



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Tulsequah Project 2014 Feasibility Study Optimization: Tulsequah Chief and Big Bull Resources & Reserve

TOTAL COST: \$99,542.03

AUTHOR(S): B. Armstrong,
SIGNATURE(S): B. Armstrong

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):
Mx-1-910 Issued 20th August 2013, Approval # 13-0100019-0816;
Mx-1-355 Issued 22nd August 2013, Approval # 13-1650242-0822;

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S) : 5535014; 2014/dec/19

YEAR OF WORK: 2014

PROPERTY NAME: Tulsequah

CLAIM NAME(S) (on which work was done): 590422 TCMINE; 513820

COMMODITIES SOUGHT: Au, Ag, Cu,Pb, Zn

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN: 104K 002; 104K 008

MINING DIVISION: Atlin
NTS / BCGS: 104K/12
LATITUDE: 58° 44' 25"
LONGITUDE: 133° 35' 24" (at centre of work)
UTM Zone: NAD83 8N EASTING: 581,600 NORTHING: 6,512,000

OWNER(S): Chieftain Metals Inc.
MAILING ADDRESS: 2 Bloor Street West, Suite 2510, Toronto, Ontario, M4W 3E2

OPERATOR(S) [who paid for the work]: Chieftain Metals Inc.
MAILING ADDRESS: 2 Bloor Street West, Suite 2510, Toronto, Ontario, M4W 3E2

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)
Stikine Assemblage, Mt. Eaton Suite, island arc volcanic, limestone, Devono-Mississippian, Permian, Llewellyn Fault, Chief Fault, Chief Cross Fault, Mount Eaton Anticline, quartz sericite pyrite alteration, polymetallic volcanogenic massive sulphide, Kuroko type, Geophysics, Induced Polarization, Magnetics, Tulsequah Chief, Big Bull, Feasibility Study, Mineral Resource, Mineral Reserve.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:
8933; 9825; 11018; 17054; 17137; 19453; 20423; 20901; 23762; 23763; 23951; 24183;
24188; 27385; 27659; 31030; 33468; 33482; 34358; 34969.

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
<u>Ground, mapping</u>			
<u>Photo interpretation</u>			
GEOPHYSICAL (line-kilometres)			
<u>Ground</u>			
<u>Magnetic</u>			
<u>Other</u>			
<u>Airborne</u>			
GEOCHEMICAL (number of samples analysed for ...)			
<u>Soil</u>			
<u>Silt</u>			
<u>Rock</u>			
<u>Other</u>			
DRILLING (total metres, number of holes, size, storage location)			
<u>Core</u>			
<u>Non-core</u>			
RELATED TECHNICAL			
<u>Sampling / Assaying</u>			
<u>Tulsequah Chief Mineral Resource</u>		590422	\$16,517.11
<u>Tulsequah Chief Mineral Reserve</u>		590422	\$66,176.61
<u>Big Bull Mineral Resource</u>		513820	\$16,848.32
<u>Metallurgical</u>			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
<u>Line/grid (km)</u>			
<u>Topo/Photogrammetric (scale, area)</u>			
<u>Legal Surveys (scale, area)</u>			
<u>Road, local access (km)/trail</u>			
<u>Trench (number/metres)</u>			
<u>Underground development (metres)</u>			
<u>Other</u>			
		TOTAL COST	\$99,542.03

**BC Geological Survey
Assessment Report
35093**

**Tulsequah Project 2014 Feasibility Study
Optimization: Tulsequah Chief and Big Bull
Resources & Reserve**

**Tulsequah River Area
Northwestern BC
NTS 104K/12**

Atlin Mining Division

Latitude 58°44'N, Longitude 133°35'W

Owner & Operator:

**Chieftain Metals Inc.
2 Bloor Street West, Suite 2510
Toronto, Ontario**

Work performed: April 1th – November 30th 2014

On mineral claims: 513820
590422 TCMINE

Statement of Work Event Number: 5535014; 2014/dec/19

B. D. Armstrong P.Geo

Report Submitted December 19th, 2014

SUMMARY

The Tulsequah Chief Project is a development stage polymetallic volcanogenic massive sulphide (VMS) project situated in Northwestern British Columbia 100 km south of Atlin, B.C. and 64 km northeast of Juneau, Alaska. The Tulsequah property is 100% owned by Chieftain Metals Inc. and covers 32453.4ha including 36 Mineral Claims and 25 Crown Granted Mineral claims. The property includes the past producing Tulsequah Chief and Big Bull mines, and a number of earlier stage prospects.

The Tulsequah Chief deposit was discovered in 1923 and the nearby Big Bull deposit was discovered in 1929. Cominco Ltd. acquired the properties in 1946 and operated the Tulsequah Chief mine from 1951-1957, mining 575,463 tonnes at a grade of 3.43g/t Au, 108 g/t Ag, 1.8% Cu, 1.3% Pb and 6.7% Zn.

In the 1980's Cominco re-commenced exploration on the property using the new volcanogenic hosted massive sulphide 'Kuroko' genetic model, rather than hydrothermal veins or replacement models. Cominco conducted surface mapping and geophysical surveys and entered into a joint venture with Redfern Resources Ltd, commencing diamond drilling in 1987. Seasonal drilling and surface programs continued until 1992 when Redfern purchased Cominco's remaining 60% interest and assumed the site legacy environmental remediation obligations. Redfern continued to develop the property and completed a positive feasibility study by Rescan in 1995. No technical work was conducted between 1994 and 2002

Redfern re-commenced exploration in 2003, with a significant drill program in 2004 to update the 1995 resource to the current NI43-101 criteria. Subsequent resources were published by AMEC in 2005 and reserves by Wardrop in 2007 with a positive feasibility study using river access from Juneau. Redfern commenced mine development in 2008 with the construction of 19km of exploration road, an air strip and 2 camp facilities. In early 2009 Redfern notified it's creditors it would not be able to fulfill it's financial obligation and they placed it into receivership.

