

**A TECHNICAL REVIEW  
OF THE  
THE "D" REEF  
(FORMERLY THE LOVITT-DAY GOLD MINE)  
WENATCHEE, WASHINGTON, USA  
FOR  
LOVITT RESOURCES INC.**

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## 1. SUMMARY

On October 2, 2008, Lovitt Resources Incorporated ("**LRC**") retained Watts, Griffis and McOuat Limited ("**WGM**") to carry out an independent technical review of the "D" Reef gold deposit, formerly known as the Lovitt-Day Gold Mine, located near Wenatchee in central Washington State, in support of a National Instrument ("NI 43-101") Technical Report.

LRC owns the "D" Reef which is located on two patented claims, plus mineral rights on the surrounding area with a 100% interest in approximately 80 hectares (200 acres) and a 70% interest in an additional 142 hectares (350 acres). The remaining 30% interest is held by the Lovitt Family and/or Estate. The "D" Reef is located about 1.5 km south of the town limits and about a kilometre to the southeast of the former Cannon Mine, formerly owned by Asamera Minerals Inc. ("**Asamera**") – Breakwater Resources Inc. ("**Breakwater**") JV.

The area is located within a northwest-trending graben referred to as the Chiwaukum Graben. This graben is a major non-marine wrench fault basin in central Washington and is bounded on the west by the Leavenworth Fault Zone and to the east by the Entait Fault.

The three main styles of veins at the "D" Reef included major veins, sheeted veins and stockwork-type veins. The major veins were characterized by an "en echelon" set of laterally and vertically continuous veins up to a 0.5 m or more in width and fairly continuous for 100 m or so both along strike and dip. Textures in the veins are open space filling, including crustiform banding and coxcomb quartz; brecciation and calcite boxwork occur throughout the mine

The deposit is classed as a low sulphidation, adularia-sericite epithermal gold-silver deposit. It is within the gold-selenide category of the Au-Ag epithermal deposits by W. Lindgren (see *Ore Deposits*, 1933). Other selenide-bearing Au-Ag epithermal deposits in Washington include Knob Hill, Golden Promise and Seattle, in the Republic District of northeast Washington. Low sulphidation adularia-sericite epithermal gold-silver systems comprise the rift low sulphidation style. These are dominated by gangue minerals deposited from meteoric water rich in circulating geothermal fluids, typically formed in rift settings. Sediment hosted replacement gold deposits are interpreted to develop from low sulphidation fluids in reactive carbonate-bearing rocks.

The mineralization is hosted within Tertiary sandstones, focused along northwest-trending faults. Ore mineralogy included native gold and silver, electrum, ruby silver (parargyrite),

acanthite, as well as naummanite and aguilarite. The later two are common silver-selenide minerals and important ore minerals. Sulphide mineralogy (in decreasing abundance includes pyrite, arsenopyrite, chalcopyrite, marcasite and spherlite) constituted less than 5% and more commonly between 2–3%.

In 1885, V. Carleek staked a silicified iron stained ridge, approximately 3.25 km south of Wenatchee. The claims were known as the Golden King and MacBeth, which later became known by a variety of names, including the L-D, Lovitt-Day, Lovitt Mine and "D" Reef, depending upon the company and date. In 1885, Carleek formed the Golden King Mining and Development Company and operations included a five-stamp mill and a drift developed at the base of the ridge. In 1894, approximately 217 tonnes of ore were produced yielding US\$1,600.00 in profits.

A total of 27,433 tonnes of ore grading 13 g Au/t to 37 g Au/t were mined between 1885 and 1911. The mine was dormant from 1911 to about 1928, and in 1934 the claims were patented by Gold King Mining and Development Company. Between 1938 and 1942 the mine supplied silicon flux to American Smelting and Refining Company.

E. Lovitt, a Canadian mining engineer, arrived on site in 1949 to examine the property and concluded that the gold could be mined profitably using selective shrink stopping methods. In 1949, the Wenatchee Mining Partnership ("**WMP**") was formed with E. Lovitt as majority shareholder. By 1950, the Golden King Mine was the leading gold producer in Washington State, ranking 11<sup>th</sup> nationally. In 1961, the Mining Partnership entered into a joint venture with the Day Mining Company forming the Lovitt-Day (L-D) Mine. A total of 582,000 tonnes of direct-shipment ore grading 15.24 g Au/t and 21.37 g Ag/t, and 359,000 tonnes of flotation concentrate grading 8.24 g Au/t and 16.7 g Ag/t, were shipped from the mine before it closed in 1967.

In the early 1970s, Cyprus Exploration ("**Cyprus**") recognized the potential of the Lovitt Mine as a disseminated gold deposit. In 1973 Cyprus entered into negotiations for exploration rights and commenced exploration in 1974 on the two patented claims and later out into the surrounding area, as land became available.

The "resource estimates" described herein were prepared prior to the implementation of NI 43-101 and are therefore historical in nature and should not be relied upon. These estimates are reproduced in this report for reference only.

By 1976, Cyprus had completed 2,831 m of diamond drilling and 5,065 m of rotary drilling leading to the discovery of the "B" and "B" West Reefs. By 1983, exploration drilling revealed the presence of the "B" North Reef. These reefs later became known as the Cannon Mine. By late 1984, Asamera - Breakwater JV had delineated approximately 4.7 Mt averaging 7.4 g Au/t and 13.8 g Ag/t. By mid-1985, a 1,800 t/d flotation mill was operational with initial production from the "B" North ore shoot. In its 10 years of operation, the Cannon Mine produced about 2.72 Mt of ore that yielded 25,535 kg (821,000 oz) gold and 41,834 kg (1.345 m oz) silver.

In a 1988 technical report, WGM estimated a historical resource for the Lovitt-Day Mine of about 2.98 Mt grading 4.29 g Au/t. To-date, the exploration by LRC has consisted primarily of confirmatory work. There is a need to define the limits of the mineralization and previous mining within the "D" Reef. The last significant exploration was in 1987 by Teck Resources for LMC on the east part of Block 2 and Block 3.

A nine-day site visit was conducted by WGM from November 10–18, 2008. During the site visit, Mr. D. Power-Fardy, P.Geo, reviewed reports, maps and sections held in the company's possession, visited the underground workings and surface showings, and collected independent verification samples. Also at this time, Mr. Power-Fardy was able to meet with a former Asamera exploration geologist familiar with the geology of the property and surrounding area, as well as with a former underground miner who worked at the Lovitt Mine.

A two-phase exploration program has been proposed at a total cost of \$656,400. As requested by the client, the exploration program is confined to the two patented claims, Golden King and MacBeth, as there is no exploration agreement in place for the other areas. The initial exploration phase is budgeted at \$236,400 and is designed to define the extent of the gold mineralization. It will consist of ground geophysical and geochemical surveys with follow-up surface drilling. The second phase would investigate the "favourable" exploration areas identified in the "Recommendations" Section (items 1 through 5) at the end of this report. This phase of the exploration program is budgeted at \$420,000, for a total exploration budget of \$656,400.

## 2. INTRODUCTION AND TERMS OF REFERENCE

### 2.1 INTRODUCTION

Lovitt Resources Incorporated ("**LRC**") is a publicly-traded Canadian junior mineral exploration company with its head office in Vancouver, British Columbia. It is listed on the TSX Venture Exchange ("**TSX**") under the symbol LRC. The two patented claims (MacBeth and Golden King) which form the basis of the "D" Reef are the current focus of the company's attention. LRC owns 100% interest of the patented claims and 70% interest in the surrounding claims. The remaining 30% of the surrounding claims is held by the Lovitt Family and Estate. All claims are located in three separate parcel of private land, WE 70, WE 21 and WE 15. The properties are free and clear of any underlying royalties or other interests.

LRC conducts business through its wholly owned subsidiary, the Lovitt Mining Company Incorporated ("**LMC**"), a private company incorporated in 1949. The company, LRC, changed its name from Lovitt Nutraceutical Corporation on June 12, 2008 at the annual general meeting by shareholder approval. The company has applied to the TSX for a change in name to Lovitt Resources Inc. and change in stock symbol more in line with the change in company focus from agriculture to mining. There was no change in control, management or Board of Directors in connection with these matters.

This report has been prepared for LRC as a National Instrument 43-101 ("**NI 43-101**") qualifying property Technical Report. The report includes a technical review of its properties, as well as an exploration program and budget. The data supporting the statements made in this report have been verified for accuracy and completeness by the author. No meaningful errors or omissions were noted. The sources of information used in the preparation of this report are given in the "Reference" section.

A nine-day site visit was conducted by WGM from November 10–18, 2008. During the site visit, Mr. D. Power-Fardy, P.Geo, reviewed reports, maps and sections held in the company's possession, visited the underground workings and surface showings and collected independent verification samples. WGM received the full co-operation and assistance of LRC personnel during the site visit and in the preparation of this report.

## **2.2 TERMS OF REFERENCE**

This report has been completed in respect to an engagement executed between LRC and Watts, Griffis and McOuat Limited ("WGM") dated October 2, 2008. WGM's scope of work entailed making a site visit, reviewing the available information related to the LRC properties and summarizing its findings and recommendations in a report prepared in compliance with Canadian Securities Administrators' NI 43-101 and definitions of the Council of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") standards.

This report incorporates all information assembled by the Company to the current date, including geological data reported by Cyprus Anvil, Teck Resources Inc. ("Teck") and Asamera Minerals (US) Inc. ("Asamera") from their respective mineral exploration activity in the 1970s through the 1990s.

## **2.3 SOURCES OF INFORMATION**

In conducting this study, WGM relied on unpublished internal reports and other information supplied by LRC, geological publications of the government of Washington State and British Columbia, and publicly available assessment reports from local libraries and the University of Washington.

During the site visit Mr. Power-Fardy was able to meet with a former exploration geologist of Asamera familiar with the geology of the property and surrounding area, and with a former driller who worked underground at the Lovitt Mine.

A list of the material reviewed is provided in the "References" section at the end of this report.

## **2.4 UNITS AND CURRENCY**

Throughout this report, measurements are in metric units, unless the historic context dictates that the use of Imperial units is appropriate. Tonnages are presented in tonnes ("t"), equivalent to 1,000 kilograms (kg), linear measurements in metres ("m"), or kilometres ("km") and precious metal values as grams per tonne ("g Au/t") or troy ounces per ton ("oz Au/T" or "opt"). Grams are converted to ounces based on  $31.104 \text{ g} = 1 \text{ troy ounce}$  and  $34.29 \text{ g/t} = 1 \text{ oz/T}$ .

The reader should be aware that "grades" and "tonnages" reported in the body of the report are expressed in "grams" and "tonnes". They have been recalculated from the original reported "ounces" and "tons". The historically reported grades and tonnages expressed as "ounces" and "tons" in the tables have been maintained in their original format with the inclusion of their "grams" and "tonnes" equivalency.

Currency amounts are quoted in Canadian Dollars.

## **2.5                    DISCLAIMERS**

This report, or portions of this report, are not to be reproduced or used for any purpose other than to fulfil LRC's obligations pursuant to Canadian provincial securities legislation, including disclosure on SEDAR, and if LRC chooses to do so, to support a public financing, without WGM's prior written permission in each specific instance. WGM does not assume any responsibility or liability for losses occasioned by any party as a result of the circulation, publication or reproduction or use of this report contrary to the provisions of this paragraph.

The author is not aware of any material fact or material change with respect to the subject matter of this technical report that is not reflected in the report. The author reserves the right, but will not be obligated to, revise this report and conclusions if additional information becomes known subsequent to the date of this report.

