[ARIS11A] **ARIS Summary Report**

Regional Geologist, Smithers | **Date Approved:** 2005.07.08 | **Off Confidential:** 2005.12.16

ASSESSMENT REPORT: 27659 | **Mining Division(s):** Atlin

Property Name: Tulsequah Chief

Location:

NAD 27	**Latitude:**	58 44 00	**Longitude:**	133 35 00	**UTM:**	08	6511017 582018
NAD 83	**Latitude:**	58 44 01	**Longitude:**	133 35 07	**UTM:**	08	6511254 581902
NTS:	104K12E						
BCGS:	104K073						

Camp:

Claim(s): Tulsequah Chief (L. 5670), Elva Fr. (L. 5679), Marcie 3

Operator(s): Redfern Resources Limited
Author(s): Carmichael, R.G.

Report Year: 2005

No. of Pages: 1126 Pages

Commodities Searched For: Gold, Silver, Copper, Lead, Zinc

General Work Categories: GEOC, DRIL, PHYS

Work Done:
Drilling
UNDD Diamond underground (52 hole(s);NQ2) (28036.0 m) No. of maps : 10 ; Scale(s) : 1:1000
Geochemical
SAMP Sampling/assaying (1750 sample(s);)
Elements Analyzed For : Multielement
Physical
UNDV Underground development (161.0 m;)

Keywords: Devonian-Permian, Mount Eaton suite, Ash tuffs, Mudstones, Agglomerates, Dacites, Massive sulphides

Statement Nos.: 3221963

MINFILE Nos.: 104K 002

Related Reports: 08933, 09825, 11018, 16983, 17054, 17137, 19453, 20423, 20901, 22939, 23762, 22763, 23951, 24183, 27385

Geological, Geochemical and Diamond Drilling Report on the Tulsequah Chief Property

Tulsequah River Area
Northwestern BC
NTS 104K/12

Atlin Mining Division

58°43'N 133°35'W

Owner & Operator:
Redfern Resources Ltd.
760 - 777 Hornby Street,
Vancouver, BC

R.G. Carmichael, P.Eng.

February 2, 2005

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 Summary

The Tulsequah Chief property, situated in Northwestern British Columbia, is located 100 km south of Atlin, B.C. and 64 km northeast of Juneau, Alaska.

The Tulsequah Chief deposit was discovered in 1923 and the nearby Big Bull deposit in 1929. Cominco Ltd. acquired the properties in 1948. Mining began in 1951 and continued until 1957 at which time low metal prices forced its closure. Production during that period totaled 935,536 tonnes grading 1.59% copper, 1.54% lead, 7.0% zinc, 3.84 grams/tonne gold, and 126.52 grams/tonne silver. Of that total, 575,463 tonnes were mined from the Tulsequah Chief and the remainder from the Big Bull.

The Tulsequah Chief property lay dormant from 1957 to 1971. In 1971, the deposits were interpreted as volcanogenic massive sulphide (VMS) deposits similar to the "Kuroko" deposits in Japan. Using the VMS model, significant new tonnage was defined by diamond drilling at the Tulsequah Chief deposit between 1978 and 1994 by Cominco Ltd. and Redfern Resources Ltd. In June, 1992, Redfern Resources Ltd. purchased Cominco's interest (60%) in the Tulsequah Chief property. No technical geological work was carried out on the property between 1994 and 2003.

The Tulsequah Chief deposits are precious metal-rich massive sulphide deposits hosted within the Devonian to Permian Mount Eaton suite. The deposits consist of chert, barite, gypsum and massive sulphides. The sulphides in order of abundance are pyrite, sphalerite, chalcopyrite, galena and bornite and tetrahedrite is also an important ore mineral. Native gold is a relatively common accessory, and native silver has been observed in high-grade precious metal rich veins in the footwall to the ore lenses.

The Mount Eaton suite is folded into a northwesterly plunging anticlinal-synclinal fold pair in the vicinity of the Tulsequah Chief Mine. These upright to steeply overturned parasitic folds are on the western limb of the regional Mount Eaton anticline. Faulting sub-parallel to the axial plane of these folds has offset stratigraphy across the 4400E and 5300E faults by a small amount. These faults divide the mine area into three mine blocks--Western Mine Block (west of 4400E fault), Central Mine Block (between 4400E and 5300E fault) and Eastern Mine Block (east of 5300E fault).

The 2004 work program was carried out between April 1 and November 9. The program involved underground diamond drilling, and approximately 175m of underground development and the construction of a new drill underground drill station. During the program, 49 drill holes and 5 wedge holes were drilled for a total of 28,036 meters.

The total cost of the program, including the new development of underground workings, was $5.9 million.

2 Property Description and Location

The Tulsequah Chief property is situated along the Tulsequah River in Northwestern B.C. (Fig. 1). It is centered on latitude 58°43'N and longitude 133°35'W (NTS 104K/12). Access is by air from Atlin, B.C. 100 km to the north, or by air from Juneau, Alaska, 64 km to the southwest. The exploration base camp is situated on the east bank of the Tulsequah River at an elevation of 108 m above sea level.

The property is comprised of a total of 49 located mineral claims and 25 crown granted mineral claims for a total of 651 claim units (16,088.69 ha.) (Fig. 2), and is 100% owned by Redfern Resources Ltd., subject to a royalty of $0.10 per dry ton of ore mined on the Tulsequah Chief and Big Bull crown granted claims. Assuming acceptance of this report, all mineral claims are in good standing until December 31, 2014. Under the BC Mineral Tenure Act, Redfern can maintain the located mineral claims in good standing by filing assessment work in the amount of $200 per unit per year, or by using credits from Redfern's Portable Assessment Credit account. Crown granted claims are maintained through the payment of annual taxes. Crown granted claims at the Tulsequah Chief mine have been legally surveyed.

Table 1: Claim Data

LOCATED CLAIMS				
Claim Name	Record Number	Units	Area (Ha)	Expiry Date
CO #3	201802	20	500	December 31, 2014
CO #5	201803	18	450	December 31, 2014
SWAMP #2	201927	1	25	December 31, 2014
SWAMP #3	201928	1	25	December 31, 2014
TALLON #1	202030	20	500	December 31, 2014
TALLON #2	202031	9	225	December 31, 2014
WEBB 1	202279	20	500	December 31, 2014
WEBB 5	202283	20	500	December 31, 2014
WEBB 9	202284	10	250	December 31, 2014
WEBB 10	202285	16	400	December 31, 2014
MARY 1	203385	20	500	December 31, 2014
MARCIE 1	203386	20	500	December 31, 2014
MARCIE 2	203387	20	500	December 31, 2014
MARCIE 3	203388	20	500	December 31, 2014
ELYSA 1	203389	20	500	December 31, 2014
ELYSA 2	203390	20	500	December 31, 2014
ELYSA 3	203391	6	150	December 31, 2014
ELYSA 4	203392	20	500	December 31, 2014
BULL NO.8	203779	1	25	December 31, 2014
BULL NO.9	203780	1	25	December 31, 2014
BRUCE FR.	203781	1	25	December 31, 2014
BIG BULL EXTENSION	203965	1	25	December 31, 2014
BULL #2	203966	1	25	December 31, 2014
BULL NO. 3	203967	1	25	December 31, 2014
BULL #4	203968	1	25	December 31, 2014
WENDY 1	320163	20	500	December 31, 2014
STRONG #1	320339	16	400	December 31, 2014
RODGER 6	322057	18	450	December 31, 2014
SHAZAH 1	323102	18	450	December 31, 2014
SHAZAH 2	323103	20	500	December 31, 2014
SHAZAH 3	323104	6	150	December 31, 2014
CST 4	323358	18	450	December 31, 2014
T.M.F. 1	324199	6	150	December 31, 2014
T.M.F. 4	324202	3	75	December 31, 2014
R.F.	356291	9	225	December 31, 2014
RODGER 5	322056	12	300	December 31, 2014
WEBB 4	202282	20	500	December 31, 2014
SWAMP #1	201926	4	100	December 31, 2014
WENDY 2	320164	20	500	December 31, 2014
RODGER 1	322046	20	500	December 31, 2014
RODGER 2	322053	20	500	December 31, 2014
RODGER 3	322054	20	500	December 31, 2014
RODGER 7	322058	20	500	December 31, 2014
GOAT 1	201925	16	400	December 31, 2014
RODGER 4	322055	10	250	December 31, 2014
STRONG #2	320340	12	300	December 31, 2014
STRONG #3	320341	8	200	December 31, 2014
STRONG #4	320342	12	300	December 31, 2014
STRONG #5	320343	10	250	December 31, 2014
MAPLE 2	408601	3	75	December 31, 2014
TOTALS		**629**	**15,725**	

CROWN GRANTED CLAIMS				
Claim Name	**Record**	**Units**	**Area (Ha)**	**Expiry Date**
River Fraction	5669	1	7.99	July 3, 2005
Tulsequah Bonanza	5668	1	20.90	July 3, 2005
Tulsequah Bald Eagle	5676	1	14.16	July 3, 2005
Tulsequah Chief	5670	1	20.90	July 3, 2005
Tulsequah Elva Fr.	5679	1	9.70	July 3, 2005
Big Bull	6303	1	20.65	July 3, 2005
Bull No. 1	6304	1	16.95	July 3, 2005
Bull No. 5	6306	1	14.57	July 3, 2005
Bull No. 6	6305	1	17.22	July 3, 2005
Hugh	6308	1	20.71	July 3, 2005
Jean	6307	1	17.02	July 3, 2005
Vega No. 1	6155	1	20.90	July 3, 2005
Vega No. 2	6156	1	17.62	July 3, 2005
Vega No. 3	6157	1	18.97	July 3, 2005
Vega No. 4	6158	1	19.85	July 3, 2005
Vega No. 5	6159	1	14.94	July 3, 2005
Janet W. No. 1	6160	1	18.95	July 3, 2005
Janet W. No. 2	6161	1	18.75	July 3, 2005
Janet W. No. 3	6162	1	16.60	July 3, 2005
Janet W. No. 4	6163	1	20.76	July 3, 2005
Janet W. No. 5	6164	1	18.20	July 3, 2005
Janet W. No. 6	6165	1	19.02	July 3, 2005
Janet W. No. 7	6166	1	18.78	July 3, 2005
Janet W. No. 8	6167	1	17.98	July 3, 2005
Joker	6169	1	16.60	July 3, 2005
TOTAL		**25**	**438.69**	
GRAND TOTAL		**651**	**16,088.69**	

3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Tulsequah Chief property is accessible only by air or water. The most direct access is by helicopter from Atlin to the mine site. Fixed wing access is possible using one of two airstrips which are present in the Tulsequah valley. One is located 4.7 km SSW of the camp at the site of the old Polaris Taku Mine, and a second is located in the middle of the Tulsequah floodplain 8.5 km south of the camp. The airstrips are suitable for aircraft up to Shorts Sky Van in size; however a helicopter is required to access the site from either airstrip. Charter flights, both fixed wing and helicopter, are available from Atlin or Juneau. River boat access from Juneau is possible for most of the early summer months.

