| BRITISH<br>COLUMBIA<br>The Best Place on Earth  | T T T   |
|---|---|
| Ministry of Energy, Mines & Petroleum Resources   |   |
| Mining & Minerals Division<br>BC Geological Survey  | Assessment Report<br>Title Page and Summary   |
|   |   |
| TYPE OF REPORT [type of survey(s)]: Core Drilling   | TOTAL COST: 188,752.76  |
| AUTHOR(S): Grant F. Crooker   | SIGNATURE(S):   |
| NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-4-592, Work Nu  | umber 11-1620978-0720, July 20, 2014 YEAR OF WORK: 2014   |
| STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):  | 5543487, February 20, 2015  |
| PROPERTY NAME: Tulameen Project, Whipsaw Target   |   |
| CLAIM NAME(S) (on which the work was done): 576850, 649890, 576   | 828, 576843, 649886, 649883   |
|   |   |
|   |   |
| COMMODITIES SOUGHT: copper. gold. silver  |   |
|   |   |
| MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: U92HSE112,   | Raven   |
| MINING DIVISION: Similkameen  | NTS/BCGS: 092H027, 037  |
| LATITUDE: 49 ° 17 '20 " LONGITUDE: 120  | <sup>0</sup> <u>39</u> ' <u>40</u> '' (at centre of work)   |
| OWNER(S):   |   |
| 1) Goldcliff Resource Corporation   | 2)  |
|   |   |
| MAILING ADDRESS:<br>42 Georgia Wynd   |   |
| Delta, BC, V4M 1A5  |   |
| OPERATOR(S) [who paid for the work]:<br>1) Goldcliff Resource Corporation   | 2) Badger Minerals  |
| MAILING ADDRESS:<br>42 Georgia Wynd   | Suite 380-580 Hornby Street   |
| Delta, BC, V4M 1A5  | Vancouver, BC, V6C 3B8  |
| PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure<br>The Whipsaw target is underlain by Upper Triassic Nicola Grou | a, alteration, mineralization, size and attitude):<br>p volcanic and sedimentary rocks that have been intruded by |
| Triassic gabbro and diorite that may be related to the Copper M   | ountain intrusions or the Tulameen Ultramafic complex. Trace  |
| amounts of chalcopyrite occur with carbonate-quartz-epidote ve  | inlets, along fractures and as fine grained disseminations within   |
| the volcanic and intrusive rocks. The highest copper assay from   | the 2014 drilling program was 953 ppm over 3.27 m in diorite.   |
| REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT R   | EPORT NUMBERS: 17619, 20313, 21507, 22,680, 32268, 33514  |

| TYPE OF WORK IN EXTENT OF WORK<br>THIS REPORT (IN METRIC UNITS) |                                       | ON WHICH CLAIMS                       | PROJECT COSTS<br>APPORTIONED<br>(incl. support) |
|---|---------------------------------------|---------------------------------------|---|
| GEOLOGICAL (scale, area)  |                                       |                                       |   |
| Ground, mapping   |                                       |                                       |   |
| Photo interpretation  |                                       |                                       |   |
| GEOPHYSICAL (line-kilometres)                                   |                                       |                                       |   |
| Ground  |                                       |                                       |   |
|   |                                       | · · · · · · · · · · · · · · · · · · · |   |
|   |                                       |                                       |   |
|   |                                       |                                       |   |
|   |                                       |                                       |   |
| Seismic   |                                       |                                       |   |
| Other   |                                       |                                       |   |
| Airborne  |                                       |                                       |   |
| GEOCHEMICAL<br>(number of samples analysed for)<br>Soil         |                                       |                                       |   |
| Silt  |                                       |                                       |   |
| Rock  |                                       |                                       |   |
| Other core 40 samples 51 el                                     | ement ICP-AES/MS                      | 576850                                | 18.853.80                                       |
| DRILLING<br>(total metres: number of holes, size)               |                                       |                                       |   |
| Core NQ, 727.87 metres, 4 l                                     | holes                                 | 576850                                | 154,277.20                                      |
| Non-core  |                                       |                                       |   |
| RELATED TECHNICAL   |                                       |                                       |   |
| Sampling/assaying 8 core Pt,                                    | Pd, Au fire assay, ICP finish         | 576850                                | 184.80  |
| Petrographic  | · · · · · · · · · · · · · · · · · · · |                                       |   |
| Mineralographic   |                                       |                                       |   |
| Metallurgic   |                                       |                                       |   |
|   |                                       |                                       |   |
| PROSPECTING (scale, area)                                       |                                       |                                       |   |
| PREPARATORY / PHYSICAL  |                                       |                                       |   |
| Line/grid (kilometres)  |                                       | ·                                     |   |
| Topographic/Photogrammetric<br>(scale, area)                    |                                       |                                       |   |
| Legal surveys (scale, area)                                     |                                       |                                       |   |
| Road, local access (kilometres)/                                | trail <u>1.1 kms, 16 kms rehab</u>    | 576850, 649890, 576828, 576843        | 11,824.64                                       |
| Trench (metres)   |                                       |                                       |   |
| Underground dev. (metres)                                       |                                       |                                       |   |
| Other Reclamation   |                                       | 576850, 649890                        | 3,612.32  |
|   |                                       | TOTAL COST:                           | 188,752.76                                      |
|   |                                       |                                       |   |

| <b>BC</b> Geological Survey |
|-----------------------------|
| Assessment Report           |
| 35488                       |

## CORE DRILLING REPORT

on the

# TULAMEEN PROJECT

(SOW 5543487)

## WHIPSAW TARGET AREA

Similkameen Mining Division Princeton Mining District British Columbia Canada 92H037

(49° 19' North Latitude, 120° 40' West Longitude)

for

## **GOLDCLIFF RESOURCE CORPORATION**

42 Georgia Wynd Delta, BC V4M 1A5 (Owner and Operator)

by

## GRANT F. CROOKER, PGEO GFC CONSULTANTS INC.

Box 404, 2522 Upper Bench Road Keremeos, BC V0X 1N0

## **FEBRUARY 2015**

| PAC | θE |
|-----|----|
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#### **1.0 SUMMARY AND RECOMMENDATIONS**

The Tulameen project is owned and operated by Goldcliff Resource Corporation and consists of 59 mineral claims covering 25,979 hectares in the Princeton mining district, Similkameen Mining Division, British Columbia, Canada. It is located 200 kilometres east of Vancouver, 5 to 30 kilometres southwest of the town of Princeton and 7 kilometres west of the Copper Mountain mine that has produced significant amounts of copper, gold and silver from alkalic porphyry ore deposits.

Extensive mineral exploration for gold, silver, copper, platinum and coal has been carried out in the Princeton and Tulameen areas (Princeton mining district) for well over 100 years. The earliest production of gold and platinum was from the placer mines along the Tulameen and Similkameen rivers and their tributaries Granite and Whipsaw creeks.

The most significant mining property in the Princeton area is the Copper Mountain mine located approximately 15 kilometres south of Princeton and a few kilometres east of Goldcliff's Tulameen project. Copper was first discovered at Copper Mountain in 1884 by a trapper named Jameson. However production did not begin until 1926 when the Granby Consolidated Mining, Smelting and Power Company Limited acquired the property. The Copper Mountain mine was in production from 1926 to 1996, with several periods of shutdown due to low copper prices or lack of mineable reserves. The historical production from the mine was 1.7 billion pounds of copper, 8.4 million ounces of silver and 0.62 million ounces of gold.

Copper Mountain Mining Corporation renewed exploration at the Copper Mountain mine in 2007. Core drilling commenced in January of 2007 and continued through November of 2008. In April of 2009, a NI 43-101 (Giroux Consultants Ltd) compliant resource report was issued by Copper Mountain Mining Corporation. The measured and indicated resources, based on a 0.15% copper cut-off grade, are 518.6 million tons grading 0.31% copper and containing 3.2 billion pounds of copper. Inferred resources at 0.15% copper cut-off grade are 390.7 million tons grading 0.23% copper and containing 1.8 billion pounds of copper. The Copper Mountain mine (75% Copper Mountain Mining Corporation and 25% Mitsubishi Materials Corp) resumed production in September of 2011 by conventional open pit mining methods with a 35,000 tonnes per day mill.

The alkalic copper-gold-silver porphyry deposits at the Copper Mountain mine are spatially and genetically associated with multiple phases of the Copper Mountain intrusions and associated structures. The ore deposits, whether in Nicola Group volcanic rocks or intrusive rocks are associated with zones of extensive and locally intense wall rock hydrothermal alteration, principally of potassic origin. The copper and silver mineralization is associated with fractures, sulphide veins and vein stock works, while the gold mineralization is associated with magnetite vein systems. The regional and local structures are the important overall mineralizing controls, the most important being the northwest (Main fault), northeast (Mine breaks) and eastwest (Gully fault) structures. The majority of the ore deposits and prospects occur along, or at intersections to these structures.

The Tulameen project is located within the southern portion of the Intermontane Tectonic Belt of British Columbia that is Quesnel Terrane (Quesnellia). Quesnellia is a northwesterly trending belt of Upper Triassic to Lower Jurassic submarine and subaerial alkali and calc-alkali volcanic rocks, related sedimentary rocks and comagmatic intrusive rocks.

In the southern part of British Columbia, this assemblage of volcanoplutonic arc rocks is known as the Nicola Group. Throughout the Intermontane Tectonic Belt these rocks are noted for their mineral deposits, principally alkalic copper-gold-silver porphyry deposits, and copper and gold skarns. The central part of the Nicola Group between Merritt and Princeton has been subdivided into three subparallel structural belts, referred to as the Western, Central and Eastern Belts, on the basis of physical and chemical differences of the rock assemblages. The three belts are separated by northerly trending high-angle fault systems (Preto, 1979). The Princeton area hosts the Eastern and Western Belt Nicola rocks that are separated by the northerly trending high-angle Boundary fault (BF).

The Eastern Belt Nicola rocks occur east of the Boundary fault and are comprised of a lower sequence of argillite and limestone sedimentary rocks that are intercalated with volcanic rocks of the Wolfe Creek

Formation. The Eastern Belt Nicola Group rocks host the copper-gold alkalic porphyry deposits at Copper Mountain.

The Western Belt Nicola rocks occur west of the Boundary fault and underlie the Tulameen project area. They are the oldest rocks exposed in the Tulameen project area and are lithologically similar to those in the Eastern Belt Nicola Group rocks. The sedimentary sequence is dominated by interbedded black argillite, grey siltstone, limestone and sandstone. The rocks show pervasive chlorite alteration, veinlets and patches of epidote, and minor amounts of disseminated pyrite and chalcopyrite. The volcanic sequence is dominated by fragmental volcanic beds of interbedded pyroxene-feldspar tuff, lapilli tuff, breccia and agglomerate. Epidote, chlorite and calcite occur as alteration minerals in clasts and matrix, and also in veins. Quartz veins are also common.

Within the southwestern portion of the Tulameen project, five stocks of mafic diorite, gabbro and pyroxenite intrude Nicola Group rocks along Whipsaw Creek. The five separate bodies are mapped along a southwest-northeast 050° trend, occur over a 10 kilometre strike length and are associated with the Whipsaw Creek fault. The stocks are Late Triassic in age and Massey's description of the Whipsaw stocks indicates that the stocks are differentiated intrusions similar to the Copper Mountain stock.

The large northerly trending fault systems such as the Allison, Summers Creek, Whipsaw and Boundary, are believed to represent deep-seated crustal features which dominated the geology of the region in the Late Triassic time and caused volcanic centres to be aligned in a northerly direction, thus producing a central zone of dominantly volcanic and intrusive rocks, the Central Belt and part of the Eastern Belt, flanked to the west and east by sedimentary basins. Some of these eruptive centres can be identified with stocks or clusters of stocks of micromonzonite or microdiorite which may have associated copper-gold mineralization such as at Copper Mountain.

Goldcliff has conducted exploration programs on the Tulameen project since acquiring the claims in 2008. This work has included a multi-sensor Resolve airborne geophysical survey (1,533 line kilometres), prospecting, geological mapping, reconnaissance geochemical stream sediment (493 samples), soil (369 samples), and rock (700 samples) sampling, line cutting (95 line kilometres), geophysical 3D induced polarization (95 line kilometres), magnetic (77 line kilometres) and ground radiolithic (305.9 line kilometres) surveys. Goldcliff compiled and interpreted the geological, geochemical and geophysical data and identified the Whipsaw, Lamont and Fifteen Mile targets as high priority for follow-up ground exploration.

The 3D induced polarization survey over the Whipsaw target identified twelve, deeply rooted chargeability anomalies that were interpreted to be disseminated sulphide mineralization and extend from surface to depths of 500 metres. The Whipsaw target chargeability anomalies occur in Upper Triassic Nicola Group rocks that host the alkalic porphyry copper-gold orebodies in the district. The Eagle, Trojan, Nev and Raven showings (chalcopyrite mineralization) occur within or adjacent to the Bolas chargeability anomaly. The 2014 work program on the Tulameen project consisted of drill testing (four NQ drill holes totalling 727.87 metres) the Bolas chargeability induced polarization anomaly (Whip, Elk and Eagle nodes) as well as copper mineralization (chalcopyrite) in float and outcrop samples at the Trojan, Eagle and Raven showings.

The following conclusions can be drawn from the 2014 work program:

- Trace amounts of chalcopyrite occur in sub-economic quantities associated with pyrite within narrow (<1 to 5 centimetres wide) carbonate-epidote-quartz veinlets, patchy epidote alteration and more rarely as fine grained disseminations in the diorite-gabbro-pyroxenite stock and Nicola volcanics.
- 2) Weak patchy pervasive epidote alteration and narrow epidote veinlets occurs sporadically within the diorite-gabbro-pyroxenite stock and Nicola volcanics, rarely with chalcopyrite.
- 3) Forty representative samples were collected from the core and sent for analysis. Copper values were weakly anomalous, ranging from 21.3 to 953 ppm.

- 4) The highest copper value from the drilling was 953 ppm copper (WS14-002-097.87) across 3.27 metres of diorite containing a weak quartz-carbonate-pyrite stockwork zone with traces of chalcopyrite.
- 5) The induced polarization chargeability anomalies are explained by the pyrite encountered within the drill holes.

Recommendations are as follows:

-Additional geological, geochemical and geophysical surveys should be conducted over the Tulameen project to define target areas for follow-up trenching and/or drilling.

## 2.1 INTRODUCTION

The following report entitled "Core Drilling report on the Tulameen Project, (SOW 5543487), Whipsaw Target Area, Similkameen Mining Division, Princeton Mining District, British Columbia, Canada, 92H037, February 2015" was prepared for Goldcliff Resource Corporation, 42 Georgia Wynd, Delta, BC by Grant F. Crooker, PGeo. The report documents the results of the core drilling program conducted on the Tulameen project during the 2014 field season.

The drilling program was carried out in July and August of 2014 by Grant F. Crooker, PGeo, geologist, Sam Zastavnikovich, PGeo, geochemist and Edwin R. Rockel, PGeo, geophysicist. Hardrock Drilling of Penticton, BC was the drilling Contractor.

## 2.2 LOCATION AND ACCESS

The Tulameen project (Figure 1.0) is located 200 kilometres east of Vancouver near Princeton, in southern British Columbia, Canada and is accessed from Princeton or Hope along Highway 3, the Crowsnest Highway. Because the Tulameen project covers a large area, a great many all-weather gravel logging roads access the various areas of the property. The Deep Gulch Creek road accesses the area south and east of Whipsaw Creek, while the Whipsaw Creek road accesses the area north and west of Whipsaw Creek. The Lamont Creek road accesses the central portion of the property and the Black Mine road accesses the northeastern portion. The Granite Creek road accesses the northwestern part of the property from Coalmont. An extensive network of old and new secondary logging roads provide access to all areas of the property.

The claims are situated in the Copper Mountain mining camp, Princeton mining district, Similkameen Mining Division (NTS 092H017, 018, 027, 028, 036, 037, 038, 046 and 047) British Columbia. The geographic coordinates of the Tulameen Project are between 49° 12' and 49° 27' north latitude and 120° 35' and 120° 50' west longitude.

## 2.3 PHYSIOGRAPHY

The Tulameen project ranges in elevation from 1,000 to 1,900 metres above sea level and consists of gentle to steep slopes. Lodgepole pine is the dominant tree species, with spruce and Douglas fir being secondary species. The area has seen two generations of logging; the first in the 1950's and 1960's consisting of selective logging of Douglas fir, yellow pine and spruce, followed by clear cutting of Lodgepole pine that is continuing today. Much of the area has been logged by clear cutting methods.

The area is at the southern boundary of the Interior Plateau and borders the Cascade Mountains to the south and west. The climate is continental to semi-arid and moderate. Winters are cold, although not extreme, with snowfalls common and heavy at times, while summers are warm and dry.

## 2.4 PROPERTY AND CLAIM STATUS

The Tulameen property (Figure 2.0) is located within the Similkameen Mining Division and encompasses fiftynine mineral claims (Table 1.0) covering 25,978.9844 hectares. Goldcliff Resource Corporation (FMC #280280) is the registered owner of the claims as documented in Table 1.0. Badger Minerals provided the funding for the project.

| TABLE 1.0 - TULAMEEN PROJECT CLAIM DATA |               |             |                         |                 |          |  |
|---|---------------|-------------|-------------------------|-----------------|----------|--|
| Tenure Number                           | Owner         | Issue Date  | Good To Date<br>(y/m/d) | Mining Division | Hectares |  |
| 576808                                  | 280280 (100%) | 2008/feb/22 | 2017/mar/01 *           | Similkameen     | 525.701  |  |
| 576809                                  | 280280 (100%) | 2008/feb/22 | 2017/mar/01 *           | Similkameen     | 525.699  |  |
| 576813                                  | 280280 (100%) | 2008/feb/22 | 2017/mar/01 *           | Similkameen     | 525.922  |  |
| 576814                                  | 280280 (100%) | 2008/feb/22 | 2017/mar/01 *           | Similkameen     | 525.919  |  |
| 576817                                  | 280280 (100%) | 2008/feb/22 | 2017/mar/01             | Similkameen     | 526.141  |  |

| 576818   | 280280 (100%) | 2008/feb/22 | 2017/mar/01   | Similkameen | 526.139     |
|----------|---------------|-------------|---------------|-------------|-------------|
| 576823   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 526.357     |
| 576824   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 526.355     |
| 576827   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 526.576     |
| 576828   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 526.575     |
| 576829   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 525.482     |
| 576830   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 525.480     |
| 576831   | 280280 (100%) | 2008/feb/22 | 2017/mar/01   | Similkameen | 525.478     |
| 576832   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 525.477     |
| 576837   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 525.254     |
| 576838   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 525.477     |
| 576839   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 525.698     |
| 576840   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 525.918     |
| 576841   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 526,137     |
| 576842   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 252.645     |
| 576843   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 210.630     |
| 576849   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 442.520     |
| 576850   | 280280 (100%) | 2008/feb/22 | 2018/mar/01 * | Similkameen | 526 796     |
| 577001   | 280280 (100%) | 2008/feb/22 | 2017/mar/01 * | Similkameen | 210.041     |
| 644643   | 280280 (100%) | 2009/sep/30 | 2017/mar/01 * | Similkameen | 529 933     |
| 644663   | 280280 (100%) | 2009/sep/30 | 2017/mar/01 * | Similkameen | 441.766     |
| 644683   | 280280 (100%) | 2009/sep/30 | 2017/mar/01 * | Similkameen | 420 927     |
| 644703   | 280280 (100%) | 2009/sep/30 | 2017/mar/01 * | Similkameen | 526 142     |
| 644723   | 280280 (100%) | 2009/sep/30 | 2018/mar/01 * | Similkameen | 526 355     |
| 644743   | 280280 (100%) | 2009/sep/30 | 2017/mar/01 * | Similkameen | 526 356     |
| 644763   | 280280 (100%) | 2009/sep/30 | 2018/mar/01 * | Similkameen | 442 312     |
| 644783   | 280280 (100%) | 2009/sep/30 | 2017/mar/01 * | Similkameen | 442 180     |
| 649883   | 280280 (100%) | 2009/oct/09 | 2017/mar/01 * | Similkameen | 294,784     |
| 649886   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 526 573     |
| 649888   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 379.111     |
| 649890   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 526,795     |
| 649892   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 463 573     |
| 649894   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 358,360     |
| 649903   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 527 015     |
| 649924   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 527.017     |
| 649926   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 506 134     |
| 649927   | 280280 (100%) | 2009/oct/09 | 2018/mar/01   | Similkameen | 189.803     |
| 649928   | 280280 (100%) | 2009/oct/09 | 2017/mar/01   | Similkameen | 147 574     |
| 649929   | 280280 (100%) | 2009/oct/09 | 2018/mar/01   | Similkameen | 527 226     |
| 649933   | 280280 (100%) | 2009/oct/09 | 2018/mar/01   | Similkameen | 126.514     |
| 666565   | 280280 (100%) | 2009/nov/08 | 2017/mar/01 * | Similkameen | 525.702     |
| 666583   | 280280 (100%) | 2009/nov/08 | 2017/mar/01 * | Similkameen | 525.704     |
| 666603   | 280280 (100%) | 2009/nov/08 | 2017/mar/01 * | Similkameen | 483.654     |
| 666623   | 280280 (100%) | 2009/nov/08 | 2018/mar/01 * | Similkameen | 420.386     |
| 666643   | 280280 (100%) | 2009/nov/08 | 2017/mar/01 * | Similkameen | 462.436     |
| 666663   | 280280 (100%) | 2009/nov/08 | 2017/mar/01 * | Similkameen | 483.776     |
| 666664   | 280280 (100%) | 2009/nov/08 | 2016/mar/01 * | Similkameen | 506.368     |
| 666683   | 280280 (100%) | 2009/nov/08 | 2016/mar/01 * | Similkameen | 506 367     |
| 666684   | 280280 (100%) | 2009/nov/08 | 2016/mar/01 * | Similkameen | 295.353     |
| 666685   | 280280 (100%) | 2009/nov/08 | 2016/mar/01 * | Similkameen | 463 957     |
| 754822   | 280280 (100%) | 2010/apr/22 | 2017/mar/01 * | Similkameen | 483.134     |
| 754842   | 280280 (100%) | 2010/apr/22 | 2017/mar/01 * | Similkameen | 147.0804    |
| 936940   | 280280 (100%) | 2011/dec/09 | 2022/mar/01   | Similkameen | 42.10       |
| 937098   | 280280 (100%) | 2011/dec/11 | 2022/mar/01   | Similkameen | 42.10       |
| TOTAL 59 |               |             |               |             | 25,978.9844 |

\* Upon acceptance of this report

## 2.5 PERMITTING AND FIRST NATIONS

The Tulameen project received a Mines Act Permit (MX-4-592) and 2011 Work Approval Number (11-1620978-0720) on July 20, 2011. The permit was granted for three years (expiring June 30, 2014) and allows for construction and modification of exploration access, mechanical trenching/test pits and surface drilling/settling ponds and sumps. An application was made by Goldcliff to extend the Mines Act Permit an

additional two years in May of 2014, and on July 20, 2014 the permit was extended an additional two years (June 30, 2016). A Free Use Permit was also issued allowing Goldcliff to harvest up to 50 cubic metres of timber in the course of exploration activities.

Goldcliff was granted a road use permit (1-3600-14) by the Ministry of Forests, Lands and Natural Resource Operations to use the Whipsaw Forest Service Road from 0.0 to 15.2 kilometres and the Deep Gulch Forest Service Road from 0.0 to 4.2 kilometres. Goldcliff was also granted a road use permit (R07751) by Weyerhaeuser Company Limited to use the Whipsaw, Deep Gulch and other branch roads.

The Tulameen Project falls within the traditional territory used by the Upper Similkameen Indian Band and other First Nations. The Upper Similkameen Indian Band and Goldcliff Resource Corporation have a Memorandum of Understanding Agreement in place as of November 24, 2006 which covers all the areas currently tenured to Goldcliff in the Panorama Property near Hedley. The agreement provides for other properties acquired by Goldcliff within the traditional territory of the Upper Similkameen Indian Band.

In summary the Memorandum of Understanding Agreement states:

"The Upper Similkameen Indian Band ("USIB") and Goldcliff Resource Corporation ("GCN") have signed a Memorandum of Understanding Agreement ("MOU");

Covering activity within the Upper Similkameen Indian Band's traditional territory ("the Territory"), the MOU is an agreement of co-operation between the Upper Similkameen Indian Band and Goldcliff Resource Corporation;

Goldcliff Resource Corporation's Panorama Ridge Gold Project, Hedley, British Columbia ("the Project") is located within the Upper Similkameen Indian Band's Territory and Goldcliff Resource Corporation recognises the obligation to consult with the USIB on aboriginal interests in regard to the Project;

The MOU agreement provides that the Upper Similkameen Indian Band and Goldcliff Resource Corporation ("the Parties") have committed to meaningful consultation and the exchange of information in the Territory;

The Parties share a desire to develop and maintain a working relationship based on mutual respect and understanding. The Parties are committed to meaningful consultation and the exchange of information."

#### 2.6 AREA AND PROPERTY HISTORY

#### 2.6.1 AREA HISTORY

The area of the Similkameen and Tulameen rivers has a long history of mining, beginning with the mining of ochre at Vermillion Bluffs in prehistoric times by the Similkameen First Nations. The highly prized red ochre was traded to many other First Nations for face painting. The red ochre at Vermillion Bluffs also gave rise to the original name of Princeton, Vermillion Forks.

The first documented mining in historic times was from placer deposits along the Similkameen and Tulameen rivers and their tributary creeks in the early 1860s. Most of the early placer mining was on the Similkameen River with mixed results. It was not until 1885, that the rich placer deposits on Granite Creek were discovered by John Chance and the Tulameen area came into prominence. From 1885 to 1943, reported production was 41,000 ounces of gold and 11,000 ounces of platinum. By 1891, the district was recognized to be the most important producer of platinum in North America. The majority of the gold and platinum production was from 1885 through 1897.

Coal has also played a prominent roll in the history of the Princeton area, with the first coal occurrences known before the 1860s and the first reported production in 1900. The coalfields are comprised of two separate Tertiary basins referred to as Tulameen and Princeton coal basins. About 4 million tonnes of high-volatile coal were produced prior to 1961, with the production split evenly between the two basins. Rank of the coal varies from lignite to sub-bituminous.

The most recent exploration in the area was initiated by Compliance Coal Limited in the Tulameen basin in 1998. In 1999, Compliance Coal Limited tested and washed a bulk sample with favourable results. In 2002, Compliance Energy Corporation completed a feasibility study on the Basin Coal Project in the Tulameen coal basin and announced a production decision. The feasibility report classify the resource as containing 20 million tonnes measured, 60 million tonnes indicated and 160 million tonnes inferred. Coal from the deposit is classed as a high volatile thermal coal with low sulphur content. The mine operated though 2004 and is currently under care and maintenance. In 2008, Compliance Energy Corporation optioned the Basin Coal Project to Jameson Resources Limited.

The most significant mining property in the Princeton area is the Copper Mountain mine located approximately 15 kilometres south of Princeton and a few kilometres east of Goldcliff's Tulameen Project. Copper was first discovered at Copper Mountain in 1884 by a trapper named Jameson. However little work was carried out in the area until Volcanic Brown located the Sunset claim in 1892. From 1892 until 1923 exploration was carried out in many areas of the camp. During the latter stages of World War I a concentrator was built at Allenby and a rail line was built from Princeton to Allenby and thence to Copper Mountain. However, no copper was produced during this time.

In 1923 The Granby Consolidated Mining, Smelting and Power Company Limited acquired the property and reorganized the concentrator and mine plants. Production did not begin until early in 1926 and continued until 1930. The mine was shut down until 1937 when production resumed and continued until 1957 when the mine was again closed. To the end of 1957 the concentrator treated 31,547,476 tonnes of ore producing 278,116 tonnes of copper, 5,825 kilograms of gold and 152,525 kilograms of silver. Most of this production was from underground operations.

Little work was carried out in the area from 1957 to 1965. In 1966, extensive trenching and drilling was carried out by The Granby Mining Company Limited at Copper Mountain, Newmont Mining Corporation of Canada Limited on the Ingerbelle property west of the Similkameen River and Cumont Mines Limited on its holdings near Copper Mountain. In December 1967, Newmont purchased all of the Granby holdings in the Copper Mountain area and carried out large scale exploration on both properties. By the end of 1969, one large scale zone of low grade copper mineralization was outlined at the Ingerbelle property and two zones at Copper Mountain. In June 1970 Newmont gave official notice of its intention to put the properties into production.

The property entered production by open pit methods in 1972 and was in almost continuous production until 1996. Cassiar Mining Corporation (Princeton Mining Corporation) purchased the Copper Mountain property from Newmont in June of 1988. The production rate was approximately 20,000 tonnes of ore per day with a mill head grade of 0.44% copper and recoverable gold and silver values. The Copper Mountain mine closed in November of 1996 due to low copper prices and an exhaustion of low stripping ratio ore reserves.

The Copper Mountain Mining Corporation renewed exploration at the Copper Mountain mine in 2007. Core drilling commenced in January of 2007 and continued through November of 2008. In April of 2009, a NI 43-101 (Giroux Consultants Ltd) compliant resource report was issued by Copper Mountain Mining Corporation. The measured and indicated resources, based on a 0.15% copper cut-off grade, are 518.6 million tons grading 0.31% copper and containing 3.2 billion pounds of copper. Inferred resources at 0.15% copper cut-off grade are 390.7 million tons grading 0.23% copper and containing 1.8 billion pounds of copper. The Copper Mountain mine (75% Copper Mountain Mining Corporation and 25% Mitsubishi Materials Corp) mine resumed production in September of 2011 by conventional open pit mining methods with a 35,000 tonnes per day mill.

