activity/property + personnel costs + helicopter + any specific costs, rounded to the nearest hundred. Total field costs for the entire crew are approximately $12K/day of which most is helicopter.

Geological Reconnaissance

Of the

Bear Lake Properties

(Claims listed in 1.3 Property Status and Ownership)

Omineca Mining Division, British Columbia

NTS 94D /3

UTM: 620,000E, 6,220,000N (Zone 10, NAD 83)

Owner:

Electrum Resource Corporation

904-1050 West Hastings Street,

Vancouver, BC.

Operator:

Copper Mountain Mining Corp.

1700-700 West Pender Street,

Vancouver, B.C. V6C 1G8

Authors:

Peter Holbek, Richard Joyes, Peter Daubeny

January, 2013

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1. Introduction

Copper Mountain Mining Corporation optioned seven properties in the Bear Lake area from Electrum Resource Corporation. Prior to initiating a field based exploration program, Copper Mountain commissioned Photo Sat. to obtain Spot Satellite imagery of the claim areas and also obtained TRIM topographic data from the Government of BC in order to provide base maps and to assist with a regional geological study. Compilation of area data continued and field examinations were conducted during the period of July 23 to August 1, 2012, by a six person field crew. This report builds on the earlier work and documents the results of data compilation and field studies and sampling for the five major properties the region.

1.1 Location and Access

The seven properties consist of a total of 117 claims covering 19,537.41hectares and are approximately centered at UTM (Zone 10 Nad 83) 620,000E and 6,220,000N, on the western side of Bear Lake, on the NTS map sheet 94D/2W and 3E. Currently, none of the properties are road accessible and all require helicopter access. However, logging operations are being carried out just to the south of Bear Lake via road networks extending south to the Babine Lake area. Remote logging is also taking place to the north of the Jake and Pat Groups whereby the logs are transported south via the old BC rail line. The geographical center of the claim groups is approximately 100 km south-southwest of the Kemess mine site. The properties outlines are shown on the topographic map in Figure 1.1 and UTM centre points for each property group are listed below:

Jake Group - 607,500E; 6,230,000N

Pat Group - 620,000E; 6,234,000N

Say Group - 634,500E; 6,213,000N

IFT Group - 628,000E; 6,213,000N

Mot Group - 617,500E; 6,215,000N

Kik Claim - 610,500E; 6,216,000N

Off Claim – 603,000E; 6, 104,500N

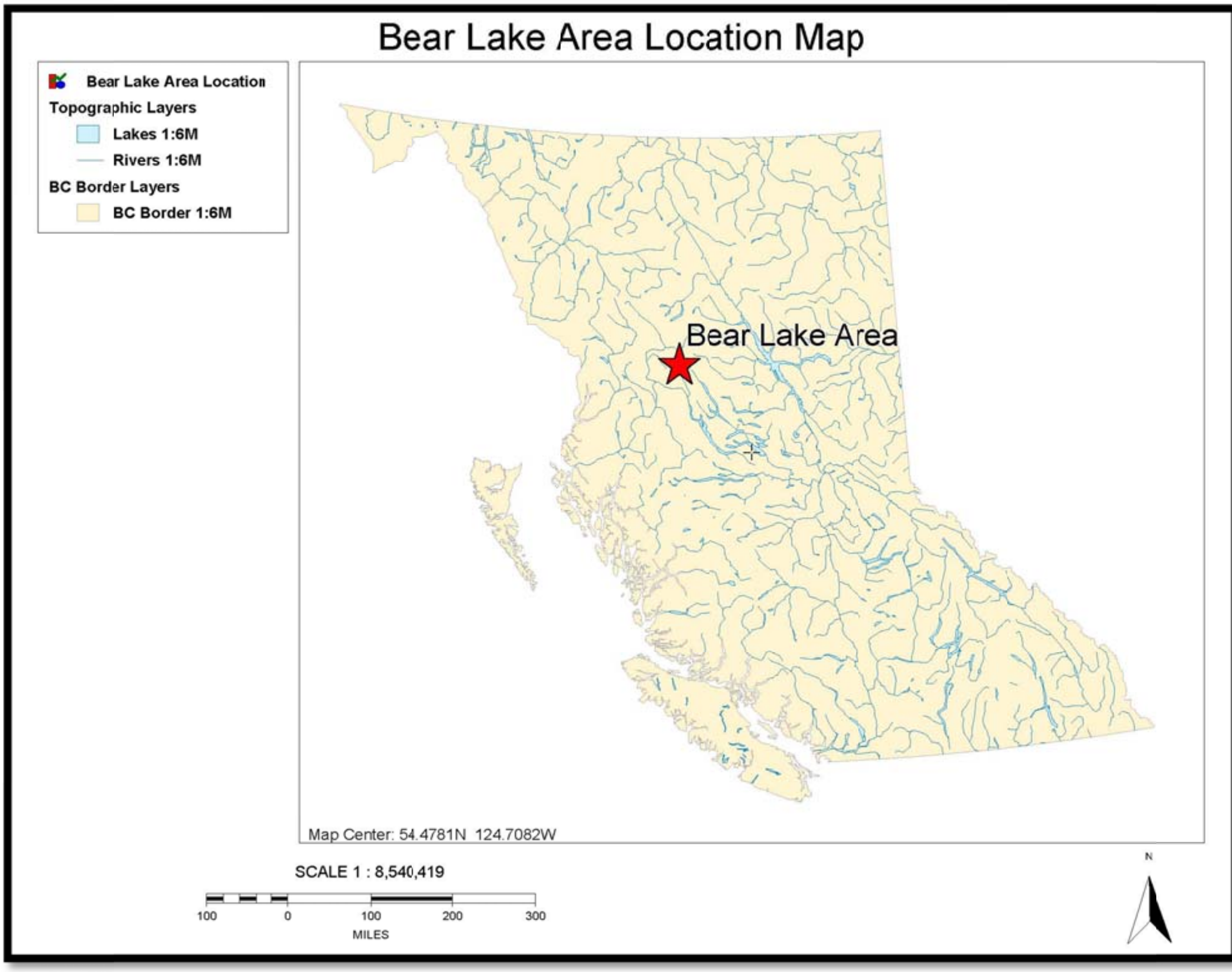

Figure 1.1 Bear Lake Project Area Location

1.2 Physiography and Climate

The properties cover a wide variety of terrain, but are generally centered on ridges or mountain tops and are large enough to incorporate adjacent valley bottoms. Elevations on the properties range from 2,300m to 1,100m. Tree-line is generally at, or around the 1,500m elevation. The properties to the west have higher elevations and more rugged terrain whereas the eastern properties are lower with slightly more subdued terrain due to rounded-off ridges due to large ice-sheet type glaciation. More recent alpine glaciation has created small cirques. A strong northwest-southeast orientation of the drainages and ridges on the eastern part of the study area is a relic of continental glaciation.

Forest cover at lower elevations consists of relatively mature stands of pine and spruce, although tree size is limited due to the average elevation. Swamps are common in the rounded valley bottoms and large numbers of avalanche chutes, filled with slide alder and devil’s club attest to relatively high snow loads during the winter. Proximity of the area to the Skeena River valley, to the north, allows an influence of coastal climate to sneak into the area, resulting in higher precipitation than one would normally expect at this easting.

1.3 Property Status and Ownership

There are 7 properties within the study area, most made up of multiple claims as outlined below. All claims are owned by Electrum Resource Corporation of Vancouver. Claim locations are shown in the following figures and relevant claim data are listed in Table 1.1.

Table 1.1 Mineral Tenure Details

Tenure Number	Claim Name / Property	Issue Date	Good To Date	New Good To Date	Area in Ha
831844	MOT 12	2010/aug/19	2012/aug/19	2013/dec/15	18.05
517965		2005/jul/18	2012/aug/26	2013/dec/15	18.05
751103	IFT 4	2010/apr/17	2012/jul/10	2013/oct/31	18.07
865388	MOT 2B	2011/jul/10	2012/jul/10	2013/oct/31	144.42
865390	MOT 2A	2011/jul/10	2012/jul/10	2013/oct/31	144.39
865440	IFT 6	2011/jul/11	2012/jul/11	2013/oct/31	126.52
865681	PAT 7	2011/jul/12	2012/jul/12	2013/oct/31	161.89
865861	PAT 8	2011/jul/13	2012/jul/13	2013/oct/31	107.93
563877	JAKE NORTH	2007/jul/30	2012/jul/31	2013/dec/31	916.87
533778		2006/may/08	2012/jun/15	2013/dec/31	449.61
600132	MOT 11	2009/feb/28	2012/jun/15	2013/oct/31	108.35
755904	SUSTUT PORPHYRY 18	2010/apr/24	2012/jun/15	2013/oct/31	323.98
756663	SUSTUT PORPHYRY 23	2010/apr/25	2012/jun/15	2013/oct/31	72.04
759202	SUSTUT PORPHYRY 19	2010/apr/27	2012/jun/15	2013/oct/31	143.96
767866	MOT 1	2010/may/05	2012/jun/15	2013/dec/15	90.26
833828	SAY 10	2010/sep/18	2012/jun/15	2013/oct/31	54.22
834539	MOT 13	2010/sep/29	2012/jun/15	2013/dec/17	162.52
836095	SUSTUT PORPHYRY 2	2010/oct/17	2012/jun/15	2013/oct/31	108.05
836454	SUSTUT PORPHYRY 7	2010/oct/22	2012/jun/15	2013/oct/31	432.01
836541	SUSTUT PORPHYRY 8	2010/oct/24	2012/jun/15	2013/oct/31	431.83
836992	SUSTUT PORPHYRY 11	2010/oct/30	2012/jun/15	2013/oct/31	324.04
837032	MOT 4	2010/oct/31	2012/jun/15	2013/oct/31	108.31
837149	SUSTUT PORPHYRY 6	2010/nov/02	2012/jun/15	2013/oct/31	197.83
837592	SUSTUT PORPHYRY 15	2010/nov/05	2012/jun/15	2013/oct/31	180.14
837785	MOT 5	2010/nov/06	2012/jun/15	2013/dec/19	90.29
837806	SUSTUT PORPHYRY 5	2010/nov/07	2012/jun/15	2013/oct/31	431.78

839044	SUSTUT PORPHYRY 12	2010/nov/27	2012/jun/15	2013/oct/31	359.87
839066	OFF	2010/nov/28	2012/jun/15	2013/oct/31	288.97
839114	MOT 15	2010/nov/29	2012/jun/15	2013/oct/31	234.70
840969	KIK	2010/dec/16	2012/jun/15	2013/oct/31	162.48
843388	MOT 16	2011/jan/18	2012/jun/15	2013/oct/31	36.11
844115	MOT 6	2011/jan/23	2012/jun/15	2013/oct/31	36.13
845748	MOT 7	2011/feb/08	2012/jun/15	2013/oct/31	180.63
846142	MOT 8	2011/feb/11	2012/jun/15	2013/oct/31	198.56
846350	SUSTUT PORPHYRY 16	2011/feb/13	2012/jun/15	2013/oct/31	144.13
850015	MOT 17	2011/mar/29	2012/jun/15	2013/oct/31	379.53
850100	MOT 10	2011/mar/30	2012/jun/15	2013/oct/31	379.41
850213	MOT 18	2011/mar/31	2012/jun/15	2013/oct/31	162.52
850420	PAT 1	2011/apr/01	2012/jun/15	2013/oct/31	179.83
850635	PAT 2	2011/apr/03	2012/jun/15	2013/oct/31	287.64
851094	PAT 3	2011/apr/08	2012/jun/15	2013/oct/31	287.76
851329	PAT 5	2011/apr/10	2012/jun/15	2013/oct/31	431.50
851483	PAT 12	2011/apr/12	2012/jun/15	2013/oct/31	143.91
851485	PAT 12A	2011/apr/12	2012/jun/15	2013/oct/31	71.93
851690	PAT 4	2011/apr/14	2012/jun/15	2013/oct/31	107.87
851694	PAT 13	2011/apr/14	2012/jun/15	2013/oct/31	107.84
851844	PAT 14	2011/apr/16	2012/jun/15	2013/oct/31	71.97
851846	PAT 15	2011/apr/16	2012/jun/15	2013/oct/31	72.00
851888	PAT 16	2011/apr/17	2012/jun/15	2013/oct/31	125.96
851891	PAT 17	2011/apr/17	2012/jun/15	2013/oct/31	107.96
852010	PAT 18	2011/apr/19	2012/jun/15	2013/oct/31	53.96
852015	PAT 19	2011/apr/19	2012/jun/15	2013/oct/31	107.86
852269	PAT 9A	2011/apr/22	2012/jun/15	2013/oct/31	72.25
852274	MOT 9B	2011/apr/22	2012/jun/15	2013/oct/31	72.25
852323	PAT 20	2011/apr/23	2012/jun/15	2013/oct/31	125.95
852235	PAT 19	2011/apr/23	2012/jun/15	2013/oct/31	107.93
852384	PAT 10	2011/apr/24	2012/jun/15	2013/oct/31	89.99
852385	PAT 10B	2011/apr/24	2012/jun/15	2013/oct/31	125.99
852464	PAT 11A	2011/apr/25	2012/jun/15	2013/oct/31	72.01
852466	PAT 11B	2011/apr/25	2012/jun/15	2013/oct/31	108.02
852862	PAT 21	2011/apr/26	2012/jun/15	2013/oct/31	89.99
852563	PAT 22	2011/apr/26	2012/jun/15	2013/oct/31	108.00
853360	SAY 9	2011/may/03	2012/jun/15	2013/oct/31	144.59
853659	SAY 2B	2011/may/06	2012/jun/15	2013/oct/31	162.62
853661	SAY 2A	2011/may/06	2012/jun/15	2013/oct/31	162.57
854308	IFT 5B	2011/may/10	2012/jun/15	2013/oct/31	216.82
854473	SAY 1B	2011/may/13	2012/jun/15	2013/oct/31	162.62
854481	SAY 1A	2011/may/13	2012/jun/15	2013/oct/31	144.51
854516	SAY 3A	2011/may/14	2012/jun/15	2013/oct/31	108.42
854522	SAY 3B	2011/may/14	2012/jun/15	2013/oct/31	216.77
854575	IFT 5B	2011/may/16	2012/jun/15	2013/oct/31	36.13
854578	IFT 5C	2011/may/16	2012/jun/15	2013/oct/31	180.69

855131	SAY 8A	2011/may/17	2012/jun/15	2013/oct/31	72.31
855135	SAY 8B	2011/may/17	2012/jun/15	2013/oct/31	144.62
855178	IFT 1B	2011/may/18	2012/jun/15	2013/oct/31	289.28
855185	IFT 1A	2011/may/18	2012/jun/15	2013/oct/31	144.62
855238	SUSTUT PORPHYRY 26	2011/may/19	2012/jun/15	2013/oct/31	180.14
855243	SUSTUT PORPHYRY 25	2011/may/19	2012/jun/15	2013/oct/31	216.17
855291	IFT 2B	2011/may/20	2012/jun/15	2013/oct/31	216.98
855292	IFT 2A	2011/may/20	2012/jun/15	2013/oct/31	216.93
855354	SUSTUT PORPHYRY 22	2011/may/21	2012/jun/15	2013/oct/31	216.10
855357	SUSTUT PORPHYRY 28	2011/may/21	2012/jun/15	2013/oct/31	216.10
855395	SUSTUT PORPHYRY 20	2011/may/22	2012/jun/15	2013/oct/31	216.02
855396	SUSTUT PORPHYRY 29	2011/may/22	2012/jun/15	2013/oct/31	215.95
855416	SAY 6A	2011/may/23	2012/jun/15	2013/oct/31	108.44
855417	SAY 6B	2011/may/23	2012/jun/15	2013/oct/31	216.96
855452	SAY 5A	2011/may/24	2012/jun/15	2013/oct/31	162.68
855454	SAY 5B	2011/may/24	2012/jun/15	2013/oct/31	144.65
855635	SAY 7	2011/may/25	2012/jun/15	2013/oct/31	216.98
855738	SAY 4	2011/may/26	2012/jun/15	2013/oct/31	108.42
855739	SAY 4B	2011/may/26	2012/jun/15	2013/oct/31	54.18
855740	SAY 4C	2011/may/26	2012/jun/15	2013/oct/31	162.59
855811	SUSTUT PORPHYRY 30	2011/may/27	2012/jun/15	2013/oct/31	162.03
855814	SUSTUT PORPHYRY 31	2011/may/27	2012/jun/15	2013/oct/31	162.11
856372	IFT 3	2011/jun/07	2012/jun/15	2013/oct/31	54.22
856490	SUSTUT PORPHYRY 21	2011/jun/09	2012/jun/15	2013/oct/31	107.97
856627	IFT 4B	2011/jun/10	2012/jun/15	2013/oct/31	126.48
856633	IFT 4C	2011/jun/10	2012/jun/15	2013/oct/31	108.42
857017	SUSTUT PORPHYRY 19A	2011/jun/16	2012/jun/15	2013/oct/31	143.99
857018	SUSTUT PORPHYRY 19B	2011/jun/16	2012/jun/15	2013/oct/31	144.02
857094	SUSTUT PORPHYRY 23A	2011/jun/17	2012/jun/15	2013/oct/31	144.07
857097	SUSTUT PORPHYRY 23	2011/jun/17	2012/jun/15	2013/oct/31	144.06
659588	SUSTUT 3	2011/jun/26	2012/jun/15	2013/oct/31	35.97
857282	MOT 1A	2009/oct/26	2012/jun/15	2013/oct/31	108.33
857284	MOT 1B	2011/jun/19	2012/jun/15	2013/oct/31	108.3
905621	MOT 14	2011/jun/19	2012/jun/15	2013/oct/31	144.50
916949	SUSTUT PORPHYRY 1A	2011/oct/17	2012/jun/15	2013/oct/31	216.05
917649	SUSTUT PORPHYRY 2A	2011/oct/18	2012/jun/15	2013/oct/31	216.03
921289	SUSTUT PORPHYRY 10A	2011/oct/22	2012/oct/22	2013/oct/31	216.07
922389	SUSTUT PORPHYRY 10B	2011/oct/24	2012/oct/24	2013/oct/31	216.12
923869	SUSTUT PORPHYRY 9A	2011/oct/26	2012/oct/26	2013/oct/31	215.95
924789	SUSTUT PORPHYRY 1B	2011/oct/27	2012/oct/27	2013/oct/31	216.05
926316	SUSTUT PORPHYRY 9B	2011/oct/28	2012/oct/28	2013/oct/31	53.97
926323	SUSTUT PORPHYRY	2011/oct/28	2012/oct/28	2013/oct/31	71.96
926324	SUSTUT PORPHYRY 9BW	2011/oct/28	2012/oct/28	2013/oct/31	89.95
926616	SUSTUT PORPHYRY 2B	2011/oct/30	2012/oct/30	2013/oct/31	108.07
926638	SUSTUT PORPHYRY 11B	2011/oct/31	2012/oct/31	2013/nov/04	108.06

1.4 Exploration History

The mountainous region near the center of the northern half of British Columbia has historically been relatively inaccessible. A placer gold discovery in 1899 on McConnell Creek marked the first interest in mining in the area and subsequent discoveries resulted in wide-spread prospecting in the region during the years 1907-1908. Geological mapping in the region by the Geological Survey of Canada was undertaken during the years 1941 to 1948 and a number of precious & base-metals, coal and other mineral occurrences were tabulated during this period (Sheppard, 1973).

More recently, with the support of modern aviation and the location of often well-appointed hunting and fishing lodges in the area, access has improved. In addition, the partial construction of the BC Rail line to Dease Lake has provided additional access to the area and in-spite of overall incompletion of the rail line it is currently being used by logging concerns in the vicinity of Bear Lake and points north. The BC Rail right-of-way tracts down the east side of Bear Lake within 7 to 10 km of the eastern boundaries of the PAT and SAY claim groups.

Documented exploration begins as far back as 1945, at least for the MOT property area, when Yukon Northwest Explorations Limited staked the initial claims and carried out work on the property. The claims in the MOT area were acquired by Huestis Mining Corporation in 1961 and extensive surface sampling was carried out. Noranda did some work in 1962. Over in the SUSTUT property area, the gossanous zones attracted the attention of Kennco, who staked claims and carried out work in 1965. Kennco conducted the initial helicopter reconnaissance in the region and examined many of the other prominent gossans, carrying out prospecting, soil and stream geochemistry and in some cases, diamond drilling. In the years following, a number of companies, both major and junior, continued work in the region with some properties seeing repeated exploration programs every few years. As the various properties have somewhat differing exploration histories a more detailed exploration history of each property is listed in Section 3 of this report.

1.5 Current Program

Following initial compilation and a satellite-imagery investigation, additional research was conducted leading up to the current field examination. Field work was based on a helicopter assisted six person crew. The field crew and helicopter pilot stayed at the Bear Claw Lodge (the Cliffs at Kispiox) located on the upper reaches of the Kispiox River, approximately 80 km southwest of the property areas. Half of the field crew would be fly to the selected property while the other half drove 60 km to the end of the logging road (and the jet fuel cache) positioning themselves about 40 km southwest of the properties minimizing the flying hours needed. The helicopter remained in the area to facilitate moves during the day as required. In order to maximize the use of the helicopter the field crews worked 12 hour days. All crew members carried Fm transceivers and were able to communicate with other field members and the helicopter. In general, four to eight traverses were carried out on each property. The objectives were slightly different on each property depending upon the amount and results of previous exploration work. On many of the properties, the previously explored and documented mineralization was given a cursory examination with more time devoted to examining the general geology as well as other areas of the property in order to provide an overall understanding of the mineralization and an assessment of the property's exploration potential. All of the properties, with the exception of the MOT, were examined for potential to host significant porphyry copper mineralization. The MOT was considered to have better potential as a precious metal deposit. Known, and well documented mineralization on adjacent properties, particularly those that had received significant exploration, was also examined in order to provide comparisons with the subject properties. Details of the work carried out on each property are presented in Section 3.

2. Geology

2.1 Regional Geological Setting

The project area is situated near the central-eastern edge of the Bowser Basin, a large sedimentary basin that was deposited on Jurassic volcanic rocks of the Stikine terrane. The basin was uplifted and deformed to form the Skeena Fold Belt in Cretaceous time and, within the project area is intruded by Tertiary to Cretaceous intrusive rocks of the Katsberg and Babine plutonic suites. Source of the sediments within the Bowser stratigraphy is believed to be from the obduction of the Cache Creek terrane over Stikinia in the early middle Jurassic (Gagnon, 2010).

Rocks of the Bowser Basin are primarily middle Jurassic to mid-Cretaceous sediments deposited in wide range of environments ranging from deep-water marine to deltaic and lacustrine. Shale and argillite with interbedded sandstone form a thick succession in the western part of the project area and overlie coarse sandstone, minor conglomerate and possibly some tuffaceous rocks that may be transitional into the underlying Hazelton Group volcanic rocks, in the eastern project area. The Hazelton Group rocks within the project area are probably part of the upper Hazelton Group which is dominated by fine grained clastic rocks and lesser bi-modal rift-related volcanic rocks.

Structurally, the Bowser Basin is dominated by contractional folding and faulting (Evanchick *et. al.*, 2009). Within the project area, folds generally have a northwesterly orientation, and may be accompanied by similarly oriented thrust faults. Observed folds vary from open to tight and can be recumbent.

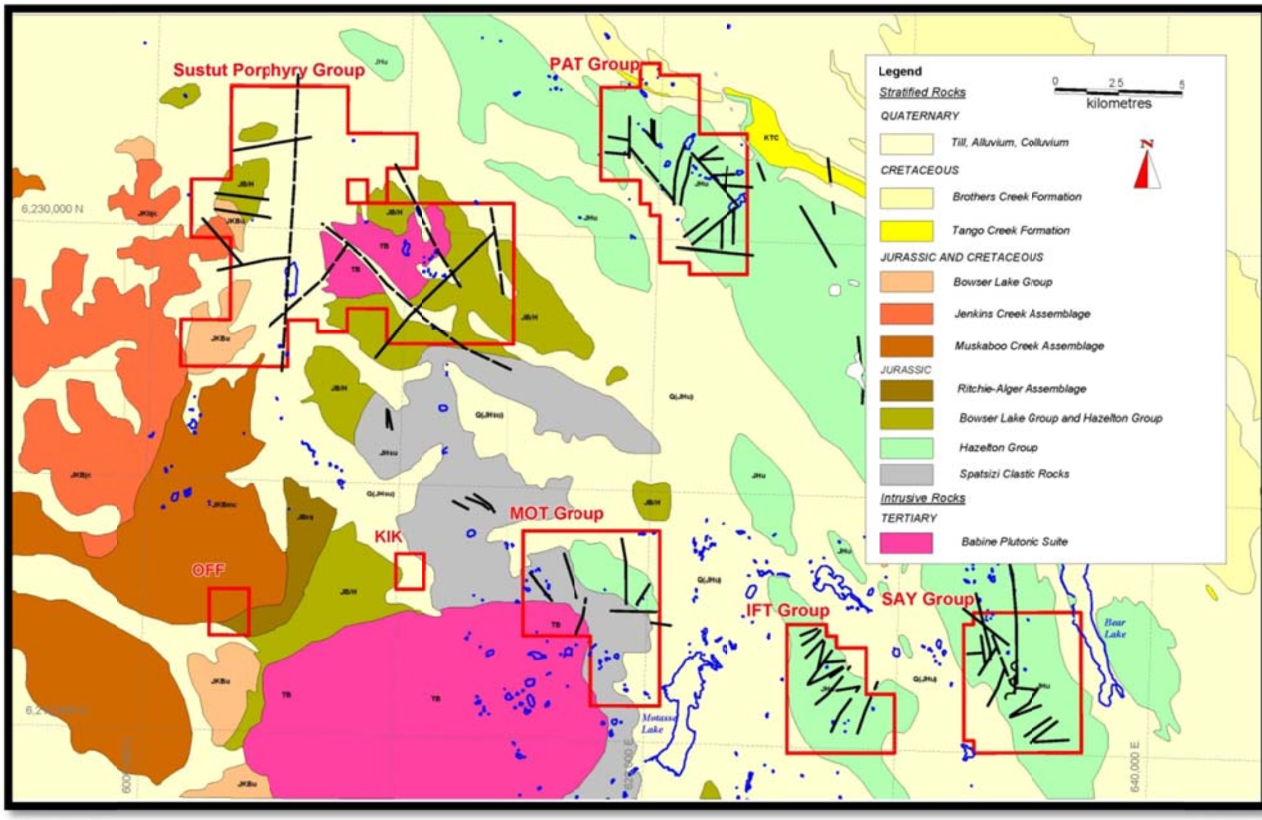

Figure 2.1 Regional Geology and Claim Group Locations

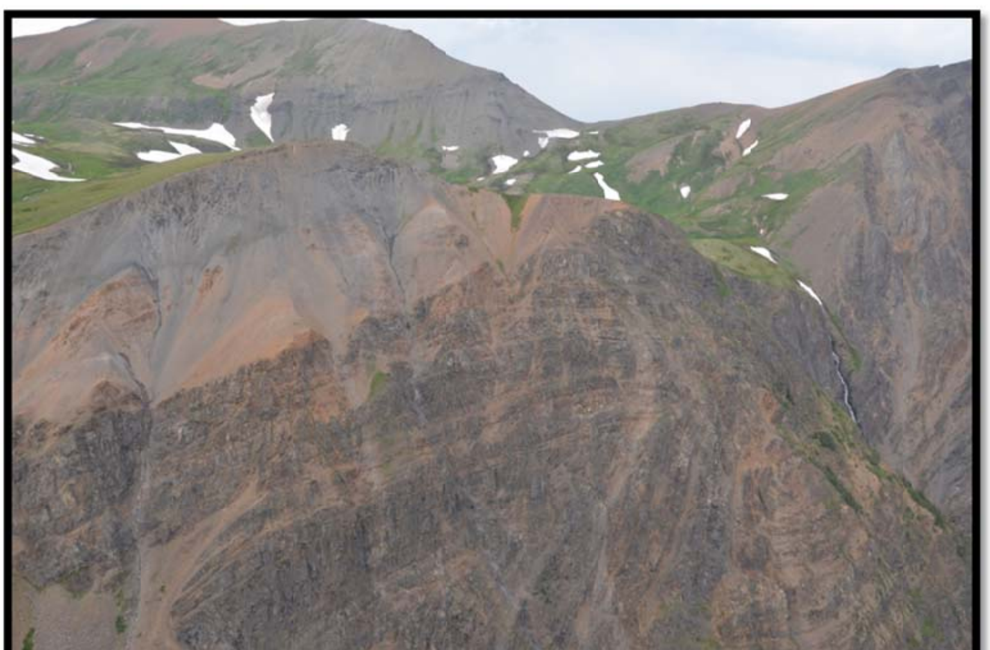

Plate 2.1. Possible thrust contact between Jenkins Creek Assemblage (?) sediments and tightly folded Ritchie-Alger Assemblage of the Bowser Lake Group, in area between the Sustut property and the Off claim.

2.2 Project Area Geology

The project area geology was determined by compiling information from published maps and digitizing it onto a GIS. The most current source of geology is GSC open file 5571 (Evanchick, 2007). Simplified geology is shown on Figure 2.1. The three easternmost properties are entirely underlain by undivided, lower to lower-middle Jurassic Hazelton Group rocks, consisting of: subaerial and marine mafic volcanic and epiclastic rocks; felsic volcanic rocks include sills, dykes and welded and non-welded ignimbrite, airfall tuff breccias; epiclastic and bioclastic rocks, including volcanic debris flow, breccias, conglomerate, siltstone, shale and limestone. The western properties are more complex with rocks of both the Hazelton and Bowser Lake Groups and intrusions of the Babine Plutonic Suite. Areas of intrusion and perhaps, of iron rich Hazelton Group rocks, are indicated on the regional aeromagnetic data (Figure 2.1). It is clear the regional contacts for the plutons are at least partially taken from the regional magnetic data; however, work completed for this report indicates that these contacts are incorrect. In particular, the large southern pluton (herein referred to as the Motase Pluton) extends for many kilometers to the northwest, at least at lower elevations. Less informative is a blended unit of undivided rocks of the Bowser Lake and Upper Hazelton Groups.

The Bowser Lake Group has been subdivided into eight Assemblages, four each in the upper Jurassic to lower Cretaceous and Upper Middle to Upper Jurassic age ranges. In the vicinity of the project area the lower three of the younger four assemblages and the older part of the Bowser Lake Group consisting of the one Formation and three Assemblages that we would expect to encounter. A brief description taken from OF5571 is given below:

Jenkins Creek Assemblage (JKBjc): (non-marine assemblage) mudstone, siltstone, fine to medium grained sandstone, rare conglomerate and coal, commonly arranged in fining upwards cycles, sandstone is grey, green and brown weathering and fossil plants are abundant.