### **3. RELIANCE ON OTHER EXPERTS**

WGM prepared this study using the resource materials, reports and documents as noted in the text and "References" at the end of this report. While the author has made every effort to accurately convey the content of those reports, he can guarantee neither the accuracy nor validity of the work described within the reports.

WGM has not verified title to the property, nor has it verified the status of LRC's exploration agreements, but has relied on information supplied by LRC in this regard. WGM has no reason to doubt that the title situation is other than that which was reported to it by LRC.

## **4. PROPERTY LOCATION AND DESCRIPTION**

### **4.1 LOCATION**

The property is located near the city of Wenatchee in central Washington State. Wenatchee is the largest city in, and the county seat of, Chelan County, Washington. The city is situated on the western bank of the Columbia River, approximately 3 km south of the confluence of the Wenatchee River in the eastern foothills of the Cascade Range (Figure 1).

Wenatchee is approximately 160 km east of Seattle, at a latitude of 47°25'N and a longitude of 120°19'W, near the junction of US Highway 2 (East-West) and US Highway 97 (North-South), which are the two major routes serving north-central Washington ([www.city-data.com/city/Wenatchee-Washington.html](http://www.city-data.com/city/Wenatchee-Washington.html), January 9, 2009).

The property is located mostly to the south of the city. The "D" Reef is located about 1.5 km south of the town limits, some 330 m northeast of the intersection of Squilchuck Canyon Road and Methow Street. It is approximately 1 km to the southeast of the former Cannon Mine, owned by Asamera – Breakwater Resources Joint Venture.

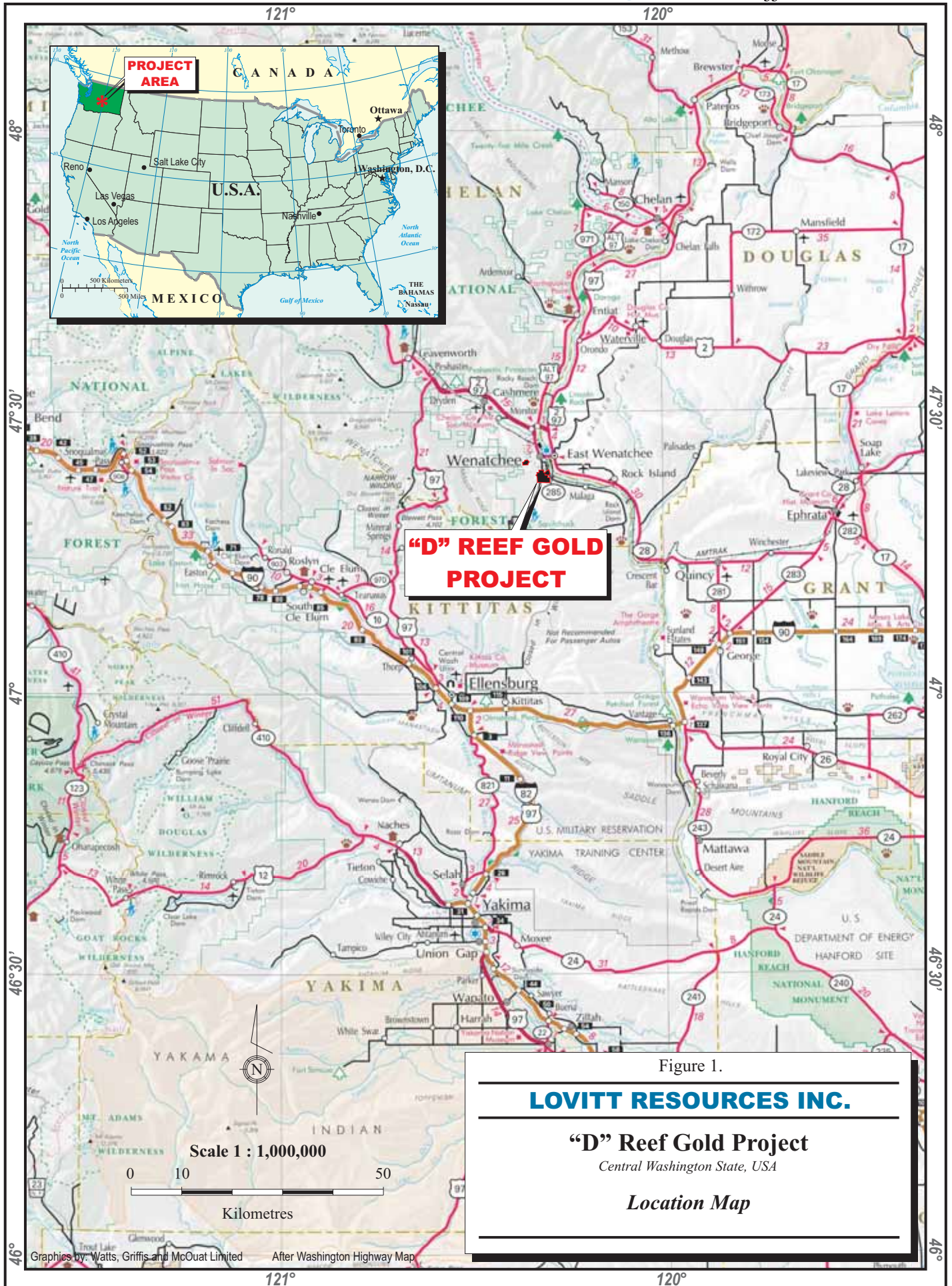
### **4.2 PROPERTY DESCRIPTION AND OWNERSHIP**

LRC has an interest in 248.48 hectares (614 acres), with various mineral and/or surface rights. The remaining interest is held by the Lovitt family and/or Estate (Figure 2).

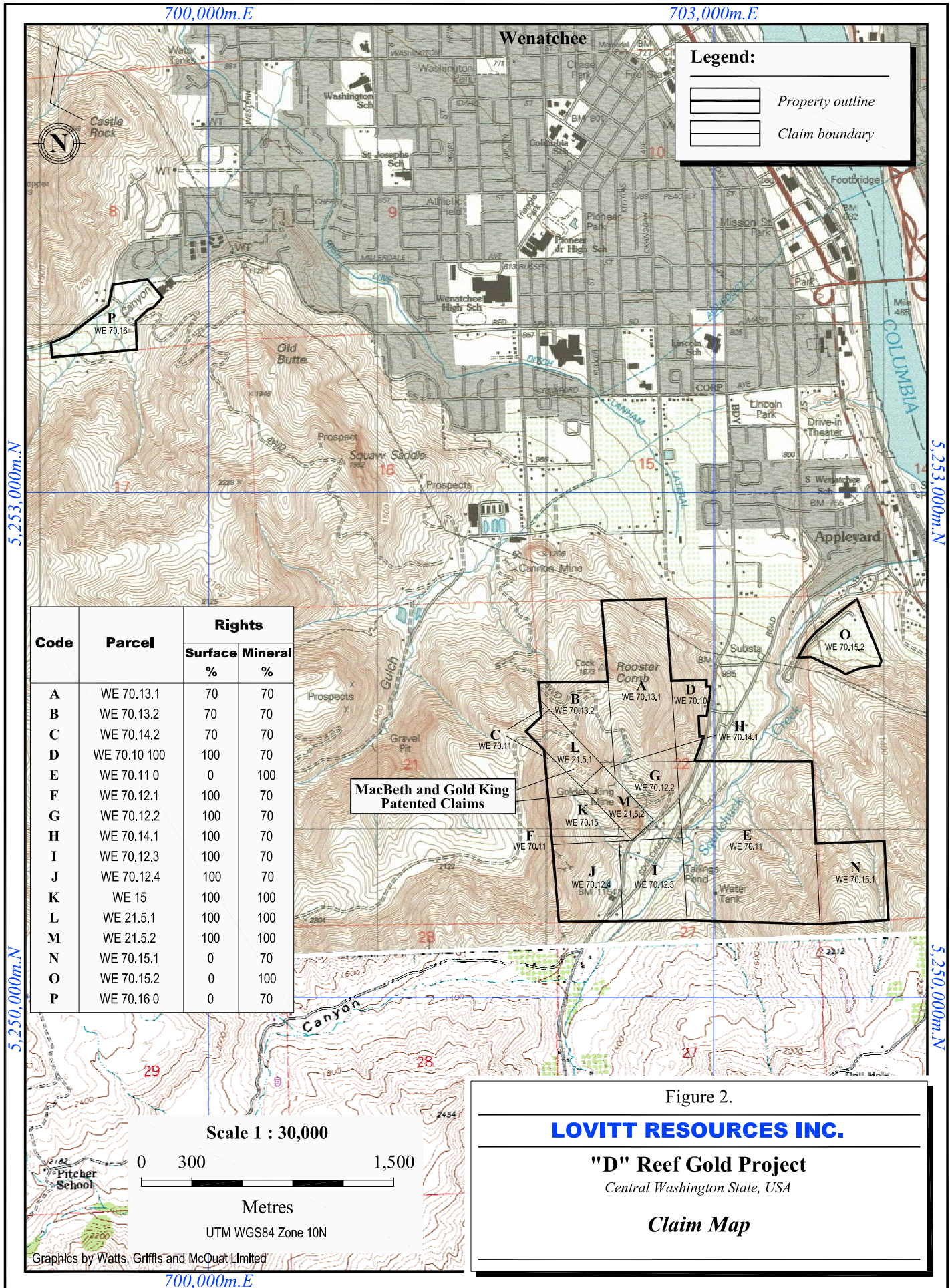
LRC has 100% mineral rights on approximately 114 hectares (283 acres), including the "D" Reef, and 70% mineral rights on an additional 134 hectares (331 acres). The company owns the two patented claims the MacBeth, at 6 ha (15 acres), and the Golden King, at 7.3 ha (18 acres), totalling some 13.3 hectares (33 acres). These two patented claims comprise the "D" Reef.

The list of claims is tabled in Appendix 1 at the end of this report. Note that Areas "L" and "M" as depicted on the claim map in Figure 2 are the patented claims, MacBeth and Golden King, respectively.









| Code | Parcel       | Rights    |           |
|------|--------------|-----------|-----------|
|      |              | Surface % | Mineral % |
| A    | WE 70.13.1   | 70        | 70        |
| B    | WE 70.13.2   | 70        | 70        |
| C    | WE 70.14.2   | 70        | 70        |
| D    | WE 70.10.100 | 100       | 70        |
| E    | WE 70.11.0   | 0         | 100       |
| F    | WE 70.12.1   | 100       | 70        |
| G    | WE 70.12.2   | 100       | 70        |
| H    | WE 70.14.1   | 100       | 70        |
| I    | WE 70.12.3   | 100       | 70        |
| J    | WE 70.12.4   | 100       | 70        |
| K    | WE 15        | 100       | 100       |
| L    | WE 21.5.1    | 100       | 100       |
| M    | WE 21.5.2    | 100       | 100       |
| N    | WE 70.15.1   | 0         | 70        |
| O    | WE 70.15.2   | 0         | 100       |
| P    | WE 70.16.0   | 0         | 70        |

**MacBeth and Gold King Patented Claims**

Figure 2.

**LOVITT RESOURCES INC.**

**"D" Reef Gold Project**  
 Central Washington State, USA

**Claim Map**

Scale 1 : 30,000

0 300 1,500

Metres

UTM WGS84 Zone 10N

There are several other auriferous reefs (Reefs "A", "C", "E", "F" and "G") throughout the property. All have a varying amount of exploration and development work, though none yet have proven to be economic.

To the best of the author's knowledge and ability to determine, there are no environmental liabilities or public liabilities associated with any of the claims making up the property. There are no disputes as to title or liens registered on the property, as far as can be determined. The area does not support any federally-listed threatened or endangered species of plants or animals.