Copper Mountain Mining Corporation's guidance for 2014 forecasts production of 80 to 90 million pounds of copper at an average feed grade of 0.35% copper, with a mining rate of 175,000 tonnes per day and a milling rate of 35,000 tonnes per day. Production for the first six months of 2014 was 39 million pounds of copper, 11,000 ounces of gold and 135,000 ounces of silver at a total cash cost of \$ 2.27 per pound of copper net of precious metal credits.

#### 2.6.2 TULAMEEN PROJECT HISTORY

Goldcliff Resource Corporation acquired the Tulameen project claims by staking during the period 2008 through 2011, targeting alkalic copper-gold porphyry systems similar to the Copper Mountain mine. Goldcliff has conducted a number of exploration programs on the Tulameen Project since acquiring the claims.

In 2008, Goldcliff conducted a multi-sensor Resolve airborne geophysical survey (1,533 line kilometres), prospecting, and reconnaissance geochemical stream sediment (184 samples) and rock (91 samples) sampling.

In 2009, Goldcliff interpreted the airborne geophysical survey data, analyzed and interpreted the stream sediment and rock samples, and consolidated the ARIS and Minfile data on the Tulameen project claim area. The geological, geophysical and geochemical date compilation identified the Whipsaw, Lamont and Fifteen Mile targets as high priority for follow-up ground exploration.

The 2010 exploration program focussed on the Whipsaw, Lamont and Fifteen Mile targets and consisted of a ground radiolithic survey (163 line kilometres), geological mapping, prospecting, and reconnaissance geochemical stream sediment (114 samples) and rock sampling (147 samples).

The 2011 exploration program focussed on the Whipsaw target and consisted of line cutting (95 line kilometres), geophysical 3D induced polarization (95 line kilometres), magnetic (77 line kilometres) and ground radiolithic (134 line kilometres) surveys, geological mapping, prospecting, and reconnaissance geochemical stream sediment (152 samples), soil (189 samples) and rock (419 samples) sampling.

The 2012 exploration focussed on the newly acquired Goldrop claims and consisted of a ground radiolithic survey (8.9 line kilometres), geological mapping, prospecting and reconnaissance geochemical roadside sediment (43 samples), soil (180 samples) and rock (54 samples) sampling.

A large number of showings and prospects occur within the Tulameen Project area (Figure 3.0) including the Lamont (Nine-mile) Creek placer (Minfile 092HSE231) and Whipsaw Creek placer (Minfile 092HSE236). The Lamont (Nine-mile) Creek placer occupies a fairly broad and open valley extending southeast from a divide separating it from Granite Creek to the west. Placer deposits were mined in this valley in the early 1900's, and are now reported to be largely exhausted (Geological Survey of Canada Summary Report 1922, page 118A). The Whipsaw Creek placer is located on Whipsaw Creek that flows northeast for 24 kilometres into the Similkameen River, southwest of Princeton. The lower 2 kilometres of the creek cuts through a narrow steepsided valley while the remainder flows over a broader, more open valley floor. The gravels from this creek yielded "fine scales" of gold and platinum (Geological Survey of Canada Annual Report 1887-1888, page 62A). The gravels were worked intermittently between 1887 and 1935 with total gold production estimated at 3,460 grams.

A number of copper showings are documented on the Tulameen project, the most significant of which are the Lam (092HSE135), Wilmac (092HSE042) and the Nev (092HSE112). The Lam showing is located at the headwaters of Lamont Creek, 8 kilometres west-northwest of Lamont Creek's confluence with Whipsaw Creek and 13.5 kilometres southwest of Princeton. A small elliptical plug of diorite (600 metres long by 260 metres wide) intrudes and esitic flows and agglomerates of the Upper Triassic Nicola Group. The rocks exhibit weak and erratic epidote and carbonate alteration. Some saussuritization of feldspars and chloritization has occurred along fractures in the host rocks.

Pyrite, along with minor pyrrhotite occurs primarily along fractures with limonite, but also disseminated in the volcanic rocks. Chalcopyrite is erratically distributed throughout the area and forms blebs and fine disseminations replacing mafic minerals in the gabbroic matrix of an intrusive breccia in the diorite plug, and as isolated grains on the altered fracture planes in the surrounding volcanic rocks. Sampling by previous workers gave low grade copper values (<0.10% copper). One sample of intrusive breccia with chalcopyrite assayed 0.0118% copper and nil molybdenum. Sampling of the showing by Goldcliff gave low copper values, with the highest value 126 ppm (8070).

Goldcliff identified five other pyrite-chalcopyrite showings in the area, the Deer, Elk, Kid, Bear and Goat. Most

of the samples collected by Goldcliff gave copper values of <150 ppm and background gold values (<5 ppb). A sample (27030) taken from a shear zone at the Elk showing gave the highest copper value of 1000 ppm and the highest gold value of 20 ppb, while a sample (27035) of andesite with chalcopyrite at the Goat showing gave 330 ppm copper.

The Wilmac showing is located 1.5 kilometres northwest of Twelve Mile Creek, 6 kilometres west-northwest of the confluence with Whipsaw Creek and 15 kilometres southwest of Princeton. A mass of hornblende pyroxenite, possibly related to the Tulameen Ultramafic-Mafic Complex intrudes a sequence of mafic flows, pyroclastic breccias, tuffs and argillaceous rocks of the Upper Triassic Nicola Group. The body outcrops discontinuously over a width of 200 metres, and is comprised of four northwest trending lenticular pods averaging 12 metre in thickness.

Small lenses of magnetite and narrow pegmatitic veins of hornblendite, with interstitial plagioclase (epidote altered) and apatite are associated with areas of coarse grained black hornblendite in the intrusion. Disseminated chalcopyrite and pyrite occur in the mafic pegmatites and in the sheared margins of the pods (070° trending structure). Goldcliff collected five samples from the showing and they gave copper values ranging from 34 to 841 ppm and gold values ranging from 10 to 20 ppb. A sample of andesite (201005036) taken near the margin of the intrusion gave the highest copper value of 841 ppm.

The Polaris showing is located along the banks of Arrastra Creek, 21.5 kilometres west-southwest of Princeton. The showings occur in Upper Triassic Nicola Group volcanic rocks near the south end of the Tulameen Ultramafic-Mafic Complex. Although extensive work was carried out in the area there is little information recorded in the literature. The occurrence of chalcopyrite is described in several ways, the first as disseminated in hornblende pyroxenite, and the second as in Nicola Group volcanics associated with structural lineaments that may be a complex fault zone associated with granodiorite to the west of the showing.

One zinc-copper-gold showing, the Goldrop (092HSE124) is located within the Tulameen project area. The showing is located 500 metres north of the confluence of Fourteen Mile Creek and Whipsaw Creek and 15 kilometres south-southeast of Princeton. The exact location of the Goldrop showing on surface is not known at this time. However the mineralization was intersected in three drill holes that tested the showing in 1988, 1989 and 1990. The mineralization consists of three to six zones of calcite veining, pervasive carbonate alteration and weak silicification containing pyrite, sphalerite and chalcopyrite occurring over widths of 5.79 to 10.42 metres. From 20 to 70% of the intervals are mineralized, with the remaining sections barren andesite. The intersection in drill hole 88-2 from 126.48 to126.98 metres (0.50 metres) gave the highest gold value of 5590 ppb, with 7.64% zinc and 0.40% copper.

A number of copper showings have been located by Goldcliff and previous exploration in the Whipsaw Creek area and altogether form the Whipsaw target area. These showings include the Nev, Eagle, Trojan and Raven on the southeast side of Whipsaw Creek and the Shirley and Moose showings on the northwest side. The copper mineralization occurs within chloritic schists of the Nicola Group and a diorite-gabbro-pyroxenite stock that has intruded the Nicola rocks. Traces of chalcopyrite associated with pyrite, occur within narrow carbonate-quartz-epidote veinlets, patchy epidote alteration and more rarely as fine grained disseminations in the diorite-gabbro-pyroxenite stock and Nicola volcanics.

The 3D induced polarization survey conducted over the Whipsaw target in 2011 located twelve (Condor, Bolas, Crow, Falcon, Hawk, Nob, Mazin, Garri, Osprey, Owl, Merlin and Deep) deeply rooted chargeability anomalies that are interpreted to be disseminated sulphide mineralization and extend from surface to depths of 500 metres (Figures 4.0 and 5.0). The Bolas and Condor are the most significant of the chargeability anomalies.

The Bolas chargeability anomaly is located within the Whipsaw target area and the anomaly occurs in Upper Triassic Nicola Group rocks that host the alkalic porphyry copper-gold orebodies in the district. The Bolas chargeability anomaly was named after a South American device with three nodes or balls connected by a rope to a nexus and used to capture a running game. The Bolas chargeability anomaly can be visualized as a three-pronged feature with Bolas as the nexus and the Whip, Elk and Eagle as the three nodes. Close to the surface (~50 metres) only moderate to weak individual chargeability anomalies represent the three nodes.

With increasing depth the three nodes and the Bolas nexus become stronger and begin to merge about 150 metres in depth and, as depth continues to increase, ultimately form the continuous three pronged Bolas feature. The chargeability values in the nexus and nodes reach their maximum (25 to 30 ms) at about 300 metres below surface and then begin to fade to around 20 ms at 500 metres. The Eagle, Trojan and Nev showings occur within the Bolas chargeability anomaly.

The Condor anomaly is also located within the Whipsaw target area and occurs within in Upper Triassic Nicola Group sedimentary and volcanic rocks. The Condor anomaly exhibits unusually strong chargeability values from surface down beyond 500 metres. Nicola sedimentary rocks north of Whipsaw Creek contain significant amounts of pyrite on surface and this is considered the main cause of chargeability here. South of Whipsaw Creek the Condor-Raven extension continues at depth towards the Raven showing.

#### **3.0 EXPLORATION PROCEDURE**

## 3.1 DRILLING PARAMETERS

-727.87 metres NQ drilling -4 NQ drill holes -4 drill sites -Hydracore drill -drilling contractor Hardrock Diamond Drilling of Penticton, BC

The drill hole locations are illustrated on Figure 5.0 and the drill sections illustrated on Figures 6.1 through 6.4.

## 3.2 EXPLORATION ACCESS

-1100 metres of exploration access -Caterpillar D-6 bulldozer used for access construction -bulldozer provided by Hardrock Diamond Drilling of Penticton, BC

The access roads are illustrated on Figure 5.0.

## 3.3 CORE HANDLING PROCEDURE

The drill core was brought from the drill site to a locked core logging and sampling facility in Princeton BC after each shift. The core was logged, cut and sampled within the locked facility, with only Goldcliff personnel having access to the site. All samples taken were kept within the locked facility until transported to by Goldcliff personnel to ALS Minerals laboratory in Kamloops BC for analysis.

## 3.4 CORE SAMPLING METHODS

The drill core was logged and various sections selected for sampling. The sections selected for sampling were cut in half by a rock saw with one-half sent for analysis and the other half retained for future reference. The sample interval for the portions of core selected for analysis was generally three metres, with some variation for specific geological conditions.

#### 3.5 SAMPLE ANALYSIS

The drill core samples collected from the 2014 drilling program were delivered to ALS Minerals, 2953 Shuswap Road, Kamloops, BC, V2H 1S9 for sample preparation. The pulps were then sent to ALS Minerals, 2103 Dollarton Highway, North Vancouver, BC, V7H 0A7 for analysis. Laboratory technique for the core samples consisted of fine crushing to 70% passing <2 mm, splitting off a 250 gram sample and pulverizing to better than 85% passing 75 microns. Forty samples were analyzed by an ultra trace level 51 element ICP-AES/ICP-MS (aqua regia digestion) package (ME-MS41). Eight of the samples were analyzed for platinum, palladium and gold (30 gram sample) by fire assay and ICP-AES finish (PGM-ICP23).

ALS Minerals is accredited to ISO/IEC 17025-2005 standards.

#### 4.0 GEOLOGY AND MINERALIZATION

#### 4.1 REGIONAL GEOLOGY

#### 4.1.1 INTRODUCTION

The Princeton mining district is located within the southern portion of the Quesnel Terrane, or Quesnellia, of the Intermontane Tectonic Belt of British Columbia. Quesnellia is a northerly trending, Mesozoic tectonostratigraphic terrane, 40 to 50 kilometres wide and traceable from the 49<sup>th</sup> parallel along the full length of the Intermontane Belt into northern British Columbia and Yukon. Quesnellia consists of Upper Triassic to Lower Jurassic submarine and subaerial alkali and calc-alkali volcanic rocks (Figure 3.0) and related sedimentary rocks that have been intruded by comagmatic Triassic-Jurassic intrusive rocks ranging in composition from monzonite, syenite, diorite, tonalite, and gabbro to dunite and pyroxenite. The older units are overlain by Tertiary sedimentary and volcanic units. Bedrock is poorly exposed in many places due to an extensive cover of Quaternary unconsolidated deposits.

The geology of the region has been reported by Camsell (1912), Downing (1915), Dolmage (1929), Rice (1947), Shaw (1952), Montgomery (1967), Preto (1972), Hills (1962), McMechan (1983), Monger (1989), Read (2000), Preto-Nixon (2004) and Massey et al (2008/2009).

The focus of exploration in the Princeton area at this time is alkalic copper-gold-silver porphyry deposits such as Copper Mountain Mining Corporation's Copper Mountain mine. There are however, numerous metallic mineral occurrences in the region containing copper, gold, silver, molybdenum, lead and zinc. Historically, the first economic mineral deposits were the gold-platinum placers mined in the late 1800s along the Tulameen River and Granite Creek. Coal was also an economically significant commodity, mainly from the 1920's through to the 1950's.

#### 4.1.2 TERTIARY PRINCETON GROUP

Throughout Quesnellia, in the Interior Plateau region of southern British Columbia, there are numerous exposures of Tertiary rocks. They occur in isolated structural basins, fault troughs, and pre-existing topographic depressions overlying Quesnellia rocks. The bulk of these Tertiary rocks are volcanic in origin. Relatively thick sequences of coal-bearing sedimentary rocks, mainly of fluvial and lacustrine origin, are interbedded with these broadly lenticular flows and pyroclastic sheets in the basins.

The Tulameen project area contains Early to Middle Eocene Princeton Group sedimentary and volcanic rocks that are localized in the Princeton basin. On the Tulameen project, the most southern portion of the overall Princeton Group is dissected by a northerly trending structure. To the west, the Princeton basin consists of the older Cedar Formation volcanic rocks and younger Allenby Formation sedimentary and volcanic rocks. To the southeast, the Princeton basin consists of the younger Allenby Formation sedimentary and volcanic rocks.

The geology of the Princeton Group related to the Tulameen Project claims is quoted from Peter B. Read "Geology and Industrial Minerals of the Tertiary Basins, South-Central British Columbia, GeoFile 2000-03". The Read geology map is page 1 and geological cross-sections are page 2 in Open File 1987-19. The Princeton Group on the Tulameen project claims is contained in the Princeton and Sunday basins. Read's description of the Tertiary Princeton Group is quoted as follows:

"The Princeton basin (NTS 92H17 to 10) is a northerly trending trough filled with Eocene volcanic rocks of intermediate composition composing the Cedar Formation, and an overlying mid-Eocene sedimentary sequence comprising the Allenby Formation. Basaltic andesite flows clearly overlie the Allenby Formation only at the north end of the basin. The basin contains up to 1370 metres of volcanic rocks overlain by 1600 to 2100 metres of sandstone, tuffaceous sandstone, shale, waterlain rhyolite tephra and coal (McMechan, 1983). In contrast, to the south, Sunday contains at least 1500 metres of volcanic rocks overlain by 320 metres of volcanic conglomerate, sandstone and zeolitized rhyolite tephra of the Allenby Formation.

To the west of the Princeton basin lays the Tulameen basin. It contains 1300 metres of Eocene volcanic and sedimentary rocks that overlie the Upper Triassic Nicola Group and underlie two remnants of the Miocene Chilcotin Group (Church and Brasnet, 1983). Up to 500 metres of grey, sparsely porphyritic hornblende dacite flows, and locally rhyodacite to rhyolite flows and waterlain tuffs of the Cedar Formation underlie a 790-metre thickness of sedimentary rocks of the Allenby Formation.

Geological data from Shaw (1952a, 1952b), Preto (1972, 1979), McMechan (1983) and numerous coal assessment reports have been used extensively in the preparation of the geological map (OF 1987-19, Read).

## 4.1.3 UPPER TRIASSIC NICOLA GROUP

The Quesnellia assemblage, in the southern part of the Province, consists of volcanoplutonic arc rocks known as the Upper Triassic Nicola Group. In northern British Columbia and Yukon these rocks are known as the Takla and Stuhini volcanoplutonic assemblages. Throughout the Intermontane Tectonic Belt these rocks are noted for their mineral deposits, principally alkalic copper-gold porphyry deposits, and copper and gold skarns.

The Nicola Group between Merritt and Princeton has been subdivided into three subparallel structural belts, referred to as the Western, Central and Eastern belts. The three belts are separated by northerly trending high-angle fault systems (Preto, 1979). The Princeton area hosts the Eastern and Western belt Nicola rocks that are separated by the northerly trending high-angle Boundary fault (BF).

The Eastern Belt Nicola rocks occur east of the Boundary fault and are comprised of a lower sequence of argillite and limestone sedimentary rocks that are intercalated with volcanic rocks of the Wolfe Creek Formation. The Eastern Belt Nicola Group rocks host the copper-gold alkalic porphyry deposits at Copper Mountain.

The Western Belt Nicola rocks occur west of the Boundary fault and underlie the Tulameen project. They are the oldest rocks exposed in the Tulameen project area and are lithologically similar to those in the Eastern Belt Nicola Group rocks. In the Tulameen project claim area the sedimentary sequence is dominated by interbedded black argillite, grey siltstone, limestone and sandstone. The rocks show pervasive chlorite alteration, veinlets and patches of epidote, and minor amounts of disseminated pyrite and chalcopyrite. The volcanic sequence is dominated by fragmental volcanic beds of interbedded pyroxene-feldspar tuff, lapilli tuff, breccia and agglomerate. Epidote, chlorite and calcite occur as alteration minerals in clasts and matrix, and also in veins. Quartz veins are also common.

## 4.1.4 PERMIAN-TRIASSIC EASTGATE-WHIPSAW METAMORPHIC BELT

Rocks of the Eastgate-Whipsaw metamorphic belt occur west of the Tulameen project and are quite distinct from those of the Nicola Group. The rocks are divided into three northwest-trending lithological assemblages that show increasing metamorphic grade from greenschist in the east to amphibolite in the west. Foliation and bedding dip to the west. Faulting is significant. The three lithological assemblages are the amphibolite western unit, the central quartzite-biotite-quartz schist unit and the mixed metavolcanic-metasedimentary schist units along the eastern margin of the metamorphic belt. The rocks host mineral occurrences of copper, gold, silver, molybdenum, lead and zinc that are associated with the Whipsaw porphyry camp.

## 4.1.5 INTRUSIVE ROCKS

Several intrusive complexes occur within and peripheral to the Tulameen project. These include the Late Triassic Tulameen ultramafic-mafic complex, Late Triassic-Early Jurassic Copper Mountain diorite stock, Triassic Whipsaw stocks, Triassic Rice stocks, Middle-Late Jurassic Eagle pluton and Tertiary Whipsaw porphyry.

#### COPPER MOUNTAIN STOCK

The Copper Mountain stock is proximal to the Tulameen project and is spatially and genetically associated with the copper-gold ore deposits at Copper Mountain and Ingerbelle. The Copper Mountain stock is a concentrically zoned, differentiated intrusion that includes four main phases grading from an outer mafic diorite

through monzonite into a syenite core. These bodies intrude and cause hornfels alteration of the Eastern Belt Nicola Group rocks. The Copper Mountain diorite has a high magnetic susceptibility and environment. Epidote and chlorite veinlets, some with potassic alteration halos, are pervasive throughout the diorite. Coarse biotiteolivine pyroxenite is associated with the diorite in the lower reaches of Friday Creek and biotite is associated with pink K-feldspar veins and alteration patches.

#### WHIPSAW STOCKS

Within the southwestern portion of the Tulameen project, five stocks of mafic diorite, gabbro and pyroxenite intrude Nicola Group rocks along Whipsaw Creek. The five separate bodies are mapped along a southwest-northeast 050° trend, occur over a 10 kilometre strike length and are associated with the Whipsaw Creek fault. The mineral occurrences related to the stocks are Mazie (092HSE081 Pd, Zn), Nev (092HSE112 Cu) and Goldrop (092HSE0124 Cu, Pb, Au, and Ag).

Massey et al (Geological Fieldwork 2008, Paper 2008-1) describe the Whipsaw stocks as follows:

The diorite is fine to medium grained and has typical grey salt-and-pepper fresh surfaces with brown or brick red to grey weathered surfaces. It is composed primarily of white feldspar and greenish black hornblende. Minor minerals include rare euhedral biotite flakes, pyroxene or quartz. The pyroxenite is dark green to black on fresh surfaces and weathers dark grey. It is coarse grained with crystals ranging from 1 to 3 centimetres in diameter. Pyroxene constitutes 80 to 90% of the rock, the rest being chlorite, magnetite and minor feldspar. Epidote-chlorite veinlets are common; serpentinite and calcite alteration is rare. The pyroxenite outcrops separately from but close to the diorite. Contacts are rarely seen but suggest that the diorite is intrusive into the pyroxenite. The Whipsaw stocks may be related to the Late Triassic Tulameen ultramafic complex or the Late Triassic Copper Mountain intrusions.

#### **RICE STOCKS**

In the northwestern part The Tulameen Project, several smaller stocks of diorite, gabbro and pyroxenite have been identified. The stocks intrude Upper Triassic Nicola Group rocks and may be related to the Tulameen complex or to the Late Triassic Copper Mountain intrusions (Massey et al). The Lam (092HSE135-Cu), Wilmac (092HSE042-Cu), GD (092HSE134-Au, Cu, Ag) and Finlay (Au) showings are associated with the various stocks.

The Rice stock as originally described by Rice (Memoir 243) is located at the Findlay gold showing (671135E, 5479310N). The rock is medium grey to green, coarse grained and equigranular to slightly porphyritic gabbro or diorite. Feldspar laths are white to apple green; minor pink K-feldspar forms small interstitial crystals.

Another coarse-grained, layered pyroxenite-gabbro-diorite occurs in an isolated outcrop two kilometres south of the main Rice stock near Bromley Creek. Pyroxenite is dark green to black on fresh surfaces, weathers dark grey and contains crystals of white feldspar and magnetite. About a kilometre west of this outcrop, a diorite stock has been identified. The GD showing (Au, Cu, and Ag) is about 5 km to the west of the Findlay gold occurrence. The rock is similarly coarse-grained diorite with white to pale green plagioclase feldspar and minor pink K-feldspar.

#### TULAMEEN ULTRAMAFIC-MAFIC COMPLEX

In northwest corner of the Tulameen project, the Late Triassic Tulameen ultramafic-mafic Alaskan-type complex is situated. The complex is comprised of dunite, gabbro, diorite and monzonite rocks and is host to gold, platinum, palladium, iron and chrome mineralization.

## EAGLE PLUTONIC COMPLEX

The Jurassic-Cretaceous Eagle Plutonic Complex lies mostly outside and along the western margin of the Tulameen project. The biotite-granodiorite is a syntectonic intrusion with varying texture and fabrics. The Eagle Plutonic Complex has no economic significance to the Princeton mining district.

#### **TERTIARY PORPHYRY STOCK**

The Whipsaw porphyry stock is located in the Whipsaw camp, southwest of the Tulameen project. It is considered an important mineralizing intrusion within the Princeton mining district.

The Whipsaw porphyry forms a small stock and associated dikes in the Forty-five Mile Creek area, north of Whipsaw Creek. The stock is a grey to pink porphyry with abundant white to pink feldspar laths and rounded quartz crystals. Hornblende and biotite phenocrysts are tabular, greenish black and often altered to epidote. Disseminated sulphides and malachite are observed in some outcrops. The age of the Whipsaw porphyry is unknown. It intrudes the Eagle plutonic complex and may be correlated with porphyries of the Late Cretaceous Otter Lake suite. Alternatively, it may be comagmatic with the Princeton Group (Massey et al). If the Whipsaw porphyry stock is comagmatic with the Princeton Group, it can be correlated to the Tertiary Coryell intrusions located east of the Princeton mining district. The Tertiary Coryell intrusions are associated with gold deposits in the mining districts of the Okanagan (Church, 1973), Boundary (Massey, 2007) and Kootenay (Hoy, 2010)

The intrusive complexes that occur in the Princeton mining district are the Tulameen ultramafic-mafic complex and Late Triassic diorite intrusions related to Copper Mountain and Rice stocks. The Triassic Tulameen complex rocks are gabbro and dunite and host mineral occurrences of platinum, palladium, copper, chrome and iron. The Late Triassic diorite intrusions related to Copper Mountain and Rice stocks host alkalic porphyry deposits and mineral occurrences of copper, gold and silver.

In the Eastern Belt Nicola Group, the Late Triassic Copper Mountain stock of diorites and their equivalents are related to the copper-gold-silver orebodies and regional mineralization. In the Western Belt Nicola Group rocks, the Late Triassic diorite intrusions are related to copper-gold-silver showings. Several stocks of diorite and pyroxenite intruded Western Belt Nicola Group rocks on the Tulameen property and are associated with copper and gold mineralization.

The Whipsaw and Rice stocks are diorite and pyroxenite intrusive rock associated with copper and gold mineralization. The Tertiary Whipsaw porphyry (Whipsaw camp) is associated with disseminated sulphides, malachite and molybdenum. The Jurassic-Cretaceous Eagle Plutonic Complex intrudes the Eastgate-Whipsaw metamorphic belt rocks and is not associated with economic mineralization.

#### 4.1.6 STRUCTURE

The large northerly trending fault systems such as the Allison, Summers Creek and Boundary, are deepseated crustal features which dominated the geology of the region in the Late Triassic time and caused volcanic centres to be aligned in a northerly direction. A central area of dominantly volcanic and intrusive rocks was established that flanked the Eastern and Western belts. These eruptive centres are geologically identified with stocks or clusters of stocks of gabbro, diorite and monzonite which are associated copper-gold mineralization such as at Copper Mountain.

The structural setting in the Princeton mining district is complex and poorly documented due to lack of outcrop. In the district, an anticlinorium fold (RA) occurs in the Western Belt rocks from the Tulameen River to Whipsaw Creek and a synclinorium fold (RS) occurs in the Eastern Belt rocks from the confluence of the Tulameen and Similkameen Rivers to Copper Creek (Rice, 1947).

The Western and Eastern Belt Nicola Group rocks are offset by the north-south trending Boundary fault, traceable for over 50 kilometres.

#### 4.1.7 MINERALIZATION

The economic deposits in the region are precious metal placer deposits, metallic lode deposits and nonmetallic deposits. The precious and metallic deposits are placer gold-platinum and lode copper-gold-silver. The non-metallic deposits are coal and industrial minerals.

The focus of exploration in the Princeton area at this time is alkalic copper-gold-silver porphyry deposits such as Copper Mountain Mining Corporation's Copper Mountain mine. There are however, numerous metallic

mineral occurrences in the region containing copper, gold, silver, molybdenum, lead and zinc. Historically, the first economic mineral deposits were the gold-platinum placers mined in the late 1800s along the Tulameen River and Granite Creek. Coal was also an economically significant commodity, mainly from the 1920's through to the 1950's.

#### PRECIOUS METAL PLACER DEPOSITS

In the early 1860s, placer deposits were found along Tulameen and Similkameen rivers and their tributary creeks. In 1885, rich placer gold deposits were revealed along the Granite Creek and Tulameen River. By 1891, the district was recognized to be the most important producer of platinum in North America. From 1885 to 1943, reported gold and platinum recoveries were 41,000 ounces of gold and 11,000 ounces of platinum.

The gold occurs in rough, angular or slightly flattened, rarely well-flattened nuggets with white quartz. Platinum forms small rounded grains of uniform size, which are smaller than the gold nuggets and are commonly pitted. The gravel-black sands consist of magnetite and chromite. The origin of the gold and platinum in the placers is believed to be from gold veins of the Grasshopper Mountain area and the chromitite from the dunite of the Tulameen complex in the Olivine Mountain region.

#### METALLIC LODE DEPOSITS

The focus of exploration in the Princeton area at this time is alkalic copper-gold-silver porphyry deposits such as Copper Mountain Mining Corporation's Copper Mountain mine. The ore deposits at Ingerbelle and Copper Mountain are spatially and genetically associated with multiple phases of the Copper Mountain intrusions and associated structures. The ore deposits, whether in volcanic or intrusive rocks are associated with zones of extensive and locally intense wall rock hydrothermal alteration, principally of potassic origin. The copper and silver mineralization is associated with fractures, sulphide veins and vein stock works, while the gold mineralization is associated with magnetite vein systems. Primary mineralization is bornite ± chalcopyrite ±pyrite ± magnetite. The supergene alteration and mineralization are malachite, goethite, and hematite and minor amounts of native copper, chalcocite, covellite and digenite. The regional and local structures are the important overall mineralizing controls, the most important being the northwest (Main fault), northeast (Mine breaks) and eastwest (Gully fault) structures. The majority of the ore deposits and prospects occur along, or at intersections to these structures.

From 1925 to 1957 Granby extracted 31,547,478 tonnes of ore containing 0.882% copper, 0.185 g/t gold and 4.322 g/t silver by underground mining methods. From 1972 to 1988, open-pit mining at the Ingerbelle and Copper Mountain mines extracted 257,091,744 tonnes of ore containing 0.357% copper, 0.141 g/t gold and 1.045 g/t silver. From 1989 to 1992, open-pit mining extracted 87,971,275 tonnes of ore containing 0.361% copper, 0.078 g/t gold and 1.772 g/t silver. The historical production from the area is 1.7 billion pounds of copper, 8.4 million ounces of silver and 0.62 million ounces of gold.