Skelhorne Assemblage (JKBs): (deltaic assemblage) thinly intermixed and varicoloured siltstone, sandstone and conglomerate (with or without coal), commonly arranged in coarsening and thickening upward cycles, and featuring sandstone with cross-bedding, ripples, burrows, and fossils and conglomerate that is rusty and grey weathering but constitutes a lower proportion of the sequence (15-30%) than in the Eaglenest Assemblage.

Muskaboo Assemblage (JKBmc): (shelf assemblage) sandstone, siltstone and conglomerate; primary lithofacies is sandstone forming laterally continuous thin to thick bedded sheets, less common is sandstone interbedded with siltstone and lenses of conglomerate. Sandstone is green, grey to brown weathering, thin to thick bedded and arranged in coarsening upwards cycles, abundant marine fossils; conglomerate increases in proportion and thickness upsection.

Netalzul Formation (JBn): feldspar-hornblende-porphyritic andesite flow, breccia and tuff, intercalated volcaniclastic sedimentary rocks, including volcanic debris flow. (The rocks of this formation could easily be mis-classified as part of the Hazelton Group if observed in isolation, and may be present on the northern side of the MOT claim area.)

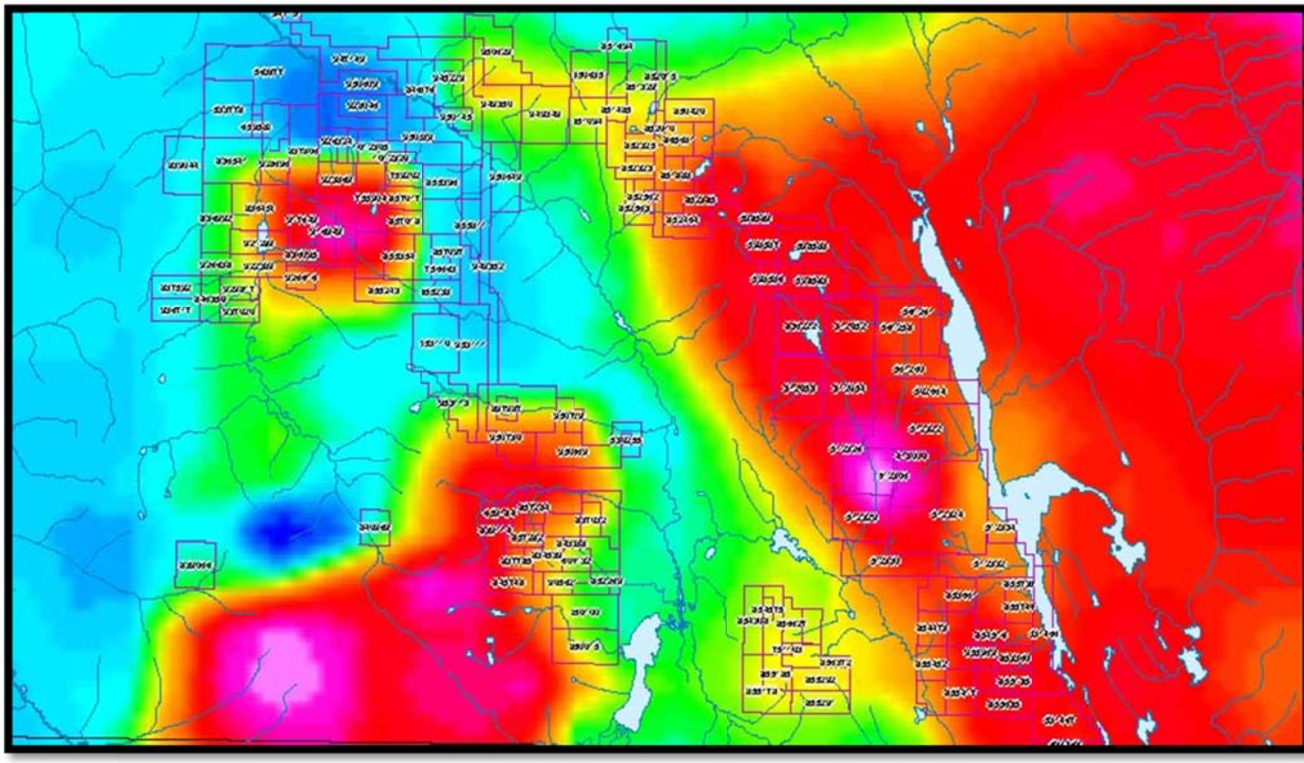

Figure 2.2: Aeromagnetic image for the Bear Lake Region

Eaglenest Assemblage (JBe): (deltaic assemblage) conglomerate, sandstone, siltstone, mudstone, and rare coal, arranged in a coarsening- and fining-upward cycles of mudstone to pebble or cobble conglomerate, prominently rusty weathering: 30 to 80% conglomerate; sheets of conglomerate up to 50m thick.

Todagin Assemblage (JBt): (slope assemblage) siltstone, fine-grained sandstone, and conglomerate; mainly laminated siltstone and/or fine-grained sandstone which is dark grey to black weathering and includes thin, orange weathering claystone beds and syndepositional faults and folds; chert pebble conglomerate occurs as lenses.

Ritchie-Alger Assemblage (JBra): (submarine fan assemblage) sandstone, siltstone, and rare conglomerate; approximately equal proportions of sheet-like intervals up to 50m thick, dominated either by siltstone, shale or very fine grained sandstone, or by medium-grained sandstone; siltstone and/or fine grained sandstone is dark grey and black weathering, sandstone is medium and light grey weathering: abundant turbidite features.

The overall similarity of rocks within the Bowser Group makes it difficult to impossible to assign Assemblages or Formations based on local traverses and/or rock descriptions within Assessment Reports, and requires detailed mapping of significantly thick stratigraphic sections. Limited bedrock exposure, particularly at lower elevations of the project area, makes it very difficult to find a full stratigraphic section. In general, the actual assemblage of the Bowser Group is likely irrelevant to the potential for mineralization, however, as one or more of the Assemblages is noted to have rusty weathering, this may well impact selection of areas for investigation through the use of both colour and FeO spectral imagery.

2.3 Alteration and Mineralization

A variety of mineralization has been discovered, explored and documented in the region, but almost all observed mineralization appears to be related to some form of intrusive activity. The intrusive rocks related to the various areas of mineralization exhibit a wide range of textures and compositions and may either be part of the Eocene Katsberg Plutonic Suite or the older Babine Intrusions. The Babine Intrusions are associated with porphyry copper deposits 100km to the southeast along the main structural trend. The outcrop pattern as shown on the geological map suggests that the Babine intrusions in project area are early in the erosional process of being "unroofed" and therefore there may additional areas that are underlain by intrusive rocks at relatively shallow depths. The Bear property (Roste, 2008) and possibly the Jake property (Ronning, 2007; and Smith, 1999) provide evidence of the potential for copper-gold porphyry style mineralization within the district.

Mineralization in the district appears to fall into four groups: 1) copper, usually associated with relatively high silver values disseminated or as fracture fillings in Hazelton volcanic or epiclastic rocks, 2) porphyry Cu + Mo hosted in or related to feldspar or quartz-feldspar intrusions; 3) porphyry Cu-Au mineralization associated with possibly more alkaline intrusions and 4) gold vein and vein stockwork deposits. The most advanced projects in the district are the two Tommy Jack properties on the western side of the district and the Bear property on the eastern side of the district. The Tommy Jack property (reference) has been extensively drill tested and appears to be comprised of numerous narrow to broad zones of gold mineralization associated with sulphidization of sediments adjacent to a complex intrusive dyke swarm. The Bear property (ref, ref) has a relatively long history of drilling and has numerous drill holes with long intersections of potentially economic grades within quartz and feldspar phyric intrusive rocks.

Colour anomalies are commonly associated with hornfelsing and pyritization of the Bowser Group sediments along contact zones with intrusions. In many areas the intrusive is well exposed and is relatively pristine tombstone right up to the contact. Hornfelsing of the sediments and pyritization, particularly in sandstone units and finely interbedded shale and sandstone units, can extend for 10's to 100's of metres into the sedimentary rocks. No significant mineralization and no geochemical anomalies were obtained from these areas. Mineralization appears to be related to specific phases of the plutonic suite, notably porphyritic phases occurring as relatively small volume dykes or sills.

3 Property Descriptions

3.1 MOT

3.1.1 Introduction and Objectives

The MOT property has more than 65 years of exploration history, changing owners many times. Significant gold values are associated with base metal sulphide minerals within mesothermal style quartz veins. The veining appears to be related to a dyke swarm of orthoclase, megacrystic monzonite intruding argillite, sandstone and conglomerate of the Bowser Lake Group. A large batholith of quartz diorite is situated to the west of the property and forms the south-western third of the property area. Approximately four to six, sizable areas of mineralization and associated anomalous soil geochemistry have been defined, which are somewhat zoned from Mo-Cu-Au-Ag-W in the north and Au-Ag +/-Cu-Pb-Zn to the south. A majority of significant assays have come from the Huestis zone and a majority of the advance exploration has been undertaken there. There is no documentation of large scale geophysical surveys having been undertaken on the property, which is not unreasonable in light of the exploration focus has been on gold and silver within quartz veins hosted by carbonaceous shale and as such, the mineralization is not well suited for most geophysical techniques. Two, relatively small, drill programs have been undertaken exploring gold bearing veins in the Huestis zone and another drill program exploring for porphyry Mo-Cu mineralization. The initial drill program involved very short holes (likely with very small diameter core) testing directly below relatively high-grade surface mineralization at shallow depths and yielded a 9m (~6m true) intersection grading 9.1g/t Au. A more extensive drill program in 1987 tested a larger area of mineralization and fortunately almost all of the core was split and assayed allowing for a better understanding of the distribution of gold mineralization. The results of this program suggested that there may be some potential for a low grade bulk tonnage gold deposit.

The current work program was designed to carry out a preliminary investigation into the nature of the mineralization and determine potential for either a plus one million ounce deposit of bulk mineable low-grade deposit or a +500,000 ounce high-grade vein deposit. Three traverses were run on the property: one with the intent to sample the south gossan area, one to collect rock chip samples from the Huestis zone and one cover as much property area and see as many zones as possible. An additional day was spent attempting to extract core from the collapsed core rack. As the wooden boxes were missing all labels, and were quite rotten, this proved to be mostly futile although a fair amount of core was examined giving a general idea of what the rocks and mineralization looked like in drill core.

Considerable physical effort was expended to collect five full fuel drums (diesel and jet fuel) and move them to an area where they would not contaminate creeks if they started to leak. These drums should be flown out to the nearest road for removal when work resumes on the property.

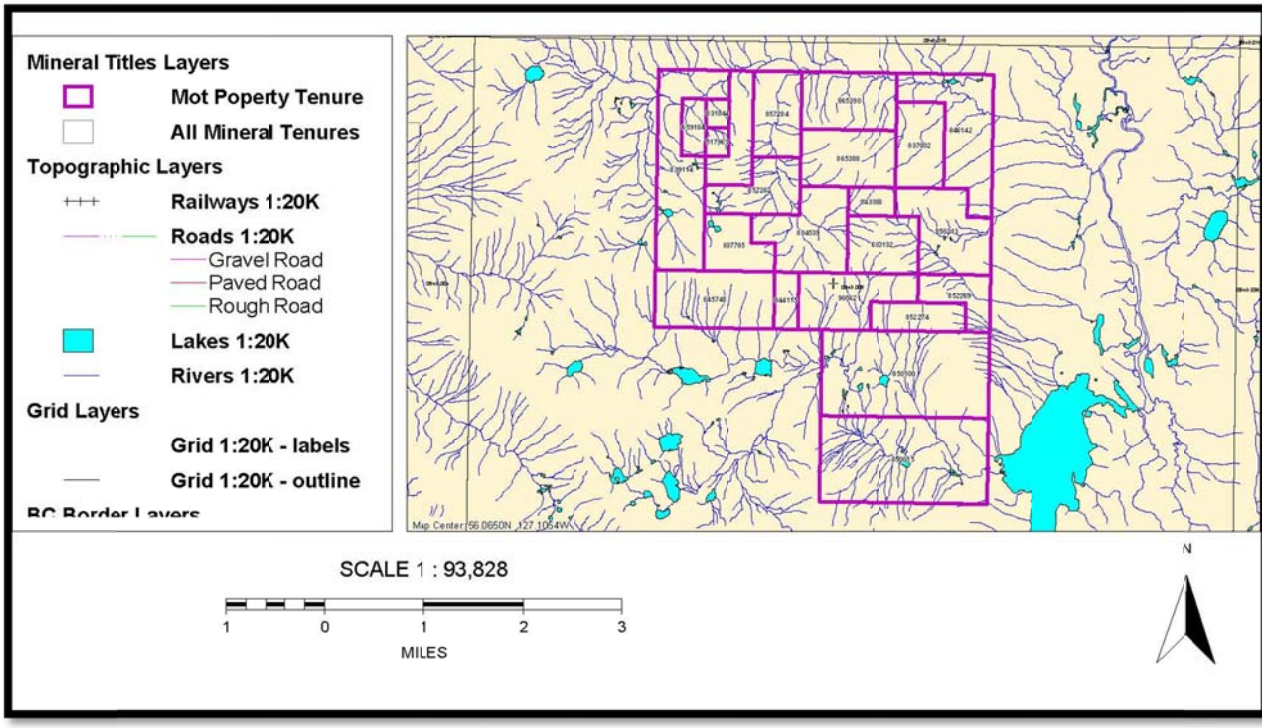

Figure 2.1.1 MOT Claims and Detailed Location

2.1.2 Exploration History

Possibly the earliest exploration in the Motase Lake area, and perhaps the district, was noted by Lord (1949), who documented claim staking and work by Yukon Northwest Explorations Limited, in 1945 which consisted of prospecting, geological mapping, and sampling. However based on the description of showings containing bornite and chalcocite with minor associated galena, pyrite, chalcopyrite, and possibly tetrahedrite within minute fractures and as disseminations adjacent t o fractures in andesitic volcanic, it sounds like these showings were within the Hazelton volcanic rocks, possibly on the north side of the property or even closer to the western shoreline of Motase Lake.

Gold bearing mineralization was discovered in 1948 by H.H. Huestis (one of the founders of Bethlehem Copper Corporation) which held claims in the area until 1982, when the property was inherited by Cominco from Bethlehem. Subsequent to discovery, three areas with gold showings were identified on the property and are named the 'Huestis', 'Goudridge', and 'Moran' with the majority of the work having been carried out on the Huestis zone. The initial diamond drilling was carried out by Noranda in 1962 who drilled 4 holes all of which yielded significant intersections (however the low gold price at the time and the remoteness of the claim area discouraged Noranda from pursuing exploration on the property.

Noranda's best intersection was of 0.32 oz/T Au over 30 feet (estimated to be 20 feet true but this would also depend upon the azimuth). Two of the other drill holes (#2 and #2A) which were in close proximity (figure 3.1) returned intervals of 0.6 oz/T and 9.4 oz/T Ag over 4.9 feet and 1.2 oz/T Au and 2.0 oz/T Ag over 2.6 feet. The Huestis zone consists of a series of quartz veins, hosted by "altered' sediments, and feldspar porphyry intrusive rocks.

In 1983, Cominco carried out surface rock sampling which yielded 2m of 0.27oz/T Au and 2.5 oz/T Ag from the outcrop a few metres above Noranda's DH 2 and 2A (Pauwels & Wiley, 1983). The Goudridge zone was reported by Cominco to consist of quartz within an alteration envelope at the contact between feldspar porphyry and sedimentary rocks. Here, a 3m chip sample yielded 0.346 oz/T Au, 0.47 oz/T Ag, and low values for base metals. Sampling was limited by the extreme ruggedness o f the terrain (Pauwels, 1983). Cominco also named the Moran zone, which occurs near the ridge top to the southeast of the Huestis area. Sample values were significantly lower than the Huestis zone with the best sample being within a quartz vein and assaying 0.77 oz/T Au over 0.1m. Cominco allowed all of the claims to lapse with the exception of the two core claims covering the Huestis zone.

In 1981 Amoco Canada staked claims over the Mot area and conducted soil geochemical sampling, rock sampling, geological mapping and diamond drilling. Amoco defined a sizeable geochemical anomaly (Cu, Mo, Au, Ag, W) covering a northwest trending area about 2500m by 750m which included the Huestis zone. 916m of drilling was completed in four holes, targeting potential porphyry style mineralization to the east of the Huestis zone, with negative results. The claims were once again allowed to lapse.

The Horn claims were staked to cover a large colour anomaly and zone of pyritization at the contact between Bowser sediments and elongate quartz diorite porphyry, located about 3km north of the Huestis zone by Canadian Superior in 1973 (Baker and Rainboth, 1973). Soil sampling indicated a 2km long Mo anomaly, with scattered anomalous values in Au and Cu. The intrusion consisted of two phases: a feldspar-phyric quartz diorite and a mega-crystic pink (K-spar) porphyry quartz monzonite, neither of which displayed any alteration in outcrop, similar to the intrusions on the MOT claims.

The most significant work on the MOT claim area was undertaken in 1987 by Prolific Resources, who conducted a 10 hole, 976m drill program together with extensive prospecting and surface geochemical surveys, and is well documented by Davis (1988). The 10 drill holes from this program are distributed along 3 fences spaced from 20 to 60m apart and that straddle the original Noranda drilling (figure 3.2). Unfortunately most of the holes were drilled in opposite directions from the same collar location which covers a wider area but makes downwards correlation of the veins more difficult, in a few areas holes were drilled off the same collar at -45 and -60 degrees and these holes demonstrated poor correlation between grade bearing intersections. Some of the veins appear to be correlative along strike but only to the next closest drill hole. All of the drill holes intersected mineralized material with 6 of the 10 holes intersecting at least one intersection greater than 1 foot and 0.1 oz/T gold. There were a total of four intersections greater than 3 feet in thickness and greater than 0.25 oz/T gold. A table of the most significant intersections is attached below.

Table 2.1.1. Summary of Significant Drill Results from Prolific Resources' 1987 Program

Drill Hole	From (ft)	To (ft)	Thickness	Au oz/T	Ag oz/T
87-01	310	313	3	0.26	0.09
87-03	45.9	53.0	7.1	0.26	0.45
87-04	44.5	45.3	0.8	0.14	6.83
	130.3	134.2	3.9	0.26	0.70
87-05	258	259	1	0.15	2.68
87-09	19	22	3	0.13	0.70
87-10	81	83.4	2.4	1.72	1.34
	138.5	141.0	2.5	0.10	1.55

As much (but not all) of the drill holes were split and assayed an average value for the assays was also estimated and is given in the table below:

Table 3.1.2 Compilation of all Assay Data from Prolific Resources' 1987 Drill Program

Drill Hole	Total depth	# of samples	Au ppb	Ag ppb
87-01	313	104	231	508
87-02	308	79	60	790
87-03	305	103	738	2230
87-04	313	87	369	5260
87-05	313	64	171	3420
87-06	338	50	155	1120
87-07	313	59	78	930
87-08	313	60	56	1020
87-09	338	68	223	1340
87-10	343	52	1724	12540

It should be noted that the average values are with uncut samples and most of the higher values would be much lower if the extreme highs were cut, additionally not all of the unsampled material would carry grade so if the entire drill hole was analyzed the overall averages would be somewhat lower.

Work on the property subsequent to the 1987 drill program has been relatively minor, usually consisting of additional prospecting and soil geochemistry.

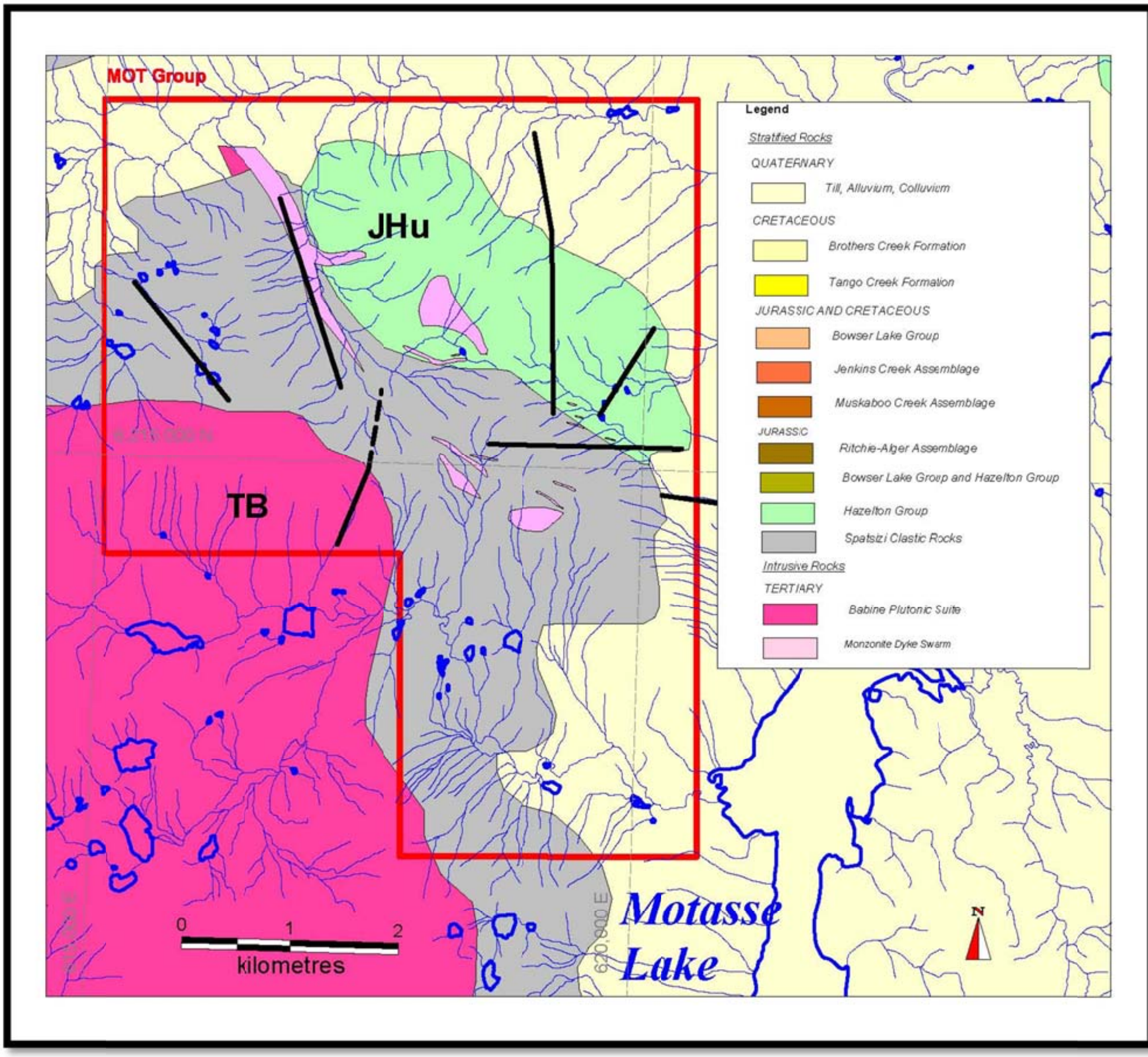

Figure 3.1.2: MOT Claim area simplified Geology

3.1.2 Geology and Mineralization

At a large scale the geology of the MOT property is relatively simple. A homoclinal sequence beginning with Hazelton volcanic and volcaniclastic rocks at the base of the sequence, which are exposed at lower elevations on the north side of the property, and transitioning upwards into a thick sedimentary package of interbedded black shale, sandstone and lesser conglomerates of the Bowser Lake Group. All of the the stratified rocks dip gently to the west. It is possible that recumbent folds exist, as these are evident elsewhere in the region, but none were observed on the steep north faces with excellent exposure on the alpine ridges on the property. A relatively large batholith intrudes this package and forms the southwestern third of the property area. The contact area of the batholith is not well exposed, most commonly being covered with talus from slopes above but based on the general outcrop pattern is presumed to dip moderately to the east. A much smaller intrusive or perhaps better described as an intrusive complex appears to transect the center of the property along a northwesterly trend although large scale contacts were not observed and the northwesterly trend is suggested by the trend in gossans and geochemically anomalous areas/mineralized zones. The complex is made up of small dykes and scattered, irregularly-shaped outcrops. Intrusive rocks range from slightly porphyritic, fine to medium grained monzonite to orthoclase mega-crystic porphyries; quartz grains were only rarely observed. Possibly the largest area of intrusion occurs along the southwest facing slope of the southern ridge on the property which is composed a large rusty talus slope with about 20-30% of the talus being made up of intrusive rocks and the remainder rusty shale and lesser sandstone.

Mineralization consists of disseminated to fracture controlled pyrite within sedimentary and intrusive rocks and quartz veining with or without associated sulphide mineralization. Results of current sampling are in general agreement with results in previous sampling and drilling whereby sulphide minerals appear to be critical for hosting precious metal mineralization and the best grades are obtained from quartz veins with abundant base metal sulphide minerals. Quartz without sulphide mineralization does not appear to carry significant grades and sulphide minerals, mostly pyrite, as fracture fill within black shales can carry anomalous to low grade mineralization, but usually in general proximity to quartz veins. The main quartz veins of the Huestis zone strike northeasterly (20-30 degrees) appear to be vertical and have strike length of more than 60m. There are 3 major veins and large number of subordinate veins with the main veins having thickness' ranging from 1 to a maximum of 3m on surface. Intrusive dykes appear to have a similar orientation to the veins but this is a bit uncertain due to limited outcrop. The Huestis zone would appear to be a zone of breakage at the intersection of 2 or more faults with the main structural zone trending 022 degrees.

Talus fine samples were collected from the large gossanous talus slope to the southeast of the Huestis zone and below the Moran zone (figure 3.3A and B). These samples did not identify any significant mineralization. Chip samples were collected from the Huestis zone and were intended to be continuous to semi-continuous samples of material between the veins in order to get a sense of potential for bulk tonnage style mineralization. The sample results are not dissimilar to what was obtained within the diamond drilling, namely that localized areas of sulphide concentration will carry precious metal grades but that this mineralization is spotty and inconsistently distributed within the host rocks, making it difficult to estimate bulk grades.

Plate 2.1. Looking south east from the Huestis zone on the MOT property. Gossanous slope is created by feldspar megacrystic monzonite and monzo-diorite intruding siltstone of the upper Hazelton Group (Spatzizi formation?).

Plate 2.1 Rusty weathering pyritic siltstone in the Huestis Zone.

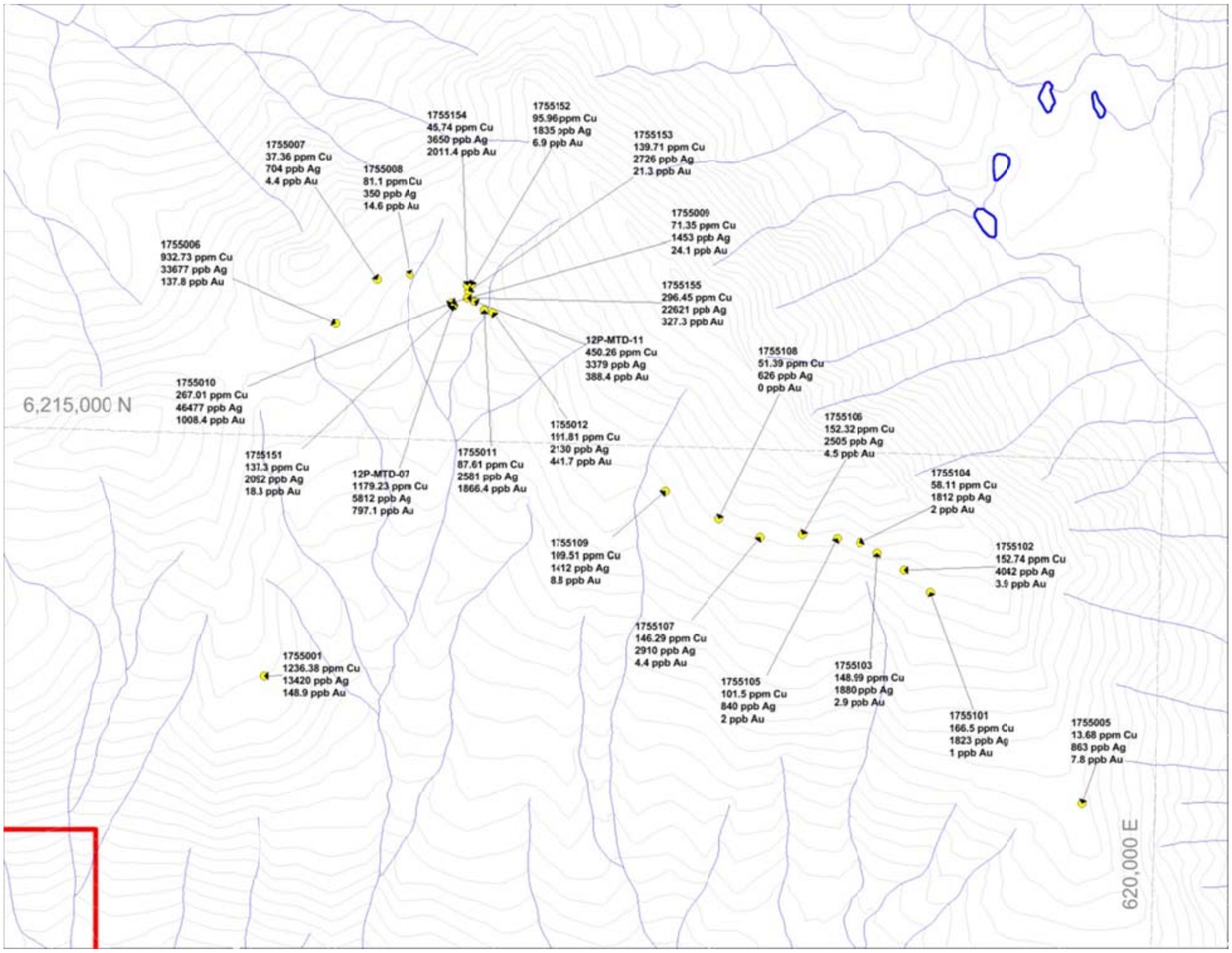

Figure 2.1.3A Sample locations and results for Cu, Ag, Au

2.1.4 Conclusions and Recommendations

Historical and current results indicate that precious metal grades are associated with base metal sulphides within quartz veins and within sulphide fracture fill adjacent to quartz veins, and that the quartz veins and sulphide mineralization occur within a northeasterly (020-028^{o}) trending structural zone. Examination of historical drill data together with surface observations suggest that mineralized veins lack sufficient continuity required to create a bulk minable situation. Distribution of sulphide mineralization within the larger quartz veins exposed on surface also appears capricious indicating that continuity of grade within these veins could be an issue in attempting to define mineable high grade zones.