The property roughly covers the area directly north of the confluence of the Tulsequah and Taku Rivers. Topographic elevations on the property range from 50 m at river level to over 1800 m at the top of Mount Eaton. Vegetation ranges from wet, dense coastal forest at the lower elevations to sub-alpine scrub at the higher elevations. Approximately 60 percent of the property is covered by dense, mature coastal forest with thick undergrowth comprised of devils club and various thorns. Two major ice fields; Mount Eaton and Manville, cover approximately 15% of the present property area.

The Tulsequah and Taku River valleys are glacial in origin with broad flat floodplains, each several kilometers wide, and moderate to steep valley walls. The Tulsequah River originates at the toe of the Tulsequah Glacier, located some 15km north of the property, and occupies a valley comprised of glacio-fluvial debris with little vegetative cover.

The climate at Tulsequah is typical of inland areas of the north coast of BC. It is characterized by high precipitation and relatively moderate winter temperatures due to the influence of the Pacific ocean. The closest towns for which climate data are available are Juneau, Alaska and Atlin, BC. At the river level, snow cover typically lasts from mid-November to early May.

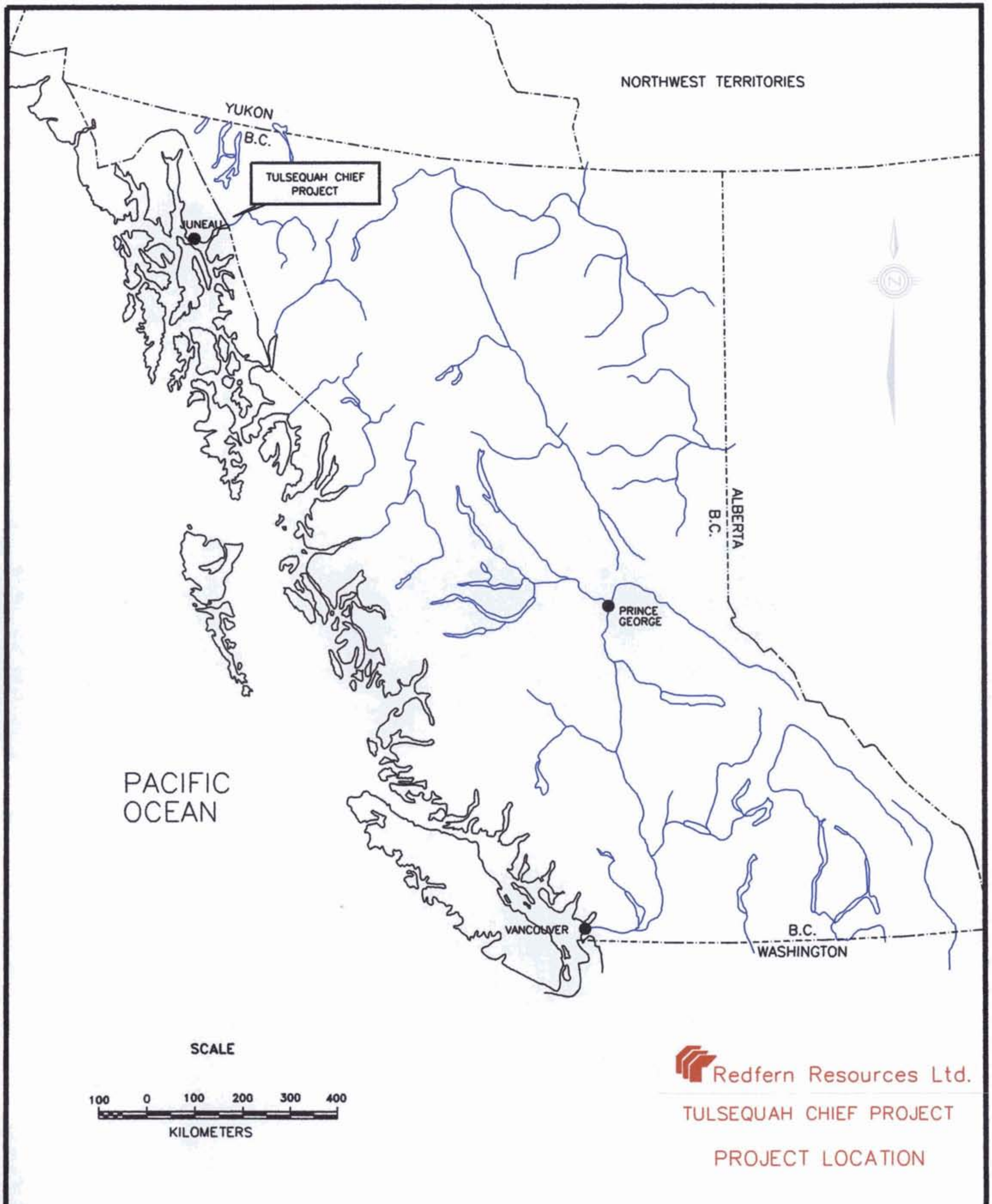

NORTHWEST TERRITORIES
YUKON
B.C.
TULSEQUAH CHIEF PROJECT
JUNEAU
ALBERTA
B.C.
PRINCE GEORGE
PACIFIC OCEAN
VANCOUVER
B.C.
WASHINGTON
SCALE
100 0 100 200 300 400
KILOMETERS
Redfern Resources Ltd.
TULSEQUAH CHIEF PROJECT
PROJECT LOCATION
FILE: D:DWG:8x11:BCLOC

FIGURE: 1

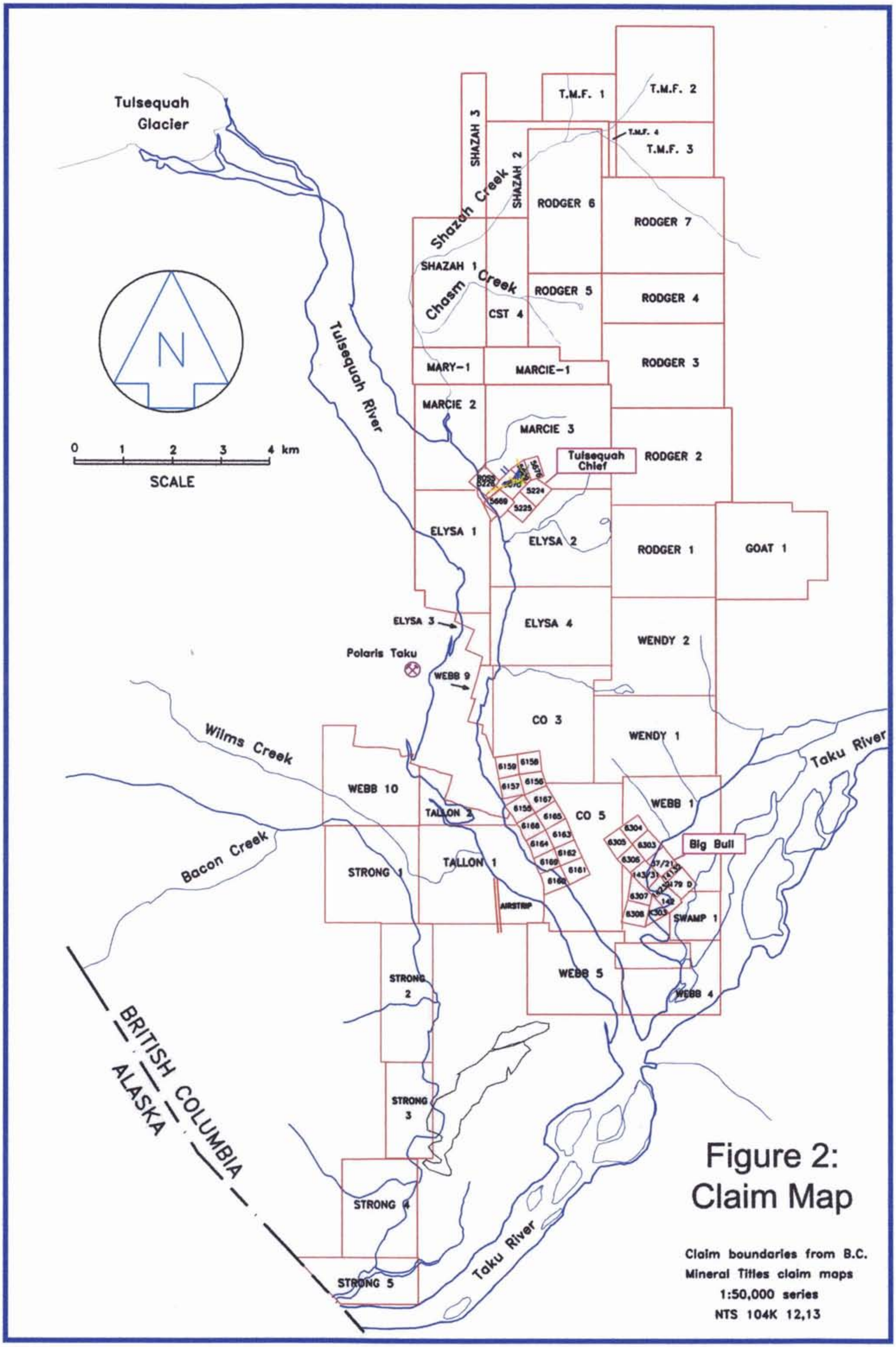


Figure 2: Claim Map

Claim boundaries from B.C. Mineral Titles claim maps 1:50,000 series NTS 104K 12,13

4 History

The Tulsequah Chief deposit was discovered in 1923 by W. Kirkham of Juneau. He located high-grade barite, pyrite, sphalerite, galena, and chalcopyrite mineralization outcropping in a gully at about 500 meters asl. Development of this showing between 1923 and 1929 attracted about 40 prospectors to the area. In 1929, V. Manville discovered the Big Bull massive sulphide deposit. Other discoveries that year included the Potlatch (Sparling), Banker and the Whitewater (Polaris Taku) vein deposits.

Cominco Ltd. acquired the Tulsequah Chief and Big Bull deposits in 1946. Production started in 1951 and continued to 1957 when low metal prices forced the suspension of mining activity. Production averaged 482 tonnes (530 tons) per day. Total production was 935,536 tonnes comprised of 575,463 tonnes from the Tulsequah Chief and 360,073 tonnes from the Big Bull deposit. Average grade of ore was 1.59% Cu, 1.54% Pb, and 7.0% Zn, 3.84 g /tonne Au, and 126.52 g /tonne Ag. The mines produced 14,756 tons Cu, 11,439 tons Pb, 54,910 tons Zn, 95,340 oz Au, and 3,329,938 oz Ag at a recovery of about 88% Cu, 94% Pb, 87% Zn, 77% Au, and 89% Ag.