The Tulameen Complex is host to four main types of mineral deposits. Chromite occurs in the dunite core and is rich in platinum group metals. Magnetite forms semi-massive to massive lenses or vein-like bodies in hornblende pyroxenite. Copper mineralization is associated with a variety of host rocks, commonly gabbro to diorite or hornblende-rich pegmatite. Mineralization is primarily chalcopyrite, pyrite and bornite, but may include minor sphalerite and galena.

In the Whipsaw camp, porphyry copper-molybdenum mineralization is associated with the Whipsaw porphyry and its host rocks of the Eagle Plutonic Complex and the Eastgate-Whipsaw metamorphic belt. Sulphide mineralization is developed over a wide area, as disseminations and fracture fillings, and in quartz and calcite veins. Pyrite is most abundant with trace amounts of chalcopyrite, molybdenite, bornite, chalcocite, covellite and magnetite.

The other occurrences of copper and gold mineralization similar to that observed in the Tulameen Complex is found associated with the Rice stock at the GD (MINFILE 092HSE134), Lam (MINFILE 092HSE 135) and Wilmac (MINFILE 092SHE042) showings.

#### NON-METALLIC DEPOSITS

The exploration and production of coal in the Tulameen and Princeton Tertiary basins has proceeded sporadically since prior to 1900s. From 1919 to 1940, underground coal mines extracted about 2 million tonnes from the Tulameen basin, and in the 1950s, surface mining extracted about 0.15 million tonnes (Ryan, 2004). Compliance Coal Ltd continued exploration in the Tulameen basin until 2004.The coal deposits are hosted in the Allenby Formation of the Princeton coal basin. Several coal seams are found in a shale-rich member. The coal consists of up to 30 metres of coal interbedded with mudstone, bentonite shale and sandstone. Coal rank is generally high-volatile C to B bituminous.

Zeolite and bentonite are also known from intermediate to felsic ash-rich sedimentary units in the Allenby Formation of the Tulameen and Princeton basins.

#### 4.2 WHIPSAW TARGET GEOLOGY

## 4.2.1 ROCK TYPES

The Whipsaw target geology units (Figure 5.0) have been taken from the Ministry of Energy, Mines and Petroleum Resources Geoscience Map 2010-4, Geology of the Area South and West of Princeton, British Columbia by N.W.D. Massey, J.M.S. Vineham and S.L. Oliver to provide continuity of information in the area.

The area of the 2014 drill program is underlain by Upper Triassic Nicola Group sedimentary and volcanic rocks that have been intruded by a 2.5 kilometre long by 1 kilometre wide diorite-gabbro-pyroxenite stock. The stock is one of five that make up the Triassic Whipsaw stocks aligned along Whipsaw Creek.

The oldest rocks in the Whipsaw target area are Nicola Group volcanic and sedimentary rocks. Three sedimentary rock types were intersected in the drilling (WS14-001 and WS14-003), including light grey tuffaceous sandstone (Unit uTNssa), light grey tuffaceous siltstone (Unit uTNssi) and black argillite (Unit uTNsa). The tuffaceous sandstone contains coarser and finer beds with grains sizes ranging from <1 to 2 millimetres in diameter in a grey sericite altered matrix with emerald green fuchsite. The tuffaceous siltstone is fine grained with minor coarser beds in a grey sericite altered matrix also with emerald green fuchsite. The argillite mainly occurs as narrow (6 to 50 centimetres wide) interbeds within the tuffaceous siltstone and sandstone, although one argillite bed is 3.98 metres wide. Narrow (3 to 8 centimetres wide), hard, light brown, cherty interbeds also occur within the sandstone and siltstone. Bedding in WS14-001 ranges from 55° to 68° to the core axis, while in WS14-003 bedding ranges from 61° to 69° to the core axis.

Two volcanic rock types were intersected in the drilling (WS14-001 and WS14-003), including green to greygreen tuff (Unit uTNvt) and a dark green chlorite schist (Unit uTNvsh). The fine grained tuff contains rare <1 to 2 millimetre feldspar laths and rare 1 to 2 millimetre pyroxene phenocrysts. The tuff shows little or no foliation and exhibits increased chlorite alteration of the pyroxene with depth. Weak to moderate patchy green epidote alteration occurs throughout the unit with carbonate and varying concentrations of pyrite (1-5%). The chlorite schist is moderately to strongly foliated with finer and coarser bands. Some sections show narrow, 5 to 10 centimetre wide faults paralleling the foliation. Weak1 to 4 millimetre chlorite altered lapilli occur within the schist, often stretched along the foliation. Foliation in the chlorite schist varies from 53° to 68° to the core axis.

A small diorite (Unit Td), gabbro (Unit Tg) and pyroxenite (Unit Tp) stock intrudes the Nicola Group rocks in the Whipsaw target area and was intersected in drill holes WS14-002 and WS14-004. The pyroxenite is coarse grained, dark green to black, strongly magnetic and consists mainly of 2 to 4 millimetre pyroxene phenocrysts with minor pale green feldspar laths. The pyroxenite was only intersected in two narrow zones and appears to be the oldest phase of the stock as it is intruded by the gabbro.

The gabbro is dark green and strongly magnetic with 2 to 3% disseminated magnetite. It occurs in two phases, the majority of which is medium grained, with a weakly porphyritic texture and made up of 70 to 90%, 1 to 2 millimetre pyroxene phenocrysts and <10 to 30%, 1 to 4 millimetre pale green feldspar laths. A minor amount of the gabbro is fine grained with a more equigranular texture. The gabbro exhibits rare to weak patchy epidote alteration and contains from 0.5 to 2% disseminated pyrite.

The diorite is fine grained, grey to grey-green with 10 to 40%, 1 to 4 millimetre often needle like hornblende and 2 to 10%, <1 millimetre feldspar laths in a fine grained grey groundmass. The top of the diorite intrudes into the gabbro as dikes and sills in a contact zone 50 to 60 metres wide in drill holes WS14-002 and WS14-004. The diorite also occurs as narrow dikes and sills (0.47 to 3.58 metres wide) intruding the Nicola tuffs in drill hole WS14-001. The diorite exhibits rare to weak patchy epidote alteration and generally contains 0.5 to 2% pyrite, although the dikes and sills intruding the Nicola tuffs contain up to 10% pyrite.

Several black, strongly magnetic mafic dikes associated with faults cut the older Nicola and intrusive rocks.

## 4.3 WHIPSAW TARGET MINERALIZATION

Goldcliff carried out prospecting and rock sampling in the Whipsaw Creek area from 2008 to 2012. This work resulted in Goldcliff relocating several documented copper showings and discovering several new copper showings. All of the showings together form the Whipsaw target area. These showings include the Nev, Eagle, Trojan and Raven on the southeast side of Whipsaw Creek and the Shirley and Moose showings on the northwest side.

The 2014 drilling program intersected trace amounts of chalcopyrite within narrow carbonate, epidote and quartz veinlets, disseminated within patchy epidote alteration and as fine grained disseminations within the Nicola volcanics and diorite-gabbro-pyroxenite stock. The copper occurs in sub-economic concentrations.

## 4.3.1 NEV SHOWING

The Nev showing (Figure 5.0) is located 500 metres east of Whipsaw Creek, 2.5 kilometres northeast of the confluence of Forty-three Mile Creek and Whipsaw Creek and 21 kilometres south-southeast of Princeton. The Nev and its associated showings (Eagle, Trojan and Raven) occur in chlorite schists of the Upper Triassic Nicola Group that have been intruded by a diorite-gabbro-pyroxenite stock. Pyrite and chalcopyrite occur mainly in narrow carbonate-quartz veinlets but also occur along fractures and as fine grained disseminations.

The Nev showing is located above an old mining road in green, foliated chlorite schist of the Nicola Group. Weak rusty fractures and carbonate-quartz veinlets with traces of chalcopyrite and malachite cut the schist. Traces of fine grained disseminated chalcopyrite also occur sporadically within the schist, and pyrite is rare. Rock samples collected from the showing gave weakly anomalous copper values ranging up to 173 ppm.

A second showing is located approximately 80 metres northwest of the Nev showing along a new logging road. Narrow quartz veinlets with traces of chalcopyrite occur within green, foliated chlorite schist. One to two millimetre wide pyrite cubes occur within the quartz veinlets and adjacent schist, generally in concentrations of <1%. Rock samples collected from the showing gave weakly anomalous copper values ranging up to 231 ppm.

## 4.3.2 EAGLE SHOWING

The Eagle showing is located on a prominent knoll at the end of an old mining road. Two bulldozer trenches approximately 75 metres long criss-cross the knoll and intermittently expose coarse grained, green gabbro. Weak fractures within the gabbro contain limonite and 1 to 3% pyrite, along with rare 1 centimetre quartz, carbonate and epidote veinlets with pyrite. Disseminated pyrite was noted adjacent to some fractures. Malachite and chalcopyrite were rare, with one sample (1201120040) of gabbro float with limonite, malachite and chalcopyrite occurring along fractures giving an anomalous copper value of 1753 ppm.

## 4.3.3 TROJAN SHOWING

The Trojan showing is located 350 metres west of the Eagle showing along a reclaimed logging road. Coarse grained, green gabbro float was found over a strike length of 110 metres along the road, with variable quartz-carbonate veining, epidote and fracturing. Malachite and chalcopyrite were found within the gabbro at a number of locations along the road, occurring within quartz-carbonate veinlets, along fractures, and more rarely as disseminations. Pyrite was relatively rare, generally occurring in concentrations of <1%.

Rock samples of float collected along the road gave anomalous copper values ranging from 192 to 6549 ppm. The highest copper value of 6549 ppm (1201120033) was gabbro with limonite, malachite and chalcopyrite occurring along fractures, along with fine grained disseminations of chalcopyrite and malachite. This sample was also strongly magnetic, with magnetite occurring as fine grained disseminations and blebs. A second sample (1201120034) of gabbro with malachite occurring along fractures gave a copper value of 4727 ppm, while a sample (1201120029) of a 6 centimetre wide quartz vein with malachite and chalcopyrite gave a copper value of 3970 ppm.

A float sample (1201120041) of a light grey-green dike located midway between the Eagle and Trojan showings gave an anomalous copper value of 527 ppm. The dike contains 5% fine grained disseminated pyrite along with rusty fractures.

## 4.3.4 RAVEN SHOWING

The Raven showing is located along an old mining road and associated trench. Outcrop is poorly exposed, with light to dark grey dikes intruding black argillite and limestone of the Nicola Group. Fe-carbonate-silica alteration is extensive and consists of an orange, strongly oxidized rind on the weathered surfaces, with a fresh, unaltered core. A weak stockwork of quartz-carbonate veinlets with traces of pyrite cut the rocks. Disseminated pyrite occurs in concentrations of 1 to 2%, mainly as 1 to 3 mm cubes. Rock samples collected from the showing gave weakly anomalous copper values ranging up to 132 ppm. Arsenic values were elevated, in the 25 ppm range, with one sample (1201120045) giving a weakly anomalous gold value of 165 ppb.

A second area of strong Fe-carbonate-silica alteration occurs as float 130 metres southeast of the Raven showing along a skid trail. The Fe-carbonate-silica alteration again consists of an orange, strongly oxidized rind on the weathered surfaces, with a fresh, unaltered core. A weak stockwork of quartz-carbonate veinlets with traces of pyrite cut the rocks. The rock is variably silicified and contains green fuchsite and 2 to 4% disseminated pyrite, mainly as 1 to 3 mm cubes. Rock samples of the float gave weakly anomalous copper values ranging up to 131 ppm. Arsenic values were elevated, ranging from 51 to 65 ppm.

## 4.3.5 MOOSE SHOWING

The Moose and Shirley showings are located on the west side of Whipsaw Creek. Prospecting by Goldcliff along the Elk logging road located the Moose showing. Greenish diorite is poorly exposed for about 25 metres along the road and intrudes schistose Nicola Group rocks. Sheared argillites of the Nicola Group outcrop south of the showing and Fe-carbonate-silica alteration (C-5) occurs sporadically within the area.

A weak quartz stockwork with veinlets up to one centimetre in width cut the diorite. The quartz veinlets and fractures contain traces of malachite and chalcopyrite and <1% pyrite. Three rock samples collected from the Moose showing (1201120139-1201120141) gave weakly anomalous copper values of 188, 275 and 242 ppm respectively. Approximately 300 metres south of the Moose showing a sample of diorite float with a weak quartz stockwork and fracturing with traces of malachite and chalcopyrite was collected along the road. The sample (12011201420) gave a weakly anomalous copper value of 566 ppm.

## 4.3.6 SHIRLEY SHOWING

The Shirley showing is located along the Shirley South logging road, 300 metres east of the Moose showing. Two samples of rounded, grey-black silicious dike float were found along the road about 150 metres apart. The samples are weakly to moderately magnetic and contain from 2 to 4% pyrrhotite along fractures and as blebs up to 5 millimetres in diameter. Traces of chalcopyrite occur along fractures and within the blebs of pyrrhotite. The two samples of float (1201120145 and 1201120146) gave anomalous copper values of 1705 and 224 ppm respectively.

#### 5.0 CORE DRILLING

The 2014 exploration program consisted of a four drill hole (WS14-001 to WS14-004) NQ sized core drilling program totalling 727.87 metres. The drill holes tested a combination of strong chargeability anomalies and copper mineralization discovered on surface in outcrop and float samples. Table 2.0 summarizes the information for each drill hole, the drill logs are listed Appendix I, certificates of analysis listed in Appendix II, drill hole locations illustrated on Figure 5.0 and sections illustrated on Figures 6.1 through 6.4. No dip tests were conducted on the drill holes. The drilling results for each hole are documented below with a brief description of the geology and analytical results.

| TABLE 2.0 – 2014 DRILL HOLE DATA (NQ Core) |        |               |                |                    |                        |                    |                       |            |
|--|--------|---------------|----------------|--------------------|------------------------|--------------------|-----------------------|------------|
| Drill Hole<br>Number                       | Target | UTM East<br>m | UTM North<br>m | Azimuth<br>degrees | Inclination<br>degrees | Elevation<br>m asl | Core<br>Recovery<br>% | Depth<br>m |
| WS14-001                                   | Bolas  | 669834.0      | 5462412.0      | -                  | -90                    | 1187               | 77                    | 212.45     |
| WS14-002                                   | Trojan | 669793.0      | 5461952.2      | -                  | -90                    | 1300               | 81                    | 188.06     |
| WS14-003                                   | Raven  | 670619.0      | 5462860.0      | -                  | -90                    | 1268               | 86                    | 194.16     |
| S14-004                                    | Eagle  | 670123.2      | 5461897.5      | -                  | -90                    | 1396               | 90                    | 133.20     |
|  |        |               |                |                    |                        | Total              |                       | 727.87     |

## 5.1 Drill Hole – WS14-001

Drill hole WS14-001 was a vertical hole collared at 669834.0E and 5462412.0N to test the Bolas chargeability anomaly. The Bolas chargeability anomaly is background near surface (~50 metres), gradually increasing to strongly anomalous at the bottom of the hole. Resistivity is weak throughout the hole.

The drill hole intersected pale green tuff (Unit uTNvt) with patchy epidote/carbonate alteration from surface to a depth of 169.92 metres. The tuff is cut by a number of 5 centimetres to 3.58 metres wide diorite dikes and sills (Unit Td) that also exhibit variable patchy epidote alteration. The tuff and diorite dikes and sills are occasionally cut by narrow (<1 to10 centimetres wide) carbonate, epidote and quartz veinlets containing up to 5% pyrite and traces of chalcopyrite. Chalcopyrite also rarely occurs as fine grained disseminations in both the epidote altered and unaltered areas of the tuff and diorite. Green-grey chlorite schist (Unit uTNvsh) was intersected from 169.92 to 181.80 metres and light grey tuffaceous sandstone (Unit uTNssa) from 181.80 to 212.45 metres (EOH). The schist and tuffaceous sandstone do not exhibit epidote alteration or carbonate, epidote or quartz veining.

Pyrite content within the tuff varies from 1 to 3%, while the narrow diorite dikes and sills contain up to 5% pyrite and the grey sandstone 0.5% pyrite. Narrow argillite beds within the tuffaceous sandstone contain 2 to 3% disseminated and fractured controlled pyrite. The chargeability anomaly is explained by the disseminated pyrite throughout the drill hole. Ten samples of the more strongly mineralized sections of core were selected from the drill hole for analysis. The samples gave sub-economic copper values ranging from 33.0 to 375 ppm. The highest value of 375 ppm (WS14-001-100.69) was taken across 3.58 metres of a weakly epidote altered diorite sill with traces of chalcopyrite and cut by a 4 mm quartz veinlet with a trace of chalcopyrite. Two of the samples were also analyzed for gold, platinum and palladium but gave only background values.

## 5.2 Drill Hole – WS14-002

Drill Hole WS14-002 was a vertical hole collared at 669793.0E and 5461952.2N to test the copper mineralization found in float along a logging road (Trojan showing). The hole was drilled 200 metres southwest of the flank of the Eagle chargeability anomaly in an area with weak chargeability and moderate resistivity.

The drill hole intersected medium grained, dark green, strongly magnetic gabbro (Unit Tg) with up to 3% fine grained disseminated magnetite from surface to a depth of 32.09 metres. The zone from 32.09 to 97.87 metres is a contact zone with fine grained grey, diorite (Unit Td) dikes and sills intruding the gabbro, while

diorite was intersected from 97.87 188.06 metres (EOH). The gabbro and diorite exhibit rare to weak patchy epidote alteration with traces of chalcopyrite and are occasionally cut by narrow (<1 to 5 centimetres wide) carbonate, quartz and epidote veinlets with traces of chalcopyrite. Chalcopyrite also rarely occurs as fine grained disseminations within the gabbro and diorite.

Pyrite content in the gabbro is <1%, while the diorite contains from 0.5 to 2% pyrite. Ten samples of the more strongly mineralized sections of the core were sent for analysis. The samples gave sub-economic copper values (73.2 to 953 ppm), although they were the highest results from the four drill holes. The highest copper value of 953 ppm (WS14-002-097.87) was taken across 3.27 metres of diorite containing a weak quartz-carbonate-pyrite stockwork zone with traces of chalcopyrite. Two of the samples were also analyzed for gold, platinum and palladium but gave only background values.

## 5.3 Drill Hole - WS14-003

Drill hole WS14-003 was a vertical hole collared at 670619.0E and 5462860.0N to test the southern extension of the Condor-Raven chargeability anomaly. The Condor-Raven chargeability anomaly is background near surface (~75 metres), gradually increasing to moderately anomalous towards the bottom of the hole. Resistivity is moderate near surface (~50 metres) then becoming strong to the bottom of the hole.

The drill hole intersected moderately to strongly foliated green chlorite schist (Unit uTNvsh) from surface to a depth of 125 metres with some sections showing narrow (5 to 10 centimetres wide) faults paralleling the foliation. The schist is rarely cut by narrow (<1 to 2 centimetres wide) quartz and carbonate veinlets containing traces of chalcopyrite. Light grey tuffaceous sandstone (Unit uTNssa) and tuffaceous siltstone (Unit uTNssi) were intersected from 125 to 194.16 metres (EOH). They show weak banding due to coarser and finer beds and emerald green fuchsite occurs with sericite in the matrix. Narrow interbeds of black argillite and brown chert occur within the sandstone and siltstone units.

Pyrite content in the chlorite schist is about 1%, while the tuffaceous sandstone and siltstone generally contain <0.5%. The argillite beds show a higher pyrite content, ranging from 2 to 5%. The chargeability anomaly is explained by the disseminated pyrite in the drill hole. Eleven samples were sent for analysis but they gave only background copper values, ranging from 18.4 to 143.5 ppm. Two of the samples were also analyzed for gold, platinum and palladium but gave only background values.

#### 5.4 Drill Hole - WS14-004

Drill hole WS14-004 was a vertical hole collared at 670123.2E and 5461897.5N to test the Eagle chargeability anomaly. The Eagle chargeability anomaly is weakly anomalous near surface (~75 metres), increasing to strongly anomalous below 100 metres. Resistivity is weak near surface (~50 metres) then becoming strong to the bottom of the hole.

The drill hole intersected medium grained, dark green, strongly magnetic gabbro (Unit Tg) with up to 2% fine grained disseminated magnetite from surface to a depth of 53.36 metres. The zone from 53.36 to 107.24 metres is a contact zone with fine grained, grey diorite (Unit Td) dikes and sills intruding the gabbro and several narrow sections of coarse grained, dark green to black pyroxenite (Unit Tp). The pyroxenite appears to be the oldest unit as gabbro dikes intrude the pyroxenite in several places. Diorite was intersected from 107.24 to 133.20 metres (EOH). Four narrow (0.31 to 1.62 metres wide) strongly magnetic massive black dikes (Unit Dm) occur within a fault zone from 89.43 to 94.77 metres. The gabbro, pyroxenite and diorite exhibit rare to weak patchy epidote alteration with traces of chalcopyrite and are occasionally cut by narrow (<1 to 2 centimetres wide) carbonate, epidote and quartz veinlets with traces of chalcopyrite.

Pyrite content in the gabbro varies from 0.5 to 2%, while the diorite contains from 2 to 3% pyrite. The chargeability anomaly is explained by the disseminated pyrite, especially in the diorite towards the bottom of the hole. Nine samples of the more strongly mineralized sections of the core were sent for analysis. The samples gave sub-economic copper values ranging from 21.3 to 305 ppm. The highest copper of 305 ppm (WS14-004-102.77) was taken across 3.00 metres of moderately epidote altered pyroxenite cut by narrow carbonate veinlets with traces of chalcopyrite. Two of the samples were also analyzed for gold, platinum but palladium and gave only background values.

## 6.0 CONCLUSIONS

The following conclusions can be drawn from the 2014 work program:

- Trace amounts of chalcopyrite occur in sub-economic quantities associated with pyrite within narrow (<1 to 5 centimetres wide) carbonate-epidote-quartz veinlets, patchy epidote alteration and more rarely as fine grained disseminations in the diorite-gabbro-pyroxenite stock and Nicola volcanics.
- 2) Weak patchy pervasive epidote alteration and narrow epidote veinlets occurs sporadically within the diorite-gabbro-pyroxenite stock and Nicola volcanics, rarely with chalcopyrite.
- 3) Forty representative samples were collected from the core and sent for analysis. Copper values were weakly anomalous, ranging from 21.3 to 953 ppm.
- 4) The highest copper value from the drilling was 953 ppm copper (WS14-002-097.87) across 3.27 metres of diorite containing a weak quartz-carbonate-pyrite stockwork zone with traces of chalcopyrite.
- 5) The induced polarization chargeability anomalies are explained by the pyrite encountered within the drill holes.

## 7.0 RECOMMENDATIONS

Recommendations are as follows:

-Additional geological, geochemical and geophysical surveys should be conducted over the Tulameen project to define target areas for follow-up trenching and/or drilling.

Respectfully submitted,

Grant Crooker Crooker Digitally signed by Grant Crooker Dit: cn=Grant Crooker, o, ou, email=crooker@itelus.net, c=CA Date: 2015.02.23 13.39:10-08007

Grant F. Crooker, PGeo Consulting Geologist February 23, 2015

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Ministry of Energy, Mines, and Petroleum Resources ARIS Reports 092HSE-Tulameen Property:

| Tulameen Property-Historical ARIS Reports 092HSE |                |      |                     |  |
|--|----------------|------|---------------------|--|
| ARIS #   | Property       | Year | Author              | Work   |
| 948  | JILL           | 1966 | Jury, R.            | Geochemical                                    |
| 1744   | Don            | 1968 | Clark, G.R.         | Geophysical, Geochemical                       |
| 1774   | Т              | 1968 | Baird, J.           | Geophysical                                    |
| 1852   | Wilmac         | 1969 | Cochrane, D.        | Geophysical                                    |
| 2197   | Claire & Y     | 1969 | Jury, R.            | Geochemical                                    |
| 2243   | Till           | 1969 | Pendergast, J.      | Geophysical                                    |
| 2599   | Coral          | 1970 | Stadnyk, M.         | Geophysical                                    |
| 2802   | MAE            | 1970 | Leighton, Douglas   | Geological, Geochemical                        |
| 3037   | CLAIRE, X      | 1971 | Lloyd, John         | Geophysical                                    |
| 3182   | HOL            | 1971 | Buttis, A.          | Geochemical                                    |
| 3357   | TULAMEEN       | 1971 | Newell, J.          | Geological, Geochemical                        |
| 3557   | Т              | 1972 | Read, W.S.          | Geophysical                                    |
| 3596   | Don            | 1972 | Wolfe, R.           | Geophysical, Physical                          |
| 3653   | Copper         | 1971 | Fominoff, P.        | Geophysical, Geochemical                       |
| 3655   | Vulture        | 1971 | Newell, J.          | Geological, Geochemical                        |
| 3905   | Nighthawk      | 1972 | Newell, J.          | Geological, Geochemical                        |
| 3939   | NEV            | 1972 | Taylor, David P.    | Geological, Geochemical                        |
| 4170   | MAE            | 1973 | Anderson, P.        | Drilling, Geochemical, Geological              |
| 4171   | Т              | 1972 | Read, W.S.          | Geochemical                                    |
| 4374   | F.G.P.         | 1973 | Poloni, John R.     | Geochemical                                    |
| 5043   | G.D.           | 1974 | Doubt, T.           | Prospecting                                    |
| 5339   | LAM            | 1974 | Schindler, John N.  | Geological, Physical, Geophysical, Geochemical |
| 5491   | Mae            | 1974 | Gambardella, A.     | Geochemical                                    |
| 5564   | WEL            | 1974 | Murray, C.          | Geological, Physical, Geophysical, Geochemical |
| 5959   | Golddrop       | 1975 | Huff, H.P.          | Drilling                                       |
| 5992   | WEL            | 1976 | MacDonald, C.       | Geological, Geochemical                        |
| 6503   | SPUR           | 1977 | Gidluck, Marcus J.  | Drilling                                       |
| 7974   | ASH            | 1979 | Walcott, Peter E.   | Geochemical, Geological, Geophysical, Physical |
| 11579  | VIOLET         | 1982 | Cavey, George       | Geochemical                                    |
| 12330  | PL             | 1983 | Ash, W.M.           | Geological                                     |
| 12674  | TP 6           | 1983 | Gamble, Dave        | Geophysical, Physical                          |
| 14958  | RIV 1-4        | 1986 | O'Grady, Frank      | Geophysical                                    |
| 15317  | AVT            | 1986 | Borovic, I.         | Geochemical, Geological, Geophysical, Physical |
| 17619  | Goldrop        | 1988 | Crooker, Grant F.   | Drilling                                       |
| 17195  | Stik (Bromley) | 1988 | Woods, D.V.         | Geophysical                                    |
| 18543  | Stik           | 1989 | Sadlier-Brown, T.L. | Geochemical                                    |
| 22367  | Stik           | 1992 | Sadlier-Brown, T.L. | Geochemical                                    |
| 22534  | Princeton West | 1992 | Wojdak, P.          | Geochemical, Geological                        |
| 24781  | Betsy          | 1997 | Scheske, Michael    | Prospecting                                    |
| 25317  | Goldrop        | 1988 | Crooker, Grant F.   | Drilling, Geochemical                          |