Current work was concentrated in Huestis zone where most of the significant results from historical work are concentrated. The property has a number of defined zones with anomalous geochemistry and mineralized samples that have not been subject to as much intense investigation as the Huestis zone and could benefit from closer examination. Additionally, due to high elevations permanent snow packs cover a considerable amount of ground and conducting field investigations in early September may provide new exposures within mineralized areas. The carbonaceous host rocks and dispersed sulphide mineralization does not create a good target for geophysical methods, so ultimately changes with depth will have to be determined with the drill bit.

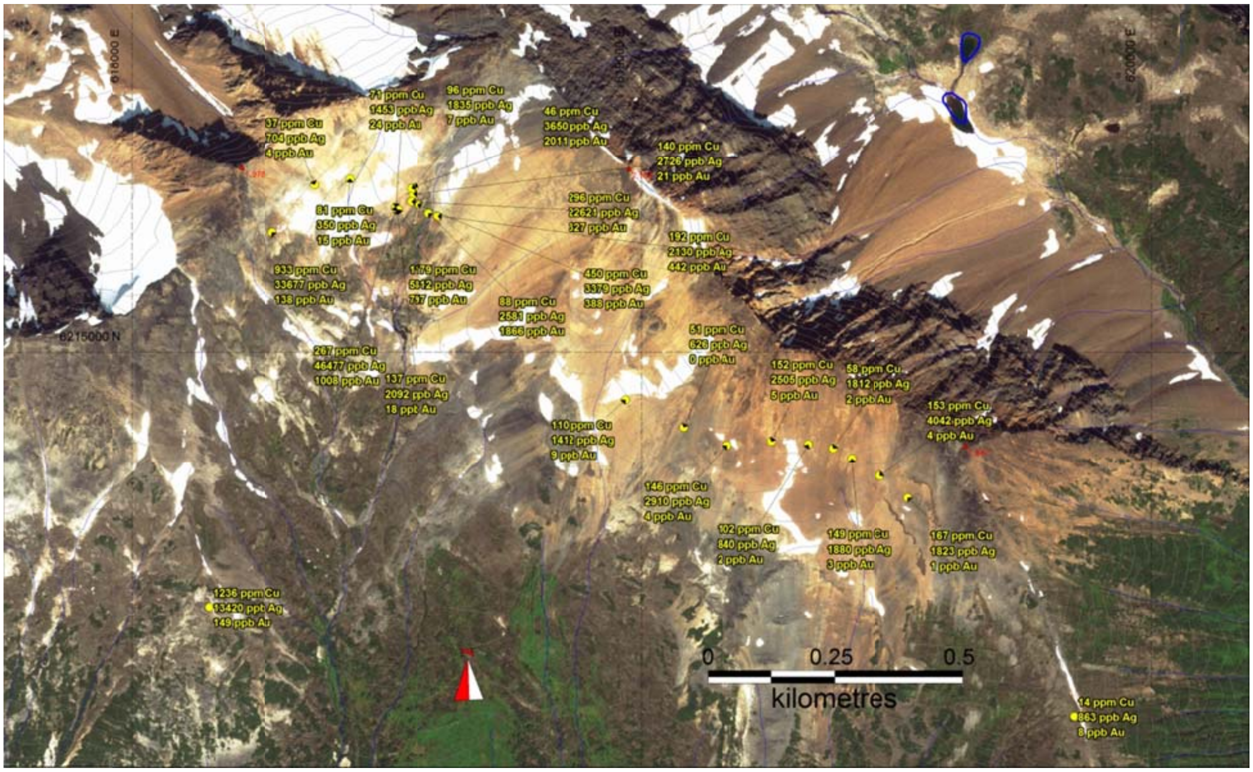

Figure 2.1.3B Sample results plotted on Satellite Image

Table 2.1.3: Summary of analytical results for MOT samples (see map for locations)

Sample	Utm East	Utm North	Type	Cu ppm	Ag ppb	Au ppb	Pb ppm	Zn ppm	Mo ppm	Mn ppm	Fe %	As ppm	Sb ppm	Bi ppm	W ppm
1755001	618150	6214500	Drill Core	1236	13420	149	32.61	187.7	6.02	375	5.10	35.8	1.39	32.31	>100.0
1755002	618150	6214500	Drill Core	73	557	15	10.95	41.9	13.96	665	1.55	6.7	0.47	1.19	18.8
1755003	618150	6214500	Drill Core	196	903	206	13.42	66.1	27.53	1036	3.39	12.8	0.38	4.10	68.1
1755004	618150	6214500	Drill Core	101	340	70	3.74	62.0	1.15	1272	3.77	1.8	0.31	1.69	24.4
1755005	619850	6214285	Rock	14	863	8	70.04	168.4	3.45	205	1.36	77.0	6.35	0.33	0.8
1755006	618275	6215235	Rock	933	33677	138	75.52	97.6	10.97	111	2.68	37.0	5.76	40.13	5.4
1755007	618358	6215329	Rock	37	704	4	8.62	28.8	14.92	128	1.50	3.4	0.29	0.87	17.9
1755008	618426	6215341	Rock	81	350	15	3.54	44.6	3.95	268	3.74	9.8	0.27	1.61	2.7
1755009	618515	6215285	Rock	71	1453	24	26.77	31.4	15.33	95	2.06	42.5	0.48	5.43	>100.0

1755010	618515	6215285	Rock	267	46477	1008	9994.12	590.5	7.69	53	3.99	2935.5	20.36	13.91	>100.0
1755011	618582	6215272	Rock	88	2581	1866	204.62	104.4	4.98	152	3.82	73.7	0.35	2.90	>100.0
1755012	618600	6215267	Rock	192	2130	442	218.69	236.1	49.15	244	3.03	139.2	0.41	1.48	8.1
1755013	618150	6214500	Drill Core	281	2179	47	48.74	111.1	3.69	2174	3.41	300.6	0.63	19.82	>100.0
1755014	618150	6214500	Drill Core	497	36586	1509	3017.92	9810.4	9.63	549	2.94	70.5	3.09	58.02	4.2
1755101	619523	6214714	Rock	167	1823	1	4.16	92.0	4.07	361	3.49	46.9	0.15	1.67	7.9
1755102	619468	6214758	Rock	153	4042	4	15.80	201.5	24.89	296	3.81	214.7	0.39	32.75	6.1
1755103	619412	6214791	Rock	149	1880	3	5.56	68.4	6.70	323	3.21	73.7	0.20	2.52	48.1
1755104	619375	6214811	Rock	58	1812	2	6.13	67.5	6.66	288	3.00	105.0	0.24	13.77	1.3
1755105	619327	6214819	Rock	102	840	2	8.11	87.6	2.66	353	3.65	70.3	0.36	0.85	0.9
1755106	619255	6214825	Rock	152	2505	5	24.00	223.1	6.60	274	2.64	307.1	1.77	5.69	>100.0
1755107	619168	6214817	Rock	146	2910	4	21.56	394.3	18.42	293	4.13	155.5	0.86	1.02	4.0
1755108	619082	6214853	Rock	51	626	>0.2	6.62	104.7	1.96	331	2.75	14.3	0.48	3.15	4.3
1755109	618968	6214907	Rock	110	1412	9	30.59	167.1	13.04	177	1.38	220.5	0.38	3.23	9.9
1755151	618518	6215279	Rock	137	2092	18	5.09	53.0	8.42	238	1.67	10.3	0.14	1.53	>100.0
1755152	618554	6215323	Rock	96	1835	7	11.64	59.7	11.02	158	3.02	83.1	0.51	6.14	>100.0
1755153	618549	6215310	Rock	140	2726	21	10.88	106.9	7.99	238	3.44	6.9	0.31	5.64	>100.0
1755154	618546	6215322	Rock	46	3650	2011	1547.17	112.5	29.27	37	1.99	673.5	2.81	1.31	4.5
1755155	618546	6215296	Rock	296	22621	327	121.79	194.3	2.44	61	4.53	78.8	0.86	16.20	>100.0
12P-MTD-07	618520	6215280	Soil	1179	5812	797	183.30	1386.0	43.33	1748	9.52	736.7	2.21	7.51	>100.0
12P-MTD-11	618561	6215290	Soil	450	3379	388	444.14	648.2	63.38	2708	9.46	352.4	1.40	6.57	>100.0

3.2 SUSTUT

3.2.1 Introduction and Objectives

The SUSTUT property, of which the northwest corner is previously known as the "Jake" property, is a large property that hosts a strong gossanous zone (Jake property) and a large gossanous area on the eastern edge of the property. Additionally, a small area of gossan occurs in the southwest corner of the property. A fair amount of exploration has taken place on Jake property including three phases of diamond drilling and extensive soil/talus sampling and prospecting. There is little documented work on the eastern part of the property but it is understood that this area was included in the property due to anomalous stream geochemistry draining this area. Five prospecting and sampling traverses were run on the property; one to cover the eastern gossanous area, two on the south ridge of the northwest gossan and two on the north ridge of the northwest gossan. A fair amount of time was spent trying to get crews into position to carry out stream geochemistry along both sides of the west fork of the Squingula River, but this turned out not to be possible without cutting landing sites for the helicopter.

Since such sites had not been anticipated and therefore not permitted for this idea was aborted. A gossanous area in the southwest corner of the property appears to be pale brown to yellow coloured sediments (lacking the red to deep orange colours attributed to oxidized sulphide minerals) and was initially given lower priority, and subsequently left to future exploration due to time constraints. Additional time was spent unstacking, laying out, examining and restacking the drill core from the North ridge area. The drill core was very informative and worth the effort of unpacking, and summary logs are included in Appendix II. Having been cross-staked and wrapped in chicken wire the core was in relatively good condition. The purpose of this work was to evaluate the area for the potential to host a significant porphyry copper-gold deposit.

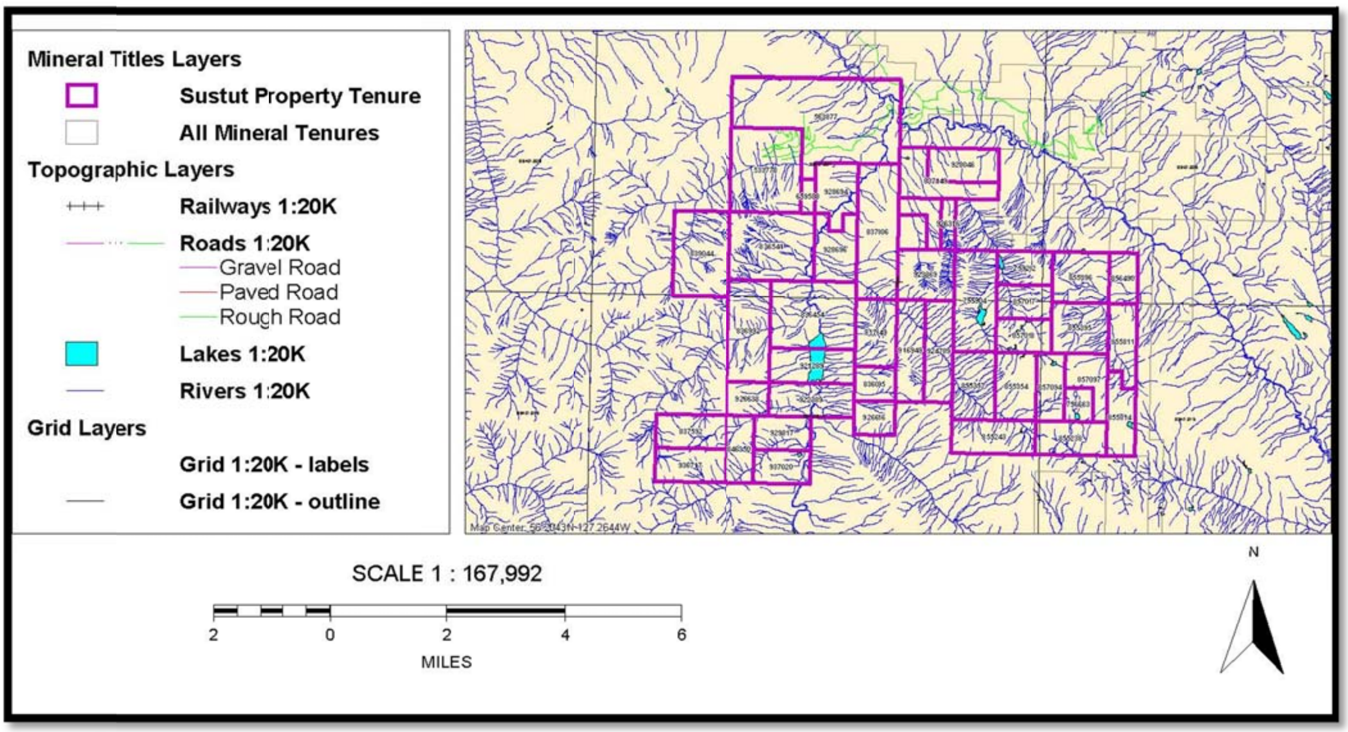

Figure 3.2.1 SUSTUT Group Claim Locations

3.2.2 Exploration History

The Jake property is one of the more intensely explored properties in the region. Kennco is credited with discovering the property in 1965 through areal reconnaissance and stream sediment sampling. Kennco examined the property and drilled two AX holes totaling 55m, but allowed the claims to lapse. Canadian Superior staked the ground in 1968 did some minor work and then re-staked the ground in 1971. Exploration work was carried out in 1972, 73 and 76, including rock and soil sampling, geological mapping, magnetometer surveys, cat trenching, road building (presumably they also used the bulldozer to construct the airstrip at this time), and diamond drilling, which consisted of three X-ray holes (95m), two BQ holes (305m), and seven NQ holes (900m). The property was optioned out to Cities Services Minerals in 1977, who carried out additional soil sampling, geological mapping, trenching and drilled two holes (~430m). The above work was summarized by Linden (*et. al.* , 1990) and also stated that Cities' trenching produced a result of 0.39% Cu and 27.4g/t Ag over 27.5m and may have had similar results in a drill hole. The location and orientation of this trench is not known, and subsequent documented work has not produced results of similar grades and thickness.

In 1986, Placer Dome conducted exploration in the area, including stream sediment, rock and soil geochemistry and presumably results of this work led to staking claims. Placer Dome, however, optioned to property to QPX Minerals Ltd. in 1987, who carried out geochemical surveys over a 40 square kilometre area. Placer Dome conducted additional work in 1990, consisting of a soil geochemistry and geophysics on the north side of the mineralized area. This work indicates that gold and lead are associated with Cu and Ag anomalies but that the soil response falls off to the north presumably indicating an end to the mineralization. VLF surveys on the same grid indicate that mild to moderate conductors occur as a series with sub-parallel north-northeast trends, which corresponds well with observed intrusive dykes in the area. The area was relatively quiet until 1997 when Teck Resources acquired the property and carried out mapping, rock and soil (talus) sampling and re-logged the 1973 drill core . This program was followed up with 500m of hand trenching and then six holes of diamond drilling totaling 696m. Key results from the Teck drilling are listed in the following table:

Table 3.2.1 Summary of Significant results from Teck's 1997 drill program on the Jake Property

Drill hole	From(m)	To (m)	Thickness	Cu%	Pb%	Zn%	Au g/t	Ag g/t
99-01	6.1	7.78	1.79				0.55	
	40.9	54.1	13.2	0.20				
	66.3	80.1	13.8	0.14				
	77.9	83.6	5.7				0.78	
	88.9	89.5	0.6			5.26		
99-02	58.25	67.12	8.87			1.35	0.7	8.98
Incl.			0.30	0.3	0.9	22.6	3.67	136.2
and			0.78			7.6	4.11	58.6
99-03	80.5	81.8	1.31		1.24	1.76	0.43	52.4
99-04	22.55	22.86	0.30		1.04	2.40		
(qz vn)	55.47	56.08	0.61	0.38			0.57	
	118.87	134.11	15.2	0.13				
99-05			No significant results					
99-06	100.03	106.89	6.86		>1	>1	1.14	>30

All of the Teck holes were drilled with an azimuth of 300 degrees and a dip of -45 degrees and were spaced across the hillside at roughly even intervals, thereby testing almost the entire width of exposed gossanous (mineralized) area. Drill hole 4 ended in low grade mineralization and perhaps should have been extended. The key features of the drilling indicate that Bowser Group sediments are intruded by a monzonite dyke swarm and mineralization is nearly equally distributed between the intrusive and sedimentary rocks and is mostly related to quartz-sulphide veins or crackle breccias along or adjacent to intrusive-sedimentary contacts. Drill hole 1 is located in the center of the strongest geochemical anomaly and likely close to where Cities Services obtained their best results.

Electrum Resources carried out a small work program in 2007 consisting of rock, soil and stream geochemistry, this work did identify samples with elevated values, but not with potentially economic grades over mineable widths; none-the-less the authors suggest some potential for mineralization in a northerly direction (Ronning, 2007).

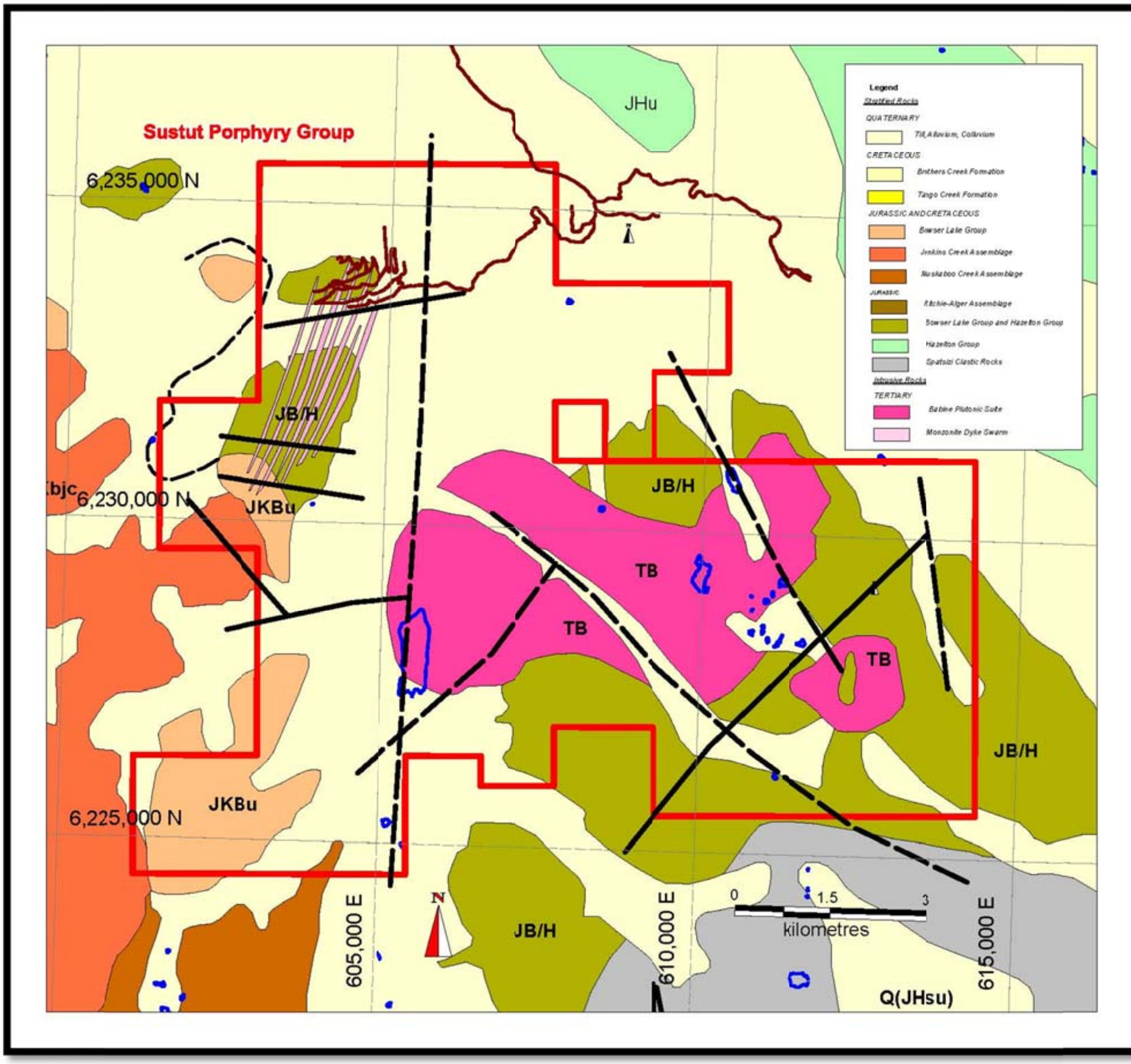

Figure 3.2.2. Geology (modified) of the SUSTUT Claim area. The JB/H designation (green) for sedimentary rocks in the northwest corner of the claims appears incorrect and these rocks are more likely part of the Muskaboo Assemblage.

3.2.3 Geology and Mineralization

The general geology for the Sustut property is shown in Figure 3.2.2, it has been modified from the regional map (Evenchick, 2010) based on traverses undertaken. Most of the property area is underlain by sediments of the Bowser Lake and or Hazelton Groups (undifferentiated), which have been intruded by a large diorite stock in the central part of the property area and by a swarm of monzonite dykes in the northwestern part of the property area. The Bowser/Hazelton Group rocks are well exposed in the northeasterly oriented drainages on the east side of Jake Creek and these rocks are predominately black shales with minor interbedded sandstone and wackes. Adjacent to the diorite intrusion the sedimentary beds are steeple to vertically dipping and appear to have been "turned-up" by forceful emplacement of the stock. On the western side of Jake Creek the sediments are closer to flat lying with gentle to moderate westerly dips. The upper part of the this sequence is predominately coarse to fine sandstone and interbedded fine conglomerate which seems to correlate better with the Muskaboo Assemblage and that overly black clastics – mostly shale and argillite, all of which have been intruded by a dyke swarm of predominately monzonite with variable textures. The dykes are closely spaced, appear to be vertically dipping and range in thickness from 2 to 20m and generally have north-northeasterly trends. Grain size and texture of the dykes varies and may be related to cooling on the margins during emplacement, although in places it does appear that more than a single phase of intrusive is present. The sandstone-conglomerate units develop annealed grain boundaries adjacent to the dykes and in some instances it requires a very close examination to differentiate them from adjacent intrusive rocks. The black clastic rocks display a variety of contact effects from classic hornfels to bleaching and possibly sercitization, best exposed in Teck's drill core. Clay alteration is conspicuous adjacent to the dykes on surface in areas of intense pyrtization and this is believed to be primarily a surface or supergene effect cause by weathering of pyrite, as it was only observed in the shallow parts of some drill holes. In spite of petrographic work included in one of Teck's reports, no rocks in outcrop or drill core appeared to have a volcanic origin, although volcanic detritus may be present in some of the sediments and either hornfelsed sediments and/or chill margins on some of the dykes may have been given volcanic nomenclature by the petrographer in Smith (1997).

Less well consolidated or indurated shale and siltstones overly the rocks to the west and the complete lack of alteration or intrusion in this unit and the moderate westerly dips suggest that these rocks may have been thrust eastwards over the mineralized areas. This unit also weathers much differently producing very round ridge tops and 'smooth', very-fine talus slopes.

Mineralization on the old Jake property consists of extensive pyrite associated with intrusive dykes but developed both in the margins of the intrusive dykes and in the intruded sediments, and base-metal sulphide mineralization within quartz veinlets that cut both the intrusive and sedimentary rocks. The south ridge of the Jake property is almost exclusively pyrite with only a few small areas where quartz veining or minor silicification occurs, samples taken for this program (figure 3.2.3) and most of the samples from past work are weakly to moderately anomalous but seldom yield potentially economic grades. One sample from this program is anomalous in silver and gold, and was collected from a small zone of slicification with clumps of silvery pyrite on the northwester side of the ridge top (the edge of the ridge provided more or less continuous outcrop). In spite of covering many kilometers of talus material while circumnavigating the ridge not one speck of malachite was observed in the talus, supporting the rock samples that contained only back ground copper values. In contrast, the north ridge (which only has exposure on the south face, and made much easier to access by past road building) has scattered areas where malachite is observed, and a much higher tenor of

Plate 3.2.1. 'Jake' gossan, Sustut property, looking east. The whitish bands on the lower right of the photograph are clay rich zones believed to be the result of surface weathering producing sulphuric acid from the oxidation of abundant pyrite.

geochemical samples to match. Consequently it is not surprising that this is where all of the past drilling took place. Mineralization and alteration is best displayed by the drill holes in which a majority of significant assays area associated with base-metal sulphide minerals in quartz veins (and in one drill hole what may be a quartz healed fault zone or crackle breccia). Disseminated pyrite does occur within the dykes but typically near their outer contacts. Only the lower part of DH97-04 does the rock start to resemble what might be considered porphyry style mineralization with any significant thickness. The interpretation here is that the north ridge is both the northern extent and probably the top or maximum vertical extent of the intrusions and it is here that magmatic fluids were concentrated and both quartz

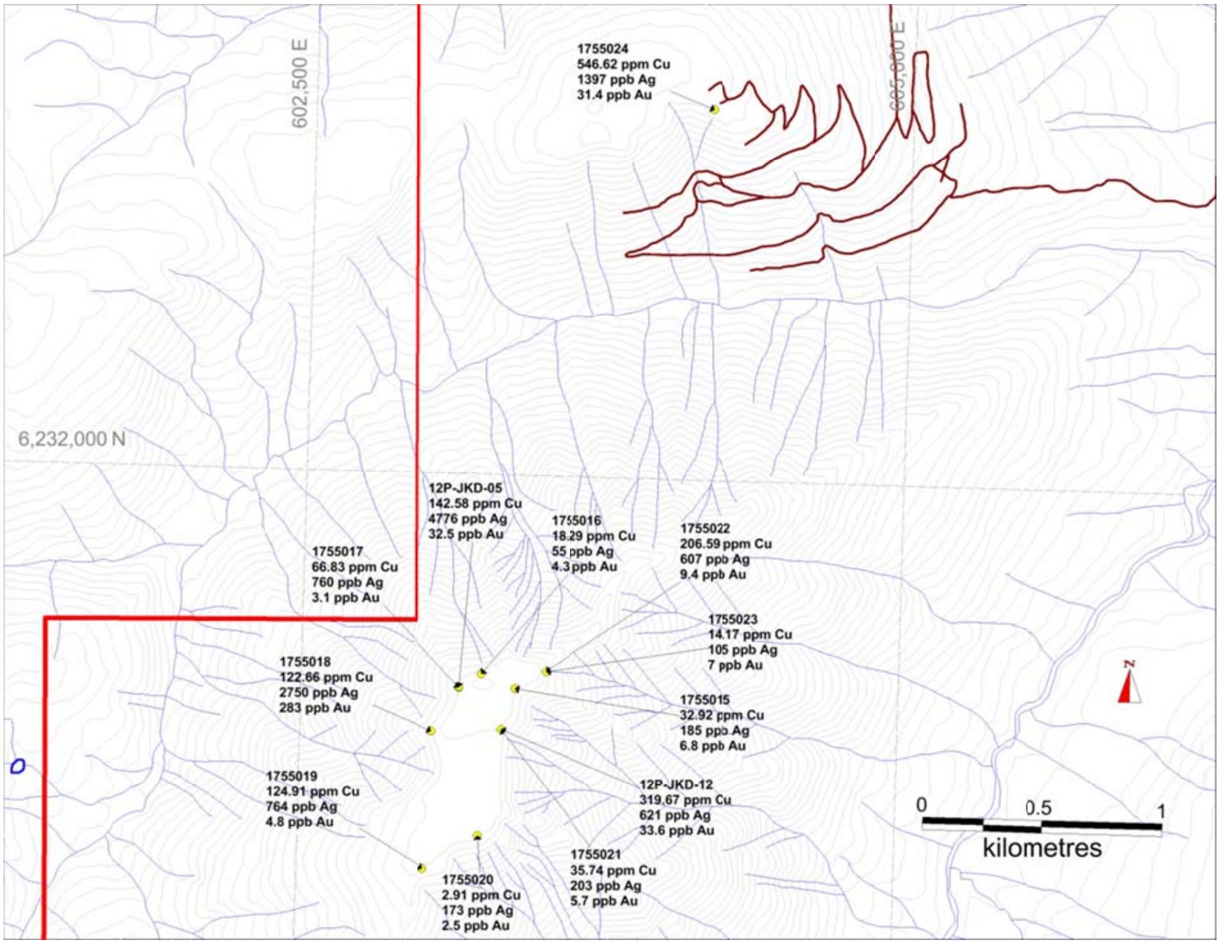

Figure 3.2.3A Sample locations and results for the "Jake" area

Plate 3.2.2. Looking north from the south ridge to the north ridge of the Jake zone on the Sustut property. On the left hand side of the photograph, overlying, west-dipping sediments possibly of the Skelhorne Assemblage that have no trace of mineralization.

and sulphide minerals precipitated due to cooling and possibly mixing with connate water within the sediments. The preponderance of pyrite at the intrusion-sediment interface is also suggestive that the sediments may have been the sulphur source for an otherwise “dry” intrusive event.

Mineralization on the eastern side of the property is minimal. Sediments adjacent to the intrusion are hornfelsed and rusty weathering for a distance that varies from 30 to 200m from the intrusive contact. A traverse through the area showing the greatest concentration of FeO from satellite imagery (Holbek and Joyes, 2012) did not reveal any significant mineralization although many of the samples collected contained weak to moderately anomalous results. Given the extensive area of hornfelsing and rapid erosion of this material, it is quite likely that this area could account the anomalous stream geochemistry in the streams draining this area. Exposure in the area is very good and detailed aerial reconnaissance also failed to locate anything else of interest. However, snow and or talus cover at the higher elevations could obscure some smaller mineralized zones.