At shutdown, ore reserves at the Tulsequah Chief were 707,616 tonnes grading 1.3% Cu, 1.6% Pb, 8.0% Zn, 2.40 g/tonne Au, and 116.50 g/tonne Ag, and at the Big Bull were 57,541 tonnes grading 1.1% Cu, 1.5% Pb, 5.6% Zn, 3.43g/tonne Au, and 154.3 g/tonne Ag. These reserves were estimated by Cominco geologists in 1957. They are based on detailed underground drilling and sampling and were calculated in accordance with accepted Cominco practices at the time.

The Tulsequah Chief and Big Bull deposits lay dormant until 1971. At this time the deposits were reinterpreted as volcanogenic massive sulphides, rather than hydrothermal veins as originally described. Geological mapping (1:2500) over the Tulsequah Chief and Big Bull deposits was completed in 1981. The property was flown by Dighem and Input EM/Mag in 1982, however, these surveys failed to define any significant conductors. A joint venture between Cominco Ltd. and Redfern Resources Ltd. led to extensive exploration programs from 1987 to 1991.

<u>**1987**</u>

The 1987 Exploration Program (Casselman, 1988) was funded by Redfern Resources Ltd. Surface mapping was completed over the property and five surface diamond drill holes (3,524 meters) tested the down dip extension of the Tulsequah Chief deposit. The mineralized horizon was intersected on approximately 90 meter spacings, 450 to 600 meters below surface, and 40-240 meters below previous drilling.

<u>**1988**</u>

The 1988 Exploration Program (Casselman, 1989) was funded by Redfern Resources Ltd. Outside the Tulsequah Chief Mine area, mapping, prospecting, and soil sampling were completed over areas of felsic volcanic units. Inside the mine area, 900 meters of underground workings were rehabilitated on the 5400 Level and 3,530 meters of underground and surface diamond drilling were completed. Nine drill holes tested areas below the old workings, of which, eight holes intersected significant base and precious metal mineralization. Four holes tested other targets on the property.

1989

The 1989 Exploration Program (Casselman, 1990) was jointly funded by Redfern Resources Ltd. (40%) and Cominco Ltd. (60%). The program consisted of re-ballasting track, 175 meters of drifting in the 5400 Level crosscut, and 4,890 meters of underground drilling. Ten drill holes from the extended 5400 Level crosscut tested the down dip extension of the known sulphide bodies. Eight holes intersected significant base and precious metals. Specific gravity measurements were made on all 1987, 1988, and 1989 mineralized drill intersections.

1990

The 1990 Exploration Program (Aulis, 1991) jointly funded by Redfern Resources Ltd.(40%) and Cominco Ltd. (60%) consisted of underground rehabilitation, 180 meters of drifting, slashing two drill stations on the 5400 Level and 5,908 meters of underground drilling. Seven drill holes tested the down-dip extension of the H-AB sulphide bodies. An eighth drill hole was abandoned due to ground problems.

1991

The 1991 Exploration Program was operated and funded by Redfern Resources Ltd. (100%). The program was restricted by agreement with Cominco to infill drilling on the H and AB lenses between the 3400 and 4900 Levels. Six drill holes (3,090 m) were collared from the 5400 Level crosscut. All holes intersected the targeted massive sulphide horizon.

Redfern Resources Ltd. purchased Cominco's interest (60%) in the Tulsequah Chief property in June, 1992. Consequently, Redfern Resources became the 100% owner of the Tulsequah Chief and Big Bull deposits and adjacent ground.

1992

The 1992 Exploration Program (McGuigan et al., 1993) consisted of surface and underground geological mapping, core re-logging (1987-1991) and underground diamond drilling (4,579 meters in 13 holes).

1993

Redfern conducted a comprehensive exploration program in 1993 consisting of 6,238 meters of underground drilling (14 holes) at the Tulsequah Chief Mine and 5,368 meters of surface drilling - 1,812 m in 6 holes in the Tulsequah Chief Mine area and 3,556 meters in 12 holes in the Big Bull Mine area (Chandler et al, 1994; Carmichael et al, 1994). Extensions were added to existing grids at the Tulsequah Chief Mine and the Big Bull Mine areas and new grids were cut to cover prospective stratigraphy south of Tulsequah Chief and the Banker prospect (Curtis, 1994). This work generated an additional 76 line-kilometers of grid which was geologically mapped at 1:2000 scale and covered by various combinations of gradient array IP, magnetometer and VLF-EM geophysical surveys. The geophysical surveys also covered the previous grid areas at Tulsequah Chief and Big Bull. Reconnaissance geological mapping was conducted in selected areas.

1994

In 1994 Redfern completed 4,241 meters of underground diamond drilling in 11 holes and 1,700 meters of surface diamond drilling in 4 holes at Tulsequah Chief, and 5,228 meters of surface drilling in 15 holes at Big Bull for a program total of 11,169 meters in 30 holes.

Underground and surface mapping and sampling programs were completed on the 5400 level main drift. Over 1 km of underground rehabilitation was completed on the 5200 level main drift which allowed for detailed geological mapping and sampling programs in an area not accessible since the 1950's production era.

Surface work included the establishment of an additional 10.7 kilometers of I.P. standard cut survey grid over altered felsic volcanic rocks exposed to the south of the 5200 level portal. During the course of geological mapping and sampling over this and adjacent parts of the existing grid a total of 71 trace element and 14 lithogeochemical samples were collected from selected rock outcrops.

1995 – 2003

Technical geological work during this period was limited to the collection of a bulk sample from the 5200 Level. A feasibility study was completed in 1995, and updated in 1997 (reference).

2003

Redfern Resources Ltd. carried out an exploration program on the Tulsequah Property between June 2nd and November 18th, 2003. The program involved primarily underground diamond drilling from existing drill stations within the Tulsequah Chief mine, although two surface holes were also completed. During the program, 23 holes totaling 10,109 meters were drilled.

5 Geological Setting and Mineralization

5.1 Regional Scale

The regional geology of the Tulsequah area is characterized by fault juxtaposition of several diverse Paleozoic to Mesozoic tectonostratigraphic terranes which have been variably deformed, intruded by Jurassic to Cretaceous age Coast intrusions and unconformably overlain by Tertiary Sloko volcanics (Mihalynuk et al, 1994).

The dominant structural feature of the region is the **Llewellyn fault** (known locally as the **Chief Fault**) which divides higher grade metamorphic rocks of Paleozoic and older ages on the west from weakly metamorphosed Paleozoic and Mesozoic rocks on the east. West of the fault three suites of rocks are recognized: the **Whitewater suite** which consists of an amphibolite grade metamorphic sequence of sedimentary origin, the **Boundary Ranges suite**, consisting of schists of volcanic and sedimentary origin, and the **Mount Stapler suite**, a low-grade metamorphic package which shares characteristics of both the Whitewater and Boundary Range suites and may be gradational to both. East of the fault Paleozoic rocks of the Stikine Assemblage include the **Mount Eaton block -** low metamorphic grade volcanic rocks of island arc affinity which host the Tulsequah Chief and Big Bull sulphide deposits.

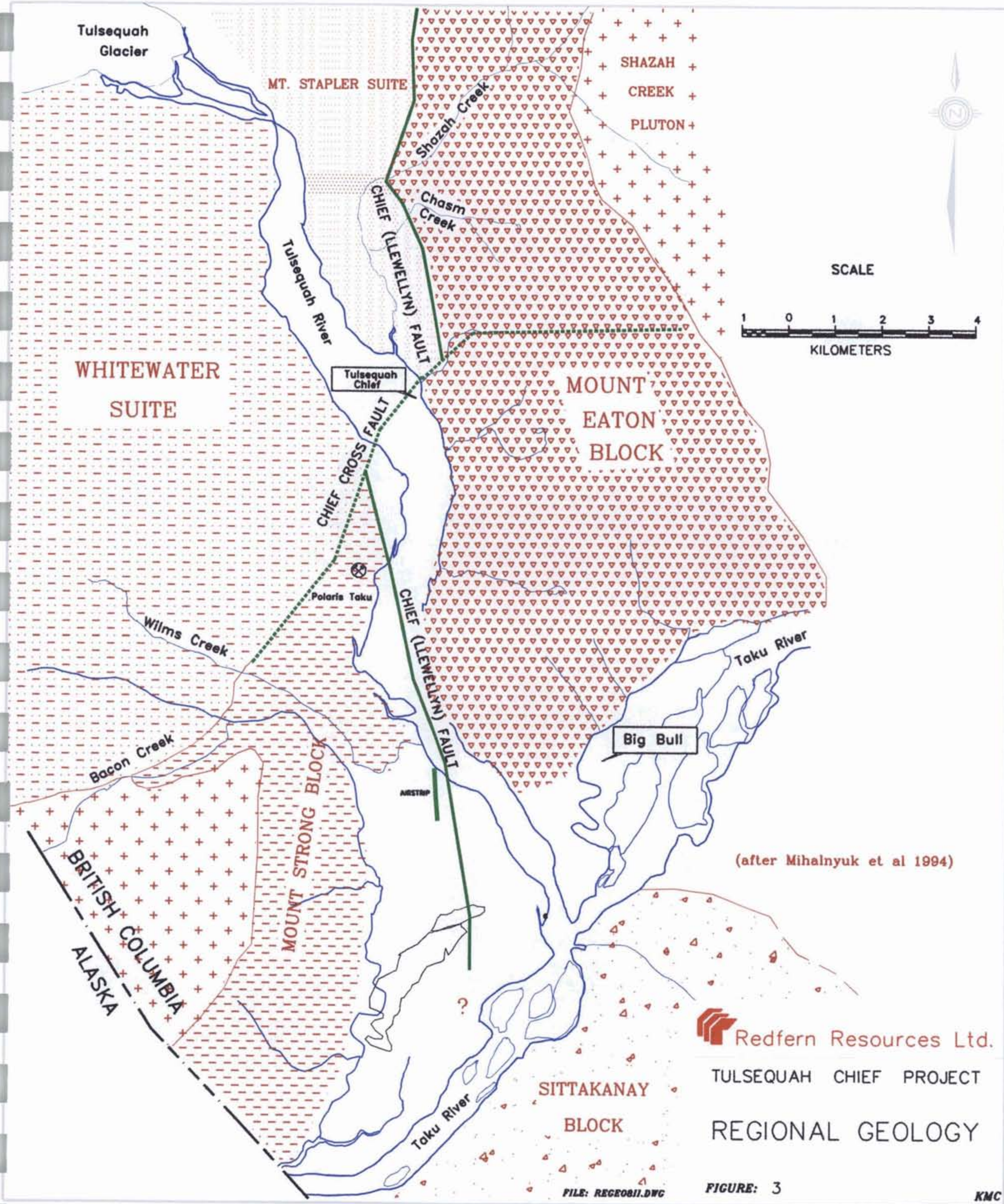
Deformation and metamorphic grade in the Tulsequah region decreases from west to east. Lithologies range from polyphase deformed high grade gneisses in the Boundary Ranges suite to lower greenschist grade volcanics of the Mount Eaton block. The latter has been affected by an upright to steeply overturned north trending, open to isoclinal fold event. A second, less well developed, fold event overprints the first. North trending, steeply dipping faults show evidence of numerous re-activations and intrusion by late Tertiary Sloko dykes.