The area surrounding the tailings impoundment has been a declared wet-lands area. However the State government is considering reclassifying the area so that the drainage system can be brought back to its initial natural condition that existed prior to mining (pers. comm., L Browne, 2009).

## **5. ACCESS, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

### **5.1 ACCESS**

Wenatchee is located near the junction of two major highway routes, State Highway Routes 2 (East/West) and 97 (North/South). The area also is accessible by both freight (Burlington Northern) and passenger (Amtrak) service from Seattle and Spokane. Bus service is provided by Greyhound and Interstate carriers provide truck freight services to and from the area. Air transportation is provided by Horizon Airlines and United Express with regular service to Seattle, Tacoma, Yakima, Portland and the Tri-Cities.

The property is located mostly to the south of Wenatchee and is accessible by road by the Squilachuck Canyon Road. Within the property, local access is by dirt (mine/exploration) roads.

### **5.2 CLIMATE**

The property area is located in the Columbia River Basin at the base of Cascade foothills. The area has a dry, mild climate that is characterized by hot summers and cool winters. The local climate is influenced by the topography, especially the Cascade Mountain Range to the west, which acts as a barrier to the storm systems crossing into the region from the North Pacific Ocean.

During the summer months, temperatures on average can range between 26°C to 32°C (80°F to 90°F). Temperatures can reach 35°C (95°F) or higher for several weeks of the year. Temperatures during the winter months, range from -2°C to 2°C (25°F to 35°F), with minimum temperatures as low as -10°C (15°F). Between mid-November and mid-February, the night-time temperatures can drop to below freezing. In the mountains, the temperatures are much lower.

Average precipitation in the area is about 38 cm, most of which falls as snow during the winter, with an annual snowfall between 76 to 89 cm.

### **5.3 LOCAL RESOURCES AND INFRASTRUCTURE**

The immediate Wenatchee vicinity includes the city of Wenatchee, and the "bedroom" communities of Sunnyslope, East Wenatchee, Orondo, Rock Island and Cashmere (Johnson, 1988). The population of Wenatchee is about 29,810 as determined from the 2007 census. The labour force in the "trading" area is in excess of 200,000 ([www.wenatcheewa.gov](http://www.wenatcheewa.gov), January 13, 2009).

The main industries in the area are health care, agriculture, education and public service. Other major employers include telephone, food products, newspaper, retail, and the hospitality industries. There is no skilled mining workforce that the company can draw on locally. However, the company does have on staff a former underground miner who worked in the L-D Mine, as well as the services of a former Asamera geologist who worked at the Cannon Mine. The company will have to rely on contract workers while training its workforce.

### **5.4 PHYSIOGRAPHY**

The topography is characterized as being mountainous to hilly with plateaus; with elevations from 275 m in the Squilchuck Creek just southeast of the area to over 610 m in the Rooster Comb area north of the area.

The northern portion of the property is predominantly steep hillside and undeveloped rangeland. The southern portion, which straddles the Squilchuck Canyon Road, also includes steep hillsides and undeveloped rangeland, as well as orchards and the tailings impoundment (Lovitt Mine).

Vegetation is typical of lowland central Washington. Native rangeland is dominated by Upper Sonoran sagebrush and bunch grasses. Most flat areas capable of supporting agriculture have been converted to fruit orchards; typically apple, pear and cherry. Wildlife in the area includes mule deer, elk, coyote, skunk, quail, gray partridge, ring-necked pheasant, plus other small mammals, birds and reptiles.



## 6. HISTORY

The earliest recorded information regarding the geology of the area was in 1855 by a Pacific Railway exploration crew, who noted the intracalated volcanics and metasediments. The first known mining activity in the area was in 1867 by Chinese miners working up in the Squilchuck Canyon on the west side of the Squilchuck Creek. The old workings and remnants of the ladders that they used are visible still on the side of the hill.

### **"D" Reef**

In 1885, V. Carleek staked a silicified iron stained ridge, approximately 3.25 km south of Wenatchee. The claims were known as the Golden King and MacBeth, which later became known by a variety of names including; the L-D, Lovitt-Day, Lovitt Mine and "D" Reef, depending upon the company and date. In 1885, Carleek formed the Golden King Mining Company. Operations included a five-stamp mill and a drift developed at the base of the ridge. In 1894, approximately 217 tonnes of ore were produced yielding US\$1,600.00 in profits (Hunting, 1955).

Judge McIntosh from Seattle acquired the claims in 1894 and held them until 1898, when the claims were sold to the Wenatchee Mining Company. Between 1885 and 1911, a total of 27,433 tonnes of gold-bearing silica grading 13 g Au/t to 37 g Au/t were shipped from the stamp mill to the Asarco smelter at Tacoma, Washington (Grange Gold, undated). In 1910, approximately 173 tonnes of ore were milled from which gold and silver worth \$722.68 were recovered (Marr, 1990). The 1910 historic gold price was US\$21.00 per ounce and silver was US\$0.55 per ounce.

In 1911, the claims were abandoned and remained dormant until 1928 when they were purchased by J.J. Kegan. The MacBeth and Golden King Claims were patented in 1934 by the Gold King Mining and Development Company. From 1938 to 1942, Kegan had a contract to supply American Smelting and Refining with silicon flux. There were efforts to resume gold production, but these efforts met with little success.

Between 1943 and 1946, Knob Hill Mining Company ("**Knob Hill**") conducted some prospecting over the area. During 1945-46, Knob Hill contracted Chuck and Dick Stumpf to conduct an initial drilling program. Based on the results of the drilling program, the company decided that the mineralization was not sufficient for a large tonnage, low grade operation and decided that further investigations were not warranted (Marr, 1990 and Ott, 1988).

In 1948, Ed Lovitt, a Canadian mining engineer, arrived in Wenatchee to examine the property. He concluded that the auriferous quartz veins could be mined economically by using small selective shrinkage stoping methods. In 1949, the Wenatchee Mining Partnership ("**WMP**") was formed with Ed Lovitt as majority shareholder. In 1950, the WMP bought the properties belonging to J.J. Kegan and the Wenatchee Mining Company and commenced mining operations. At this time, the Golden King Mine was the leading gold producer in Washington State, ranking 11<sup>th</sup> nationally (Hunting, 1955).

In 1951, Anaconda signed an option agreement with the WMP reportedly for \$1,000,000 for exploration and development. During this time, Anaconda built the assay office, the dry and mechanics shop and supply room. Anaconda developed the 1250 ft Level drift and associated raise from the 1,100 ft down to the 700 ft Level. In 1953, Anaconda relinquished the option after deciding that the ore body was not sufficiently large enough to warrant further development. Under the terms of the option agreement, all supplies and installation work including assay office, mechanic shop, pipelines, track and timbers had to remain. Between 1951 and 1967, the miners were under contract which included a daily wage plus tonnage and advancement. However, the miners had to lay the track and install the water and air lines, as well as any timbering, drilling, blasting and of course transporting the ore.

In 1961, Day Mining Company ("**Day Mining**") of Wallace Idaho entered into a JV with the WMP forming the Lovitt–Day (L-D) Mine. The WMP had 70% interest in the JV operations, while Day Mining owned the remaining 30%. In 1962, the WMP built a 300 ton per day flotation mill on the mine site. The mine started shipping concentrate to the Bunker Hill Smelter at Kellogg, Idaho. A total of about 582,000 tonnes of direct-shipment ore grading 15.24 g Au/t and 21.37 g Ag/t, and 359,000 tonnes of flotation concentrate grading 8.24 g Au/t and 16.7 g Ag/t, were shipped from the mine before it closed in 1967 (Schmidt, 1976 and Ott, 1988).

The mine was developed on 10 levels between elevations 850 ft to 1,600 ft, and encompassed over 11 km (7 miles) of underground workings, from which approximately 0.9 million tonnes of ore was extracted. The ore was mined from a series of adits on the 855, 957, 1100, 1150, 1250, 1320, 1450, 1550, 1595 and the 1,625 ft (above sea) levels. The main haulage level was the 1150 ft Level, with portals at higher levels. The major sub-levels included the 1130, 1160, 1205, 1245, 1315, 1365, 1370, 1400, 1405, 1418, 1442 and 1466 ft Levels. An inclined 32° winze provided access from the main haulage level to the 1100, 950 and 850 ft Levels. The workings were open stopes and mining was focused on the major cross-cutting quartz veins which graded locally over 34.29 g Au/t. A longitudinal section of the mine is shown in Figure 3.

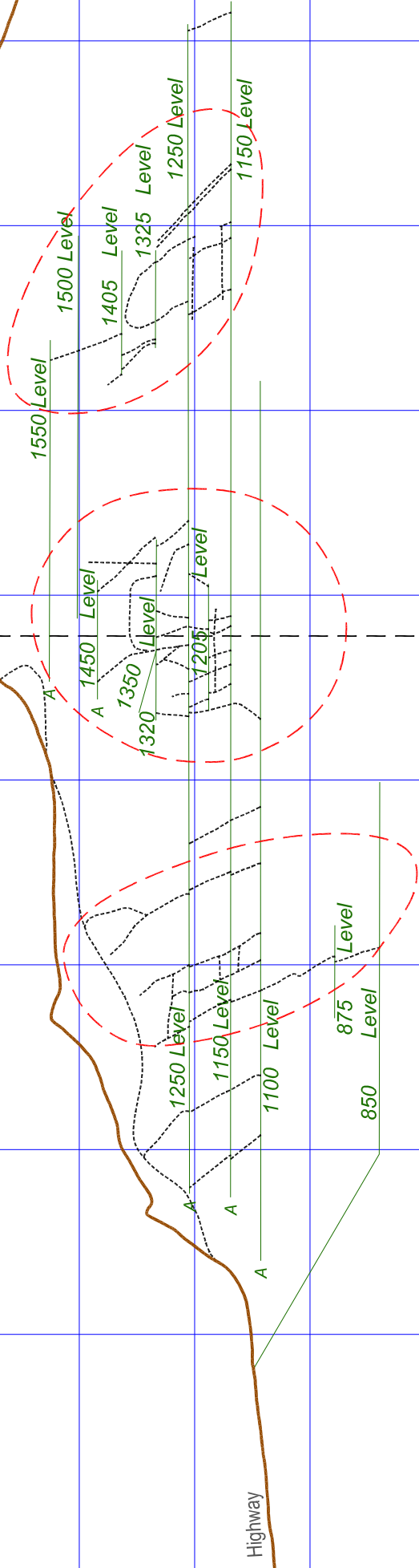
MACBETH

GOLDEN KING

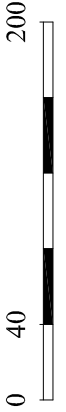
0Ft. 400Ft. 800Ft. 1,200Ft. 1,600Ft. 2,000Ft. 2,400Ft. 2,800Ft.

0Ft. 400Ft. 800Ft. 1,200Ft. 1,600Ft. 2,000Ft. 2,400Ft. 2,800Ft.