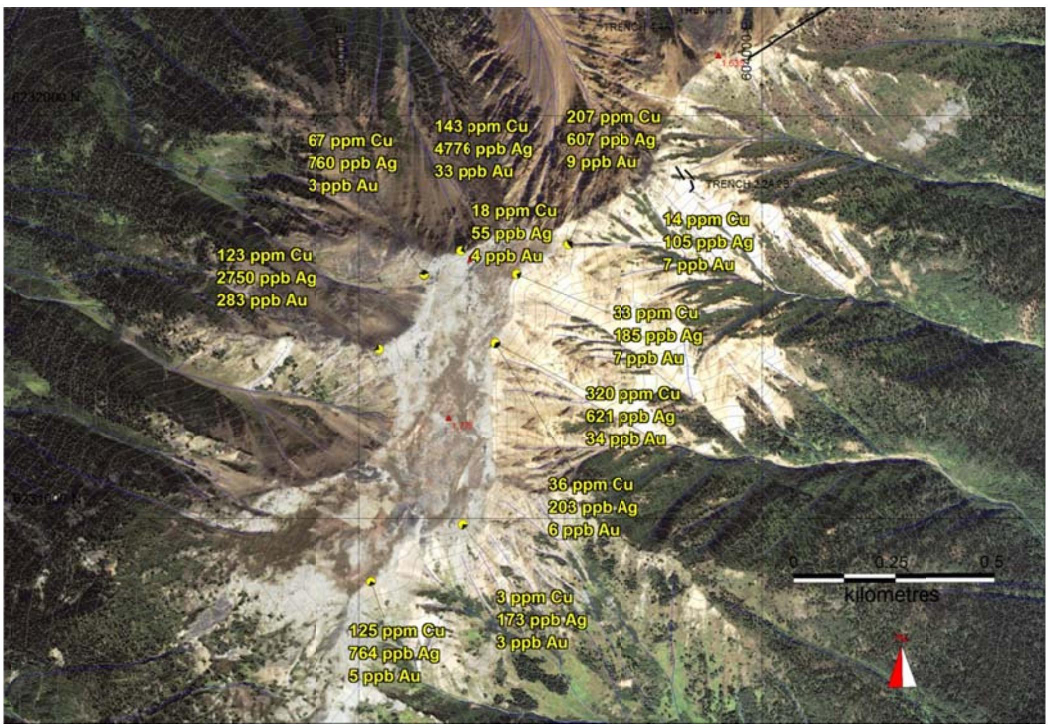

Figure 3.2.3b: Sample locations for traverse on South Ridge of Jake Showing

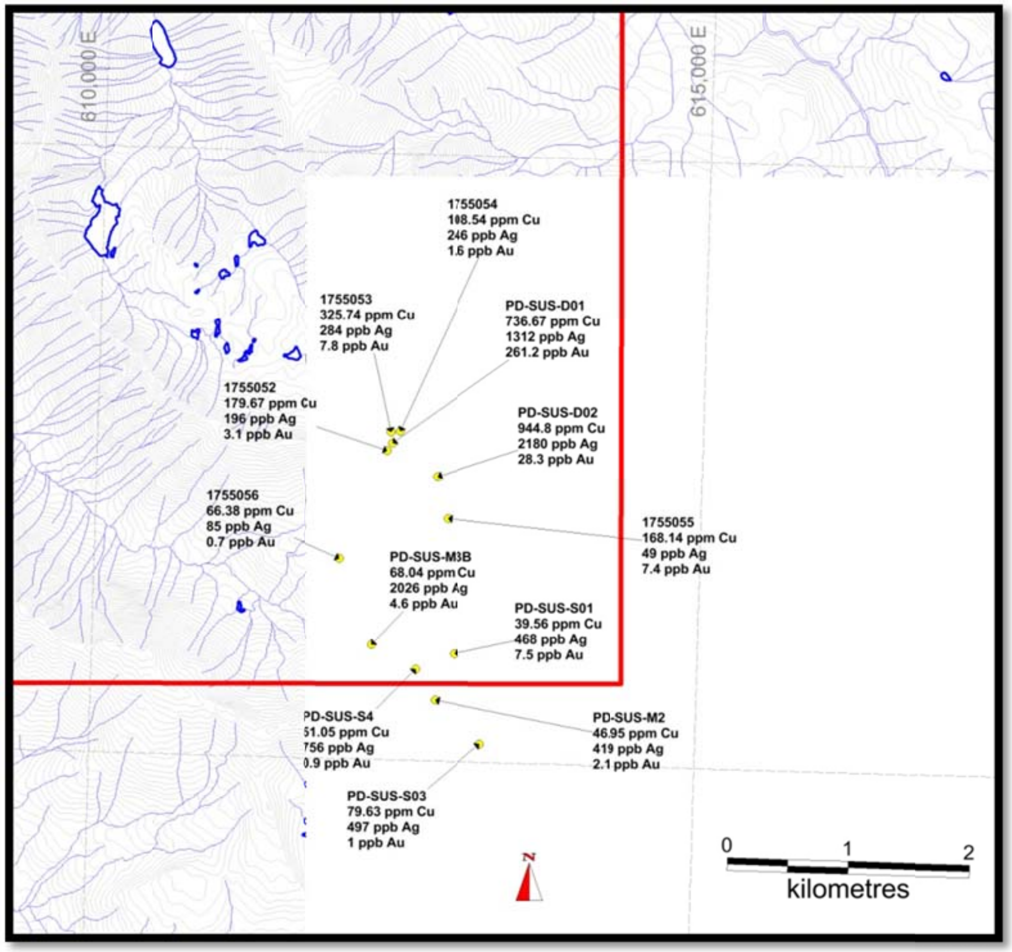

Figure 3.2.4a: Sample Locations and results for the eastern gossan of the SUSTUT area

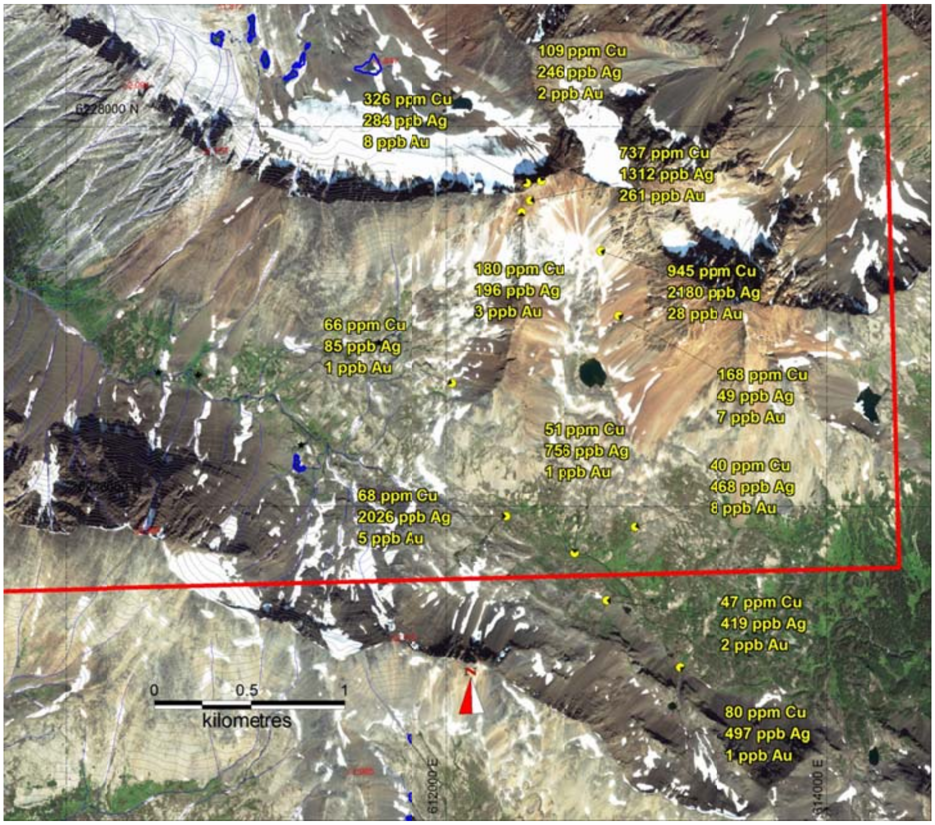

Figure 3.2.4: Sample locations and results for eastern side of the SUSTUT Claim area.

3.2.4 Conclusions and Recommendations

The only significant mineralization observed on the SUSTUT claim group appears to be restricted to the historic Jake property. The Jake mineralization is exposed on two northeasterly trending ridge spurs and the area is centered on an intrusive dyke swarm. The dykes are interpreted to be of mostly monzonite composition with variable textures which are likely related to nature of emplacement and speed of cooling. The dykes appear to be parallel north-northeasterly trending vertical structures with a strike length of about seven kilometers. The dykes intrude argillite, sandstone, wackes and fine conglomerates of the Bowser Lake Group and pyrite is extensively developed in both rock types along the intrusive sedimentary contacts everywhere but quartz +/- base metal sulphide veining seems to be restricted the northern end of the dyke swarm. The nature of the mineralization (small quartz veins with or without sulphide mineralization and base metal sulphide veins with minimal quartz), patchy, weak and inconsistent alteration suggest that pyrite mineralization is caused as much by the thermal effect of the intrusion into (wet) sedimentary rocks and that the quartz-sulphide veining is related to magmatic degassing as opposed to a magmatic driven hydrothermal system.

The possibility of mineralization extending to the north, under cover was considered by Placer Dome who carried out a soil geochemical program to test this hypothesis with results strongly suggesting that mineralization fades very quickly to the north. A traverse in this area failed to find any outcrop that would indicate continuation of the intrusive rocks. Thus, the question remains about what happens at depth and how deep would one have to go (eg: is there a viable, porphyry deposit at depth)? This could only be determined through drilling, but existing data provides limited encouragement. Induced polarization surveys may give a better picture of the sulphide (pyrite) distribution with depth, and may provide better targeting of drill holes. Bedrock exposure below the ridge crests is limited to about 200m vertical and there is no discernible change in the mineralization or alteration over this distance, with the exception that rocks lower down seem to be more extensively "weathered" which could indicate incipient sericitization. A reasonable question then becomes what sort of grades would be required to make removal of a pyritic ridge top economically viable (considering the proximity of the Skeena River).

Table 3.2.2: Analytical Results for Samples collected on SUSTUT Claims

Sample	Utm East	Utm North	Type	Cu ppm	Ag ppb	Au ppb	Pb ppm	Zn ppm	Mo ppm	Mn ppm	Fe %	As ppm	Sb ppm	Bi ppm	W ppm
1755052	612393	6227550	Rock	180	196	3	1.73	59.9	39.39	291	4.13	2.1	0.12	0.30	0.2
1755053	612420	6227703	Rock	326	284	8	1.96	18.8	1.67	279	4.26	2.2	0.04	0.34	1.7
1755054	612496	6227714	Rock	109	246	2	2.65	16.7	0.77	278	1.93	1.4	0.06	0.63	0.3
1755055	612906	6227005	Rock	168	49	7	1.13	15.9	2.12	144	1.82	0.5	0.05	0.68	2.5
1755056	612030	6226650	Rock	66	85	1	2.26	21.2	1.38	210	3.91	0.5	0.06	2.19	0.1
12P-JKD-12	603340	6231435	Soil	320	621	34	12.88	9.9	3.69	61	21.32	52.1	0.86	53.80	0.9
12P-JKD-05	603160	6231606	Soil	143	4776	33	717.81	1750.8	2.50	267	9.95	2203.5	2.87	5.57	0.2
PD-SUS-D01	612438	6227612	Soil	737	1312	261	26.06	80.9	113.48	897	11.25	83.8	0.82	1.23	6.2
PD-SUS-D02	612813	6227346	Soil	945	2180	28	80.69	128.7	69.90	986	5.23	29.6	1.12	2.57	11.0
PD-SUS-S01	612992	6225892	Mat	40	468	8	26.93	100.3	16.46	1002	3.46	238.2	2.15	0.29	2.3
PD-SUS-M2	612845	6225506	Mat	47	419	2	15.44	69.1	1.61	786	1.48	18.3	1.41	0.14	0.3
PD-SUS-S03	613228	6225153	silt	80	497	1	9.83	176.2	2.07	1530	6.36	24.7	0.75	0.12	<0.1
PD-SUS-M3B	612312	6225948	Mat	68	2026	5	32.95	185.5	2.05	827	4.48	69.5	2.63	0.17	<0.1
PD-SUS-S4	612677	6225755	Mat	51	756	1	18.38	158.7	2.88	726	3.47	58.8	2.08	0.27	0.1
1755015	603393	6231607	Rock	33	185	7	12.81	55.3	1.36	247	3.25	8.8	0.43	1.08	3.2
1755016	603251	6231665	Rock	18	55	4	3.43	45.2	0.34	810	6.34	35.8	0.22	0.46	0.1
1755017	603160	6231605	Rock	67	760	3	101.78	1440.1	1.22	1009	3.34	121.7	1.31	1.10	0.3
1755018	603050	6231420	Rock	123	2750	283	205.66	936.7	0.65	41	2.80	5813.9	18.17	5.40	0.4
1755019	603030	6230844	Rock	125	764	5	41.99	134.7	2.35	944	4.10	21.9	0.72	0.27	<0.1
1755020	603255	6230986	Rock	3	173	3	5.55	72.1	1.12	2081	4.03	31.0	0.40	0.25	<0.1
1755021	603340	6231435	Rock	36	203	6	9.68	53.9	1.21	524	4.23	13.4	0.25	2.07	<0.1
1755022	603520	6231680	Rock	207	607	9	10.07	75.6	1.19	885	3.44	23.3	0.41	1.47	0.2
1755023	603520	6231680	Rock	14	105	7	3.55	10.2	0.51	45	0.54	17.2	0.10	0.42	<0.1
1755024	604157	6234053	Drill Core	547	1397	31	26.75	57.6	34.42	780	4.46	39.6	1.19	1.66	0.2

3.3 SAY Claim Group

3.3.1 Introduction and Objectives

The SAY Property covers an area formerly known as the “Spur Showing*” and is located immediately to the south of the Bear property where Imperial Metals Corp. is exploring for a porphyry Mo-Cu deposit. The SAY property covers a large, north-south ridge comprised of Hazelton volcanic rocks. Satellite imagery undertaken earlier in the year (Holbek and Joyes, 2012) indicated a number of areas of enriched Feo, however in areas away from the Spur location. Three traverses were run to cover both sides of the ridge over most of the property area, with the traverses ending in the vicinity of the Spur showing. The northern traverse actually began on the Bear property in order to examine the rocks associated within Mo-Cu mineralization and to determine if any of that geology extended onto the SAY claims as the desired target is a blind porphyry system. Due to the need to cover a large area and to the virtual lack of anything resembling mineralization only a few samples were taken, all in the vicinity of the Spur showing.

*(*note: the spur showing may be within a separate claim that is not owned as part of the property, however what we believe to be the spur showing is not in the same location as the un-owned claim based on the MTO claim map)*

3.3.2 Exploration History

The SAY claim group covers the SPUR MINFILE copper oxide and sulphide occurrence, the discovery and initial staking of which was undertaken by the Canadian Nickel Company Ltd. (INCO) in 1974. A program consisting of grid establishment, soil sampling and geologic mapping was conducted the following year in preparation for a diamond drilling carried out in 1976 (Gidluck, 1975). Results from this work include the definition of a number of copper, zinc and silver soil geochemical anomalies; the main body of which trend discontinuously NNE across an approximately 0.4 ×1 km grid. Geological mapping shows these anomalies as being spatially associated with basalt/volcaniclastic contacts and a NNE trending linear feature dubbed the “Hunter Fault” (Gidluck, 1977).

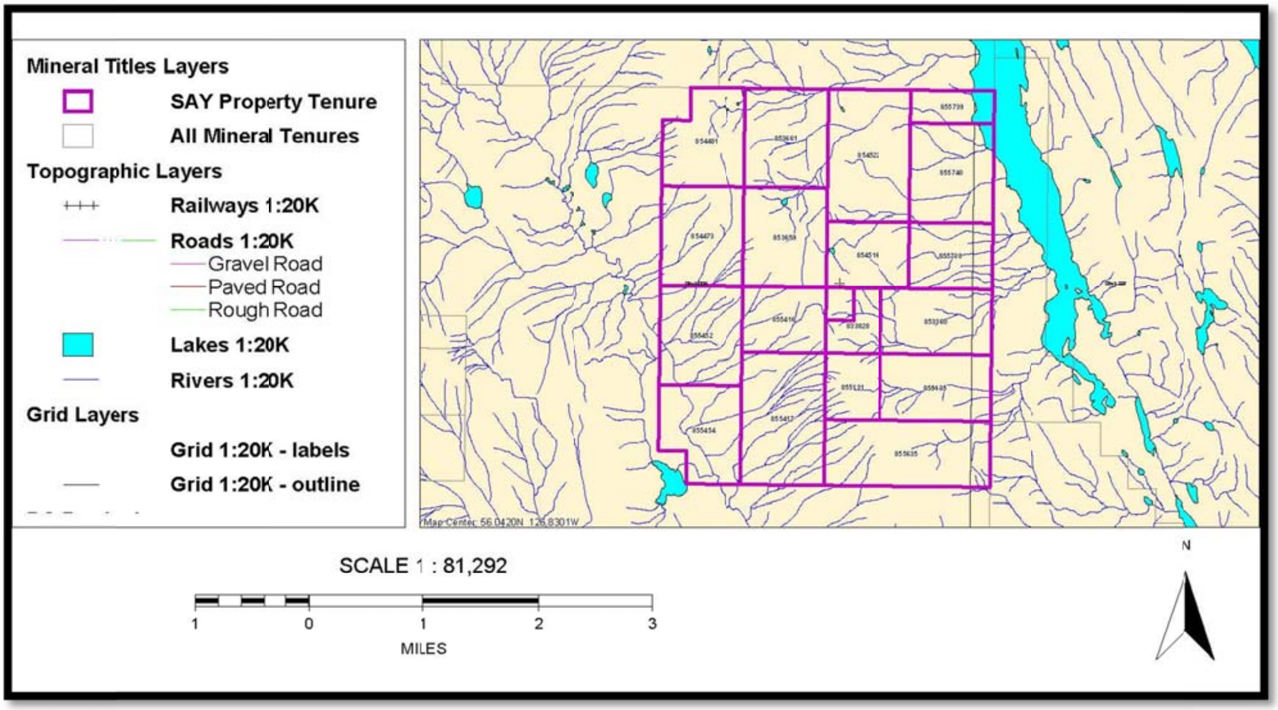

Figure 3.3.1: SAY property Claim Locations

Assessment report 06503 which was filed for the 1976 diamond drill program contains costs but does not record any results from that drilling (not an uncommon occurrence); however the capsule geology in the MINFILE description for occurrence 094D 103 records a drill intersection from this program as returning 2.36% copper and 48.34 g/t silver over 5.79-metres. The next documented work on the SPUR showing is recorded in Lucero Resource Corporations annual report for 1997 and subsequent annual information forms to 1999. Lucero acquired the claims by staking in 1996-97 and undertook an "extensive geochemical survey together with geologic mapping and sampling" program spending approximately $330,000 over a two year period. The claims were subsequently allowed to lapse.

The area was restaked and is currently held by Electrum Resource Corporation who, in August 1997, conducted two days of helicopter supported reconnaissance designed to verify earlier work. Conclusions obtained from this work contained in (Ronning, & Schau, 2008a) are that the extent of known mineralization is "limited" and, among other recommendations, that a stream sediment program would be an effective way of evaluation the area of the claim block for more highly mineralized areas.

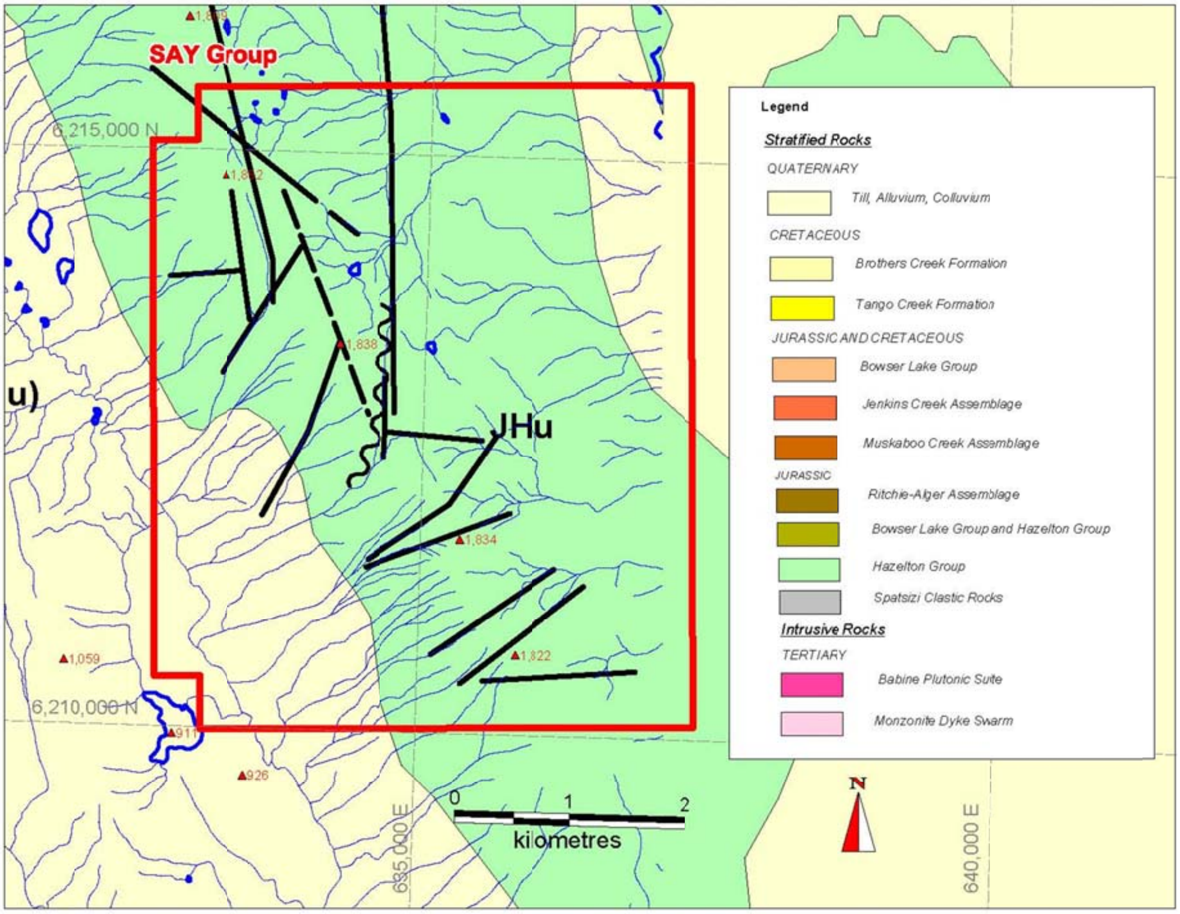

Figure 3.3.2: SAY Simplified Geology

3.3.3 Geology and Mineralization

The SAY claim group covers a NNW trending ridge underlain by Hazelton Group volcanic and volcaniclastic rocks. The ridge appears to represent almost 600m of Hazelton stratigraphy which is gently to moderately dipping to the west, however exposures on the east side of the ridge a limited to about 300m of vertical exposed above tree line and much less on the western side of the ridge as this is a dip slope and extensively covered in talus beginning about 200m below the ridge top. All of the rocks are maroon (hematite rich) volcaniclastics ranging from coarse debris flows and breccias to lapilli-ash tuffs and volcanic wackes. Beds are relatively thick ranging from 10 to +80m.

To the north, on the Bear property monzonite, quartz monzonite and diorite (?) outcrop in the center of the ridge. Porphyry Mo-Cu mineralization is associated with part of this intrusion and may be related to north-northeasterly trending diorite dykes. Cu and Mo associated with quartz veins can be easily spotted in talus fragments, but interestingly, in the main area of drilling there is very little gossanous material. A weak gossan is developed on the south side of the drilled area where a both mega-crystic monzonite and diorite dykes cut into the Hazelton volcanic rocks. The intrusive rocks do not extend onto the SAY property, although other narrow, un-mineralized and unaltered diorite dykes do occur on the north part of the property.

The three traverses (July 28th) along the SAY ridge converged in the Spur area and included an examination of the 094D 103 (SPUR) MINFILE chalcopyrite, bornite and oxide copper showing. This showing is trending approximately 195/78 degrees and consists of a 30-cm scale buff weathering pink to dark gray fresh surface, k-spar altered aphanitic dyke hosting copper sulphide and oxide mineralization with surrounding volcaniclastic rocks also hosting copper oxides, up to 10m from the mineralized structure. Samples collected from the occurrence returned greater than 1% copper and 100 g/t Ag.

The Spur showing has been the target of previous exploration that includes a grid, previous rock sampling and diamond drilling. The occurrence was examined over a strike length of approximately 500m and appears to be closed off in an area of reasonable exposure at its northern extent; while it is possibly open along strike to the south where it trends down a steep slope covered in scree and increasing amounts of sub-alpine growth at lower elevations. It is hosted in a strong topographic lineament which is interpreted as a fault structure and so it is reasonable to expect that mineralization could have significant strike and down-dip extents.

Plate 3.3.1. Looking north, a northeast trending monzonite dyke cuts maroon volcaniclastic rocks of the Hazelton Group on the north side of the Say property. A very minor amount of pyrite was noted within the volcanic rocks on the east side of the dyke, but otherwise there was no mineralization, although the dyke is similar to mineralized versions (on other properties) to the north.

Four rock samples and 4 silt samples were collected. Silt samples PD-SAY-S17 and -S18 were deliberately collected downstream in the drainage where the copper showing was first located. (Cu showing = rock sample numbers 1755059 to 1755062), and silt sample number PD-SAY-16 was supposed to have been collected up stream of the copper showings. This was designed to help determine background verses anomalous values in the area of the copper showings. Subsequent examination of the trend of the showings shows that PD-SAY-16 was also located downstream of the showings; and as might be expected all three of these samples are anomalous in copper (204 to 283 ppm), but not hugely so.

Malachite is in large part hosted on Hazelton Group volcaniclastic rocks while primary copper sulphides appear restricted to the dyke like lithology that is spatially associated with the copper oxides through their entire strike length. On the west side of the ridge hosting this occurrence, at the locality where the showing trends downhill to the south, malachite was observed up slope from the dyke that contains

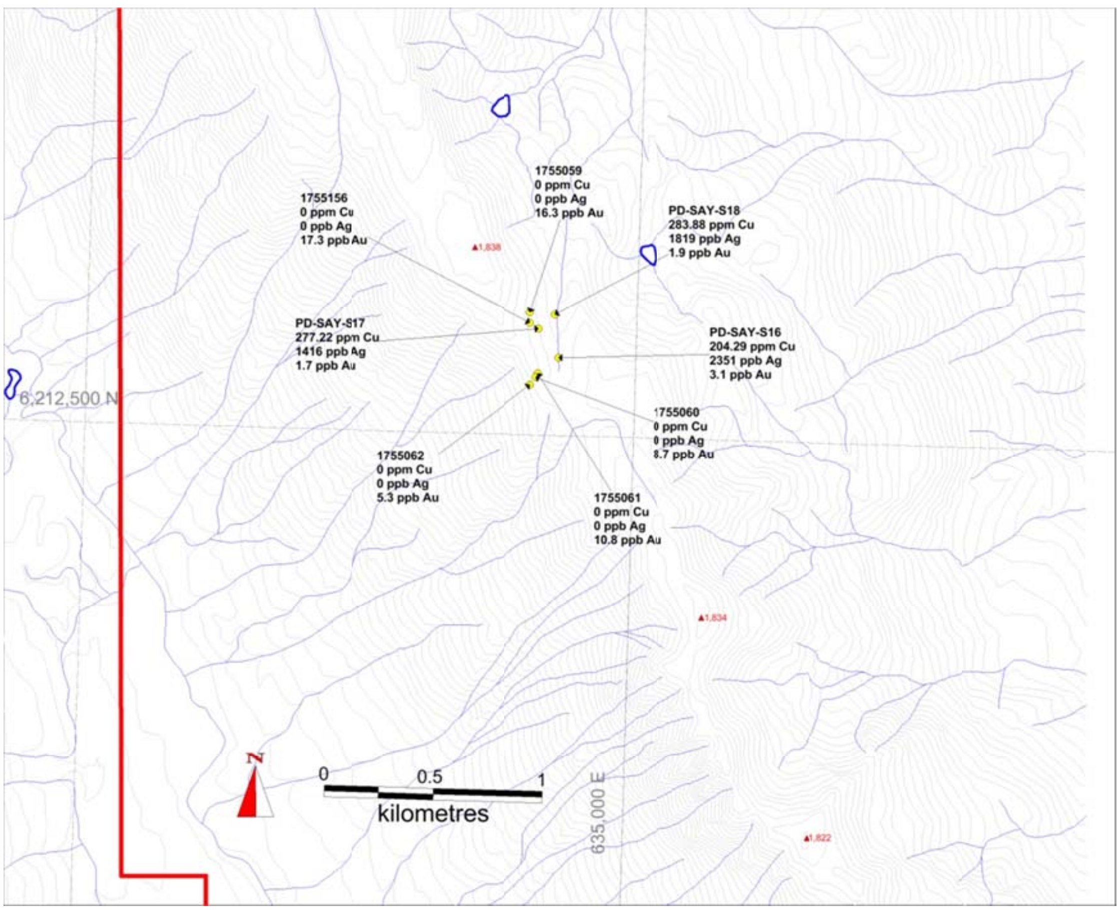

Figure 3.3.3 Sample locations and Cu, Ag, and Au results, SAY claims.

copper sulphide, which suggests the presence of other cross-cutting copper bearing structures, at least in that area.

The pads for three drill holes were located. The orientation of the dyke on surface suggests that it is dipping away from drill holes, which are oriented with westerly azimuths and dips and therefore could miss the zone (depending upon dip) or would have intersections much longer than true thickness. It is also likely that these holes would have intersected at least some of the secondary copper mineralization hosted in the volcaniclastic rocks that crop out on the slope below the collars. Records document a drill intersection of g 2.36% Cu and 48.34 g/t Ag over 5.79-metres.

3.3.4 Conclusion and Recommendations

The SPUR MINFILE occurrence is classified as Red Bed Cu showing. However, the most recently conducted examination of this showing suggests that primary mineralization is genetically related to a cross-cutting dyke like feature, which is a much better fit with our current understanding of the mineralization in the region. Trace element geochemistry in the rock samples collected from this occurrence is low in everything except copper and silver; not giving any definitive clues into the occurrences origin. However, Mg, Cr, V are all slightly elevated in context with other samples collected during the current program and this supports the interpretation that a mafic dyke is the preferred host for the primary copper sulphide mineralization. A hand-sample examination of this rock supports the interpretation that the host rock is mafic in origin while the presence of secondary k-spar and elevated Hg (up to 1739 ppb) in the geochemistry suggest that the mineralization is high-level and hydrothermal fluids may have been channeled from considerable depth along a significant fault structure.

