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TJS → Tuli Chief



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Redfern Resources Ltd.

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TULSEQUAH PROJECT

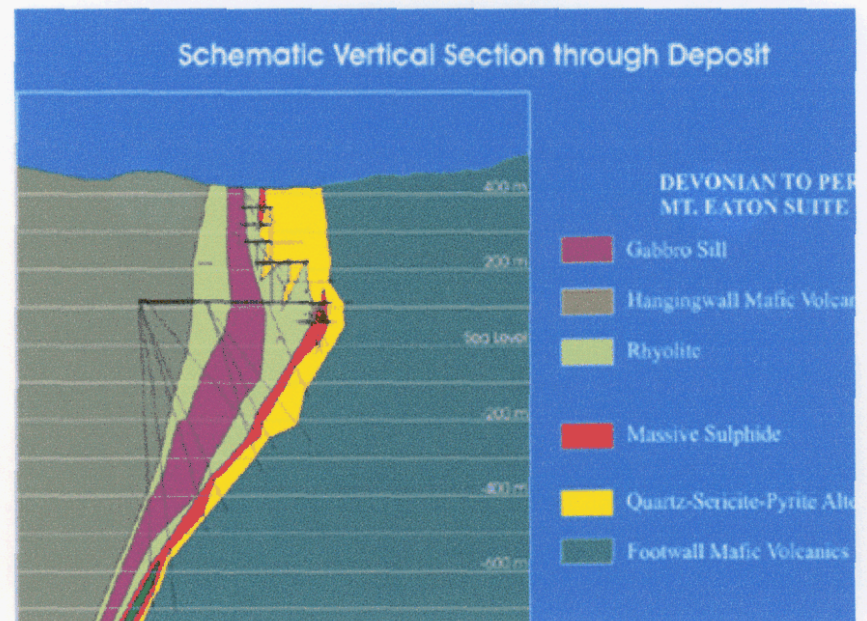
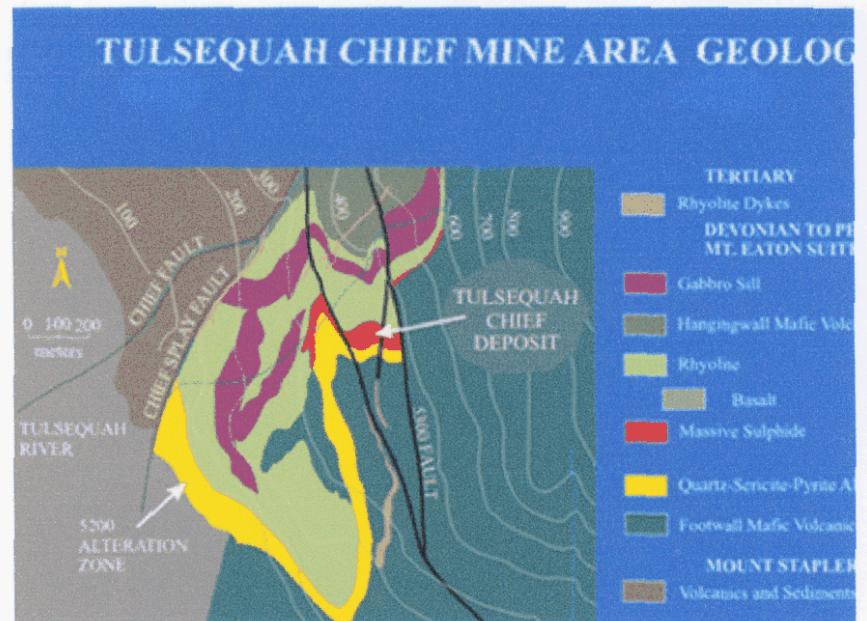
Geology

The Tulsequah Chief and Big Bull deposits are volcanogenic massive sulphide is found in the hinge zone and limbs of a steeply plunging synclinal fold. The consist of sphalerite, chalcopyrite, galena, tennantite-tetrahedrite and native minerals include pyrite, quartz, sericite, barite and/or gypsum and lithic frag

Regionally, The Tulsequah Chief deposit is located in the Paleozoic-aged Mou which is a volcanic arc assemblage contained within the Stikine Terrane of n Llewelyn fault separates the Mt Eaton assemblage from older and more defo tectonostratigraphic blocks to the west. These include the Whitewater Suite (nearby Polaris-Taku gold deposit) and the Boundary and Mt. Stapler suites. volcanics unconformably overlies all of these older blocks.

