Location/Identification

MINFILE Number: 104K 002
National Mineral Inventory Number: 104K12 Zn2
Name(s): **TULSEQUAH CHIEF**

Status: Past Producer
Mining Method Underground
Regions: British Columbia
BCGS Map: 104K072
NTS Map: 104K12E
Latitude: 58 44 09 N
Longitude: 133 36 04 W
Elevation: 54 metres
Location Accuracy: Within 500M

Mining Division: Atlin
Electoral District: Stikine
Resource District: Skeena Stikine Natural Resource District

UTM Zone: 08 (NAD 83)
Northing: 6511483
Easting: 580980

Comments: Located on the east side of the Tulsequah River about 12.9 kilometres north of the confluence of the Tulsequah and Taku rivers, about 95 kilometres south of Atlin (Exploration in British Columbia 1987). Production includes Big Bull (MINFILE 104K 001).

Mineral Occurrence

Commodities: Zinc, Copper, Lead, Silver, Gold, Cadmium

Minerals
Significant: Pyrite, Chalcopyrite, Sphalerite, Galena, Tetrahedrite, Tennantite, Gold
Associated: Quartz, Carbonate, Barite, Gypsum
Alteration: Pyrite, Sericite, Silica, Chlorite
Alteration Type: Silicific'n, Pyrite, Sericitic, Chloritic
Mineralization Age: Unknown

Deposit
Character: Stratiform, Massive, Disseminated
Classification: Volcanogenic, Syngenetic, Exhalative
Type: G06: Noranda/Kuroko massive sulphide Cu-Pb-Zn

Host Rock

Dominant Host Rock: Volcanic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Paleozoic	------	------	Stikine Assemblage
Tertiary	------	------	Unnamed/Unknown Informal

Isotopic Age	Dating Method	Material Dated
Early Mississippian	Uranium/Lead	Rhyodacite
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Lithology: Dacite, Dacitic Tuff, Andesite, Andesitic Flow, Dacite Flow, Rhyolite, Basalt

Comments: Mineralization occurs in pre-Permian submarine rocks on the west limb of a north plunging anticline.

Geological Setting

Tectonic Belt: Coast Crystalline
Physiographic Area: Boundary Ranges
Terrane: Nisling, Stikine, Plutonic Rocks

Metamorphic Type:
Relationship: Post-mineralization
Grade: Zeolite, Greenschist
Comments: In linear belt between Stuhini Group (E) and Boundary Ranges Suite(W).

Inventory

Ore Zone: TULSEQUAH CHIEF
Year: 2014
Category: Indicated
Report On: Y
Quantity: 5,136,000 tonnes
NI 43-101: Y

Commodity	Grade
Silver	102.1 grams per tonne
Gold	2.8 grams per tonne
Copper	1.43 per cent
Lead	1.28 per cent
Zinc	6.76 per cent

Comments:

Reference: NI-43-101: TULSEQUAH CHIEF PROJECT – FEASIBILITY STUDY TECHNICAL REPORT, JDS Energy and Mining Inc., October 2014

Ore Zone: TULSEQUAH CHIEF
Year: 2014
Category: Inferred
Report On: Y
Quantity: 439,000 tonnes
NI 43-101: Y

Commodity	Grade
Silver	80.6 grams per tonne
Gold	2.33 grams per tonne
Copper	0.79 per cent
Lead	1.03 per cent
Zinc	5.54 per cent

Comments:

Reference: NI-43-101: TULSEQUAH CHIEF PROJECT – FEASIBILITY STUDY TECHNICAL REPORT, JDS Energy and Mining Inc., October 2014

Ore Zone: TULSEQUAH CHIEF
Year: 2014
Category: Measured
Report On: Y
Quantity: 787,000 tonnes
NI 43-101: Y

Commodity	Grade
Silver	105.5 grams per tonne
Gold	2.81 grams per tonne
Copper	1.57 per cent
Lead	1.5 per cent
Zinc	8.6 per cent

Comments:

Reference: NI-43-101: TULSEQUAH CHIEF PROJECT – FEASIBILITY STUDY TECHNICAL REPORT, JDS Energy and Mining Inc., October 2014

Ore Zone: TULSEQUAH CHIEF
Year: 2012
Category: Indicated
Report On: Y
Quantity: 6,762,000 tonnes
NI 43-101: Y

Commodity	Grade
Silver	85 grams per tonne
Gold	2.4 grams per tonne
Copper	1.19 per cent
Lead	1.1 per cent
Zinc	5.89 per cent

Comments:

Reference: Technical Report for the Tulsequah Chief Project, for Chieftan Metals Inc., Dec.12, 2012.