Primary copper sulphide mineralization located at the SPUR MINFILE occurrence appears restricted to an up to 28 cm wide dyke that is intermittently exposed over a ½ km strike length. The difficulty in developing significant tonnage of potential ore, given the narrowness of this feature is a significant negative for the prospectivity of this showing, and no further work is recommended.

3.4 PAT Claim Group

3.4.1 Introduction and Objectives

The PAT Claims host a number of historical showings which have been recently described and reasonably well summarized by Ronning and Schau (2008c). The showings all appear to be part of a common theme although there are some variations between them and that is oxidized and weathered zones of relatively high grade copper and silver. Mineralization is hosted within structural zones or possibly within permeable volcani-clastic units. The Cu-Ag association with bornite mineralization within structures is a feature of some of the BC alkalic porphyry deposits so it was postulated that the showings present on the property may be indicative of a buried porphyry system. Traverses were conducted moving outwards from the general vicinity of the known showings in order to prospect for more showings and to collect stream geochemical samples as per the recommendations in Ronning and Schau's (2008) report.

3.4.2 PAT Claim Group Exploration History

The PAT claim group covers the area of MINFILE occurrences 094D 058 (Magnum), 094D 071 (Pat), 094D 117 (Topo), and 094D 120 (West Section). The Magnum, West Section and PAT showings are classified as volcanic red-bed Cu occurrences while the Topo is in the books as sediment hosted Cu mineralization.

Mouritsen (1970) writing for Cyprus Anvil and Ronning & Schau, (2008) indicate that the initial discoveries of, what are now, MINFILE # 094D 058 D, A & B occurrences, were made by Northern Exploration Limited in 1963. Twelve, 50 foot drill holes collared in a grid pattern and targeted at the D occurrence were drilled the following year and returned an average of 7.13 g/t Ag and 0.383% Cu. An IP survey carried out for 97837 Resources Company over the "B" occurrence is reported by Walcott (1984) and most recently crews from Electrum Resources visited and evaluated the drilled area and various blast pits that comprise the "D" showing (Ronning & Schau, 2008c).

Mouritsen (1970) also documents work on what is now MINFILE # 094D 120 by Westfrob Mines in 1973. Surface sampling over an area of 750 × 575 feet is reported as returning an average of 0.725 oz. Ag and 0.27% Cu while sampling over the "ridge in the cup basin" returned an average of 1.14 oz/ton Ag and 0.575% Cu "over 41 feet representing a strike length of 300 feet". Westfrob also intersected 0.623 oz/ton Ag and 0.561% Cu over the entire 60 foot length of a diamond drill hole completed on this occurrence.

MINFILE occurrences 094D 071 and 094D 117 are known from circa 1973 Canadian Superior Exploration Limited maps which documents geological mapping, soil and silt sampling in the area of the showings. Other than that, no work has been recorded for the area covering occurrence 094D 117 while occurrence 094D 071 was subject to what appears to be a desultory program conducted by Suncor Inc. in 1984. The Suncor claims over this occurrence were initially staked to cover an airborne magnetic anomaly and a "cursory examination of the property including geological mapping, geochemical

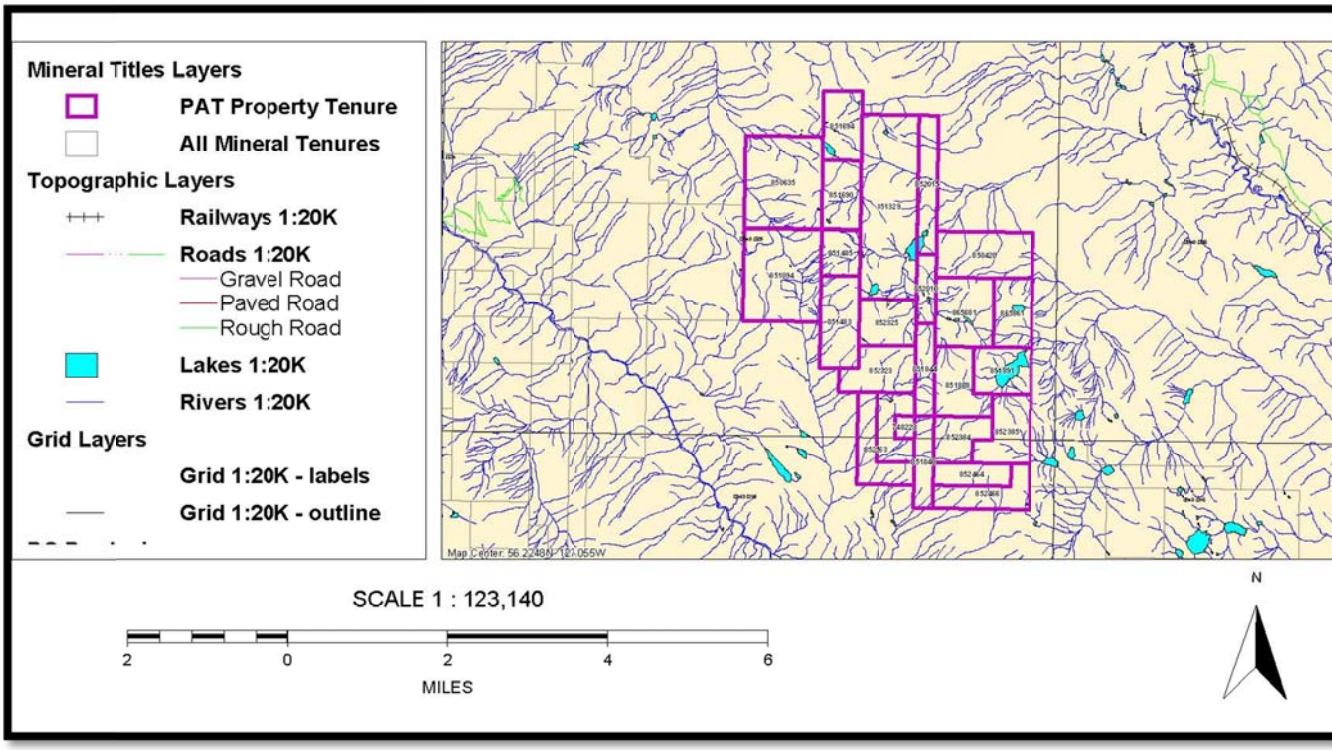

Figure 3.4.1 Mineral Claims forming the PAT Group

sampling and prospected was completed". Conclusions developed from this work were that the "potential for economic mineralization on the property [appeared] limited" and the geochemical survey detected only weak base-metal and no significant precious metals anomalies. Additional work was not recommended.

Most recently, Electrum Resource Corporation staked the PAT claim group in the area of the MINFILE occurrences described above and in 2007 ran a field program evaluating some of the showings. Conclusions developed as a result of this work were that MINFILE occurrence 094D-058 is likely shear related while the provenance of occurrence 094D-071 is unclear. Both copper showings are interpreted to have been upgraded by supergene processes and that "Selected samples may have some value to collectors of secondary mineralization". Also concluded were that attempts to find MINFILE occurrences 94D 117 & 120 were unsuccessful. A systematic stream sediment campaign designed to evaluate the claim block for addition mineralization was recommended (Ronning & Schau, 2008b).

3.4.3 Geology and Mineralization (PAT Claims)

The PAT Claim Group covers a north-northwest trending ridge of gently west dipping Hazelton volcanic and volcani-clastic rocks. The volcanic rocks are predominately maroon (and therefore interpreted to be subareal) fragmental and well bedded volcanic derived sediments at the higher elevations and on the

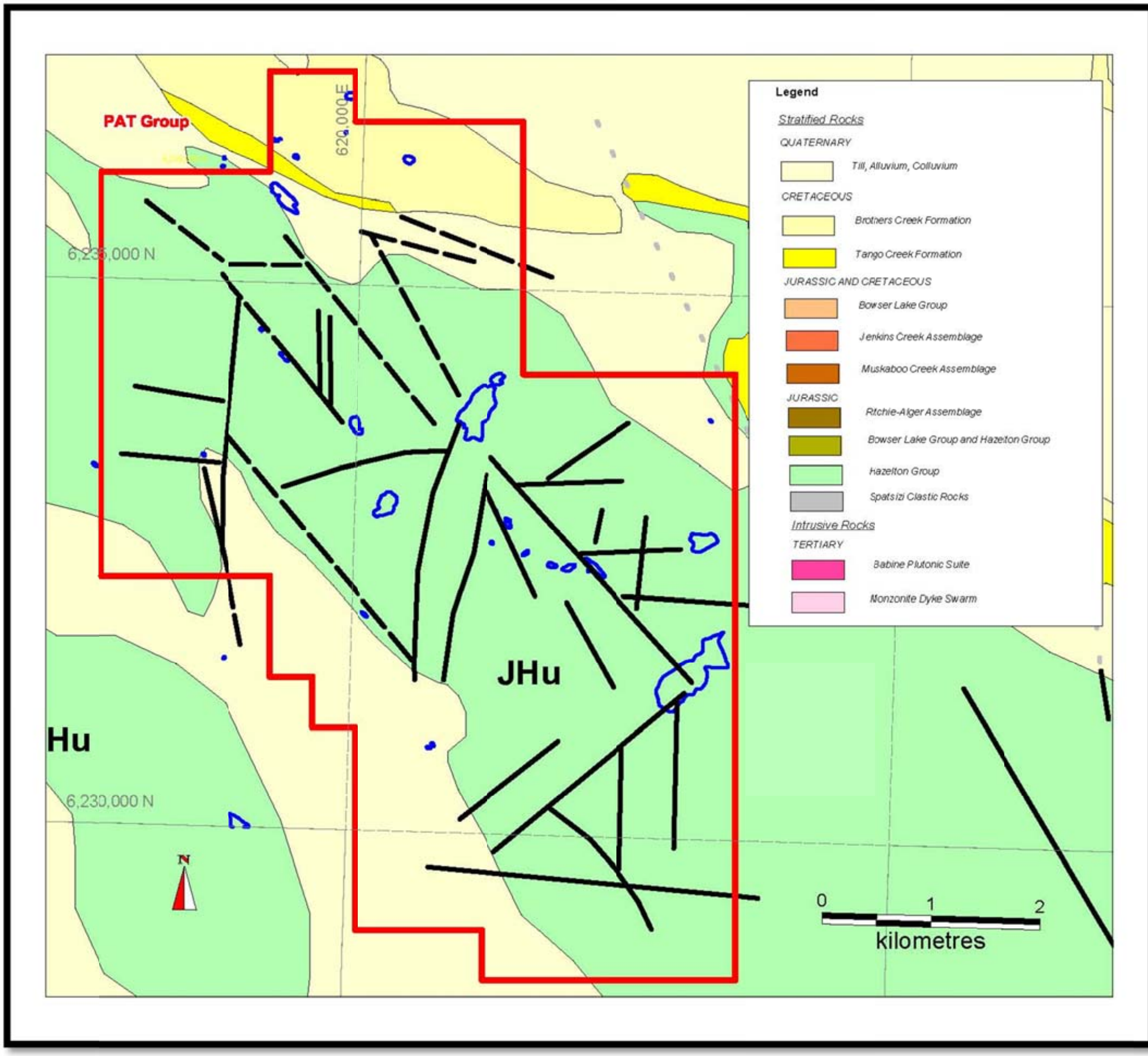

Figure 3.4.2 Simplified Geological Plan for the PAT claim group

northern part of the property. The volcanic are more grey-green (submarine deposition?) tuffs, breccias and interbedded sediments at lower elevations and to the southeast of the property. Rhyolite dykes and small bodies (domes?) are present in the central property area but a volumetrically relatively minor. Mineralization is well described and summarized in Ronning and Schau (2008c) and consists of extensive fracture coatings of oxide copper minerals related to structurally controlled (?) bornite and chalcopyrite mineralization. Surface mineralization is relatively extensive at the central showing (minfile 058) covering an area of about 300m by 100m; this area was drilled by 12 shallow 15m drill holes. Grades of up to 3% Cu and 2-4oz Ag were obtained in some samples but grades appear to dissipate with depth suggestive of some surface enrichment from now eroded overlying mineralization. However, the presence of some sulphide copper minerals indicates that some mineralization is still intact.

Traverses undertaken on the PAT Claims on July 27th were designed to cross and silt sample as many creeks as possible on the NE side of the main ridge underlying the property which is also in the vicinity of MINFILE occurrences 094D 058 and 094D 120 and 114. Three rock samples and 22 silt samples were collected. Details of the samples can be found in Appendix 1.

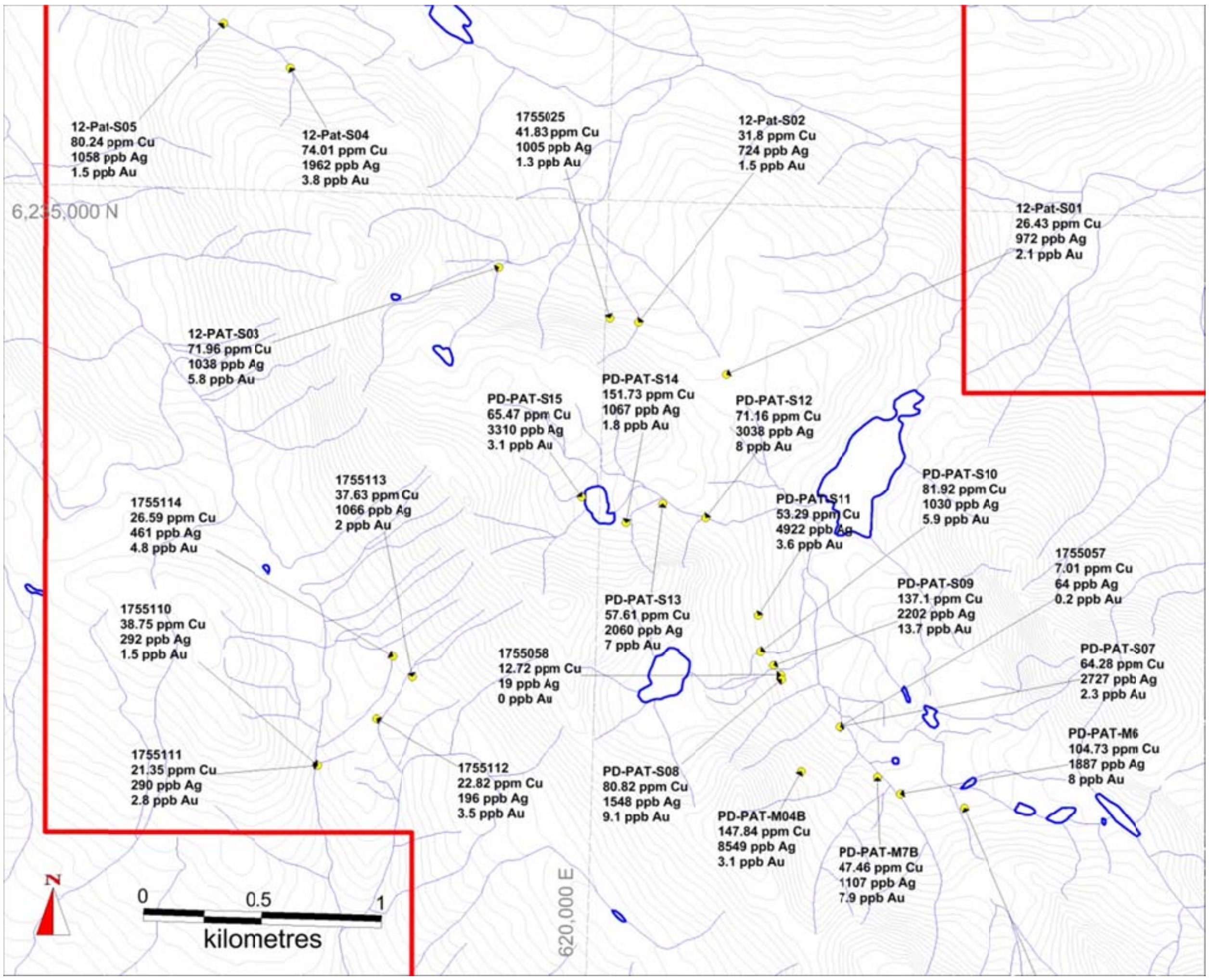

Figure 3.4.3: Sample Locations and Results for Cu, Ag, and Au; PAT Claim Group (full sample data and sample descriptions are located in Appendix

The rock samples were both of anomalously hematitic ± manganese bearing Hazelton Group volcaniclastic rocks while the silt samples were dominantly collected from creeks draining rugged terrain where cliffs exposing the occasional meter scale dyke or sill were visible. Two of these silt samples returned anomalous Ag.

Near the end of the traverse a particular locality a barren looking, buff colored fine-grained, quartz-bearing feldspar porphyry rhyolite intrusive was examined and a stream sediment sample collected from the drained at the base of this feature.

"Anomalous" Ag in PAT silt samples

- Silt samples PD-PAT-S11 & PD-PAT-S04B from the PAT property returned 4 & 8 g/t Ag. Given that there are two Cu-Ag bearing MINFILE occurrences in the general area of these sample sites it is possible that these anomalies are indicative of similar undiscovered mineralization. The anomalies may also be [in some way] genetically related to dykes observed high in the drainages from which the samples were collected.

PAT Claims rhyolite dyke area

- Silt sample (PD-PAT-S14) was collected specifically to test for metals that might have been genetically related to the "end of traverse" rhyolite body. There were no anomalies returned in the results from this sample.

3.4.4 Conclusions and Recommendations

Historical work and results in the property area is intriguing, however the current work indicates that mineralization is restricted to relatively small areas. It is noted that all historical showings are either on or proximal to interpreted major fault structures. Similar types of mineralization, although more clearly vein related, were drill tested on the next property to the south (ChacoBear) by Imperial Metals Corp. (Raven and Van Damme, 1997) with results showing narrow zones of mineralization that extend to depths of more than 100m below surface with little change. Indeed it could be interpreted that the mineralization on the entire ridge is genetically related to intrusive activity which appears to be centered on the Bear Claims but likely occurs at considerable depths elsewhere along the ridge (eg: Pat Claims to the north and SAY Claims to the south.

It is noted that two silver bearing silts samples are anomalous in the context of the other samples collected during the current exploration program; however, they are still relatively weak anomalies and are not accompanied by anomalous copper.

Although the historically documented showings are of interest it was discouraging not to be able to locate additional mineralization in the general vicinity. Based on the results of all work done in the region it is difficult to postulate a large, potentially economic mineralized system, however if further work were to be considered some test lines of deep penetration IP would be an effective way to determine exploration potential.

3.5 IFT Claim Group

3.5.1 Introduction and Objectives

Much less is known about the IFT Claim area than the other claim areas and mineralization described by Ronning and Schau (2007b) was not overly encouraging when compared to other prospects in the district. Satellite Imagery revealed a moderate Feo anomaly on the eastern side of the claim group that appeared to be related to intrusive activity and this is where the reconnaissance traverses were focused.

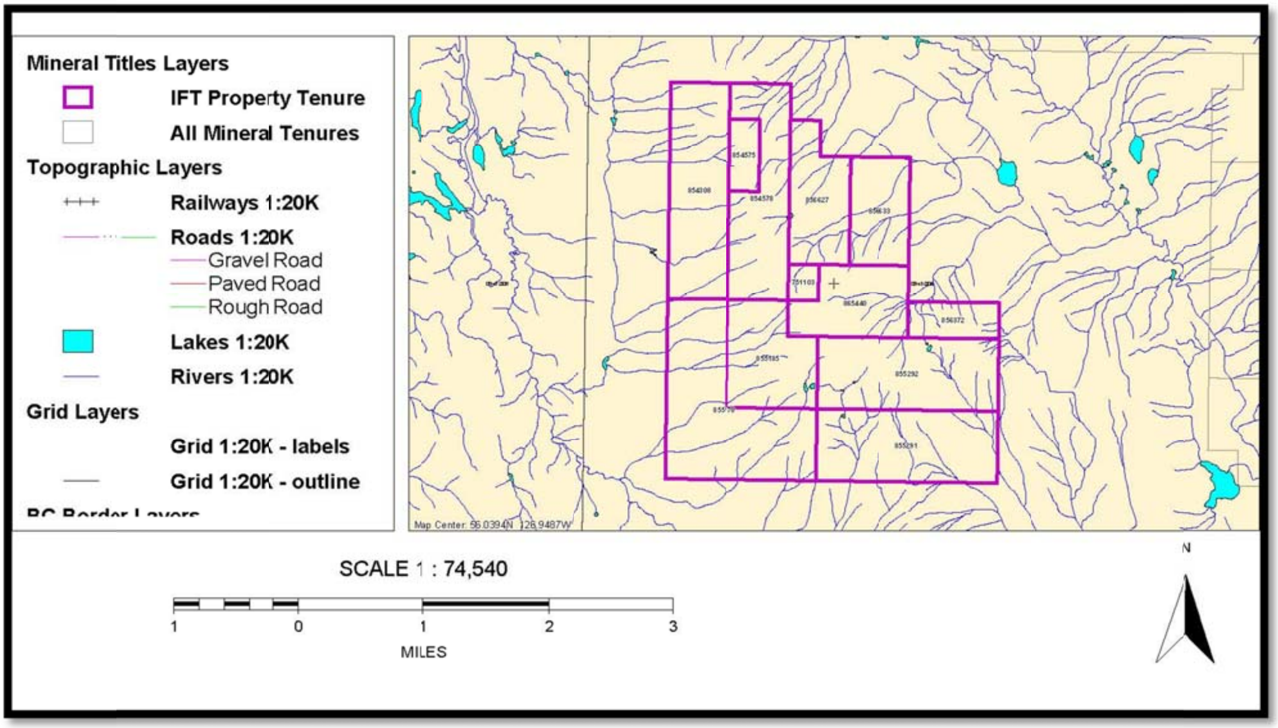

Figure 3.5.1: IFT Claims and Location

3.5.2 Exploration History

The IFT claims cover MINFILE occurrences 094D 002 & 094D 062 and Energy Mines and Resources (EMR, 1966) records the first staking of [35] claims over the area of these Cu-Ag showings in 1945. The property was acquired by Huestis Mining Corp in about 1961, optioned to Noranda Exploration Company during the year 1962, with two claims receiving sufficient expenditures at some point during this period, to be held until 1982. An oblique reference to diamond drilling encountering "mineralization" is contained in Sheppard (1973) and this drilling may account for the long "good standing" of these mineral claims; though there are apparently no assessment reports on file for this period.

Keywest Resources conducted line-cutting, geochemical surveying, a magnetometer survey, geological mapping, sampling, trenching and prospecting in the IFT locale in 1973. Results included the detection of soil and rock geochemical anomalies and indicated a flat magnetic signature over the area surveyed. The best samples were collected from a 4 to 6 inch wide-100 foot strike length quartz vein that vein assayed 2.38% Cu, 10 oz silver & 0.27 oz gold and from a sample of hornfelds sediments with returned 0.15% Cu (Sheppard, 1973).

Most recently, Electrum Resource Corporation acquired the current IFT claim block by staking and in 2007 conducted an exploration program designed to confirm the presence of mineralization documented in MINFILE occurrences 094D 002 & 062 and to prioritize the property among others for further work. Work undertaken consisted of prospecting and collection of 20 rock, 4 talus fines & 4 silt samples and the results were deemed to have confirmed the presence of Cu-Ag mineralization in the vicinity of MINFILE occurrence 094D 002 while mineralization was not detected in the vicinity of occurrence 094D 062. Recommendations for further work include a property scale steam sediment sampling program (Ronning & Schau, 2008b).

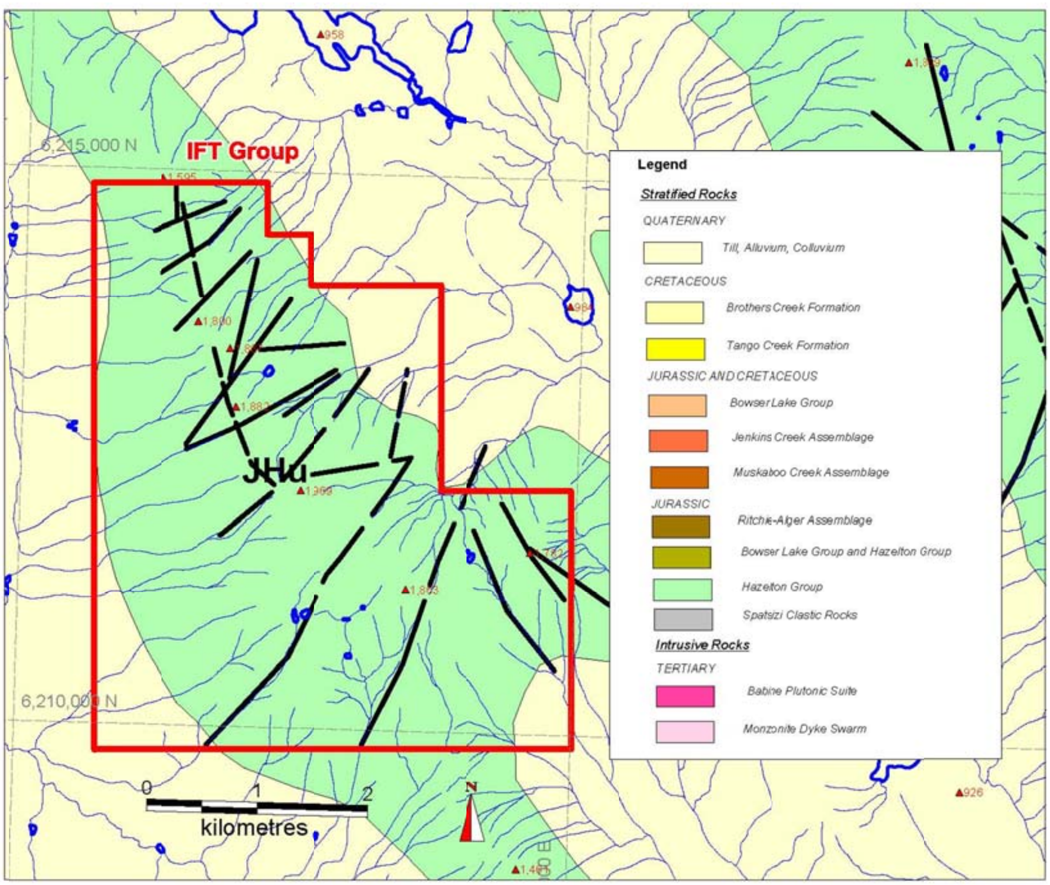

Figure 3.5.2: Simplified Geology IFT Claim area.

3.5.3 Summary of Investigation

A traverse on the IFT claim group was conducted on July 31st, 2012 and was laid out to evaluate a gossanous quartz-monzonite intrusion located in the SE corner of the claim block for porphyry style mineralization.   Two rock samples from the gossan were collected. The intrusive body is not shown on any published maps for the area but appears to underlie a sizable area on the eastern edge of the claims and within the valley to the north. The intrusion does not really appear on the aeromagnetic map (Fig. 1.3) except as a weak and fuzzy anomaly centered on the topographic high, which is all volcanic rock.

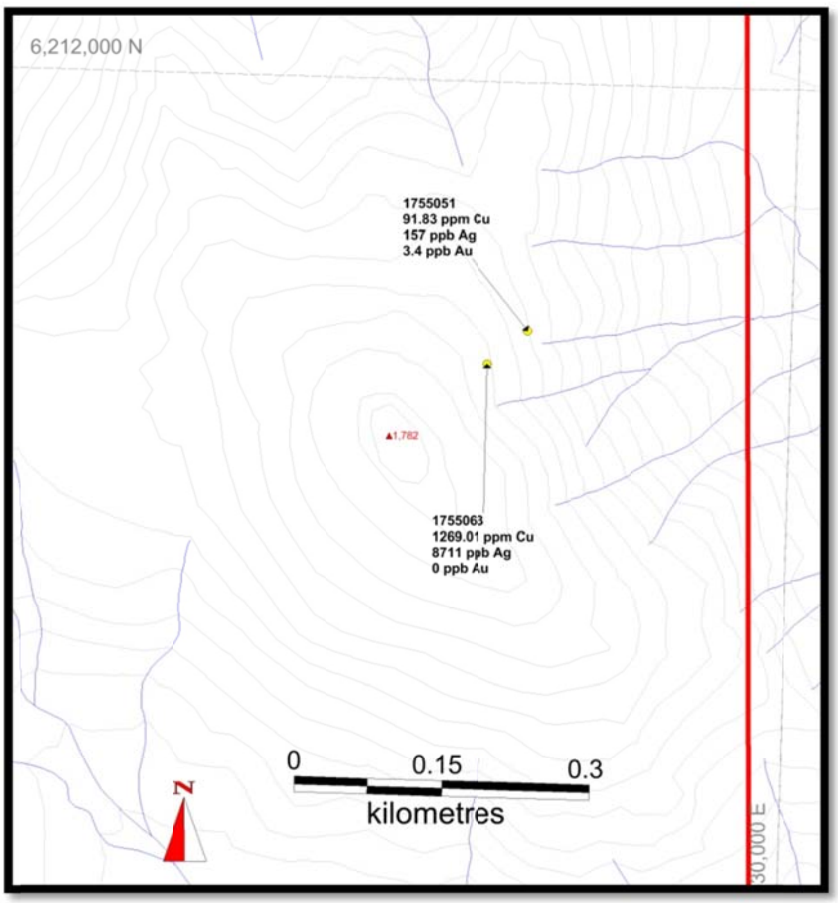

Figure 3.5.3 Sample Locations IFT claims

Anomalous IFT sample

- Sample 1755063 of quartz-vein material was collected from the area of the gossen and is described as containing “1/4% very-fine-grained silvery mineral” in an otherwise opaque, white, white vein float cobble. The sample returned 1269 ppm Cu. One interpretation is that the “silvery” material as being a copper bearing mineral though it is noted that the sample in series above sample 1755063 was high-grade Cu (from another property) and laboratory contamination of sample 1755063 from the higher-grade sample should be considered.

- The second rock sample (1755051) of pyritic quartz-monzonite collected from near the center of the gossen on the property failed to return any anomalies. In particular, copper and molybdenum values in this sample are in the order of crustal background.