At Tulsequah Chief the enclosing stratigraphy has been well defined from su underground development mapping as well as from information obtained fro and underground drilling. The deposit occurs at the base of a rhyolite-domin volcanic flows and fragmental units. These rocks sit above a thick assembla (basalts and basaltic andesites). In turn the rhyolites are overlain by a mafic sequence of basalt flows, breccias and sills. In the mine area a thick diorite/ the rhyolites above the sulphide deposits. This sill is geochemically identical volcanic units. Basaltic dykes, interpreted to be feeders to the thick sill, cut t sequence. Late stage Sloko dykes of Tertiary age are associated with faults c mine sequence rocks.

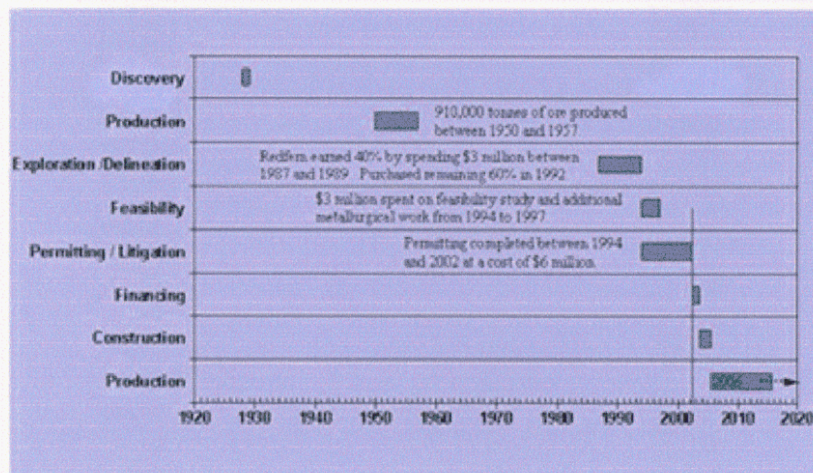
The Tulsequah deposits consist of a number of stacked sulphide lenses devel basal stratigraphy of the felsic volcanics. The thickest part of the deposit is li synclinal structure termed the H syncline. Thinner portions of the sulphide le the limbs of this structure and into the F anticline to the west. Two promin the H syncline and subparallel to the axial plane of the fold. These faults, the 5300E faults, may represent focal points of renewed movement on older bas faults at the time of sulphide deposit deposition. The G lens which occurs in the 5300E fault is interpreted to be a fault offset of the main H/AB2 lens with syncline structure.



Project development chronology

The Tulsequah project area has had a long and diverse exploration and development history. The chart below displays some of the history of these activities.

Project History



TULSEQUAH PROJECT

In the 1950s Cominco Ltd. extracted 935,536 tonnes of ore, comprised of 57% from the Tulsequah Chief mine and 360,073 tonnes from the Big Bull deposit. The production and recovery from both mines, as obtained from production records, is shown below:

Combined Historical Production from Tulsequah Chief and Big Bull Mines

Metal	Average Ore Grade	Total Metal Production
Cu	1.59 %	14,756 tons
Pb	1.54 %	11,439 tons
Zn	7.00 %	54,910 tons
Au	3.84 g/t	95,340 oz
Ag	126.52 g/t	3,329,938 oz

At Tulsequah Chief this production was achieved through the development of levels connected with an internal winze (shaft) and day-lighting through 5 acres of Mount Eaton ([Click here to view photo](#)). The earliest production took place stratigraphically higher sulphide lens on the eastern limb of the H syncline fold. As production proceeded deeper the thicker H/AB 2 lens was discovered and later production in this area. The 5400 and 5200 levels provided the main haulage levels for the mine. The uppermost portion of the main H/AB lens was delineated by Cominco at the mine's shutdown in 1957.