Ore Zone: TULSEQUAH CHIEF **Year:** 2012

Category: Inferred **Report On:** Y

Quantity: 204,000 tonnes **NI 43-101:** Y

Commodity	Grade
Silver	62 grams per tonne
Gold	1.81 grams per tonne
Copper	0.67 per cent
Lead	0.76 per cent
Zinc	4.02 per cent

Comments:

Reference: Technical Report for the Tulsequah Chief Project, for Chieftan Metals Inc., Dec.12, 2012

Ore Zone: TULSEQUAH CHIEF **Year:** 2010

Category: Inferred **Report On:** N

Quantity: 1,100,000 tonnes **NI 43-101:** Y

Commodity	Grade
Silver	72.0 grams per tonne
Gold	1.63 grams per tonne
Copper	0.94 per cent
Lead	0.93 per cent
Zinc	5.02 per cent

Comments:

Reference: Chieftain Metals Inc. press release June 14, 2011

Ore Zone: TULSEQUAH CHIEF **Year:** 2010

Category: Indicated **Report On:** N

Quantity: 6,000,000 tonnes **NI 43-101:** Y

Commodity	Grade
Silver	96.0 grams per tonne
Gold	2.63 grams per tonne
Copper	1.42 per cent
Lead	1.23 per cent
Zinc	6.44 per cent

Comments:

Reference: Chieftain Metals Inc. press release June 14, 2011

Summary Production

	Metric	Imperial
Mined:	933,570 tonnes	1,029,084 tons

	Milled:	933,569	tonnes	1,029,083	tons
Recovery	Silver	105,774,242	grams	3,400,721	ounces
	Gold	2,931,644	grams	94,255	ounces
	Zinc	56,559,436	kilograms	124,692,212	pounds
	Copper	12,341,215	kilograms	27,207,722	pounds
	Lead	12,213,754	kilograms	26,926,718	pounds
	Cadmium	205,927	kilograms	453,991	pounds

Capsule Geology

The Tulsequah Chief deposit is located on the east side of the Tulsequah River about 10 kilometres north of its junction with the Taku River.

The Tulsequah Chief property is dominantly underlain by rocks of the Mount Eaton Block, a low metamorphic grade island arc volcanic sequence of Devono-Mississppian to Permian age contained within the Stikine Assemblage. These rocks lie east of the Llewellyn fault and are mainly located north of the Taku River and east of the Tulsequah 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.

The stratigraphy has been subdivided 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 Upper Division, Pennsylvanian to Permian in age, consists primarily 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. The Mount Eaton suite is overprinted by sub-greenschist to middle greenschist facies metamorphism. Late Tertiary Sloko rhyolite and mafic dykes cut the Paleozoic units and commonly intrude along re-activated north-trending faults.

North to northwest-trending high-angle faults with complex displacement histories are common within the Tulsequah Chief region, with the largest and most significant being the Llewelyn fault. Displacement appears to be small on these faults, and most faults are marked by topographic depressions in the form of steep-sided gullies and ravines. The north trending faults are commonly intruded by late Tertiary Sloko rhyolite and mafic dykes. Thrust faults occur within the Mount Eaton block, and offset is considered relatively minor.

The Tulsequah Chief deposit consists of numerous stacked sulphide lenses developed within the basal stratigraphy or a rhyolite-rich sequence of volcanic flows and fragmental units. These felsic volcanics rest above a thick assemblage of mafic volcanics (primarily basalt, and basaltic andesite). Above the assemblage of rhyolitic volcanics, a mafic dominated sequence of basalt flows, breccias and sills, overlays the unit. Within the mine area, a thick diorite/gabbro sill, which is geochemically identical to the upper mafic volcanic units, intrudes the rhyolite above the sulphide deposits. Basaltic dyies recognized to be feeders to the thick sill, cut through the sequence. Late stage Sloko dikes of Tertiary age are associated with faults cutting all of the Mine sequence rocks.

