



## ASSESSMENT REPORT TITLE PAGE AND SUMMARY

**TITLE OF REPORT: Geophysical, Geochemical and Geological Report on the LITTLE GEM (Northern Gem) COBALT-GOLD PROPERTY**

**TOTAL COST: \$16,201.34**

AUTHOR(S): R.H. McMillan

SIGNATURE(S):



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): not applicable

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 5537389: 2015/jan/08

YEAR OF WORK: 2014

PROPERTY NAME: Little Gem

CLAIM NAME(S) (on which work was done): Little Gem

COMMODITIES SOUGHT: Co, Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: not applicable

NTS / BCGS: NTS 92J15W

LATITUDE: 50 ° 53 ' 47 "

LONGITUDE: 122 ° 57 ' 17 " (at centre of work)

UTM Zone: 10 EASTING: 503184 NORTHING: 5638304

OWNER(S): RH McMillan (50%), BN Church (50%)

MAILING ADDRESS: RH McMillan, 6606 Mark Lane, Victoria, BC, V9E 2A1

OPERATOR(S) [who paid for the work]: RH McMillan

MAILING ADDRESS: as above

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. Coast Crystalline Plutonic Rocks, Tertiary, Five Element Vein Deposit, Quartz, Carbonate and actinolite alteration. Cobalt arsenide minerals. Steeply-dipping veins up to 90 cm in width.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: EMPR ASS RPTS [7704](#), [11877](#), [15451](#), [28870](#), [30031](#), [30192](#), [31241](#)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric – 140 m		501174	<b>\$10,08013</b>
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil – 11		501174	<b>\$6,121.21</b>
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			

Trench (number/metres)		
Underground development (metres)		
Other		
	<b>TOTAL COST</b>	<b>\$16,201.34</b>

BC Geological Survey  
Assessment Report  
35282

**Geophysical, Geochemical and  
Geological Report**

on the

**LITTLE GEM**  
(Northern Gem)  
**COBALT-GOLD**  
**PROPERTY**

**Gold Bridge/Bralorne Area  
South-Central British Columbia**

NTS 92J15W  
50° 53'47"N, 122° 57'12" W

**R.H. McMillan Ph.D., P.Geo.**  
11 December 2014

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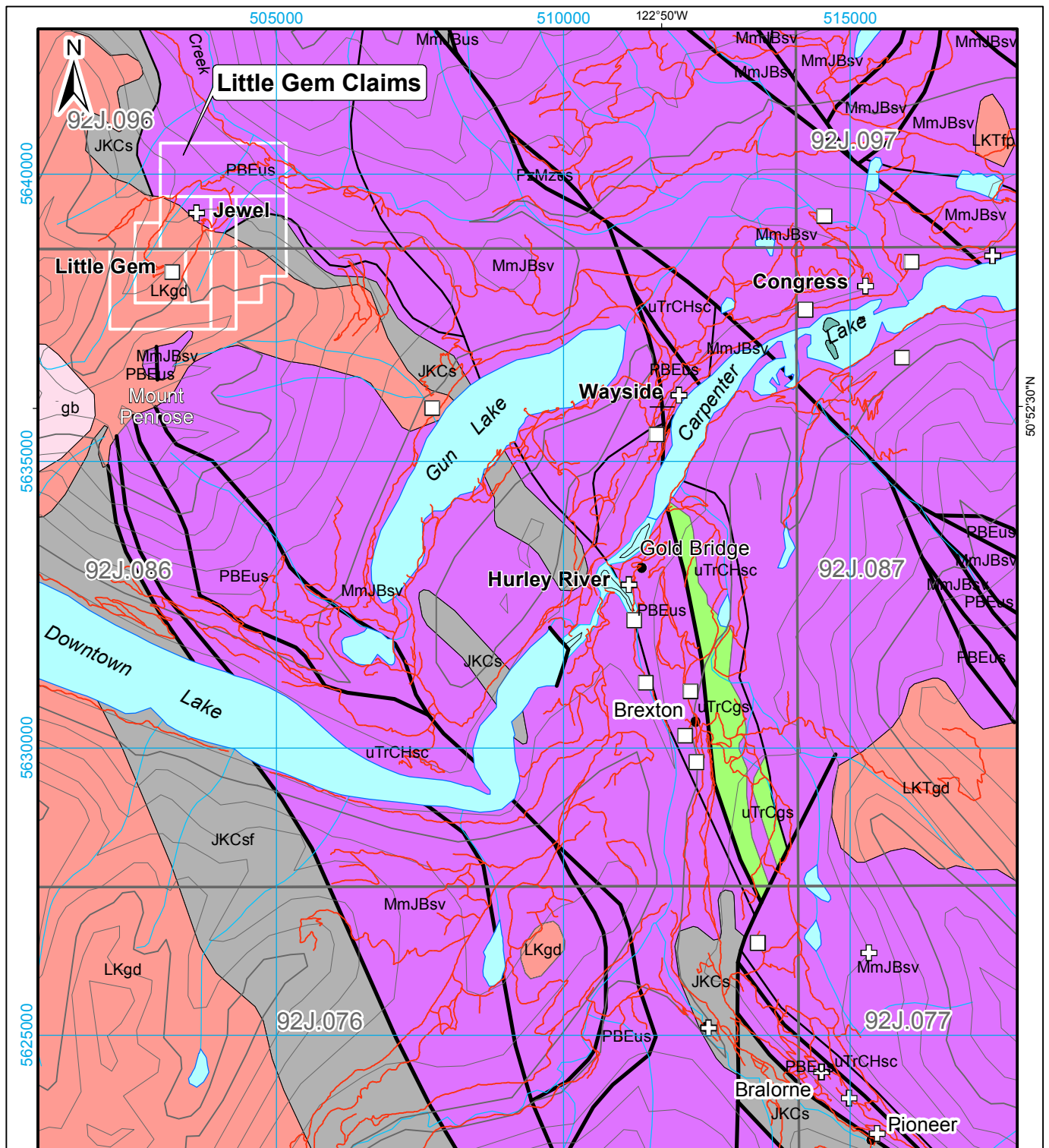
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Code	Geological Description
gb	Age Unknown - Gabbroic to dioritic intrusive rocks
KTfp	Mesozoic to Cenozoic - Feldspar porphyritic intrusive rocks
KTgd	Mesozoic to Cenozoic - Granodioritic intrusive rocks
LKgd	Mesozoic - Granodioritic intrusive rocks
JKCs	Mesozoic - Cayoosh Assemblage undivided sedimentary rocks
JKCsF	Mesozoic - Cayoosh Assemblage(?) mudstone, siltstone, shale fine clastic sedimentary rocks
uTrCgs	Mesozoic - Cadwallader Group - Volcanic Unit greenstone, greenschist metamorphic rocks
MmJBus	Mesozoic - Cadwallader Group - Hurley Formation coarse clastic sedimentary rocks
uTrCHsc	Paleozoic to Mesozoic - Bridge River Complex serpentinite ultramafic rocks
MmJBsv	Paleozoic to Mesozoic - Serpentine and ultramafic rocks
PzMzus	Paleozoic to Mesozoic - Bridge River Complex marine sedimentary and volcanic rocks
PBEus	Paleozoic - Bralorne-East Liza Complex serpentinite ultramafic rocks

Scale: 1:100 000

Kilometres

• Town

**MINFILE Occurrences**

□ Developed Prospect

⊕ Past Producer

(Geology after Massey, et al, B.C. MEMPR, 2005)

Figure 1: Location Map and Geology - Little Gem Property

## **1 Introduction -- Synopsis**

A potentially economic deposit of cobalt-gold mineralization with minor associated uranium is partially developed by three adits in the Gold Bridge area - the vein-type mineralization is hosted in granitic rocks of the Coast Range Igneous Complex and is part of the Bridge River gold mining district (Church, 1995). Mineralization - “massive sulpharsenide ore, containing the cobalt and associated gold, is a mixture of the cobalt-bearing variety of arsenopyrite (danaite) and loellingite-safflorite” (Stevenson, 1948). A previous operator reported a high-grade resource of “9425 tons (8570 tonnes) grading 0.67 oz./ton (23 g/t Au), 2.97% Co and 0.25% U” (Allen, 1956), after the 1956 underground program. The 1956 estimate was based on surface and underground channel sampling and diamond drilling within an area approximately 40 metres in length and 20 metres vertical extent. The mineralized pod remained open for expansion along strike and to depth. A later figure quoted in the Canadian Mines Handbook (1960, p.185), and presumably based on additional work, estimated “20,000 tons (18,000 tonnes) averaging 0.65 oz/ton (22.3 g/t), 3.0% Co and 0.25% U<sub>3</sub>O<sub>8</sub>“. It must be emphasized however that the two aforementioned “Historical Resource Estimates” do not comply with current NI43-101 criteria and cannot be relied upon.

The mineralized structure has been traced for a length of 300 metres and over a vertical extent of 160 metres but most of this structure has not been tested. There are two possibilities for improvement on these “Historical Resources”. Firstly, there is potential to discover additional high-grade pods and/or to extend the known deposit. Secondly, the “Historical Resource” calculations have only considered the high-grade massive to semi-massive sulphide mineralization – there has been no testing as yet for an orebody composed of “disseminated mineralization” of moderate grade and tonnage.

The author in company with Messrs. Gregory McKee and John Grabavac undertook a two-day visit to the property on 9 and 10 of October 2014. A radiometric survey of the #3 adit was undertaken, as well as collection of 11 soil samples in a traverse below the mine workings in an attempt to discover parallel mineralized structures. Road maintenance (deadfall and debris removal) was completed to permit access to the Little Gem and Jewel areas.

Follow-up work is clearly warranted on the property - the following report documents the work completed on the property and recommends a follow-up diamond drill program.

## **2 Location and Access**

The Little Gem prospect is located (Figure 1) within the Dickson Range near the head of Roxey Creek, 8 kilometres northwest of Gold Bridge. The mine workings are at the 1900 metre elevation, 2.3 kilometres northeast of Dickson Peak, 2.5 kilometres north of Mount Penrose and 5 kilometres northwest of Gun Lake. The towns of Gold Bridge and Bralorne are located respectively 10 km and 17 km southeast of the property.