Exploration re-commenced in 1987 through a Redfern/Cominco Joint Venture. Exploration programs expanded the underground access for drilling deeper into the deposit and were successful in delineating a large expansion of the previous Mine. At the end of 1994 a geological resource was estimated which fed into feasibility and reserve definition.

Resource Definition, Exploration Potential

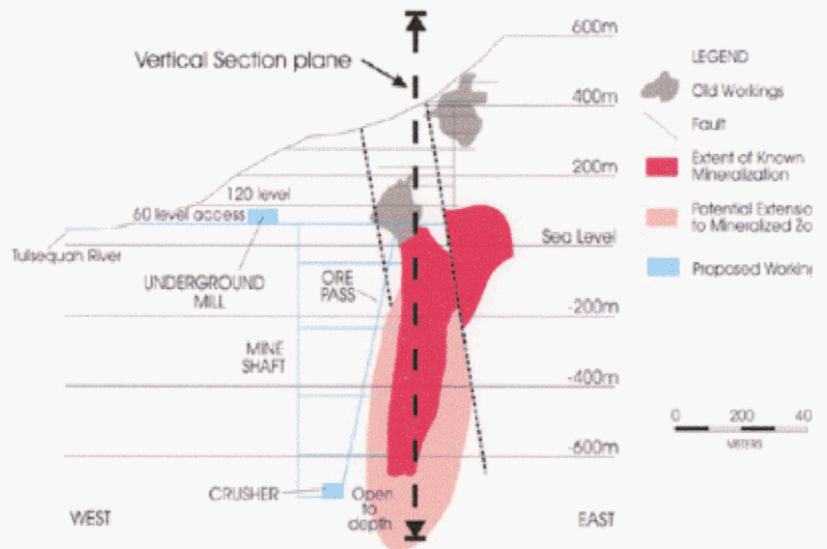
The following table sets out 1957 reserves as calculated by Cominco and the reserves for the Tulsequah Chief deposit calculated by Redfern in 1995 using polygonal resources, incorporating all drilling data:

Total Mineral Resources

Zone	Cu %	Pb %	Zn %	Au (g/t)	Ag (g/t)	Indicated	Inferred
Post 1987							
Indicated Resource	1.43	1.22	6.55	2.62	106.18	5,234,694	
Inferred Resource	1.10	1.19	6.38	2.42	107.86		2
1957 Cominco Reserves	1.30	1.60	8.00	2.40	116.50	707,616	
Total All Zones							
Indicated Resource	1.42	1.26	6.72	2.59	107.41	5,942,310	
Inferred Resource	1.10	1.19	6.38	2.42	107.86		2

The resource estimate for the Tulsequah Chief deposit pre-dates National Instrument 43-101 ("NI 43-101"). This disclosure is of a historical estimate, the source of which is a calculation completed by Redfern in 1994 and verified by Bencan in the same year. The technical report accompanying the resource estimate forms part of the 1995 Feasibility Study and the Qualified Person, as defined in NI 43-101, for the project is Terry Chandler, P.Eng. This historical estimate is relevant as it is the most recent estimate completed for the Tulsequah project. The definitions of "Indicated" and "Inferred" here are consistent with NI 43-101.

Schematic Mine Long-Section looking North



The deposit remains open at depth and along strike. This is due to the lack of drilling at the deposit at depth and to the present underground drill stations being poorly located due to the folded deposit geometry in the vicinity of the F anticline and the western

The favourable mine stratigraphy extends for over 800 meters to the SW where it meets another major synclinal fold structure. Surface outcrops of the rhyolite are sericitically altered with abundant disseminated pyrite – similar to the alluvial deposits in the footwall envelope to the known deposits. This portion of the mine stratigraphy is untested for the possible presence of additional sulphide lenses.