3.5.4 Conclusion and Recommendations

The traverse and accompanying helicopter reconnaissance confirmed the presence of a ½ km^2 to $1km^2$ scale (or larger) intrusion on the claim block and suggests there is limited possibility for the presence of any other substantial igneous bodies outcropping on the claims. As well, the gossanous quartz-monzonite is barren of base-metal mineralization where it outcrops and there is nothing to suggest that potentially economic mineralization lies within this ‘showing’ within the depth of a reasonable length drill hole. Mineralization within the volcanic rocks in other parts of the claim area may be related to “leakage” along structures from this intrusion, and is similar to mineralization observed on other properties in the district. While buried intrusions with associated, economic mineralization cannot be completely ruled out, the balance of probabilities suggests that the known mineralization is related to degassing and thermal effects of a relatively “dry” and ‘un-mineralized’ intrusion. We agree with Ronning that detailed stream geochemistry would likely be the most cost-effective method for finding any additional mineralization on the property but given the past history of extensive exploration in the region, the relatively good exposure above tree-line, and the nature of mineralization discovered thus far, we cannot be optimistic that any discoveries would not be more of the same. Therefore no further work on the property is suggested at this time.

3.6. Kik and Off Claims

3.6.1 Introduction and Objectives

The Kik and Off claims were staked by Electrum Resources based on unpublished stream geochemistry conducted by Kennecott and others in the 1970’s (J. Barakso, pers. comm.). Both areas were covered by ice and snow during the initial follow-up and so were never explored, and the source of the anomalies remained unexplained. Aerial reconnaissance was conducted by helicopter to determine the most effective approach for geological evaluation.

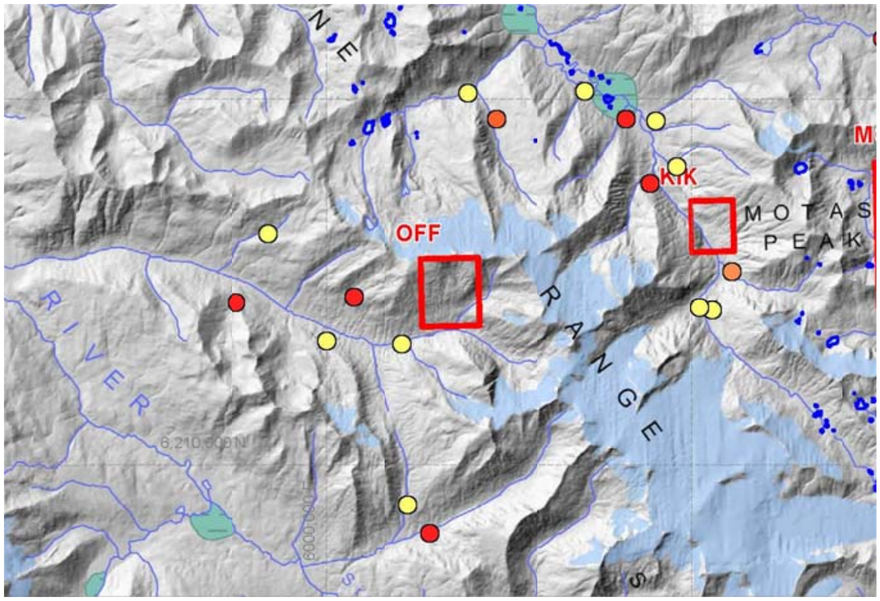

Figure 3.6.1 Location plan with Au in RGS stream sediments (Red samples are anomalous)

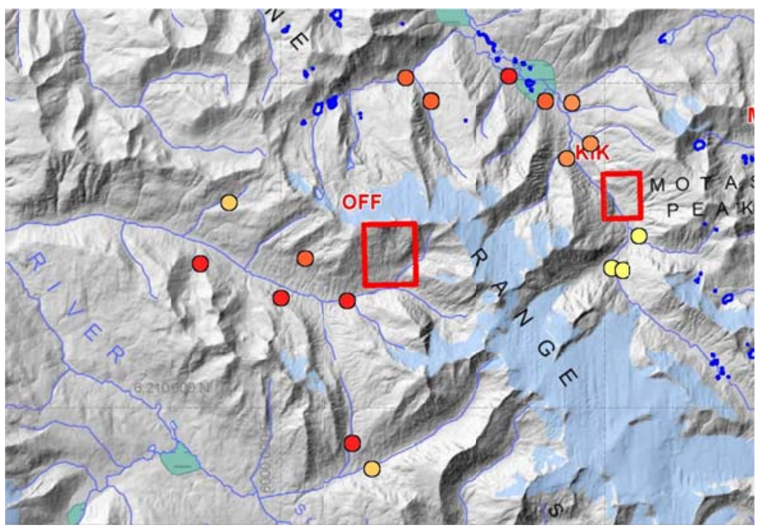

Figure 3.6.2. Copper in RGS stream sediments, Kik and Off claim areas. Red values are anomalous and range from 55-212ppm, while the orange values are weakly anomalous for the data set and range from 49-58 ppm.

3.6.2 Geology and Results of visual reconnaissance

The general geology of the area is displayed on the simplified geological plan below. The outline of the southern intrusion of the Babine Suite (referred herein as the Motase Pluton) is actually much more extensive, stretching towards the center of the image (at least at lower elevations) and is commonly well exposed in a radically different shape than indicated by the aeromagnetic image in Figure 1.3, possibly due to a second non-magnetic intrusive phase? Consequently both claims are at least proximal if not containing intrusive contacts which are (much more so in the case of the Kik claim) quite gossanous as shown in the plates 3.6.1 and 3.6.2.

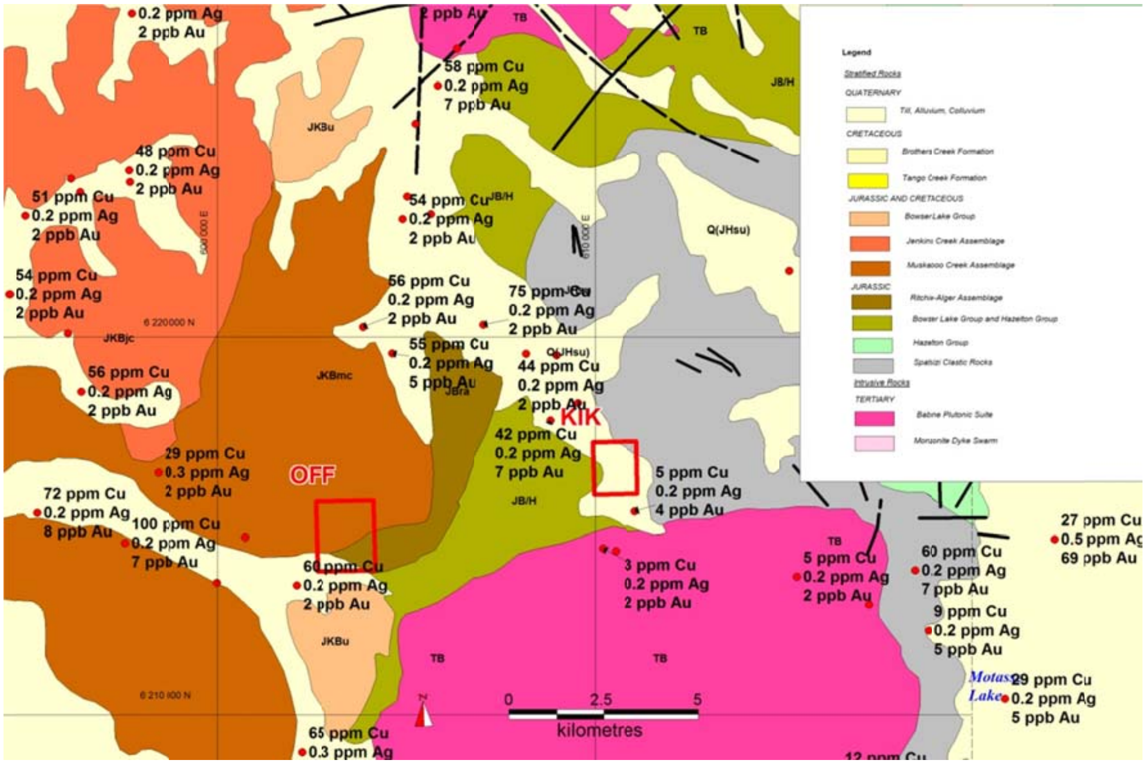

Figure 3.6.3 Geological plan showing claim locations relative to RGS data. The northern contact of the Motase Pluton (Babine Plutonic Suite) extends considerably further to the northwest than shown here.

Both claims are located on moderate to very steep slopes and detailed examination from the helicopter while searching for landing locations did not reveal any malachite or quartz veining. Both claims only have suitable landing sites in the valley bottoms.

Based on the above map and visual observation, sedimentary rocks on the Kik claim consist of thin bedded argillite of the upper Hazelton Group while those on the Off claim include siltstone and sandstone of the Ritchie-Alger and Muskaboo Assemblages. Much of the Kik claim is covered by what is probably a relatively thin dip-slope of sediments underlain by the Motase Pluton. Without further evidence of additional intrusive phases, most notably the feldspar porphyry monzonite, at either property the probability of finding sulphide mineralization beyond pyrite appears limited.

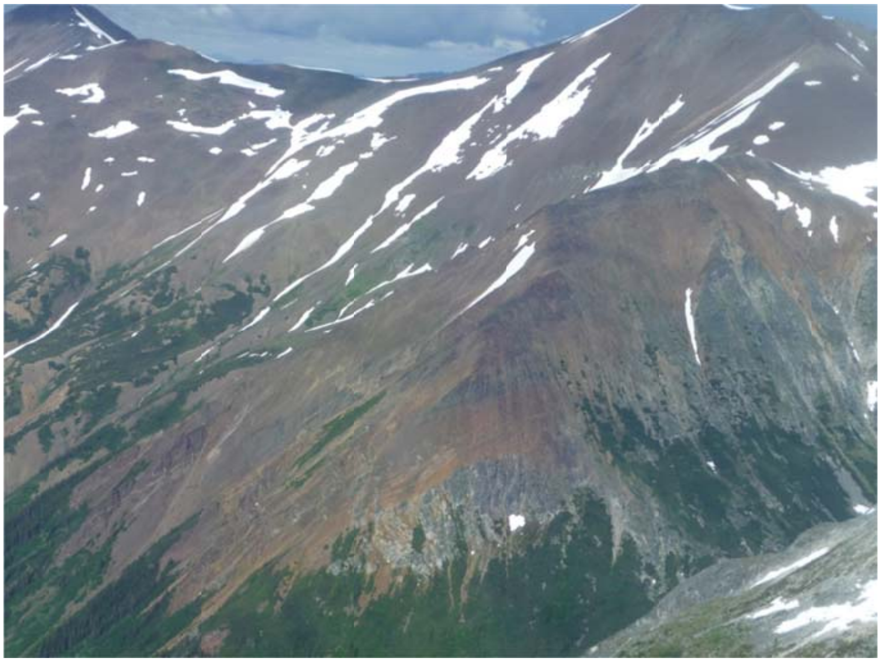

Plate 3.6.1. Southern edge of the Kik claim showing the contact of the Motase Pluton with hornfels and sediments of the Hazelton Group (Smithers or Spatzizi formation)

Plate 3.6.2 Cirque on eastern edge of the Off claim. Two phases of intrusive dykes are visible, very thin north dipping fine grained grey felsites and south dipping (almost bedding parallel) fine grained feldspar porphyry. Neither dyke set appears to be associated with mineralization.

3.6.3 Conclusions and Recommendations

Relatively detailed stream geochemistry is possible at lower elevations on both properties and should be undertaken to validate the original premise for staking the claims, during this work prospecting the stream detritus might also prove useful to help identify the nature of any mineralization. Contour soil (talus fines) lines would be possible on the Kik claims but not on the Off claim as talus is quite course right to the valley bottom. If follow up to stream geochemistry was required for the Off claim, some mountaineering skill would be required.

4.0 Conclusions

Mineralization in the Bear Lake area has been has been the subject of exploration efforts over the last 60 years. Initial prospecting may have been from the ground supported by float planes but by 1965 major companies were conducting aerial reconnaissance and selecting gossanous areas for follow-up exploration. Shortly thereafter these and other companies carried out stream geochemical surveys and followed up with prospecting which resulted in many more showings. Shortly after discovery many prospects were drilled but results did not meet expectations and many properties were abandoned. The area was frequently re-evaluated and properties re-explored as metal prices changed or new concepts in exploration or deposit models evolved. The current work was undertaken with the purpose of evaluating the area for deep seated porphyry Cu-Au deposits or in the case of the MOT area for a bulk tonnage style gold deposit.

It is suspected that almost all of the mineralization in the region is related in one way or another to post Mesozoic intrusive activity. Examination of the properties described herein and many others in the region all appear to fit the above theme, however, in almost all cases the sought after intrusive activity seems relatively impotent. Most of the area has enough relief that it is not a case of burial depth but rather that most of the relatively high-level intrusions are too dry, and therefore have limited mineralization associated with them. However, it is recognized that exposure in many areas is limited and valley cover is extensive and it is likely that more mineralization will be discovered with future exploration work, particularly with some of the newer geophysical techniques.

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APPENDIX I: "Jake" mineralization - Summary of drill core examination

Hole ID **J-99-01**

Logger R.Joyes

Depth (m)		Description
From	To	
0	41.2	Medium grained Bitotie (?) feldspar porphyry (monzonite) with weak to
		moderate alteration along fractures. (25.6m - 30.2m disseminated -
		blebby Sx +- Cpy (0.5%) and 1-3% py with Fe-Mn oxides.
41.2	55.2	Fine-grained mudstone with 1-2% blebby/vn py + 0.3% Cpy blebs. Locally
		hornfelsed and with fractures and veinlets consisting of qtz/py +- local galena,
		sphalerite and chalcopyrite
55.2	61	medium grained feldspar porphyry
61	83.5	Fine grained siltstone light grey in colour, 3% py and 0.1 % cpy.
83.5	111.9	medium grained feldspar porphyry with one finger of siltstone from 104m -
		104.3m.
		End of hole

Hole ID **J-99-02**

Logger R.Joyes

Depth (m)		Description
From	To	
0	32.3	Fine-medium grained feldpsar porphyry with upto 50% broken oxidized
		fractures. Unit looks barren of minz with some local trace diss py. Feldspars
		look to be pervasively altered to clay (recessive weathering?)
32.3	48.8	Medium grained sericite-altered feldpar porphyry with 0.5-1% py veins (sampled)
		Small bx zone @ 46.5m - 47m with sediment zenoliths +- qtx with minor 2mm
		Gn/Sph veinlets.
48.8	57.3	Medium grained feldpsar porphyry with 30-40% feldpsar phencrysts in
		groundmass. Unit looks largely barren(?)
57.3	67.7	Medium grained feldspar porphyry with 1-2% py and localized cpy upto
		0.5-1% over 1m(?). Minor Mn-Fe oxides (Sampled)
67.7	75	Medium grained feldpsar porphyry with upto 0.5% py blebs (not sampled)
75	78.4	Same unit as above but sampled.
78.4	83.2	Dark grey fine-grained mudstone with 2-3% disseminated py +- 0.3-0.5% cpy
		and 0.5% wispy qtz-cb veinlets.
83.2	90	Medium grained feldpsar porphyry with trace py

90	101.5	Core missing.
101.5	114.3	Dark grey fine-grained mudstone with minor patchy argillite (altn). 0.5% py blebs
		and 0.2% Cpy blebs. Unit goes from grey to light brown in more altered zones.
		End of hole

Hole ID **J-99-03**

Logger S.Croker

Depth (m)		Description
From	To	
0	20.1	Casing
20.1	122	Feldspar porphyry. Top 9m sampled in oxides and sampled 62.2m - 122m (EOH)
		Middel portion of the hole starting at 62.2m FSPP becomes bxdd with abundant
		qtz sweats(?)
		End of log

Hole ID **J-99-04**

Logger R.Joyes

Depth (m)		Description
From	To	
0	7.6	Medium-grained feldpsar porphyry unit which is very broken and oxidized.
7.6	55.2	Medium grained feldspar porphyry with 20-30% crowded feldspar groundmass
		(looking more dioritic). Alteration consists of moderate local to pervasive sericite
		and unit looks largely barren with trace py blebs (<0.5%) locally.
		End of log

Hole ID **J-99-05**

Logger R.Joyes

Depth (m)		Description
From	To	
0	44.2	Medium grained feldspar porphyry with mottled texture and local recessive
		sericite alteration (unit largely barren?)
44.2	48.5	Fine-medium grained feldspar porphyry with 0.2-0.5% py blebs and associated
		hematite
48.5	88.4	Medium grained feldpsar porphyry with patchy to pervasive sericite alteration
		Unit is barren of minz and was not sampled previously
		End of hole

Hole ID **J-99-06**

Logger S.Croker

Depth (m)		Description
From	To	

0	24.7	Feldspar porphyry (unsampled)
24.7	45.7	Intermixed bxdd FSPP with sediments. 0.5-1cm py veins throughout. Sericite altn
		at 28.7m - 30.8m and 43m - 45.4m 82.3m - 83.5m. Abundant qtz veins, intense
		py minz 3% and cpy 0.2%
45.7	58.8	Feldspar porphyry (unsampled)
58.8	63.7	Bxdd siltstone with abundant qtz filled fractures , 1% py, 0.1% cpy.
63.7	100.6	Feldspar porphyry (unsampled)
100.6	102.1	Bxdd siltstone
102.1	122	Feldspar porphyry unmineralized
122	125.6	Bxdd sediment, abundant qtz veins abd fracture fills. Unsampled but cpy
		present upto 0.1% and py 3% locally
		End of hole

Appendix II: Sample Descriptions and Analytical Results

Sample	Utm East	Utm North	Type	Property	Cu ppm	Ag ppb	Au ppb	Pb ppm	Zn ppm	Mo ppm	Mn ppm	Fe %	As ppm	Sb ppm	Bi ppm	W ppm
1755051	629732	6211747	Rock	IFT	92	157	3	3.97	24.9	1.89	195	2.38	0.9	0.09	0.11	0.6
1755063	629692	6211712	Rock	IFT	1269	8711	>0.2	4.47	9.2	8.63	63	0.73	0.9	0.04	0.11	1.4
1755015	603393	6231607	Rock	Sus	33	185	7	12.81	55.3	1.36	247	3.25	8.8	0.43	1.08	3.2
1755016	603251	6231665	Rock	sus	18	55	4	3.43	45.2	0.34	810	6.34	35.8	0.22	0.46	0.1
1755017	603160	6231605	Rock	sus	67	760	3	101.78	1440.1	1.22	1009	3.34	121.7	1.31	1.10	0.3
1755018	603050	6231420	Rock	Sus	123	2750	283	205.66	936.7	0.65	41	2.80	5813.9	18.17	5.40	0.4
1755019	603030	6230844	Rock	Sus	125	764	5	41.99	134.7	2.35	944	4.10	21.9	0.72	0.27	<0.1
1755020	603255	6230986	Rock	Sus	3	173	3	5.55	72.1	1.12	2081	4.03	31.0	0.40	0.25	<0.1
1755021	603340	6231435	Rock	Sus	36	203	6	9.68	53.9	1.21	524	4.23	13.4	0.25	2.07	<0.1
1755022	603520	6231680	Rock	Sus	207	607	9	10.07	75.6	1.19	885	3.44	23.3	0.41	1.47	0.2
1755023	603520	6231680	Rock	Sus	14	105	7	3.55	10.2	0.51	45	0.54	17.2	0.10	0.42	<0.1
1755024	604157	6234053	Drill Core	Sus	547	1397	31	26.75	57.6	34.42	780	4.46	39.6	1.19	1.66	0.2
1755001	618150	6214500	Drill Core	MOT	1236	13420	149	32.61	187.7	6.02	375	5.10	35.8	1.39	32.31	>100.0
1755002	618150	6214500	Drill Core	MOT	73	557	15	10.95	41.9	13.96	665	1.55	6.7	0.47	1.19	18.8
1755003	618150	6214500	Drill Core	MOT	196	903	206	13.42	66.1	27.53	1036	3.39	12.8	0.38	4.10	68.1
1755004	618150	6214500	Drill Core	MOT	101	340	70	3.74	62.0	1.15	1272	3.77	1.8	0.31	1.69	24.4
1755005	619850	6214285	Rock	MOT	14	863	8	70.04	168.4	3.45	205	1.36	77.0	6.35	0.33	0.8
1755006	618275	6215235	Rock	MOT	933	33677	138	75.52	97.6	10.97	111	2.68	37.0	5.76	40.13	5.4
1755007	618358	6215329	Rock	MOT	37	704	4	8.62	28.8	14.92	128	1.50	3.4	0.29	0.87	17.9
1755008	618426	6215341	Rock	MOT	81	350	15	3.54	44.6	3.95	268	3.74	9.8	0.27	1.61	2.7
1755009	618515	6215285	Rock	MOT	71	1453	24	26.77	31.4	15.33	95	2.06	42.5	0.48	5.43	>100.0
1755010	618515	6215285	Rock	MOT	267	46477	1008	9994.12	590.5	7.69	53	3.99	2935.5	20.36	13.91	>100.0
1755011	618582	6215272	Rock	MOT	88	2581	1866	204.62	104.4	4.98	152	3.82	73.7	0.35	2.90	>100.0

1755012	618600	6215267	Rock	MOT	192	2130	442	218.69	236.1	49.15	244	3.03	139.2	0.41	1.48	8.1
1755013	618150	6214500	Drill Core	MOT	281	2179	47	48.74	111.1	3.69	2174	3.41	300.6	0.63	19.82	>100.0
1755014	618150	6214500	Drill Core	MOT	497	36586	1509	3017.92	9810.4	9.63	549	2.94	70.5	3.09	58.02	4.2
1755101	619523	6214714	Rock	Mot	167	1823	1	4.16	92.0	4.07	361	3.49	46.9	0.15	1.67	7.9
1755102	619468	6214758	Rock	Mot	153	4042	4	15.80	201.5	24.89	296	3.81	214.7	0.39	32.75	6.1
1755103	619412	6214791	Rock	Mot	149	1880	3	5.56	68.4	6.70	323	3.21	73.7	0.20	2.52	48.1
1755104	619375	6214811	Rock	Mot	58	1812	2	6.13	67.5	6.66	288	3.00	105.0	0.24	13.77	1.3
1755105	619327	6214819	Rock	Mot	102	840	2	8.11	87.6	2.66	353	3.65	70.3	0.36	0.85	0.9
1755106	619255	6214825	Rock	Mot	152	2505	5	24.00	223.1	6.60	274	2.64	307.1	1.77	5.69	>100.0
1755107	619168	6214817	Rock	Mot	146	2910	4	21.56	394.3	18.42	293	4.13	155.5	0.86	1.02	4.0
1755108	619082	6214853	Rock	Mot	51	626	>0.2	6.62	104.7	1.96	331	2.75	14.3	0.48	3.15	4.3
1755109	618968	6214907	Rock	Mot	110	1412	9	30.59	167.1	13.04	177	1.38	220.5	0.38	3.23	9.9
1755151	618518	6215279	Rock	Mot	137	2092	18	5.09	53.0	8.42	238	1.67	10.3	0.14	1.53	>100.0
1755152	618554	6215323	Rock	Mot	96	1835	7	11.64	59.7	11.02	158	3.02	83.1	0.51	6.14	>100.0
1755153	618549	6215310	Rock	Mot	140	2726	21	10.88	106.9	7.99	238	3.44	6.9	0.31	5.64	>100.0
1755154	618546	6215322	Rock	Mot	46	3650	2011	1547.17	112.5	29.27	37	1.99	673.5	2.81	1.31	4.5
1755155	618546	6215296	Rock	Mot	296	22621	327	121.79	194.3	2.44	61	4.53	78.8	0.86	16.20	>100.0
12P-MTD-07	618520	6215280	Soil	MOT	1179	5812	797	183.30	1386.0	43.33	1748	9.52	736.7	2.21	7.51	>100.0
12P-MTD-11	618561	6215290	Soil	MOT	450	3379	388	444.14	648.2	63.38	2708	9.46	352.4	1.40	6.57	>100.0
1755025	620019	6234505	Rock	PAT	42	1005	1	26.83	55.7	0.24	1272	1.91	4.4	0.07	<0.02	0.2
1755057	621039	6232803	Rock	PAT	7	64	0	24.55	144.0	0.38	838	4.25	2.2	0.31	0.13	<0.1
1755058	620783	6233017	Rock	PAT	13	19	>0.2	21.32	1185.3	0.46	8649	4.70	8.4	0.16	<0.02	0.1
1755110	618840	6232581	Silt	PAT	39	292	2	22.65	229.4	1.99	3043	4.03	15.1	0.17	0.08	<0.1
1755111	618840	6232581	Silt	PAT	21	290	3	13.37	142.1	0.83	1590	2.90	5.4	0.29	0.06	0.1
1755112	619080	6232783	Silt	PAT	23	196	4	6.95	63.4	1.49	591	0.91	2.3	0.33	0.10	0.1
1755113	619232	6232964	Silt	PAT	38	1066	2	49.98	384.7	2.08	3068	2.54	9.3	0.56	0.07	0.2
1755114	619141	6233049	Silt	PAT	27	461	5	30.62	169.5	2.90	1702	1.00	4.7	1.04	0.15	0.3
12-Pat-S01	620520	6234280	Soil	PAT	26	972	2	16.05	123.7	1.09	1462	2.60	8.4	0.14	0.13	<0.1
12-Pat-S02	620140	6234490	Soil	PAT	32	724	2	18.67	135.5	0.74	1163	3.32	7.6	0.20	0.11	<0.1

12-PAT-S03	619542	6234706	Soil	PAT	74	1962	4	33.38	183.8	1.11	2458	1.80	5.3	0.50	0.10	0.2
12-Pat-S04	618640	6235520	Silt	PAT	72	1038	6	52.56	324.6	0.71	2780	3.36	6.2	0.22	0.13	0.1
12-Pat-S05	618350	6235700	Soil	PAT	80	1058	2	168.05	274.1	0.60	1234	2.36	11.9	0.71	0.10	0.1
PD-PAT-M04B	620881	6232616	Mat	PAT	148	8549	3	36.52	267.0	0.58	2386	2.82	6.1	0.21	0.12	0.1
PD-PAT-M6	621303	6232532	Mat	PAT	105	1887	8	40.79	301.7	0.48	2721	4.05	7.4	0.17	0.09	0.1
PD-PAT-M7B	621206	6232600	Mat	PAT	47	1107	8	28.74	210.9	0.74	1859	3.03	13.5	0.30	0.10	<0.1
PD-PAT-S05	621573	6232480	Silt	PAT	48	639	2	35.08	357.1	0.51	2379	3.72	6.3	0.12	0.03	0.2
PD-PAT-S07	621038	6232805	Silt	PAT	64	2727	2	14.93	167.3	0.61	1151	1.75	4.6	0.21	0.07	<0.1
PD-PAT-S08	620788	6232998	Mat	PAT	81	1548	9	34.20	367.6	0.76	2746	2.82	11.0	0.29	0.08	<0.1
PD-PAT-S09	620751	6233058	Silt	PAT	137	2202	14	41.50	518.3	1.32	4235	3.86	17.1	0.47	0.09	0.2
PD-PAT-S10	620695	6233114	Silt	PAT	82	1030	6	34.57	468.5	0.72	2717	4.00	15.6	0.31	0.07	0.1
PD-PAT-S11	620682	6233267	Silt	PAT	53	4922	4	28.94	410.0	0.61	2280	3.11	10.2	0.32	0.11	<0.1
PD-PAT-S12	620450	6233672	Silt	PAT	71	3038	8	67.24	496.1	0.65	3300	4.01	9.8	0.28	0.09	0.1
PD-PAT-S13	620263	6233726	Silt	PAT	58	2060	7	46.12	342.4	0.62	2025	3.82	7.4	0.21	0.07	<0.1
PD-PAT-S14	620111	6233640	Silt	PAT	152	1067	2	59.04	439.2	0.56	4275	4.85	4.5	0.22	0.06	0.2
PD-PAT-S15	619923	6233745	Silt	PAT	65	3310	3	35.03	258.5	0.74	1672	2.76	8.1	0.38	0.07	0.2
1755059	634515	6213057	Rock	SAY	>10000	>100000	16	4681.50	131.5	0.35	1134	2.42	0.4	0.07	0.24	0.1
1755060	634549	6212763	Rock	SAY	>10000	>100000	9	25.04	436.7	0.48	1942	3.49	2.9	0.15	0.65	<0.1
1755061	634559	6212782	Rock	SAY	>10000	>100000	11	29.62	461.5	0.45	2097	3.60	<0.1	0.18	0.92	<0.1
1755062	634525	6212728	Rock	SAY	>10000	>100000	5	111.66	499.4	0.49	2460	4.15	3.7	0.11	0.52	0.1
1755156	634516	6213009	Rock	Say	>10000	>100000	17	18.91	352.7	0.47	1841	3.31	1.1	0.15	0.76	0.5
PD-SAY-S16	634651	6212854	Silt	Say	204	2351	3	34.40	348.9	0.92	1664	2.12	3.9	0.22	0.12	0.2
PD-SAY-S17	634557	6212984	Mat	Say	277	1416	2	44.64	130.5	0.74	809	1.63	6.3	0.21	0.18	0.1
PD-SAY-S18	634629	6213051	Silt	Say	284	1819	2	38.23	394.6	0.80	1929	2.71	4.5	0.21	0.11	<0.1
1755052	612393	6227550	Rock	Sustat	180	196	3	1.73	59.9	39.39	291	4.13	2.1	0.12	0.30	0.2
1755053	612420	6227703	Rock	Sustat	326	284	8	1.96	18.8	1.67	279	4.26	2.2	0.04	0.34	1.7
1755054	612496	6227714	Rock	Sustat	109	246	2	2.65	16.7	0.77	278	1.93	1.4	0.06	0.63	0.3
1755055	612906	6227005	Rock	Sustat	168	49	7	1.13	15.9	2.12	144	1.82	0.5	0.05	0.68	2.5
1755056	612030	6226650	Rock	Sustat	66	85	1	2.26	21.2	1.38	210	3.91	0.5	0.06	2.19	0.1