Chieftain Metals acquired the property from the receiver in October 2011 and initiated transfer of Redfern's permits and began consultation with the Taku River Tlingit First Nation. Chieftain executed a 31,000m drilling program in 2011 which was successful in increasing the indicated resources and published in the 2012 JDS Energy and Mining Feasibility Study(Doerksen 2012). This study used a processing rate of 2,000tpd with concentrate and supplies transported on proposed new 125km access road connecting to the provincial road network at Atlin BC.

In May 2014 Chieftain commissioned JDS Energy and Mining to carry out an optimized and revised feasibility study of the Tulsequah Chief project. Proposing a lower processing rate of 1,100tpd and the use of conventional barging to transport concentrate and supplies. As part of the optimization the resource and reserve cutoff grades were increased from 2012, to compensate for the reduced mill throughput.

This report discusses the new Tulsequah Chief and Big Bull mineral resources and Tulsequah Chief mineral reserve, with the full details included in Appendix I, Feasibility Study Technical Report (Makarenko 2014).

Table of Contents

Summary.....	i
1. Introduction.....	1
2. Property Description and Location.....	2
3. Accessibility, Local Resources, Infrastructure, Climate and Physiography.....	6
4. History	7
5. Geological Setting and Mineralization.....	8
6. Interpretation and Conclusions.....	9
6.1 Tulsequah Chief and Big Bull Mineral Resources	9
6.2 Tulsequah Chief Mineral Reserve.....	13
7. Recommendations.....	15
8. References	16
9. Statement of Qualifications.....	17

List of Figures

Figure 2.1: Tulsequah Property Location.....	2
Figure 2.2: Chieftain Metals Mineral Tenure Claims	5
Figure 6.1: 2014 Tulsequah Chief Mineral Resource with Mineral Claim Boundaries	11
Figure 6.2: 2014 Big Bull Mineral Resource with Mineral Claim Boundaries	12
Figure 6.3: 2014 Tulsequah Chief Mineral Reserve with Mineral Claim Boundaries	14

List of Tables

Table 2.1: Mineral Tenure Cell Claims.....	3
Table 2.2: Crown Granted Mineral Claims	4
Table 6.1: Tulsequah Chief mineral resource	9
Table 6.2: Big Bull mineral resource	10
Table 6.3: Total combined Tulsequah Chief & Big Bull mineral resource	10
Table 6.4: Tulsequah Chief mineral reserves.....	13

List of Appendixes

- Appendix I Feasibility Study Technical Report**
- Appendix II Tulsequah Chief Plan and Vertical Sections**
- Appendix III Big Bull Plan and Vertical Sections**
- Appendix IV Computer Software**
- Appendix V Statement of Expenditures**

1. INTRODUCTION

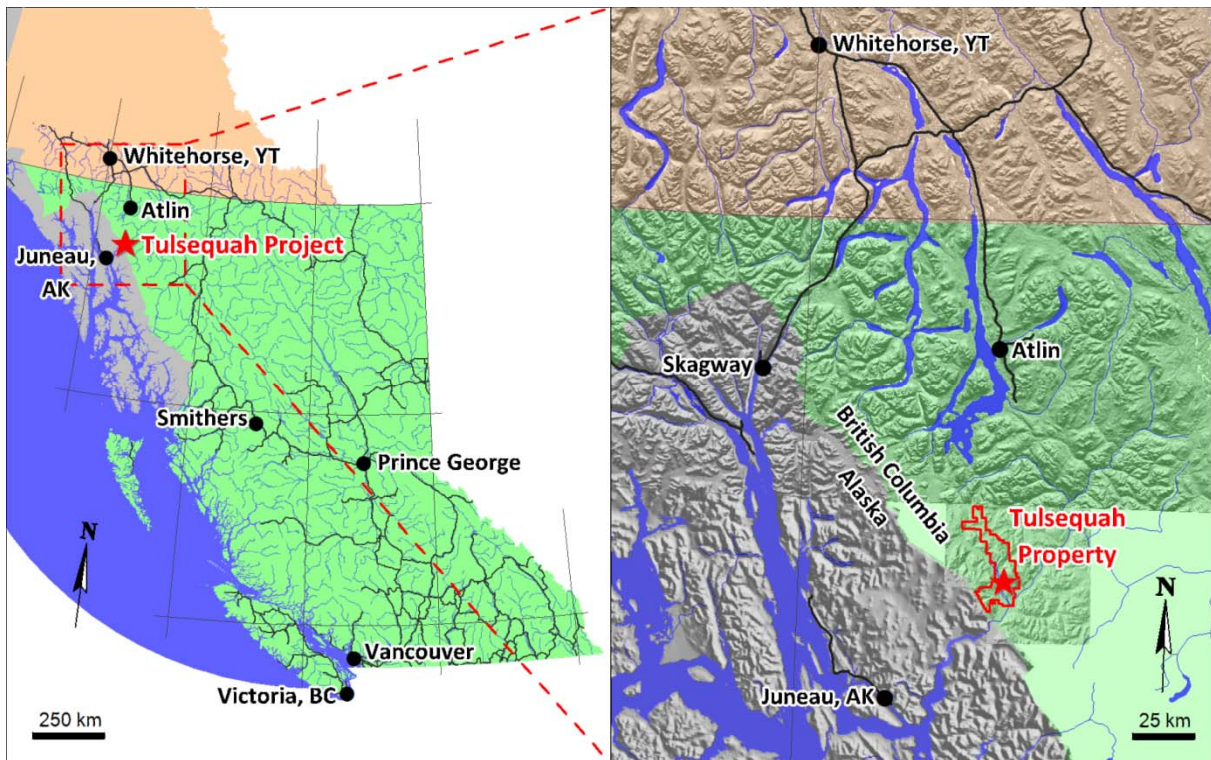
The Tulsequah Chief deposit is an advanced stage polymetallic massive sulphide deposit, located in northern British Columbia, Canada. The deposit is located on the banks of the Tulsequah River 100 kilometres south of the town of Atlin.