Ministry of Energy, Mines, and Petroleum Resources Minfile Reports 092HSE-Tulameen Property:

| Tulameen Property-Minfile Reports 092HSE |                    |                |                      |                   |  |
|--|--------------------|----------------|----------------------|-------------------|--|
| Minfile #                                | Minfile Name       | MinFile Status | MinFile Deposit Type | Minfile Commodity |  |
| 092HSE001                                | COPPER MOUNTAIN    | Past Producer  | Alkalic porphyry     | Cu, Au, Ag        |  |
| 092HSE033                                | FRIDAY CREEK       | Prospect       | Porphyry             | Au,Pt             |  |
| 092HSE034                                | LODESTONE MOUNTAIN | Developed      | Alaskan              | Fe                |  |
| 092HSE035                                | TANGLEWOOD HILL    | Developed      | Alaskan              | Fe                |  |
| 092HSE039                                | HOP                | Showing        | Porphyry             | Cu                |  |
| 092HSE042                                | WILMAC             | Showing        | Porphyry             | Cu                |  |
| 092HSE067                                | REDSTAR            | Past Producer  | Kuroko               | Zn,Cu             |  |
| 092HSE068                                | PASAYTEN           | Prospect       | Kuroko               | Zn,Cu             |  |
| 092HSE069                                | KNOB HILL          | Prospect       | Kuroko               | Zn,Cu             |  |

|           |                      | 1             | 1                |            |
|-----------|----------------------|---------------|------------------|------------|
| 092HSE072 | KNIGHT AND DAY       | Prospect      | Kuroko           | Zn,Cu      |
| 092HSE073 | S AND M              | Past Producer | Vein             | Zn,Cu      |
| 092HSE074 | MARIAN               | Prospect      | Kuroko           | Zn,Cu      |
| 092HSE076 | NEWTON CREEK         | Showing       | Vein             | Cu,Au      |
| 092HSE077 | RIV                  | Showing       | Vein             | Au,Ag      |
| 092HSE080 | DEEP GULCH           | Prospect      | Alkalic porphyry | Cu, Au, Ag |
| 092HSE081 | MAZIE                | Past Producer | Kuroko           | Pb,Ag      |
| 092HSE093 | PAW                  | Showing       | Vein             | Cu,Au      |
| 092HSE097 | METESTOFFER          | Prospect      | Vein             | Cu,Au      |
| 092HSE098 | FIVE FISSURES        | Prospect      | Vein             | Cu,Au      |
| 092HSE100 | ASH 2                | Prospect      | Vein             | Mo,Cu      |
| 092HSE101 | GRANITE SCHEELITE    | Developed     | Vein             | Cu,Au      |
| 092HSE103 | GRANITE CREEK GYPSUM | Showing       |                  | Gypsum     |
| 092HSE104 | Т                    | Showing       | Vein             | Cu         |
| 092HSE105 | SKI                  | Showing       | Vein             | Cu         |
| 092HSE109 | OX                   | Showing       | Alkalic          | Cu         |
| 092HSE111 | TULAMEEN             | Showing       | Vein             | Cu         |
| 092HSE112 | NEV                  | Showing       | Stockwork        | Cu         |
| 092HSE115 | POLARIS              | Showing       | Shear            | Cu         |
| 092HSE117 | POLARIS 16           | Showing       | Alaskan          | Cu         |
| 092HSE120 | FRM 52 (BRIGHT STAR) | Showing       | Alaskan          | Cu, Pt     |
| 092HSE124 | GOLDROP              | Past Producer | Vein             | Zn,Cu      |
| 092HSE126 | NIGHTHAWK            | Showing       | Porphyry         | Cu,Mo      |
| 092HSE128 | FRM 73 (99)          | Showing       | Alaskan          | Cu         |
| 092HSE129 | FRM 92               | Showing       | Alaskan          | Cu         |
| 092HSE134 | GD                   | Prospect      | Vein             | Cu,Au      |
| 092HSE135 | LAM                  | Showing       | Porphyry         | Cu         |
| 092HSE137 | TULAMEEN GYPSUM      | Showing       |                  | Gypsum     |
| 092HSE141 | RC                   | Showing       | Alaskan          | Cu         |
| 092HSE142 | LODE 1               | Showing       | Alaskan          | Cu,Fe      |
| 092HSE157 | BASIN COAL           | Past Producer | Sedimentary      | Coal       |
| 092HSE159 | NEWTON CREEK         | Showing       | Vein             | Cu, Pt     |
|           | PLATINUM             | _             |                  |            |
| 092HSE166 | ZEO                  | Developed     | Sedimentary      | Zeolite    |
| 092HSE168 | SUNDAY CREEK         | Prospect      | Sedimentary      | Zeolite    |
| 092HSE170 | ROANY CREEK          | Past Producer | Bog              | Са         |
| 092HSE205 | WHIP 1               | Showing       | Vein             | Pb,Zn      |
| 092HSE206 | T.G.S                | Showing       | Vein             | Zn,Cu      |
| 092HSE207 | BZ                   | Prospect      | Stockwork        | Zn,Cu      |
| 092HSE212 | BLACK                | Past Producer | Sedimentary      | Coal       |
| 092HSE213 | TAYLOR BURSON COAL   | Past Producer | Sedimentary      | Coal       |
| 092HSE214 | JACKSON NO. 1        | Past Producer | Sedimentary      | Coal       |
| 092HSE215 | BROMLEY VALE         | Past Producer | Sedimentary      | Coal       |
| 092HSE229 | CHAMPION CREEK       | Showing       | Placer           |            |
|           | PLACER               |               |                  | Au, Pt     |
| 092HSE230 | GRANITE CREEK PLACER | Past Producer | Placer           | Au, Pt     |
| 092HSE231 | LAMONT CREEK PLACER  | Past Producer | Placer           | Au         |
| 092HSE232 | NEWTON CREEK PLACER  | Past Producer | Placer           | Au, Pt     |
| 092HSE233 | SIMILKAMEEN RIVER    | Past Producer | Placer           |            |
|           | PLACER               |               |                  | Au, Pt     |
| 092HSE234 | BROMLEY CREEK        | Showing       | Placer           | Au, Pt     |
| 092HSE235 | TULAMEEN RIVER       | Past Producer | Placer           | Au, Pt     |
| 092HSE236 | WHIPSAW CREEK        | Past Producer | Placer           |            |
|           | PLACER               |               |                  | Au, Pt     |
| 092HSE238 | DALBY MEADOWS        | Developed     | Placer           | Au, Pt     |

Ministry of Energy, Mines, and Petroleum Resources Similkameen Coalfield Reports 092HSE-Tulameen Property:

| Tulameen Property-Similkameen Coalfield Reports 092HSE |        |           |      |                     |          |
|--|--------|-----------|------|---------------------|----------|
| Report #   | NTS    | Coalfield | Year | Owner               | Work     |
| 181  | 092H01 | GRANBY    | 1945 | GRANBY CONSOLIDATED | DRILLING |
| 183  | 092H01 | GRANBY    | 1947 | GRANBY CONSOLIDATED | MAPPING  |
| 184  | 092H01 | GRANBY    | 1947 | GRANBY CONSOLIDATED | DRILLING |
| 185  | 092H08 | KNOBHILL  | 1971 | KNOB HILL EXPL.     | MAPPING  |

| 790 | 092H08 | PRINCETON | 1900s | UNKNOWN              | UNKNOWN                 |
|-----|--------|-----------|-------|----------------------|-------------------------|
| 186 | 092H07 | PRINCETON | 1941  | GRANBY COLLIERY      | MAPPING                 |
| 187 | 093O15 | PRINCETON | 1945  | GRANBY COLLIERY      | UNKNOWN                 |
| 188 | 092H07 | PRINCETON | 1947  | GRANBY COLLIERY      | DRILLING                |
| 189 | 092H07 | PRINCETON | 1952  | TAYLOR-BURSON COAL   | MAPPING                 |
| 190 | 092H07 | PRINCETON | 1952  | TAYLOR-BURSON COAL   | MAPPING                 |
| 191 | 092H07 | PRINCETON | 1971  | BETHLEHEM COPPER     | DRILLING                |
| 192 | 092H07 | PRINCETON | 1974  | BETHLEHEM COPPER     | PERMITING               |
| 193 | 092H07 | PRINCETON | 1975  | BETHLEHEM COPPER     | GRAVITY, DRILLING       |
| 839 | 092H   | PRINCETON | 1975  | UNKNOWN              | GRAVITY                 |
| 194 | 092H09 | PRINCETON | 1980  | COMINCO LTD.         | GRAVITY, DRILLING       |
| 195 | 092H07 | PRINCETON | 1981  | COMINCO LTD.         | UNKNOWN                 |
| 0   | 092H07 | TULAMEEN  | 1974  | IMPERIAL MET/POWER   | UNKNOWN                 |
| 197 | 092H07 | TULAMEEN  | 1944  | IMPERIAL MET/POWER   | MAPPING                 |
| 198 | 092H07 | TULAMEEN  | 1974  | IMPERIAL MET/POWER   | SAMPLING, COAL ANALYSIS |
| 199 | 092H07 | TULAMEEN  | 1975  | IMPERIAL MET/POWER   | COAL ANALYSIS           |
| 200 | 092H07 | TULAMEEN  | 1977  | IMPERIAL MET/POWER   | DRILLING                |
| 832 | 092H07 | TULAMEEN  | 1978  | GSC                  | FEASABILITY             |
| 201 | 092H10 | TULAMEEN  | 1981  | TG STOUT             | TRENCHING               |
| 768 | 092H07 | TULAMEEN  | 1981  | IMPERIAL METALS      | UNKNOWN                 |
| 202 | 092H10 | TULAMEEN  | 1982  | TG STOUT             | TRENCHING               |
| 767 | 092H07 | TULAMEEN  | 1983  | IMPERIAL METALS CORP | COAL ANALYSIS           |

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Saleken, L.W. (2011-SOW 4799455): Compilation Exploration Report on the Tulameen Project Property, Princeton Mining District, Similkameen Mining Division, British Columbia (92HSE) for Goldcliff Resource Corporation, January 31, 2011. AR 32,268.

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## 9.0 CERTIFICATE OF QUALIFICATIONS

I, Grant F. Crooker, of 2522 Upper Bench Road, PO Box 404, Keremeos, British Columbia, Canada, VOX INO do certify that:

I am a Consulting Geologist registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (Registration No.18961);

I am a Member of the Canadian institute of Mining and Metallurgy and Petroleum;

I am a graduate (1972) of the University of British Columbia with a Bachelor of Science degree (B.Sc.) from the Faculty of Science having completed the Major program in Geology;

I have practiced my profession as a geologist for over 40 years, and since 1980, I have been practicing as a consulting geologist and, in this capacity, have examined and reported on numerous mineral properties in North and South America;

I have based this report on field examinations within the area of interest and on a review of the technical and geological data;

Respectfully submitted,

Digitally signed by Grant Crooker DN: cn=Grant Crooker, o, ou, email=crookergitelus.net, c=CA Date=2015.02.23 13.39.46-08007

Grant F. Crooker, PGeo GFC Consultants Inc. February 23, 2015 **APPENDIX I** 

DRILL LOGS
| Abb         |           | Legend                 |  |
|-------------|-----------|------------------------|--|
|             |           |                        |  |
| ASSAY       |           |                        |  |
|             |           |                        |  |
| Sample #    |           | start of sample        |  |
| Int m       |           | length of sample       |  |
| Cu          |           | copper ppm             |  |
|             |           |                        |  |
| GEOLOGY     |           |                        |  |
|             |           |                        |  |
| FrM         |           | start of rock unit     |  |
| ТоМ         |           | end of rock unit       |  |
| IntM        |           | length of rock unit    |  |
| RocU        |           | rock unit code         |  |
|             |           |                        |  |
|             |           |                        |  |
| ROCK UNITS  | <b>i</b>  |                        |  |
|             |           |                        |  |
| RocU Code   | Massey    | Formation              | Description                                |
|             |           |                        |  |
| F           |           | Fault                  |  |
| Bx          |           | Breccia                |  |
|             |           |                        |  |
| QUATERN     | IARY      |                        |  |
|             |           |                        |  |
| Qal         |           | Overburden             | unconsolidated glacia and fluvial deposits |
|             |           |                        |  |
| UPPER TR    | RIASSIC 1 | TO JURASSIC            |  |
|             |           |                        |  |
| TULAMEE     | N ULTRA   | MAFIC COMPLEX?         |  |
|             |           |                        |  |
| Dm          |           | Mafic dyke             |  |
|             |           |                        |  |
| Тр          |           | Pyroxenite             |  |
| Tg          |           | Gabbro                 |  |
| Td          |           | Diorite                |  |
|             |           |                        |  |
| NICOLA G    | ROUP      |                        |  |
|             |           |                        |  |
| Volcanice   |           |                        |  |
| + orearries |           |                        |  |
| uTNvt       |           | Nicola tuff            |  |
|             |           | Nicola chlorite schist |  |
| u 1197511   |           |                        |  |
|             |           |                        |  |

| SEDIMENT  | TS                          |  |
|-----------|-----------------------------|--|
|           |                             |  |
| uTNsa     | Nicola argillite            |  |
| uTNssi    | Nicola tuffaceous siltstone |  |
| uTNssa    | Nicola tuffaceous sandstone |  |
|           |                             |  |
| ру        | pyrite                      |  |
| ро        | pyrrhotite                  |  |
| mal       | malachite                   |  |
| сру       | chalcopyrite                |  |
| bn        | bornite                     |  |
| sph       | sphalerite                  |  |
| hem       | hematite                    |  |
| lim       | limonite                    |  |
| mt        | magnetite                   |  |
| cal       | calcite                     |  |
| carb      | carbonate                   |  |
| qtz       | quartz                      |  |
| ер        | epidote                     |  |
| рх        | pyroxene                    |  |
| chl       | chlorite                    |  |
| vllts     | veinlets                    |  |
| F         | fracture                    |  |
| D         | disseminated                |  |
| Р         | pervasive                   |  |
| frags     | fragments                   |  |
| mag       | magnetic                    |  |
| 274/56E   | strike/dip                  |  |
| 274/56E   | primary fracture            |  |
|           |                             |  |
| %         | per cent                    |  |
| ppm       | parts per million           |  |
| g/t       | grams/tonne                 |  |
| cm        | centimetres                 |  |
| mm        | millimetres                 |  |
| tag #     | sample number               |  |
| са        | core axis                   |  |
|           |                             |  |
| Intensity |                             |  |
| W         | weak                        |  |
| M         | moderate                    |  |
| S         | strong                      |  |
| tr        | trace                       |  |

|       |       |       | <u> </u> |                           | accurac Corporation   |  |                                 |                     |       |       |       |       | WS1      | 4-001   |
|-------|-------|-------|----------|---------------------------|---|--|---------------------------------|---------------------|-------|-------|-------|-------|----------|---------|
|       |       |       | Go       |                           | esource corporation   | Project:                                       | Whipsaw                         |                     | С     | ORE S | AMPLI | NG    |          |         |
|       |       |       |          |                           | GEOLOGY   |  |                                 |                     | AS    | SSAY  |       |       |          |         |
| FrM   | ТоМ   | IntM  | RocU     | Rock                      | Texture   | Alteration                                     | Structure                       | Sample              | From  | То    | Int   | Cu    | Сру      | Py<br>% |
| 0.00  | 12.10 | 12.10 |          | Overburden                | Cooling   | 1  |                                 | - π                 |       |       |       | Гррш  | 70       | /0      |
| 0.00  | 12.19 | 12.19 | Qai      | Overburden                | Casing  |  |                                 |                     |       |       |       |       | <u> </u> | ┥───    |
| 12.19 | 38.87 | 26.68 | uTNvt    | Tuff, Nicola<br>Volcanics | Pale green tuff, rare <1 mm feldspar, rare <1 mm pyroxene, up to 5 mm epidote patches with carbonate, pyrite around rims  | W-M<br>pervasive ep,<br>W ep vlts, R F<br>carb |                                 |                     |       |       |       |       |          | 2       |
|       |       |       |          |                           | 18.00 7 cm wide zone of carbonate and epidote alteration, 20% pyrite cubes up to 5 mm in diameter, weakly magnetic  |  |                                 |                     |       |       |       |       |          |         |
|       |       |       |          |                           | 23.57-23.62 Diorite dike/sill @ 57° to core axis  |  |                                 |                     |       |       |       |       |          | 4       |
|       |       |       |          |                           | 23.85-23.91 Diorite dike/sill @ 66° to core axis  |  |                                 |                     |       |       |       |       |          | 4       |
|       |       |       |          |                           | 24.76-24.84 Diorite dike/sill @ 76° to core axis  |  |                                 |                     |       |       |       |       |          | 3       |
|       |       |       |          |                           | 29.45 3 cm epidote/carbonate veinlet @ 90° to core axis, 5 mm pyrite cube, trace chalcopyrite?  |  |                                 |                     |       |       |       |       | Trace?   | ,       |
|       |       |       |          |                           | 32.03 Two 5 mm carbonate/epidote veinlets @ 42° to core axis  |  |                                 |                     |       |       |       |       |          |         |
|       |       |       |          |                           | 35.71 5-20 cm wide white carbonate veinlet @ 48° to core axis,<br>two 5 mm blebs chalcopyrite, 5% pyrite, 10 cm both sides of<br>veinlet, 1-3 mm wide carbonate veinlets with pyrite                          |  |                                 | WS14-001-<br>033.19 | 33.19 | 36.19 | 3.00  | 116.5 | Trace    | ; 1     |
|       |       |       |          |                           | 37.53-37.93 Diorite/gabbro dike/sill  | 1  |                                 |                     |       |       |       |       |          | 5       |
|       |       |       |          |                           | 38.43 3 mm carbonate veinlets @ 90° to core axis, 4% pyrite, trace chalcopyrite?  |  |                                 |                     |       |       |       |       | Trace?   | ,       |
| 38.87 | 39.84 | 0.97  | Td       | Diorite                   | Fine grained, grey to pale green, diorite dike/sill, 10-15% 1-4<br>mm needle like hornblende, 10% <1-2 mm pale green feldspar<br>in a grey-black ground mass, 10% disseminated pyrite, often as<br>1 mm cubes | R F carb, py                                   | Upper<br>contact @<br>90° to ca |                     |       |       |       |       |          | 10      |
| 39.84 | 55.03 | 15.19 | uTNvt    | Tuff, Nicola<br>Volcanics | Pale green tuff, rare <1 mm feldspar, rare <1 mm pyroxene, up to 5 mm epidote patches with carbonate, pyrite around rims  | M pervasive<br>ep, R ep carb<br>vlts, M F chl  |                                 |                     |       |       |       |       |          | 3       |
|       |       |       |          |                           | 48.92 2 cm epidote veinlet @ 48° to core axis, trace pyrite, cut  |  |                                 |                     |       |       |       |       |          |         |
|       |       |       |          |                           | by later 1 mm transparent calcite vlts  |  |                                 |                     |       |       |       |       |          |         |
|       |       |       |          |                           | 50.03-50.34 1 cm epidote/carbonate veinlet @ 0° core axis,  |  |                                 |                     |       |       |       |       |          |         |
|       |       |       |          |                           | offset by later 1-2 mm trans calcite vits   |  |                                 | l                   |       |       |       |       |          |         |
|       |       |       |          |                           | 50.34-50.90 Diorite dike/sill, 2% 1-2 mm disseminated pyrite,   | W-M ep/carb                                    |                                 |                     |       |       |       |       |          | 2       |
|       |       |       |          |                           | E4 20 E4 29 Digrite dike/cill @ 00% to core evia. 5%  |  |                                 |                     |       |       |       |       |          |         |
|       |       |       |          |                           | disseminated pyrite with epidote  | nervasive en                                   |                                 |                     |       |       |       |       |          |         |
|       | 1     | 1     | 1        | 1                         |   | per vuoive ep                                  | 1                               |                     | 1     | 1     | 1     | 1     |          | 1       |

|       |        |       | Go    |                           | aguras Corporation  |  |           |                     |       |       |       |      | WS1 | 4-001 |
|-------|--------|-------|-------|---------------------------|---|--|-----------|---------------------|-------|-------|-------|------|-----|-------|
|       |        |       | GO    |                           |   | Project:                                       | Whipsaw   |                     | C     | ORE S | AMPLI | NG   |     |       |
|       |        |       |       |                           | GEOLOGY   |  |           |                     | AS    | SAY   |       |      |     |       |
| FrM   | ТоМ    | IntM  | RocU  | Rock                      | Texture   | Alteration                                     | Structure | Sample              | From  | То    | Int   | Cu   | Сру | Ру    |
|       |        |       |       |                           |   |  |           | #                   | m     | m     | m     | ppm  | %   | %     |
| 55.03 | 55.91  | 0.88  | Td    | Diorite                   | Fine grained, grey, diorite dike/sill, 5% up to 8 mm needle like<br>hornblende, 5% <1-3 mm grey feldspar in a grey-black ground<br>mass   | W pervasive<br>ep, R F ep                      |           |                     |       |       |       |      |     | 5     |
| 55.91 | 60.64  | 4.73  | uTNvt | Tuff, Nicola<br>Volcanics | Pale green tuff, weak epidote patches with carbonate  | W pervasive<br>ep, W F ep                      |           |                     |       |       |       |      |     | 1     |
|       |        |       |       |                           | 56.94-57.26 Diorite dike/sill   |  |           |                     |       |       |       |      |     | 2     |
|       |        |       |       |                           | 59.77-59.82 Diorite dike/sill, 1cm patch epidote with 50% pyrite  |  |           |                     |       |       |       |      |     | 10    |
|       |        |       |       |                           | 59.82 2-5 mm epidote veinlet @ 63° core axis  |  |           |                     |       |       |       |      |     |       |
|       |        |       |       |                           | 59.93-60.05 Diorite dike/sill   |  |           |                     |       |       |       |      |     | 10    |
| 60.64 | 61.57  | 0.93  | Td    | Diorite                   | Fine grained, grey, diorite dike/sill, 10% <1-5 mm tabular<br>hornblende, 5-10% <1 mm grey feldspar in a grey ground mass,<br>up to 5 mm epidote patches with carbonate, up to 50% pyrite in<br>center of epidote patches | M pervasive<br>ep, W ep/carb<br>vlts           |           |                     |       |       |       |      |     | 10    |
| 61.57 | 97.56  | 35.99 | uTNvt | Tuff, Nicola<br>Volcanics | Pale green tuff, weak <1 mm feldspar, weak 1-2 mm pyroxene,<br>up to 6 mm epidote patches with carbonate, 5% pyrite   | M pervasive<br>ep, W<br>ep/carb vlts,<br>W chl |           |                     |       |       |       |      |     | 1     |
|       |        |       |       |                           | 62.40-62.45 Diorite dike/sill @ 58° to core axis  |  |           |                     |       |       |       |      |     |       |
|       |        |       |       |                           | 64.16-64.21 Diorite dike/sill @ 83° to core axis  |  |           |                     |       |       |       |      |     |       |
|       |        |       |       |                           | 64.89 10 cm white carbonate veinlet @ 64° core axis, barren   |  |           |                     |       |       |       |      |     |       |
|       |        |       |       |                           | 68.32 Broken  | W chl F  |           |                     |       |       |       |      |     |       |
|       |        |       |       |                           | 79.90-79.95 Diorite dike/sill   |  |           | WS14-001-<br>079.57 | 79.57 | 80.07 | 0.50  | 63.4 |     | 1     |
|       |        |       |       |                           | 82.18-82.90 Massive epidote veinlet, 5% pyrite, cut by later 1-3 mm carbonate veinlets  |  |           |                     |       |       |       |      |     |       |
| 97.56 | 98.17  | 0.61  | Td    | Diorite                   | Fine grained, grey-green, diorite dike/sill, 10% up to 5 mm hornblende, 25% <1-5 mm grey feldspar in a grey ground mass   | W pervasive<br>ep alt, R ep<br>vlts            |           |                     |       |       |       |      |     | 2     |
| 98.17 | 99.07  | 0.90  | uTNvt | Tuff, Nicola<br>Volcanics | Pale green, grey tuff, weak epidote patches with carbonate, pyrite  | W pervasive<br>ep, W ep F                      |           |                     |       |       |       |      |     | 1     |
| 99.07 | 99.97  | 0.90  | Td    | Diorite                   | Fine grained, grey-green, diorite dike/sill, 10% up to 5 mm<br>hornblende, 25% <1-5 mm grey feldspar in a grey ground mass,<br>weak quartz vleinlets with red hematite?   | W pervasive<br>ep, R ep vlts,<br>W qtz vlts    |           |                     |       |       |       |      |     | 4     |
| 99.97 | 100.69 | 0.72  | uTNvt | Tuff, Nicola<br>Volcanics | Pale green, grey tuff   | W ep vlts, W carb vlts                         |           |                     |       |       |       |      |     |       |

|        |          |       | Go    |                           | acource Corporation   |  |            |                     |        |        |       |      | WS1   | 4-001   |
|--------|----------|-------|-------|---------------------------|---|--|------------|---------------------|--------|--------|-------|------|-------|---------|
|        |          |       | GU    |                           |   | Project:                                     | Whipsaw    |                     | С      | ORE S  | AMPLI | NG   |       |         |
|        |          |       |       |                           | GEOLOGY   |  |            |                     | AS     | SSAY   |       |      |       |         |
| FrM    | ТоМ      | IntM  | RocU  | Rock                      | Texture   | Alteration                                   | Structure  | Sample              | From   | To     | Int   | Cu   | Сру   | Py<br>% |
|        | <u> </u> |       |       | <u> </u>                  |   | <u> </u>                                     |            | #                   |        |        | - 111 | ppin | 70    | 70      |
| 100.69 | 104.27   | 3.58  | Td    | Diorite                   | hornblende, 25% <1-5 mm grey feldspar in a grey ground mass, rare red hematite?   | W pervasive<br>ep, W ep vlts                 |            |                     |        |        |       |      | Trace | 2       |
|        |          |       |       |                           | 100.85 Trace fine grained chalcopyrite  |  |            | WS14-001-<br>100.69 | 100.69 | 104.27 | 3.58  | 375  | Trace |         |
|        |          |       |       |                           | 102.80 4 mm quartz veinlet @ 85° to core axis, trace chalcopyrite, pyrite   |  |            |                     |        |        |       |      | Trace | Trace   |
| 104.27 | 122.64   | 18.37 | uTNvt | Tuff, Nicola<br>Volcanics | Dark green tuff, weak <1 mm feldspar, rare 1-2 mm chloritized mafics, weak epidote patches with carbonate, 5% pyrite, trace chalcopyrite, narrow slips with chlorite, gouge | W pervasive<br>ep, W ep/py<br>vlts           |            |                     |        |        |       |      | Trace | 1       |
|        |          |       |       |                           | 104.77 1 mm epidote veinlet, 2% pyrite, trace chalcopyrite  |  |            |                     |        |        |       |      | Trace | 2       |
|        |          |       | 1     |                           | 108.03-108.24 Fault, green gouge  |  |            |                     |        |        |       |      |       |         |
|        |          |       |       |                           | 110.92 2 cm carbonate veinlet @ 61° core axis   |  |            |                     |        |        |       |      | Trace | 1       |
|        |          |       |       |                           | 115.10-115.15 Fault, green chloritic gouge  |  |            |                     |        |        |       |      |       |         |
|        |          |       |       |                           | 116.42 1 cm carbonate veinlet @ 18° core axis   |  |            |                     |        |        |       |      |       |         |
| 122.64 | 125.03   | 2.39  | Td    | Diorite                   | Fine grained, sepia green, diorite dike/sill, 10% up to 5 mm needle like hornblende, 5% 2-3 mm grey feldspar in a grey ground mass, weak 1-2 mm epidote patches with pyrite | W pervasive<br>ep, W ep/py F                 |            | WS14-001-<br>122.64 | 122.64 | 125.03 | 2.89  | 57.3 |       | 2       |
| 125.03 | 133.20   | 8.17  | uTNvt | Tuff, Nicola<br>Volcanics | Grey-green tuff, weak <1 mm feldspar, rare 1-2 mm chloritized mafics, weak epidote patches with carbonate   | R carb vlts, W<br>pervasive ep               |            |                     |        |        |       |      | Trace | 1       |
|        |          |       |       |                           | 125.33 1 cm carbonate veinlet @ 17° core axis, trace chalcopyrite   |  |            | WS14-001-<br>125.03 | 125.03 | 128.03 | 3.00  | 52.2 | Trace | 1       |
|        |          |       |       |                           |   |  |            | WS14-001-<br>128.03 | 128.03 | 128.53 | 0.50  | 61.1 |       |         |
| 133.20 | 138.36   | 5.16  | F     | Fault                     | Fault, green gouge, strong chlorite, weak pervasive carbonate, weak epidote   | R F carb                                     | 073° to ca |                     |        |        |       |      |       | Trace   |
| 138.36 | 139.97   | 1.61  | uTNvt | Tuff, Nicola<br>Volcanics | Grey-green tuff, 2 mm pyroxene, weak epidote patches, trace of fine grained disseminated chalcopyrite   | W pervasive<br>ep, W ep F,<br>W carb F       |            |                     |        |        |       |      | Trace | 0.5     |
| 139.97 | 140.44   | 0.47  | Td    | Diorite                   | Fine grained, grey diorite dike/sill, 15% up to 5 mm needle like<br>hornblende, 10% 1-2 mm grey feldspar in a grey ground mass,<br>weak 1-2 mm epidote patches with pyrite  | W pervasive<br>ep, R ep vlts,<br>R carb vlts |            |                     |        |        |       |      |       | 4       |
|        |          |       |       |                           | 140.20 1 cm carbonate veinlet @ 19° to core axis  |  |            |                     |        |        |       |      |       |         |

|        |        |       | Go     |   | source Corporation   |  |                           |                     |        |        |       |       | WS1            | 4-001    |
|--------|--------|-------|--------|---|--|--|---------------------------|---------------------|--------|--------|-------|-------|----------------|----------|
|        |        |       | GU     |   |  | Project:                               | Whipsaw                   |                     | С      | ORE S  | AMPLI | NG    |                |          |
|        |        |       |        |   | GEOLOGY  |  |                           |                     | AS     | SSAY   |       |       |                |          |
| FrM    | ТоМ    | IntM  | RocU   | Rock  | Texture  | Alteration                             | Structure                 | Sample<br>#         | From   | Tom    | Int   | Cu    | Cpy<br>%       | Py<br>%  |
| 140.44 | 151.30 | 10.86 | uTNvt  | Tuff, Nicola<br>Volcanics                       | Dark grey-green tuff, 2 mm chloritized mafics, chlorite alteration increasing, mafics show weak alignment, trace of fine grained disseminated chalcopyrite   | M chl, W ep<br>vlts, W carb<br>vlts    |                           |                     |        |        |       | ppm   | Trace          | Trace    |
|        |        |       |        |   | 144 70 144 87 Diorito diko/cill  |  |                           | WS14-001-<br>140.44 | 140.44 | 143.44 | 3.00  | 101.0 | Trace          | <1       |
| 151.30 | 151.92 | 0.62  | Td     | Diorite   | Fine grained, grey, diorite dike/sill, 10% up to 5 mm needle like<br>hornblende, 5% 2-3 mm grey feldspar in a grey ground mass,<br>moderate pervasive epidote alteration, trace chalcopyrite   | M pervasive<br>ep, R ep F, R<br>carb F | Upper<br>contact @<br>17° |                     |        |        |       |       | Trace          | 3        |
| 151.92 | 169.92 | 12.00 | uTNvt  | Tuff, Nicola<br>Volcanics                       | 151.30 5 mm carbonate veinlet @ 27° to core axis<br>Dark grey-green tuff, 2 mm chloritized mafics, chlorite alteration<br>increasing, weak foliation, mafics show weak alignment, trace of<br>fine grained disseminated chalcopyrite | S chl, R carb<br>vlts, R ep vlts       | Foliation @<br>62° to ca  |                     |        |        |       |       | Trace?         | 1        |
|        |        |       |        |   | 159.84 1 cm carbonate veinlet @ 28° core axis, 4 mm pyrite<br>cubes<br>159.96-160.32 Diorite dike/sill, 2 mm carbonate veinlet, trace<br>chalcopyrite  |  |                           |                     |        |        |       |       | Trace          | 5<br>0.5 |
|        |        |       |        |   | 162.57 1 cm epidote/carbonate/pyrite veinlet @ 35° to core axis,<br>trace chalcopyrite<br>163.87 1 cm epidote veinlet, trace fine grained disseminated   |  |                           | WS14-001-           | 163.92 | 164.42 | 0.50  | 115.0 | Trace<br>Trace | 0.5      |
| 169.92 | 181.80 | 11.88 | uTNvsh | Chlorite Schist,<br>Nicola<br>Volcanics         | Green-grey chlorite schist, strong chlorite alteration, strong foliation   | S chl                                  | Foliation @<br>62° to ca  | 163.92              |        |        |       |       |                |          |
| 181.80 | 212.45 | 30.65 | uTNssa | Tuffaceous<br>Sandstone,<br>Nicola<br>Sediments | Light grey-green tuffaceous sandstone, grey, bluish angular<br>quartz grains, <1- 2 mm in diameter, finer and coarser beds,<br>grey sericite matrix  | W carb vlts                            |                           |                     |        |        |       |       |                | 0.5      |
|        |        |       |        |   |  |  |                           | WS14-001-<br>184.62 | 184.62 | 188.62 | 4.00  | 69.0  |                | <1       |
|        |        |       |        |   | 186.51-186.73 Black argillite bed, pyrite with weak carbonate parallels bedding, 1 mm fractures with pyrite, minor carbonate cut bedding   |  | Bedding @<br>68° to ca    |                     |        |        |       |       |                | 3        |
|        |        |       |        |   | 193.96-194.16 Black argillite bed  |  | Bedding @<br>55° to ca    |                     |        |        |       |       |                |          |
|        |        |       |        |   | 194.96-195.31 Black argillite bed  |  |                           |                     |        |        |       |       |                |          |
|        |        |       |        |   | 196.11-196.35 Black argillite bed  |  |                           |                     |        |        |       |       |                |          |