12P-JKD-05	603160	6231606	Soil	Sustat	143	4776	33	717.81	1750.8	2.50	267	9.95	2203.5	2.87	5.57	0.2
12P-JKD-12	603340	6231435	Soil	Sustat	320	621	34	12.88	9.9	3.69	61	21.32	52.1	0.86	53.80	0.9
PD-SUS-D01	612438	6227612	Soil	Sustat	737	1312	261	26.06	80.9	113.48	897	11.25	83.8	0.82	1.23	6.2
PD-SUS-D02	612813	6227346	Soil	Sustat	945	2180	28	80.69	128.7	69.90	986	5.23	29.6	1.12	2.57	11.0
PD-SUS-M2	612845	6225506	Mat	Sustat	47	419	2	15.44	69.1	1.61	786	1.48	18.3	1.41	0.14	0.3
PD-SUS-M3B	612312	6225948	Mat	Sustat	68	2026	5	32.95	185.5	2.05	827	4.48	69.5	2.63	0.17	<0.1
PD-SUS-S01	612992	6225892	Mat	Sustat	40	468	8	26.93	100.3	16.46	1002	3.46	238.2	2.15	0.29	2.3
PD-SUS-S03	613228	6225153	silt	Sustat	80	497	1	9.83	176.2	2.07	1530	6.36	24.7	0.75	0.12	<0.1
PD-SUS-S4	612677	6225755	Mat	Sustat	51	756	1	18.38	158.7	2.88	726	3.47	58.8	2.08	0.27	0.1

Sample	Utm East	Utm North	Type	Property	Geo	Description
G1-SMI			Prep Blank			
G1-SMI			Prep Blank			
1755001	618150	6214500	Drill Core	MOT	PH	Mot core: Qz vein material, some with base metal Sx (Cp-Sp-Py). Probably two different holes. About 1m of split core.
1755002	618150	6214500	Drill Core	MOT	PH	Mot core: Siliceous material - sucrosic qz vn unsplit with fine, rusty py stringers
1755003	618150	6214500	Drill Core	MOT	PH	Mot core: split. Bowser shale/argl cut by pyritic sw to almost a fine crackle bx. Some Cp on fracture surfaces.
1755004	618150	6214500	Drill Core	MOT	PH	Mot core: similar to above but this material was not split - probably because silicification is much weaker.
1755005	619850	6214285	Rock	MOT	PH	Chip/grab sample over 20 by 30m area. Qz stockwork in argillaceous rocks on southeast ridge of Mot prop (near helicopter drop off) Qz is sucrosic, appears epithermal and is in stringers, veinlets and along foliation planes. "injected" qz makes up about 4% of rock volumn. Host rock (argillite) is not visibly altered.
1755006	618275	6215235	Rock	MOT	PH	Rusty weathering intrusive rock, due to localized fracture filling of sulphide minerals, incl Py, Sp, Ga - up to 10% locally and accompanied by silicification. Really a "gash' vein with limited strike length, and right on edge of snow patch. Host is a fine grained monzonite.
1755007	618358	6215329	Rock	MOT	PH	Bull quartz vein material, slightly rusty within Megacrystic Fx porphyry. Vein is about 30-40 cm wide but outcrop is badly broken
1755008	618426	6215341	Rock	MOT	PH	Large rusty xenolith within Fs-porphyry Monz. Xenolith is bi-schist/argl and rusty due to very fine grnd sx smattered throughout. Random chips representative of outcrop.
1755009	618515	6215285	Rock	MOT	PH	Qz vn. 50-70cm wide just to east of drill collar. Bull to druzy qz with minor (1%) Sx. Adjacent to vein is highly mineralized intrusive.
1755010	618515	6215285	Rock	MOT	PH	Rusty intusive adjacent to qz vn (see above)

1755011	618582	6215272	Rock	MOT	PH	Chip sample across 15m of hanging wall (rusty argl) of next qz vein.
1755012	618600	6215267	Rock	MOT	PH	5m chip sample of o/c rusty argl + silicified intrusive (??) Again just looking at bulk tonnage potential around this vein system.
1755013	618150	6214500	Drill Core	MOT	PH	Split drill core: Hbl-Bi granodiorite. Not particularly altered, mafics are fresh, white Fx, locally silicified with patchy fracture fill (sx - but mostly py)
1755014	618150	6214500	Drill Core	MOT	PH	Fine grnd qz vein with clusters of base metal sx (py-cp-sp) not sucrosic, but glassy to bull. Split core.
1755015	603393	6231607	Rock	Jake	PH	N. side of ridge. Fine grnd to aphanitic ground mass due to alteration - I think it was intrusive. Uehedral rusty k-spar with py veinlets + dissem. No vis Cp.
1755016	603251	6231665	Rock	Jake	PH	N. side of Ridge. Appears to be intrusive but is actually a "baked" coarse sandstone (tuff). 85% subhedral to rounded Fx grains with minor Qz and intersititial Bi that is rimmed with Py.
1755017	603160	6231605	Rock	Jake	PH	Chips from subcrop - random. Most py has been leached out of what appears to be int (dyke) of Fx-porph.
1755018	603050	6231420	Rock	Jake	PH	Silicified (?) pyritic (5%) leucocratic intrusive rock. Locally coarse knots of silvery pyrite. (type of rock that yields great gossans but never carries grade….)
1755019	603030	6230844	Rock	Jake	PH	Rusty weathering shale (see photo). Sx along bedding and joint planes. Hydrothermal Py or sed type py? No expectations of grade here but….
1755020	603255	6230986	Rock	Jake	PH	Steep side but near top of ridge. Cherty, pyritic rock with 2%py and fine Bi. Lith is uncertain. Extent of o/c obscurred by talus.
1755021	603340	6231435	Rock	Jake	PH	South side of Ridge. Very pyritic Fx-porph o/c surround by clay rich soil (supergene clay).
1755022	603520	6231680	Rock	Jake	PH	Eastward projecting spur of ridge. KBP with up to 10% py. No qz in this rock.
1755023	603520	6231680	Rock	Jake	PH	Same location as above but "chert-like" material (chill margin to int dyke or hnfls sed?) pyritic but a minor component of the ridge here.
1755024	604157	6234053	Drill Core	Jake	PH	Chips from core (J-04 55' to 160') for comparison purposes.
1755025	620019	6234505	Rock	PAT	PH	Hematitic dust tuff of Hazelton Fm. Cut by epithermal style qz veinlets with fine black, non-magnetic selvages. Local and due to fluids during deposition - not a significant form of mineralization.
1755026	633396	6004410	Rock	Fen	PH	
1755027	633491	6004679	Rock	Fen	PH	
1755028	634436	6004510	Rock	Fen	PH	
1755029	634330	6004388	Rock	Fen	PH	
1755051	629732	6211747	Rock	IFT	PD	Moderately rusty, 1% veinlet/fracture surface hosted py, hosts pristine biotite books, plagioclase & k-spar otherwise ~indistinct. Q Monzonite
1755052	612393	6227550	Rock	Sustat	PD	Rusty wthg, hornfelds Bowser Group, tr disseminated py, vfg diss biotite, hosts occ sugary textured qtz vnlt, near cts with Qtz Monzonite dyke, of which there are a number in this area.
1755053	612420	6227703	Rock	Sustat	PD	Hornfelds (hard, vfg biotite bearing, overall vfg) Bowser, rusty weathering, 1-3% py, sample 2-m from ct with qtz monzonite.
1755054	612496	6227714	Rock	Sustat	PD	1-cm qtz- vn average [locally 3 per meter], 0 - 0.5% py in vns. Vns at 285/45 degrees & hosted in Quartz Monzonite.
1755055	612906	6227005	Rock	Sustat	PD	Mod rusty wthg Quartz Monzonite, rust only on fracture surfaces. Rock hosts hairline ~15-20% py bearing vnlts. Same protolith as 1755054
1755056	612030	6226650	Rock	Sustat	PD	Light gray limonite stained vfg gray altd 'schistose" (i.e. breaking on cleavage planes) sedimentary rock. Rock has the look of an indurated clay. Collected from scree.
1755057	621039	6232803	Rock	PAT	PD	Strongly haematitic maroon colored rock, 5% <1-mm fsp "floating" in a fg matrix in Bowser Lk Gp seds.

1755058	620783	6233017	Rock	PAT	PD	Very fine grained maroon to red haematitic sedimentary rock with manganese 'blotches". Superficially looks like jasper but too soft. Bowser Gp sed.
1755059	634515	6213057	Rock	SAY	PD	Buff colored, 28-cm wide, k-spar altd, pervasively malachite stained throughout on internal fracture surfaces, bornite bearing dyke like feature hosted in Bowser Lk Gp seds. Photos of this locality. Mineralized rock oriented at 015/78 degrees, bedding at this point 334/40 degrees. Malachite traced out to the north to 634504, 6212900 and no further. also traced south to area of ddh's.
1755060	634549	6212763	Rock	SAY	PD	Ridge top malachite, bornite & covalite in dk gray to black, very fine grained igneous rock, no k-spar visible at this point.
1755061	634559	6212782	Rock	SAY	PD	Malachite & azurite stained, bornite +/- covolite bearing fg, dk gray/black andesite dyke(?). Ridge top near claim post.
1755062	634525	6212728	Rock	SAY	PD	On west side of ridge. Dk gray to blk, f-g, malachite & azurite stained andesite, hosts 1-cm k-spar band.
1755063	629692	6211712	Rock	IFT	PD	Qtz vein float. Opaque, white vein material, 1/4% vfg silvery mineral, that for some reason does not quite look like pyrite.
1755101	619523	6214714	Rock	Mot	Rich	Traverse across cirque from south to north
1755102	619468	6214758	Rock	Mot	Rich	sampling began in "oxidized zone" talus and was a
1755103	619412	6214791	Rock	Mot	Rich	combination of mixed shale, greywacke and 0.5% qtz vn float
1755104	619375	6214811	Rock	Mot	Rich	(Hazelton Volcanics)
1755105	619327	6214819	Rock	Mot	Rich	
1755106	619255	6214825	Rock	Mot	Rich	
1755107	619168	6214817	Rock	Mot	Rich	
1755108	619082	6214853	Rock	Mot	Rich	Crossed over into altered FSPP +- minor Sx (py<0.5% blebs)
1755109	618968	6214907	Rock	Mot	Rich	FSPP
1755151	618518	6215279	Rock	Mot	Sonya	
1755152	618554	6215323	Rock	Mot	Sonya	
1755153	618549	6215310	Rock	Mot	Sonya	
1755154	618546	6215322	Rock	Mot	Sonya	
1755155	618546	6215296	Rock	Mot	Sonya	
1755156	634516	6213009	Rock	Say	Sonya	
1755157	634732	6002724	Rock	Fen	Sonya	
1755158	634624	6003215	Rock	Fen	Sonya	
1755159	635268	6003291	Rock	Fen	Sonya	
1755160	635663	6003338	Rock	Fen	Sonya	
1755161	635760	6003385	Rock	Fen	Sonya	
12-Pat-S01	620520	6234280	Soil	PAT	Sonya	
12-Pat-S02	620140	6234490	Soil	PAT	Sonya	

12-Pat-S04	618640	6235520	Soil	PAT	Sonya	
12-Pat-S05	618350	6235700	Soil	PAT	Sonya	
12P-MTD-07	618520	6215280	Soil	MOT	PH	
12P-MTD-11	618561	6215290	Soil	MOT	PH	
12P-JKD-12	603340	6231435	Soil	Sustat	PH	
12P-JKD-05	603160	6231606	Soil	Sustat	PH	
PD-SUS-D01	612438	6227612	Soil	Sustat	PD	Talus fines from mid fan near ct between Bowser [above] and Quartz Monzonite in valley bottom.
PD-SUS-D02	612813	6227346	Soil	Sustat	PD	Talus fines from mid fan. At this point, Bowser seds, hosting <1-m felsite dyke, and a "few" I.e. less that 5 in outcrop, <1/2 cm wide barren qtz vns.
PD-SUS-S01	612992	6225892	Mat	Sustat	PD	Moss mat, moderate flow creek. Creek draining cirque. Sample at mouth of cirque at base of last o/c [rusty Bowser] before draining into main valley.
PD-SUS-M2	612845	6225506	Mat	Sustat	PD	Moss mat from high flow stream at break in slope. Rusty Bowser up stream to south, cliffy, dykes visible high up.
PD-SUS-S03	613228	6225153	silt	Sustat	PD	Silt from mod flow creek at break in slope. Bowser seds dominate float and water shed, can see a dyke high in cliffs to south
FC-SC-01	635419	6003319	Silt	Fen	Sonya	
FC-SC-S02	635524	6003036	Silt	Fen	Sonya	
FC-SC-S03	6335480	6003016	Silt	Fen	Sonya	
FC-SC-S04	634602	6002747	Silt	Fen	Sonya	
12-PAT-S03	619542	6234706	Silt	Say	Sonya	
PD-SAY-S16	634651	6212854	Silt	Say	PD/SONYA	Silt from moderate flow stream draining low saddle in ridge at old camp site.
PD-SAY-S17	634557	6212984	Mat	Say	PD/SONYA	Moss mat at base of snow field , low flow ephemeral stream draining Cu-showing "discovery" o/c
PD-SAY-S18	634629	6213051	Silt	Say	PD/SONYA	Silt form moderate flow stream draining low saddle/camp area. This sample collected down stream of the confluence of this creak and "Discovery" creek (PD-SAY-S18).
PD-PAT-S05	621573	6232480	Silt	PAT	PD	Collected just above snow patch and break in slope. Moderate flow creek.
PD-PAT-S07	621038	6232805	Silt	PAT	PD	Silt in low flow stream at base of talus slope. Sample site rock 1755058
PD-PAT-S08	620788	6232998	Mat	PAT	PD	Moss mat on bench at break in slope. Moderate flow stream.
PD-PAT-S09	620751	6233058	Silt	PAT	PD	Silt, low flow creek from north side of cirque. On bench that forms break in slope, sample at base of snow patch.
PD-PAT-S10	620695	6233114	Silt	PAT	PD	Silt, strong flow creek at base of rusty talus. Problematic sample, but collected to try and reflect what's coming off the talus rather than down the creek.
PD-PAT-S11	620682	6233267	Silt	PAT	PD	silt, strong flow, high volume main creek draining substantial cirque.
PD-PAT-S12	620450	6233672	Silt	PAT	PD	Silt, silty gravel from small flow creek at base of snow field. Bowser Gp and buff colored f-g fsp porphyry rhyolite intrusive poorly exposed, some sort of dyke.
PD-PAT-S13	620263	6233726	Silt	PAT	PD	Creek draining north side of cirque. Low flow, good silt.
PD-PAT-S14	620111	6233640	Silt	PAT	PD	Moss mat, low flow creek draining cirque. Sample taken from creek draining into pond located on bench

PD-PAT-S15	619923	6233745	Silt	PAT	PD	A break in slope & base of snow patch; Bowser seds. Moderate flow creek.
PD-PAT-M04B	620881	6232616	Mat	PAT	PD	Moss mat at base of 15-m water fall. Major cirque above with rusty haematitic looking meter scale beds. Mod flow stream.
PD-PAT-M6	621303	6232532	Mat	PAT	PD	Moss mat, low flow creek.
PD-PAT-M7B	621206	6232600	Mat	PAT	PD	Moss mat. Low flow creek draining cirque.
PD-SUS-M3B	612312	6225948	Mat	Sustat	PD	
PD-SUS-S4	612677	6225755	Mat	Sustat	PD	
RFNS01	634253	6002704	Silt	Fen	Rich	
RFN-S02	634097	6002678	Silt	Fen	Rich	
12RFN-S03	633842	6002621	Silt	Fen	Rich	
12RFN-S04	633537	6002523	Silt	Fen	Rich	
12RFN-S05	633345	60022587	Silt	Fen	Rich	
12RFN-S06			Silt	Fen	Rich	
12RFN-S07			Silt	Fen	Rich	
12RFN-S08	633140	6002749	Silt	Fen	Rich	
12RFN-S09	633030	6002821	Silt	Fen	Rich	
12RFN-S10	633042	6002971	Silt	Fen	Rich	
12RFN-S11	633094	6003131	Silt	Fen	Rich	
12RFN-S13	633080	6003314	Silt	Fen	Rich	
12RFN-S14	633330	6003369	Silt	Fen	Rich	
12RFN-S15	633458	6003264	Silt	Fen	Rich	
12P-FN-501			Silt	Fen	PD/SONYA	
12P-FN-505			Silt	Fen	PD/SONYA	
12P-FN-506			Silt	Fen	PD/SONYA	
1755110	618840	6232581	Silt	PAT	Rich	Traverse from west to east across Hazelton Volcs for streams
1755111	618840	6232581	Silt	PAT	Rich	(Junction of 2 creeks)
1755112	619080	6232783	Silt	PAT	Rich	
1755113	619232	6232964	Silt	PAT	Rich	North/North-West trending valley through middle of property
1755114	619141	6233049	Silt	PAT	Rich	North/North-West trending valley through middle of property

Appendix III: 6–˚–ˇæ ˇı–‡ı–‡&ı¹–¹#

Geological Evaluation/Sampling: July 22-28, 2012

Peter Daubeny, MSc. P. Geo, Richard Joyes, B.Sc, Sonya Croker, BSc.,

Peter Holbek, MSc., P.Geo, Katerina Holbek, Stephen Brard

Professional Services: 6 Days	$18,000.00
Airfares Vancouver Smithers Return Hawk Air	$5,084.82
Room and Board (Bearclaw lodge, incl Pilot)	$10,429.44
Accomodation (Smithers)	$667.00
Helicopter (Canadian Helicopters Smithers)	$24,871.00
Truck Rental (+fuel)	$ 1,068.18
Radio Rental and field supplies	$ 760.00
Analytical (ACME analytical)	$ 3452.77
Compilation (P. Holbek, R Joyes, P Daubeny; 4 days)	$8400.00
Report Preparation and Drafting	$7200.00
Total	$79,933.21

Appendix IV: [illegible]

I, Peter M. Holbek with a business address of 1700 – 700 West Pender Street, Vancouver, British Columbia, V6C 1G8, do hereby certify that:

1. I am a professional geologist registered under the Professional Engineers and Geoscientists Act of the Province of British Columbia and a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.
2. I am a graduate of The University of British Columbia with a B.Sc. in geology 1980 and an M.Sc. in geology, 1988.
3. I have practiced my profession continuously since 1980.
4. I am Vice President, Exploration for Copper Mountain Mining Corp. having a business address as given above.
5. I supervised and directed the work program on the Bear Lake properties, including research and compilation, field preparation, field work and report preparation.

Signed

Peter Holbek, M.Sc., P.Geo.

I, Richard J Joyes with a business address of 1700 – 700 West Pender Street, Vancouver, British Columbia, V6C 1G8, do hereby certify that:

1. I am a graduate of The University of Tasmania with a B.Sc. in geology 2000
2. I have practiced my profession continuously since 2000.
3. I am an exploration geologist, for Copper Mountain Mining Corp. having a business address as given above.
4. I assisted in supervising and conducting the work programs on the Bear Lake properties, and assisted in preparing this report.

Signed

Richard J Joyes B.Sc Geo.

Appendix V: Assay Certificates

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Copper Mountain Mining Corporation**
1700 - 700 West Pender St.
Vancouver BC V6G 1G8 Canada

Submitted By:	Peter Holbek
Receiving Lab:	Canada-Smithers
Received:	August 01, 2012
Report Date:	August 21, 2012
Page:	1 of 4

CERTIFICATE OF ANALYSIS SMI12000157.1

CLIENT JOB INFORMATION

Project:	Bear
Shipment ID:	
P.O. Number	
Number of Samples:	63

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	62	Crush, split and pulverize 250 g rock to 200 mesh			SMI
1F01	62	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN

SAMPLE DISPOSAL

RTRN-PLP	Return
PICKUP-RJT	Client to Pickup Rejects

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

ADDITIONAL COMMENTS

Invoice To: Copper Mountain Mining Corporation
1700 - 700 West Pender St.
Vancouver BC V6G 1G8
Canada

CC:

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Copper Mountain Mining Corporation**
1700 - 700 West Pender St.
Vancouver BC V6G 1G8 Canada

Project: Bear
Report Date: August 21, 2012

CERTIFICATE OF ANALYSIS SMI12000157.1

	Method	WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
G1-SMI	Prep Blank	<0.01	0.17	3.11	3.43	45.7	9	2.8	4.2	574	1.88	<0.1	2.6	0.5	6.4	63.2	0.01	<0.02	0.04	34	0.47
G1-SMI	Prep Blank	<0.01	0.18	2.61	3.53	48.5	13	2.8	4.2	598	1.98	<0.1	1.8	0.3	6.4	60.9	<0.01	<0.02	0.03	36	0.68
1755001	Drill Core	1.44	6.02	1236	32.61	187.7	13420	15.2	18.1	375	5.10	35.8	0.3	148.9	0.7	46.0	3.74	1.39	32.31	3	0.61
1755002	Drill Core	1.69	13.96	73.19	10.95	41.9	557	8.9	6.3	665	1.55	6.7	8.6	14.8	9.4	45.7	0.20	0.47	1.19	20	1.43
1755003	Drill Core	1.45	27.53	196.2	13.42	66.1	903	23.6	16.1	1036	3.39	12.8	0.3	206.0	1.3	119.7	0.97	0.38	4.10	11	2.06
1755004	Drill Core	3.06	1.15	100.6	3.74	62.0	340	23.7	19.8	1272	3.77	1.8	0.7	69.8	1.8	156.1	0.19	0.31	1.69	63	2.48
1755005	Rock	1.16	3.45	13.68	70.04	168.4	863	6.2	2.9	205	1.36	77.0	0.2	7.8	0.7	14.0	0.42	6.35	0.33	7	0.02
1755006	Rock	0.80	10.97	932.7	75.52	97.6	33677	5.7	6.4	111	2.68	37.0	1.8	137.8	5.2	16.7	2.04	5.76	40.13	9	0.13
1755007	Rock	0.77	14.92	37.36	8.62	28.8	704	7.6	3.4	128	1.50	3.4	0.9	4.4	3.4	17.4	0.06	0.29	0.87	11	0.10
1755008	Rock	0.58	3.95	81.10	3.54	44.6	350	16.9	7.8	268	3.74	9.8	0.6	14.6	3.6	13.9	0.02	0.27	1.61	36	0.05
1755009	Rock	0.95	15.33	71.35	26.77	31.4	1453	1.5	0.8	95	2.06	42.5	1.0	24.1	1.9	7.4	0.06	0.48	5.43	2	0.02
1755010	Rock	1.15	7.69	267.0	9994	590.5	46477	1.8	1.5	53	3.99	2935	1.2	1008	1.7	9.4	1.33	20.36	13.91	<2	0.03
1755011	Rock	1.26	4.98	87.61	204.6	104.4	2581	16.7	6.7	152	3.82	73.7	1.0	1866	3.7	46.3	0.21	0.35	2.90	35	0.11
1755012	Rock	1.09	49.15	191.8	218.7	236.1	2130	17.4	9.4	244	3.03	139.2	2.6	441.7	3.5	14.5	4.23	0.41	1.48	26	0.23
1755013	Drill Core	1.80	3.69	281.0	48.74	111.1	2179	6.6	17.5	2174	3.41	300.6	1.5	46.9	2.7	224.1	1.71	0.63	19.82	10	5.04
1755014	Drill Core	1.47	9.63	497.2	3018	9810	36586	17.0	10.4	549	2.94	70.5	0.3	1508	1.1	53.8	159.1	3.09	58.02	7	0.91
1755015	Rock	1.27	1.36	32.92	12.81	55.3	185	12.9	6.2	247	3.25	8.8	2.4	6.8	11.8	88.3	0.32	0.43	1.08	32	0.39
1755016	Rock	0.96	0.34	18.29	3.43	45.2	55	15.9	11.8	810	6.34	35.8	0.1	4.3	0.7	17.3	0.06	0.22	0.46	180	0.34
1755017	Rock	0.52	1.22	66.83	101.8	1440	760	20.3	12.6	1009	3.34	121.7	2.2	3.1	9.4	147.3	9.77	1.31	1.10	33	1.67
1755018	Rock	1.11	0.65	122.7	205.7	936.7	2750	2.4	1.9	41	2.80	5814	0.7	283.0	3.5	8.6	8.75	18.17	5.40	5	0.02
1755019	Rock	0.84	2.35	124.9	41.99	134.7	764	14.0	24.5	944	4.10	21.9	0.3	4.8	1.0	17.1	0.39	0.72	0.27	67	0.11
1755020	Rock	0.58	1.12	2.91	5.55	72.1	173	58.7	11.8	2081	4.03	31.0	1.4	2.5	7.8	146.4	0.07	0.40	0.25	78	3.17
1755021	Rock	1.57	1.21	35.74	9.68	53.9	203	9.6	8.1	524	4.23	13.4	2.7	5.7	11.6	107.9	0.12	0.25	2.07	37	0.59
1755022	Rock	1.24	1.19	206.6	10.07	75.6	607	15.6	9.0	885	3.44	23.3	2.4	9.4	11.9	193.0	0.19	0.41	1.47	26	1.32
1755023	Rock	0.38	0.51	14.17	3.55	10.2	105	2.0	1.0	45	0.54	17.2	0.3	7.0	1.1	16.2	<0.01	0.10	0.42	6	0.03
1755024	Drill Core	2.28	34.42	546.6	26.75	57.6	1397	8.4	11.1	780	4.46	39.6	3.0	31.4	10.5	231.3	0.21	1.19	1.66	28	2.51
1755025	Rock	0.50	0.24	41.83	26.83	55.7	1005	1.8	3.9	1272	1.91	4.4	1.2	1.3	0.9	37.7	0.07	0.07	<0.02	350	14.85
1755026	Rock	1.21	1.39	4.97	2.98	29.8	36	1.0	2.0	560	1.44	5.7	1.1	0.2	4.1	113.2	0.05	0.05	0.08	7	0.30
1755027	Rock	0.56	2.24	5.17	3.35	21.7	12	1.9	2.7	536	1.53	1.2	1.7	0.6	10.4	13.4	0.03	0.10	0.11	13	0.10
1755028	Rock	1.23	1.60	10.10	25.47	1466	490	7.2	4.5	5246	3.15	30.8	1.2	0.9	3.1	11.6	9.23	0.73	0.61	5	0.16

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Copper Mountain Mining Corporation**
1700 - 700 West Pender St.
Vancouver BC V6G 1G8 Canada

Project: Bear
Report Date: August 21, 2012

CERTIFICATE OF ANALYSIS SMI12000157.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
G1-SMI	Prep Blank	0.077	14.8	6.8	0.48	167.1	0.123	<20	0.87	0.087	0.47	0.6	2.5	0.34	<0.02	<5	<0.1	<0.02	5.0
G1-SMI	Prep Blank	0.083	15.1	8.7	0.61	169.9	0.131	<20	0.90	0.090	0.48	<0.1	2.5	0.38	<0.02	<5	<0.1	<0.02	5.0
1755001	Drill Core	0.012	1.7	13.1	0.18	36.0	0.008	<20	0.29	0.014	0.20	>100	0.2	0.22	4.96	<5	2.9	19.76	1.0
1755002	Drill Core	0.024	4.1	11.4	0.49	115.9	0.036	<20	0.91	0.049	0.62	18.8	2.0	0.78	0.53	<5	0.3	0.25	3.4
1755003	Drill Core	0.018	4.1	9.3	0.45	88.0	0.009	<20	0.67	0.024	0.35	68.1	1.5	0.32	1.60	<5	0.5	0.38	2.0
1755004	Drill Core	0.071	4.2	23.6	1.31	201.4	0.113	<20	2.07	0.117	1.36	24.4	6.0	1.46	0.98	<5	0.2	0.28	6.7
1755005	Rock	0.016	4.6	12.0	0.02	47.5	0.001	<20	0.22	0.007	0.12	0.8	0.9	0.81	<0.02	335	<0.1	0.05	0.9
1755006	Rock	0.068	11.0	7.8	0.23	109.7	0.008	<20	0.70	0.052	0.31	5.4	0.9	0.27	0.61	<5	3.0	1.55	3.1
1755007	Rock	0.050	10.6	14.7	0.13	99.9	0.010	<20	0.41	0.049	0.20	17.9	1.2	0.18	0.27	13	<0.1	0.16	1.8
1755008	Rock	0.024	6.7	23.9	0.59	154.6	0.063	<20	1.65	0.022	0.58	2.7	2.1	0.51	0.22	<5	0.4	0.15	5.0
1755009	Rock	0.022	6.0	11.6	0.02	58.2	0.001	<20	0.17	0.010	0.12	>100	<0.1	0.09	0.05	*	0.7	3.52	0.7
1755010	Rock	0.027	5.2	7.5	0.03	50.9	0.001	<20	0.24	0.023	0.15	>100	<0.1	0.29	0.49	*	2.3	1.40	1.1
1755011	Rock	0.011	7.5	22.3	0.41	171.9	0.018	<20	1.33	0.029	0.38	>100	1.9	0.39	0.32	<5	0.2	0.22	3.8
1755012	Rock	0.119	7.9	18.3	0.41	134.1	0.024	<20	1.14	0.024	0.38	8.1	1.8	0.39	0.43	<5	0.2	0.35	3.0
1755013	Drill Core	0.058	8.2	9.2	0.31	65.6	0.016	<20	0.38	0.049	0.26	>100	0.8	0.29	1.87	<5	1.3	8.63	2.0
1755014	Drill Core	0.029	3.9	12.9	0.26	65.9	0.004	<20	0.31	0.008	0.25	4.2	1.1	0.30	2.74	107	1.2	2.46	1.1
1755015	Rock	0.127	34.7	10.4	0.14	600.5	0.001	<20	0.58	0.051	0.09	3.2	4.0	0.22	0.29	52	<0.1	0.24	2.7
1755016	Rock	0.098	7.1	31.7	2.00	78.2	0.016	<20	3.47	0.072	0.05	0.1	13.0	0.10	0.04	<5	<0.1	<0.02	14.0
1755017	Rock	0.209	34.1	13.6	0.26	547.6	0.001	<20	0.71	0.007	0.11	0.3	4.6	0.20	0.45	556	0.2	0.05	1.9
1755018	Rock	0.043	9.1	3.9	0.03	87.9	<0.001	<20	0.25	0.005	0.15	0.4	1.1	0.20	1.48	547	0.7	0.14	0.9
1755019	Rock	0.053	9.8	8.4	0.29	209.5	<0.001	<20	1.22	0.042	0.20	<0.1	7.4	0.34	0.10	39	<0.1	0.03	3.6
1755020	Rock	0.253	59.0	59.1	1.97	103.7	0.012	<20	2.73	0.050	0.10	<0.1	6.3	0.07	<0.02	<5	<0.1	0.06	11.4
1755021	Rock	0.138	36.5	8.2	0.40	149.2	0.006	<20	0.88	0.042	0.13	<0.1	3.2	0.06	1.10	196	<0.1	0.06	4.0
1755022	Rock	0.134	51.7	8.0	0.38	79.2	0.001	<20	0.53	0.046	0.14	0.2	3.3	0.08	2.03	68	0.6	0.60	1.9
1755023	Rock	0.030	4.8	1.8	0.13	284.5	0.005	<20	0.78	0.030	0.48	<0.1	1.1	0.21	0.12	60	<0.1	0.17	1.8
1755024	Drill Core	0.129	33.9	4.7	0.86	28.2	0.001	<20	0.46	0.025	0.17	0.2	2.8	0.17	3.60	180	1.5	0.23	1.4
1755025	Rock	0.046	6.0	7.4	0.40	12.4	0.154	26	3.74	0.047	0.01	0.2	6.4	<0.02	<0.02	35	1.2	<0.02	13.3
1755026	Rock	0.035	9.8	2.2	0.16	264.7	0.006	<20	0.41	0.640	0.16	<0.1	1.0	0.21	<0.02	105	<0.1	<0.02	1.6
1755027	Rock	0.043	17.6	3.6	0.09	72.6	0.003	<20	0.53	0.053	0.10	<0.1	1.8	0.05	<0.02	34	<0.1	<0.02	2.2
1755028	Rock	0.069	16.2	4.4	0.14	67.6	<0.001	<20	0.36	0.004	0.28	0.6	1.6	0.59	0.05	40	<0.1	<0.02	0.8