A synclinal structure, termed the H syncline, is the host to the thickest section (approximately 30 metres) of the sulphide deposit. The thinner areas of the deposit extend into the limbs of this structure and into an anticline to the west (F anticline). Two prominent faults are sub-parallel to the axial plane of the fold within the H syncline. These faults, 4400E and 5300E, may represent focal points of renewed movement on older basin-bounding growth faults at the time of sulphide deposit deposition. Within the fold limb east of the 5300E fault, the G lens is interpreted to be a fault offset of the main H lens within the main H syncline structure.

Mineralization consists of massive lenses of pyrite and chalcopyrite, and semi-massive sphalerite, galena and pyrite. A total of 17 discrete massive sulphide lenses was reported in 2011. Accessory ore minerals include tetrahedrite-tennantite and rare native gold. Gangue consists of barite (averaging approximately 6 per cent), chert, gypsum, anhydrite and carbonate near the top of the lens, and carbonate quartz, chlorite and sericite with silica altered volcaniclastic rocks near the base of the lens. Visually, the sulphides can be divided into three distinct sulphide facies: copper facies (CUF), zinc facies (ZNF), and pyrite facies (PYF). CUF mineralization is characterized by massive to banded pyrite and chalcopyrite with minor sphalerite and galena. ZNF mineralization consists primarily of sphalerite and galena in barytic gangue, with much less pyrite and chalcopyrite. PYF mineralization consists of massive pyrite with little to no base metal sulphides. These ore types may occur within a single lens, typically with sharp boundaries between them. Despite the occurrences of several distinct ore types (based on the relative abundance of different sulphide minerals) no clear geographical zonation pattern has emerged.

Footwall alteration associated with the massive sulphide horizons is characterized by intense, texture destructive quartz-sericite-chlorite-pyrite alteration, extending 3 to 10 metres. Silica ranges from thin fracture envelopes to pervasive zones of intense silica flooding bleaching the rocks. These

zones are often crosscut by white quartz-pyrite plus chalcopyrite plus chlorite veins (generally less than 30 centimetres). Silica alteration decreases with depth and distance from the sulphide lenses and feeder structures, leaving an assemblage of chlorite plus sericite plus/minus pyrite. Fine-grained, exceptionally pale disseminated sphalerite is sometimes present in the intensely altered footwall rocks.

Hanging wall alteration is poorly developed generally 1 to 3 metres thick and is confined to flows and tuffs within and directly above the sulphide horizons. It is characterized by an assemblage of albite, epidote, chlorite, silica, and magnetite or hematite.

Work History

The Tulsequah Chief was discovered in 1925 but saw limited development during the 1930's. Cominco acquired the mine in 1946. The mine produced base metals from 1951 to 1957 and was mined from the 579 and 121 metre elevations. Since the ore from the Tulsequah Chief mine and the nearby Big Bull mine (MINFILE 104K 008) were combined and processed together at the Polaris Taku mine (MINFILE 104K 003) facilites, it is not possible to give accurate values for the amount of commodities recovered from just Tulsequah Chief ore. Recorded production figures give only the total amount of recovered commodities from the combined ore of the two mines. It is known, however, how much ore was actually mined in a given year and from which mine. Production started in 1951 and continued until 1957 when low metal prices forced the suspension of mining activity. A breakdown of these tonnages is given in the Production Report comment field. Over the life of the two mines a total of 580,256 tonnes was mined from Tulsequah Chief and 353,314 tonnes from Big Bull at a combined average grade of 3.77 grams per tonne gold, 126.5 grams per tonne silver, 1.59 per cent copper, 1.54 per cent lead and 7.0 per cent zinc.