5.2 Property Scale

The Tulsequah property is dominantly underlain by rocks of the Mount Eaton Block, an island arc volcanic sequence of Devono-Mississippian to Permian age (Mihalynuk et al, 1994). These rocks lie east of the Chief (Llewelyn) fault and are predominantly located east of the Tulsequah River and north of the Taku River.

The Mount Eaton block hosts the Tulsequah Chief and Big Bull volcanogenic massive sulphide deposits and a number of other similar occurrences and prospects. Work by the BCGS (Mihalynuk et al ,1994), Mineral Deposits Research Unit (MDRU) (Sherlock et al, 1993) and Redfern has crudely defined the stratigraphy of the Mount Eaton block based on mapping, biochronology, lithogeochemistry and isotopic age determinations. This work has subdivided the stratigraphy into three divisions. The Lower Division is dominated by Devonian to early Mississippian age bimodal volcanic units which include the Mine series felsic rocks hosting the Tulsequah Chief and Big Bull deposits. The Middle Division, Mississippian to Pennsylvanian in age, is composed dominantly of pyroxene bearing mafic breccias and agglomerates with locally extensive accumulations of mafic ash tuffs and volcanic sediments. The transition from the Middle to Upper Divisions is marked by polymictic debris flows and/or conglomerate. The Pennsylvanian to Permian Upper Division rocks primarily consist of volcanic derived and clastic sediments with lesser mafic flows. Distinctive bioclastic rudite and intercalated chert, shales and occasional sulphidic exhalite occur near the top of the Upper Division. Late Tertiary Sloko rhyolite and mafic dykes cut the Paleozoic units and commonly intrude along re-activated north-trending faults.

Structure in the Mount Eaton block is dominated by the north trending, eastward verging Mount Eaton anticline which plunges moderately north and dips steeply west. A number of parasitic, upright to overturned, folds (F_1) which range from open to near isoclinal occur on the western limb of this anticline. Penetrative fabric is weak or poorly developed except in extremely


Tulsequah Glacier
MT. STAPLER SUITE
SHAZAH CREEK PLUTON
Shazah Creek
Chasm Creek
CHIEF (LLEWELLYN) FAULT
Tulsequah River
SCALE
1 0 1 2 3 4
KILOMETERS
WHITEWATER SUITE
Tulsequah Chief
MOUNT EATON BLOCK
CHIEF CROSS FAULT
Polaris Taku
Wilms Creek
Taku River
Big Bull
Bacon Creek
MOUNT STRONG BLOCK
AIRSTRIP
BRITISH COLUMBIA
ALASKA
(after Mihalnyuk et al 1994)
?
SITTAKANAY BLOCK
Taku River
Redfern Resources Ltd.
TULSEQUAH CHIEF PROJECT
REGIONAL GEOLOGY
FILE: REGEO8II.DWG
FIGURE: 3
KMC

appressed folds. This first phase of folding (F_1) is refolded by a second, east-west fold phase (F_2) that is irregularly expressed across the property and locally produces a cross-cutting cleavage (S_2). The F_2 folds are generally upright and open. F_1 folds are not significantly re-oriented by the F_2 second phase of folding although they do exhibit variable plunge attitudes. F_1 fold axes generally plunge to the north in the northern half of the property with southern plunges more common in the southern areas. In the Tulsequah Chief mine area folds are open, and plunge at 55 to 60 degrees to the north with steep westerly dipping axial planes.

North to northwest trending faults are most common and generally exhibit long-lived, complex displacement histories. Displacement appears to be small on these faults except for the major Chief fault. Most faults are marked by topographic depressions in the form of steep-sided gullies and ravines. The north trending faults are commonly intruded by Sloko rhyolite dykes.

Younger east-west faults are less common on the property. However, based on regional mapping (Mihalynuk et al, 1994), these faults may have significant displacements. In particular, the Chief Cross fault was identified as potentially offsetting the regional Llewellyn (Chief) fault in a dextral sense by as much as two kilometers.

5.3 Deposit Scale

The Tulsequah Chief deposit is a precious metal-rich massive sulphide deposit hosted by the Devonian to Permian Mount Eaton suite. In the mine area, the Mount Eaton suite forms a northward younging package of felsic and mafic rocks that are sub-divided into the Footwall series (unit 1), the Mine series (unit 2) and the Hangingwall series (unit 3). The geology has also been subdivided into three structural "blocks" defined by the 4400E and 5300E faults. The Western Mine Block (WMB) lies west of the 4400E fault, the Central Mine Block (CMB) lies east of the 4400E fault and west of the 5300E fault, and the Eastern Mine Block (EMB) lies east of the 5300E fault. The stratigraphy correlates well across the faults and fault offsets typically create inconveniences to exploration rather than serious problems.

The occurrence of several distinct sulphide lenses at different stratigraphic levels, combined with the long history of production and exploration at Tulsequah, has resulted in a complex and confusing nomenclature for mineralized zones. In the 1950's, Cominco assigned letters to mineralized zones on an individual stope scale. Stopes mined above the 5200 Level included the A, B, C, D and E stopes. Late in the mine life, an F zone was discovered in the WMB, just west of the 4400E fault. Generally, these terms referred to individual sulphide lenses, without regard to stratigraphic position, and in places separated by faults.

With the resumption of exploration in 1987, an attempt was made to retain the old nomenclature, but mineralization was now being described in terms of stratigraphic position. In general, names have been given to stratigraphic intervals which host sulphide mineralization, thus AB_1 is intended to refer to sulphide mineralization which sits directly on the mafic footwall, and is overlain by rhyolites. An unfortunate complication was added by giving mineralization outside of the CMB new names, even though it could be correlated with one of the know horizons. For example, mineralization encountered at the AB_1 horizon west of the 4400E fault has been termed the F zone.

MOUNT EATON SUITE; Arc succession of the STIKINE ASSEMBLAGE
(modified after Mihalynuk et al, BCGS PAPER 1994 – 1)

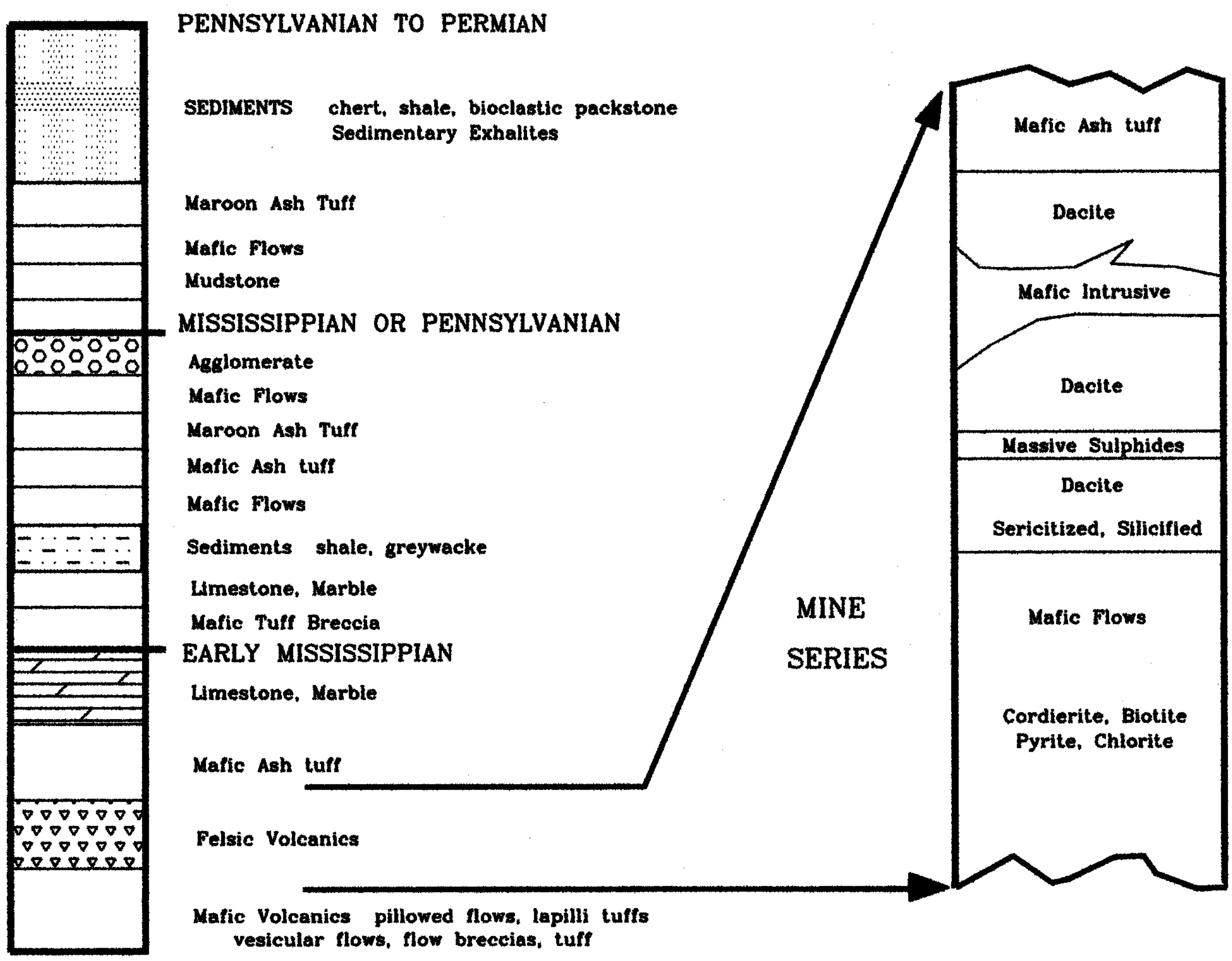
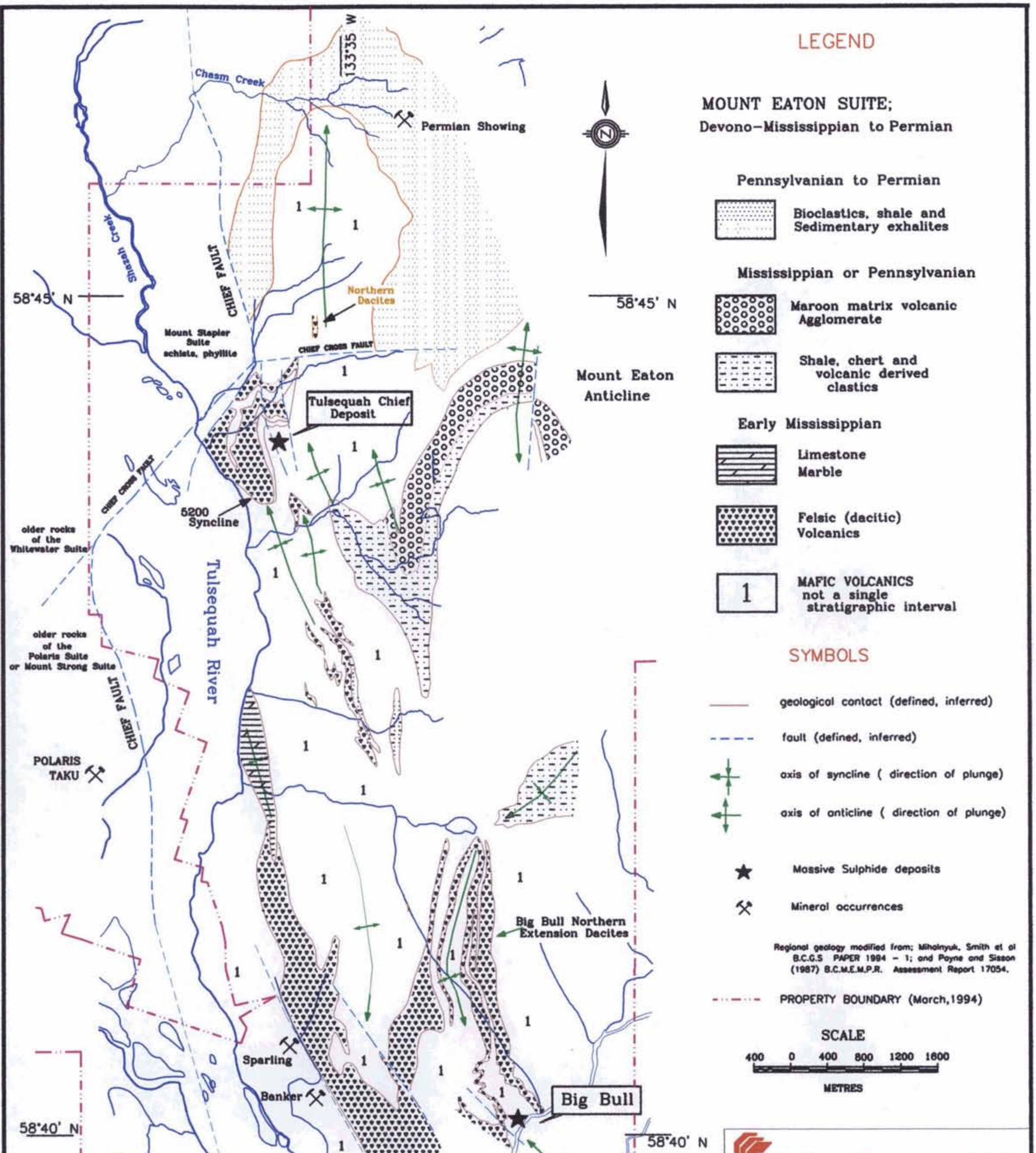