In May 2014 Chieftain Metals Inc. engaged JDS Energy and Mining Inc. to carry out an optimized and revised feasibility study for the Tulsequah Chief Project. This involved updating the 2012 feasibility study with the concentrate transport system optimized from trucking to barging, this removes the need to construct a 125km road connecting to the provincial highway system at Atlin BC. Seasonal barging introduces a concentrate shipping constraint necessitating a reduction in production to 1,100tpd, from 2,000tpd in 2012. To optimize higher grades with lower concentrate production the resource and reserve were re-estimated with a higher grade cutoff. The full Feasibility Study Technical Report (Makarenko 2014) with the Tulsequah Chief and Big Bull mineral resource estimates and Tulsequah Chief mineral reserve are included in this report as Appendix I. Only the costs of the Technical Report related to the mineral resource and mineral reserves exclusively on mineral claims 513820 and 590422 TCMINE are included in this report as eligible exploration expenditures totaling \$99,542.03 (Statement of Work Event Number 5535014; 2014/dec/19).

2. PROPERTY DESCRIPTION AND LOCATION

The Tulsequah property is situated along the Tulsequah River in northwestern B.C. centered on latitude 58°43' N and longitude 133°35' W (NTS 104K/12 and 104K/13, Figure 2.1.) The property is accessible by air from Atlin BC 100 km to the north, from Whitehorse YT 230 km to the north, or from Juneau Alaska 64 km to the southwest.

Figure 2.1: Tulsequah Property Location



The Tulsequah Property comprises 35 mineral cell claims totaling 32453.4ha (Table 2.1 and Figure 2.2) and 25 crown granted mineral claims totaling 438.69 ha (Table 2.2) The property is owned 100% by Chieftain Metals Inc.

With acceptance of this report all mineral claims will be in good standing until the good to dates listed in Table 2.1. The July 1, 2012 revisions to the Mineral Tenure Act Regulations reset the zero anniversary of all current claims, to that date. The expenditure requirement to maintain claims in good standing is: \$5 per hectare of exploration work per year to extend the good to dates for years 1-2; \$10 per hectare for the years 3-4; \$15 per hectare for years 5-6; and \$20 per hectare for all subsequent years; upto a maximum of 10 years. Crown granted claims are maintained through the payment of annual taxes on July 2rd each year. The crown granted claims at Tulsequah have been legally surveyed. At the time of writing Mineral Claim 513828 was expropriated under the Park Act on July 6th 2012 with the establishment of the Taku River/T'aḱú Téix' Conservancy, compensation pending.