Highway



Scale 1 : 4,000



Metres

LOVI  
"D"



The stopes were numbered from the portal on the 1250 ft level starting at 1 with numbers increasing to the "north". The two stopes to the "south" of the 1250 ft level portal were numbered "0" and "00", with "0" closest to the portal. Some of the more significant stopes were the I-74, Long Hole, Ben Richards, I-49 and Nellie's Room. Details of these stopes are sketchy at best, descriptions are as follows:

- **I-74 Stope.** This stope is located between 1150 ft and 1250 ft levels with dimensions of 25 m (l) x 40 m (h) x 3 m (w). Approximately 14,000 tonnes grading at 13.8 g Au/t were recovered;
- **Long Hole Stope.** The stope is located between 1250 ft and 1300 ft levels with dimensions of 85 m (l) x 12 m (h) x 14 m (w). Production was approximately 36,700 tonnes grading at 13.8 g Au/t;
- **Ben Richards Stope.** This stope is located between 1250 ft and 1400 ft levels with dimensions of 10 m (l) x 50 m (h) x 10 m (w) and tonnage of approximately 9,000 tonnes grading at 12 g Au/t; and
- **I-49 Stope.** This stope is located between the 1190 ft sub-level and the 1480 ft sub-level with approximate dimensions of 24 m x 37 m x 49 m (h). Some 29,000 tonnes at 17.1 g Au/t were removed from the stope. It was described as a "high-grade" stockwork between Mine Sections 20 and 25 in Block 2-3, from which a number of muck samples grading more than 34.29 g Au/t (1 oz Au/T) are plotted on old level plans. The stope was regarded as being mined out. Recent investigations into the stope area by LRC revealed that there was approximately 54,400 tonnes of blasted rock in the stope and that the crown pillar is intact. The crown pillar measures approximately 15.25 m x 15.25 m x 48.7 m. Four samples taken from the "blasted rock" material over a 10 metre interval returned gold grades ranging 9.4 g Au/t (0.27 oz Au/T) to 28.4 g Au/t (0.83 oz Au/T). A muck sample on the 1190 ft sub-level, directly below the I-49 Zone, graded 196 g (6.3 oz), surrounded by grades of 95.5 (3.07 oz), 43 (1.38 oz), 43.5 (1.4 oz) and 46.6 g (1.5 oz).

The "I-49" high-grade veins developed in an arkose wedge just north of the intersection the I-49 Fault and the Footwall Fault (FWF) shear zone and continue parallel to the shear zone. A series of parallel faults forms the western boundary of the stope. The "I-49" stope extends more than 100 m vertically within the high-grade wedge (Johnson, 1991b).

- **Nellie's Room.** This stope was a multi-ounce, multi-million dollar stope within Block 2, between the I-49 Stope and the "unnamed" stope on the 1460 ft level. The verification sample, WGM-LR-007, taken within the stope returned values of 1.14 g Au/t and 88 g Ag/t. In the north drift past Nellie's Room, muck samples averaged 17.1 g Au/t over 61 m. According to the development plans, there is a raise about 140 m northwest of

Nellie's Room which has muck samples assaying at 1,563.6 g Au/t over 3 m. The drift was drilled but not blasted or developed as noted on the development section/plan for 1250 I-59 (from November 1959).

The annual production for the mine is summarized in Table 1.

**TABLE 1.**  
**LOVITT MINE PRODUCTION RECORD**

| Year                                | Short Tons       | Grade (oz/ton)                                    |                   |
|-------------------------------------|------------------|---|-------------------|
|                                     |                  | Au  | Ag                |
| <b>Wenatchee Mining Partnership</b> |                  |   |                   |
| 1949                                | 9,351            | 0.5574  | 0.5264            |
| 1950                                | 43,417           | 0.7444  | 0.6657            |
| 1951                                | 52,704           | 0.4897  | 0.6312            |
| 1952                                | 38,850           | 0.3851  | 0.4888            |
| 1953                                | 57,689           | 0.4222  | 0.5883            |
| 1954                                | 52,747           | 0.4190  | 0.5150            |
| 1955                                | 60,756           | 0.4066  | 0.4100            |
| 1956                                | 61,602           | 0.3981  | 0.4469            |
| 1957                                | 68,909           | 0.3685  | 0.4228            |
| 1958                                | 62,972           | 0.3511  | 0.4441            |
| 1959                                | 31,810           | 0.9611  | 1.7266            |
| 1960                                | 40,339           | 0.8592  | 1.7559            |
| 1961 (thru Nov)                     | <u>40,239</u>    | <u>0.5759</u>                                     | <u>1.1828</u>     |
| <b>Total WMP</b>                    | <b>621,385</b>   | <b>0.4987</b>                                     | <b>0.6921</b>     |
| <b>L-D Mine</b>                     |                  |   |                   |
| Dec 1961                            | <u>513</u>       | <u>1.1846</u>                                     | <u>1.9320</u>     |
| <b>Total (1949–1961)</b>            | <b>621,898</b>   | <b>0.4993</b>                                     | <b>0.6932</b>     |
| Ore to Smelter 1962                 | 3,622            | 0.3480  | 0.7110            |
| Ore to Mill 1962                    | 40,554           | 0.3931  | 0.3863            |
| Ore to Smelter 1963                 | 5,867            | 0.1555  | 0.2736            |
| Ore to Mill 1963                    | 82,861           | 0.2898  | 0.2996            |
| Ore to Smelter 1964                 | 6,229            | 0.2665  | 0.7386            |
| Ore to Mill 1964                    | <u>88,034</u>    | <u>0.1934</u>                                     | <u>0.6092</u>     |
| <b>Total thru 1964</b>              | <b>849,065</b>   | <b>0.4373</b>                                     | <b>0.0280</b>     |
| Ore to Smelter 1965                 | 2,314            | 0.101   | 0.246             |
| Ore to Mill 1965                    | <u>85,716</u>    | <u>0.2256</u>                                     | <u>0.5974</u>     |
| <b>Total thru 1965</b>              | <b>937,125</b>   | <b>0.416</b>                                      | <b>0.625</b>      |
| Ore to Smelter 1966                 | 1,512            | 0.23  | 0.38              |
| Ore to Mill 1966                    | <u>90,984</u>    | <u>0.19</u>                                       | <u>0.456</u>      |
| <b>Total thru 1966</b>              | <b>1,029,621</b> | <b>0.397</b>                                      | <b>0.61</b>       |
| Ore to Mill 1967                    | <u>6,951</u>     | <u>0.224</u>                                      | <u>0.25</u>       |
| <b>Totals 1949 thru Feb 1967</b>    | <b>1,036,572</b> | <b>0.396</b>                                      | <b>0.607</b>      |
|                                     |                  | (932,915 tonnes at 13.85 g Au/t and 20.73 g Ag/t) |                   |
| <b>TOTAL METAL</b>                  |                  | <b>410,482 oz</b>                                 | <b>625,849 oz</b> |
|                                     |                  | <b>12,767 kg</b>                                  | <b>19,454 kg</b>  |

Ag: Au Ratio

1.525:1\* (Ott, 1988, Schmidt, 1976 and Hunting, 1955)

The mine was ranked as the 6<sup>th</sup> largest gold mine in the United States when it closed in 1967 (Schmidt, 1976). The drop in production in 1952 was the result of the involvement of Anaconda Copper Mining Company ("**Anaconda**"), which at the time took a \$1,000,000 option on the property with a focus on exploration rather than production.

Over 12,700 kg (410,000 oz) of gold and 19,400 kg (625,000 oz) of silver were produced from approximately 932,000 t of ore for a calculated "Ag: Au" ratio of 1.5:1.

In the early 1970s, Cyprus Exploration Company ("**Cyprus**") recognized the potential of the Lovitt Mine as a disseminated gold deposit and in 1973 entered into negotiations for exploration rights. The claims were secured from the bank and other individuals in late 1974 (Schmidt, 1976).

Exploration by Cyprus commenced in 1974 on the two patented claims and later on the surrounding area, as land became available. Initial work involved topographic and geologic mapping, systematic exploration of the mine by underground sampling, surface sampling, ground geophysical surveys (IP), and drilling; both rotary and diamond drill. By 1976, Cyprus had completed 18 diamond drillholes totalling 2,831 m and 44 rotary holes totalling 5,065 m. This exploration led to the discovery of the "B" and "B" West Reefs.

In previous evaluations of the "D" Reef it is important to understand that the estimations were based on differing cutoff grades and that the various blocks had different owners at different times. The following "resource estimates" were prepared prior to the implementation of NI 43-101 and are therefore non-compliant and should not be relied upon. These estimates are historical in nature and are reproduced in this report for reference only.

Three "ore reserve" estimations (historical and non-compliant) were calculated for the Lovitt Mine by independent geologists and by Cyprus staff between 1974 and 1975. The "reserves" varied from a low of about 5.9 Mt to 8.4 Mt. These historical estimates are summarized for ease of comparison in Table 2. Block 1 is the southern block and lies entirely within the Golden King Patented claim; Block 2 is the central block and straddles the MacBeth Patented Claim with its northern portion to the northeast of the MacBeth Claim; and Block 3 is the northern block and lies almost entirely outside of the MacBeth Claim, with only its most southern portion within the claim area.

R. Chadwich prepared the first study in 1974 using available muck, wall and drillhole sample data. In August 1974, this estimate was checked by Dr. O. Kortan, who re-calculated a

smaller tonnage with higher grade. In June 1975, the Technical Services of Cyprus carried out their own calculations and computed a trial open pit for the deposit (Schmidt, 1976).

**TABLE 2.**  
**1974-75 HISTORICAL "D" REEF RESERVE ESTIMATES**

| Area                         | R. Chadwick<br>(cutoff 0.04 oz)<br>(cutoff 1.24 g) |                               | O. Kartan<br>(cutoff 0.04 oz)<br>(cutoff 1.24 g) |                               | Cyprus (Tech Services)<br>(cutoff 0.05 oz)<br>(cutoff 1.55 g) |                               |
|------------------------------|--|-------------------------------|--|-------------------------------|---|-------------------------------|
|                              | Short Tons<br>(tonnes)                             | Grade<br>(g/t)                | Short Tons<br>(tonnes)                           | Grade<br>(g/t)                | Short Tons<br>(tonnes)  | Grade<br>(g/t)                |
| Block 1                      | 3,431,594<br>(3,113,108)                           | 0.085<br>(2.91)               | 2,600,000<br>(2,358,694)                         | 0.126<br>(4.32)               | 3,329,970<br>(3,020,915)                                      | 0.111<br>(3.80)               |
| Block 2                      | 2,497,000<br>(2,265,253)                           | 0.23<br>(7.88)                | 2,000,000<br>(1,814,380)                         | 0.247<br>(8.47)               | 3,685,450<br>(3,334,403)                                      | 0.198<br>(6.79)               |
| Block 3                      | 3,408,166<br>(3,091,854)                           | 0.22<br>(7.54)                | 3,205,000<br>(2,907,544)                         | 0.237<br>(8.13)               | 543,600<br>(493,148)  | 0.094<br>(3.22)               |
| Subtotal                     | 9,336,760<br>(8,470,215)                           | 0.173<br>(5.93)               | 7,805,000<br>(7,080,618)                         | 0.202<br>(6.93)               | 7,559,020<br>(6,857,467)                                      | 0.152<br>(5.21)               |
| Less Production<br>1949 – 67 | already included                                   |                               | 1,037,000<br>(940,756)                           | 0.184<br>(6.31)               | 1,036,570<br>(940,366)  | 0.112<br>(3.84)               |
| <b>Total</b>                 | <b>9,336,760</b><br><b>(8,470,215)</b>             | <b>0.173</b><br><b>(5.93)</b> | <b>6,768,000</b><br><b>(6,139,862)</b>           | <b>0.184</b><br><b>(6.31)</b> | <b>6,523,450</b><br><b>(5,918,008)</b>                        | <b>0.112</b><br><b>(3.84)</b> |

In 1981, Goldbelt Mines Inc. ("**Goldbelt**") entered into a JV agreement with Asamera to explore the "B" and "B West" ore bodies under a lease agreement with Cyprus. In 1982, Breakwater provided financing to Goldbelt and later in the same year, became a full partner (49%) with Asamera in the Cannon Joint Venture focusing on the "B" and "B West" Reefs. This development became known as the Cannon Mine, which is located about a kilometre to the northwest of the "D" Reef and was contiguous to LMC property. The reader is referred to the section on "Adjacent Properties" in this report for further details of the Cannon Mine.