|          |     |      | Go   | Ideliff Ro | source Corporation                |              |                        |                     |           |         |          | WS1       | 4-001    |          |
|----------|-----|------|------|------------|-----------------------------------|--------------|------------------------|---------------------|-----------|---------|----------|-----------|----------|----------|
|          |     |      | 00   |            |                                   | Project:     | Whipsaw                |                     | С         | ORE S/  | AMPLI    | NG        |          |          |
|          |     | -    |      |            | GEOLOGY                           |              |                        |                     | AS        | SSAY    |          |           |          |          |
| FrM      | ТоМ | IntM | RocU | Rock       | Texture                           | Alteration   | Structure              | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>%  |
|          |     |      |      |            | 197.44-197.81 Black argillite bed | R py F       | Bedding @<br>69° to ca |                     |           |         |          |           |          | 2        |
|          |     |      |      |            | 200.37-200.84 Black argillite bed | R carb, py F | Bedding @<br>58° to ca |                     |           |         |          |           |          | 3        |
|          |     |      |      |            |                                   |              |                        | WS14-001-<br>210.62 | 210.62    | 212.45  | 1.83     | 33.0      |          | <1       |
| 212.45   |     |      |      |            | End Of Hole                       |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
| <u> </u> |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
| <u> </u> |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          | <u> </u> |
| <u> </u> |     | ļ    |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           | <u> </u> |          |
| <u> </u> |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
| <u> </u> |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          | <u> </u> |
| <u> </u> |     |      |      |            |                                   |              | 1                      |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |
|          |     |      |      |            |                                   |              |                        |                     |           |         |          |           |          |          |

|       |       |       | Go   |            | source Corporation  |   |                                 |                     |       |       |        | WS14 | 4-002 |       |
|-------|-------|-------|------|------------|---|---|---------------------------------|---------------------|-------|-------|--------|------|-------|-------|
|       |       |       | 00   |            |   | Project: V                                    | Nhipsaw                         |                     | C     | ORE S | SAMPLI | NG   |       |       |
|       |       |       |      |            | GEOLOGY   |   |                                 |                     | Α     | SSAY  |        |      |       |       |
| FrM   | ТоМ   | IntM  | RocU | Rock       | Texture   | Alteration                                    | Structure                       | Sample              | From  | То    | Int    | Cu   | Сру   | Py    |
|       |       |       |      |            |   |   |                                 | #                   | m     | m     | m      | ppm  | %     | %     |
| 0     | 3.05  | 3.05  | Qal  | Overburden | Casing  |   |                                 |                     |       |       |        |      |       |       |
| 3.05  | 8.23  | 5.18  | Тg   | Gabbro     | Medium grained, dark green gabbro, 90% 1- 2 mm pyroxene<br>phenocrysts, rare 1-2 mm green feldspar laths, rare biotite,<br>weak porphyritic texture, strongly magnetic, 1-2 mm magnetite<br>disseminations, 3% magnetite          | R white carb<br>vlts                          |                                 |                     |       |       |        |      | Trace | Trace |
|       |       |       |      |            | 7.75 4 mm carbonate veinlet, trace chalcopyrite   |   |                                 |                     |       |       |        |      | Trace |       |
|       |       |       |      |            | 8.00 4 mm carbonate veinlet @ 19° to core axis, trace chalcopyrite  |   |                                 |                     |       |       |        |      | Trace |       |
| 8.23  | 10.98 | 2.75  | F    | Fault      | Fault, brown gouge, minor green gouge   |   |                                 |                     |       |       |        |      |       |       |
| 10.98 | 32.09 | 21.11 | Тg   | Gabbro     | Medium to coarse grained, dark green gabbro, 90% 1-2 mm<br>pyroxene phenocrysts, rare 1-2 mm green feldspar laths, rare<br>biotite, weak porphyritic texture, strongly magnetic, 1-2 mm<br>magnetite disseminations, 3% magnetite | W carb,<br>carb/ep vlts,<br>R pervasive<br>ep |                                 |                     |       |       |        |      | Trace | <1%   |
|       | 1     | 1     | 1    |            | 11.73 1 cm epidote patch, 20% magnetite   |   |                                 |                     |       |       |        |      |       |       |
|       |       |       |      |            | 14.81 4 cm carbonate/epidote veinlet @ 68° to core axis   |   | 1                               |                     |       |       |        |      |       |       |
|       |       |       |      |            | 16.67 2 cm carbonate veinlet @ 38° to core axis   |   |                                 |                     |       |       |        |      |       |       |
|       |       |       |      |            | 17.92-21.12 Increase in pervasive epidote, epidote/carbonate veinlets   |   |                                 |                     |       |       |        |      |       |       |
|       |       |       |      |            | 20.80 Gabbro becoming finer grained   |   |                                 |                     |       |       |        |      |       |       |
|       |       |       |      |            | 27.56 5 mm quartz/carbonate/epidote veinlets @ 31° to core axis, fleck bornite? trace chalcopyrite  |   |                                 |                     |       |       |        |      | Trace |       |
|       |       |       |      |            | 30.38, 30.48, 31.72, 31.82 Epidote veinlets, pervasive epidote alteration, trace chalcopyrite   |   |                                 | WS14-002-<br>028.98 | 28.98 | 32.09 | 3.12   | 696  | Trace |       |
| 32.09 | 36.77 | 4.68  | Td   | Diorite    | Fine grained, grey diorite dike/sill, up to 10% 1-3 mm<br>hornblende, 2% 1 mm feldspar in a dark grey groundmass,<br>weakly magnetic, up to 10% disseminated pyrite, usually with<br>epidote                                      | W pervasive<br>carb, M<br>pervasive<br>ep/py  | Lower<br>contact @<br>17° to ca |                     |       |       |        |      |       | 2     |
|       |       |       |      |            | 35.00 1 cm quartz veinlet @ 26° to core axis, red stain   |   |                                 |                     |       |       |        |      |       |       |
| 36.77 | 39.68 | 2.91  | Тg   | Gabbro     | Fine grained, dark green gabbro, 60-70% 1-2 mm pyroxene phenocrysts, 30% 1-2 mm green feldspar laths, equigranular texture  | W carb, ep<br>vlts                            |                                 | WS14-002-<br>036.77 | 36.77 | 39.68 | 2.91   | 298  | Trace | 1     |
|       |       |       |      |            | 36.93 1 cm epidote veinlet, trace chalcopyrite  |   |                                 |                     |       |       |        |      |       |       |
|       |       |       |      |            | 38.46 1 cm carbonate veinlet @ 38° to core axis, trace chalcopyrite   |   |                                 |                     |       |       |        |      |       |       |

|       |       |       | Go   |         | source Corporation  |   |                                 |                     |           |         |          |           | WS14     | 4-002   |
|-------|-------|-------|------|---------|---|---|---------------------------------|---------------------|-----------|---------|----------|-----------|----------|---------|
|       |       |       | 00   |         |   | Project: \  | Nhipsaw                         |                     | C         | ORE S   | AMPLI    | NG        |          |         |
|       |       |       |      |         | GEOLOGY   |   |                                 |                     | A         | SSAY    |          |           |          |         |
| FrM   | ТоМ   | IntM  | RocU | Rock    | Texture   | Alteration  | Structure                       | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>maa | Cpy<br>% | Ру<br>% |
| 39.68 | 52.79 | 13.11 | Td   | Diorite | Fine grained, grey to greenish diorite dike/sill, up to 10% 1-3 mm hornblende, 2% 1 mm feldspar in a dark grey groundmass                             | W pervasive<br>ep, W ep F,<br>R carb F                  |                                 |                     |           |         |          |           | Trace    | 1       |
|       |       |       |      |         | 40.75, 40.81, 41.16, 41.08 Trace fine grained disseminated chalcopyrite?  |   |                                 | WS14-002-<br>039.68 | 39.68     | 42.68   | 3.0      | 73.2      | Trace    | 1       |
|       |       |       |      |         | 44.81 Stronger epidote  |   |                                 |                     |           |         |          |           |          |         |
|       |       |       |      |         | 47.55-47.65 Fault, gouge  |   |                                 |                     |           |         |          |           |          |         |
|       |       |       |      |         | 49.39, 52.24, 52.69, 52.74 Trace fine grained disseminated chalcopyrite?  |   |                                 | WS14-002-<br>048.68 | 48.68     | 52.79   | 4.11     | 155.5     | Trace    | 1       |
|       |       |       |      |         | 49.80 2 cm quartz veinlet   |   |                                 |                     |           |         |          |           |          |         |
| 52.79 | 54.18 | 1.39  | Tg   | Gabbro  | Medium grained, dark green gabbro, 80% 1- 2 mm pyroxene<br>phenocrysts, 20% 1-4 mm green feldspar laths, weak<br>porphyritic texture                  | W ep F, W<br>pervasive ep                               |                                 | WS14-002-<br>052.79 | 52.79     | 54.18   | 1.39     | 781       | Trace    | 2       |
|       |       |       |      |         | 52.87, 54.15 Trace fine grained disseminated chalcopyrite   |   |                                 |                     |           |         |          |           | Trace    |         |
| 54.18 | 67.79 | 13.61 | Td   | Diorite | Fine grained, grey diorite dike/sill, up to 10% 1-3 mm<br>hornblende, 2% 1 mm feldspar in a dark grey groundmass,<br>narrow sections stronger epidote | W pervasive<br>ep, R red<br>stain on F                  |                                 |                     |           |         |          |           |          | <0.5    |
|       |       |       |      |         | 57.45-57.55 Fault, green gouge  |   |                                 |                     |           |         |          |           |          |         |
|       |       |       |      |         | 60.80 Red stain on fractures  |   |                                 |                     |           |         |          |           |          |         |
| 67.79 | 69.47 | 1.68  | Tg   | Gabbro  | Medium grained, dark green gabbro, 80% 1- 2 mm pyroxene phenocrysts, 20% 1-4 mm green feldspar laths, weak porphyritic texture                        |   |                                 |                     |           |         |          |           |          | 0.5     |
| 69.47 | 76.76 | 7.29  | Td   | Diorite | Fine to medium grained, grey diorite dike/sill, up to 10% 1-3 mm hornblende, 2% 1 mm feldspar in a dark grey groundmass                               | R pervasive<br>ep, R ep,<br>carb F, R red<br>stain on F | Upper<br>contact @<br>48° to ca |                     |           |         |          |           | Trace    | <1      |
|       |       |       |      |         | 73.05-73.15 Fault, green gouge  |   | Fault @<br>57° to ca            |                     |           |         |          |           |          |         |
|       |       |       |      |         | 73.75, 75.42 Trace fine grained disseminated chalcopyrite?  |   |                                 | WS14-002-<br>073.08 | 73.08     | 76.76   | 3.68     | 115.5     | Trace    | <1      |

|       |       |      | Go   |         | source Corporation   |                             |                                 |             |           |         |          | WS14      | 4-002    |         |
|-------|-------|------|------|---------|--|-----------------------------|---------------------------------|-------------|-----------|---------|----------|-----------|----------|---------|
|       |       |      | 00   |         |  | Project: \                  | Whipsaw                         |             | C         | ORE S   | SAMPLI   | NG        |          |         |
|       |       |      |      |         | GEOLOGY  |                             |                                 |             | A         | SSAY    |          |           |          |         |
| FrM   | ТоМ   | IntM | RocU | Rock    | Texture  | Alteration                  | Structure                       | Sample<br># | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>% |
| 76.76 | 83.81 | 7.05 | Тg   | Gabbro  | Medium grained, green to grey gabbro, 50% 1- 3 mm pyroxene phenocrysts, 50% 1-3 mm green, grey feldspar laths, weak porphyritic texture, moderately magnetic, 1-2 mm magnetite disseminations, 2% magnetite, rare rounded inclusions, remelted, within a black, mafic matrix | R hem F                     | Upper<br>contact @<br>35° to ca |             |           |         |          |           |          | 0.5     |
| 83.81 | 85.58 | 1.77 | Td   | Diorite | Fine grained, pale green diorite dike/sill, up to 10% 1-3 mm hornblende, 2% 1 mm feldspar in a green groundmass, 1 cm patch of epidote with strong pyrite  | R ep F                      |                                 |             |           |         |          |           |          | 2       |
| 85.58 | 88.68 | 3.10 | Тg   | Gabbro  | Medium grained, green gabbro, 50% 1- 2 mm pyroxene<br>phenocrysts, 50% 1-3 mm green feldspar laths, weak<br>porphyritic texture, rare rounded mafic and diorite? inclusions  |                             |                                 |             |           |         |          |           |          | <1      |
| 88.68 | 89.94 | 1.26 | Td   | Diorite | Fine grained, grey diorite dike/sill, up to 10% 1-3 mm hornblende, 2% 1 mm feldspar in a grey groundmass   | R ep F                      |                                 |             |           |         |          |           | Trace    | 0.5     |
|       |       |      |      |         | 89.18 Trace chalcopyrite on fracture with pyrite   |                             |                                 |             |           |         |          |           | Trace    |         |
| 89.94 | 91.45 | 1.51 | Тg   | Gabbro  | Medium grained, green gabbro, 50% 1- 2 mm pyroxene<br>phenocrysts, 50% 1-3 mm green feldspar laths, weak<br>porphyritic texture, weak rounded mafic and diorite? inclusions<br>to 6 cm in diameter   | R qtz vlts                  |                                 |             |           |         |          |           |          | 0.5     |
| 91.45 | 94.15 | 2.70 | Td   | Diorite | Fine grained, grey diorite dike/sill, up to 10% 1-3 mm hornblende, 2% 1 mm feldspar in a grey groundmass   | R carb vlts                 |                                 |             |           |         |          |           |          | 2       |
|       |       |      |      |         | 93.69-94.15 5% pyrite  |                             |                                 |             |           |         |          |           |          |         |
| 94.15 | 95.36 | 1.21 | Тg   | Gabbro  | Medium grained, green gabbro, 50% 1- 2 mm pyroxene phenocrysts, 50% 1-3 mm green, grey feldspar laths, weak porphyritic texture  | R qtz/carb<br>vlts, py      |                                 |             |           |         |          |           |          | 2       |
|       |       |      |      |         | 95.24 1 cm quartz/carbonate veinlet @ 49° to core axis, trace pyrite   |                             |                                 |             |           |         |          |           |          | Trace   |
| 95.36 | 96.80 | 1.44 | Td   | Diorite | Fine grained, grey diorite dike/sill, up to 10% 1-3 mm<br>hornblende, 2% 1 mm feldspar in a grey groundmass,<br>bleached, weak pervasive silicification  |                             |                                 |             |           |         |          |           | Trace    | 10      |
|       |       |      |      |         | 95.38 5 cm quartz/carbonate/epidote veinlet @ 22° to core axis trace chalcopyrite  |                             |                                 |             |           |         |          |           | Trace    |         |
| 96.80 | 97.87 | 1.07 | Тg   | Gabbro  | Medium grained, green gabbro, 50% 1- 2 mm pyroxene phenocrysts, 50% 1-3 mm green, grey feldspar laths, weak porphyritic texture  | R carb F, W<br>pervasive ep |                                 |             |           |         |          |           |          | 1       |

|        |        |         | Go   |         | source Corporation  |  |                                 |                     |        |        |        |       | WS14  | 4-002 |
|--------|--------|---------|------|---------|---|--|---------------------------------|---------------------|--------|--------|--------|-------|-------|-------|
|        |        |         | 90   |         |   | Project: \   | Nhipsaw                         |                     | (      | CORE S | SAMPLI | ١G    |       |       |
|        |        |         |      |         | GEOLOGY   |  |                                 |                     | Α      | SSAY   |        |       |       |       |
| ErM    | ToM    | IntM    | Pocl | Pock    | Toxturo   | Alteration   | Structure                       | Sample              | From   | То     | Int    | Cu    | Сру   | Ру    |
|        |        | IIICIVI | Roco | ROCK    | Texture   |  |                                 | #                   | m      | m      | m      | ppm   | %     | %     |
| 97.87  | 113.14 | 15.27   | Td   | Diorite | Very fine grained, grey diorite, 25% <1 mm hornblende, 20%  | R carb/qtz<br>vlts, R                                |                                 |                     |        |        |        |       | Trace | 1     |
|        |        |         |      |         | < mm leidspar in a dark grey groundmass   | W chl  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 98.89-99.05 Zone of moderate epidote alteration   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 97.87-101.14 Weak zone of up to 1 cm quartz/carbonate veinlets @ 15° to core axis, up to 10% pyrite, disseminated and along fractures, trace chalcopyrite                                 |  |                                 | WS14-002-<br>097.87 | 97.87  | 101.14 | 3.27   | 953   | Trace | 10    |
|        |        |         |      |         | 107.14-108.14 5% pyrite   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 109.74 6 cm angular mafic inclusion   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 111.67-112.03 Fault, green gouge  |  |                                 |                     |        |        |        |       |       |       |
| 113.14 | 130.82 | 17.68   | Td   | Diorite | Fine to medium grained, grey diorite, 25-40% <4 mm<br>hornblende, 5-20% <1 mm feldspar in a dark grey groundmass  | R carb vlts, R<br>ep F, W chl                        |                                 |                     |        |        |        |       |       | 0.5   |
| 130.82 | 147.03 | 16.21   | Td   | Diorite | Very fine grained, grey diorite, 25% <1 mm hornblende, 20% <1 mm feldspar in a dark grey groundmass   | R carb, chl,<br>ep F                                 |                                 |                     |        |        |        |       |       | 0.5   |
|        |        |         |      |         | 133.62 Weak 1-5 mm epidote veining @ 24° to core axis   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 135.95 1 cm calcite veinlet @ 22° to core axis, cavities  |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 141.42-141.67 Fault   |  |                                 |                     |        |        |        |       |       |       |
| 147.03 | 187.06 | 40.03   | Td   | Diorite | Fine to medium grained, grey diorite, 25-40% <4 mm<br>hornblende, 5-20% <1 mm feldspar in a dark grey groundmass,<br>rare rounded mafic inclusions, rare sections gabbro<br>(inclusions?) | W carb, ep,<br>qtz vlts, R<br>pervasive ep,<br>W chl |                                 |                     |        |        |        |       |       | 0.5   |
|        |        |         |      |         | 147.03-171.27 Brownish-red alteration with/on 1-2 mm carbonate veinlets @ 21° to core axis  |  |                                 | WS14-002-<br>147.03 | 147.03 | 147.53 | 0.50   | 148.0 |       | <1    |
|        |        |         |      |         | 150.89-151.40 Fault, green gouge, strong chlorite   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 168.14 2 cm carbonate/epidote/quartz veinlet @ 18° to core axis   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 173.44-173.64 Weak 2-3 mm quartz veinlets   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         | 174.54-175.34 Weak 2-3 mm quartz veinlets   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         |   |  |                                 | WS14-002-<br>178.03 | 178.03 | 178.53 | 0.50   | 78.7  |       | <1    |
| 187.06 | 188.06 | 1.00    | Bx   | Breccia | Angular diorite fragments to 4 cm in diameter in a soft, light green matrix   | R carb F   | Upper<br>contact @<br>13° to ca | WS14-002-<br>187.06 | 187.06 | 188.06 | 1.00   | 50.9  |       | Trace |
| 188.06 |        |         |      |         | End Of Hole   |  |                                 |                     |        |        |        |       |       |       |
|        |        |         |      |         |   |  |                                 |                     |        |        |        |       |       |       |

|       |        |        | <u> </u> |   | aguras Corporation  |            | Mhineou                  |                     |       |       |        |       | WS14   | 4-003 |
|-------|--------|--------|----------|---|---|------------|--------------------------|---------------------|-------|-------|--------|-------|--------|-------|
|       |        |        | GC       |   | source corporation  | Project: \ | wnipsaw                  |                     | (     | CORES | SAMPLI | NG    |        |       |
|       |        |        |          |   | GEOLOGY   | -          |                          |                     | A     | SSAY  |        |       |        |       |
| ErM.  | ТоМ    | IntM   | Booli    | Book                                    | Toxturo   | Alteration | Structure                | Sample              | From  | То    | Int    | Cu    | Сру    | Ру    |
| Frivi | TOW    | Intivi | ROCU     | ROCK                                    | rexture   |            |                          | #                   | m     | m     | m      | ppm   | %      | %     |
| 0     | 6.07   | 6.07   | Qal      | Overburden                              | Casing  |            |                          |                     |       |       |        |       |        |       |
| 6.07  | 24.67  | 18.60  | uTNvsh   | Chlorite Schist,<br>Nicola<br>Volcanics | Green chlorite schist, strong chlorite alteration, strong foliation,<br>finer and coarser grained bands, weak 1-4 mm chlorite altered<br>lapilli? stretched along foliation, calcareous, moderate 1-2 mm<br>calcite veinlets parallel foliation, others cut foliation, narrow<br>faults parallel foliation    | M ca vits  | Foliation @<br>68°       |                     |       |       |        |       |        | 0.5   |
|       |        |        |          |   | 6.88-6.93 Fault, grey gouge   |            | Fault @ 47°<br>to ca     |                     |       |       |        |       |        |       |
|       |        |        |          |   | 13.55-13.60 Fault, brown gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 13.81-13.90 Fault, brown gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 14.06-14.12 Fault, brown gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 15.79   |            | Foliation @<br>53° to ca |                     |       |       |        |       |        |       |
|       | 1      |        |          |   | 16.39-16.59 Fault, grey, green gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 18.92-18.95 Fault, grey gouge   |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 19.64-19.69 Fault, grey, green gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 20.32-20.52 Fault, grey, green gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 23.27-23.47 Fault, brown gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 24.07-24.15 Fault, brown gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 24.20 2 cm quartz/carbonate veinlet @ 18° to core axis  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 24.47-24.52 Fault, green gouge  |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 24.57 1 cm quartz/carbonate veinlet @ 66° to core axis  |            | Foliation @<br>66° to ca |                     |       |       |        |       |        |       |
| 24.67 | 109.01 | 84.34  | uTNvsh   | Chlorite Schist,<br>Nicola<br>Volcanics | Green chlorite schist, strong chlorite alteration, moderate<br>foliation, finer and coarser grained bands, weak 1-4 mm chlorite<br>altered lapilli? stretched along foliation, calcareous, moderate 1-<br>3 mm calcite veinlets parallel foliation, others cut foliation, 1%<br>pyrite mainly as 1-2 mm cubes | M ca vits  | Foliation @<br>53°       |                     |       |       |        |       |        | 1     |
|       |        |        |          |   | 24.71 Trace chalcopyrite?   |            |                          | WS14-002-<br>024.67 | 24.67 | 27.67 | 3.00   | 143.5 | Trace? |       |
|       |        |        |          |   | 33.08-33.13 Fault, green gouge @ 51° to core axis   |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 41.36-41.46 Fault, brown gouge @ 32° to core axis   |            |                          |                     |       |       |        |       |        |       |
|       |        |        |          |   | 43.62 5 mm carbonate veinlet, 3 mm bleb chalcopyrite, trace fine grained disseminated chalcopyrite in schist  |            |                          | WS14-003-<br>042.12 | 42.12 | 45.12 | 3.00   | 131.0 | Trace  |       |

|     |   |      | Gal  |                             | accurac Corporation  |            | Nhinoou                  |                     |           |         |          |           | WS14     | 4-003   |
|-----|---|------|------|-----------------------------|--|------------|--------------------------|---------------------|-----------|---------|----------|-----------|----------|---------|
|     |   |      | GO   |                             | esource corporation  | Project: \ | wnipsaw                  |                     | C         | ORE S   | SAMPLI   | NG        |          |         |
|     |   |      |      |                             | GEOLOGY  |            |                          |                     | A         | SSAY    |          |           |          |         |
| FrM | ТоМ   | IntM | RocU | Rock                        | Texture  | Alteration | Structure                | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>% |
|     | Ì   | İ    |      |                             | 49.09-49.29 Fault, green gouge   |            | 1                        |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 53.28-53.55 Fault, green gouge   |            | Fault @ 48°<br>to ca     |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 55.97 4 mm quartz veinlet @ 48° to core axis, trace chalcopyrite   |            |                          | WS14-003-<br>055.10 | 55.10     | 58.10   | 3.00     | 122.0     | Trace    |         |
|     |   |      |      |                             | 57.22 1 cm carbonate veinlet @ 73° to core axis, trace chalcopyrite  |            |                          |                     |           |         |          |           | Trace    |         |
|     |   |      |      |                             | 60.47-60.52 Fault, green gouge   |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 62.87-62.92 Fault, green gouge   |            |                          |                     |           |         |          |           |          |         |
|     | 72.94     Foliation @       73.14 1% pyrite, 4 mm cubes     70.92 70 74 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |      |      |                             | Foliation @<br>57° to ca   |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      | 73.14 1% pyrite, 4 mm cubes |  |            |                          |                     |           |         |          |           | 1        |         |
|     |   |      |      |                             | 73.36-73.71 Fault, green gouge   |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 75.30 1 cm carbonate veinlet @ 68° to core axis, parallels foliation, trace pyrite   |            |                          | WS14-003-<br>75.46  | 75.46     | 78.46   | 3.00     | 100.5     |          |         |
|     |   |      |      |                             | 77.21 4 mm bleb pyrite with carbonate alteration, trace chalcopyrite?  |            |                          |                     |           |         |          |           | Trace?   |         |
|     |   |      |      |                             | 79.58 1 cm carbonate/quartz veinlet @ 48° to core axis   |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 82.09 4 mm pyrite cubes  |            | Foliation @<br>42° to ca |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 84.38-84.58 Fault, green gouge   |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 79.50-89.08 1-4 mm pyrite cubes  |            |                          |                     |           |         |          |           |          | 1       |
|     |   |      |      |                             | 88.42-87.60 Grey carbonate altered zone, trace pyrite  |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 89.05-89.10 Fault, green gouge   |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 97.32  |            | Foliation @<br>54° to ca |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 97.75 1 cm quartz veinlet @ 32° to core axis, 1 cm quartz/carbonate veinlet @ 47° to core axis, 10% pyrite, pyrite halo around veinlet |            |                          |                     |           |         |          |           |          |         |
|     |   |      |      |                             | 100.33 2% Disseminated pyrite, 1-3 mm cubes  |            | Foliation @<br>54° to ca |                     |           |         |          |           |          | 2       |
|     |   |      |      |                             | 102.78 2% Disseminated pyrite, 1-3 mm cubes  |            |                          |                     |           |         |          |           |          | 2       |