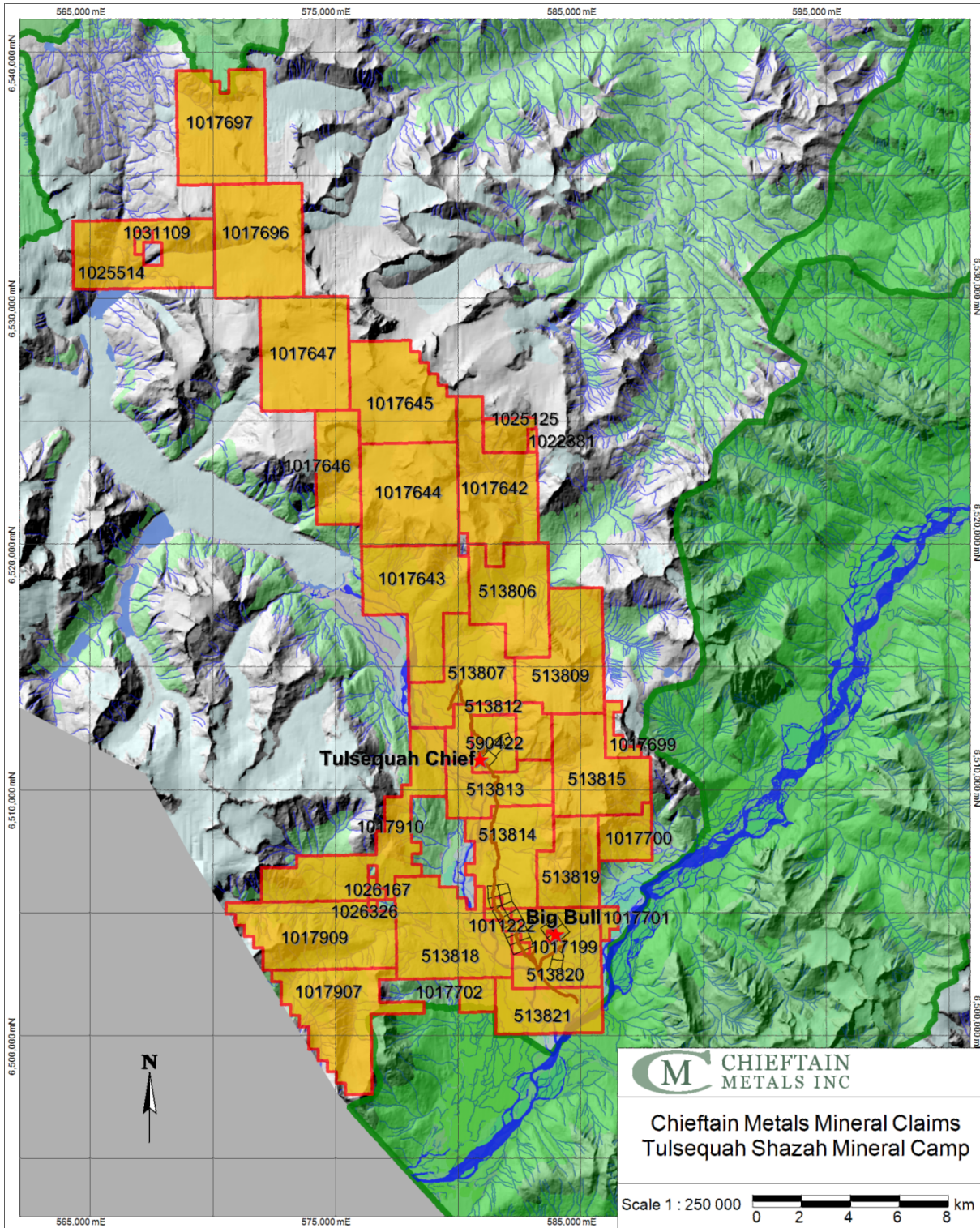
Table 2.1: Mineral Tenure Cell Claims

Tenure Number	Claim Name	Owner	Tenure Type	Tenure Sub Type	Area (ha)	Good To Date
513806		248384 (100%)	Mineral	Claim	1241.30	31-Dec-22
513807		248384 (100%)	Mineral	Claim	1242.29	31-Dec-22
513809		248384 (100%)	Mineral	Claim	1393.21	31-Dec-22
513812		248384 (100%)	Mineral	Claim	621.53	31-Dec-22
513813		248384 (100%)	Mineral	Claim	806.77	31-Dec-22
513814		248384 (100%)	Mineral	Claim	1160.49	31-Dec-22
513815		248384 (100%)	Mineral	Claim	1310.80	31-Dec-22
513818		248384 (100%)	Mineral	Claim	1615.84	31-Dec-22
513819		248384 (100%)	Mineral	Claim	841.08	31-Dec-22
513820		248384 (100%)	Mineral	Claim	1094.34	31-Dec-22
513821		248384 (100%)	Mineral	Claim	842.32	31-Dec-22
513828		248384 (100%)	Mineral	Claim	0.00	31-Dec-22
590422		248384 (100%)	Mineral	Claim	420.00	31-Dec-23
1011222	Banker	248384 (100%)	Mineral	Claim	151.48	30-Oct-17
1017199	Big Bull	248384 (100%)	Mineral	Claim	16.83	30-Oct-17
1017642	STAPLER1	248384 (100%)	Mineral	Claim	1507.93	30-Oct-17
1017643	STAPLER2	248384 (100%)	Mineral	Claim	1593.55	30-Oct-17
1017644	STAPLER3	248384 (100%)	Mineral	Claim	1658.84	30-Oct-17
1017645	STAPLER4	248384 (100%)	Mineral	Claim	1506.43	30-Oct-17
1017646		248384 (100%)	Mineral	Claim	837.54	30-Oct-17
1017647	STAPLER6	248384 (100%)	Mineral	Claim	1673.04	30-Oct-17
1017696	STAPLER7	248384 (100%)	Mineral	Claim	1670.96	30-Oct-17
1017697	STAPLER8	248384 (100%)	Mineral	Claim	1618.92	30-Oct-17
1017699		248384 (100%)	Mineral	Claim	167.99	30-Oct-17
1017700		248384 (100%)	Mineral	Claim	420.40	30-Oct-17
1017701		248384 (100%)	Mineral	Claim	84.16	30-Oct-17
1017702		248384 (100%)	Mineral	Claim	202.11	30-Oct-17
1017907	STRONG1	248384 (100%)	Mineral	Claim	1532.82	30-Oct-17
1017909	STRONG2	248384 (100%)	Mineral	Claim	1632.61	30-Oct-17
1017910	STRONG3	248384 (100%)	Mineral	Claim	1681.59	30-Oct-17
1022381	ICE FALL 2	248384 (100%)	Mineral	Claim	33.49	30-Oct-17
1025125	ICE FALL	248384 (100%)	Mineral	Claim	267.92	30-Oct-17