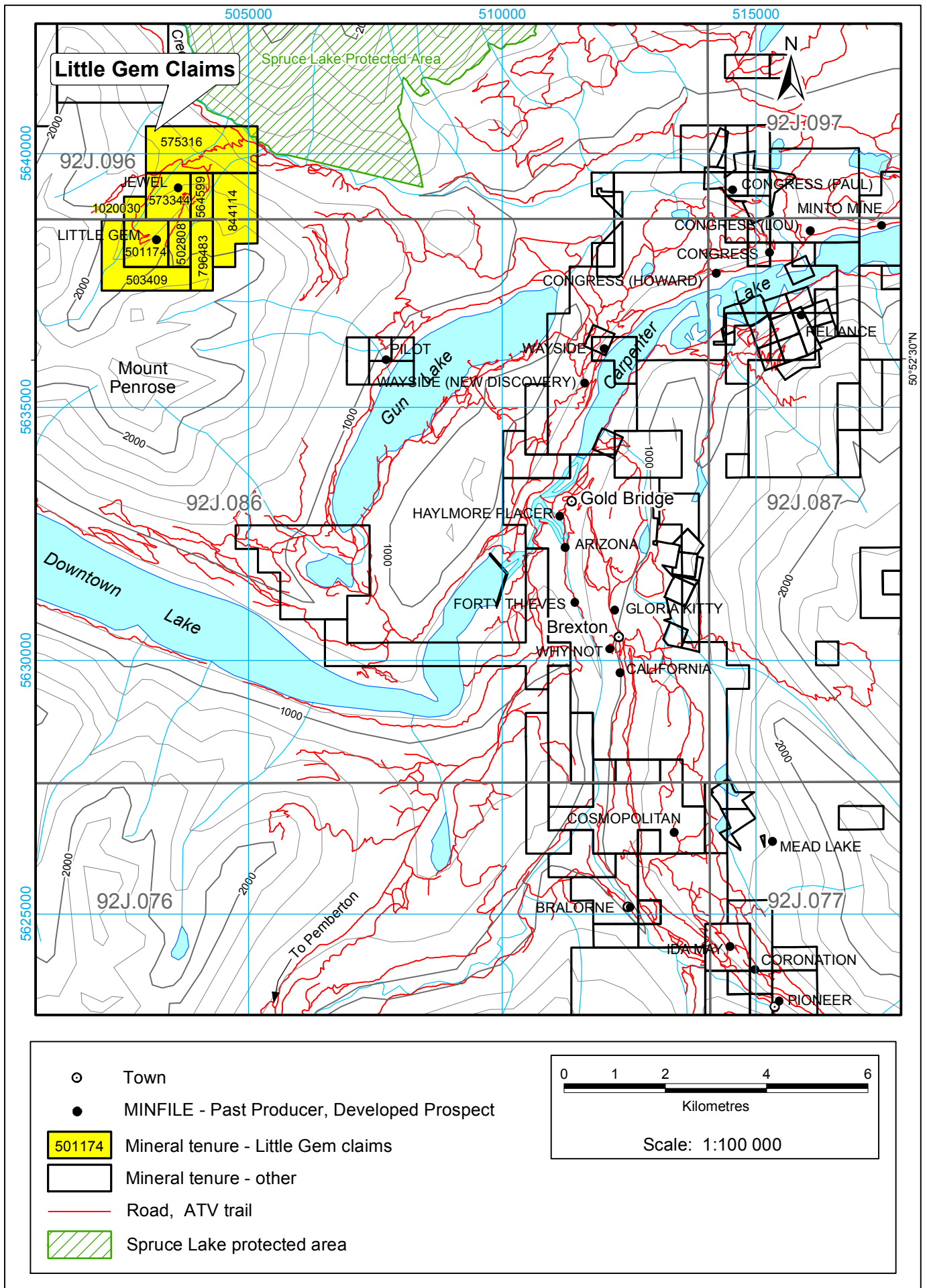


Figure 2: Claim Map - Little Gem Property



Access to the property from Gold Bridge is via Gun Lake and thence on the Slim Creek logging road. At km 12.9 on the Slim Creek road, a mountain road leads up Roxey Creek to the mine workings, a distance of 3 km as the crow flies. The access road is currently accessible by ATV vehicle, but with minor bulldozer work could be made accessibly to four-wheel drive vehicles.

### **3 Claim Status**

The Little Gem Property comprises 856 ha in ten mineral claims. (Figure 2). The claims are held in the names of Ronald Hugh McMillan (FMC #132841), Dr. Barry Neil Church (FMC #141786) and Goldbridge Holdings Ltd. (FMC #210834 ).

***Table 1- Little Gem Property Claims***

Tenure #	Registered Owner(s)	Area (ha)	Current Expiry Date	New Expiry Date
501174	RH McMillan (50%), BN Church (50%)	81.54	2022/jun/29	
502808	RH McMillan (50%), BN Church (50%)	40.77	2022/jun/29	
503409	RH McMillan (100%)	122.32	2014/dec/15	
1020030	BN Church (100%)	20.38	2015/jun/03	
796483	Goldbridge Holdings Ltd.	61.16	2014/dec/15	
573344	Goldbridge Holdings Ltd	81.52	2014/dec/15	
564599	Goldbridge Holdings Ltd	40.76	2014/dec/15	
575316	Goldbridge Holdings Ltd	203.77	2014/dec/15	
844114	Goldbridge Holdings Ltd	142.68	2014/dec/15	
	total	794.90		

The core claims were optioned by Goldbridge from Church and McMillan in an agreement dated October 23, 2007 under the following terms:

- \$7,000 Down Payment (paid)
- \$10,000 cash on the anniversary of year 1 to 5.
- 1,000,000 shares over 5 years, 200,000 each year
- 20% NPI Royalty of first 20,000 tonnes produced
- 2% NSR Royalty with a buyout of the NSR (1%) for \$1,000,000.

Technically the agreement is currently in default. However the vendors have not as yet sent a letter of default, so the agreement can be reinstated if the optionee rectifies the deficiencies (or re-negotiates the terms).

### **4 Physiography and Vegetation**

The Little Gem Co-Au showings are exposed on a steep hillside in the Dickson Range, part of the eastern Coast Mountain Ranges. Steep peaks are separated by wooded valleys and slopes. The showings and adits are located on a west-facing timbered slope between the elevations of 1800 and 2100 metres. The area is timbered with douglas fir, spruce and pine with light undergrowth. The timber line is between 1700 and 2100 metres in the area.

## 5 Past Exploration Work

Pink cobalt-bloom on weathered mineralization led to discovery of the Little Gem showings by prospectors W.H. Ball and William Haylmore in 1934 (MINFILE; Allen (1955). The prospectors sold their interests to J.M. and R.R. Taylor in 1937. The property was then optioned to the **United States Vanadium Corporation** between 1938 and 1939, and during that time the upper (#1) adit and most of the lower (#2) adit were driven. United States Vanadium Corp. subsequently suspended operations in Canada.

In 1940, the property was optioned by **Bralorne Mines**. The #2 adit and two short raises were completed. Due to the war, the Bralorne option was dropped.

In 1952, **Estella Mines** optioned the property and completed a switchback road from the Gun Creek bridge to the Little Gem camp and completed twelve (12) short AX diamond drill holes totalling 667 feet (203.4 metres) from the #2 adit. Allen (1956) reported incomplete results from seven of the drill holes as follows:

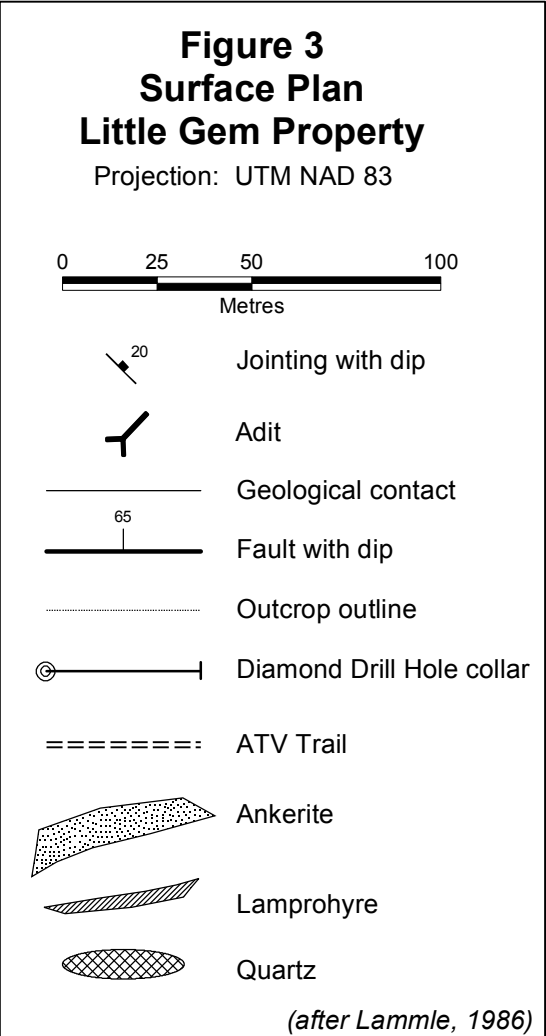
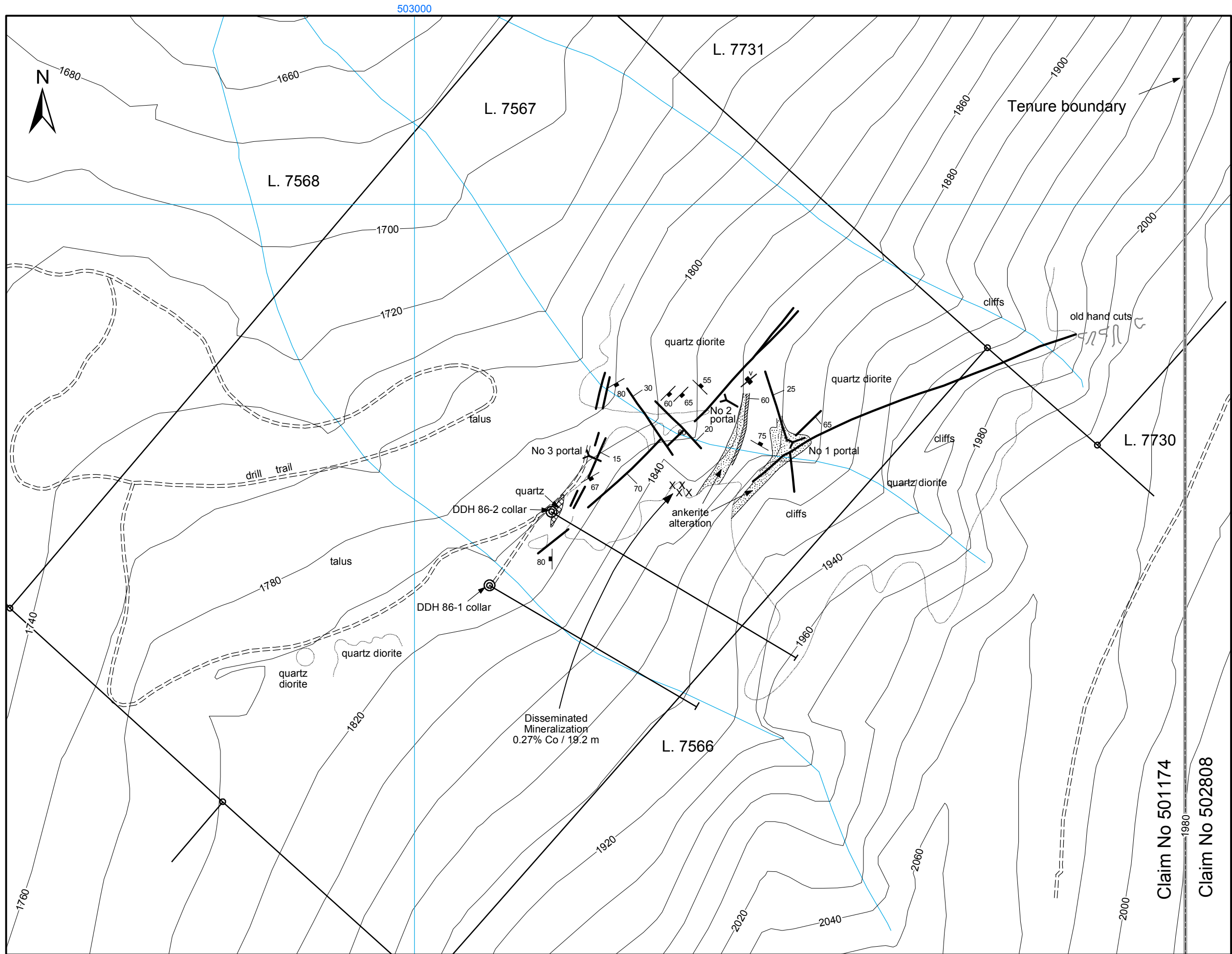
Hole# / length	Location	Angle	Dip	Core Length	Au Oz/ton	Co%
1 / 30 ft.	SW drift	S82E	0	2.5'	0.20	1.28
				20.0'	Disseminated sulphides and lost core	
				10.9'	0.36	1.39
				3.5'	disseminated sulphides	
2 / 24 ft.	SW drift	S88E	0	1.7'	0.28	0.93
				1.3'	massive sulphides and lost core	
3 / 28 ft.	SW drift	S12E	0	1.5'	0.28	2.34
				1.5'	massive sulphides and lost core	
				9.5'	0.35	0.90
4 / 28 ft.	SW drift	S17W	0	6.5'	massive sulphides and lost core	
5 / ?	SW drift	S52E	-25 <sup>0</sup>	3.3'	lost core and heavy sulphides	
				4.7'	massive to disseminated sulphides	
6 / 97 ft.	SW drift	S88E	-25 <sup>0</sup>	9.0'	lost core and massive sulphides	
				2.2'	lost core, massive to disseminated sulphides	
7 / 68 ft.	SW drift	N43W	-25	16.0'	lost core, massive to disseminated sulphides	
				4.0'	lost core, massive to disseminated sulphides	

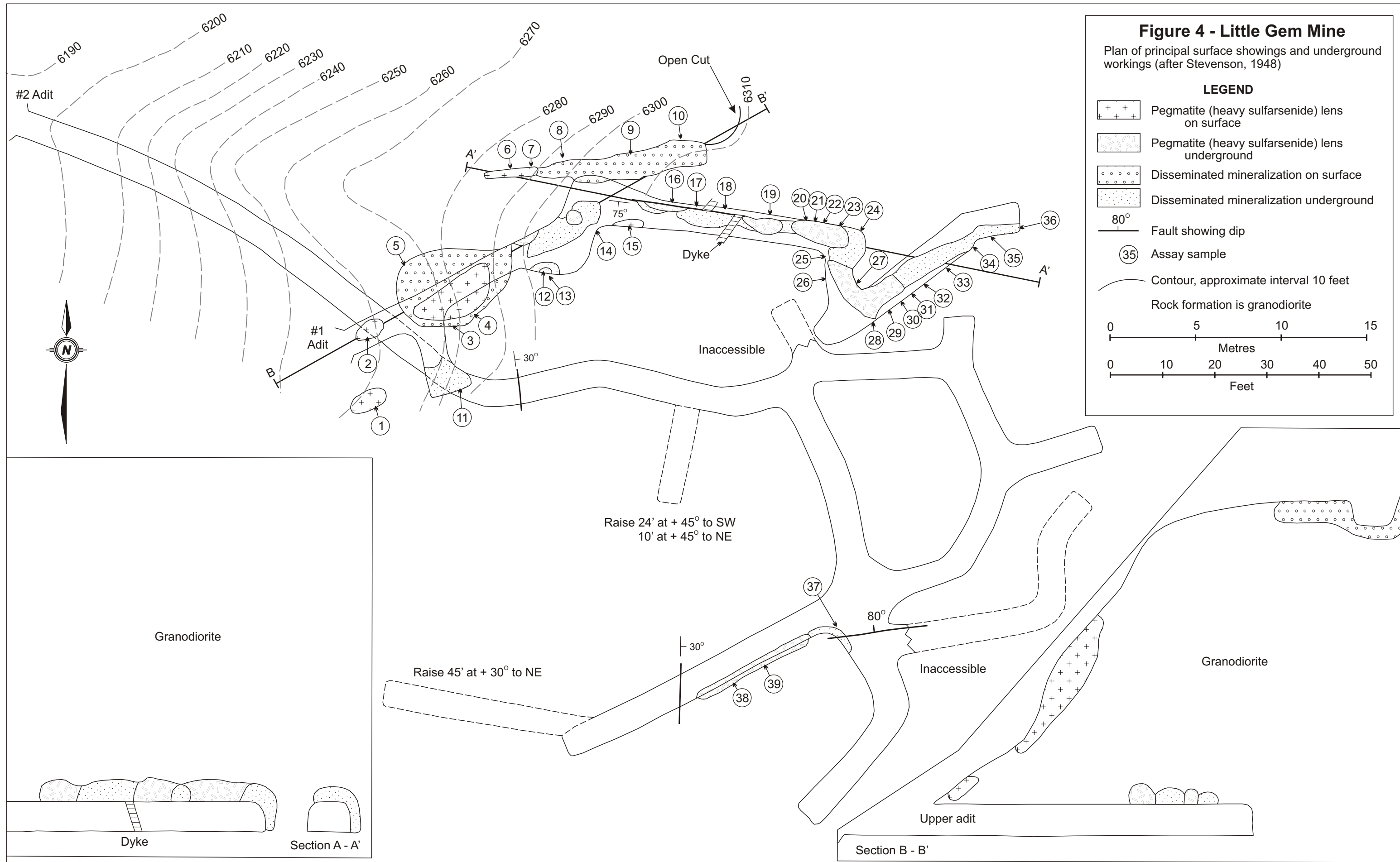
*\*Measurements are all imperial.*

Estella Mines ran out of money and the property was obtained by **Northern Gem Mining Corporation** in December of 1955 – this company completed road work, camp improvements and some work on the mineral showings in 1956. The work included four AX-sized diamond drill holes totalling 697 feet (212.5 metres) from the #2 adit. Allen (1956) reported some of the results as follows:

Hole# / length	Location	Angle	Dip	From	To	Au oz/ton	Co%	U <sub>3</sub> O <sub>8</sub> %
1-56 / 167'	50 ft. in	S55E	-30	133.5	135.0	0.22	0.21	-
				138.0	139.0	0.54	0.54	nil
				139.0	145.0	3.26	2.42	Nil
				145.0	146.5	2.40	0.25	Nil
				146.5	151.5	Lost core		
				151.5	152.5	1.52	0.20	nil
2-56 / 225'	50 ft. in	S55E	-40	177.0	185.5	0.04	0.13	-
				185.5	192.0	0.02	0.01	-
3-56 / 125 ft.	100 ft. in	S72E	-30	83.0	88.5	0.04	0.08	-
				88.5	97.0	0.04	0.11	-
4-56 / 180 ft.	100 ft. in	S72E	-40	186.0	192.0	massive sulphides, not yet sampled		