|        |        |      | Go     |   | source Corporation   | Project: V | Vhineaw                  |                     |           |         |          |           | WS14     | 4-003   |
|--------|--------|------|--------|---|--|------------|--------------------------|---------------------|-----------|---------|----------|-----------|----------|---------|
|        |        |      | 00     |   |  | FTOJECI. V | ViiipSaw                 |                     | C         | ORE S   | SAMPLI   | NG        |          |         |
|        |        | 1    | -      |   | GEOLOGY  |            |                          |                     | A         | SSAY    | -        |           |          | _       |
| FrM    | ТоМ    | IntM | RocU   | Rock  | Texture  | Alteration | Structure                | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>% |
|        |        |      |        |   | 105.07-105.26 Quartz veinlet @ 62° to core axis, parallels foliation   |            | Foliation @<br>62° to ca |                     |           |         |          |           |          |         |
|        |        |      |        |   | 106.33-106.38 Fault, green gouge @ 62° to core axis, parallels foliation   |            | Foliation @<br>62° to ca |                     |           |         |          |           |          |         |
| 109.01 | 110.48 | 1.47 | F      | Fault   | Fault, greyish-green gouge, rock fragments   |            |                          |                     |           |         |          |           |          |         |
| 110.48 | 118.25 | 7.77 | uTNvsh | Chlorite Schist,<br>Nicola<br>Volcanics         | Green chlorite schist, strong chlorite alteration, moderate<br>foliation, finer and coarser grained bands, weak 1-4 mm chlorite<br>altered lapilli? stretched along foliation, rare 1 mm calcite<br>veinlets parallel foliation, more cut foliation, 1% pyrite mainly as<br>1-5 mm cubes | R ca vlts  |                          |                     |           |         |          |           |          | 1       |
|        |        |      |        |   | 113.54   |            | Foliation @<br>64° to ca |                     |           |         |          |           |          |         |
|        |        |      |        |   | 118.15   |            | Foliation @<br>62° to ca |                     |           |         |          |           |          |         |
| 118.25 | 120.01 | 1.76 | Dm     | Mafic Dike                                      | Fine grained, dark grey mafic dyke, strongly magnetic  |            |                          | WS14-003-<br>118.25 | 118.25    | 120.01  | 1.76     | 55.7      |          |         |
| 120.01 | 125.00 | 4.99 | F      | Fault   | Fault, green, minor grey gouge, some sections strongly<br>chloritized schist   |            |                          | WS14-003-<br>120.01 | 120.01    | 125.00  | 4.99     | 122.5     |          |         |
| 125.00 | 127.85 | 2.85 | uTNssa | Tuffaceous<br>Sandstone,<br>Nicola<br>Sediments | Light grey, grey-green tuffaceous sandstone, indistinct grains, coarser and finer beds, grey sericite altered matrix with emerald green fuchsite, 0.5% fine grained disseminated pyrite  | R qtz vlts |                          |                     |           |         |          |           |          | 0.5     |
| 127.85 | 131.83 | 3.98 | uTNsa  | Argillite, Nicola<br>Sediments                  | Massive black argillite, minor light grey intercalated quartzite<br>beds, graphite on fractures, 5% pyrite on fractures and as <1-3<br>mm cubes  |            | Bedding @<br>70° to ca   |                     |           |         |          |           |          | 5       |
|        |        |      |        |   | 129.46-129.59 Fault, gouge, broken core  |            |                          |                     |           |         |          |           |          |         |
| 131.83 | 140.31 | 8.48 | uTNssa | Tuffaceous<br>Sandstone,<br>Nicola<br>Sediments | Light grey tuffaceous sandstone, indistinct grains, coarser and finer beds, grey sericite altered matrix with emerald green fuchsite   | R qtz vlts |                          |                     |           |         |          |           |          |         |
|        |        |      |        |   | 131.97 1 cm quartz veinlet @ 38° to core axis, trace chalcopyrite?   |            |                          | WS14-003-<br>131.83 | 131.83    | 134.83  | 3.00     | 77.1      | Trace?   |         |
|        |        |      |        |   | 137.99   |            | Bedding @<br>69° to ca   |                     |           |         |          |           |          |         |

|        |        |       | Go     |   | source Corporation   | Project: V | Nhineau                |                     |        |        |        |       | WS14 | 4-003 |
|--------|--------|-------|--------|---|--|------------|------------------------|---------------------|--------|--------|--------|-------|------|-------|
|        |        |       | GU     |   |  | Project.   | mpsaw                  |                     | (      | CORES  | SAMPLI | NG    |      |       |
|        |        |       |        |   | GEOLOGY  |            |                        |                     | Α      | SSAY   |        |       |      |       |
| FrM    | ToM    | IntM  | RocU   | Rock  | Texture  | Alteration | Structure              | Sample              | From   | То     | Int    | Cu    | Сру  | Ру    |
|        |        |       |        |   |  |            |                        | #                   | m      | m      | m      | ppm   | %    | %     |
|        |        |       |        |   | 138.84   |            | Bedding @<br>61° to ca |                     |        |        |        |       |      |       |
|        |        |       |        |   | 139.12-139.16 Fault, green gouge   |            |                        |                     |        |        |        |       |      |       |
|        |        |       |        |   | 140.23-140.28 Fault, green gouge   |            |                        |                     |        |        |        |       |      |       |
| 140.31 | 146.85 | 6.54  | uTNssi | Tuffaceous<br>Siltstone,<br>Nicola<br>Sediments | Light grey tuffaceous siltstone, minor dark grey bands, hard, silicified, 4% pyrite, mainly as 1-3 mm cubes  |            |                        | WS14-003-<br>140.31 | 140.31 | 140.81 | 0.50   | 18.4  |      | 4     |
|        |        | 1     |        |   | 145.15 1 cm quartz veinlet @ 46° to core axis  |            |                        |                     |        |        |        |       |      |       |
|        |        |       |        |   | 146.62-146.65 Black argillite bed  |            | Bedding @<br>74° to ca |                     |        |        |        |       |      | 3     |
|        |        |       |        |   | 146.66-146.68 Black argillite bed  |            | Bedding @<br>80° to ca |                     |        |        |        |       |      |       |
| 146.85 | 177.35 | 30.50 | uTNssa | Tuffaceous<br>Sandstone,<br>Nicola<br>Sediments | Light grey tuffaceous sandstone, indistinct grains, coarser and finer beds, grey sericite altered matrix with emerald green fuchsite, <0.5% pyrite | R qtz vlts |                        |                     |        |        |        |       |      | <0.5  |
|        |        |       |        |   | 147.79-147.98 Black argillite bed, 4% pyrite, 1-3 mm cubes   |            |                        |                     |        |        |        |       |      | 4     |
|        |        |       |        |   | 148.12-148.24 Black argillite bed  |            | Bedding @<br>79° to ca |                     |        |        |        |       |      | 2     |
|        |        |       |        |   | 152.52   |            | Bedding @<br>63° to ca |                     |        |        |        |       |      |       |
|        |        |       |        |   | 160.50   |            | Bedding @<br>61° to ca | WS14-003-<br>158.85 | 158.85 | 159.35 | 0.50   | 103.5 |      | <0.5  |
|        |        |       |        |   | 163.71-163.93 Brown, hard, silicious, cherty bed   |            | Bedding @<br>51° to ca |                     |        |        |        |       |      |       |
|        |        |       |        |   | 164.67-164.71 Brown, hard, silicious, cherty bed   |            | Bedding @<br>71° to ca |                     |        |        |        |       |      |       |
|        |        |       |        |   | 164.81-164.84 Brown, hard, silicious, cherty bed   |            |                        |                     |        |        |        |       |      |       |
|        |        |       |        |   | 164.88-164.92 Brown, hard, silicious, cherty bed   |            |                        |                     |        |        |        |       |      |       |

|        |        |      | G      |   | acura Corporation  | Drojootu V | Nhinoou                |                     |           |         |          |           | WS14     | 4-003   |
|--------|--------|------|--------|---|--|------------|------------------------|---------------------|-----------|---------|----------|-----------|----------|---------|
|        |        |      | GC     |   |  | Project: 1 | wnipsaw                |                     | (         | CORE S  | SAMPLI   | NG        |          |         |
|        |        |      |        |   | GEOLOGY  |            |                        |                     | A         | SSAY    |          |           |          |         |
| FrM    | ТоМ    | IntM | RocU   | Rock  | Texture  | Alteration | Structure              | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>% |
|        |        |      |        |   | 165.11-165.15 Brown, hard, silicious, cherty bed   |            | Ì                      | İ                   |           |         |          |           | Î        |         |
|        |        |      |        |   | 170.85   |            | Bedding @<br>64° to ca |                     |           |         |          |           |          |         |
|        |        |      |        |   | 171.38-171.42 Black argillite bed  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   | 171.59-171.89 Black argillite bed  |            |                        | 1                   |           |         |          |           |          |         |
|        |        |      |        |   | 173.78-174.08 Black argillite bed  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   | 175.52-175.82 Black argillite bed  |            |                        |                     |           |         |          |           |          |         |
| 177.35 | 184.66 | 7.31 | F      | Fault   | Fault, white, grey gouge, brecciated and clay altered rock, narrow sections fresher rock, rare fuchsite                      |            |                        | WS14-003-<br>177.35 | 177.35    | 180.35  | 3.00     | 123.5     |          | <0.5    |
| 184.66 | 194.16 | 9.50 | uTNssi | Tuffaceous<br>Siltstone,<br>Nicola<br>Sediments | Light grey tuffaceous siltstone, minor coarser beds, weak sericite altered matrix, rare emerald green fuchsite, <0.5% pyrite | R py F     |                        |                     |           |         |          |           |          | <0.5    |
|        |        |      |        |   | 185.06-185.13 Black argillite bed  |            |                        |                     |           |         |          |           |          | 2       |
|        |        |      |        |   | 185.91   |            | Bedding @<br>62° to ca |                     |           |         |          |           |          |         |
|        |        |      |        |   | 186.48-186.64 Brown, hard, silicious, cherty bed   |            | Bedding @<br>66° to ca |                     |           |         |          |           |          |         |
|        |        |      |        |   | 187.18-187.23 Brown, hard, silicious, cherty bed   |            |                        | 1                   |           |         |          |           |          |         |
|        |        |      |        |   | 188.19-188.24 Brown, hard, silicious, cherty bed   |            |                        | 1                   |           |         |          |           |          |         |
|        |        |      |        |   | 188.38-188.42 Brown, hard, silicious, cherty bed   |            |                        | 1                   |           |         |          |           |          |         |
|        |        |      |        |   | 188.76-188.83 Brown, hard, silicious, cherty bed   |            |                        | 1                   |           |         |          |           |          |         |
|        |        |      |        |   | 189.54-189.62 Brown, hard, silicious, cherty bed   |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   | 190.68-190.87 Black argillite bed  |            | Bedding @<br>62° to ca | WS14-003-<br>190.66 | 190.66    | 191.16  | 0.50     | 129.5     |          | <0.5    |
|        |        |      |        |   |  |            |                        |                     |           |         |          |           |          |         |
| 194.16 |        |      |        |   | End Of Hole  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   |  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   |  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   |  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   |  |            |                        |                     |           |         |          |           |          |         |
|        |        |      |        |   |  |            |                        |                     |           |         |          |           |          |         |

|      |       |       |      |            | a a a sur a la constita a  | Duciesta                            | A/le :               |                     |           |         |          |           | WS14-    | 004     |
|------|-------|-------|------|------------|--|-------------------------------------|----------------------|---------------------|-----------|---------|----------|-----------|----------|---------|
|      |       |       | Gol  | aciitt R   | esource Corporation  | Project: \                          | wnipsaw              |                     |           | CORE    | SAMPL    | ING       |          |         |
|      |       |       |      |            | GEOLOGY  | •                                   |                      |                     | A         | SSAY    |          |           |          |         |
| FrM  | ТоМ   | IntM  | RocU | Rock       | Texture  | Alteration                          | Structure            | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>% |
| 0.00 | 3.05  | 3.05  | Qal  | Overburden | Casing   |                                     |                      |                     |           |         |          |           |          |         |
| 3.05 | 4.59  | 1.54  | Тg   | Gabbro     | Medium grained, dark green gabbro, 70% 1-2 mm pyroxene<br>phenocrysts, 30% 1-4 mm pale green feldspar laths, weak<br>porphyritic texture, strongly magnetic, 3% disseminated<br>magnetite                                    | R carb vlts                         |                      |                     |           |         |          |           | Trace    |         |
|      |       |       |      |            | 3.59 1-2 mm red carbonate veinlets @ 17° to core axis  |                                     |                      |                     |           |         |          |           |          |         |
| 4.59 | 5.03  | 0.44  | F    | Fault      | Fault, green, brown gouge, rock fragments, 1 cm quartz veinlet with 2% pyrite on wall of fault   |                                     | Fault @ 7°<br>to ca  |                     |           |         |          |           |          | 0.50    |
|      |       |       |      |            | 4.62 6 mm pyrite cube  |                                     |                      |                     |           |         |          |           |          |         |
| 5.03 | 46.57 | 41.54 | Tg   | Gabbro     | Medium grained, dark green gabbro, 70% 12-2 mm pyroxene<br>phenocrysts, 30% 1-4 mm pale green feldspar laths, weak<br>porphyritic texture, rare sections massive pyroxenite, strongly<br>magnetic, 3% disseminated magnetite | W 2 mm<br>carb/ep vlts, R<br>hem? F |                      |                     |           |         |          |           | Trace    | 0.50    |
|      |       |       |      |            | 5.82 Fault, brown, green gouge   |                                     | Fault @ 28°<br>to ca |                     |           |         |          |           |          |         |
|      |       |       |      |            | 5.64 1.3 cm long pyroxene phenocryst   |                                     |                      |                     |           |         |          |           |          |         |
|      |       |       |      |            | 8.86 1 cm semi rounded mafic inclusion, 20% epidote, 10% pyrite  |                                     |                      |                     |           |         |          |           |          |         |
|      |       |       |      |            |  |                                     |                      | WS14-004-<br>009.54 | 9.54      | 12.54   | 3.00     | 41.6      | Trace    |         |
|      |       |       |      |            | 10.25 1 cm quartz/carbonate veinlet @ 27° to core axis, 3 mm bleb chalcopyrite   |                                     |                      |                     |           |         |          |           | Trace    |         |
|      |       |       |      |            | 11.51 1 cm mafic inclusion   |                                     |                      |                     |           |         |          |           |          |         |
|      |       |       |      |            | 11.83 2 cm carbonate/epidote veinlet @ 25° to core axis, trace chalcopyrite?   |                                     |                      |                     |           |         |          |           | Trace?   | 2       |
|      |       |       |      |            | 16.30 1 cm quartz/carbonate veinlet @ 10° to core axis, trace chalcopyrite?  |                                     |                      |                     |           |         |          |           | Trace?   |         |
|      |       |       |      |            | 18.93 1 cm carbonate/chlorite veinlet @ 21° to core axis, cuts earlier epidote/carbonate veinlets  |                                     |                      |                     |           |         |          |           |          |         |
|      |       |       |      |            | 23.13 2-4 mm carbonate/epidote veinlets @ 32° to core axis   |                                     |                      |                     |           |         |          |           |          | 1       |
|      |       |       |      |            | 26.46 1 cm carbonate/chlorite/quartz veinlet @ 22° to core axis, 2% reddish hematite   |                                     |                      |                     |           |         |          |           |          |         |
|      |       |       |      |            | 34.31 5 mm epidote veinlet @ 16° to core axis, later <1 mm carbonate veinlets along margin of epidote veinlet  |                                     |                      |                     |           |         |          |           |          | Trace   |
|      |       |       |      |            | 41.44 2 mm epidote/carbonate veinlet @ 29° to core axis  |                                     |                      |                     |           |         |          |           |          | 5       |
|      |       |       |      |            | 41.76-42.23 Pyroxenite, weak carbonate stockwork   |                                     |                      |                     |           |         |          |           |          | 4       |

|       |   |        | Cal   |         | an autra Carporation  | Drainatu          | Mineeu                          |                     |       |       |       |       | WS14-  | 004 |
|-------|---|--------|-------|---------|---|-------------------|---------------------------------|---------------------|-------|-------|-------|-------|--------|-----|
|       |   |        | GOI   |         | esource Corporation   | Project: V        | vnipsaw                         |                     |       | CORE  | SAMPL | ING   |        |     |
|       |   |        |       |         | GEOLOGY   |                   |                                 |                     | A     | SSAY  |       |       |        |     |
| ErM   | ToM   | IntM   | Boold | Book    | Toyturo   | Alteration        | Structure                       | Sample              | From  | То    | Int   | Cu    | Сру    | Ру  |
|       | TOW   | IIIUVI | ROCU  | ROCK    | Texture   |                   |                                 | #                   | m     | m     | m     | ppm   | %      | %   |
|       |   |        |       |         | 42.54 1 cm carbonate veinlet @ 17° to core axis, trace chalcopyrite?  |                   |                                 | WS14-004-<br>042.54 | 42.54 | 45.54 | 3.00  | 136.5 | Trace? | 1   |
|       |   |        |       |         | 42.88 Pyroxenite, 95% pyroxene phenocrysts, gabbro has intruded pyroxenite, trace chalcopyrite? with 2 mm epidote patches   |                   |                                 |                     |       |       |       |       | Trace? |     |
| 46.57 | 53.36   | 6.79   | Тg    | Gabbro  | Fine grained, dark green gabbro, 70% 1-2 mm pyroxene<br>phenocrysts, 30% 1-3 mm pale green feldspar laths,<br>equigranular texture, moderately magnetic, 2% disseminated<br>magnetite                                       | R ep vlts         |                                 |                     |       |       |       |       | Trace? | 1   |
|       |   |        |       |         | 51.86 2 mm quartz veinlet @ 26° to core axis, trace chalcopyrite?   |                   |                                 | WS14-004-<br>050.36 | 50.36 | 53.36 | 3.00  | 28.6  | Trace? |     |
| 53.36 | 60.05   | 6.69   | Td    | Diorite | Fine grained, grey to pale green diorite dike/sill, 25% 1-3 mm<br>hornblende in a dark grey groundmass, rare inclusions of<br>gabbro, 5% disseminated pyrite as cubes to 1.4 cm   | R carb vlts       |                                 |                     |       |       |       |       |        | 3   |
|       |   |        |       |         | 54.71 1.4 cm pyrite cube  |                   |                                 | WS14-004-<br>053.36 | 53.36 | 56.36 | 3.00  | 96.0  | Trace? | 3   |
|       |   |        |       |         | 55.59 2 mm carbonate veinlet @ 5° to core axis, trace chalcopyrite?   |                   |                                 |                     |       |       |       |       | Trace? |     |
|       |   |        |       |         | 58.65 1-2 cm carbonate veinlet @ 19° to core axis   |                   |                                 |                     |       |       |       |       |        |     |
| 60.05 | 61.68   | 1.63   | Тg    | Gabbro  | Fine grained, dark green gabbro, 70% 1-2 mm pyroxene<br>phenocrysts, 30% 1-3 mm pale green feldspar laths,<br>equigranular texture, moderately magnetic, 2% disseminated<br>magnetite                                       | R ep vlts         |                                 |                     |       |       |       |       |        | 2   |
|       |   | 1      |       |         | 60.15 1 cm epidote veinlet @ 5° to core axis  |                   |                                 |                     |       |       |       |       |        |     |
|       |   |        |       |         | 60.55 1-2 cm epidote/carbonate veinlet @ 10° to core axis   |                   |                                 |                     |       |       |       |       |        |     |
| 61.68 | 62.73   | 1.05   | Td    | Diorite | Fine grained, grey to pale green diorite dike/sill, 25% 1-3 mm hornblende in a dark grey groundmass, rare inclusions of gabbro  | R pervasive<br>ep | Upper<br>contact @<br>27° to ca |                     |       |       |       |       |        | 1   |
| 62.73 | 76.59   | 13.86  | Тg    | Gabbro  | Medium grained, dark green gabbro, 70% 1-2 mm pyroxene<br>phenocrysts, 30% 1-4 mm pale green feldspar laths, weak<br>porphyritic texture, rare sections massive pyroxenite, strongly<br>magnetic, 3% disseminated magnetite | R carb, ep vlts   |                                 |                     |       |       |       |       |        | 2   |
|       |   |        |       |         | 63.26 5 mm epidote veinlets @ 24° to core axis  |                   |                                 |                     |       |       |       |       |        |     |
|       |   |        |       |         | 63.28 5 x 5 cm angular inclusion greenish sediment?   |                   |                                 |                     |       |       |       |       |        |     |
|       | 68.34 1 cm carbonate veinlet @ 18° to core axis |        |       |         | 68.34 1 cm carbonate veinlet @ 18° to core axis   |                   |                                 |                     |       |       |       |       |        |     |
|       |   |        |       |         | 73.72-73.94 Grey diorite dike/sill  |                   |                                 |                     |       |       |       |       |        |     |

|       |       |      |      |            |   | Duciestu   | A/la:                                     |                     |       |       |       |       | WS14 | -004 |
|-------|-------|------|------|------------|---|--|---|---------------------|-------|-------|-------|-------|------|------|
|       |       |      | GOI  |            | esource Corporation   | Project: V   | wnipsaw                                   |                     |       | CORE  | SAMPL | ING   |      |      |
|       |       |      |      |            | GEOLOGY   | -  |   |                     | A     | SSAY  |       |       |      |      |
| FrM   | ТоМ   | IntM | RocU | Rock       | Texture   | Alteration   | Structure                                 | Sample              | From  | То    | Int   | Cu    | Сру  | Ру   |
|       |       |      |      |            |   |  |   | #                   | m     | m     | m     | ppm   | %    | %    |
| 76.59 | 79.53 | 2.94 | Тg   | Gabbro     | Fine grained, dark green gabbro, 90% 1-2 mm pyroxene<br>phenocrysts, <10% 1-3 mm pale green feldspar laths,<br>equigranular texture, some sections massive pyroxenite,<br>moderately magnetic | W ep/carb/py<br>vlts, qtz vlts<br>cut ep vlts, W<br>pervasive ep,<br>W-M chl |   |                     |       |       |       |       |      | 1    |
|       |       |      |      |            | 78.40 2, 2 cm quartz veinlets @ 69° to core axis  | 1  |   |                     |       |       |       |       |      |      |
|       |       |      |      |            | 78.48 1-3 cm carbonate veinlet, strong pervasive epidote along margins of veinlet   |  |   |                     |       |       |       |       |      |      |
|       |       |      |      |            | 78.23-78.28 Fault, green chloritic gouge  |  |   |                     |       |       |       |       |      |      |
| 79.53 | 86.26 | 6.73 | Td   | Diorite    | Fine grained, grey to pale green diorite dike/sill, 5% 1-4 mm<br>hornblende, 40% 1-5 mm white feldspar in a dark grey<br>groundmass, bottom 0.8 m hard, silicified                            | W pervasive<br>ep  |   |                     |       |       |       |       |      | 2    |
|       |       |      |      |            | 80.78-81.33 Fault, green gouge  |  |   |                     |       |       |       |       |      |      |
| 86.26 | 87.38 | 1.12 | Тр   | Pyroxenite | Coarse grained, dark green to black massive pyroxenite, >95%<br>2-4 mm pyroxene phenocrysts, <5% 1-3 mm pale green feldspar<br>laths  | W ep vlts  |   |                     |       |       |       |       |      | 0.5  |
| 87.38 | 88.23 | 0.85 | Td   | Diorite    | Fine grained, pale green diorite dike/sill, 5% 1-4 mm hbl, 40% 1-<br>5 mm white feldspar in a dark grey groundmass, weakly silicified   | W chl  |   |                     |       |       |       |       |      | 4    |
|       |       |      |      |            | 87.58-87.78 Fault, green chloritic gouge  |  |   |                     |       |       |       |       |      |      |
| 88.23 | 89.43 | 1.20 | F    | Fault      | Fault, green chloritic gouge  |  |   | WS14-004-<br>088.23 | 88.23 | 89.43 | 1.20  | 69.3  |      |      |
| 89.43 | 89.74 | 0.31 | Dm   | Mafic dyke | Fine grained, black mafic dyke, strong chlorite alteration, strongly magnetic, rare 1-2 mm veinlets with pinkish mineral  | S chl, R carb<br>F   |   |                     |       |       |       |       |      |      |
| 89.74 | 90.11 | 0.37 | F    | Fault      | Fault, strong chlorite alteration, rock fragments of diorite dike/sill  | S chl  |   |                     |       |       |       |       |      |      |
| 90.11 | 90.48 | 0.37 | Dm   | Mafic dyke | Fine grained, black mafic dyke, strong chlorite alteration, strongly magnetic, rare patchy calcite  | S chl  | Upper<br>contact @<br>15° to core<br>axis |                     |       |       |       |       |      |      |
| 90.48 | 91.45 | 0.97 | F    | Fault      | Fault, strong chlorite alteration, rock fragments of diorite dike/sill  | S chl  |   |                     |       |       |       |       |      |      |
| 91.45 | 92.88 | 1.43 | Dm   | Mafic dyke | Fine grained, black mafic dyke, strong chlorite alteration, strongly magnetic, weak 1-4 mm reddish carbonate veinlets   | S chl  |   | WS14-004-<br>091.45 | 91.45 | 92.88 | 1.43  | 122.0 |      |      |
| 92.88 | 93.15 | 0.27 | F    | Fault      | Fault, strong chlorite alteration, pyroxenite?  | S chl  |   |                     |       |       |       |       |      | Γ    |

|        |        |          | Cal  | daliff D   | acquirac Corporation   | Drojact: \                            | Nhinoow   |                     |           |         |          |           | WS14-    | -004    |
|--------|--------|----------|------|------------|--|---------------------------------------|-----------|---------------------|-----------|---------|----------|-----------|----------|---------|
|        |        |          | GOI  |            |  | Project. V                            | mpsaw     |                     |           | CORE    | SAMPL    | ING       |          |         |
|        |        |          |      |            | GEOLOGY  |                                       |           |                     | Α         | SSAY    |          |           |          |         |
| FrM    | ТоМ    | IntM     | RocU | Rock       | Texture  | Alteration                            | Structure | Sample<br>#         | From<br>m | To<br>m | Int<br>m | Cu<br>ppm | Сру<br>% | Ру<br>% |
| 93.15  | 94.77  | 1.62     | Dm   | Mafic dyke | Fine grained, black mafic dyke, strong chlorite alteration, strongly magnetic, rare 1-2 mm veinlets with pinkish mineral   | S chl                                 |           |                     |           |         |          |           |          |         |
| 94.77  | 105.77 | 11.00    | Тр   | Pyroxenite | Coarse grained, dark green to black massive pyroxenite, >95%<br>2-4 mm pyroxene phenocrysts, <5% 1-3 mm pale green feldspar<br>laths, strongly magnetic  | W carb/ep<br>vlts, R qtz vlts         |           |                     |           |         |          |           | Trace    | 1       |
|        |        |          |      |            | 94.77-98.14 Strongly chlorite altered zone, rare fragments of pyroxenite   |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            | 98.44 Medium grained gabbro intrudes pyroxenite  |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            | 102.32 Carbonate veinlet @ 39° to core axis, trace chalcopyrite?   |                                       |           | WS14-004-<br>099.77 | 99.77     | 102.77  | 3.00     | 21.3      | Trace?   |         |
|        |        |          |      |            | 103.04 Carbonate veinlet, trace chalcopyrite   |                                       |           | WS14-004-<br>102.77 | 102.77    | 105.77  | 3.00     | 305.0     | Trace    |         |
|        |        |          |      |            | 103.78-105.77 Moderate epidote alteration, disrupted, diorite? dike/sill intruding pyroxenite  |                                       |           |                     |           |         |          |           |          |         |
| 105.77 | 107.24 | 1.47     | Tg   | Gabbro     | Fine grained, dark green gabbro, 90% 1-2 mm pyroxene phenocrysts, <10% 1-3 mm pale green feldspar laths, equigranular texture  | R carb, qtz<br>vlts                   |           |                     |           |         |          |           |          | 2       |
| 107.24 | 133.20 | 25.96    | Td   | Diorite    | Fine grained, grey to pale green, diorite, 10% 1-3 mm needle<br>like hornblende, 1% biotite flakes, 20% <1-3 mm porphyritic<br>feldspar in a dark grey groundmass, weakly magnetic, weak<br>patchy epidote with pyrite | R carb/qtz<br>vlts, W<br>pervasive ep |           |                     |           |         |          |           | Trace    | 2       |
|        |        |          |      |            | 107.24-115.52 Weak inclusions of gabbro  |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            | 107.24-119.98 Contact zone? bleaching, weak pervasive epidote  | W pervasive<br>ep                     |           |                     |           |         |          |           |          |         |
|        |        |          |      |            | 114.54 5 mm epidote patch, pyrite, trace chalcopyrite  |                                       |           | WS14-004-<br>113.04 | 113.04    | 116.04  | 3.00     | 150.5     | Trace    | 2       |
|        |        |          |      |            |  |                                       |           |                     |           |         |          |           |          |         |
| 133.20 |        |          |      |            | End Of Hole  |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            |  |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            |  |                                       | ļ         |                     |           |         |          |           |          |         |
|        |        | <u> </u> |      |            |  |                                       |           |                     |           |         |          |           |          |         |
|        |        | <u> </u> | I    |            | 1  |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            |  |                                       |           |                     |           |         |          |           |          |         |
| ——     |        |          |      |            |  |                                       |           |                     |           |         |          |           |          |         |
|        |        |          |      |            |  |                                       |           |                     |           |         |          |           |          |         |

APPENDIX II



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#### To: BADGER MINERALS 580 HORNBY STREET VANCOUVER BC V6C 3B6

Page: 1 Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 2-SEP-2014 This copy reported on 4-SEP-2014 Account: BADGMIN

CERTIFICATE KL14124509

Project: WS14-001 to WS14-004 P.O. No.: Whipsaw Drilling This report is for 40 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 20-AUG-2014. The following have access to data associated with this certificate: GRANT CROOKER

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

|           | ANALYTICAL PROCEDU        | RES        |
|-----------|---------------------------|------------|
| ALS CODE  | DESCRIPTION               | INSTRUMENT |
| PGM-ICP23 | Pt, Pd, Au 30g FA ICP     | ICP-AES    |
| ME-MS41   | 51 anal. aqua regia ICPMS |            |

To: BADGER MINERALS ATTN: GRANT CROOKER 580 HORNBY STREET VANCOUVER BC V6C 3B6

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

Signature: Colin Ramshaw, Vancouver Laboratory Manager

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



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Page: 2 - A Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 2-SEP-2014 Account: BADGMIN