1025514	MAPLE LEAF	248384 (100%)	Mineral	Claim	1487.42	30-Oct-17
1026167	SOUTH SLOPE	248384 (100%)	Mineral	Claim	50.47	30-Oct-17
1026326	SB1	248384 (100%)	Mineral	Claim	16.83	30-Oct-17
1031109	ML1	248384 (100%)	Mineral	Claim	50.13	30-Oct-17
Total				35	32453.43	

Table 2.2: Crown Granted Mineral Claims

Claim Name	Record	Units	Area (Ha)	Expiry Date
Tulsequah Chief Crown Grants				
Tulsequah Bonanza	5668	1	20.9	July 3, 2015
River Fr.	5669	1	7.99	July 3, 2015
Tulsequah Chief	5670	1	20.9	July 3, 2015
Tulsequah Bald Eagle	5676	1	14.16	July 3, 2015
Tulsequah Elva Fr.	5679	1	9.7	July 3, 2015
Big Bull Crown Grants				
Big Bull	6303	1	20.65	July 3, 2015
Bull No. 1	6304	1	16.95	July 3, 2015
Bull No. 6	6305	1	17.22	July 3, 2015
Bull No. 5	6306	1	14.57	July 3, 2015
Jean	6307	1	17.02	July 3, 2015
Hugh	6308	1	20.71	July 3, 2015
Banker Crown Grants				
Vega No. 1	6155	1	20.9	July 3, 2015
Vega No. 2	6156	1	17.62	July 3, 2015
Vega No. 3	6157	1	18.97	July 3, 2015
Vega No. 4	6158	1	19.85	July 3, 2015
Vega No. 5	6159	1	14.94	July 3, 2015
Janet W. No. 1	6160	1	18.95	July 3, 2015
Janet W. No. 2	6161	1	18.75	July 3, 2015
Janet W. No. 3	6162	1	16.6	July 3, 2015
Janet W. No. 4	6163	1	20.76	July 3, 2015
Janet W. No. 5	6164	1	18.2	July 3, 2015
Janet W. No. 6	6165	1	19.02	July 3, 2015
Janet W. No. 7	6166	1	18.78	July 3, 2015
Janet W. No. 8	6167	1	17.98	July 3, 2015
Joker	6169	1	16.6	July 3, 2015
Total		25	438.69	

Figure 2.2: Chieftain Metals Mineral Tenure Claims



3. ACCESSIBILITY, LOCAL RESOURCES, INFRASTRUCTURE, CLIMATE AND PHYSIOGRAPHY

The Tulsequah Chief property is accessible only by air or water. The most direct access is by charter fixed wing or helicopter from Atlin BC or Whitehorse YT to the Shazah Camp airstrip. The Shazah gravel airstrip is 1,030m long, situated on the eastern side of the Tulsequah River just north of the confluence with Shazah Creek. The airstrip was constructed in 2008 and is utilized mostly by chartered Cessna 207 and Shorts Sky Van aircraft from Atlin, but has accommodated aircraft as large as De Havilland Buffalo.