In the mid-1980s, Teck explored the property and between 1986 and 1987, had completed 19 drillholes in the vicinity and north of Block 3, and tested some resistivity anomalies to the south. In 1984, Teck produced "in-house" calculations for "probable ore reserves" for the "D" Reef. At that time, the reef (Blocks 1, 2 and 3) was split between United Mining Company ("**United**") and LMC. United reported a historical resource of 1.4 Mt (1.27 Mt) at a grade of 0.15 opt (5.14 g Au/t) and 4.6 Mt (4.17 Mt) at a grade of 0.05 opt (1.71 g Au/t). Details are presented in Table 3. Approximately two-thirds of this resource was determined to be on the Gold King and MacBeth Claims, ground held at that time by United (Teck, 1984).

**TABLE 3.**  
**1983 HISTORICAL "D" REEF RESERVE ESTIMATES (US TONS)**

|               | Ore Block | UMC<br>(tonnes)    | LMC<br>(tonnes)    | Total<br>(tonnes)  |
|---------------|-----------|--------------------|--------------------|--------------------|
| <b>High</b>   | 1         | 186,823            | 0                  | 186,823            |
| Grade         |           | <i>(169,484)</i>   | <i>(0)</i>         | <i>(169,484)</i>   |
| (0.15 opt)    | 2         | 551,880            | 36,784             | 588,664            |
| (5.14 g Au/t) |           | <i>(500,660)</i>   | <i>(33,370)</i>    | <i>(534,030)</i>   |
|               | 2-3       | 170,435            | 34,303             | 515,738            |
|               |           | <i>(154,617)</i>   | <i>(31,119)</i>    | <i>(467,872)</i>   |
|               | 3         | 0                  | 118,594            | 118,594            |
|               |           | <i>(0)</i>         | <i>(107,587)</i>   | <i>(107,587)</i>   |
| <b>Total</b>  |           | <b>909,138</b>     | <b>500,681</b>     | <b>1,409,819</b>   |
|               |           | <i>(824,761)</i>   | <i>(454,213)</i>   | <i>(1,278,974)</i> |
| <b>Low</b>    | 1         | 1,460,757          | 0                  | 1,460,757          |
| Grade         |           | <i>(1,325,184)</i> | <i>(0)</i>         | <i>(1,325,184)</i> |
| (0.05 opt)    | 2         | 914,851            | 217,438            | 1,132,289          |
| (1.71 g Au/t) |           | <i>(829,944)</i>   | <i>(197,257)</i>   | <i>(1,027,201)</i> |
|               | 2-3       | 338,234            | 882,247            | 1,220,481          |
|               |           | <i>(306,842)</i>   | <i>(800,366)</i>   | <i>(1,107,208)</i> |
|               | 3         | 0                  | 247,542            | 247,542            |
|               |           | <i>(0)</i>         | <i>(224,568)</i>   | <i>(224,568)</i>   |
| <b>Total</b>  |           | <b>2,713,842</b>   | <b>1,347,227</b>   | <b>4,061,069</b>   |
|               |           | <i>(2,461,970)</i> | <i>(1,222,190)</i> | <i>(3,684,161)</i> |

Asamera leased the Golden King and MacBeth patented claims from Tenneco Mineral Company in 1985. The patented claims covered the "mineral resource" Blocks 1 and 2. In March 1986, an evaluation of the "D" Reef completed by Asamera indicated that there was potential for an open pit and/or limited underground mining operations. The historical resource estimate based on the mineral resource blocks is summarized in Table 4. Asamera estimated resource for the LMC portion of the "D" Reef at about 1.88 Mt (1.7 Mt) grading at 0.10 oz Au/T (3.43 g Au/t) using a cutoff of 0.04 oz Au/T (1.37 g Au/t) and 0.860 Mt (0.78 Mt) grading at 0.17 oz Au/T (5.83 g Au/t) at a 0.10 oz Au/T (3.43 g Au/t) cutoff.

Grange Gold Corporation ("**Grange**") acquired an indirect 26.5% shareholding in LMC in 1984, and in 1986 Grange increased its shareholding in LMC to 50%. In 1986 through to 1990, Asamera had a lease purchase agreement to acquire up to 50% interest in LMC.

In an internal memorandum dated July 30, 1986, from J.L. May of Teck, the results of a meeting between Teck, as operator for an exploration program on the Lovitt Mining Company property, and Asamera were presented. The focus of the meeting was to review the latest geological data developed by Asamera on the area. During the course of the meeting, Asamera presented geological sections and reserve block data, which were not available to Lovitt Mining Company at the time, and that an ore resource of some 1.8 million tonnes (2 million tons) grading at 5.72 g Au/t (0.167 oz Au/ton) was indicated. No further

information was available. WGM has no knowledge how this resource was calculated or what geological data was used.

**TABLE 4.**  
**1986 ASAMERA HISTORICAL "D" REEF RESOURCE ESTIMATE**

| Area  | Tons<br>(tonnes)                       | oz/Ton<br>(g/t)               | Contained Gold<br>ozs (kg)         |
|---|--|-------------------------------|------------------------------------|
| <b>At 0.04 oz Au/T (1.37 g Au/t) cutoff</b> |  |                               |                                    |
| Block 1                                     | 3,084,000<br>(2,797,188)               | 0.058<br>(1.99)               | 178,872<br>(5,563)                 |
| Block 2                                     | 2,748,000<br>(2,492,436)               | 0.113<br>(93.87)              | 310,524<br>(9,658)                 |
| Block 3                                     | 877,000<br>(795,439)                   | 0.88<br>(30.17)               | 77,176<br>(2,400)                  |
| <b>Total</b>                                | <b>6,709,000</b><br><b>(6,085,063)</b> | <b>0.085</b><br><b>(2.91)</b> | <b>568,670</b><br><b>(17,688)</b>  |
| <b>At 0.10 oz Au/T (3.43 g Au/t) cutoff</b> |  |                               |                                    |
| Block 1                                     | 403,000<br>(365,521)                   | 0.135<br>(4.63)               | 54,405<br>(1,692)                  |
| Block 2                                     | 1,593,000<br>(1,444,851)               | 0.161<br>(5.52)               | 256,473<br>(7,977)                 |
| Block 3                                     | 235,000<br>(213,145)                   | 0.193<br>(6.61)               | 45,355<br>(1,410)                  |
| <b>Total</b>                                | <b>2,231,000</b><br><b>(2,023,517)</b> | <b>0.159</b><br><b>(5.45)</b> | <b>355,300</b><br><b>(110,512)</b> |

Notes: 1) gold grades in excess of 1 oz Au/T were cut to 1 oz Au/T.  
2) in Block 1, all resources above the 0.10 oz Au/T cutoff are above the 1100 Level.  
3) all Block 2 resources are within the MacBeth patented claim.

Between 1987 and 1988, Asamera undertook a pre-feasibility study and redefined the "mineral resource" Blocks 1 and 2. The resource estimates were for that mineralization above the 900 Level in Block 1 and above 1100 Level in Block 2 and are shown in Table 5. This 1988 estimate was used as the official "reserves" by Asamera and partners through to 1989. It should be noted that silver was not calculated, nor had the tonnage been corrected for previous mining production. WGM advises that this resource is historical in nature and caution should be used when referencing these numbers. They are presented here in historical context, as WGM is of the opinion that they demonstrate the possible potential of the reef.

From 1986 through to 1992, Asamera re-opened the underground workings on Level 1250 and conducted a "resource evaluation" of the "D" Reef. Reportedly, US\$4 million was spent during this time. The program included the rehabilitation of approximately 2,100 m of underground workings on the 1250 ft Level, underground geological mapping and sampling, 11,887 m of underground diamond drilling on Block 1 and the southern portion of Block 2, 4,755 m of surface reverse circulation drilling on Block 2, and metallurgical tests on the "D" Reef ore (Burgoyne, 1996). The results of this undertaking were positive, even though it did not include that portion of the "D" Reef held by LMC.

**TABLE 5.**  
**1988 ASAMERA HISTORICAL "D" REEF RESOURCE ESTIMATE**

| Area  | Tons<br>(tonnes) | oz/Ton<br>(g/t) | Contained Gold<br>ozs (kg) |
|---|------------------|-----------------|----------------------------|
| <b>At 0.04 oz Au/T (1.37 g Au/t) cutoff</b> |                  |                 |                            |
| Block 1                                     | 1,310,471        | 0.09            | 117,832                    |
|   | (1,188,597)      | (3.08)          | (3,665)                    |
| Block 2                                     | 626,502          | 0.10            | 63,221                     |
|   | (568,237)        | (3.43)          | (1,966)                    |
| <b>Total</b>                                | <b>1,936,973</b> | <b>0.093</b>    | <b>181,053</b>             |
|   | (1,756,834)      | (3.19)          | (5,631)                    |
| <b>At 0.10 oz Au/T (3.43 g Au/t) cutoff</b> |                  |                 |                            |
| Block 1                                     | 336,883          | 0.183           | 61,556                     |
|   | (305,552)        | (6.27)          | (1,914)                    |
| Block 2                                     | 191,173          | 0.179           | 34,289                     |
|   | (173,393)        | (6.14)          | (1,066)                    |
| <b>Total</b>                                | <b>528,006</b>   | <b>0.182</b>    | <b>95,845</b>              |
|   | (478,901)        | (6.24)          | (2,981)                    |

In 1988, Asamera commissioned a pre-feasibility study of open pit mining and heap leaching of the "D" Reef. Based on the current data at that time, it was concluded that if Block 1 contained the estimated 2.2 million tons (1.99 Mt) grading 0.099 opt Au (3.39 g Au/t) and a 1.3:1 stripping ratio, the project appeared to be economic (Asamera, 1988). In 1989, Asamera estimated a total mineral inventory (historical) for Blocks 1, 2 and 3 at a cutoff of 0.04 opt Au (1.37 g Au/t) to be 1,937,000 tons (1,757,227 t) at a grade of 0.094 opt Au (3.22 g Au/t).

Also in 1988, Asamera Minerals, Breakwater and Grange commissioned WGM to complete a valuation of the assets of LMC. WGM reviewed the resource estimate by Asamera and included the more recent 1986 and 1987 drill results by LMC. A "resource estimate" of approximately 0.907 Mt at a grade of 6.51 g Au/t was determined (WGM, 1988). In 1990, Asamera conducted a resource estimate for the open pit model containing Block 1 and the western portion of Block 2. From 1990 to 1992, Asamera evaluated LMC's portion of the "D" Reef. The resource estimates are summarized in Table 6.