Figure 4: Stratigraphic Section



Redfern Resources Ltd.

TULSEQUAH CHIEF PROJECT

PROPERTY GEOLOGY AND MINERAL OCCURRENCES

FIGURE: 5

Footwall series (unit 1) forms the lowest stratigraphic unit in the Tulsequah Chief Mine area. It consists primarily of amygdaloidal mafic flows with minor interflow ash tuff, volcanic sediment and chert.

Mine series (unit 2) forms a laterally extensive, mainly felsic unit that stratigraphically overlies unit 1. It consists of felsic volcaniclastics, flows and sills that are host to a number of sulphide deposits at several distinct stratigraphic levels. These levels, or "horizons" include the I, H, AB_2, and AB_1 horizons.

A revised interpretation of drill data following the 2004 program has tentatively established the existence of 12 discreet sulphide lenses at Tulsequah Chief. These include 3 separate G zone lenses (east of the 5300 fault) and 9 separate H zone lenses. These lenses appear to occur at four distinct stratigraphic levels, and range in size from 25,000 tonnes to just under 2 million tonnes.

The sulphide lenses consist of thinly banded to massive pyrite, sphalerite, chalcopyrite and galena. Accessory minerals include tetrahedrite-tennantite and native gold. Gangue consists of barite (averaging 6%), chert, gypsum and sericite $\pm$ silica altered volcaniclastics. Visually the sulphides can be divided into three distinct sulphide facies: copper facies (CUF), zinc facies (ZNF) and pyrite facies (PYF). CUF-mineralization (>30% total sulphides) is characterized by massive to banded pyrite and chalcopyrite with minor sphalerite and galena. ZNF-mineralization (>30% total sulphides) consists primarily of sphalerite and galena in a barytic gangue, with much less pyrite and chalcopyrite. PYF-mineralization (>30% total sulphides) consists of massive pyrite with little economic sulphides. These ore types may occur within a single lens, typically with sharp boundaries between them.

In addition to the stratiform ore lenses, precious-metal rich vein mineralization has also been discovered at Tulsequah. Narrow, but extremely high-grade, veins have been intersected within mafic intrusives which lie immediately beneath the sulphide lenses and, in some instances, intrude them. These veins typically contain abundant visible gold and occasional native silver.

Mineralization at the I horizon (historically called the Upper Deposits) was mined from 1951 to 1957 between the 6100 and 6500 Levels (+300 to +500m elevation). Mineralization occurring at shallower levels of the AB_1, AB_2, and H horizons (historically called the Lower Deposits) was mined from 1951 to 1957 between the 5200 and 5700 Level (+50 to 200m elevation). Additional discoveries below the 5200 Level (+50m elevation) identified since 1987 include the H, AB_2 (extension of the Lower Deposits), G (offset extension of the H-AB_2 east of the 5300E fault), and AB_1 massive sulphide horizons.

Hanging Wall series (unit 3) is the highest unit recognized in the Tulsequah Chief Mine area. It consists of mafic flows, sills and lesser interflow volcanic sediment and volcaniclastics.

Units 1 through 3 are intruded by subvolcanic mafic intrusions (unit 4) which form thin sills and dykes that feed a large sill-like body that dilates unit 2 felsic volcanic rocks.

Tertiary Sloko intrusions (unit 5) form narrow dykes emplaced along faults in the Tulsequah Chief Mine area. They consist of flow banded and quartz-feldspar porphyritic rhyolite.

Mesozoic or older deformation has folded the Mount Eaton suite into northwesterly plunging anticlinal-synclinal fold pairs in the vicinity of the Tulsequah Chief Mine. These upright to steeply overturned parasitic folds are on the western limb of the regional Mount Eaton anticline. Faulting sub-parallel to the axial plane of these folds has offset stratigraphy right laterally along the 4400E and the 5300E faults by a small amount (<50m).

5.4 Structure

5.4.1 Folding

Mount Eaton suite rocks are deformed into anticlinal-synclinal fold pairs. These folds are easterly verging, parasitic folds on the western limb of the regional Mount Eaton anticline. The Mount Eaton anticline axial plane lies east of the map area along the western upper flanks of Mount Eaton and Mount Manville (Mihalynuk et al., 1994).

In detail, parasitic folds between the 4400E and 5300E fault (Central Mine Block) are upright to overturned and have moderate interlimb angles. Axial planes strike AZ166° and dip 79°W; the fold axis plunges 56° in the direction of AZ 329°. These small-scale fold structures have an amplitude of 30-50m and a frequency of 50m. Weak foliation and small scale folds are locally observed within unit 2 exhalitive horizons and in quartz + sericite + pyrite altered volcanic rocks in surface exposures, drill core and underground exposures.

West of the 4400E fault (Western Mine Block), bedding generally strikes north-northeast and dips moderately to steeply west. An overturned, north plunging synclinal fold is interpreted between the F-zone and the 5200 Level alteration zone. The synclinal closure between unit 1 mafic flows and the overlying unit 2 felsic volcanics free airs approximately 500 meters southeast of the 5200 Level portal.

East of the 5300E fault, bedding strikes northeast and dips vertically to steeply westward.

5.4.2 Faulting

Two major periods of faulting are identified in the Tulsequah Chief Map area. The first period of faulting is Mesozoic or older and related to deformation that produced the Mount Eaton anticline. These faults include the 4400E and 5300E faults.

The 4400E fault has a prominent surface expression; it is traceable from the Tulsequah Chief Mine area to the Big Bull Mine, 8km to the south. Underground at the Tulsequah Chief Mine the fault is identified on the 5200, 5400 and 5900 Level crosscuts by 1m of clay gouge. It strikes AZ 355-003° and dips 75-80° east. Stratigraphy is displaced less than 50m right laterally across this fault. Sloko rhyolite dykes are emplaced along part of this fault.

The 5300E fault has a faint surface expression that is traceable to the south where it intersects the 4400E fault 3.5 km south of the Tulsequah Chief Mine. The fault has a number of sub-parallel subsidiary splays that are identified in drilling and in underground workings. Underground the main fault splay is identified in the 5200, 5400, 5500, 5700, 5900 and 6200 Level crosscuts by 1m of clay gouge; locally it is intruded by Sloko Rhyolite dykes. It strikes AZ 001° and dips 80°east; apparent displacement across this fault is less than 30m in a right lateral sense.

A second younger period of faulting is displayed by the Chief fault which juxtaposes strongly deformed rocks of the Mount Stapler suite against less deformed rocks of the Mount Eaton suite. Within the Tulsequah Mine area, the fault strikes north-northeast and dips moderately to steeply west. Slickensides on associated parallel fractures are shallow which suggests mainly strike-slip displacement.

5.5 Alteration

Alteration associated with the H-AB horizon (unit 2) is mainly confined to the top of the Footwall series (unit 1) and within unit 2 itself. The alteration is characterized by an assemblage of silica ± sericite ± chlorite ± pyrite. Silica occurs as thin fracture envelopes to pervasive zones of silica flooding which cause the mafic volcanics to have a bleached grey to white colour. These zones are often crosscut by white quartz ± pyrite ± chalcopyrite ± chlorite veins (<30 cm).

West of the 4400E fault, footwall alteration on surface persists but decreases in intensity as the H-AB horizon pinches out to the south. It grades from an assemblage of pervasive silica, sericite, chlorite and pyrite directly below unit 2 mineralization to chlorite and disseminated pyrite up to 500 m south of the last exposure of exhalitive tuff in unit 2.