Conventional water access using the Taku River is possible with shallow draft vessels from Juneau to Chieftain's barge landing site on the Taku River, 1.6km NE of the confluence with the Tulsequah River. This transportation method is seasonally limited May to October with higher water flows during the spring freshet in early Summer and extended rainfall periods in the Fall.

Site roads include the 19 km gravel exploration access road from the Barge Landing to the Shazah Camp via the Tulsequah Chief Mine completed in November 2008 by Redfern. A spur road 2km north of the Barge Landing continues 3km to the Big Bull mine site, the last 400m is unfinished and passable only with all-terrain vehicles.

The 32,453ha property is roughly an area of 40km north-north west and 7km east-west extending from the confluence of the Tulsequah and Taku Rivers in the south, to the Atlin Provincial Park in the north. Topographic elevations on the property range from 50m at river level to over 1800m at the top of Mount Eaton. The Tulsequah and Taku River valleys are glacial in origin with broad flat floodplains, several kilometers wide, and moderate to steep valley walls. The north of the property is heavily glaciated with the Tulsequah River originating at the toe of the Tulsequah Glacier, immediately west of the Property. Coarse glaciofluvial sands, gravels and cobbles fill the Tulsequah valley with little vegetative cover. The Tulsequah River is noted for annual jökulhlaup glacial outburst flood events.

The climate at Tulsequah is typical of inland areas of the north coast of BC. It is characterized by high precipitation and generally 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. Vegetation ranges from wet coastal rain forest with thick canopy at the lower elevations to dense sub-alpine scrub at the higher elevations. Two major ice fields; Mount Eaton and Manville, cover approximately 15% of the present property area.

4. HISTORY

The exploration history of the project is included in Appendix I, Chapter 6: Feasibility Study Technical Report (Makarenko 2014).

5. GEOLOGICAL SETTING AND MINERALIZATION

Geological Setting of the Tulsequah Chief area is well understood with the regional geology mapped by Milalynuk et al 1994, and deposit geology by Redfern and Chieftain Geologists. It is included in Appendix I, Chapter 7: Feasibility Study Technical Report (Makarenko 2014).

6. INTERPRETATION AND CONCLUSIONS

Details of the mineral resource and mineral reserve calculations are in the Appendix I (Feasibility Study Technical Report, Makarenko 2014). Detailed plan and vertical sections with the Tulsequah Chief mineral resource shapes and stope grades are in Appendix II. Plans and vertical sections for the Big Bull mineral resource are in Appendix III.

6.1 TULSEQUAH CHIEF AND BIG BULL MINERAL RESOURCES

The Feasibility Study Technical Report mineral resource estimates (Appendix I chapter 14, Makarenko 2014) were updated and classified using the Canadian Institute of Mining and Metallurgy (“CIM”) definitions referred to in National Instrument 43-101 into Measured, Indicated, and Inferred Mineral Resources. The mineral resource estimate was developed using industry-accepted methods with GEMS software in blocks sized 5 m x 5 m x 4 m. For the purpose of resource estimation, all assay intervals within the mineralized units were composited to two metres and grades were capped prior to estimation. Zinc was capped at 30%, lead and copper at 10%, gold at 25 g/t and silver at 600 g/t for the resource estimate. The Tulsequah Chief mineral resource is listed in table 6.1, Big Bull mineral resource in Table 6.2, and the total combined Tulsequah and Big Bull mineral resource in Table 6.3. The location of the Tulsequah Chief mineral resource in relation to mineral claim 590422 ‘TCMINE’ and crown grants is shown in Figure 6.1, with 32% of the mineral resource exclusively on mineral claim 590422. The location of the Big Bull mineral resource in relation to mineral claim 513820 and crown grants is shown in figure 6.2, with 48% on the mineral resource exclusively on mineral claim 513820.

Table 6.1: Tulsequah Chief mineral resource

Category	M Tonnes	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq %.
Measured	0.787	1.57	1.50	8.60	2.81	105.5	30.9
Indicated	5.136	1.43	1.28	6.76	2.80	102.1	28.1
Total M+I	5.923	1.45	1.31	7.00	2.80	102.5	28.5
Inferred	0.439	0.79	1.03	5.54	2.33	80.6	21.6

Notes:

1. \$100/tonne Net Smelter Return (NSR) cut-off used.
2. The cut-off value is based on a price of US\$ 1,250.00 per ounce of gold, US\$ 19.00 per ounce for silver, US\$ 0.90 per pound for zinc and lead and US\$ 2.75 for copper and recoveries of 90.0 % for gold, 84.5 % for silver, 89.0 % for copper, 66.2% for lead and 89.0 % for zinc.
3. Resource: Zn EQ% = ((Au g/t*36.69x)+ (Ag g/t*0.5013)+ (Cu %*36.24)+ (Pb %*9.39)+ (Zn %*10.2))/10.2
4. Qualified Person for resource estimate is Dr. Gilles Arseneau, P.Geol, of SRK Consulting (Canada) Inc. effective date 20th October 2014.
5. The Resources are inclusive of the Mineral Reserves stated in Table 6.4

Table 6.2: Big Bull mineral resource

Category	M Tonnes	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq %.
Indicated	0.653	0.34	1.54	4.11	3.03	125	23.8
Inferred	1.453	0.37	1.37	4.15	2.67	103.9	21.4

Notes:

1. \$100/tonne Net Smelter Return (NSR) cut-off used.
2. The cut-off value is based on a price of US\$ 1,250.00 per ounce of gold, US\$ 19.00 per ounce for silver, US\$ 0.90 per pound for zinc and lead and US\$ 2.75 for copper and recoveries of 90.0 % for gold, 84.5 % for silver, 89.0 % for copper, 66.2% for lead and 89.0 % for zinc.
3. Resource: Zn EQ% = $((\text{Au g/t} \times 36.69) + (\text{Ag g/t} \times 0.5013) + (\text{Cu \%} \times 36.24) + (\text{Pb \%} \times 9.39) + (\text{Zn \%} \times 10.2)) / 10.2$
4. Qualified Person for resource estimate is Dr. Gilles Arseneau, P.Geo, of SRK Consulting (Canada) Inc. effective date 20th October 2014.