*\*Drill hole locations are all measured from the portal of the lower adit.*





## Assays, Little Gem Mine.

## CHANNEL SAMPLES.

Sample No.	Width.	Gold.	Silver.	Uranium-Oxide Equivalent.	Cobalt.	Iron.	Arsenic.	Sulphur.	Silica.
	Inches.	Oz. per Ton.	Oz. per Ton.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
1.....	24	1.04	Nil	0.0055	3.6	.....	.....	.....	.....
2.....	30	0.41	Nil	0.0300	1.3	23.7	42.6	14.5	6.3
3.....	72	0.52	Nil	0.0220	5.1	20.3	48.2	3.7	5.9
4.....	84	0.32	Nil	0.0025	5.1	20.0	61.2	1.6	3.7
5.....	24	0.24	1.1	0.0200	0.3	.....	.....	.....	.....
6.....	25	0.27	Trace	0.0035	4.4	.....	.....	.....	.....
7.....	24	0.35	Nil	0.0200	3.9	.....	.....	.....	.....
8.....	18	1.60	Nil	0.0070	4.3	25.2	42.2	14.2	2.7
9.....	60	0.27	Nil	0.0100	0.9	.....	.....	.....	.....
10.....	96	0.87	Nil	0.0030	0.8	.....	.....	.....	.....
11.....	60	0.22	Nil	0.0100	0.3	.....	.....	.....	.....
12.....	24	0.02	Trace	0.0140	0.5	.....	.....	.....	.....
13.....	13	1.24	0.1	0.0080	6.0	.....	.....	.....	.....
14.....	36	0.53	Nil	0.0380	3.5	.....	.....	.....	.....
15.....	12	0.61	Trace	0.0050	5.7	.....	.....	.....	.....
16.....	33	0.62	0.1	0.0220	4.1	.....	.....	.....	.....
17.....	36	0.51	Nil	0.0320	2.5	.....	.....	.....	.....
18.....	39	0.15	Trace	0.2100	1.5	.....	.....	.....	.....
19.....	36	1.09	0.1	0.0260	6.6	.....	.....	.....	.....
20.....	36	0.23	Trace	1.0100	1.3	.....	.....	.....	.....
21.....	38	0.48	0.3	1.5400	2.9	15.4	12.8	4.9	23.2
22.....	40	0.38	0.1	0.2400	3.0	.....	.....	.....	.....
23.....	53	0.84	0.3	0.5700	4.0	20.1	27.2	9.8	9.8
24.....	49	0.01	Nil	0.2300	0.7	.....	.....	.....	.....
25.....	52	0.51	0.4	0.2100	3.5	.....	.....	.....	.....
26.....	34	1.21	0.1	1.0400	5.3	21.7	36.8	13.0	9.5
27.....	23	1.78	Trace	0.5300	7.2	18.4	32.8	11.6	14.4
28.....	60	0.76	Nil	1.8900	5.4	.....	.....	.....	.....
29.....	39	1.58	0.1	0.0095	3.8	21.5	31.5	11.3	12.5
30.....	39	1.82	Nil	0.0100	1.3	.....	.....	.....	.....
31.....	38	0.58	Trace	0.0030	0.6	.....	.....	.....	.....
32.....	24	0.83	0.1	0.0030	0.5	.....	.....	.....	.....
33.....	48	1.00	Nil	0.0030	1.4	.....	.....	.....	.....
34.....	33	1.26	Nil	0.0025	1.1	.....	.....	.....	.....
35.....	26	1.40	Trace	0.0015	1.2	.....	.....	.....	.....
36.....	12	0.34	Nil	0.0020	0.4	.....	.....	.....	.....
37.....	60	0.12	Trace	0.0040	2.0	.....	.....	.....	.....
38.....	80	2.21	Trace	0.8700	3.1	.....	.....	.....	.....
39.....	72	2.14	Nil	0.0180.	4.4	19.8	45.4	3.1	7.6

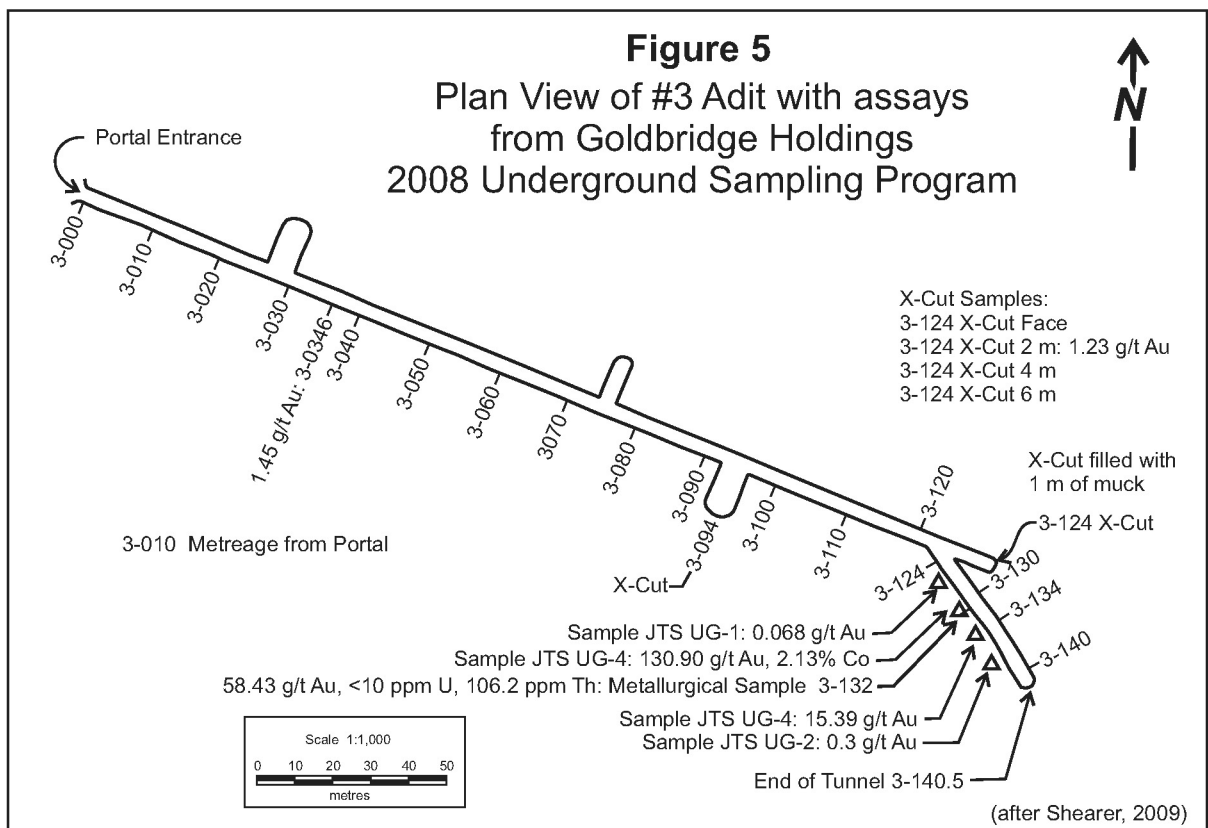
## MISCELLANEOUS SELECTED SAMPLES.

Sample No.	Description.	Gold.	Silver.	Uranium-Oxide Equivalent.	Cobalt.
		Oz. per Ton.	Oz. per Ton.	Per Cent.	Per Cent.
40	Upper adit, near Sample No. 27, sulpharsenide and non-metallics.....	0.66	Nil	0.130	2.4
41	Upper adit, near Sample No. 27, massive sulpharsenide.....	1.46	Nil	0.003	3.6
42	Upper adit, dump; mixed sulpharsenide and non-metallics.....	0.01	Nil	3.200	0.2
43	Upper adit, dump; principally non-metallics.....	0.06	0.1	0.350	0.91
44	Lower adit, near Sample No. 38, mixed sulpharsenide and non-metallics.....	1.66	Nil	0.210	4.4
45	Surface, near Sample No. 7; selected sulpharsenide crystals; also assaying (per cent.) Fe, 10.3; As, 60.7; SiO <sub>2</sub> , 2.7.....	0.28	0.1	0.005	6.2
46	Similar to Sample No. 45.....	0.33	Nil	0.002	6.5
47	Highest showings, higher of two open-cuts; across 3-inch rib of sulpharsenide and non-metallics.....	4.56	0.5	0.270	2.8
48	Location, ditto; check sample across same material as No. 47.....	23.34	0.6	0.375	4.6
49	Location, ditto; typical mineralization from ore-pile.....	7.04	Trace	0.750	4.5
50	Highest showings, lower of two open-cuts; across 15-inch wide lens of mixed sulpharsenide and non-metallics.....	45.92	1.8	2.800	5.7
51	Location, ditto; across a 2-inch rib of molybdenite in the sulpharsenide lens; Mo, 24.2 per cent.....	1.19	0.2	2.240	0.5
52	Location, ditto; typical mineralization from ore-pile.....	2.10	0.1	2.600	1.6

Table 2 - Assays - Little Gem Mine Property (after Stevenson, 1948)

In 1957, **Northern Gem Mining Corp.** completed 363 ft. (119 m) of drifting and 50 ft. (16.4 m) of crosscutting at the #1 adit. They also collared the #3 adit, completing 435 ft. (142.7 m) of drifting and 70 ft. (23 m) of crosscutting. They also completed 2,600 ft. (853 m) of diamond drilling. As yet, the author has not been able to obtain any records of the results of this work – however Church (personal communication, 2007) possesses sketches of level plans showing portions of the drifting and crosscutting completed in the 1957 program. This plan shows part of the eastern portion of the #3 adit as being mineralized starting at about 10 metres from the portal.

**Major Resources Ltd.** (Mark, 1979) completed an airborne magnetic/radiometric/VLF-EM survey by over the property and surrounding area in 1979. The radiometric survey outlined three moderately large zones, the most interesting being east-west trending Anomaly A which correlates with the Little Gem mineralized zone and extends for a length of 600 metres. Mark (1979) states that “the mineralization occurs within the magnetic low that is a reflection of the sheared and altered granodiorite.” The magnetic “low” is coincident with radiometric anomaly A and extends for 1500 metres.