East of the 5300E fault, footwall alteration rapidly decreases in intensity and thickness as the I and G horizon pinch out to the north.

Hanging wall alteration is poorly developed and is confined to rhyolite flows and tuffs within and directly above the I and H-AB horizon (unit 2). It characterized by an assemblage of albite, epidote, chlorite, silica and magnetite (± hematite). Albite occurs as thin, white to grey fracture envelopes. Where fracture density is higher or alteration more intense, albite forms irregular pervasive zones, and primary textures are often obscured.

5.6 Metamorphism

Mount Eaton suite is a weakly penetratively deformed sequence that is overprinted by sub-greenschist to middle greenschist facies metamorphism (Mihalynuk et al., 1994). It is characterized by the breakdown of pyroxene and amphibole to chlorite and epidote, and potassium feldspar to sericite. Locally, the Mount Eaton suite in the Tulsequah Chief Mine area has undergone contact metamorphism. It is characterized by quartz ± epidote, chlorite, actinolite, magnetite and garnet veinlets which crosscut pervasive biotite and cordierite. Biotite is fine grained to aphanitic and phlogopitic in composition (Raudsepp, 1992). Cordierite forms subhedral to euhedral porphyroblasts (<1 cm) and often appears to be replacing quartz amygdules within altered basalt flows of unit 1.

6 Drilling

Exploration drilling was first carried out by Redfern Resources Ltd. between April 12th and November 9th, 2004. The program involved underground diamond drilling of 49 NQ2 drill holes and 5 wedge holes totaling 28,036 meters.

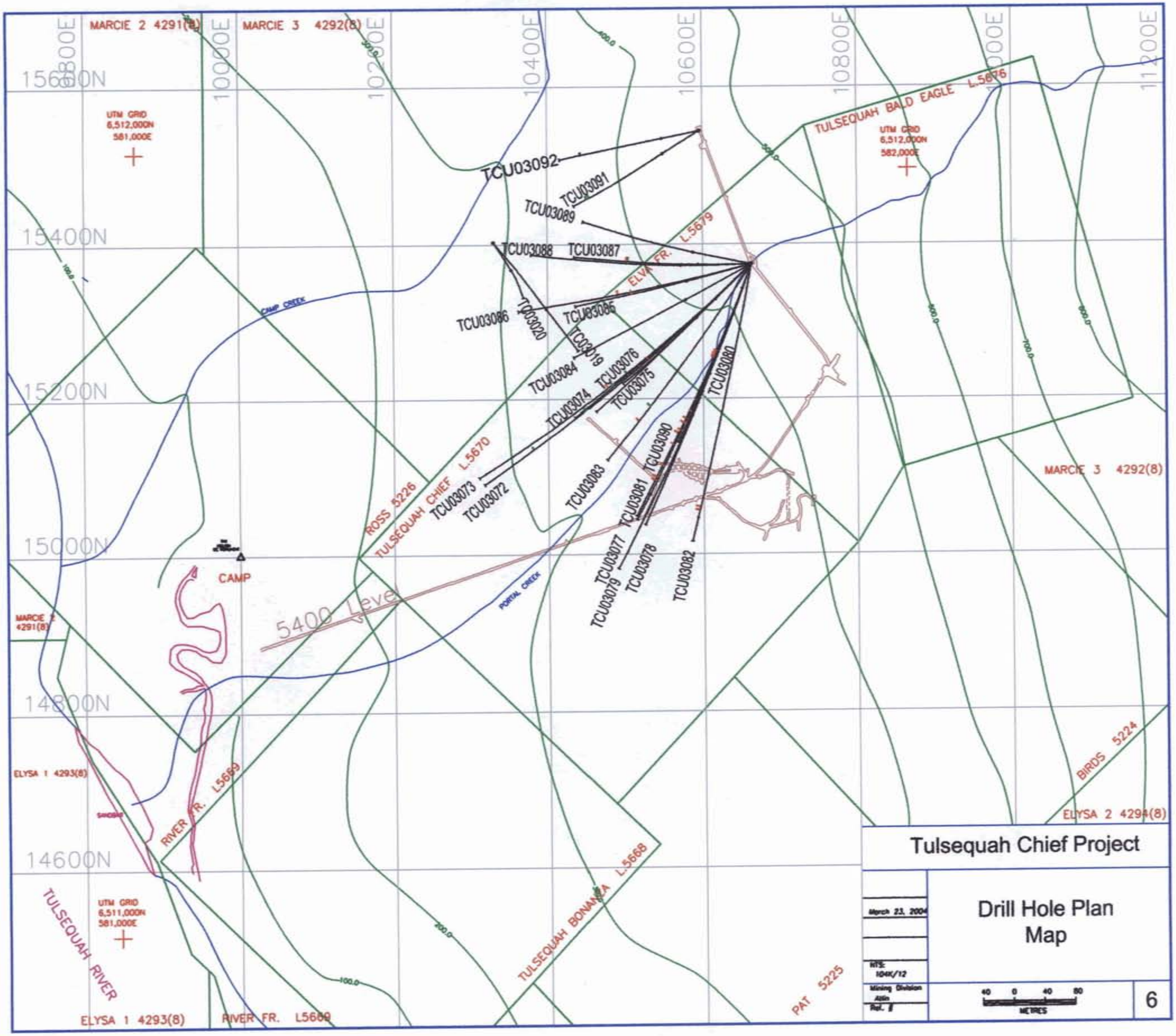
Drilling was done by Hy-Tech Drilling Ltd. of Smithers, BC. Drilling averaged 144 meters per day (with three drills), including moves and down-time, over the course of the job. Collar locations and orientations were surveyed in UTM coordinates relative to established mine survey stations with a total station EDM. Down hole surveys were done using the Maxi Bore system backed up by an EZ-SHOT single shot instrument. Collar locations are shown in Figure 12. Directional drilling services were provided by International Directional Services of Timmins using a Devico tool.

Drill core was moved by diesel loci for the underground holes, to the camp where it was logged. RQD was measured for all core, and geological logging captured lithological, alteration and structural information. Data was entered in to GEMS, which utilizes a MS Access database and allows for 3D visualization of drill holes. All drill core was also digitally photographed. Core is cross piled and racked on site. Drill logs are presented in Appendix I and all analytical results are in Appendix II. Drill sections are presented in Appendix VI, in map pockets. These sections are a series of inclined plan sections, with section planes oriented at a strike direction of 059° and dipping 34.5° to the south.

Table 2: 2004 Diamond Drill Hole Information

HOLE-ID	[EAST	NORTH	ELEV.	LENGTH	AZIMUTH	DIP
TCU04094	10663	15374	114	432.52	167.83	-68.37
TCU04095	10663	15374	114	495.91	170.87	-74.65
TCU04096	10596	15545	114	665.68	172.94	-74.65
TCU04097	10601	15525	114	649.83	182.25	-71.88
TCU04098	10663	15374	114	474.88	175.5	-57.33
TCU04099	10663	15374	114	614.17	187.15	-73.16
TCU04100	10596	15545	114	646.79	181.5	-78
TCU04101	10601	15525	114	665.68	183.54	-71
TCU04102	10601	15525	114	762.91	194.83	-81.11
TCU04103	10663	15374	114	411.81	190.81	-61.97
TCU04104	10596	15545	114	666.75	182.78	-70.83
TCU04105	10663	15374	114	472.44	212.87	-70.43
TCU04106	10601	15525	114	653.79	188.09	-75.5
TCU04107	10596	15545	114	630.63	193.09	-67.07
TCU04108	10486	15636	117	831.49	152	-81
TCU04109	10601	15525	114	677.27	192.87	-81.11
TCU04110	10596	15545	114	655.02	190.71	-70.54
TCU04111	10601	15525	114	751.64	220.96	-77.99
TCU04112	10596	15545	114	624.23	165.3	-77.26
TCU04113	10601	15525	114	637.03	187.7	-73.3
TCU04114	10596	15545	114	612.04	161.77	-61.4

TCU04115	10601	15525	114	654.41	195.42	-75.36
TCU04116	10486	15638	117	1000.66	161.21	-84.86
TCU04117	10596	15545	114	589.33	162.5	-69.13
TCU04118	10601	15525	114	697.69	205.19	-81.99
TCU04119	10596	15545	114	592.53	163.6	-72.36
TCU04120	10601	15525	114	719.02	218.58	-81.12
TCU04121	10596	15545	114	740.36	216.49	-62.29
TCU04122	10486	15636	117	964.59	360	-89.4
TCU04122A	10486	15636	117	1005.68	320.66	-89
TCU04123	10601	15525	114	663.55	189.59	-84.55
TCU04124	10596	15545	114	681.49	218.5	-81
TCU04124A	10596	15545	114	473.66	218.5	-81
TCU04124B	10596	15545	114	864.72	213.79	-83.63
TCU04124C	10596	15545	114	658.06	218.5	-81
TCU04125	10663	15374	114	325.83	112	-48
TCU04126	10596	15545	114	672.69	179.6	-66.2
TCU04127	10663	15374	114	279.5	117.5	-33.48
TCU04128	10663	15374	114	338.02	127.87	-44.26
TCU04129	10663	15374	114	289.26	128.66	-25.6
TCU04130	10663	15374	114	648.92	211.73	-80.12
TCU04131	10486	15636	117	908.34	156.56	-79.76
TCU04131A	10486	15636	117	768.71	156.56	-79.76
TCU04132	10663	15374	114	423.37	168	-58
TCU04133	10736	15186	111	197.82	128	-49.6
TCU04134	10736	15186	111	264.87	118	-76.5
TCU04135	10736	15186	111	292.3	108	-65.5
TCU04136	10736	15186	111	200.86	109	-53.89
TCU04137	10736	15186	111	193.24	108	-39
TCU04138	10735	15190	111	277.06	93	-72.5
TCU04139	10735	15190	111	179.27	86	-48
TCU04140	10735	15190	111	225.25	81.5	-59.5
TCU04141	10735	15190	111	252.68	75.6	-65.3



Tulsequah Chief Project
Drill Hole Plan Map
6
March 23, 2004
NTS: 104K/12
Mining Division Atlin
METRES
15600N
15400N
15200N
15000N
14800N
14600N
9800E
10000E
10200E
10400E
10600E
10800E
11000E
11200E
MARCIE 2 4291(8)
MARCIE 3 4292(8)
TULSEQUAH BALD EAGLE L.5676
ELVA FR. L.5679
TULSEQUAH CHIEF L.5670
ROSS 5226
RIVER FR. L5669
TULSEQUAH BONANZA L.5668
ELYSA 1 4293(8)
ELYSA 2 4294(8)
BIRDS 5224
PAT 5225
UTM GRID 6,512,000N 581,000E
UTM GRID 6,512,000N 582,000E
UTM GRID 6,511,000N 581,000E
CAMP CREEK
PORTAL CREEK
CAMP
5400 Level
TULSEQUAH RIVER
TCU03092
TCU03091
TCU03089
TCU03088
TCU03087
TCU03086
TCU03020
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TCU03080
TCU03073
TCU03072
TCU03083
TCU03090
TCU03081
TCU03077
TCU03079
TCU03078
TCU03082