In the Big Bull deposit area Cominco records estimated a 1957 shutdown resource of 707,616 tonnes. Limited wide-spaced surface drilling by Redfern in 1993 and 1994 located the sulphide deposits at depth and along strike to the northwest. The Big Bull deposit system appears to be plunging towards the northwest beneath Mt. Manville and requires new underground access to allow drilling platforms for further exploration of the deposit. Big Bull host stratigraphy appears to be more distal than exhibited by the Tulsequah deposit with finer grained volcanics and volcanic-derived sediments. It is noteworthy that production at Big Bull yielded ore with lower copper but higher lead and zinc associated gold and silver values.

2003 Exploration Program Progress Results and Discussion

The currently defined resource for the Tulsequah Chief deposit is as follows:

Table 1: Tulsequah Chief Resource Summary

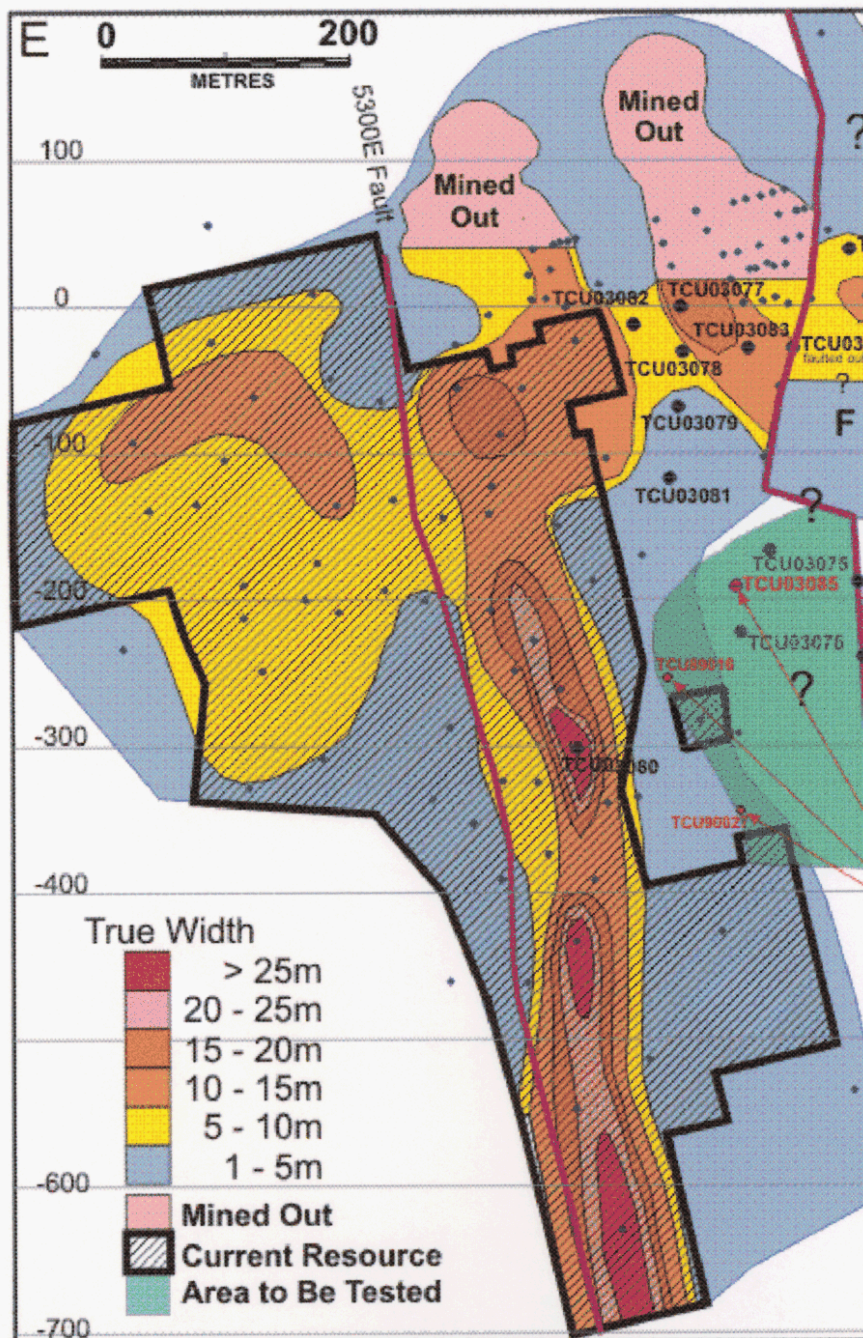
Category	Tonnes	Au (gpt)	Ag (gpt)	Cu %	Zn %	P
Measured						
And	5,940,000	2.59	107.41	1.42	6.72	1
Indicated						
Inferred	3,000,000	2.42	107.86	1.10	6.38	1