Table 6.3: Total combined Tulsequah Chief & Big Bull mineral resource

Category	M Tonnes	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq %.
Measured	0.787	1.57	1.50	8.60	2.81	105.5	30.9
Indicated	5.787	1.31	1.38	6.46	2.83	104.7	27.6
Total M+I	6.576	1.34	1.33	6.71	2.82	104.8	28
Inferred	1.892	0.47	1.29	4.47	2.59	98.5	21.5

Notes:

1. \$100/tonne Net Smelter Return (NSR) cut-off used.
2. The cut-off value is based on a price of US\$ 1,250.00 per ounce of gold, US\$ 19.00 per ounce for silver, US\$ 0.90 per pound for zinc and lead and US\$ 2.75 for copper and recoveries of 90.0 % for gold, 84.5 % for silver, 89.0 % for copper, 66.2% for lead and 89.0 % for zinc.
3. Resource: Zn EQ% = $((\text{Au g/t} \times 36.69) + (\text{Ag g/t} \times 0.5013) + (\text{Cu \%} \times 36.24) + (\text{Pb \%} \times 9.39) + (\text{Zn \%} \times 10.2)) / 10.2$
4. Qualified Person for resource estimate is Dr. Gilles Arseneau, P.Geo, of SRK Consulting (Canada) Inc. effective date 20th October 2014.
5. The Resources are inclusive of the Mineral Reserves stated in Table 6.4

Figure 6.1: 2014 Tulsequah Chief Mineral Resource with Mineral Claim Boundaries

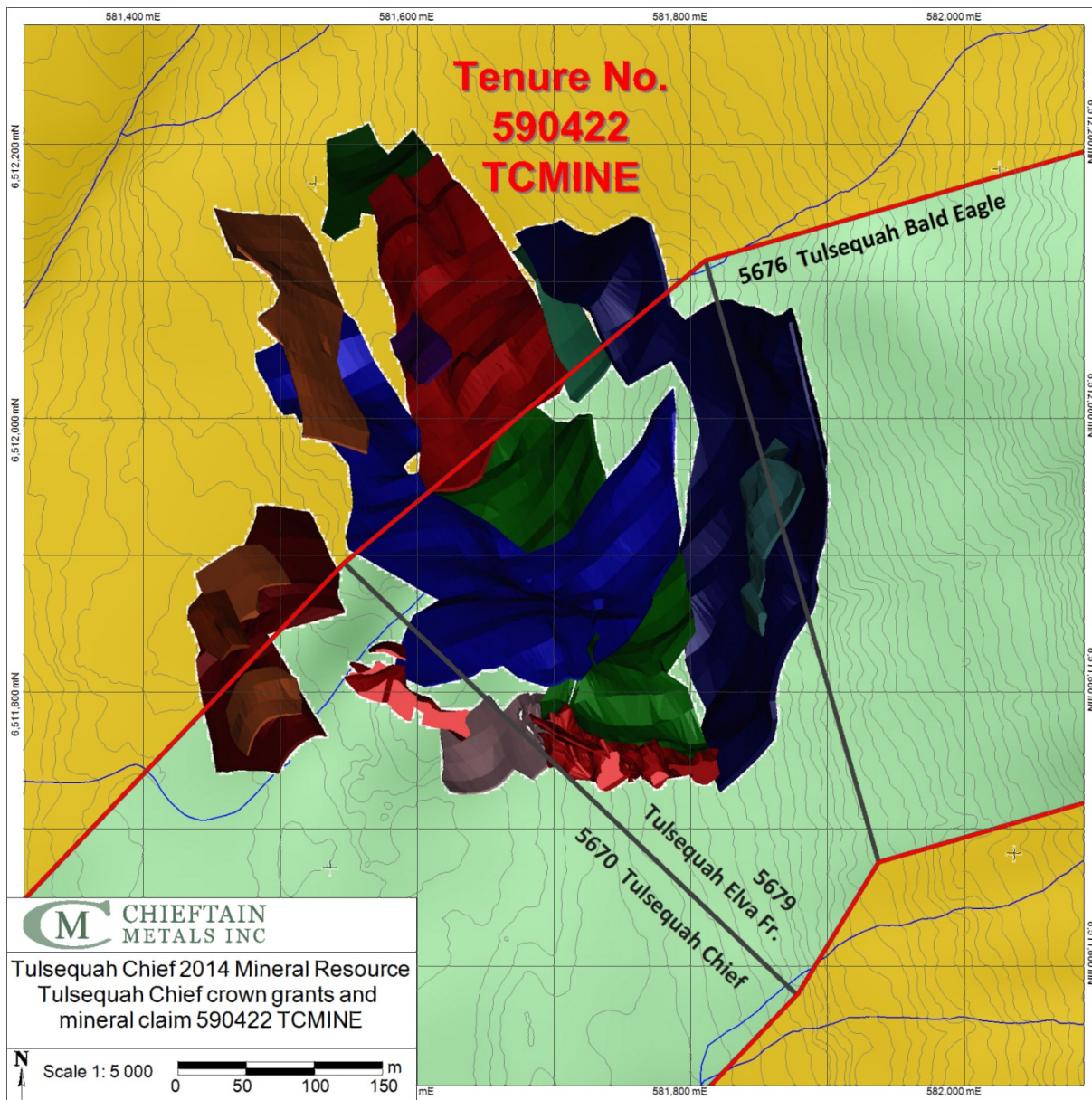
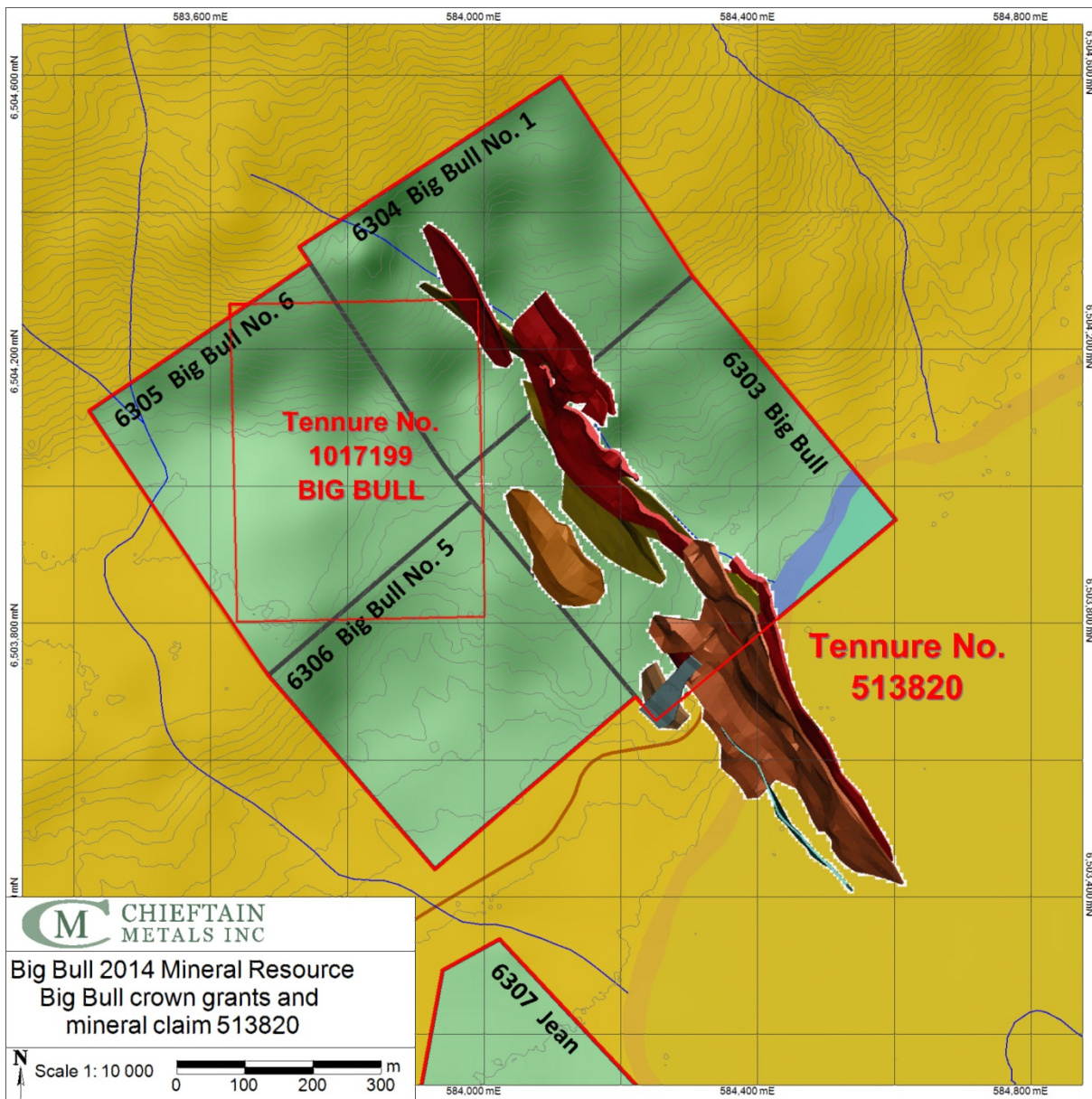