**TABLE 6.**  
**1990 HISTORICAL "D" REEF RESOURCE ESTIMATE, 1990**

| Block        | Tons<br>(tonnes) | Gold Grade<br>oz/T<br>(g/t) | Cutoff Gold<br>oz/T<br>(g/t) | Contained Gold<br>oz<br>(kg) | Company | Year |
|--------------|------------------|-----------------------------|------------------------------|------------------------------|---------|------|
| 1 & 2E       | 2,291,669        | 0.097                       | 0.04                         | 223,022                      | Asamera | 1990 |
|              | (2,078,967)      | (3.33)                      | (1.36)                       | (6,914.91)                   |         |      |
| 2W & 3       | 1,000,000        | 0.19                        | 0.10                         | 190,000                      | WGM     | 1988 |
|              | (907,184)        | (6.51)                      | (3.43)                       | (5,905.76)                   |         |      |
| <b>Total</b> | <b>3,291,000</b> |                             | <b>0.125</b>                 | <b>413,522</b>               |         |      |
|              | (2,986,151)      |                             | (4.29)                       | (12,820.67)                  |         |      |

(Burgoyne, 1996 and WGM, 1988)

In its 1988 report, WGM estimated a "resource" of approximately 300,000 T (272,155 tonnes) grading 0.035 oz Au/T (1.2 g Au/t) for the tailings. Test work by Dawson Metallurgical Laboratories in 1986 indicated that a recovery of 80–85% could be obtained using a rapid cyanide leach (WGM, 1988). However, the area around the tailings is classified as wetlands and environmental concerns remain high for any development. As a result, the tailings "resource" has not been included in the "resource estimate" presented in Table 6. It has since been reported that the state government is considering restoring the drainage system to its original condition and if it goes ahead the tailings will need to be moved (pers. comm., L. Brown, 2009).

In early 1994, Ramrod Gold (USA) ("**Ramrod**") under a Letter of Intent to acquire the LMC shares owned by Grange, contracted Hammond, Collier & Wade-Livingstone Associates to complete a Phase 1 Environmental Site Assessment on the LMC property. The Letter of Intent expired as Ramrod was unable to meet the terms of the agreement. LMC, through its wholly-owned subsidiary Gold King Incorporated, purchased the Gold King and MacBeth Claims (which were previously held by Asamera) in the latter part of 1994. Also at this time, LMC purchased the Chisel Claim, which was adjacent to the western boundary of the Gold King and MacBeth Claims (Burgoyne, 1996).

In 1996 when Asamera withdrew from the area, the company gave its shares in LMC to the minority shareholders. At this time, Grange purchased the two patented claims (Gold King and MacBeth). In 2002, Grange controlled LMC with a 57.8% interest, with the balance held by the minority shareholders, who were mostly the same people who held the 30% mineral interests. LMC bought out the minority shareholder interest in 2003 for \$600,000 and a 5% Net Smelter interest on the mineral interest (pers. comm., L. Brown, 2008).

In 2005, Grange, which was incorporated in British Columbia in 1981, changed its name to Lovitt Nutriceutical Corporation to reflect the company's agricultural "focus" with its fruit juices and orchards. With its refocus on mining, the company changed its name to Lovitt Resources Incorporated in 2008. There was no change to the US subsidiary LMC during these name changes (pers. comm., L. Brown).



## 7. GEOLOGICAL SETTING

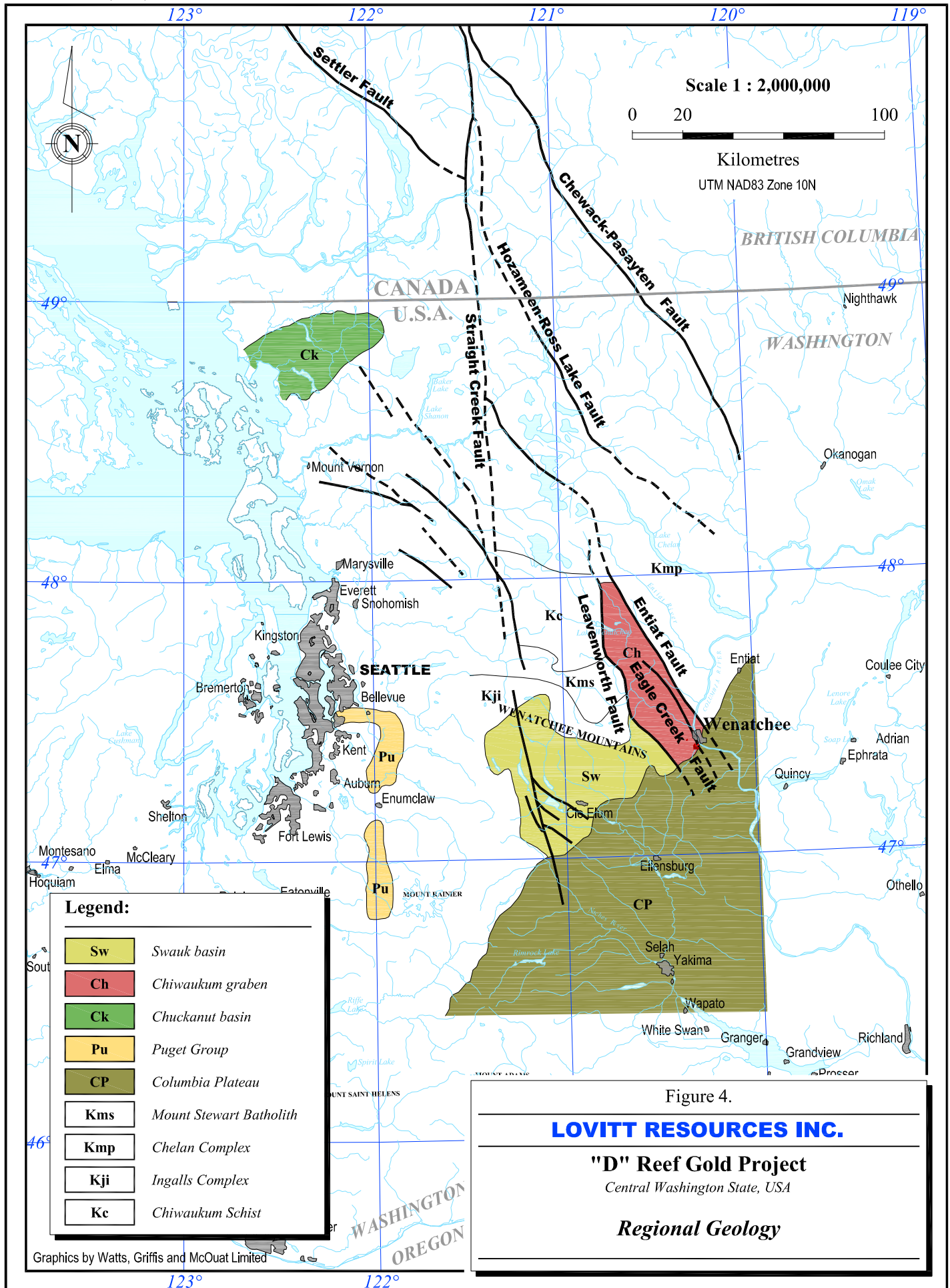
### **7.1 REGIONAL GEOLOGY**

The tectonic setting of epithermal gold deposits is characterized by extension, at least at the district scale or larger, localizing and facilitating emplacement of magma and, at higher levels, hydrothermal fluids. Regional strike-slip fault systems may connect rhomb-shaped extensional zones or pull-apart basins. Fault off-sets or transitions from one fault to another can create local environments of extension.

The geologic evolution of Washington and the modern Pacific Northwest developed during four main episodes over the past 200 million years and can be summarized as: 1) the Omineca Episode from 195 Ma to 115 Ma; initiated when a chain of island arcs collided with the western edge of North America; 2) the Coast Range Episode, 115 Ma to 57 Ma, began when a second chain of volcanic islands collided with the western edge of North America; 3) the Challis Episode, 57 Ma to 37 Ma; marked by further convergence of large areas of the Pacific Northwest. During this time, a chain of volcanoes stretched diagonally across Washington and Idaho. At the end of this period, a large section of the ocean floor (Olympic Peninsula) was uplifted and subducted beneath the edge of the continent, extending the continental margin to its modern western extent; 4) the Cascade Episode, 37 Ma to present, began as the modern ocean plate, Juan de Fuca Plate, advanced into its present area and was subducted under the western edge of the continent, giving rise to a chain of volcanoes that still are erupting today. The Columbia River Flood Basalt Plateau was developed between 17–12 Ma, and the Cascade Range was developed between 7-5 Ma.

The area is located within a northwest-trending graben referred to as the Chiwaukum Graben as shown in Figure 4. This graben is a major non-marine wrench fault basin in central Washington and is bounded on the west by the Leavenworth Fault Zone and to the east by the Entait Fault. Pre-Tertiary crystalline rocks are exposed to the west of the Leavenworth Fault Zone and are part of the Mount Stuart Batholith and the Ingalls Tectonic Complex. East of the Entait Fault, are metamorphic rocks of the Swakane Gneiss. The southern portion of the Chiwaukum Graben is overlain by the Columbia River Basalt.

The Tertiary (early Eocene) sedimentary rocks are exposed to the southeast of the Leavenworth Fault Zone and are part of the Swauk Formation and consist of lithic to feldspathic sandstones and pebble conglomerates. To the southeast of the Leavenworth Fault



**Legend:**

- Sw *Swauk basin*
- Ch *Chiwaukum graben*
- Ck *Chuckanut basin*
- Pu *Puget Group*
- CP *Columbia Plateau*
- Kms *Mount Stewart Batholith*
- Kmp *Chelan Complex*
- Kji *Ingalls Complex*
- Kc *Chiwaukum Schist*

Figure 4.

**LOVITT RESOURCES INC.**

**"D" Reef Gold Project**

*Central Washington State, USA*

***Regional Geology***

Zone, the Swauk Formation is unconformably overlain by volcanics belonging to the Teanaway Formation. Included in this formation are basaltic, andesitic and rhyolitic tuffs, breccias and flows, and minor feldspathic sedimentary rocks. These units are overlain conformably by the Roslyn Formation, consisting of thick-bedded arkoses intercalated with coal seams and conglomerates (Ott, 1988).

The Chiwaukum Graben is in-filled with sedimentary rocks of the Eocene Chumstick Formation. Units include lower arkose member, conglomerates, shales and thin tuff beds and an upper siltstone member. This formation is unconformably overlain by the Wenatchee Formation consisting of sandstone and shale units (lower members) and a conglomerate unit (upper member). This formation reaches thicknesses up to 250 m or so (Ott, 1988).

Two distinct Tertiary igneous episodes have been recognized in the area; the first are the volcanics and hypabyssal intrusives (Eocene) that were emplaced southwest of the Chiwaukum Graben that are part of the Teanaway Formation; the second are the andesitic intrusives (Miocene) that were emplaced throughout the southern Chiwaukum Graben.

## **7.2 PROPERTY GEOLOGY**

Most of the rocks in the Wenatchee area are Eocene continental sediments. These rocks are easily eroded and weathered and therefore are not well exposed. Three distinct sedimentary series have been identified in the Wenatchee area. The oldest of these are exposed in the central portion of the district forming a northwest-trending belt of deformed feldspathic sandstones, siltstones and local conglomerates beds. These units host all known mineralization north of Squilchuck Canyon. To the east, there is a "conglomerate-feldspathic sandstone- siltstone" series. These rocks are typically less deformed than those in the central belt. The last series unconformably overlies the western flank of the first (central) series (Ott, 1988). The property geology is shown in Figure 5.

Basaltic debris and flows of the Columbia River Plateau Basalts cover much of the graben to the south and southeast.

The Eagle Creek Structure ("**ECS**"), which parallels the Entait Fault, has been interpreted as an intra-graben horst or wrench fault. The ECS passes through the "D" Reef and is thought to be the primary control on deformation (Roberts, 1990 and Bourgoyne, 1996).