Project: WS14-001 to WS14-004

|                    | Method              | WEI-21<br>Recvd Wt. | ME-MS41<br>Ag | ME-MS41<br>AL | ME-MS41<br>As | ME-MS41<br>Au | ME-MS41<br>8 | ME-MS41<br>Ba | ME-MS41<br>Be | ME-MS41<br>Bi | ME-MS41<br>Ca | ME-MS41<br>Cd | ME-M541<br>Ce | ME-MS41<br>Co | ME-MS41<br>Cr | ME-MS41<br>Cs |
|--------------------|---------------------|---------------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sample Description | Units<br>LOR        | kg<br>0.02          | ppm<br>0.01   | %<br>0.01     | ppm<br>0.1    | ppm<br>0.2    | ppm<br>10    | ppm<br>10     | ppm<br>0.05   | ppm<br>0.01   | %<br>0.01     | ppm<br>0.01   | ppm<br>0.02   | ppm<br>0.1    | ppm<br>1      | ppm<br>0.05   |
| WS14-001-033.19    |                     | 5.30                | 0.15          | 1.87          | 0.8           | <0.2          | <10          | 100           | 0.47          | 0.01          | 3.03          | 0.05          | 12.35         | 24.7          | 44            | 1.00          |
| WS14-001-079.57    |                     | 1,47                | 0.07          | 1.88          | 0.9           | <0.2          | <10          | 40            | 0.55          | 0.01          | 3.77          | 0.06          | 15.80         | 33.9          | 139           | 0.44          |
| WS14-001-100.69    |                     | 5.67                | 0.28          | 1.58          | 0.3           | <0.2          | <10          | 100           | 0.27          | 0.01          | 2.60          | 0.08          | 12.70         | 18.5          | 34            | 0.26          |
| WS14-001-122.64    | · · · · · · · · · · | 2.94                | 0.07          | 0.98          | 0.3           | <0.2          | <10          | 120           | 0.29          | 0.02          | 2.55          | 0.05          | 9.13          | 11.4          | 10            | 0.49          |
| WS14-001-125.03    |                     | 4.06                | 0.07          | 2.27          | 0.6           | <0.2          | <10          | 50            | 0.50          | 0.01          | 3.00          | 0.08          | 11.90         | 22.2          | 84            | 0.17          |
| WS14-001-128.03    |                     | 1.41                | 0.08          | 2.08          | 1.3           | <0.2          | <10          | 50            | 0.50          | 0.02          | 3.11          | 0.07          | 15.35         | 24.2          | 117           | 0.20          |
| W\$14-001-140.44   |                     | 6.37                | 0.10          | 2.31          | 0.3           | <0.2          | <10          | 60            | 0.15          | 0.01          | 3.68          | 0.08          | 1.55          | 21.6          | 210           | 1.53          |
| WS14-001-163.92    |                     | 1.29                | 0.08          | 3.31          | 0.2           | <0.2          | <10          | 50            | 0.12          | 0.01          | 0.88          | 0.04          | 1.55          | 27.7          | 239           | 1.71          |
| WS14-001-184.62    |                     | 6.80                | 0.08          | 1.88          | 4.3           | <0.2          | <10          | 70            | 0.21          | 0.03          | 3.12          | 0.06          | 7.58          | 23.4          | 104           | 0.06          |
| WS14-001-210.62    |                     | 5.73                | 0.09          | 2.23          | 12.3          | <0.2          | <10          | 180           | 0.30          | 0.01          | 4.33          | 0.04          | 10.55         | 24.3          | 91            | 0.11          |
| WS14-002-028.98    |                     | 6.97                | 0.36          | 3.51          | 0.4           | <0.2          | <10          | 210           | 0.24          | 0.01          | 3.33          | 0.13          | 4.31          | 45,6          | 77            | 1.43          |
| WS14-002-036.77    | ·                   | 5.83                | 0.16          | 3.25          | 0.7           | <0.2          | <10          | 290           | 0.30          | 0.01          | 2.42          | 0.06          | 11.95         | 35.1          | 118           | 1.27          |
| WS14-002-039.68    |                     | 6.84                | 0.05          | 3.21          | 0.4           | <0.2          | <10          | 120           | 0.31          | 0.01          | 3.16          | 0.07          | 17.60         | 31.3          | 198           | 0.34          |
| WS14-002-048.68    |                     | 7.99                | 0.09          | 1.26          | 0.2           | <0.2          | <10          | 110           | 0.22          | 0.01          | 2.64          | 0.07          | 7.88          | 15.4          | 24            | 0.32          |
| WS14-002-052.79    | 1                   | 3.01                | 0.38          | 2.93          | 1.8           | <0.2          | <10          | 110           | 0.31          | 0.02          | 2.29          | 0.20          | 11.45         | 37.8          | 60            | 0.81          |
| WS14-002-073.08    |                     | 6.82                | 0.09          | 2.03          | 0.6           | <0.2          | <10          | 230           | 0.31          | 0.01          | 2.60          | 0.04          | 8.06          | 19.3          | 21            | 1.06          |
| WS14-002-097.87    |                     | 6.00                | 0.36          | 2.25          | 15.6          | <0.2          | <10          | 40            | 0.15          | 0.04          | 2.95          | 0.22          | 12.85         | 51.8          | 88            | < 0.05        |
| WS14-002-147.03    |                     | 1.38                | 0.10          | 2,59          | 3.3           | <0.2          | <10          | 130           | 0.26          | 0.02          | 2.59          | 0.11          | 18.30         | 24.2          | 70            | 0.16          |
| WS14-002-178.03    |                     | 1.33                | 0.06          | 2,17          | 2.6           | <0.2          | <10          | 40            | 0.24          | < 0.01        | 1.01          | 0.07          | 10.75         | 19.8          | 92            | 0.08          |
| WS14-002-187.06    | 1 + j1              | 2.03                | 0.03          | 2.16          | 1.3           | <0.2          | <10          | 30            | 0.24          | 0.01          | 1.56          | 0.06          | 11.30         | 22.0          | 100           | 0,20          |
| WS14-003-024.67    |                     | 3.24                | 0.08          | 4.72          | 3.7           | <0.2          | <10          | 60            | 0.46          | 0.02          | 3.03          | 0.14          | 14.80         | 31.0          | 110           | 0.93          |
| WS14-003-042.12    | C                   | 5.97                | 0.08          | 3.68          | 4.8           | <0.2          | <10          | 50            | 0.27          | 0.01          | 2.46          | 0.08          | 10.35         | 30.3          | 210           | 0.53          |
| WS14-003-055.10    |                     | 4.75                | 0.07          | 5.10          | 0.3           | <0.2          | <10          | 150           | 0.58          | 0.01          | 2.64          | 0.11          | 15.20         | 34.3          | 221           | 2.23          |
| WS14-003-075.46    |                     | 6.69                | 0.05          | 3.94          | 2.3           | <0.2          | <10          | 210           | 0.50          | 0.01          | 3.55          | 0.11          | 19.60         | 31.7          | 169           | 1.38          |
| WS14-003-118.25    |                     | 1.21                | 0.07          | 2.36          | 0.5           | <0.2          | <10          | 140           | 0.42          | 0.05          | 2.62          | 0.09          | 26.9          | 14.1          | 50            | 0.85          |
| WS14-003-120.01    |                     | 3.74                | 0.08          | 3.03          | 1.9           | <0.2          | <10          | 90            | 0.50          | 0.03          | 3.59          | 0.12          | 13,95         | 27,3          | 124           | 1.24          |
| WS14-003-131.83    |                     | 5.32                | 0.11          | 2.47          | 39.3          | <0.2          | <10          | 20            | 0.19          | 0.01          | 3.75          | 0,10          | 8.54          | 34.6          | 224           | < 0.05        |
| WS14-003-140.31    |                     | 1.52                | 0.03          | 0.38          | 7.7           | <0,2          | <10          | 50            | 0.15          | 0.01          | 3.54          | 0.11          | 11.15         | 8.8           | 1             | < 0.05        |
| WS14-003-158.85    |                     | 1.19                | 0.10          | 3.83          | 5.5           | <0.2          | <10          | 190           | 0.62          | 0.04          | 2.21          | 0.11          | 24.3          | 27.7          | 163           | 3.51          |
| WS14-003-177.35    |                     | 4.27                | 0.12          | 1.22          | 16.9          | <0.2          | <10          | 40            | 0.29          | 0.03          | 2.82          | 0.13          | 16.60         | 24.4          | 31            | 0.29          |
| WS14-003-190.66    |                     | 1.30                | 0.10          | 0.49          | 14.8          | <0.2          | <10          | 80            | 0.13          | 0.04          | 2.30          | 0.17          | 14.00         | 23.2          | 9             | 0.05          |
| WS14-004-009.54    |                     | 7.11                | 0.03          | 2.57          | 0.5           | <0.2          | <10          | 120           | 0.22          | < 0.01        | 2.78          | 0.04          | 7.33          | 25.8          | 35            | 0.40          |
| WS14-004-042.54    |                     | 6.68                | 0.10          | 2.59          | 0.6           | <0.2          | <10          | 140           | 0.21          | < 0.01        | 2.54          | 0.05          | 11.85         | 26.7          | 29            | 0.51          |
| WS14-004-050.36    |                     | 7.07                | 0.02          | 2.36          | 0.6           | <0.2          | <10          | 80            | 0.18          | < 0.01        | 2.39          | 0.03          | 9.74          | 22.9          | 34            | 0.23          |
| WS14-004-053.36    |                     | 5.21                | 0.08          | 1.44          | 0.7           | <0.2          | <10          | 40            | 0.12          | < 0.01        | 2.86          | 0.04          | 7.84          | 20.7          | 16            | 0.34          |
| WS14-004-088.23    |                     | 1.41                | 0.04          | 3.61          | 1.4           | <0.2          | <10          | 390           | 0.68          | < 0.01        | 2.71          | 0.05          | 29.7          | 39.6          | 497           | 0.51          |
| WS14-004-091.45    | 1.11                | 2.71                | 0.06          | 2.65          | 4.0           | <0.2          | <10          | 160           | 0.90          | 0.03          | 2.32          | 0.05          | 28.7          | 34.2          | 127           | 1.26          |
| WS14-004-099.77    | - 11 I.I.           | 6.08                | 0.02          | 2.64          | 0.6           | <0.2          | <10          | 160           | 0.19          | < 0.01        | 3.39          | 0.04          | 5.43          | 31.8          | 105           | 0.84          |
| WS14-004-102.77    |                     | 5.79                | 0.18          | 2.14          | 1.1           | <0.2          | <10          | 50            | 0.23          | < 0.01        | 4.12          | 0.09          | 12,70         | 33.5          | 106           | 0.40          |
| WS14-004-113.04    |                     | 6.16                | 0.11          | 2.09          | 1.4           | <0.2          | <10          | 100           | 0.36          | < 0.01        | 3.11          | 0.09          | 18.85         | 27.3          | 79            | 0.33          |



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#### To: BADGER MINERALS 580 HORNBY STREET VANCOUVER BC V6C 3B6

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Project: WS14-001 to WS14-004

|                    | Method<br>Analyte<br>Units | ME-MS41<br>Cu<br>ppm | ME-MS41<br>Fe<br>% | ME-MS41<br>Ga<br>ppm | ME-MS41<br>Ge<br>ppm | ME-MS41<br>Hf<br>opm | ME-MS41<br>Hg<br>ppm | ME-MS41<br>In<br>ppm | ME-MS41<br>K<br>% | ME-MS41<br>La<br>ppm | ME-MS41<br>Li<br>ppm | ME-MS41<br>Mg<br>% | ME-MS41<br>Mn<br>ppm | ME-MS41<br>Mo<br>ppm | ME-MS41<br>Na<br>% | ME-MS41<br>Nb<br>ppm |
|--------------------|----------------------------|----------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------------------|----------------------|--------------------|----------------------|----------------------|--------------------|----------------------|
| Sample Description | LOR                        | 0.2                  | 0.01               | 0.05                 | 0.05                 | 0.02                 | 0.01                 | 0.005                | 0.01              | 0.2                  | 0.1                  | 0.01               | 5                    | 0.05                 | 0.01               | 0.05                 |
| WS14-001-033.19    | -                          | 116.5                | 3.29               | 4.98                 | 0.08                 | 0.18                 | 0.08                 | 0.010                | 0.90              | 5.8                  | 9,9                  | 1.65               | 557                  | 0.49                 | 0.05               | 0.20                 |
| WS14-001-079.57    | I I                        | 63.4                 | 2.42               | 3.95                 | 0.07                 | 0,40                 | 0.04                 | 0.009                | 0.54              | 6.8                  | 10.3                 | 1.78               | 577                  | 0.29                 | 0.05               | 0.44                 |
| WS14-001-100.69    |                            | 375                  | 2.92               | 3.89                 | <0.05                | 0.11                 | 0.03                 | 0.007                | 0.50              | 7.1                  | 7.7                  | 1.47               | 642                  | 0.34                 | 0.05               | 0.07                 |
| WS14-001-122.64    |                            | 57.3                 | 1.85               | 3.42                 | < 0.05               | 0.10                 | 0.04                 | 0.009                | 0.60              | 4.4                  | 4.6                  | 0.67               | 493                  | 0.08                 | 0.06               | 0.07                 |
| WS14-001-125.03    |                            | 52.2                 | 3.04               | 5.09                 | 0.05                 | 0.16                 | 0.03                 | 0.011                | 0.38              | 5.1                  | 12.9                 | 2.22               | 619                  | 0.36                 | 0.05               | 0.22                 |
| WS14-001-128.03    | 1.1                        | 61.1                 | 2.75               | 4.31                 | 0.05                 | 0.21                 | 0.05                 | 0.008                | 0.40              | 6.7                  | 10.3                 | 1.96               | 544                  | 3.50                 | 0.05               | 0.38                 |
| WS14-001-140.44    |                            | 101.0                | 3.17               | 4.11                 | 0.08                 | 0.08                 | 0.06                 | 0.007                | 0.87              | 0.6                  | 12.4                 | 2.28               | 623                  | 0.19                 | 0.06               | < 0.05               |
| WS14-001-163.92    |                            | 115.0                | 4.22               | 6.54                 | 0.08                 | 0.05                 | 0.04                 | 0.006                | 0.88              | 0.6                  | 21.1                 | 3.87               | 595                  | 0.08                 | 0.05               | < 0.05               |
| WS14-001-184.62    |                            | 69.0                 | 3.13               | 3.72                 | < 0.05               | 0.11                 | 0.04                 | 0.009                | 0.17              | 3.4                  | 7.7                  | 1.62               | 465                  | 2.12                 | 0.06               | 0.21                 |
| WS14-001-210.62    |                            | 33.0                 | 3.59               | 5.06                 | <0.05                | 0.13                 | 0.04                 | 0.008                | 0.34              | 4.6                  | 9.4                  | 1.78               | 702                  | 0.87                 | 0.05               | 0.32                 |
| WS14-002-028.98    |                            | 696                  | 8.41               | 10.75                | 0.19                 | 0.20                 | 0.02                 | 0.024                | 1.34              | 1.6                  | 13.7                 | 4.24               | 994                  | 0.07                 | 0.06               | < 0.05               |
| WS14-002-036.77    |                            | 298                  | 5.82               | 8.59                 | 0.11                 | 0.18                 | 0.02                 | 0.020                | 1.33              | 4.9                  | 12.9                 | 3.52               | 839                  | 0.22                 | 0.07               | 0.10                 |
| WS14-002-039.68    |                            | 73.2                 | 4.52               | 8.13                 | 0.08                 | 0,19                 | 0.02                 | 0.022                | 0.61              | 7.4                  | 12.3                 | 3.90               | 851                  | 0.29                 | 0.05               | 0.10                 |
| WS14-002-048.68    |                            | 155.5                | 2.53               | 3.89                 | 0.06                 | 0,18                 | 0.02                 | 0.013                | 0.45              | 3.7                  | 3.4                  | 1.26               | 578                  | 0.09                 | 0.07               | 0.08                 |
| WS14-002-052.79    | a straight de p            | 781                  | 6.54               | 6.83                 | 0.09                 | 0.18                 | 0.01                 | 0.020                | 1.24              | 4.7                  | 11.8                 | 3.01               | 852                  | 0.46                 | 0.05               | 0.14                 |
| WS14-002-073.08    |                            | 115.5                | 3.57               | 6.05                 | 0.08                 | 0,15                 | < 0.01               | 0.007                | 1.19              | 4.4                  | 8.2                  | 1.97               | 659                  | 0.11                 | 0.06               | <0.05                |
| WS14-002-097.87    |                            | 953                  | 5.89               | 4,91                 | 0.08                 | 0,19                 | 0.01                 | 0.011                | 0.11              | 6.0                  | 6.7                  | 2.27               | 612                  | 7.64                 | 0.03               | 0.13                 |
| WS14-002-147.03    |                            | 148.0                | 4.76               | 6,51                 | 0.05                 | 0.11                 | 0.01                 | 0.020                | 0.22              | 8.4                  | 8.3                  | 2.47               | 771                  | 4.64                 | 0.04               | 0.08                 |
| WS14-002-178.03    | ·                          | 78.7                 | 2.91               | 4.31                 | <0.05                | 0.09                 | < 0.01               | 0.008                | 0.15              | 4.9                  | 8.8                  | 2.01               | 426                  | 1.09                 | 0.06               | 0.12                 |
| W\$14-002-187.06   |                            | 50.9                 | 3.30               | 4.34                 | <0.05                | 0.11                 | 0.01                 | 0.014                | 0.16              | 4.8                  | 8.8                  | 2.35               | 525                  | 1.09                 | 0.05               | 0.10                 |
| WS14-003-024.67    | 1.11                       | 143.5                | 6.08               | 12.45                | 0.15                 | 0.06                 | 0.01                 | 0.052                | 0.83              | 6.3                  | 30.8                 | 5.91               | 906                  | 0.27                 | 0.02               | <0.05                |
| WS14-003-042.12    |                            | 131.0                | 5.26               | 10.20                | 0.12                 | 0.09                 | 0.01                 | 0.032                | 0.39              | 4.4                  | 25.3                 | 4.57               | 782                  | 0.22                 | 0.03               | < 0.05               |
| WS14-003-055.10    |                            | 122.0                | 6.83               | 13.20                | 0.21                 | 0.07                 | < 0.01               | 0.045                | 1.60              | 6.8                  | 38.3                 | 6.56               | 997                  | 0.14                 | 0.02               | <0.05                |
| WS14-003-075.46    | ·                          | 100.5                | 6.14               | 12.70                | 0.17                 | 0.07                 | 0.01                 | 0.056                | 1.09              | 8.7                  | 31.3                 | 4.56               | 1100                 | 0.38                 | 0.04               | <0.05                |
| WS14-003-118.25    |                            | 55.7                 | 4.27               | 6.99                 | 0.11                 | 0.36                 | <0.01                | 0.039                | 0.27              | 11.5                 | 10.5                 | 2.01               | 601                  | 0.44                 | 0.31               | <0.05                |
| WS14-003-120.01    |                            | 122.5                | 5.80               | 10.25                | 0.09                 | 0.15                 | <0.01                | 0.052                | 0.33              | 6.1                  | 21.9                 | 4.46               | 843                  | 0.21                 | 0.03               | <0.05                |
| WS14-003-131.83    |                            | 77.1                 | 5.60               | 6.52                 | 0.06                 | 0.03                 | < 0.01               | 0.037                | 0.07              | 3.8                  | 30.7                 | 6.48               | 1240                 | 0.19                 | 0.03               | <0.05                |
| WS14-003-140.31    |                            | 18.4                 | 3.78               | 1.02                 | <0.05                | 0.02                 | < 0.01               | 0.023                | 0.15              | 4.9                  | 1.1                  | 1.19               | 790                  | 0.50                 | 0.08               | < 0.05               |
| WS14-003-158.85    |                            | 103.5                | 5.73               | 12.05                | 0.20                 | 0.05                 | < 0.01               | 0.048                | 1,50              | 12.0                 | 40.0                 | 4.58               | 887                  | 0.36                 | 0.04               | < 0.05               |
| WS14-003-177.35    |                            | 123.5                | 5.68               | 3,86                 | 0.05                 | 0.03                 | < 0.01               | 0.044                | 0.15              | 7.8                  | 11.9                 | 4.04               | 901                  | 0.30                 | 0.03               | <0.05                |
| WS14-003-190.66    |                            | 129.5                | 4.66               | 1.07                 | 0.05                 | 0.04                 | 0.01                 | 0.028                | 0.25              | 6.9                  | 3.2                  | 3.15               | 780                  | 0.34                 | 0.04               | <0.05                |
| WS14-004-009.54    |                            | 41.6                 | 4.27               | 6.27                 | 0.09                 | 0,17                 | < 0.01               | 0.017                | 0.54              | 3.3                  | 8.5                  | 2.44               | 805                  | 0.08                 | 0.08               | <0.05                |
| WS14-004-042.54    |                            | 136.5                | 4.78               | 6.87                 | 0.09                 | 0.15                 | < 0.01               | 0.018                | 0.56              | 5.5                  | 8.7                  | 2.58               | 879                  | 0.07                 | 0.05               | < 0.05               |
| WS14-004-050.36    |                            | 28,6                 | 3.60               | 5.68                 | 0.07                 | 0.18                 | < 0.01               | 0.015                | 0.32              | 4.4                  | 7.2                  | 2.22               | 678                  | 0.05                 | 0.06               | <0.05                |
| WS14-004-053.36    |                            | 96.0                 | 3.36               | 5.38                 | 0.08                 | 0.13                 | <0.01                | 0.011                | 0.32              | 3.9                  | 4.9                  | 1.67               | 623                  | 0.10                 | 0.07               | <0.05                |
| WS14-004-088.23    | - 11                       | 69.3                 | 4.90               | 11.75                | 0.15                 | 0.15                 | <0.01                | 0.016                | 0.22              | 13.2                 | 16.0                 | 5.08               | 853                  | 1.00                 | 0.01               | 0.06                 |
| WS14-004-091.45    |                            | 122.0                | 5.95               | 9.84                 | 0.16                 | 0.51                 | 0.01                 | 0.042                | 0.34              | 12.7                 | 16.7                 | 2.82               | 553                  | 0.10                 | 0.32               | 0.06                 |
| WS14-004-099.77    |                            | 21.3                 | 5.85               | 6.91                 | 0.14                 | 0.24                 | 0.01                 | 0.034                | 0.92              | 2.1                  | 9.7                  | 3.16               | 636                  | 0.08                 | 0.19               | <0.05                |
| WS14-004-102.77    |                            | 305                  | 4.78               | 5.58                 | 0.12                 | 0.31                 | 0.01                 | 0.022                | 0.33              | 5.3                  | 6.9                  | 2.35               | 598                  | 0.08                 | 0.04               | 0.10                 |
| WS14-004-113.04    |                            | 150.5                | 3.72               | 5.48                 | 0.10                 | 0.29                 | < 0.01               | 0.020                | 0.46              | 9.2                  | 7.7                  | 1.92               | 519                  | 0.31                 | 0.05               | 0.23                 |



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Project: WS14-001 to WS14-004

| WS14-001-033.19  |       | 0.2   | ppm<br>10 | ррт<br>0.2 | Rb<br>ppm<br>0.1 | Re<br>ppm<br>0.001 | 5<br>%<br>0.01 | 5b<br>ppm<br>0.05 | Sc<br>ppm<br>0.1 | Se<br>ppm<br>0.2 | Sn<br>ppm<br>0.2 | Sr<br>ppm<br>0.2 | Ta<br>ppm<br>0.01 | Te<br>ppm<br>0.01 | Th<br>ppm<br>0.2 | Ti<br>%<br>0.005 |
|------------------|-------|-------|-----------|------------|------------------|--------------------|----------------|-------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|
|                  |       | 39.8  | 1860      | 1.1        | 28.6             | 0.001              | 0.45           | 0.22              | 4.4              | 0.5              | 0.3              | 153.5            | <0.01             | 0.01              | 0.8              | 0.308            |
| WS14-001-079.57  |       | 126.5 | 2120      | 1.1        | 14.1             | 0.004              | 0.34           | 0.24              | 3.9              | 0.4              | 0.4              | 129.0            | < 0.01            | 0.01              | 0.9              | 0.384            |
| WS14-001-100.69  |       | 21.0  | 1590      | 0.8        | 12.2             | < 0.001            | 0.81           | 0.14              | 3.3              | 1.7              | 0.2              | 167.5            | < 0.01            | 0.02              | 1.4              | 0.105            |
| WS14-001-122.64  |       | 9.3   | 1590      | 1.6        | 18.5             | < 0.001            | 0.67           | 0.11              | 3.4              | 0.4              | <0.2             | 229              | < 0.01            | < 0.01            | 1.3              | 0.072            |
| WS14-001-125.03  |       | 69.5  | 2080      | 1.1        | 9.1              | 0.002              | 0,10           | 0.18              | 4.6              | 0.6              | 0.4              | 156.0            | <0.01             | 0.01              | 0.5              | 0.333            |
| WS14-001-128.03  |       | 97.3  | 2340      | 1.0        | 10.0             | 0.005              | 0.18           | 0.20              | 3.5              | 0.5              | 0.4              | 139.0            | < 0.01            | <0.01             | 0.8              | 0.325            |
| WS14-001-140.44  |       | 48.6  | 830       | 0.6        | 32.7             | < 0.001            | 0.05           | 0.13              | 6.0              | 0.4              | <0.2             | 107.5            | < 0.01            | < 0.01            | <0.2             | 0.268            |
| WS14-001-163.92  | - 11  | 73.2  | 800       | 0.3        | 29.7             | < 0.001            | 0.05           | 0.07              | 4.8              | 0.4              | <0.2             | 53.9             | < 0.01            | < 0.01            | < 0.2            | 0.258            |
| WS14-001-184.62  |       | 91.8  | 1480      | 0.7        | 3.1              | 0.002              | 0.33           | 0.20              | 3.7              | 1.2              | 0.2              | 69.1             | < 0.01            | 0.01              | 0.7              | 0.242            |
| WS14-001-210.62  | (     | 103.0 | 2030      | 1.0        | 5.7              | < 0.001            | 0.14           | 0.16              | 3.8              | 0.6              | 0.4              | 144.0            | 0.01              | 0.01              | 1.0              | 0.307            |
| WS14-002-028.98  |       | 57.3  | 710       | 0.5        | 32.5             | < 0.001            | 0.11           | 0,16              | 15.8             | 1.0              | 0.4              | 111.5            | < 0.01            | 0.05              | 0.2              | 0.393            |
| WS14-002-036.77  |       | 77.2  | 2560      | 0.7        | 38.7             | 0.001              | 0.50           | 0.19              | 9.7              | 1.4              | 0.3              | 129.0            | < 0.01            | 0.06              | 0.3              | 0.357            |
| WS14-002-039.68  |       | 137.5 | 2030      | 0.6        | 15.2             | 0.001              | 0.05           | 0.15              | 8.8              | 0.5              | 0.3              | 135.5            | < 0.01            | 0.11              | 0.6              | 0.283            |
| WS14-002-048.68  |       | 16.8  | 1460      | 1.0        | 12.4             | < 0.001            | 0.60           | 0.11              | 7.2              | 0.6              | 0.2              | 207              | < 0.01            | 0.01              | 1.0              | 0.137            |
| WS14-002-052.79  | 1000  | 38.1  | 2000      | 0.6        | 36.6             | 0.005              | 1.92           | 0.16              | 10.7             | 4.2              | <0.2             | 109.0            | < 0.01            | 0.11              | 0.2              | 0.329            |
| WS14-002-073.08  |       | 13.7  | 1310      | 1,1        | 28.9             | 0.001              | 0.32           | 0.14              | 4.9              | 0.3              | 0.2              | 155.0            | < 0.01            | 0.01              | 1.4              | 0.162            |
| WS14-002-097.87  |       | 91.6  | 2370      | 0.8        | 2.5              | 0.026              | 3.30           | 0.22              | 6.3              | 8.4              | <0.2             | 104.0            | < 0.01            | 0.31              | 0.5              | 0.191            |
| WS14-002-147.03  |       | 59.7  | 1520      | 1.9        | 4.3              | 0.011              | 0.71           | 0.29              | 8.9              | 1.8              | 0.3              | 166.5            | < 0.01            | 0.09              | 1.6              | 0.186            |
| WS14-002-178.03  |       | 78.4  | 1500      | 1.1        | 3.1              | 0.001              | 0.06           | 0.14              | 3.9              | 0.2              | 0.2              | 73.7             | < 0.01            | 0.03              | 1.0              | 0.179            |
| WS14-002-187.06  |       | 89.5  | 1370      | 0.8        | 3.2              | 0.002              | 0.09           | 0.12              | 5.8              | 0.3              | 0.2              | 75.2             | < 0.01            | 0.03              | 0.9              | 0.167            |
| WS14-003-024.67  |       | 58.8  | 1050      | 2.0        | 22.6             | 0.006              | 0.14           | 0.13              | 28.4             | 1.2              | 0.5              | 135.5            | <0.01             | 0.04              | 1.1              | 0.151            |
| WS14-003-042.12  |       | 95.3  | 930       | 1.3        | 12.4             | 0.004              | 0.17           | 0.12              | 12.4             | 0.8              | 0.3              | 58.7             | < 0.01            | 0.02              | 1.0              | 0.189            |
| WS14-003-055.10  |       | 103.5 | 840       | 3.5        | 44.6             | 0.001              | 0.04           | 0.10              | 32.1             | 0.3              | 0.4              | 147.5            | < 0.01            | 0.02              | 1.1              | 0.218            |
| WS14-003-075.46  |       | 82.3  | 1160      | 2.6        | 23.3             | 0.002              | 0.14           | 0.11              | 29.6             | 1.1              | 0.6              | 207              | < 0.01            | 0.01              | 1.0              | 0.234            |
| W\$14-003-118.25 |       | 27.0  | 1670      | 3.0        | 9.0              | 0.001              | 0.06           | 0.11              | 12.6             | 0.6              | 0.5              | 432              | < 0.01            | 0.02              | 2.0              | 0.125            |
| WS14-003-120.01  |       | 64.6  | 1170      | 3.1        | 9.7              | 0.002              | 0.17           | 0.10              | 26.2             | 0,6              | 0.3              | 229              | < 0.01            | 0.02              | 1.0              | 0.050            |
| WS14-003-131.83  | 1.11  | 126.5 | 780       | 5.2        | 0.8              | 0.001              | 0.08           | 0.10              | 22.9             | 0.4              | <0.2             | 174.5            | < 0.01            | 0.03              | 0.6              | < 0.005          |
| WS14-003-140.31  |       | 3.8   | 1050      | 1.4        | 2.4              | 0.001              | 0.80           | 0.12              | 2.8              | 1.2              | <0.2             | 132.5            | < 0.01            | 0.01              | 0.9              | < 0.005          |
| WS14-003-158.85  |       | 74.4  | 1000      | 5.8        | 44.2             | 0.008              | 0.29           | 0.27              | 28.9             | 1.2              | 0.5              | 127.5            | < 0.01            | 0.06              | 1.4              | 0.212            |
| WS14-003-177.35  | 100   | 40.0  | 1050      | 2.6        | 2.2              | 0.002              | 0,17           | 0.18              | 13.1             | 0.9              | <0.2             | 208              | < 0.01            | 0.05              | 1.5              | <0.005           |
| WS14-003-190.66  |       | 34.6  | 1050      | 3.9        | 3.4              | 0.004              | 0.21           | 0.36              | 7.7              | 1.1              | <0.2             | 191.0            | < 0.01            | 0.07              | 1.4              | <0.005           |
| WS14-004-009.54  |       | 23.3  | 2120      | 0.6        | 9,5              | 0.001              | 0.04           | 0.21              | 9.5              | 0.3              | 0.2              | 174.5            | < 0.01            | 0.01              | 0.2              | 0.183            |
| WS14-004-042.54  |       | 20.8  | 2950      | 0.7        | 11.4             | 0.001              | 0.19           | 0.22              | 10.2             | 0.3              | 0.2              | 186.0            | < 0.01            | 0.01              | 0.5              | 0.160            |
| WS14-004-050.36  |       | 26.1  | 2060      | 0.6        | 6.0              | 0.001              | 0.10           | 0.23              | 8.0              | <0.2             | 0.2              | 183.0            | < 0.01            | 0.01              | 0.6              | 0.153            |
| WS14-004-053.36  | 10.11 | 11.9  | 1560      | 0.6        | 7.5              | 0.001              | 0.75           | 0.13              | 6.9              | 0.7              | 0.2              | -124.5           | < 0.01            | 0.01              | 1.2              | 0.100            |
| W514-004-088.23  |       | 245   | 3230      | 0.6        | 8.2              | 0.004              | 0.19           | 0.17              | 8.9              | 0.6              | 0.5              | 100.5            | < 0.01            | 0.02              | 3.0              | 0.186            |
| WS14-004-091.45  |       | 88.8  | 1640      | 3.4        | 10.1             | 0.001              | 0.06           | 0.30              | 12.0             | 0.5              | 0.6              | 294              | < 0.01            | 0.01              | 1.4              | 0.460            |
| WS14-004-099.77  |       | 62.3  | 1360      | 0.3        | 20.6             | - 0.001            | 0.12           | 0.14              | 22.8             | 0.4              | 0.4              | 125.5            | < 0.01            | 0.06              | 0.3              | 0.296            |
| WS14-004-102.77  |       | 70.2  | 3150      | 0.5        | 7.1              | 0.001              | 0.46           | 0.25              | 12.0             | 1.2              | 0.3              | 120.5            | < 0.01            | 0.04              | 0.5              | 0.286            |
| WS14-004-113.04  |       | 59.9  | 2180      | 0.8        | 13.5             | 0.003              | 0.75           | 0.18              | 7.8              | 1.5              | 0.3              | 114.5            | < 0.01            | 0.03              | 1.2              | 0.251            |