The resource remains open in several areas, and is currently limited only by drilling that has been done to define the deposit. Additional drilling will result in this resource. Due to excellent continuity of the deposit in the down-dip direction, potential for adding tonnes is to continue drilling below the resource. This is due to the length of drill holes required, and is best deferred until additional access is available to provide drill platforms.

A second, more easily tested, area of high potential lies along strike to the west. This area has obvious potential for expanding the current deposit, but also offers the potential of discovering a new massive sulphide deposit, which could lead to a dramatic resource.

The focus of the 2003 program is to test this along-strike area and to extend the resource at the Tulsequah Chief deposit, principally at shallow to moderate depths of the current resource. No holes are planned to test the down-dip extension of the deposit this year.

Interpretation of the previous drill hole and mining operations database indicates potential for significant extensions to the sulphide mineralization on the flank of the "F" anticline and adjacent to the 4400E Fault. This is based on down-plunge drilling of mined and un-mined lenses intersected by operations in the 1950s, shortly after the mine was shut down due to low metal prices. Results from the present drilling program suggest this is the case, although the location and trend of the 4400E fault is further west as a result of the new drilling information. The schematic long-section presents the location of the holes and previously identified resources for general company's PowerPoint presentation also provides information on the current resource. Note that this section is viewed to the South, hence East is on the left side of the section and West is on the right.



Inclined longitudinal section looking from north to south. This is a reconstruction of the distribution of the aggregate estimated true thickness of massive sulphide and drill pierce points. It can be thought of as a floor at the time of deposition of the massive sulphides from an exhausted hydrothermal system, similar to the "black smokers" which occur on today.

Drilling operations using one rig commenced on June 12. The first two drill holes were completed from surface (TC03019 and TC03020) and were targeted on the anticline axis west of the known deposit and current resource which is centered on the syncline. The drill was moved underground and further drilling has been completed in two sections (Az 225 degrees and 200 degrees) targeted at the "F" Anticline targets west of the known deposit (holes TCU03072, 073, 074, 075 and 076) and holes TCU03077, 078, 079, 080 and 081 on Section 200). Results have been reported on a regular basis through news releases dated June 12, July 15, August 18 and September 12.

and available on the website of [Redcorp Ventures Ltd.](#)

Surface Holes and Underground Section 225

Holes TC03019 and TC03020 were drilled from surface to test the F zone below of 1.5% copper over 1.5 meters in hole TC87004.

TC03019 intersected intensely altered rhyolites and basalts with anomalous metal values over a 50 meter width, including a 16 meter section of semi-massive sulphide. Although no ore grade sulphide was intersected, the intensity of alteration and exhalative pyrite suggest the presence of massive sulphide mineralization near

Hole TC03020 intersected a wide zone of mafic intrusive. A 3.8 meter section of altered rhyolite with anomalous metal values was intersected within the intrusive crosscuts the mineralized zone in this area. Below the intrusive, a 14 meter section of altered and anomalous rhyolites represents the mineralized horizon.

The underground holes tested the horizon farther east than the surface holes. Massive sulphide mineralization on both sides of the 4400E in holes 072, 073, and 074. Massive sulphides in hole 74 were cut off by the 4400E fault. Holes 075 and 076 dip on the same section and intersected the mineralized horizon east of the 4400E fault. Holes encountered thick sections of disseminated and stockwork pyrite in intrusive volcanics with narrow sections of higher base-metal content. The 4400E fault has splayed farther west at the level of these holes.