In 1980, Redfern entered into a joint venture with Comaplex Resources International Ltd to conduct reconnaissance exploration in northwestern BC, with Comaplex as the operator. During 1980-1981, the joint venture staked claims in the Tulsequah area, including the SEQ claims which surrounded the Tulsequah Chief crown grants. Comaplex completed geochemical and VLF-EM surveys on the SEQ claims (Assessment Report 8933).

In 1981, the Comaplex-Redfern joint venture performed 1:2500 scale geological mapping the on mineral claims surrounding Tulsequah Chief. Cominco completed 1:5000 scale geological mapping and geochemical soil sampling on the crown grants at Tulsequah Chief and Big Bull, as well as regional mapping and stream sediment sampling on the CO claims between Tulsequah Chief and Big Bull (Assessment Report 9825.)

In 1982, the area was covered by helicopter-borne EM (Dighem II) and magnetic surveys flown by Dighem for Cominco (Assessment Report 10587).

In 1987, Redfern entered into an option to joint venture (40 per cent) with Cominco on an amalgamated property covering the northern parts of the Tulsequah project area, including the Tulsequah Chief deposit, with Redfern as the operator. Redfern also acquired the Comaplex interest in the Redfern-Complex joint venture. Big Bull and the southern parts of the Tulsequah project area were not included in the agreement, and continued to be held by Cominco. During 1987, surface mapping was completed over the Tulsequah property and five surface diamond drill holes totaling 3,524 metres were drilled to test the down dip extension of the Tulsequah Chief deposit (Assessment Report 17137).

In 1987, rehabilitation of the 5400 level by Redfern Resources was underway with the focus on extending the existing reserves along strike and to depth. A new discovery, to the northeast of the main workings, yielded several well-mineralized drill intercepts. In 1987, a 6.25 metre intercept from one drill hole assayed 6.5 grams per tonne gold, 222.85 grams per tonne silver, 1.4 per cent copper, 2.8 per cent lead and 8.0 per cent zinc (Northern Miner, July 4, 1988, page 20). I

In 1988, 900 metres of underground workings were rehabilitated on the 5400 Level at Tulsequah Chief, and 3,530 metres of underground and surface diamond drilling were completed. Nine holes were drilled to test areas below the old workings. Eight of those holes intersected significant base and precious metal mineralization. Four holes tested other targets on the property. Outside the Tulsequah Chief Mine area, mapping, prospecting, and soil sampling were completed over areas of felsic volcanic units. Drilling confirmed that mineralization called the E lens continues at least 213 metres down plunge from the lowest mine level. Also, the newly discovered G lens has been intersected in 6 holes over a strike length of 137 metres and a dip length over 137 metres. It appears to be open in all directions (George Cross News Letter October 3, 1988).

Work in 1989 included, 175 meters of drifting on the 5400 Level to slash a new underground diamond drill station. Ten drill holes(4,890 metres) were drilled from this new station to test the down dip extension of the known sulphide bodies at Tulsequah Chief. Eight of these holes intersected significant base and precious metals.

In 1990 a further 180 meters of drifting was conducted extending the 5400 Level and slashing two new underground diamond drill station (Assessment Report 20901). Eight underground holes (5,908 metres) tested the down-dip extension of the H-AB sulphide bodies, one hole had to be abandoned due to ground problems.

In 1991 Redfern entered into an option agreement with Cominco to acquire Cominco’s interest in both the joint venture Tulsequah property and Cominco’s Big Bull property. The 1991 exploration program was restricted, by agreement with Cominco, to infill drilling on the H and AB lenses between the 3400 and 4900 Levels at Tulsequah Chief. Six drill holes (3,090 metres) were collared from the 5400 Level crosscut, all holes intersected the targeted massive sulphide horizon.

Mineralization at present is contained in two lenses, the lower AB lens and the stratigraphically higher H lens. True thicknesses range from 1.5 to 7.6

metres in the AB lens and from 1.5 to 38.4 metres in the H lens. Drilling since 1987 has indicated a preliminary reserve of 7,801,060 tonnes grading 1.6 per cent copper, 1.2 per cent lead, 6.5 per cent zinc, 2.74 grams per tonne gold and 109.69 grams per tonne silver (Northern Miner - October 12, 1992, page 3). About 85 per cent of the reserve is contained in the H lens (Property File - Northwest Mining Conference (Spokane, Washington), Handout, 1991) .