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#### To: BADGER MINERALS 580 HORNBY STREET VANCOUVER BC V6C 3B6

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Project: WS14-001 to WS14-004

### CERTIFICATE OF ANALYSIS KL14124509

| Sample Description | Method<br>Analyte<br>Units | ME-MS41<br>TI<br>ppm | ME-MS41<br>U<br>ppm | ME-MS41<br>V<br>ppm | ME-MS41<br>W<br>ppm | ME-MS41<br>Y<br>ppm | ME-MS41<br>Zn<br>ppm | ME-MS41<br>Zr<br>ppm | PGM-ICP23<br>Au<br>ppm | PGM-ICP23<br>Pt<br>ppm<br>0.005 | PGM-ICP23<br>Pd<br>ppm |  |
|--------------------|----------------------------|----------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|------------------------|---------------------------------|------------------------|--|
|                    | LOK                        | 0.02                 | 0.03                | 08                  | 0.05                | 5.70                | 44                   | 7.6                  | 0.001                  | <0.005                          | 0.002                  |  |
| WS14-001-033.19    |                            | 0.20                 | 6.63                | 53                  | 0.05                | 7.57                | 40                   | 18.0                 | 0.001                  | 40.000                          | 0.002                  |  |
| WS14-001-079.57    |                            | 0.10                 | 0.03                | 52                  | <0.05               | 4.58                | 40                   | 3.2                  | 0.003                  | <0.005                          | 0.008                  |  |
| WS14-001-100.09    |                            | 0.09                 | 0.34                | 40                  | <0.05               | 3 35                | 27                   | 25                   | 0.000                  | 40.000                          | 0.000                  |  |
| WS14-001-122.04    |                            | 0.07                 | 0.45                | 40                  | <0.05               | 8 59                | 42                   | 49                   |                        |                                 |                        |  |
| WS14-001-129.03    |                            | 0.00                 | 0.05                | 40                  | 0.00                | 7.40                | 20                   | 7.0                  |                        | _                               |                        |  |
| WS14-001-128.03    |                            | 0.00                 | 0.25                | 42                  | <0.05               | 2.66                | 30                   | 1.0                  |                        |                                 |                        |  |
| WS14-001-140.44    |                            | 0.25                 | 0.07                | 447                 | <0.05               | 3.00                | 35                   | 0.0                  |                        |                                 |                        |  |
| WS14-001-103.92    |                            | 0.19                 | 0.05                | 50                  | 0.03                | 5.57                | 45                   | 2.2                  |                        |                                 |                        |  |
| WS14-001-184.02    | 20 million (               | 0.05                 | 0.20                | 48                  | 0.08                | 7.08                | 43                   | 3.1                  |                        |                                 |                        |  |
| W314-001-210.02    |                            | 0.00                 | 0.10                | 40                  | 0.00                | 7.00                | 45                   | 0.1                  |                        |                                 |                        |  |
| WS14-002-028.98    |                            | 0.18                 | 0.18                | 395                 | <0.05               | 8.08                | 75                   | 4.9                  | 0.000                  | 0.045                           | 0.024                  |  |
| WS14-002-036.77    |                            | 0.22                 | 0.21                | 224                 | 0.05                | 8.64                | 74                   | 5.4                  | 0.002                  | 0.015                           | 0.034                  |  |
| WS14-002-039.68    | - U                        | 0.08                 | 0.29                | 111                 | <0.05               | 9.47                | 57                   | 5.4                  |                        |                                 |                        |  |
| WS14-002-048.68    |                            | 0.08                 | 0.43                | 11                  | <0.05               | 5.42                | 33                   | 4./                  |                        |                                 |                        |  |
| WS14-002-052.79    |                            | 0.21                 | 0.30                | 189                 | <0.05               | 12.55               | 119                  | 3.8                  |                        |                                 |                        |  |
| WS14-002-073.08    |                            | 0.18                 | 0.30                | 109                 | <0.05               | 3.81                | 64                   | 3.7                  |                        |                                 |                        |  |
| WS14-002-097.87    |                            | 0.02                 | 0.39                | 100                 | 0.07                | 11.15               | 52                   | 4.0                  | 0.007                  | 0.010                           | 0.024                  |  |
| WS14-002-147.03    |                            | 0.08                 | 0.53                | 115                 | < 0.05              | 12.15               | 81                   | 2.2                  |                        |                                 |                        |  |
| WS14-002-178.03    |                            | 0.02                 | 0.37                | 48                  | < 0.05              | 5.51                | 36                   | 1.9                  |                        |                                 |                        |  |
| WS14-002-187.06    | - mar 1                    | 0.02                 | 0.37                | 52                  | <0.05               | 6.94                | 38                   | 2.0                  |                        |                                 |                        |  |
| WS14-003-024.67    |                            | 0.10                 | 0.19                | 261                 | <0.05               | 13.85               | 68                   | 2.2                  |                        |                                 |                        |  |
| WS14-003-042,12    |                            | 0.06                 | 0.17                | 191                 | 0.06                | 8.42                | 158                  | 2.9                  |                        |                                 |                        |  |
| WS14-003-055.10    |                            | 0.17                 | 0.11                | 259                 | < 0.05              | 7.67                | 116                  | 2.0                  |                        |                                 |                        |  |
| WS14-003-075.46    | T                          | 0.12                 | 0.13                | 232                 | < 0.05              | 14.90               | 66                   | 1.5                  | 0.001                  | <0.005                          | 0.005                  |  |
| WS14-003-118.25    |                            | 0.07                 | 0.61                | 124                 | <0.05               | 10.40               | 86                   | 11.8                 |                        |                                 |                        |  |
| WS14-003-120.01    |                            | 0.06                 | 0.24                | 226                 | < 0.05              | 6.18                | 70                   | 4.8                  |                        |                                 |                        |  |
| WS14-003-131.83    | 1.1                        | < 0.02               | 0.09                | 124                 | <0.05               | 3.12                | 61                   | 1.6                  | 0.002                  | 0.010                           | 0.011                  |  |
| WS14-003-140.31    |                            | <0.02                | 0.08                | 7                   | <0.05               | 7.49                | 73                   | 1.5                  |                        |                                 |                        |  |
| WS14-003-158.85    | _                          | 0.22                 | 0.12                | 246                 | <0.05               | 7.20                | 71                   | 1.6                  |                        |                                 |                        |  |
| WS14-003-177.35    |                            | <0.02                | 0.19                | 76                  | <0.05               | 4.90                | 90                   | 1.4                  |                        |                                 |                        |  |
| WS14-003-190.66    |                            | 0.03                 | 0.18                | 18                  | <0.05               | 5.06                | 67                   | 1.7                  |                        |                                 |                        |  |
| WS14-004-009.54    |                            | 0.05                 | 0.12                | 154                 | 0.05                | 5.62                | 61                   | 3,9                  |                        |                                 |                        |  |
| WS14-004-042.54    |                            | 0.07                 | 0.21                | 167                 | <0.05               | 7.02                | 67                   | 3.1                  |                        |                                 |                        |  |
| WS14-004-050.36    |                            | 0.04                 | 0.17                | 116                 | < 0.05              | 5.55                | 50                   | 3.6                  |                        |                                 |                        |  |
| WS14-004-053.36    | 1.11                       | 0.04                 | 0.37                | 99                  | <0.05               | 4.43                | 36                   | 3.1                  |                        |                                 |                        |  |
| WS14-004-088.23    | 11                         | 0.05                 | 0.61                | 102                 | 0.07                | 7.91                | 70                   | 4.5                  | Pag. 10                |                                 |                        |  |
| WS14-004-091.45    |                            | 0.09                 | 0.47                | 222                 | <0.05               | 7.74                | 110                  | 20.5                 | < 0.001                | <0.005                          | 0.002                  |  |
| WS14-004-099.77    |                            | 0.11                 | 0.13                | 249                 | <0.05               | 6.95                | 73                   | 6.5                  |                        |                                 |                        |  |
| WS14-004-102.77    |                            | 0.05                 | 0.21                | 153                 | 0.06                | 8.31                | 56                   | 8.3                  | 0.001                  | 0.005                           | 0.038                  |  |
| WS14-004-113.04    |                            | 0.09                 | 0.72                | 95                  | <0.05               | 7.91                | 54                   | 8.5                  |                        |                                 |                        |  |

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



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Project: WS14-001 to WS14-004

| _                  |                         | CERTIFICATE COM                        | IMENTS                               |        |
|--------------------|-------------------------|--|--------------------------------------|--------|
|                    | Cold determinations by  | ANALY                                  | TICAL COMMENTS                       | n)     |
| Applies to Method: | ME-MS41                 | ans method are senni quantitative due  | to the small sample neight asso (ors | ,,     |
|                    |                         | LABOR                                  | ATORY ADDRESSES                      |        |
| Car warmen         | Processed at ALS Kamloo | ops located at 2953 Shuswap Drive, Ka  | mloops, BC, Canada.                  |        |
| Applies to Method: | CRU-31<br>PUL-QC        | CRU-QC<br>SPL-21                       | WEI-21                               | PUL-31 |
|                    | Processed at ALS Vancou | iver located at 2103 Dollarton Hwy, No | orth Vancouver, BC, Canada.          |        |
| Applies to Method: | ME-MS41                 | PGM-ICP23                              |                                      |        |
|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |
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|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |
|                    |                         |  |                                      |        |

APPENDIX III

**COST STATEMENT** 

## **COST STATEMENT**

### SALARIES

| Grant Crooker, Geologist<br>Field, June 5-August 21, 2014  |                 |
|--|-----------------|
| 29 days @ \$ 700.00/day<br>Reporting   | \$<br>20,300.00 |
| 10 days @ \$ 700.00/day  | 7,000.00        |
| Sam Zastavnikovich, Geochemist<br>Field, July 23-August 18, 2014<br>28 days @ \$ 700.00/day      | 19,600.00       |
| Edwin Rockel, Geophysicist<br>Field, June 5-August 23, 2014<br>16 days @ \$ 700.00/day           | 11,200.00       |
| Reporting<br>14 days @ \$ 700.00/day   | 9,800.00        |
| Alea Rockel, Core Cutter<br>Field, July 23-August 18, 2014                                       |                 |
| 7 days \$ 300.00/day   | 2,100.00        |
| MEALS & ACCOMMODATION  |                 |
| Grant Crooker - 29 days @ \$ 120.00/day  | 3,480.00        |
| Sam Zastavnikovich - 28 days @ \$ 120.00/day   | 3,360.00        |
| Edwin Rockel – 16 days @ \$ 120.00/day   | 1,920.00        |
| Alea Rockel – 7 days @ \$ 120.00/day   | 840.00          |
| TRANSPORTATION   |                 |
| Vehicle Rental (2008 Chev 1/2 ton 4 x 4)<br>29 days @ \$ 100.00/day                              | 2,900.00        |
| Vehicle Rental (2008 Chev 1/2 ton 4 x 4)<br>2405 kms @ \$ 0.20/km                                | 481.00          |
| Vehicle Rental (1974 Chev 3/4 ton 4 x 4, water truck fire suppression)<br>9 days @ \$ 100.00/day | 900.00          |
| Vehicle Rental (2006 Blazer 4 x 4)<br>28 days @ \$ 100.00/day                                    | 2,800.00        |
| Vehicle Rental (2000 Suburban, 4 x 4, Rockel)<br>12 days @ \$ 100.00/day                         | 1,200.00        |
| Vehicle Rental (2000 Suburban, 4 x 4, Rockel)<br>1901 kms @ \$ 0.20/km                           | 380.20          |
| Gasoline   | 2,231.96        |

## CONTRACTORS

| Hardrock Drilling, Penticton, BC<br>727.87 metres NQ core @ \$ 114.13/metre<br>56 hours D-6 bulldozer @ \$ 140.00/hour | 83,071.80<br>7,840.00 |
|--|-----------------------|
| ANALYSES   |                       |
| 40 core samples, 51 element ICP @ \$ 42.70   | 1,708.00              |
| 8 core samples, pt, Pd, Au, 30 g FA, ICP   | 184.80                |
| EQUIPMENT RENTAL   |                       |
| Stihl Power Saw, 10 days @ \$ 10.00/day  | 100.00                |
| Communications (Cellular/Sat Phones) 29 days @ \$ 10.00/day  | 290.00                |
| Radios (Logging Frequency), 29 days @ \$ 30.00/day   | 870.00                |
| GPS 29 days @ \$ 5.00/day  | 145.00                |
| Core logging, cutting facility, 30 days @ \$ 75.00/day   | 2,250.00              |
| Rock saw (cutting core), 30 days @ \$ 50.00/day  | 1,500.00              |
| Rock saw blades, 1 blade @ \$ 300.00/blade   | 300.00                |
|  | Total \$188,752.76    |

| Exploration Work type              | Comment                                   | Days         |              |             | Totals      |
|------------------------------------|---|--------------|--------------|-------------|-------------|
|                                    |   |              |              |             |             |
| Personnel (Name)* / Position       | Field Days (list actual days)             | Days         | Rate         | Subtotal*   |             |
| Grant Crooker, Geologist, PGeo     | June 5-August 21, 2014                    | 29           | \$700.00     | \$20,300.00 |             |
| S Zastavnicovich, Geochemist, PGeo | July 23-August 18, 2014                   | 28           | \$700.00     | \$19,600.00 |             |
| Edwin Rockel, Geophysicist, PGeo   | June 5-August 21, 2014                    | 16           | \$700.00     | \$11,200.00 |             |
|                                    |   |              | \$0.00       | \$0.00      |             |
| Alea Rockel, core cutter           | July 23-August 18, 2014                   | 7            | \$300.00     | \$2,100.00  |             |
|                                    |   |              | \$0.00       | \$0.00      |             |
|                                    |   |              |              | \$53,200.00 | \$53,200.00 |
| Office Studies                     | List Personnel (note - Office onl         | y, do not    | include fi   | eld days    |             |
| Literature search                  |   |              | \$0.00       | \$0.00      |             |
| Database compilation               | Ed Rockel                                 | 7            | \$700.00     | \$4,900.00  |             |
| Computer modelling                 |   |              | \$0.00       | \$0.00      |             |
| Reprocessing of data               |   |              | \$0.00       | \$0.00      |             |
| General research                   |   |              | \$0.00       | \$0.00      |             |
| Report preparation                 | Grant Crooker                             | 10           | \$700.00     | \$7,000.00  |             |
| Report preparation                 |   |              | •            |             |             |
|                                    |   |              |              |             |             |
| Map preparation                    | Ed Rockel                                 | 7            | \$700.00     | \$4,900.00  |             |
|                                    |   |              |              |             |             |
|                                    |   |              |              |             |             |
|                                    |   |              |              |             |             |
|                                    |   |              |              |             |             |
|                                    |   |              |              | \$16,800.00 | \$16,800.00 |
| Airborne Exploration Surveys       | Line Kilometres / Enter total invoiced a  | mount        |              |             |             |
| Aeromagnetics                      |   |              | \$0.00       | \$0.00      |             |
| Radiometrics                       |   |              | \$0.00       | \$0.00      |             |
| Electromagnetics                   |   |              | \$0.00       | \$0.00      |             |
| Gravity                            |   |              | \$0.00       | \$0.00      |             |
| Digital terrain modelling          |   |              | \$0.00       | \$0.00      |             |
| Other (specify)                    |   |              | \$0.00       | \$0.00      |             |
|                                    |   |              |              | \$0.00      | \$0.00      |
| Remote Sensing                     | Area in Hectares / Enter total invoiced a | amount or li | st personnel | I           |             |
| Aerial photography                 |   |              | \$0.00       | \$0.00      |             |
| LANDSAT                            |   |              | \$0.00       | \$0.00      |             |
| Other (specify)                    |   |              | \$0.00       | \$0.00      |             |
|                                    |   |              |              | \$0.00      | \$0.00      |
| Ground Exploration Surveys         | Area in Hectares/List Personnel           |              |              |             |             |
| Geological mapping                 |   |              |              |             |             |
| Regional                           |   | note: exp    | enditures h  | ere         |             |
| Reconnaissance                     |   | should be    | captured in  | n Personnel |             |
| Prospect                           |   | field expe   | nditures ab  | ove         |             |
| Underground                        | Define by length and width                |              |              |             |             |
| Trenches                           | Define by length and width                |              |              | \$0.00      | \$0.00      |
|                                    |   |              |              |             |             |
| Ground geophysics                  | Line Kilometres / Enter total amount in   | voiced list  | personnel    |             |             |
| Radiometrics                       |   |              |              |             |             |
| Magnetics                          |   |              |              |             |             |
| Gravity                            |   |              |              |             |             |
| Digital terrain modelling          |   |              |              |             |             |
| Electromagnetics                   | note: expenditures for your crew in       | the field    |              |             |             |
| SP/AP/EP                           | should be captured above in Person        | nel          |              |             |             |
| IP                                 | field expenditures above                  |              |              |             |             |

| AMT/CSAMT  |   |   |   |  |             |
|--|---|---|---|--|-------------|
| Resistivity  |   |   |   |  |             |
| Complex resistivity  |   |   |   |  |             |
| Seismic reflection   |   |   |   |  |             |
| Seismic refraction   |   |   |   |  |             |
| Well logging   | Define by total length  |   |   |  |             |
| Geophysical interpretation   |   |   |   |  |             |
| Petrophysics   |   |   |   |  |             |
| Other (specify)  |   |   |   |  |             |
|  | 1   | 1   | 1   | \$0.00   | \$0.00      |
| Geochemical Surveying  | Number of Samples   | No.   | Rate  | Subtotal   | 40.00       |
|  |   |   |   |  |             |
| Drill Core   | 40, 51 element ICP, aqua regia  | 40  | \$42.70   | \$1,708.00   |             |
| Soil   | note: This is for assays or   |   | \$0.00  | \$0.00   |             |
| Bock   | laboratory costs  |   | \$0.00  | \$0.00   |             |
| Drill Core   | 8 Pt Pd Au 30 g FA ICP  | 8   | \$23.10   | \$184.80   |             |
| Biogeochemistry  |   | 0   | \$0.00  | 00.02  |             |
| Whole rock   |   |   | \$0.00<br>\$0.00  | 0.00<br>\$0.00   |             |
| Petrology  |   |   | \$0.00<br>¢0.00   | \$0.00<br>¢0.00  |             |
| Other (specify)  |   |   | \$0.00<br>¢0.00   | \$0.00   |             |
| Other (specify)  |   |   | <b>φ</b> 0.00   | ¢1 802 80  | ¢1 902 90   |
| Drilling   | No. of Holes, Size of Core and Matrice  | No  | Pata  | \$1,092.00   | \$1,092.00  |
| Diamond (motros)   | A balas NO 727.97 matros  | 707 07  | ¢11/ 12   | 402 071 00   |             |
| Diditiona (metres)   | 4 holes, NQ, 727.87 metres  | /2/.8/  | \$114.13  | \$03,071.80  |             |
| Reverse circulation (RC)   |   |   | \$0.00  | \$0.00   |             |
| Roldry dir Didsl (RAD)   |   |   | \$0.00  | \$0.00   |             |
| Other (specify)  |   |   | \$0.00  | \$0.00   | ¢02.071.00  |
|  |   |   | 1   | \$83,071.80  | \$83,071.80 |
|  |   |   | Dete  | Cubbabal   |             |
| Other Operations   | Clarify   | No.   | Rate  | Subtotal   |             |
| Other Operations Trenching Pulk compliance   | Clarify   | No.   | <b>Rate</b><br>\$0.00   | Subtotal<br>\$0.00   |             |
| Other Operations Trenching Bulk sampling Linderserved development  | Clarify   | No.   | <b>Rate</b><br>\$0.00<br>\$0.00   | Subtotal<br>\$0.00<br>\$0.00   |             |
| Other Operations<br>Trenching<br>Bulk sampling<br>Underground development  | Clarify   | No.   | Rate           \$0.00           \$0.00           \$0.00           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$0.00   |             |
| Other Operations<br>Trenching<br>Bulk sampling<br>Underground development<br>Road Work (hours)   | Clarify<br>road rehab 16 km, new road 1.1 km  | <b>No.</b>  | Rate           \$0.00           \$0.00           \$0.00           \$140.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$0.00<br>\$7,840.00   | 47.040.00   |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)   | road rehab 16 km, new road 1.1 km   | <b>No.</b><br>56  | Rate           \$0.00           \$0.00           \$0.00           \$140.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify   | No.<br>56<br>No.  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling  | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify   | No.<br>56<br>No.  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Different field   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify   | No.<br>56<br>No.  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify   | No.<br>56<br>No.  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify   | No.<br>56<br>No.  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify   | No. 56  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           Rate           \$0.00           \$0.00           \$0.00           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4  | No.<br>56<br>No.<br>29                                  | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$0.00           Rate           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental (water truck fire supp)  | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4   | No.<br>56<br>No.<br>29<br>9                             | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$0.00           \$0.00           \$140.00           \$0.00           \$0.00           \$100.00           \$100.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$900.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4  | No.<br>56<br>No.<br>29<br>9<br>28                       | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$100.00           \$100.00   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental         truck rental  | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4   | No.<br>56<br>No.<br>29<br>9<br>28<br>12                 | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$100.00           \$100.00           \$100.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$1,2000   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental         kilometres  | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks                               | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$100.00           \$100.00           \$100.00           \$100.00           \$100.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,800.00<br>\$1,200.00<br>\$861.20   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental         kilometres         fuel   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks                     | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$140.00           \$0.00           \$100.00           \$100.00           \$100.00           \$0.20           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$1,200.00<br>\$861.20<br>\$2,231.96   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental         kilometres         fuel         Helicopter (hours)  | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks                     | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate         \$0.00         \$0.00         \$0.00         \$140.00         Rate         \$0.00         \$0.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$0.20         \$0.00   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental         truck rental         thometres         fuel         Helicopter (hours)         Fuel (litres/hour)   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks                     | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$140.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$100.00           \$100.00           \$100.00           \$0.00           \$0.00           \$0.00                                 | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$1,200.00<br>\$861.20<br>\$2,231.96<br>\$0.00<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental         truck rental         kilometres         fuel         Helicopter (hours)         Fuel (litres/hour)         Other   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks                     | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$100.00           \$100.00           \$100.00           \$100.00           \$100.00           \$100.00           \$0.20           \$0.00  | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,800.00<br>\$1,200.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         Kilometres         fuel         Helicopter (hours)         Fuel (litres/hour)         Other | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks                     | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate         \$0.00         \$0.00         \$0.00         \$140.00         Rate         \$0.00         \$0.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$0.20         \$0.00         \$0.00   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,800.00<br>\$1,200.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00<br>\$1,0,893.16   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental (water truck fire supp)         truck rental         kilometres         fuel         Helicopter (hours)         Fuel (litres/hour)         Other   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks<br>trucks           | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate         \$0.00         \$0.00         \$0.00         \$140.00         Rate         \$0.00         \$0.00         \$100.00         \$100.00         \$100.00         \$0.20         \$0.00         \$0.00   | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>Subtotal<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,200.00<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000<br>\$1,000\$1,000\$1,000\$1,000\$1,000\$1,000\$1,000\$1,000\$1,000\$1,000\$1,000\$1,0 | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental (water truck fire supp)         truck rental         kilometres         fuel         Helicopter (hours)         Fuel (litres/hour)         Other   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks<br>trucks           | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate         \$0.00         \$0.00         \$0.00         \$140.00         Rate         \$0.00         \$100.00         \$100.00         \$100.00         \$100.00         \$0.00         \$0.00         \$100.00         \$100.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00           | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00<br>\$2,231.96<br>\$0.00<br>\$10,893.16<br>\$10,893.16   | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental (water truck fire supp)         truck rental         kilometres         fuel         Helicopter (hours)         Fuel (litres/hour)         Other         Accommodation & Food         Hotel         Camp   | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks                     | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306         | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$100.00           \$100.00           \$100.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00 | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00<br>\$1,200.00<br>\$1,200.00<br>\$10,893.16  | \$7,840.00  |
| Other Operations         Trenching         Bulk sampling         Underground development         Road Work (hours)         Reclamation         After drilling         Monitoring         Other (specify)         Transportation         truck rental         truck rental (water truck fire supp)         truck rental         truck rental         kilometres         fuel         Helicopter (hours)         Fuel (litres/hour)         Other         Accommodation & Food         Hotel         Camp         Meals and Accommodation  | Clarify<br>road rehab 16 km, new road 1.1 km<br>Clarify<br>2008 chev 1/2 ton 4 x 4<br>1974 chev 3/4 ton 4 x 4<br>2006 Blazer 4 x 4<br>2000 Suburban 4 x 4<br>4 trucks<br>trucks<br>trucks<br>trucks | No.<br>56<br>No.<br>29<br>9<br>28<br>12<br>4306<br>4306 | Rate           \$0.00           \$0.00           \$0.00           \$140.00           Rate           \$0.00           \$100.00           \$100.00           \$100.00           \$100.00           \$100.00           \$0.20           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00           \$0.00              | Subtotal<br>\$0.00<br>\$0.00<br>\$7,840.00<br>\$7,840.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$0.00<br>\$2,900.00<br>\$2,800.00<br>\$2,800.00<br>\$1,200.00<br>\$2,231.96<br>\$0.00<br>\$10,893.16<br>\$10,893.16<br>\$0.00<br>\$9,600.00   | \$7,840.00  |

| Miscellaneous                 |                                   |    |          |            |              |
|-------------------------------|-----------------------------------|----|----------|------------|--------------|
|                               | power saw                         | 10 | \$10.00  | \$100.00   |              |
| Telephone                     | cellular/satellite                | 29 | \$10.00  | \$290.00   |              |
| Radios                        | logging frequencies/communication | 29 | \$30.00  | \$870.00   |              |
| GPS                           |                                   | 29 | \$5.00   | \$145.00   |              |
| Blade                         | cutting core                      | 1  | \$300.00 | \$300.00   |              |
|                               |                                   |    |          | \$1,705.00 | \$1,705.00   |
| Equipment Rentals             |                                   |    |          |            |              |
| Core logging/cutting facility | Rental                            | 30 | \$75.00  | \$2,250.00 |              |
| Rock Saw                      | Cutting Core                      | 30 | \$50.00  | \$1,500.00 |              |
|                               |                                   |    |          | \$3,750.00 | \$3,750.00   |
| Freight, rock samples         |                                   |    |          |            |              |
| Supplies                      |                                   |    | \$0.00   | \$0.00     |              |
|                               |                                   |    |          | \$0.00     | \$0.00       |
|                               |                                   |    |          |            |              |
| TOTAL Expenditures            | ,                                 |    |          |            | \$188,752.76 |
