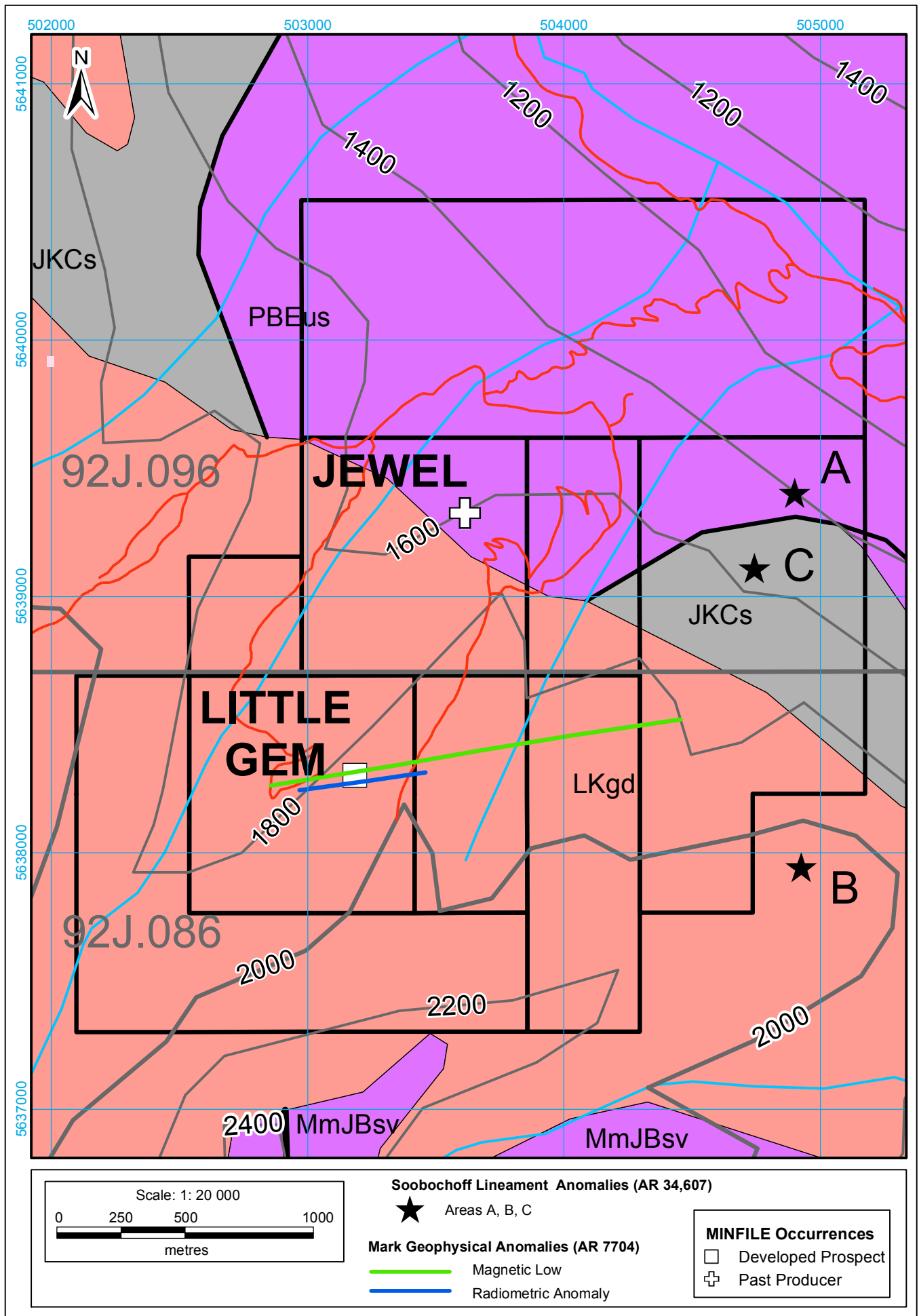


Figure 6: Little Gem Property Geology - Geophysical Anomalies and Lineaments

**Anvil Resources Ltd.** completing two surface diamond drill holes totalling 373.8 metres in 1986 (Lammle, 1986).

**McMillan (2007)** undertook a property examination in 2006 and recommended a geological mapping program and rehabilitation of the #2 adit followed by an underground and surface diamond drill program.

**Church (2008)** reported petrographic descriptions by Vancouver Petrographics Ltd, chemical analyses by AcmeLabs and X-ray diffraction results by Teck Cominco. Four samples of vein material and 16 stream sediment samples were collected. The report identified cobaltian arsenopyrite, glaucodot and safflorite as the principal ore minerals. The report stated that uranium occurs as “irregular and sparsely distributed concentrations often associated with allanite, but not necessarily with the sulpharsenides”.

**Beaton, A.J. and Shearer, J. (2008)** reported on an underground rock-chip sampling program undertaken in October of 2007 by Goldbridge Holdings Ltd., as well as a Baseline Hydrological Data Review undertaken by Entech Environmental Consultants Ltd. In the underground sampling program, almost one tonne of rock samples were taken in 167 channel samples, including 200 kilograms of metallurgical samples from the #1 and #3 adits. #2 Adit was inaccessible due to caving at the portal. The work determined that access from the #1 or #2 adits would not be feasible to mine a bulk sample. The sampling and assay data obtained correlated well with the information presented in historical reports. Mr. Shearer collected and assayed five check samples (3 of vein material) from the #1 and #3 adits.

**Shearer, J. (2009)** reported on a trenching program on the ridge above the Little Gem adits and the Jewel showing. Fourteen chip samples were taken – all returned low metal values.

**Church (2013)** in 2012 completed a reconnaissance magnetometer traverse (11 readings), ore sampling (6 samples), lithogeochemical study (8 samples), petrographic description (14 samples) and X-ray diffraction analyses (4 samples). The magnetometer study suggested the presence of an east-west trending magnetic depression possibly coincident with the Little Gem mineralized trend.

**Sookochoff (2014)** completed a structural analysis of Tenure 844114 and identified three cross-structural anomalies based on the intersection between dominant north-, west-, and northeast-trending structural lineaments. The cross-structural anomalies have the following coordinates:

Area	UTM East	UTM North	Elevation (m)
A	504,901	5,639,405	1,342
B	504,927	5,637,945	2,190
C	504,744	5,639,110	1,533



## **6 Geology**

Geologically, the Little Gem Mine workings and showings are underlain by granitic rocks of the Cretaceous to Tertiary Penrose Stock, a lobe of the Coast Plutonic Complex that projects east from Dickson Peak across Roxey Creek to Gun Lake (Church, 1995). Penrose Stock granitic rocks consist mainly of biotite hornblende granodiorite and some granitic phases that intrude Late Paleozoic to Mesozoic Ferguson Series cherts, argillites and limestones on the southwest. On the northeast the stock intrudes Late Paleozoic to Mesozoic Noel Formation black argillite, calcareous rocks and tuffs and serpentized peridotites of probable Jurassic age (Church, 1995). Lammler (1986) believes that the area of the mine workings was close to the upper contact of the Penrose granitic intrusive body which has been shallowly unroofed – his mapping documented “*abundant xenoliths of recrystallized volcanic (?) rock that in all probability represents blocks that were incorporated into the quartz diorite during intrusion*”.

Stevenson (1948) noted the presence of three steeply-dipping feldspar porphyry dykes ranging from 25 centimetres to 16 metres in thickness associated with the showings – these dykes are of varying and different orientations from the altered and mineralized zones and were not considered genetically related to the mineralization. Lammler (1986) observed some lamprophyre dykes in the area of the showings.

## **7 Mineralization, Alteration and Veining**

The Little Gem mineralization consists of structurally-controlled lenses of semi-massive and disseminated mineralization associated with pegmatitic intergrowths of iron-cobalt sulpharsenides, allanite (Ce, La and Y group bearing epidote), apatite, K-feldspar, quartz, chlorite, sericite, calcite, molybdenite and uraninite (Stevenson, 1948). According to Stevenson (1948), “*gold is moderately widespread within the pegmatite lenses*”. Uraninite is associated with the non-metallic gangue minerals within the pegmatite lenses (Stevenson, 1948). According to Stevenson (1949), the “*massive sulpharsenide ore, containing the cobalt and associated gold, is a mixture of the cobalt-bearing variety of arsenopyrite (danaite) and loellingite-safflorite*”. Church (1995) also reports the presence of minor scheelite. The mineralized lenses range in width from several centimetres to a maximum width of 7 feet (2.1 metres) and occur in a steeply south-dipping east-trending zone (080°) of bleaching and sericitized granodiorite approximately 12 metres (40 feet) wide which has been traced for a length of approximately 40 metres (130 feet) in adit #1. Stevenson (1948) states that on surface and in the underground adits two subparallel zones of mineralization and two other possible sub-zones have been exposed. The mineralization is also exposed in adit #2, 58 feet (18 metres) lower in elevation and at the east end of adit #3. The altered bleached granodioritic wallrocks consists of sericite and residual quartz with scattered needles of small diamond-shaped crystals of arsenopyrite. Allen (1956) obtained an assay of 0.27% Co across 30 feet (9.2 metres) on a zone of “*disseminated sulphides*” in bleached granodiorite in an outcrop below the trail, 45 metres southwest of the #2 adit portal. Stevenson’s maps and sampling results have been reproduced in Figure 4 and Table 2. Church (1995) notes “*a number of tan-coloured ankeritic carbonate zones associated with shears*” being “*conspicuous near the showings*”. In polished section, Stevenson observed gold intergrown with sulpharsenide

minerals, between metallic and non-metallic minerals and some wholly within the non-metallic minerals. Uraninite on the other hand is moderately fine grained (generally < 0.03 mm) and occurs as widely scattered cubic or octahedral grains generally scattered throughout the non-metallic minerals (Stevenson, 1948).

Stevenson (1948) also describes mineralization exposed in two “*open cuts and strippings further up the mountain-side, just below the top of the ridge at a point 450 feet (140 metres) above and 600 feet (180 metres) easterly from the upper adit*” (adit #1). Sampling of the two ridge-top open cuts and “*strippings*” by Stevenson (1948, Table 2) returned several results with assays between 1 and 2 ounces of gold per ton, with two specimens (samples #48 and #50) of selected material from the open-cuts near the top of the ridge assaying 23.34 and 45.92 oz/ton Au.