In 1992, Redfern exercised their option to acquire Cominco's interest in the Tulsequah property and the Big Bull property, giving Redfern 100 per cent interest in the Tulsequah Chief and Big Bull deposits and surrounding ground. Redfern conducted surface and underground geological mapping, relogged core from the 1987-1991 campaigns, and drilled a further 4,579 metres in 13 underground holes at the Tulsequah Chief deposit.

Work completed by Redfern during 1993 included 14 underground drillholes (6,238 metres) and 6 surface holes (1,812 metres) in the Tulsequah Chief near-mine area (Assessment Report 23763).

In 1994, Redfern drilled 11 underground holes (4,241 metres) and 4 surface holes (1,700 metres) at Tulsequah Chief and the near mine area (Assessment Report 24183). Underground and surface mapping and sampling programs were completed on the 5400 level main drift, and over 1km of underground rehabilitation was completed on the 5200 level main drift in the Tulsequah Chief mine.

The Tulsequah Chief drill indicated geological reserve in all categories totals 8,930,000 tonnes grading 1.31 per cent copper, 1.24 per cent lead, 6.62 per cent zinc, 2.53 grams per tonne gold and 107.56 grams per tonne silver (George Cross News Letter No.105 (June 1), 1995).

In July 1995 Redfern Resources Ltd. reported positive results from a 1.5 million dollar feasibility study conducted by Rescan Engineering Ltd. with contributions by a team of independent consulting engineers. The study is based on an initial mineable reserve of 7.2 million tonnes grading 1.24 per cent copper, 1.18 per cent lead, 6.32 per cent zinc, 2.41 grams per tonne gold and 99.33 grams per tonne silver, which is part of the overall geological reserve of 8.9 million tonnes. At a production rate ranging from 800,000 to 900,000 tonnes per year, the mine life is estimated to be about 8.3 years. Economic analysis is based on the year-round utilization of a 160-kilometre access road to be built from the minesite northwards to the existing road at Atlin, British Columbia. An alternative access option contemplates the seasonal use of barges on the Taku River, from its confluence with the Tulsequah River to its outlet at the ocean near Juneau, Alaska. Revisions to the feasibility study are anticipated, but Redfern hopes to file an application for a Mine Development Certificate before the end of the year (Information Circular 1996-1, page 16).

Redfern Resources Ltd. submitted a revised Project Report for the Tulsequah Chief to the Environmental Assessment office on July 8, 1997. Reserves estimated by the company in 1996 are 7.91 million tonnes grading 6.35 per cent zinc, 1.27 per cent copper, 1.18 per cent lead, 100.91 grams per tonne silver and 2.42 grams per tonne gold, and open to depth and along strike (Information Circular 1998-1, page 20). At full production, milling 900,000 tonnes per year, the mine is forecast to produce 53,200 tonnes of zinc, 10,090 tonnes of copper, 9350 tonnes of lead, 75,270 kilograms of silver and 1742 kilograms of gold annually over a minimum mine life of 9 years. The mine will employ 260 people; the capital cost is estimated at $155 million. Redfern has established a maximum public awareness program, including close contacts with the Taku River Tlingit First Nation Band. The company received approval for the mine in March 1998. Production is planned in early 2000.

Redfern received a second project approval certificate in December 2002.

In 2003, Redfern Resources Ltd., a wholly owned subsidiary of Redcorp Ventures Ltd., conducted a surface and underground drill program to locate extensions of existing resources at the Tulsequah Chief deposit. Two surface diamond-drill holes totaled 1069 metres and 21 underground diamond-drill holes totaled 9040 metres. The deposit is open in several areas. Continuity is excellent in the down-dip direction but drill holes at least 800 metres long are required, therefore Redfern explored a more accessible area west of the deposit for a continuation of ore lenses across the 4400 fault. A new massive sulphide lens, with deposit-average grade that is stratigraphically above the main deposit, was intersected in six holes. Nine holes cut the principal H lens, including an uncommonly thick (37 metre) intercept, and six holes cut the AB lenses. One intersection of uncertain correlation returned exceptional precious metal grades of 16.3 grams per tonne gold, 511 grams per tonne silver, 0.08 per cent copper, 0.7 per cent lead and 1.2 per cent zinc over 7.6 metres (Exploration and Mining in BC 2003, page 6).