Table 3: 2004 Drill Intersections

Hole #	From (m)	To (m)	Length	Estimated True Width	Au (gpt)	Ag (gpt)	Cu (%)	Pb (%)	Zn (%)
TCU04093	282.62	288.10	5.48	5.00	2.22	85.2	0.66	0.92	6.86
plus	295.30	297.50	2.20	2.00	2.72	75.3	2.22	1.65	14.91
TCU04094	365.60	378.00	12.40	7.50	2.20	75.8	1.44	1.85	10.04
TCU04095	377.42	382.48	5.06	4.80	1.44	61.3	0.72	0.74	3.96
plus	485.10	486.51	1.40	1.20	2.89	69.1	0.28	0.84	2.58
TCU04096	565.38	570.76	5.40	5.00	3.22	91.1	0.56	1.22	6.23
TCU04097	516.50	530.60	14.10	12.80	3.10	125.1	1.35	1.70	7.34
TCU04099	410.95	434.40	23.40	15.00	2.39	73.4	0.68	1.20	5.02
TCU04100	598.40	609.55	11.20	9.00	6.81	229.0	0.85	3.69	11.12
TCU04101	545.40	555.29	9.90	7.00	3.78	108.6	1.20	1.97	11.17
TCU04102	602.39	636.63	34.24	31.00	2.77	78.8	1.35	1.00	9.73
incl	615.63	626.34	10.71	9.60	3.66	88.4	1.94	0.83	20.40
TCU04103	341.95	347.95	6.00	4.50	2.37	167.9	1.82	3.10	11.30
TCU04104	560.00	577.50	17.50	15.50	1.63	180.2	3.15	1.51	10.88
TCU04105	436.65	438.15	1.50	1.30	1.26	32.7	0.13	0.63	2.43
	442.65	444.15	1.50	1.30	1.83	142.0	1.04	0.92	3.47
	445.40	446.40	1.00	0.90	0.53	32.7	2.36	8.01	0.23
TCU04106	581.41	619.33	37.90	30.00	3.34	123.9	2.30	1.60	11.06
TCU04107	559.75	569.67	9.92	9.00	0.42	32.9	0.28	0.33	1.87
TCU04109	604.07	630.59	26.52	22.00	5.23	157.9	2.88	1.03	7.29
TCU04110									
TCU04111									
TCU04112	581.98	597.55	15.57	13.00	1.65	59.6	1.22	0.82	7.00
TCU04113	553.33	559.25	5.92	4.00	6.28	442.1	5.52	1.65	6.92
	578.93	596.82	17.89	12.00	3.78	129.0	2.41	1.47	13.38
TCU04114	486.75	487	0.25	0.25	3.93	90.0	3.00	1.03	7.09
TCU04115	591.37	592.87	1.50	1.00	7.06	142.0	3.20	0.76	7.76
	594.37	595.87	1.50	1.00	0.41	32.0	0.13	0.19	1.05
	608.91	615.77	6.86	4.60	6.15	137.8	5.51	1.23	10.82
	627.77	630.77	3.00	2.00	0.16	2.3	0.12	0.03	2.20
TCU04116	905.13	911.13	6.00		1.66	0.0	0.00	0.00	0.00
TCU04117	499.27	505.27	6.00	4.40	1.21	27.5	0.28	0.45	2.48
TCU04118	624.73	660.04	35.67	22.00	2.18	132.0	1.41	1.93	8.28
TCU04119	489.28	489.91	0.63	0.49	0.3	12.00	0.23	0.42	1.63
plus	556.45	560.72	4.27	3.30	2.7	38.52	0.43	0.41	1.78
TCU04120	641.03	672.10	31.07	20.22	3.8	143.12	1.25	2.10	9.20
TCU04121	357.45	361.00	3.55	2.46	1.4	119.95	0.06	0.53	1.03
TCU04122	No significant assays								
TCU04122A	No significant assays								

TCU04123	625.12	627.25	2.13	1.40	1.0	51.02	0.29	0.51	2.37
plus	630.41	642.70	12.29	8.07	4.0	146.90	3.05	1.58	7.82
plus	657.95	660.80	2.85	1.87	1.2	61.93	0.52	0.53	2.41
TCU04124	No significant assays								
TCU04124A	No significant assays								
TCU04124B	747.1	757.92	8.05	0.62	0.64	27.38	0.14	0.31	1.27
TCU04124C	No significant assays								
TCU04125	274	276.16	2.16	1.80	1.7	92.07	0.62	1.53	6.92
plus	280.79	285.70	4.91	4.10	0.3	32.99	0.37	0.76	5.62
plus	299.12	300.20	1.08	0.90	1.4	40.00	0.51	0.98	3.42
TCU04126	539.19	555.53	16.34	13.97	4.5	202.17	1.16	2.29	6.53
TCU04127	211.15	217.29	6.14	5.67	0.6	50.47	0.22	0.65	1.91
plus	243.25	246.28	3.03	2.79	8.6	274.29	2.12	4.39	8.82
TCU04128	274.19	274.62	0.43	0.36	0.2	42.30	0.51	0.18	3.36
plus	284.66	287.32	2.66	2.19	0.9	40.74	0.54	1.04	5.04
TCU04129	222.8	225.20	2.40	2.13	7.4	439.04	7.95	3.06	18.17
plus	229.17	231.50	2.33	2.06	0.7	21.50	0.52	0.31	4.24
plus	246.4	252.09	5.69	5.01	7.8	235.79	1.40	2.91	11.12
TCU04130	483.2	489.8	6.6	3.9	1.72	85.3	0.60	2.00	7.28
TCU04131	822.88	826.02	3.14	2.2	1.68	17.24	0.35	0.55	2.48
TCU04131A	No significant assays								
TCU04132	305.49	312.64	7.15	5.9	2.23	59.35	0.98	0.9	4.8
plus	339.66	348.83	9.17	7.5	2.19	58.79	1.53	0.79	6.53
TCU04133	166.9	178.63	11.73	8.5	3.75	95.65	2.27	0.87	4.35
TCU04134	219.9	222.82	2.92	1.5	1.72	40.85	0.76	0.76	5.13
TCU04135	Thin mineralization								
TCU04136	172.6	174.9	2.3	1.89	3.11	86.16	1.57	1.32	6.27
TCU04137	116.6	122.5	5.9	5.33	3.77	95.59	1.78	1.36	6.06
TCU04138	213.6	221.6	8	7.75	1.54	42.91	1.15	0.82	5.8
TCU04139	107.75	117.2	9.45	8.0	1.65	64.71	0.69	0.93	4.66
plus	125.1	134.06	8.96	7.5	5.53	145.95	1.55	2.33	12.82
TCU04141	201.87	208.85	6.98	4.7	3.03	82.52	2.21	1.05	7.27

The 2004 drill program had two main goals; infill drilling of the main Tulsequah deposits to provide sufficient data to support a 43-101 compliant resource estimate with sufficient confidence to allow most of the know mineralization to be classified as Indicated and to begin to test the down-plunge extent of the deposit below the previous deepest holes.

Infill drilling attempted to maintain a 40 meter spacing between drill hole intersections of the main H lenses. This proved to be challenging due to unpredictable deflection and the tight tolerance required for hitting small targets with long holes. Despite the challenges, the spacing was reasonable well maintained and the subsequent resource estimate was able to convert most of the material to the Indicated category.

The deep holes designed to test the down-plunge extent of the deposit also proved to be challenging due to a combination of unpredictable deviations and the presence of narrow, but sand-rich, faults which proved to be very difficult to drill through.

7 Interpretation and Conclusions

The 2004 drill program had two main goals; infill drilling of the main Tulsequah deposits to provide sufficient data to support a 43-101 compliant resource estimate with sufficient confidence to allow most of the know mineralization to be classified as Indicated and to begin to test the down-plunge extent of the deposit below the previous deepest holes.

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The deep holes designed to test the down-plunge extent of the deposit also proved to be challenging due to a combination of unpredictable deviations and the presence of narrow, but sand-rich, faults which proved to be very difficult to drill through. Only two hole were successful at intersecting the full width of the mineralized horizon below TCU92036. Although neither hole intersected massive sulphide mineralization, they did core significant thicknesses of intensely altered rhyolite and basalt, indicating that the hydrothermal system responsible for the ore deposition remains strong in that area and that the potential for continuation of the deposit remains good.

8 Recommendations

Additional drilling is recommended at Tulsequah in order to continue to convert Inferred resources to Indicated, to continue exploration for additional lenses within the Tulsequah cluster and to begin the search for new deposits associated with know, but underexplored, alteration zones distal to the Tulsequah deposit area. A modest drill program consisting of 5,250 meters of drilling should be sufficient to begin to achieve these objectives.

The 2004 drill program supported a revised resource interpretation which contains an Inferred resource of 1.54 million tonnes. It is recommended that this resource be drilled off at 40 meter intersection spacings in order to allow it to be converted to the Indicated category. This drilling can be done from existing underground drill platforms using existing infrastructure at the site.

Several peripheral targets remain in the immediate vicinity of the Tulsequah deposits. These targets fall within the extensive alteration zone surrounding the deposits and represent excellent opportunities to discover new massive sulphide lenses. These areas have typically not been drilled in the past due to challenging geometry and difficulties in drilling them from the existing underground platforms. The excavation of a new platform in 2004 will allow these areas to be targeted more effectively, and surface drilling can also be used to target some areas.

Virtually all of the exploration and development focus to date has been on the Tulsequah deposit area. This represents a cluster of massive sulphide lenses associated with a single hydrothermal system which produced an extensive halo of intense alteration around the deposits. This cluster occurs within a well-defined section of stratigraphy which can be followed along strike away from this alteration zone. At least two other alteration zones occur at this same stratigraphic level between the Tulsequah deposits and the Tulsequah river. These other alteration zones represent separate hydrothermal systems which may have resulted in the deposition of undiscovered massive sulphide lenses. Drill testing of these zones is recommended in order to better characterize them and test their potential to host sulphide mineralization.

The most obvious alteration zone has been called the 5200 alteration zone and outcrops along the Tulsequah river from the 5200 portal extending some 500 meters south along the river bank. It has been tested by 8 short drill holes to date and needs additional drilling to better understand its characteristics. The lithogeochemical work done by Tim Barrett will allow the alteration zone to be characterized and compared to the Tulsequah alteration.