Mapping by Lammle (1986) showed that, in general, the granitic hostrock is “*relatively unaltered. At the showings, however, it appears to contain a younger more felsic intrusion, and an occasional lamprophyre dyke, and is much faulted and fractured. Some of the stronger faults have acted as a plumbing system along which hydrothermal fluids migrated, and these have ankeritic alteration along them, and at the workings heavy to massive sulphide mineralization. The principal controlling fault system mapped trends east-southeasterly and dips at a steep angle into the mountain to the south: it is mineralized at the workings and near the divide between Roxey and Jewel Creeks, and is covered by overburden in the cirque basin of Roxey Creek*”. He further states that “*the projections along strike of this fault system have exploration potential both to the west and east, but complicating later faults of both steep and flat dips could offset the projections*”.

## **8 Mineral Resources**

No modern calculation of mineral resources for the Little Gem property has been undertaken and the available data is not of sufficient quality to calculate an estimate to current technical standards. Estimates however have been made in the past based on underground and surface channel sampling by Stevenson (1948) and the drilling by Estella Mines and Northern Gem Mining Corporation. These are included in this section as “*Historical Resource Estimates*”.

Allen (1956) calculated a resource of “*9425 tons (8570 tonnes) grading 0.67 oz./ton (23 g/t) Au, 2.97% Co and 0.25% U*”. This 1956 estimate was based on surface and underground channel sampling and diamond drilling within an area approximately 40 metres in length and 20 metres vertical extent. Apparently the mineralized pod remained open for expansion along strike and to depth. A later figure quoted in the Canadian Mines Handbook (1960, p.185), and presumably based on additional work, estimated “*20,000 tons (18,000 tonnes) averaging g 0.65 oz/ton (22.3 g/t), 3.0% Co and 0.25% U<sub>3</sub>O<sub>8</sub>*”.

The author emphasizes that these “*Historical Resource Estimates*” do not comply with current NI43-101 criteria and should not be relied upon.

## **9 Metallurgy**

According to Allen (1956) “*extensive work by the University of British Columbia and British Columbia Research Council resulted in the development in the 1940’s of a flow sheet involving medium-to-high temperature and pressure leaching which would result in an indicated recovery of 90% cobalt and 98% gold. Results of recently completed research by Sherritt Gordon Mines and others have, however, so improved these methods that the Northern Gem Mining Corporation has been advised that treatment by leaching at normal pressure and temperature sufficiently low that no external heating is required, is applicable to the ore and recoveries as good or better than previously anticipated are assured.*”

CANMET (Jenkins, 1959) conducted some preliminary small-scale amalgamation, cyanidation, gravity and floatation concentration tests, in addition to mineralogical work (Hughson, 1958). Lammler (1986) references roast tests on mineral concentrates by a French company (Taramazzo, 1986) – unfortunately this and other information which were in the Anvil Resources Ltd. files are not currently available.

## **10 Present Exploration Work**

Between October 8 and 11 1014, a field program was undertaken on the Little Gem Property. October 9 and 10 were spent in the field, the other two days were travel time. The author was assisted by Mr. John Grabavac B.Eng, B.Sc. and Mr. Gregory McKee. The program consisted of:

- (a) scintillometer survey of the #3 adit.
- (b) collection of 11 soil samples in a northeast-trending traverse line below the cliffs where the Little Gem mineral showings are located.
- (c) compilation and reinterpretation of past exploration work.
- (d) reconnaissance of road access to potential drill sites on the ridge east of the Little Gem underground workings.
- (e) road maintenance (deadfall and debris removal) to permit access to the Little Gem and Jewel areas.

The scintillometer survey was initiated to determine if there were concentrations of radioactive material associated with the Little Gem mineralization. The soil sample traverse was conducted to see if there was evidence for mineralized structures in addition to the Little Gem veins.

The scintillometer survey commenced at the 8 metre mark in adit #3, with readings were taken against the south wall at 2 metre intervals, with the instrument held at chest height (approximately 1.4 metres). The survey instrument was an Exploranium GRS-101 scintillometer with a 1 inch<sup>3</sup> NaI crystal and capacity to read up to 10,000 c/s. The Scintillometer results are tabulated below in Table 3:

**Table 3 – Scintillometer Readings (c/s) - Adit #3**

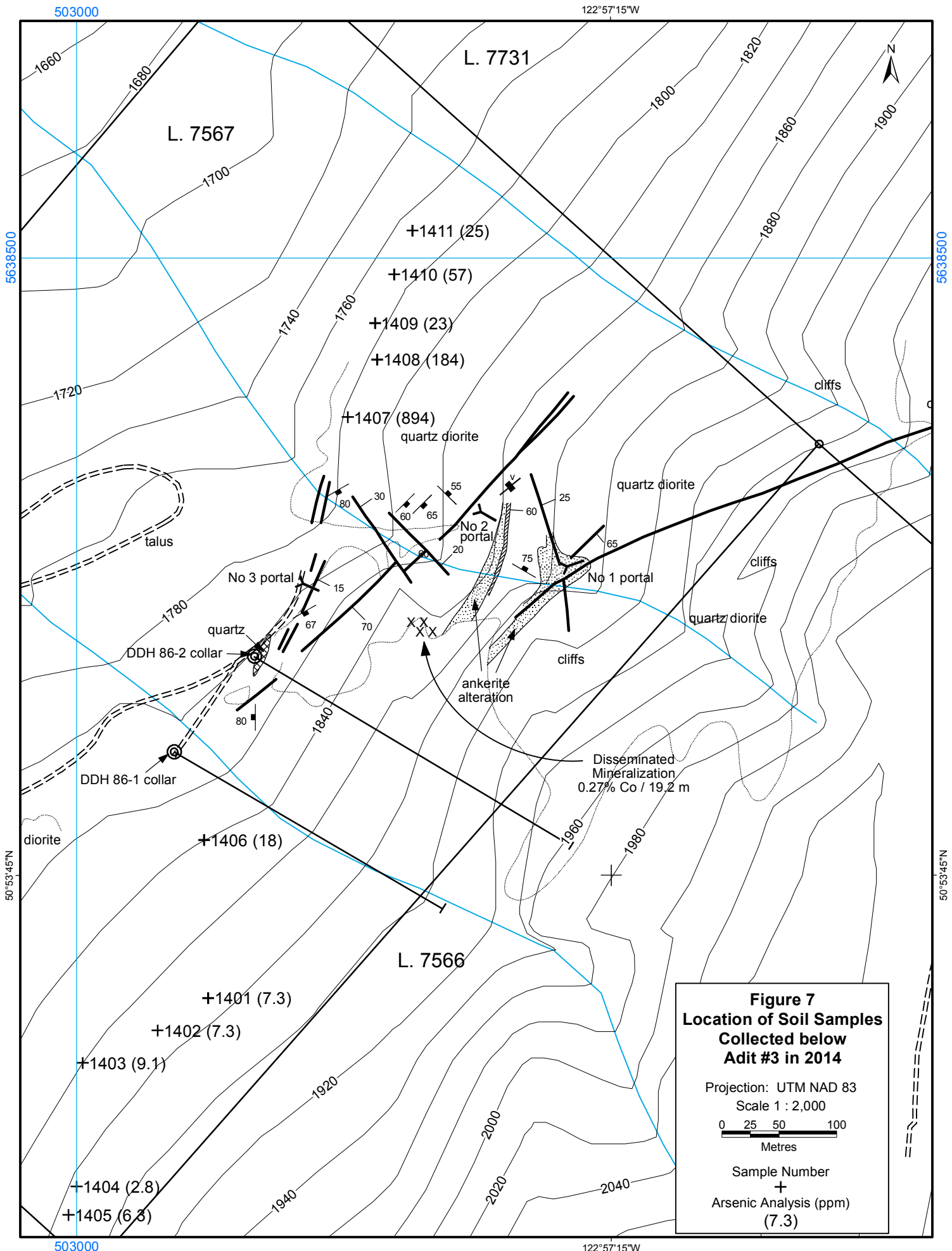
metre	counts	metre	counts	metre	counts	metre	counts	metre	counts
8	30	36	30	64	30	92	42	120	40
10	30	38	35	66	25	94	25	122	35
12	30	40	35	68	25	96	30	124	35
14	30	42	35	70	30	98	38	126	50
16	30	44	35	72	30	100	35	128	75
18	30	46	35	74	25	102	42	130	65
20	30	48	30	76	20	104	40	132	60
22	30	50	30	78	25	106	50	134	900
24	30	52	30	80	28	108	42	135	500
26	30	54	32	82	28	110	38	136	50
28	30	56	30	84	26	112	33	138	36
30	30	58	28	86	28	114	40	140	30
32	30	60	25	88	28	116	40		
34	30	62	25	90	35	118	34		

*\*note – all readings taken against the south wall at chest height*

Soil samples were collected in a traverse below the cliffs over a length of 500 metres and between the elevations of 1760 and 1880 metres and spaced at approximately 40 metres. The gully below the mineral showings was avoided (see Figure 6 for locations). The complete results and analytical certificates are presented in Appendix 2. Elements which returned anomalous results are presented in Table 4 below.