In 2004, Redfern conducted a major program of in-fill and step-out drilling to confirm and expand resources at the Tulsequah Chief deposit. Three drills recovered 30,444 meters of core in 54 holes and include some of the highest grades obtained over the life of the project. The 5400 level drift was extended 160 meters and all drilling was conducted from three underground stations. The most important part of the deposit, the H lens, forms a steep pipe, or lens, that is about 100 meters long, up to 31 meters in true thickness and was delineated by the current program to 800 meters below previous mining. At that level, a fault zone was encountered that caused several drill holes to be lost. Holes that were completed through the fault penetrated intense alteration and the company suggests that the H lens bends to the east toward the 5300E fault. Drilling also targeted the G zone, which is a faulted offset of the H deposit on the east side of the 5300E fault.

In 2005, Redfern Resources Ltd updated the resource estimate for the Tulsequah Chief deposit. Measured and Indicated resources total 5.38 million tonnes at a grade of 1.41 per cent copper, 1.32 per cent lead, 6.73 per cent zinc, 2.73 grams per tonne gold and 100.8 grams per tonne silver (Exploration and Mining in BC 2005, page 28). The figures represent an approximate 10 per cent decrease in tonnage and total metal content from the previous estimate. The Inferred resource was nearly halved to 1.54 million tonnes at 1.13 per cent copper, 1.07 per cent lead, 5.44 per cent zinc, 2.23 grams per tonne gold and 85.1 grams per tonne silver (Exploration and Mining in BC 2005, page 28). The previous year's drilling program determined

that the principal H ore zone is restricted in strike length at depth, and it is also disrupted and/or displaced by the 5300 fault. Redfern began an update of the feasibility study done in 2005 but the work was halted in mid-year when it became apparent that increased capital and operating costs, combined with the downgraded resource estimate, made the project financially unattractive.

Redcorp Ventures Ltd. conducted a drill program in 2006 on Tulsequah Chief and Big Bull (104K 008) deposits. It was focused on upgrading resources for the feasibility study, exploration of geophysical anomalies near mine workings as well as regional scale studies. Combined drilling at these two deposits amounted to 23,350 metres. Near the Tulsequah mine workings a new mineralization zone was encountered (A-zone) which has a NI 43-101 compliant resource estimate. The Indicated resource was 108.9 thousand tonnes at 1.4 per cent copper, 1.24 per cent lead, 6.41 per cent zinc, 2.67 grams per tonne gold and 98.93 grams per tonne silver. The Inferred resource was 98.3 thousand tonnes at 0.73 per cent copper, 1.59 per cent lead, 5.46 per cent zinc, 2.63 grams per tonne gold and 120.14 grams per tonne silver. The A-zone Extension was intersected by five holes, the best of which yielded 1.69 grams per tonne gold, 177.6 grams per tonne silver, 0.98 per cent copper, 0.85 per cent lead and 5.24 per cent zinc over a core length of 11.85 metres (Exploration and Mining in BC 2006, page 35). Mineralization was also discovered west of the 4400 fault, a structure that formed the western boundary of past mine production.

In early 2007, total probable, recoverable and diluted reserves were reported to be 5.379 million tonnes grading 6.33 per cent zinc, 1.40 per cent copper, 1.20 per cent lead, 93.69 grams per tonne silver and 2.588 grams per tonne gold (McVey, S., Mills, K., Wells, P. (2007-03-14): Technical Report on the Tulsequah Chief Property). Later that year, fifteen core holes at Tulsequah Chief explored up-dip of the G-zone and A-zone extension. A total of 12,484 metres was drilled at the Tulsequah Chief and Big Bull (MINFILE 104K 008) where a further 20 core holes were completed. A geotechnical assessment of the plant site and the tailings impoundment, a detailed topographic survey (LIDAR) and several environmental programs were also completed. A new mining support plan for development is based on an air cushion barge that will be towed by an amphibious tug and operate year-round on the Taku River. The shipment of equipment and supplies during construction and operation, and the shipment of concentrate would all be done using this system, via Juneau Alaska.