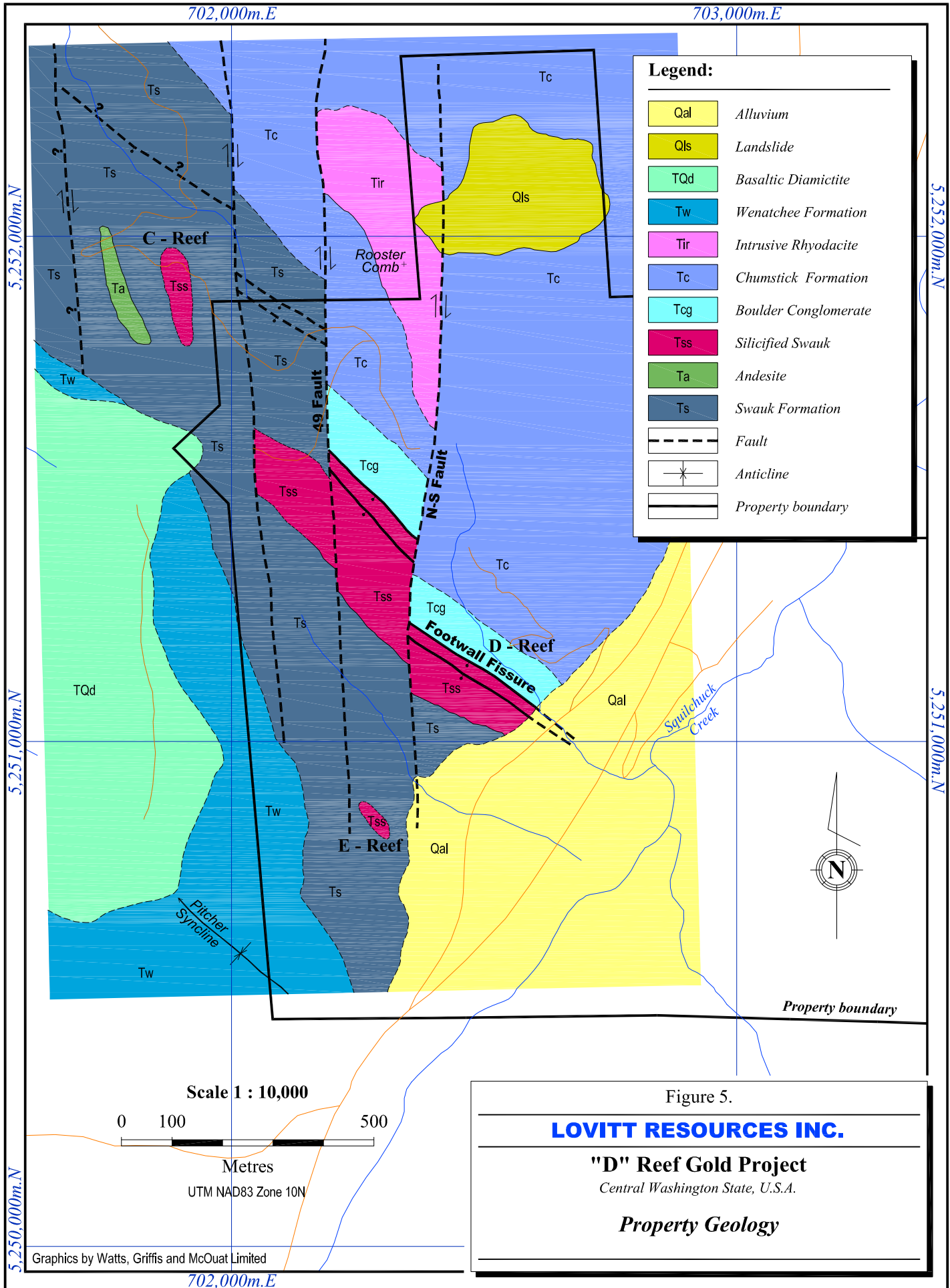


Figure 5.

**LOVITT RESOURCES INC.**

**"D" Reef Gold Project**

Central Washington State, U.S.A.

**Property Geology**

Scale 1 : 10,000



Metres

UTM NAD83 Zone 10N

The "D" Reef is located in the southern portion of the Chiwaukum Graben and has been divided into 3 "mineral resource" blocks: a southern block referred to as Block 1; a central block Block 2; and a northern block Block 3.

Block 1 was defined as that area contained by the 1150L Fault to the south and northeast, and by the N-S Fault to the north and southwest. The bedding of the silicified arkose within this block is N60W, dipping 65–75° SW. Zones of stoped high-grade ore were limited to veins filling fissures developed in silicified arkose located adjacent to and southwest of the Footwall Fissure (FWF) shear zone. The FWF shear zone was thought to be the conduit for the mineralizing fluids in Block 1.

Although Block 2 appears to be a continuation of Block 1, the sediments have a different orientation and the style of mineralization than that of Block 1. The sense of continuity is from the FWF shear zone and the sequence of mud, arkose and conglomerate between it and the 1150L Fault. The arkose sequence in this block has an N35W orientation. The bulk of the ore obtained from this block came from a 25 m wide (and approximately 60 m long) wedge of intensely fractured and brecciated rocks located between the FWF shear zone and the N-S Fault to the northeast and a parallel fault known as the clay Zone Fault to the southwest. The mineralization in Block 2 is thought to be associated with a dilatant zone that developed during the right-lateral faulting and apparent clock-wise rotation that occurred at the intersection of Blocks 1 and 2.

The silicification in Block 3 is bounded to the northeast by the FWF Fault and to the southwest by the No Name Fault. The 49 Fault which defines the southern boundary of Block 3, forms the break between Block 2 and Block 3. The arkose sequence in Block 3 has a N15E orientation. The I-49 high-grade veins within this block developed in a wedge of arkose (40 m x 30 m) located north of where the 49 Fault intersects the FWF shear zone and then continues parallel to it. The I-49 stope extends more than 100 m (vertical) within the high-grade wedge. As in Block 2, the mineralization occurs within a dilatant zone.

## 8. DEPOSIT TYPES

The "D" Reef is classed as a low sulphidation, adularia-sericite epithermal gold-silver deposit and is within the gold-selenide category of the Au-Ag epithermal deposits by W. Lindgren (in *Ore Deposits*, 1933). Other selenide-bearing Au-Ag epithermal deposits in Washington State include Knob Hill, Golden Promise and Seattle deposit in the Republic District of northeast Washington.

Epithermal gold deposits are lode gold deposits consisting of economic concentrations of Au ( $\pm$  Ag and base metals). They form in a variety of host rocks from hydrothermal fluids, primarily by replacement (i.e. by solution and reprecipitation), or by open-space filling (e.g. veins, breccias, pore spaces). The form of the deposits originating by open-space filling typically reflects that of the structural control of the hydrothermal fluids (planar vs. irregular fractures, etc). They may be of similar age as the host rocks (when volcanic) or more typically, younger than their host.

These deposits are distinguished using criteria of varying gangue and ore mineralogy, deposition by the interaction of different ore fluids with host rocks and groundwaters. They commonly are classified into one of three subtypes: high sulphidation, intermediate sulphidation, or low sulphidation, with each sub-type denoted by characteristic alteration mineral assemblages, occurrences, textures, and, in some cases, characteristic suites of associated geochemical elements (e.g. Hg, Sb, As, and Tl). Base metal (Cu, Pb, and Zn) and sulphide minerals may also occur in addition to pyrite and native Au or electrum.

Epithermal gold ( $\pm$ Cu & Ag) deposits form at shallower crustal levels than porphyry Cu-Au systems, and are distinguished primarily as either "low" or "high" sulphidation, using criteria of varying gangue and ore mineralogy, deposition by the interaction of different ore fluids with host rocks and groundwaters. Low sulphidation epithermal Au-Ag deposits are distinguished from high sulphidation deposits primarily by their differencing sulphide mineralogy (pyrite, sphalerite, galena, chalcopyrite) typically within quartz veins with local carbonate, their association with near-neutral wall rock alteration (illite clays), and are deposited from dilute hydrothermal fluids (Corbett and Leach, 1998). Many low sulphidation veins are well banded and each band represents a separate episode of hydrothermal mineral deposition. Low sulphidation deposits are divided according to mineralogy, related to the depth and environment of formation.

Low sulphidation epithermal Au-Ag deposits are distinguished primarily by their sulphide mineralogy (pyrite, sphalerite, galena, chalcopyrite) typically within quartz veins with local



carbonate, and associated near-neutral wall rock alteration (illite clays), deposited from dilute hydrothermal fluids (Corbett and Leach, 1998). Many low sulphidation veins are well banded with each band representing a separate episode of hydrothermal mineral deposition. Low sulphidation deposits are in turn further divided according to mineralogy related to the depth and environment of formation and relation to intrusion source rocks and influence precious metal grade, Ag: Au ratio, metallurgy and Au distribution.

Low sulphidation, adularia-sericite epithermal gold-silver systems comprise the rift low sulphidation style. These are dominated by gangue mineralogies deposited from meteoric water rich circulating geothermal fluids, typically formed in rift settings. Sediment-hosted replacement gold deposits are interpreted to develop from low sulphidation fluids in reactive carbonate bearing rocks ([www.aig.asn.au](http://www.aig.asn.au), Jan, 2009).

The main hydrothermal fluids which contribute towards low sulphidation vein formation have been described by Corbett and Leach (1998) as: 1) meteoric-dominated waters form shallow circulating cells and deposit clean quartz, which has not come in contact with buried intrusion sources for metals and commonly are barren; 2) magmatic-meteoric waters developed where meteoric waters circulate to deep crustal levels in contact with magmatic sources for metals; 3) magmatic-dominant waters derived from intrusion sources for metals at depth and contain the highest precious metal values associated with sulphides.

Styles of low sulphidation epithermal gold deposits are distinguished according to mineralogy and relation to intrusion source rocks and influence precious metal grade, Ag: Au ratio, metallurgy and Au distribution.

Mechanisms of gold deposition have a significant effect upon the gold grade. Boiling fluids deposit much of the gangue (adularia, quartz, pseudomorph platy calcite and local chalcedony), in epithermal veins. Other mechanisms are preferred to account for elevated gold grades ([www.corbettgeology.com](http://www.corbettgeology.com)).

Margolis (1989) noted that there were two laterally extensive (2 km and greater in strike-length) within the property area; one in the hanging wall of a post-mineralization reverse fault bounded by mudstones, and the other in the footwall of the fault, with an upper boundary of mudstone and ash-flow tuff. The absence of alteration stratigraphically above this footwall zone was inferred by Margolis to indicate that it is the stratigraphically highest mineralized aquifer in the district. It was interpreted that hydrothermal fluids migrated laterally along at least two laterally extensive aquifers which were stratigraphically stacked. The shallower footwall zone is enriched in As, Sb, and Au relative to the deeper hanging-wall zone, which is

richer in Ag, Cu, Te, and Se. This variation in element enrichment with depth is thought to be similar to patterns observed in active geothermal systems and epithermal precious metal deposits; and hence implies some degree of exchange of hydrothermal fluids between the aquifers, possibly by "leaks" in aquitards (i.e. a layer of low permeability adjacent to the aquifer, that can serve as a storage unit for groundwater although it does not yield water readily).



## 9. MINERALIZATION

Epithermal gold deposits, in many cases, are structurally controlled. The same features that served as the conduits for hydrothermal fluids may have facilitated processes leading to gold deposition (e.g. rapid cooling, boiling, fluid mixing, water-rock reaction, decompression, etc.). Gold ( $\pm$  silver) is the principal commodity of the epithermal gold deposits, occurring usually as native gold, or in electrum, a gold-silver alloy. Gold also may occur in tellurides, or as inclusions in sulphides. These deposits typically are smaller in size in comparison to the low-grade, bulk-tonnage porphyry deposits or the 'Carlin-type' deposits. However, epithermal gold deposits can reach high grades, a few to several tens of grams per tonne or greater.