**Table 4 – Anomalous Elements from Soil Samples Collected Below Adit #3 in 2014 Program**

#	UTM E	UTM N	As	Ce	Co	Cu	La	U	W	Y
1401	503052	5638190	7.3	33	21.9	100	12.1	15.8	0.2	18.4
1402	503036	5638177	7.3	16	13.2	37	5.4	16.9	0.9	5.0
1403	503007	5638163	9.1	13	8.5	39	5.6	15.1	0.2	3.9
1404	503000	5638127	2.8	5	3.7	9	2.5	5.2	0.1	1.5
1405	502988	5638106	6.3	5	9.1	21	2.2	12.2	0.1	1.5
1406	503051	5638260	18	15	20.6	97	5.5	16.8	0.4	7.4
1407	503113	5638433	894	112	32.3	91	63.3	24.5	1.3	31.6
1408	503126	5638458	184	21	29.5	161	9.2	10.7	1.7	7.1
1409	503124	5638474	23	12	17.3	52	5.9	16	0.2	3.3
1410	503130	5638495	57	15	31.2	31	8.5	12.3	0.3	2.1
1411	503141	5638510	25	14	14.2	48	5.6	21.4	0.2	4.0



## **11 Discussion and Conclusions**

- 1) The present soil geochemical sampling program did not detect a new mineralized structure. The anomalous samples are located down-slope from the known mineralization and were likely contaminated by metals derived the known deposits.
- 2) The Little Gem claims cover significant showings of high-grade cobalt-gold mineralization with associated modest uranium values. These values are well documented by channel sampling and mapping by Dr. John S. Stevenson (1948), a highly-reputable government geologist employed by the British Columbia Department of Mines.
- 3) Underground exploration and development and underground diamond drilling by several mining companies between the 1930's and 1957 outlined a "*Historical Resource*" of high-grade mineralization which at current prices could be valued at between US\$1500 and US\$1800 per ton. Unfortunately, the available data from these programs appears to have been misplaced after Anvil Mining terminated their interest in mining – as a consequence, the records may have been lost. Therefore the data presented in this report (*Section 5 – Past Exploration Work*) is incomplete and inconsistent and cannot be relied upon. The recent work by Goldbridge Holdings Ltd. has partially documented the historical data; however additional underground diamond drilling will be necessary to confirm the historical data, particularly from the #2 adit.
- 4) There appears to be considerable exploration potential for more high-grade mineralization along a corridor extending from the lower adit #1 portal to the high-grade trenches at the ridge top, 300 metres east of and 180 metres vertically above the #3 adit. Stevenson (1948) documented high grade mineralization on the rim of the ridge above the cliff area. Specifically, this 200 metre interval could be drilled easily and cheaply from the plateau-like area above the cliffs. Road construction by Goldbridge has made the area accessible for drilling.
- 5) The potential for a moderate-tonnage deposit of moderate grade "disseminated mineralization" has not been considered to date – Allen (1956) obtained assays of 0.27% Co across 30 feet (9 metres) from a zone of "disseminated sulphides" located 150 feet (45 metres) southwest of the #2 adit.
- 6) The two Anvil Resources drill holes appear to have been collared into the hangingwall of the Little Gem structure and drilled away from the mineralization. Further, the mineralization documented by Goldbridge (Beaton and Shearer, 2008) in adit #3 suggests the mineralized structure extends 50 metres vertically below the #2 adit and has a moderate to steep (45 to 60 degree) south dip. The mineralized corridor remains open at depth below the #2 and #3 adits.

7) Documentation of the work completed in past metallurgical studies is not currently available. However, recent work on ores with similar mineralogy has developed flow sheets that can recover the metals in the Little Gem ore. Should a small high-grade deposit of economic dimensions be defined, one option would be to direct-ship hand-sorted material to AREVA's mill in Saskatchewan – the Midwest Lake Mine is operating and processes ore of similar mineralogy to Little Gem (Hendry et al, 2005). Other possibilities are to ship the high-grade ore to Formation Capital's Sunshine facility in Idaho, or possibility to ship it to smelters in Asia – possibly China or Korea.

8) The airborne magnetic/radiometric/VLF-EM survey completed by Major Resources Ltd. (Mark, 1979) detected a 600 metre long radiometric anomaly and a 1500 metre long magnetic "low" above the outcrop area of the Little Gem mineralized corridor. The radiometric anomaly probably reflects the radioactive metals associated with the mineralization and downslope contamination. The magnetic "low" probably reflects magnetite destruction in the walls of the granodiorite hostrocks associated with hydrothermal alteration during vein formation.

## **12 Recommendations**

1) An initial diamond drill program of six holes totalling approximately 700 metres could be undertaken to test extensions on the eastern end of mineralized corridor. The six holes could be drilled from the ridgetop 300 metres east of the #3 adit. These holes would test the eastern extension of the mineralized corridor under the high-grade trenches (Stevenson's samples 47 to 52). The three collar locations should be approximately as follows:

Location	UTM E	UTM N
1	503405	5638400
2	503362	5638366
3	503322	5638340

The holes should be directed perpendicular to the strike of the mineralized corridor at an azimuth of 335° and dips of -45° and -60°.

2) The # 2 adit should be re-habilitated and an underground drill program completed from adit #2 to document the attitude of the high-grade lens. Drilling at 10 metre centres, a total of 18 drill holes totalling approximately 1000 metres should be adequate to complete the program, after which it should be possible to initiate data compilation for a NI43-101 compliant mineral resource.

3) The # 1 adit should be surveyed with the scintillometer to determine if there is zoning to determine if the radioactive elements (U and Th) are associated with pegmatitic phases of the mineralized corridor and separate from the metallic mineralization.

4) Ground scintillometer and magnetometer traverses should be undertaken in accessibly areas east and west of the cliffs area. The traverses should be as close as possible to perpendicular to the strike of the mineralized corridor.

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### **Appendix 1 - Statement of Expenditures**

Item	Cost \$
Report writing - R. McMillan, 3 days @ \$1000.00	3,000.00
Field Geologist - R. McMillan, 4 days @ \$1000.00	4,000.00
Technician - John Grabavac, 4 days @ \$350.00	1,400.00
Expenses - Grabavac	39.19
Technician - Greg McKee, 5 days @ \$300.00	1,500.00
Travel costs - 1,050 km Vic to Property return. RM and JG (1,050 km @ \$0.55)	577.50
Travel costs - 2,000 km Vancouver to Greenwood to Goldbridge return. GM in car and pick/up truck (with ATV aboard) 2,000 km @ \$0.55/km	1,100.00
Oct 8-11 ATV Rental - 4 days @ \$200/day	800.00
Food and Lodging - 13 man-days @ \$100/day	1,300.00
Scintillometer Rental - 4 days @ \$50.00	200.00
Chainsaw rental - 5 days @ \$30.00	150.00
Tools, sample bags, mine lights, hard hats and safety equipment	200.00
Assays – Met-Solve Lab	313.96
Sample shipping	20.69
Drafting	1,600.00
Total	16,201.34

**Appendix 2 - Certificate**

I, RONALD HUGH McMILLAN, of 6606 Mark Lane, Victoria,  
British Columbia (V9E 2A1), do hereby certify that:

1. I am a Consulting Geologist, registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1992, and with the Association of Professional Engineers of Ontario since 1981.
2. I am a graduate of the University of British Columbia with B.Sc. (Hon. Geology, 1962), and the University of Western Ontario with M.Sc. and Ph.D. (1969 and 1972) in Mineral Deposits Geology.
3. I have practiced my profession throughout Canada, as well as in other areas of the world continuously since 1962.
4. The foregoing report on the Little Gem Property is based on a review of published and unpublished information regarding the geological setting, styles of mineralization and results of previous exploration programs within the subject property.
5. I have a 50% interest in the mineral claims (tenures 501174 and 502808) and 100% interest in tenure 503409 which constitute the Little Gem Property. Dr. Neil Church holds a 50% interest in tenures 501174 and 502808.

*R. H. McMillan*



R. H. McMillan Ph.D. P.Geo.  
Victoria, B. C.  
15 December 2014

**Appendix 3 – Met-Solve Analytical Services Certificate of Analysis MAO111**



Met-Solve Analytical Services  
 Unit 1, 20120 102nd Avenue  
 Langley, BC V1M 4B4  
 Phone: +1-604-888-0875

To: **Goldbridge Mining Ltd.**  
**202-609 Stamps Landing**  
**Vancouver**  
**British Columbia**

**CERTIFICATE OF ANALYSIS: MA0111-OCT14**

Project Name: Little Gem  
 Job Received Date: 29-Oct-2014  
 Job Report Date: 06-Nov-2014  
 Report Version: Final

**COMMENTS:**

Test results reported relate only to the samples as received by the laboratory. Unless otherwise stated above, sufficient sample was received for the methods requested and all samples were received in acceptable condition. Analytical results in unsigned reports marked "preliminary" are subject to change, pending final QC review. Please refer to Met-Solve Analytical Services' *Schedule of Services and Fees* for our complete Terms and Conditions

SAMPLE PREPARATION	
METHOD CODE	DESCRIPTION
PRP-757	Dry, Screen to 80 mesh, save plus fraction

ANALYTICAL METHODS	
METHOD CODE	DESCRIPTION
MS-130	Multi-Element, Aqua Regia, ICP-MS/AES, Ultra Trace Level

**Signature:**

Jimbo Zheng BSc., PChem, BC Certified Assayer  
 Senior Analytical Chemist  
 Met-Solve Analytical Services Inc.