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Project: Bear
Report Date: August 21, 2012

CERTIFICATE OF ANALYSIS SMI12000157.1

	Method	WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
1755029	Rock	0.66	6.69	33.86	71.58	571.1	1762	4.1	1.4	496	2.82	151.9	1.2	12.2	2.0	13.2	2.68	6.44	1.90	3	0.06
1755051	Rock	1.24	1.89	91.83	3.97	24.9	157	2.5	10.2	195	2.38	0.9	2.0	3.4	3.9	30.2	0.14	0.09	0.11	29	0.41
1755052	Rock	0.94	39.39	179.7	1.73	59.9	196	14.6	12.1	291	4.13	2.1	0.8	3.1	2.1	14.6	0.02	0.12	0.30	141	0.14
1755053	Rock	1.06	1.67	325.7	1.96	18.8	284	9.7	14.2	279	4.26	2.2	0.2	7.8	0.6	306.8	0.03	0.04	0.34	57	2.92
1755054	Rock	1.39	0.77	108.5	2.65	16.7	246	5.9	6.1	278	1.93	1.4	2.6	1.6	9.1	62.1	0.05	0.06	0.63	41	0.97
1755055	Rock	0.90	2.12	168.1	1.13	15.9	49	7.6	5.9	144	1.82	0.5	1.8	7.4	4.9	51.4	0.03	0.05	0.68	30	0.41
1755056	Rock	0.62	1.38	66.38	2.26	21.2	85	3.3	2.1	210	3.91	0.5	0.1	0.7	0.8	87.6	<0.01	0.06	2.19	99	0.11
1755057	Rock	0.72	0.38	7.01	24.55	144.0	64	12.4	8.7	838	4.25	2.2	1.0	0.2	2.3	72.0	0.03	0.31	0.13	63	0.74
1755058	Rock	1.01	0.46	12.72	21.32	1185	19	48.1	22.4	8649	4.70	8.4	0.3	<0.2	0.7	13.5	0.01	0.16	<0.02	75	0.64
1755059	Rock	1.12	0.35	>10000	4681	131.5	>100000	12.9	6.6	1134	2.42	0.4	0.4	16.3	0.6	48.3	4.76	0.07	0.24	106	1.48
1755060	Rock	1.16	0.48	>10000	25.04	436.7	>100000	15.3	11.7	1942	3.49	2.9	0.5	8.7	0.9	16.7	0.85	0.15	0.65	158	0.42
1755061	Rock	0.57	0.45	>10000	29.62	461.5	>100000	30.7	11.5	2097	3.60	<0.1	0.4	10.8	0.7	6.9	6.31	0.18	0.92	130	0.58
1755062	Rock	0.43	0.49	>10000	111.7	499.4	>100000	35.0	17.9	2460	4.15	3.7	0.6	5.3	1.1	9.4	2.59	0.11	0.52	155	0.81
1755063	Rock	0.53	8.63	1269	4.47	9.2	8711	1.7	0.9	63	0.73	0.9	0.1	<0.2	0.4	1.9	0.04	0.04	0.11	10	0.02
1755101	Rock	0.97	4.07	166.5	4.16	92.0	1823	44.5	9.4	361	3.49	46.9	0.3	1.0	2.9	17.6	0.53	0.15	1.67	37	0.18
1755102	Rock	0.86	24.89	152.7	15.80	201.5	4042	15.5	4.8	296	3.81	214.7	0.4	3.9	2.2	20.9	1.32	0.39	32.75	28	0.09
1755103	Rock	0.75	6.70	149.0	5.56	68.4	1880	38.0	9.1	323	3.21	73.7	0.7	2.9	3.1	66.8	0.52	0.20	2.52	45	0.58
1755104	Rock	0.69	6.66	58.11	6.13	67.5	1812	22.4	5.9	288	3.00	105.0	0.4	2.0	1.9	11.3	0.53	0.24	13.77	27	0.05
1755105	Rock	0.67	2.66	101.5	8.11	87.6	840	32.1	9.5	353	3.65	70.3	0.4	2.0	2.7	40.5	0.87	0.36	0.85	39	0.35
1755106	Rock	0.71	6.60	152.3	24.00	223.1	2505	29.0	8.6	274	2.64	307.1	0.4	4.5	2.7	31.2	2.02	1.77	5.69	24	0.26
1755107	Rock	0.65	18.42	146.3	21.56	394.3	2910	53.6	8.6	293	4.13	155.5	1.1	4.4	4.0	27.6	3.38	0.86	1.02	29	0.22
1755108	Rock	0.66	1.96	51.39	6.62	104.7	626	29.6	6.7	331	2.75	14.3	0.8	<0.2	4.4	23.8	0.84	0.48	3.15	35	0.22
1755109	Rock	0.68	13.04	109.5	30.59	167.1	1412	2.9	2.3	177	1.38	220.5	2.0	8.8	4.4	19.9	0.74	0.38	3.23	4	0.05
1755151	Rock	0.32	8.42	137.3	5.09	53.0	2092	3.7	2.4	238	1.67	10.3	0.6	18.3	2.1	7.5	0.84	0.14	1.53	4	0.22
1755152	Rock	0.31	11.02	95.96	11.64	59.7	1835	2.0	1.8	158	3.02	83.1	2.7	6.9	5.4	29.5	0.31	0.51	6.14	32	0.26
1755153	Rock	0.61	7.99	139.7	10.88	106.9	2726	2.8	1.7	238	3.44	6.9	1.9	21.3	3.9	30.2	0.53	0.31	5.64	36	0.39
1755154	Rock	0.51	29.27	45.74	1547	112.5	3650	1.2	0.4	37	1.99	673.5	0.4	2011	0.8	5.4	0.31	2.81	1.31	<2	<0.01
1755155	Rock	0.26	2.44	296.4	121.8	194.3	22621	3.7	13.2	61	4.53	78.8	0.3	327.3	0.1	1.5	0.55	0.86	16.20	<2	<0.01
1755156	Rock	0.55	0.47	>10000	18.91	352.7	>100000	26.0	10.8	1841	3.31	1.1	0.4	17.3	0.7	6.4	4.69	0.15	0.76	137	0.52
1755157	Rock	1.55	30.07	103.1	5.12	4.4	876	0.6	0.5	15	1.30	43.8	1.7	2.3	3.0	38.8	0.02	0.08	0.10	6	0.09

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Project: Bear
Report Date: August 21, 2012

CERTIFICATE OF ANALYSIS SMI12000157.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
1755029	Rock	0.035	6.6	4.5	0.07	53.3	0.001	<20	0.43	0.006	0.29	0.2	0.8	1.17	1.26	601	<0.1	0.13	1.0
1755051	Rock	0.132	12.4	4.7	0.40	319.4	0.151	<20	0.62	0.078	0.26	0.6	1.6	0.15	0.59	<5	0.1	0.46	3.6
1755052	Rock	0.049	5.2	21.3	1.26	353.4	0.222	<20	2.19	0.071	1.47	0.2	12.1	0.49	0.83	<5	1.4	0.12	7.9
1755053	Rock	0.090	2.6	15.5	0.32	66.2	0.112	<20	4.41	0.521	0.16	1.7	5.5	0.06	2.26	<5	1.7	0.49	11.4
1755054	Rock	0.080	18.8	9.5	0.50	192.6	0.059	<20	0.70	0.066	0.37	0.3	3.1	0.13	0.31	<5	0.7	0.32	3.7
1755055	Rock	0.109	13.5	10.9	0.44	357.2	0.141	<20	0.59	0.091	0.36	2.5	1.8	0.10	0.46	<5	0.4	0.23	3.3
1755056	Rock	0.117	7.1	22.4	0.99	275.4	0.169	<20	2.19	0.144	1.35	0.1	8.1	0.80	0.60	<5	2.8	0.17	7.7
1755057	Rock	0.061	16.0	18.1	0.70	105.5	0.092	<20	0.64	0.070	0.08	<0.1	9.4	0.03	<0.02	<5	<0.1	<0.02	4.9
1755058	Rock	0.131	10.6	52.1	3.76	154.3	0.321	<20	2.31	0.041	0.12	0.1	17.1	0.04	<0.02	<5	<0.1	<0.02	10.1
1755059	Rock	0.142	5.5	54.8	0.72	51.9	0.215	<20	1.19	0.036	0.06	0.1	10.5	0.03	2.39	1739	7.1	5.27	6.5
1755060	Rock	0.148	7.0	59.8	1.97	112.2	0.089	<20	1.59	0.033	0.12	<0.1	10.2	0.02	1.03	208	4.9	0.77	8.6
1755061	Rock	0.149	10.8	71.0	2.27	44.9	0.262	<20	1.77	0.043	0.04	<0.1	14.2	0.05	3.41	1545	13.5	1.19	10.4
1755062	Rock	0.168	11.0	70.1	2.69	122.0	0.256	<20	2.07	0.044	0.05	0.1	15.4	<0.02	1.45	448	4.3	0.68	10.8
1755063	Rock	0.004	0.8	13.0	0.03	7.9	0.006	<20	0.05	0.007	0.03	1.4	0.4	<0.02	0.06	21	<0.1	<0.02	0.5
1755101	Rock	0.056	8.5	34.3	0.61	71.1	0.014	<20	2.16	0.041	0.20	7.9	3.4	0.21	<0.02	<5	0.1	0.46	5.2
1755102	Rock	0.044	7.6	21.3	0.51	89.1	0.033	<20	1.35	0.039	0.47	6.1	2.6	0.53	0.05	<5	0.6	5.05	3.7
1755103	Rock	0.065	7.9	37.3	0.70	93.4	0.049	<20	2.76	0.165	0.50	48.1	3.3	0.65	0.14	<5	0.5	0.91	6.4
1755104	Rock	0.025	5.5	27.9	0.53	57.8	0.029	<20	1.47	0.020	0.31	1.3	2.1	0.37	0.06	7	0.3	4.34	3.7
1755105	Rock	0.081	8.3	32.4	0.82	78.8	0.034	<20	2.43	0.080	0.39	0.9	3.0	0.45	0.06	<5	0.4	0.28	5.6
1755106	Rock	0.030	10.6	21.5	0.37	67.6	0.015	<20	1.43	0.071	0.31	>100	1.7	0.33	0.11	<5	0.3	0.69	3.7
1755107	Rock	0.146	12.3	24.2	0.55	102.8	0.018	<20	1.99	0.031	0.42	4.0	3.2	0.42	0.06	<5	0.3	1.24	4.5
1755108	Rock	0.067	15.8	23.8	0.52	159.5	0.020	<20	1.68	0.069	0.29	4.3	3.4	0.26	<0.02	<5	<0.1	1.26	5.1
1755109	Rock	0.053	11.8	3.9	0.08	74.5	0.003	<20	0.49	0.040	0.22	9.9	1.1	0.17	0.03	<5	0.3	1.15	1.7
1755151	Rock	0.037	5.0	8.3	0.05	45.3	0.002	<20	0.35	0.008	0.24	>100	<0.1	0.18	0.48	<5	0.4	0.77	1.4
1755152	Rock	0.138	17.1	13.2	0.45	129.9	0.031	<20	0.98	0.046	0.49	>100	1.6	0.58	0.18	<5	0.8	2.30	6.1
1755153	Rock	0.201	14.6	14.3	0.47	115.5	0.043	<20	0.83	0.060	0.48	>100	<0.1	0.58	0.12	<5	0.9	2.10	5.9
1755154	Rock	0.017	2.7	10.2	<0.01	28.3	<0.001	<20	0.10	0.029	0.04	4.5	0.5	0.06	0.21	<5	0.1	0.46	0.4
1755155	Rock	0.003	0.9	9.1	<0.01	12.6	<0.001	<20	0.03	0.003	0.03	>100	<0.1	0.02	3.24	<5	2.2	8.16	0.2
1755156	Rock	0.127	9.0	60.8	1.99	49.6	0.223	<20	1.62	0.035	0.06	0.5	11.7	0.04	2.93	1421	9.0	1.35	9.2
1755157	Rock	0.010	2.3	2.3	0.02	138.0	0.002	<20	0.46	0.061	0.15	<0.1	1.3	0.59	0.27	312	<0.1	<0.02	1.9

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Project: Bear
Report Date: August 21, 2012

CERTIFICATE OF ANALYSIS SMI12000157.1

Method		WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
1755158	Rock	0.78	1.02	162.9	2.56	4.3	1158	0.8	0.2	37	0.27	17.9	0.9	1.8	1.5	6.6	0.03	0.09	0.04	<2	0.02
1755159	Rock	0.56	0.55	5.77	2.37	8.8	147	0.6	0.2	68	0.25	8.8	1.7	1.1	4.9	6.4	0.02	0.10	0.12	<2	0.03
1755160	Rock	0.92	2.10	13.65	4.12	7.8	163	0.9	0.4	59	0.18	3.0	4.7	0.7	6.6	32.2	0.01	0.18	0.07	<2	0.17
1755161	Rock	0.62	0.23	2.52	2.24	10.0	82	0.8	0.3	231	0.21	0.2	1.0	0.5	2.2	14.2	0.02	<0.02	0.04	<2	0.10

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CERTIFICATE OF ANALYSIS SMI12000157.1

		Method	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**	**1F**
		Analyte	**P**	**La**	**Cr**	**Mg**	**Ba**	**Ti**	**B**	**Al**	**Na**	**K**	**W**	**Sc**	**Tl**	**S**	**Hg**	**Se**	**Te**	**Ga**
		Unit	**%**	**ppm**	**ppm**	**%**	**ppm**	**%**	**ppm**	**%**	**%**	**%**	**ppm**	**ppm**	**ppm**	**%**	**ppb**	**ppm**	**ppm**	**ppm**
		MDL	**0.001**	**0.5**	**0.5**	**0.01**	**0.5**	**0.001**	**20**	**0.01**	**0.001**	**0.01**	**0.1**	**0.1**	**0.02**	**0.02**	**5**	**0.1**	**0.02**	**0.1**
1755158	Rock		0.002	1.0	3.4	0.01	39.3	0.002	<20	0.28	0.033	0.16	0.5	0.7	0.15	<0.02	13	<0.1	<0.02	0.9
1755159	Rock		0.005	2.0	4.0	0.02	53.2	0.002	<20	0.36	0.026	0.21	0.5	1.1	0.14	<0.02	296	<0.1	<0.02	1.2
1755160	Rock		0.004	6.1	2.2	0.04	70.1	0.005	<20	0.48	0.197	0.47	0.3	1.3	0.14	<0.02	106	<0.1	<0.02	1.4
1755161	Rock		0.002	2.5	1.6	0.05	36.3	0.005	<20	0.32	0.175	0.32	0.4	0.7	0.07	<0.02	<5	<0.1	<0.02	1.1

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Client: **Copper Mountain Mining Corporation**
1700 - 700 West Pender St.
Vancouver BC V6G 1G8 Canada

Project: Bear
Report Date: August 21, 2012

QUALITY CONTROL REPORT SMI12000157.1

	Method	WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
Pulp Duplicates																					
1755014	Drill Core	1.47	9.63	497.2	3018	9810	36586	17.0	10.4	549	2.94	70.5	0.3	1508	1.1	53.8	159.1	3.09	58.02	7	0.91
REP 1755014	QC		9.51	479.1	2993	9664	35947	16.7	10.2	531	2.90	70.3	0.3	1502	1.2	52.6	157.5	3.18	57.63	7	0.91
REP 1755107	QC		17.68	146.5	21.23	382.0	2909	53.1	8.2	292	4.14	154.0	1.1	3.9	3.9	26.6	3.28	0.86	1.00	28	0.22
Core Reject Duplicates																					
1755015	Rock	1.27	1.36	32.92	12.81	55.3	185	12.9	6.2	247	3.25	8.8	2.4	6.8	11.8	88.3	0.32	0.43	1.08	32	0.39
DUP 1755015	QC	<0.01	1.33	31.98	17.25	64.6	247	12.2	6.1	226	3.26	9.0	2.3	4.6	11.7	81.2	0.50	0.41	1.16	31	0.35
1755107	Rock	0.65	18.42	146.3	21.56	394.3	2910	53.6	8.6	293	4.13	155.5	1.1	4.4	4.0	27.6	3.38	0.86	1.02	29	0.22
DUP 1755107	QC	<0.01	22.42	151.7	23.05	368.4	3872	49.1	8.9	297	4.34	151.0	1.1	7.6	3.8	30.0	3.51	1.18	1.39	28	0.26
Reference Materials																					
STD DS9	Standard		14.23	114.2	133.2	325.9	2091	43.0	8.3	593	2.41	25.4	3.0	124.9	6.8	73.6	2.43	4.42	6.34	39	0.76
STD DS9	Standard		13.21	103.4	127.8	324.1	1793	41.3	7.4	605	2.35	24.7	2.5	111.8	5.9	74.9	2.26	3.61	6.35	38	0.73
STD OREAS45CA	Standard		0.98	520.2	22.03	63.9	268	261.1	101.4	992	16.94	3.6	1.3	42.8	7.7	13.8	0.07	0.07	0.17	210	0.47
STD OREAS45CA	Standard		0.89	516.8	18.91	59.3	255	263.4	96.6	979	17.13	3.4	1.1	38.9	6.7	14.6	0.10	0.06	0.17	211	0.44
STD OREAS45CA Expected			1	494	20	60	275	240	92	943	15.69	3.8	1.2	43	7	15	0.1	0.13	0.19	215	0.4265
STD DS9 Expected			12.84	108	126	317	1830	40.3	7.6	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	40	0.7201
BLK	Blank		<0.01	0.06	0.06	<0.1	<2	<0.1	<0.1	<1	<0.01	0.2	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01
BLK	Blank		<0.01	0.03	<0.01	0.3	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01
Prep Wash																					
G1-SMI	Prep Blank	<0.01	0.17	3.11	3.43	45.7	9	2.8	4.2	574	1.88	<0.1	2.6	0.5	6.4	63.2	0.01	<0.02	0.04	34	0.47
G1-SMI	Prep Blank	<0.01	0.18	2.61	3.53	48.5	13	2.8	4.2	598	1.98	<0.1	1.8	0.3	6.4	60.9	<0.01	<0.02	0.03	36	0.68

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Vancouver BC V6G 1G8 Canada

Project: Bear
Report Date: August 21, 2012

QUALITY CONTROL REPORT SMI12000157.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
Pulp Duplicates																			
1755014	Drill Core	0.029	3.9	12.9	0.26	65.9	0.004	<20	0.31	0.008	0.25	4.2	1.1	0.30	2.74	107	1.2	2.46	1.1
REP 1755014	QC	0.027	3.7	12.8	0.26	65.4	0.004	<20	0.31	0.007	0.24	4.1	1.2	0.30	2.70	100	1.2	2.45	1.1
REP 1755107	QC	0.145	12.0	24.4	0.56	103.5	0.018	<20	2.01	0.031	0.42	4.3	3.2	0.41	0.06	7	0.3	1.20	4.5
Core Reject Duplicates																			
1755015	Rock	0.127	34.7	10.4	0.14	600.5	0.001	<20	0.58	0.051	0.09	3.2	4.0	0.22	0.29	52	<0.1	0.24	2.7
DUP 1755015	QC	0.126	34.5	11.0	0.14	578.0	0.001	<20	0.56	0.049	0.09	0.9	4.0	0.17	0.30	62	<0.1	0.22	2.6
1755107	Rock	0.146	12.3	24.2	0.55	102.8	0.018	<20	1.99	0.031	0.42	4.0	3.2	0.42	0.06	<5	0.3	1.24	4.5
DUP 1755107	QC	0.160	12.3	22.6	0.55	104.5	0.023	<20	1.90	0.034	0.43	6.6	3.3	0.46	0.09	<5	0.4	2.21	4.3
Reference Materials																			
STD DS9	Standard	0.081	14.7	117.4	0.64	343.9	0.117	<20	1.00	0.093	0.42	2.6	2.5	5.79	0.15	249	5.6	4.75	4.7
STD DS9	Standard	0.083	12.5	117.8	0.62	337.8	0.113	<20	0.96	0.088	0.40	2.8	2.9	5.74	0.15	195	5.3	5.37	4.8
STD OREAS45CA	Standard	0.039	17.8	755.8	0.17	174.0	0.148	<20	3.88	0.018	0.08	<0.1	46.6	0.12	<0.02	37	0.3	0.06	20.5
STD OREAS45CA	Standard	0.041	15.6	772.0	0.15	159.3	0.147	<20	3.97	0.016	0.08	<0.1	47.1	0.14	<0.02	35	0.3	0.05	19.9
STD OREAS45CA Expected		0.0385	15.9	709	0.1358	164	0.128		3.592	0.0075	0.0717		39.7	0.07	0.021	30	0.5	0.06	18.4
STD DS9 Expected		0.0819	13.3	121	0.6165	330	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59
BLK	Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1
BLK	Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1
Prep Wash																			
G1-SMI	Prep Blank	0.077	14.8	6.8	0.48	167.1	0.123	<20	0.87	0.087	0.47	0.6	2.5	0.34	<0.02	<5	<0.1	<0.02	5.0
G1-SMI	Prep Blank	0.083	15.1	8.7	0.61	169.9	0.131	<20	0.90	0.090	0.48	<0.1	2.5	0.38	<0.02	<5	<0.1	<0.02	5.0

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Client:	**Copper Mountain Mining Corporation** 1700 - 700 West Pender St. Vancouver BC V6G 1G8 Canada
Submitted By:	Peter Holbek
Receiving Lab:	Canada-Smithers
Received:	August 01, 2012
Report Date:	August 20, 2012
Page:	1 of 2

CERTIFICATE OF ANALYSIS SMI12000158.1

CLIENT JOB INFORMATION

Project:	Bear
Shipment ID:	
P.O. Number	
Number of Samples:	13

SAMPLE DISPOSAL

RTRN-PLP	Return
STOR-RJT-SOIL	Store Soil Reject - RJSV Charges Apply

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

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	13	Dry at 60C			SMI
SS80	13	Dry at 60C sieve 100g to -80 mesh			SMI
1F01	13	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
RJSV	13	Saving all or part of Soil Reject			SMI

ADDITIONAL COMMENTS

Invoice To: Copper Mountain Mining Corporation
1700 - 700 West Pender St.
Vancouver BC V6G 1G8
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Vancouver BC V6G 1G8 Canada

Project: Bear
Report Date: August 20, 2012

CERTIFICATE OF ANALYSIS SMI12000158.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001
12-Pat-S01	Soil	1.09	26.43	16.05	123.7	972	39.1	13.2	1462	2.60	8.4	0.6	2.1	<0.1	24.7	0.67	0.14	0.13	53	0.36	0.145
12-Pat-S02	Soil	0.74	31.80	18.67	135.5	724	40.8	14.2	1163	3.32	7.6	0.6	1.5	0.1	22.9	0.65	0.20	0.11	61	0.38	0.084
12-Pat-S03	Soil	1.11	74.01	33.38	183.8	1962	14.7	9.6	2458	1.80	5.3	1.5	3.8	<0.1	72.7	1.94	0.50	0.10	75	1.41	0.168
12-Pat-S05	Soil	0.60	80.24	168.1	274.1	1058	34.6	11.7	1234	2.36	11.9	2.2	1.5	<0.1	42.8	3.41	0.71	0.10	91	0.75	0.143
12P-MTD-07	Soil	43.33	1179	183.3	1386	5812	34.0	31.2	1748	9.52	736.7	10.7	797.1	6.5	24.1	3.16	2.21	7.51	82	0.62	0.349
12P-MTD-11	Soil	63.38	450.3	444.1	648.2	3379	28.7	30.4	2708	9.46	352.4	5.5	388.4	6.3	22.0	1.98	1.40	6.57	101	0.49	0.387
12P-JKD-12	Soil	3.69	319.7	12.88	9.9	621	0.9	0.5	61	21.32	52.1	0.3	33.6	1.5	9.1	0.02	0.86	53.80	154	<0.01	0.093
12P-JKD-05	Soil	2.50	142.6	717.8	1751	4776	13.4	11.3	267	9.95	2203	0.6	32.5	1.5	66.5	6.70	2.87	5.57	48	0.06	0.139
PD-SUS-D01	Soil	113.5	736.7	26.06	80.9	1312	23.0	20.5	897	11.25	83.8	3.1	261.2	4.9	364.3	0.19	0.82	1.23	116	0.35	0.246
PD-SUS-D02	Soil	69.90	944.8	80.69	128.7	2180	28.1	27.3	986	5.23	29.6	6.7	28.3	9.8	154.8	1.00	1.12	2.57	73	0.74	0.276
PD-SUS-S01	Soil	16.46	39.56	26.93	100.3	468	25.8	15.8	1002	3.46	238.2	1.6	7.5	0.2	109.7	0.45	2.15	0.29	33	0.94	0.153
PD-SUS-M2	Soil	1.61	46.95	15.44	69.1	419	51.3	10.8	786	1.48	18.3	7.2	2.1	<0.1	236.3	1.58	1.41	0.14	12	1.95	0.286
PD-SUS-S03	Soil	2.07	79.63	9.83	176.2	497	39.5	28.1	1530	6.36	24.7	0.2	1.0	0.6	34.1	0.47	0.75	0.12	46	0.46	0.168

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Client: **Copper Mountain Mining Corporation**
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Vancouver BC V6G 1G8 Canada

Project: Bear
Report Date: August 20, 2012

CERTIFICATE OF ANALYSIS SMI12000158.1

Method		1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
12-Pat-S01	Soil	7.6	46.7	0.63	311.3	0.008	<20	1.90	0.006	0.07	<0.1	3.4	0.17	0.09	90	0.5	<0.02	5.5
12-Pat-S02	Soil	9.5	40.0	0.74	183.0	0.036	<20	1.83	0.005	0.06	<0.1	3.9	0.11	0.05	75	0.7	<0.02	5.7
12-Pat-S03	Soil	20.6	28.8	0.70	1135	0.013	<20	1.13	0.012	0.09	0.2	1.8	0.06	0.24	184	3.8	<0.02	5.5
12-Pat-S05	Soil	31.3	66.9	1.06	107.3	0.044	<20	1.90	0.012	0.07	0.1	2.4	0.07	0.13	84	2.5	<0.02	7.0
12P-MTD-07	Soil	34.8	34.3	1.07	61.3	0.140	<20	3.90	0.003	0.21	>100	5.7	0.49	0.11	77	2.5	2.28	10.8
12P-MTD-11	Soil	26.4	39.7	1.14	147.0	0.104	<20	2.77	0.006	0.49	>100	6.7	1.07	0.09	34	1.4	1.07	12.9
12P-JKD-12	Soil	8.9	24.3	0.13	127.9	0.006	<20	0.92	0.008	0.08	0.9	5.9	0.21	0.41	19	2.0	22.11	30.7
12P-JKD-05	Soil	18.3	13.3	0.03	273.8	<0.001	<20	0.57	0.040	0.20	0.2	7.0	1.32	0.57	1103	0.9	0.29	1.6
PD-SUS-D01	Soil	12.7	17.1	1.24	332.7	0.138	<20	3.13	0.020	0.62	6.2	11.7	0.44	0.27	15	3.6	0.65	10.1
PD-SUS-D02	Soil	42.1	19.1	1.07	336.2	0.096	<20	1.70	0.007	0.29	11.0	7.6	0.24	0.04	23	1.3	0.35	7.2
PD-SUS-S01	Soil	7.9	26.6	0.58	93.6	0.012	<20	1.50	0.010	0.11	2.3	2.0	0.08	0.14	45	3.1	0.07	4.2
PD-SUS-M2	Soil	3.9	25.0	0.50	97.5	0.004	<20	0.98	0.015	0.14	0.3	1.4	0.05	0.31	99	8.7	0.02	1.8
PD-SUS-S03	Soil	5.3	14.6	0.70	89.3	0.001	<20	1.94	0.006	0.04	<0.1	7.8	0.08	0.12	89	1.9	0.08	4.4

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Project: Bear
Report Date: August 20, 2012

QUALITY CONTROL REPORT SMI12000158.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001
Reference Materials																					
STD DS9	Standard	12.51	110.3	136.7	336.3	2205	43.7	8.3	652	2.48	25.5	2.8	169.7	6.4	83.2	2.45	3.84	6.62	43	0.78	0.091
STD OREAS45CA	Standard	0.83	546.6	17.93	59.4	295	260.6	92.0	983	16.25	2.8	1.1	37.4	6.1	11.3	0.09	0.12	0.18	225	0.44	0.041
STD OREAS45CA Expected		1	494	20	60	275	240	92	943	15.69	3.8	1.2	43	7	15	0.1	0.13	0.19	215	0.4265	0.0385
STD DS9 Expected		12.84	108	126	317	1830	40.3	7.6	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819
BLK	Blank	<0.01	<0.01	<0.01	<0.1	4	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001

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Project: Bear
Report Date: August 20, 2012

QUALITY CONTROL REPORT SMI12000158.1

	Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
	MDL	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
Reference Materials																		
STD DS9	Standard	12.7	131.6	0.66	355.3	0.119	<20	1.03	0.095	0.42	3.3	2.9	6.02	0.18	226	5.9	5.40	5.2
STD OREAS45CA	Standard	14.7	756.4	0.15	170.1	0.153	<20	3.74	0.007	0.08	<0.1	45.5	0.12	0.03	34	0.3	0.05	19.0
STD OREAS45CA Expected		15.9	709	0.1358	164	0.128		3.592	0.0075	0.0717		39.7	0.07	0.021	30	0.5	0.06	18.4
STD DS9 Expected		13.3	121	0.6165	330	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1