In December 2008 Redcorp suspended construction activities due to uncertainty related to costs to complete development.

Redfern Resources Ltd. wound down construction activities in early 2009 and was placed into receivership in May, 2009 by its creditors.

In September 2010 Chieftain Metals Inc. purchased the thirteen mineral claims, twenty-five crown-granted claims and four fee-simple lots comprising the Tulsequah project.

In June 2011 Chieftain released results from a NI43-101 compliant preliminary economic assessment. Included in this was updated mineral resource as follows (Press Release June 14, 2011):

Category	tonnes	Au (g/t)	Ag (g/t)	Zn (%)	Cu (%)	Pb (%)
Indicated	6,034,000	2.63	96.0	6.44	1.42	1.23
Inferred	1,093,000	1.63	72.0	5.02	0.94	0.93

Exploration drilling was conducted by Chieftain Metal in 2011. The program involved 4005 metres in 10 NQ Surface holes and underground diamond drilling of 18,625 in 50 NQ drill holes totaling 22,630 meters (Assessment Report 33468). The 2011 program successfully completed its goals increasing the confidence of the Tulsequah Chief modeled lenses and resource by defining a total of 17 discrete massive sulphide lenses and converting a significant amount of the 2010 inferred resource to the indicated category.

A mineral resource model prepared by SRK considered 665 core boreholes drilled by Cominco, Redfern and Chieftain during the period of 1940 to 2011. The effective date of a NI43-101 compliant resource is March 15, 2012. The total indicated resource is estimated at 6,762,000 tonnes grading 1.19 per cent copper, 1.1 per cent lead, 5.89 per cent zinc, 2.4 grams per tonne gold and 85 grams per tonne silver; in addition total inferred resources are estimated at 204,000 tonnes grading 0.67 per cent copper, 0.76 per cent lead, 4.02 per cent zinc, 1.81 grams per tonne gold and 62 grams per tonne silver (Technical Report for the Tulsequah Chief Project, for Chieftan Metals Inc., Dec.12, 2012.)

An NI 43-101 compliant probable mineral reserve estimate is given at 6,447,098 tonnes grading 1.13 per cent copper, 1.04 per cent lead, 5.59 per cent zinc, 2.30 grams per tonne gold and 81 grams per tonne silver (Technical Report for the Tulsequah Chief Project, for Chieftan Metals Inc., December 12, 2012).

In 2013, Chieftan drilled a total of 3,540 meters 9 surface NQ holes. Of primary interest is the base metal values intersected in four holes targeting the strong 3D-IP chargeability anomaly located 350 metres to the southwest of the known Tulsequah Chief Orebody.

In October 2014 a NI-43-101 Feasibility Study Technical Report for the Tulsequah Chief Project was completed for Chieftan Metals Inc. by JDS Energy and Mining Inc. (SEDAR database: Chieftain Metals Inc. Dec 1 2014). Mineral Resources for the Tulsequah Chief Mine were as follows:

Category	MTonnes	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq (%)

Measured	0.787	1.57	1.5	8.6	2.81	105.5	30.9
Indicated	5.136	1.43	1.28	6.76	2.8	102.1	28.1
Total M+I	5.923	1.45	1.31	7	2.8	102.5	28.5
Inferred	0.439	0.79	1.03	5.54	2.33	80.6	21.6

In September 2016, the Tulsequah Chief Mine went into receivership (CBC News Sept 13, 2016). Since then, the Government of BC, working collaboratively with the Taku River Tlingit First Nation and the Government of Alaska has been working on a Closure and Reclamation Plan for the Tulsequah Chief mine site.

Bibliography

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EMPR ASS RPT *8933, 9825, *11018, 16983, 17054, 17137, 19453, 20423, 20901; 22939, 23762, 23763, 23951, 24183, 24188, 27385, 27659, 31030, *33468, *34538, *34969, *35093

EMPR BULL 1 (1930)

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