The massive sulphide intersection in hole TCU03073 has characteristics that are similar to the distal extension of the main H lens, but represents a new sulphide lens. The copper-rich pyrite, which tends to occur in the center of the zoned sulphide lens, intersection was also underlain by a section of intensely altered basalt and stockwork mineralization which represents the feeder system for the massive sulphide. This is interpreted to be contiguous with the copper-rich section in hole TC87-4 west and remains untested down-plunge.

Underground Section 200

A second section was drilled underground on Az 200 degrees with holes TCU080 and 081 to test the areas between the current resource and the F zone.

Hole TCU03080 was drilled as a confirmation infill hole within the current resource. This hole was widely spaced drilling and has intersected a thicker zone of massive sulphide with higher base-metal values. Assay results are awaited.

Hole 077 intersected several mineralized horizons corresponding to extensive mineralized lenses in the present deposit. In addition this hole encountered a zone above the main H horizon which contained very high gold and silver values (1000 g/t). Although the down-dip extension of this high-grade zone is limited by Hole C, this has not been fully tested. As it occurs above the main massive sulphide zone, there is a possibility that the 1950's drilling stopped short of it and that it may continue in hole 077.

Holes 078 and 079 drilled beneath hole 077 encountered more typical base-metal mineralization corresponding to the expected mineralized intervals, although gold and silver values in both holes were higher than average for the deposit.

Hole 081 has also intersected an observed base-metal rich section of the H lens. Assays are awaited.

Drilling on section 200 has extended the main deposit and opened up the potential for an additional resource of high-grade gold-silver mineralization. Additional holes are planned for extensions of the high-grade gold-silver mineralization and to explore the deposit horizon towards the F zone. Further holes will also be targeted on probing the westward projection of the F zone on the west side of the 4400E fault.

Based on incurred and anticipated drilling costs the program is expected to be completed by October within the current \$1.6 million dollar budget.

Table 2: 2003 Diamond Drill Hole Intersections

Hole #	Horizon	From (m)	To (m)	Length	Au (gpt)	Ag (gpt)	Cu (%)	Pb (%)
TCU03072	H	282.3	290.4	8.1	1.30	20.03	0.59	0.22
TCU03073	AB1	238.7	248.3	9.6	1.59	18.10	1.52	0.06
TCU03074	H	229.0	231.2	2.2	1.06	51.08	0.24	1.33
TCU03076	H	361.8	362.7	0.9	3.23	256.00	0.27	2.06
TCU03077	?	234.4	242.0	7.6	14.58	439.28	0.07	0.62
and	?	246.2	252.1	5.9	3.62	173.66	0.03	0.06
and	H	258.9	279.3	20.4	0.36	19.60	0.34	0.32
and	AB2	300.8	303.2	2.4	0.31	4.76	0.20	0.01
TCU03078	H	263.2	264.9	1.7	4.40	252.75	0.65	2.95
and	AB2	315.8	319.1	3.3	0.13	1.68	0.34	0.00
and	AB1	332.7	339.9	7.2	1.45	13.45	2.11	0.03
TCU03079	H	256.4	259.9	3.5	4.30	149.75	0.50	1.80

Table 3: 2003 Diamond Drill Hole Information

Hole #	East (m)	North (m)	Elev (m)	Length (m)	Bearing	D
TC03019	10329	15403	291	502.62	140.44	-70
TC03020	10329	15403	291	572.73	143.71	-81
TCU03078	10663	15374	114	395.60	199.74	-26
TCU03074	10663	15374	114	322.78	225.73	-22
TCU03077	10663	15374	114	383.74	199.45	-17
TCU03080	10663	15374	114	636.40	199.68	-73
TCU03081	10663	15374	114	545.28	199.43	-48
TCU03079	10663	15374	114	539.20	198.80	-36
TCU03072	10662	15374	114	450.50	224.95	0
TCU03073	10663	15374	114	451.71	225.27	-11
TCU03075	10663	15374	114	425.50	225.41	-48
TCU03076	10663	15374	114	450.80	226.69	-61
TCU03082	10663	15374	114	400.00	190.00	-20
TCU03083	10663	15374	114	400.00	190.00	-32

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