A second alteration zone is poorly exposed some 850 meters south west of the 5200 portal, again at the same stratigraphic level as the Tulsequah deposits. This zone lies in the core of the 5200 syncline and has never been drill tested. Surface drilling is recommended in order to characterize this alteration zone and begin to determine its extent and significance.

Table 4: Proposed Budget for Recommended Work

Category	Detail	Unit cost	# Units			Total Cost
Communications	Long Distance	$ 0.16	2500	minutes		$ 400.00
	Sat Phone Rental	$ 5,000.00	2	months		$ 10,000.00
	Installation					$ 850.00
Office supplies						$ 1,000.00
Publication/map/data						$ 1,000.00
Travel	Air fares, in-transit accom. and meals	$ 620.00	10	man-trips		$ 6,200.00
Accomodation		$ 2,080.00	1	months		$ 2,080.00
Groceries		$ 30.00	700	mandays		$ 21,000.00
Vehicle lease, rental	Truck 1	$ 2,050.00	1	months		$ 2,050.00
Sample shipping		$ 1.00	1000	samples		$ 1,000.00
Employee Wages - Geology	Project Geologist	$ 400.00	90	days	$ 36,000.00	
					$ 36,000.00	
Employee Wages - Support	Camp Manager	$ 250.00	70	days	$ 17,500.00	
	Cook	$ 250.00	60	days	$ 15,000.00	
	Core Technician	$ 225.00	60		$ 13,500.00	
					$ 46,000.00	$ 82,000.00
Geological Consulting	T. Barrett	$ 600.00	10	days		$ 6,000.00
Draft/plot/reproduction						$ 2,500.00
Helicopter		$ 825.00	75	hours		$ 61,875.00
Assay and analysis	Core Samples - ICP	$ 9.00	1000	samples	$ 9,000.00	
	- Assay	$ 9.00	300		$ 2,700.00	
			1000			$ 11,700.00
Drilling	Footage	$ 60.00	0	meters	$ 287,100.00	
(see Drilling Page)	mob/demob				$ 7,500.00	
	Standby				$ 11,182.50	
	Tests				$ 8,342.00	
	Op Field Costs				$ 22,417.50	
	Materials				$ 2,000.00	
	Boxes				$ 8,750.00	
						$ 347,292.00
Equipment Rental		$ 8,000.00	2	months		$ 16,000.00
Field/technical supplies						$ 4,000.00
Construction supplies						$ 1,000.00
Fuel & Lubricants / Camp		$ 0.80	1000	liter		$ 800.00
Fuel & Lubricants / Gen		$ 0.75	25000	liter		$ 18,750.00
Spare parts / repairs						$ 1,500.00
	TOTAL					$ 598,997.00

9 References

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APPENDIX I
DIAMOND DRILL LOGS
VOLUME 1
TCU04094 to TCU04100

Geological, Geochemical and Diamond Drilling Report on the Tulsequah Chief Property

Tulsequah River Area
Northwestern BC
NTS 104K/12

Atlin Mining Division

58°43'N 133°35'W

Owner & Operator:
Redfern Resources Ltd.
760 - 777 Hornby Street,
Vancouver, BC

APPENDIX I
DIAMOND DRILL LOGS
VOLUME 2
TCU04101 to TCU04120

Geological, Geochemical and Diamond Drilling Report on the Tulsequah Chief Property

Tulsequah River Area
Northwestern BC
NTS 104K/12

Atlin Mining Division

58°43'N 133°35'W

Owner & Operator:
Redfern Resources Ltd.
760 - 777 Hornby Street,
Vancouver, BC

APPENDIX I
DIAMOND DRILL LOGS
VOLUME 3
TCU04121 to TCU04141

Geological, Geochemical and Diamond Drilling Report on the Tulsequah Chief Property

Tulsequah River Area
Northwestern BC
NTS 104K/12

Atlin Mining Division

58°43'N 133°35'W

Owner & Operator:
Redfern Resources Ltd.
760 - 777 Hornby Street,
Vancouver, BC

APPENDIX II
ASSAY CERTIFICATES

Geological, Geochemical and Diamond Drilling Report on the Tulsequah Chief Property

Tulsequah River Area
Northwestern BC
NTS 104K/12

Atlin Mining Division

58°43'N 133°35'W

Owner & Operator:
Redfern Resources Ltd.
760 - 777 Hornby Street,
Vancouver, BC

APPENDIX III
ANALYTICAL METHODS

SAMPLE PREPARATION

Samples are catalogued and dried. Soils are prepared by sieving through an 80 mesh screen to obtain a minus 80 mesh fraction. Samples unable to produce adequate minus 80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to -140 mesh. The subsample is rolled, homogenized and bagged in a prenumbered bag.

GEOCHEMICAL GOLD ANALYSIS

The sample is weighed to 30 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-range values for rocks are re-analyzed using gold assay methods.

Appropriate reference materials accompany the samples through the process allowing for quality control assessment. Results are entered and printed along with quality control data (repeats and standards). The data is faxed and/or mailed to the client.

GOLD ASSAY

Samples are sorted and dried (if necessary). The samples are crushed through a jaw crusher and cone or rolls crusher to –10 mesh. The sample is split through a Jones riffle until a –250 gram sub sample is achieved. The sub sample is pulverized in a ring & puck pulverizer to 95% - 140 mesh. The sample is rolled to homogenize.

A ½ 1.0 A.T. sample size I fire assayed using appropriate fluxes. The resultant dore bead is parted and then digested with aqua regia and then analyzed on a Perkin Elmer AA instrument.

Appropriate standards and repeat sample (Quality Control Components) accompany the samples on the data sheet.

METALLIC GOLD ASSAY

Samples are catalogued and dried. Rock samples are two stage crushed to minus 10 mesh, then split to achieve a 250 gram (approximate) sub sample. The sample is pulverized to 95% -140 mesh. The sample is weighed, then rolled and homogenized and screened at 140 mesh.

The –140 mesh fraction is homogenized and 2 samples are fire assayed for Au. The +140 mesh material is assayed entirely. The resultant fire assay bead is digested with acid and after parting is analyzed on a Perkin Elmer atomic absorption machine using air-acetylene flame to .03 grams/t detection limit.

The entire set of samples is redone if the quality control standard is outside 2 standard deviations or if the blank is greater than .015 g/t.

The values are calculated back to the original sample weight providing a net gold value as well as 2-140 values and a single +140 mesh value.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are faxed and or mailed to the client.

MULTI ELEMENT ICP ANALYSIS

A 0.5 gram sample is digested with 3ml of a 3:1:2 (HCl:HN03:H20) which contains beryllium which acts as an internal standard for 90 minutes in a water bath at 95°C. The sample is then diluted to 10ml with water. The sample is analysed on a Jarrell Ash ICP unit.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are faxed and/or mailed to the client.

	Detection Limit			Detection Limit	
	Low	Upper		Low	Upper
Ag	0.2ppm	30.0ppm	Mo	1ppm	10,000ppm
Al	0.01%	10.0%	Na	0.01%	10.00%
As	5ppm	10,000ppm	Ni	1ppm	10,000ppm
Ba	5ppm	10,000ppm	P	10ppm	10,000ppm
Bi	5ppm	10,000ppm	Pb	2ppm	10,000ppm
Ca	0.01%	10,00%	Sb	5ppm	10,000ppm
Cd	1ppm	10,000ppm	Sn	20ppm	10,000ppm
Co	1ppm	10,000ppm	Sr	1ppm	10,000ppm
Cr	1ppm	10,000ppm	Ti	0.01%	10.00%
Cu	1ppm	10,000ppm	U	10ppm	10,000ppm
Fe	0.01%	10.00%	V	1ppm	10,000ppm
La	10ppm	10,000ppm	Y	1ppm	10,000ppm
Mg	0.01%	10.00%	Zn	1ppm	10,000ppm
Mn	1ppm	10,000ppm			

BASE METAL ASSAYS (Ag,Cu,Pb,Zn)

Samples are catalogued and dried. Rock samples are 2 stage crushed followed by pulverizing a 250 gram subsample. The subsample is rolled and homogenized and bagged in a prenumbered bag.

A suitable sample weight is digested with aqua regia. The sample is allowed to cool, bulked up to a suitable volume and analysed by an atomic absorption instrument, to .01 % detection limit.

Appropriate certified reference materials accompany the samples through the process providing accurate quality control. Result data is entered along with standards and repeat values and are faxed and/or mailed to the client.

APPENDIX IV
STATEMENT OF COSTS

Salaries and Wages							$ 927,892
Geological Consulting	Lithogeochemical Study						$ 24,890
Room & Board (camp costs)	includes fuel	5589	mandays	$ 93.30		per manday	$ 521,454
Communications	Satellite Phone, courier						$ 51,722
Transportation	Helicopter and Fuel					$380,241.56	
	Fixed wing and Fuel					$432,024.39	
	Car Rental					$ 6,549.07	
	Commercial Travel and Accommodation					$ 41,562.55	
							$ 860,378
Freight & Shipping							$ 28,535
Underground Rehabilitation						$312,656.42	
Diamond Drilling	Includes directional drilling and core boxes	28036	meters	$ 101.50	per meter	$2,845,654.00	
							$ 3,158,310
Analytical							$ 60,786
Instrument Rental	Maxi-Bore hole deviation survey instrument	8	months	$7,000.00	per month	$ 56,000.00	
	EZ Shot hole deviation survey instrument	16	months	$1,600.00	per month	$ 25,600.00	
	Total Station survey instrument	5.5	months	$1,000.00	per month	$ 5,500.00	
							$ 87,100
Field, Office and Technical Supplies	includes upgrading electrical supply to drills						$ 153,510
Computer Software & Supplies							$ 22,018
	Grand Total						**$ 5,896,594**

APPENDIX V
STATEMENT OF QUALIFICATIONS

I, Robert G. Carmichael, of 1142 Arborlynn Drive, North Vancouver, BC, do hereby certify that:

- I am currently employed as Vice President, Exploration by Redfern Resources Ltd.;

- I am a qualified person as defined by National Instrument 43-101;

- I am a graduate of the University of British Columbia (1987) with a Bachelor of Applied Science degree in Geological Engineering;

- I have worked in the field of mining exploration since graduation, including extensive work on exploration and delineation of volcanogenic massive sulphide deposits located in British Columbia and Portugal;

- I have been a Registered Professional Engineer under the Association of Professional Engineers and Geoscientists of BC since 1992;

- The information, opinions, conclusions and recommendations contained in this report are based on work performed and supervised by myself on the Tulsequah Chief property during the period from June 9th to November 12th, 2003.

- I am not aware of any material fact or material change with respect to the Tulsequah Chief property which is not reflected in this technical report.

Robert G. Carmichael, P.Eng.
May 2, 2004

APPENDIX VI
DRILL SECTIONS