Met-Solve Analytical Services  
 Unit 1, 20120 102nd Avenue  
 Langley, BC V1M 4B4  
 Phone: +1-604-888-0875

To: **Goldbridge Mining Ltd.**  
**202-609 Stamps Landing**  
**Vancouver**  
**British Columbia**

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0111-OCT14</b>
---------------------------------	---------------------

Project Name: Little Gem  
 Job Received Date: 29-Oct-2014  
 Job Report Date: 06-Nov-2014  
 Report Version: Final

Sample ID	Sample Type	PWE-100 Rec. Wt. kg	Method Analyte Units	MS-130 Ag ppm	MS-130 Al %	MS-130 As ppm	MS-130 Au ppm	MS-130 B ppm	MS-130 Ba ppm	MS-130 Be ppm	MS-130 Bi ppm	MS-130 Ca %
		0.01	LOR	0.01	0.01	0.1	0.005	10	10	0.05	0.01	0.01
1401	Sand	0.24		0.04	2.65	7.3	<0.005	<10	89	0.54	0.05	0.30
1402	Sand	0.28		0.03	2.06	7.3	<0.005	<10	103	0.32	0.06	0.23
1403	Sand	0.20		0.06	2.70	9.1	<0.005	<10	71	0.35	0.08	0.16
1404	Sand	0.22		0.02	1.23	2.8	<0.005	<10	41	0.13	0.09	0.10
1405	Sand	0.24		0.01	1.88	6.3	<0.005	<10	92	0.15	0.07	0.18
1406	Sand	0.30		0.05	2.04	18.0	0.013	<10	131	0.36	0.06	0.35
1407	Sand	0.34		0.08	2.04	894.4	0.013	<10	124	0.48	0.09	0.74
1408	Sand	0.33		0.07	1.48	184.4	0.009	<10	120	0.37	0.08	0.37
1409	Sand	0.26		0.02	1.77	23.0	0.010	<10	83	0.22	0.09	0.29
1410	Sand	0.25		0.06	1.84	57.0	0.009	<10	73	0.19	0.20	0.10
1411	Sand	0.26		0.05	2.57	24.7	0.011	<10	91	0.29	0.09	0.17
DUP 1401				0.03	2.75	6.1	<0.005	<10	92	0.54	0.05	0.30
STD BLANK				<0.01	<0.01	<0.1	<0.005	<10	<10	<0.05	<0.01	<0.01
STD OREAS 24b				0.08	3.18	8.7	0.007	<10	144	1.74	0.68	0.46

\*\*\*Please refer to the cover page for comments regarding this certificate. \*\*\*



Met-Solve Analytical Services  
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To: **Goldbridge Mining Ltd.**  
**202-609 Stamps Landing**  
**Vancouver**  
**British Columbia**

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0111-OCT14</b>
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Project Name: Little Gem  
 Job Received Date: 29-Oct-2014  
 Job Report Date: 06-Nov-2014  
 Report Version: Final

Sample ID	MS-130 Cd ppm	MS-130 Ce ppm	MS-130 Co ppm	MS-130 Cr ppm	MS-130 Cs ppm	MS-130 Cu ppm	MS-130 Fe %	MS-130 Ga ppm	MS-130 Ge ppm	MS-130 Hf ppm	MS-130 Hg ppm	MS-130 In ppm
1401	0.07	33.43	21.9	34	8.42	100.0	4.39	9.09	0.12	<0.02	0.32	0.040
1402	0.06	16.33	13.2	29	4.86	37.1	3.27	7.50	0.07	<0.02	0.11	0.023
1403	0.12	12.60	8.5	28	4.15	38.7	3.06	8.17	0.07	<0.02	0.08	0.023
1404	0.03	5.32	3.7	14	1.20	9.3	1.78	5.23	<0.05	<0.02	0.03	0.012
1405	0.02	4.86	9.1	34	2.82	20.6	2.95	7.37	0.06	<0.02	0.04	0.016
1406	0.15	14.66	20.6	66	6.09	97.0	4.43	6.30	0.08	<0.02	0.12	0.027
1407	0.11	112.15	32.3	36	9.38	91.0	4.65	6.98	0.17	0.02	0.48	0.041
1408	0.08	21.01	29.5	16	5.84	161.1	3.95	3.74	0.07	<0.02	0.22	0.029
1409	0.04	11.99	17.3	63	4.50	52.2	3.38	7.31	0.07	<0.02	0.09	0.022
1410	0.04	15.38	31.2	35	6.55	30.6	3.01	7.53	0.06	0.02	0.05	0.022
1411	0.08	13.57	14.2	34	8.42	47.6	4.01	8.70	0.08	0.03	0.07	0.031
DUP 1401	0.06	29.82	20.8	35	7.23	103.2	4.51	8.77	0.12	<0.02	0.27	0.036
STD BLANK	<0.01	<0.02	<0.1	<1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005
STD OREAS 24b	0.05	62.97	16.9	103	9.41	37.8	3.89	11.33	0.22	0.59	<0.01	0.046

\*\*\*Please refer to the cover page for comments regarding this certificate. \*\*\*



Met-Solve Analytical Services  
 Unit 1, 20120 102nd Avenue  
 Langley, BC V1M 4B4  
 Phone: +1-604-888-0875

To: **Goldbridge Mining Ltd.**  
**202-609 Stamps Landing**  
**Vancouver**  
**British Columbia**

**CERTIFICATE OF ANALYSIS: MA0111-OCT14**

Project Name: Little Gem  
 Job Received Date: 29-Oct-2014  
 Job Report Date: 06-Nov-2014  
 Report Version: Final

Sample ID	MS-130 K %	MS-130 La ppm	MS-130 Li ppm	MS-130 Mg %	MS-130 Mn ppm	MS-130 Mo ppm	MS-130 Na %	MS-130 Nb ppm	MS-130 Ni ppm	MS-130 P ppm	MS-130 Pb ppm	MS-130 Rb ppm
	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1
1401	0.19	12.1	15.8	0.98	1266	1.80	0.02	0.49	23.3	884	8.0	15.6
1402	0.12	5.4	16.9	0.81	312	7.79	0.03	0.97	16.6	618	4.0	19.2
1403	0.08	5.6	15.1	0.57	384	12.43	0.03	0.85	14.6	972	3.9	18.3
1404	0.04	2.5	5.2	0.23	121	2.10	0.03	1.08	6.7	292	4.3	5.4
1405	0.10	2.2	12.2	0.64	849	3.27	0.04	0.94	16.6	410	5.5	22.0
1406	0.14	5.5	16.8	1.11	984	5.04	0.04	0.48	65.1	718	5.2	21.8
1407	0.12	63.3	24.5	0.56	469	15.21	0.03	0.43	18.8	602	5.8	11.6
1408	0.12	9.2	10.7	0.31	332	9.32	0.02	0.31	16.0	365	5.0	13.2
1409	0.08	5.9	16.0	0.81	790	4.73	0.03	0.70	19.7	605	9.5	15.0
1410	0.08	8.5	12.3	0.49	355	5.34	0.03	0.81	13.9	284	5.0	17.7
1411	0.11	5.6	21.4	0.94	354	6.04	0.03	0.91	14.0	330	6.8	16.2
DUP 1401	0.20	10.3	17.2	1.00	1314	1.60	0.02	0.41	21.2	904	7.4	14.3
STD BLANK	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2	<10	<0.2	<0.1
STD OREAS 24b	1.17	31.6	47.6	1.38	350	3.89	0.12	0.39	60.1	608	8.6	114.8

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**Vancouver**  
**British Columbia**

**CERTIFICATE OF ANALYSIS: MA0111-OCT14**

Project Name: Little Gem  
 Job Received Date: 29-Oct-2014  
 Job Report Date: 06-Nov-2014  
 Report Version: Final

Sample ID	MS-130 Re ppm	MS-130 S %	MS-130 Sb ppm	MS-130 Sc ppm	MS-130 Se ppm	MS-130 Sn ppm	MS-130 Sr ppm	MS-130 Ta ppm	MS-130 Te ppm	MS-130 Th ppm	MS-130 Ti %	MS-130 Tl ppm
1401	0.002	0.02	0.78	14.0	<0.2	0.8	20.4	<0.01	0.03	6.1	0.088	0.16
1402	<0.001	0.03	0.35	4.4	<0.2	0.5	68.8	<0.01	0.03	2.4	0.150	0.13
1403	<0.001	0.08	0.25	2.2	0.3	0.6	32.5	<0.01	0.03	0.4	0.109	0.11
1404	<0.001	0.02	0.09	1.7	<0.2	0.3	23.4	<0.01	0.04	0.7	0.127	0.04
1405	<0.001	0.01	0.28	3.1	<0.2	0.4	67.9	<0.01	0.03	1.5	0.195	0.12
1406	<0.001	0.04	1.79	4.8	0.2	0.3	27.6	<0.01	0.03	0.9	0.112	0.11
1407	0.003	0.03	3.96	13.6	0.6	0.7	51.4	<0.01	0.06	5.3	0.036	0.11
1408	<0.001	0.03	9.55	7.3	<0.2	<0.2	21.1	<0.01	0.05	4.3	0.015	0.10
1409	<0.001	0.03	0.52	4.3	<0.2	0.4	22.2	<0.01	0.04	1.2	0.126	0.09
1410	<0.001	<0.01	0.80	3.7	<0.2	0.6	17.3	<0.01	0.14	1.7	0.119	0.11
1411	<0.001	0.01	0.78	6.5	<0.2	0.8	21.6	<0.01	0.03	4.5	0.150	0.11
DUP 1401	0.001	0.02	0.68	13.6	<0.2	0.7	19.8	<0.01	0.03	5.9	0.093	0.14
STD BLANK	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
STD OREAS 24b	0.001	0.20	0.61	10.4	0.2	2.5	31.3	0.01	0.05	13.2	0.199	0.62

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**British Columbia**

<b>CERTIFICATE OF ANALYSIS:</b>	<b>MA0111-OCT14</b>
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Project Name: Little Gem  
 Job Received Date: 29-Oct-2014  
 Job Report Date: 06-Nov-2014  
 Report Version: Final

Sample ID	MS-130 U ppm 0.05	MS-130 V ppm 1	MS-130 W ppm 0.05	MS-130 Y ppm 0.05	MS-130 Zn ppm 2	MS-130 Zr ppm 0.5
1401	2.77	96	0.24	18.41	53	<0.5
1402	2.87	87	0.94	5.03	43	<0.5
1403	1.84	83	0.23	3.95	57	<0.5
1404	0.41	57	0.13	1.53	25	0.7
1405	0.78	96	0.14	1.53	47	<0.5
1406	1.92	106	0.38	7.37	72	<0.5
1407	46.63	104	1.30	31.62	43	<0.5
1408	3.11	56	1.73	7.11	42	0.6
1409	0.95	107	0.18	3.26	49	<0.5
1410	0.72	91	0.31	2.14	44	1.1
1411	2.15	113	0.20	4.04	47	1.2
DUP 1401	2.63	99	0.16	17.47	54	<0.5
STD BLANK	<0.05	<1	<0.05	<0.05	<2	<0.5
STD OREAS 24b	1.62	76	1.33	12.85	93	26.6

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