Figure 6.2: 2014 Big Bull Mineral Resource with Mineral Claim Boundaries



6.2 TULSEQUAH CHIEF MINERAL RESERVE

The mineral reserve estimate from the Feasibility Study Technical Report (Makarenko 2014, Appendix I chapter 15) is summarized in Table 6.4 and complies with CIM definitions and standards, including the main assumptions used in the definition of the reserves (i.e., metal prices, dilution, operating costs and recoveries). Detailed information on mining, processing, metallurgical, and other relevant factors are also contained in the Feasibility Study Technical Report (Makarenko 2014, Appendix I) and demonstrate, at the time of this report, that economic extraction is justified. The proven and probable reserve totals 4.435 Mt of minable material at a dilution rate of 17.6% and mining recovery of 95%. The location of the Tulsequah Chief mineral reserve in relation to mineral claim 590422'TCMINE' and crown grants is shown in Figure 6.3, with 33% of the mineral reserve exclusively on mineral claim 590422.

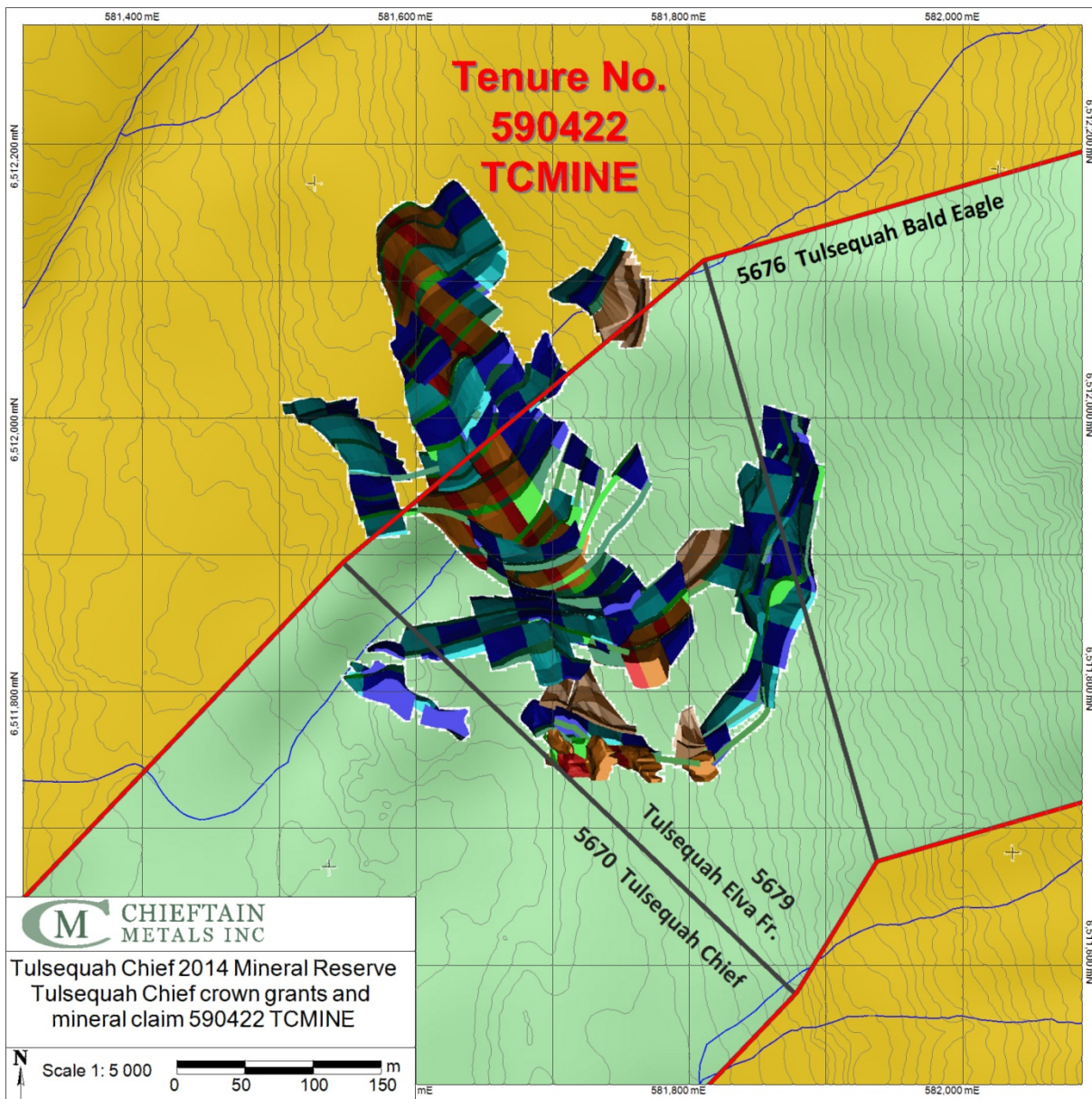
Table 6.4: Tulsequah Chief mineral reserves

Category	M Tonnes	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq %.
Proven	0.684	1.48	1.36	7.84	2.71	101	29.4
Probable	3.751	1.45	1.28	6.78	2.88	104	28.9
Total P + P	4.435	1.46	1.29	6.95	2.85	104	29

Notes:

1. Mineral reserves are reported based on underground mining above a US\$ 200/tonne NSR cut-off value.
2. Cut-off grades are based on a price of US\$ 1,250 per ounce of gold, US\$ 19.00 per ounce for silver, US\$ 0.90 per pound for zinc and lead and US\$ 2.75 for copper and recoveries of 90.0 % for gold, 84.5 % for silver, 87.8 % for copper, 65.1 % for lead and 89.3 % for zinc.
3. Reserve: Zn EQ% = ((Au g/t*36.64x)+ (Ag g/t*0.4991)+ (Cu %*36.73)+ (Pb %*8.81)+ (Zn %*10.04))/10.04
4. Qualified person for the reserve estimate is Mike Makarenko, P.Eng, JDS Energy & Mining Inc, effective date 20th October 2014.

Figure 6.3: 2014 Tulsequah Chief Mineral Reserve with Mineral Claim Boundaries



7. RECOMMENDATIONS

The Mineral Resource and Mineral Reserve Calculations confirm the high grades in the known ore bodies at Tulsequah Chief and Big Bull. Building on the 2013 exploration program that identified the South West zone further exploration drilling is recommended at the Tulsequah project to test three large IP anomalies identified in the altered felsic zones. Further property data compilation and investigation of known anomalous mineralisation sites with targets prioritized for a prospecting field campaign is also recommended. A drill program consisting of 6,500 meters of surface drilling and helicopter reconnaissance mapping/sampling should be sufficient to initiate these objectives, with a modest budget of \$1.5-\$3.0m.

8. REFERENCES

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9. STATEMENT OF QUALIFICATIONS

I, Brett Armstrong of North Vancouver, British Columbia, do hereby certify that as the Author of this Assessment Report "Tulsequah Project 2014 Feasibility Study Optimization: Tulsequah Chief and Big Bull Resources & Reserve", dated December 19th, 2014, I hereby make the following statements:

1. I am employed as Exploration Manager by Chieftain Metals Inc. since 2011, with a business address at Unit 118, 1515 Broadway Street, Port Coquitlam, BC, V3C 6M2.
2. I am a qualified person as defined by National Instrument 43-101
3. I am a graduate of the University of Tasmania, Australia 1995 with a Bachelor of Science degree, double major in Geology.
4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia, Licence No. 37985.
5. I have practiced my profession in mineral exploration since 2004, including work on volcanogenic massive sulphide deposits in British Columbia and Portugal.
6. I am responsible for all sections of this Assessment Report.
7. I have had prior involvement in the Property from 2004-2009 as an Exploration Geologist for Redfern Resources, the previous owner.
8. As of the date of this certificate, to my knowledge, information and belief, this Assessment Report contains all scientific and technical information that is required to be disclosed to make the Assessment report not misleading.
9. I am not independent of Chieftain Metals Inc.

Original Document, signed and sealed by



"Brett D. Armstrong, P. Geo."

19th, December 2014
Exploration Manager
Chieftain Metals Inc.