In the Wenatche area, the gold mineralization is hosted by silicified sediments of the Eocene Swauk Formation (Ott, 1988), about 44 Ma old. These auriferous reefs occur in an area some 2 km long by 400 m wide, in a north-northwest trend within the Chiwaukum Graben. Eight auriferous reefs have been identified within the area; the style of gold mineralization differs between the auriferous reefs, but essentially the gold is related to steeply-dipping quartz-adularia veins, breccias with quartz-adularia matrix and silicification. The mineralization is confined mostly to a sequence of interbedded feldspathic sandstones, sandy siltstones and claystones. There are local occurrences of pebble conglomerates, tuffs and breccias. The highest grades of gold and silver mineralization are within the quartz-adularia veins which can range up to greater than a half metre. Mineralization also occurs within the hydrothermal breccias and stockworks. Lower grades occur within the pervasively silicified feldspathic sandstones and sandy siltstones. The "D" Reef has approximate dimensions of 915 m in length, 90 m wide and has tested to a depth of 315 m.

The three main styles of veins at the "D" Reef included major veins, sheeted veins and stockwork-type veins. The major veins were characterized by an "en echelon" set of laterally and vertically continuous veins up to a half metre or more in width and fairly continuous for 100 m or so both along strike and dip. Textures in the veins are open space filling including crustiform banding and coxcomb quartz; brecciation and calcite boxwork occur throughout the mine. In the northern part of the "D" Reef, the veins exhibit a similar style to those at the Cannon Mine. In the central portion of the reef, the veins strike more to the north to northwest and in the southern portion of the reef, the veins strike northeast and dip steeply northwest (Watts, Griffis and McOuat, 1988).

Ore mineralogy included native gold and silver, electrum, ruby silver (parargyrite), acanthite, as well as naumannite and aguilarite. The later two are common silver-selenide minerals and

important ore minerals. Sulphide mineralogy (in decreasing abundance includes pyrite, arsenopyrite, chalcopyrite, marcasite and spherulite) constituted less than 5% and more commonly between 2–3% (pers. comm., J. Marr, 2008). Based on mineralogic relationships, gold and silver correlate in the early stages of vein mineralization where electrum is the primary precious metal phase; and in the later stages of vein mineralization where acanthite, with subsidiary naummanite, aguilarite and native silver is the primary precious metal phase, gold and silver do not correlate (Roberts, 1990).

In sediment-hosted low-sulphidation deposits, the characteristic assemblage of gangue minerals commonly includes cinnabar, orpiment-realgar, and stibnite, plus jasperoid, quartz, dolomite, and calcite. Chalcedonic quartz veins and jasperoid are typically associated with ore, whereas calcite veins are often more common further from ore, or are paragenetically late.

Hydrothermal alteration of the host sediments is pervasive and was controlled by sediment permeability, jointing and fracturing. Alteration types include propylitization, sericitization and silicification; propylitization alteration at the "D" Reef consists of pyrite, chlorite, and illite.

Silicification is the most pervasive and intense hydrothermal alteration present. It is characterized by quartz deposition in pore spaces, replacement of matrix, overgrowths on detrital grains, veinlets, and limited replacement of detrital grains. Blocks 2 and 3 underwent the most intense silicification with the development of dense stockwork and sheeted veins. The silicification in Block 1 was variable; ranging from strong directly adjacent to the major veins to more moderate in the intervening wall rocks. Silicification is the host of all known gold mineralization.

Margolis (1989) reported that the alteration consisted of a central zone of silicification which grades symmetrically outward to argillization zone and then to a widely dispersed, district-scale propylitic zone. Alteration is stratabound within units of arkosic sandstone and conglomerate bound or capped by mudstone-rich sections. Features of the propylitic zone include the growth of pyrite within detrital biotite and the replacement of plagioclase by carbonate and epidote. The argillic assemblage includes hydrothermal kaolinite and sericite. Silicification consists of silicic hydrothermal breccias and pervasive quartz flooding closest to the argillic zone; hydrothermal K feldspar is common. Typically, a transitional subzone containing abundant quartz veins (quartz stockwork) occurs between the argillic and silicic zones. This was from a study that focused on the structure, hydrothermal alteration and mineralization south of the Cannon Mine.

Sericite alteration includes illite, sericite and mixed illite-smectite and varies from strong to weak depending upon the degree of silicification. Argillization is not common at the "D" Reef and there does not appear to be a distinct argillite halo around the silicification as developed in the Cannon Mine (Burgoyne, 1996). Common diagenetic alteration minerals include calcite formation, zeolite after plagioclase and chlorite after biotite.

In the Wenatchee area, the main structural control on the gold mineralization is the Eagle Creek Structure, a major northwest-trending wrench-fault (or possibly an intra-graben horst) within the Chiwaukum Graben. Mineralization is associated with Eocene calc-alkaline volcanics (Roberts, 1990). Local tensional fractures within this structure are the sites of vein-hosted gold mineralization.

In the "D" Reef, these tensional veins are the most important economic structures. Vein orientation varies within the mine traversing from north to south. At the north end of the mine in the northern part of "mineral resource" Block 3, the veins have a northwest strike and a moderate (35°-70°) northeast dip. In the central portion of the mine at the south end of "mineral resource" Block 2, the veins have west-northwest to northeast trends with moderate north and northwest dips. In the south end of the mine, "mineral resource" Block 1 and 2, veins have a northeast strike with dips ranging between 45° - 90° to the north.

The sheeted veins occur as narrow widths in Blocks 2 and 3; and in Block 1 as parallel and sub-parallel closely-spaced structures with orientation similar to the major veins. Stockwork veining occurs throughout the mine and is found as narrow veinlets between the major veins in Block 1 and the sheeted veins in Blocks 2 and 3. The upper 50 m or so is oxidized. The large-scale mineralized zones are bounded and sometimes transacted by strong shear zones.

## 10. EXPLORATION

The company has conducted very limited surface and underground sampling, primarily to verify previous exploration and development results. The surface sampling was undertaken in dump material at the 1550 ft and the 1430 ft Levels. The underground sampling has been confined essentially to the 1250 ft Level, which was re-opened by Asamera in 1986. Preliminary underground investigations into the 1250 ft, 1300 ft and 1400 ft Levels revealed that these levels are in a good state.

### **10.1 SURFACE SAMPLING**

#### **1450 ft Level**

The 1450 ft level also has been referred to as the 1430 ft Level. The 1450 ft Level connotation is consistent with the level numbering of the Lovitt Mine, and will be used herein for ease of comparison.

On August 11, 2008, the 1450 ft Level dump was sampled. A series of 6 test pits or trenches were developed using a backhoe along the eastern edge of the dump. The location of the trenches were referenced to the northern 1450 ft Level portal timber (47°22.97'N /120°19.13'W) at elevation of approximately 447 m (1,466 ft). Trench 1 was 18.28 m (60 ft) in length at a bearing of S75E, Trench 2 was 24.38 m (80 ft) at S80E, Trench 3 was 24.38 m (80 ft) at N85E, Trench 4 was 27.43 m (90 ft) at N73E, Trench 5 was 30.78 m (101 ft) at N65E and Trench 6 was 25.3 m (83 ft) at N61E. An additional five trenches were dug by backhoe along the 1450 level access road. The access road trenches were located approximately 6 m (20 ft) upslope from the road, along a N26E bearing and spaced at approximately 6 m (20 ft) intervals. No reference point was established for the "access road" trenches, but the first trench (# 1) is at the southwest and numbering increased towards the northeast to Trench 5 (Gill, 2008).

The material sampled represented the lower edge of the dump between 1550 and 1450 ft Levels. All trenches were sampled from surface down to a depth of 1.2 m (4 ft). A channel was cut into the side of the trenches and material collected, usually consisting of silicified meta-sediments and clays (yellow and gray in colour). Samples were taken to the storage facilities to await shipment to the laboratory. Samples were kept under lock and key until shipped by courier to the laboratory.

Samples from the 1450 ft Level dump were prefixed with "1450", while those samples from the 1450 ft Level access road were prefixed with "1450-rd", to avoid confusion between the two sample sets.

### **1550 ft Level**

On June 19, 2008 five test holes were hand dug on the 1550 ft Level dump. The northeast corner of an 8 ft x 8 ft concrete slab was used as "reference point". The test hole #5 was located approximately 22 m (75 ft) from the reference point at a bearing of N42E. The other test holes were developed at 3 m (10 ft) intervals from test hole #5 at a bearing of N48E, numbering (hole ID) decreased northward. The depth of the pits ranged between 45 cm (18 in) to 30 cm (24 in). Samples were channelled from the surface to the bottom of each hole, from the north and south faces of each hole. Samples from each hole were collected in individual plastic containers and labelled (1550-T-01 through to -05) and sent to the laboratory (ALS Chemex) via UPS courier.

The 1550 Level dump was sampled on a "25 x 25 foot" grid pattern on August 9, 2008. The grid pattern was set north-south and east-west with samples collected down to a depth of 1.2 m (4 ft). The samples were taken from pits 45 cm (1.5 ft) deep (5 samples) and 150 cm (5 ft) deep. A channel was cut into the side of each trench and a total of 23 stations were sampled. The dump material was mainly silicified meta-sediments mixed with yellowish to grayish clayey material. Samples were taken to the storage facilities under lock and key until shipment to the laboratory (ALS Chemex) could be arranged (Gill, 2008).

The results from the 1450 ft and 1550 ft Level dump samples described above are presented in Table 7 and the sample locations are shown in Figure 6 (1450 ft level dump) and Figure 7 (1550 ft level). All reference and sample locations were obtained using a hand-held GPS unit, a Garmin Colorado 400 t model. As can be seen in the surface sample location plans (Figures 6 and 7), there are location errors, but they are less than 10 m. This was considered acceptable considering the accuracy of the hand-held GPS. The reference points used for plotting purposes were the locations of the indicated sample pits; hence the reference point "7N-4E" in Figure 7 is the actual location of the sample pit "7N-4E" using a "best fit" approach.

## **10.2 UNDERGROUND SAMPLING**

### **1250 ft Level**

LRC has collected 23 underground chip samples from the 1250 ft level. The samples ranged from grab to composite chip to bulk samples. At locations referenced 21D+25'L and 21D+35'L, sampled material consisted of silicified and brecciated meta-sediments with

**TABLE 7.**  
**SURFACE DUMP SAMPLES**

| Date                      | Sample ID  | oz Au/T | g Au/t | g Ag/t |
|---------------------------|------------|---------|--------|--------|
| <b>1550 ft Level</b>      |            |         |        |        |
| <b>45 cm Pit Samples</b>  |            |         |        |        |
| 19-Jun-08                 | T-1        | 0.08    | 2.74   | 3      |
| 19-Jun-08                 | T-2        | 0.07    | 2.48   | 4      |
| 19-Jun-08                 | T-3        | 0.22    | 7.60   | 9      |
| 19-Jun-08                 | T-4        | 0.11    | 3.86   | 11     |
| 19-Jun-08                 | T-5        | 0.34    | 11.70  | 9      |
| <b>150 cm Pit Samples</b> |            |         |        |        |
| 09-Aug-08                 | 0N-0E      | 0.004   | 0.15   | 1      |
| 09-Aug-08                 | 1N-0E      | 0.018   | 0.62   | 2      |
| 09-Aug-08                 | 1N-1E      | 0.016   | 0.56   | 2      |
| 09-Aug-08                 | 2N-0E      | 0.048   | 1.66   | 3      |
| 09-Aug-08                 | 2N-1E      | 0.065   | 2.23   | 3      |
| 09-Aug-08                 | 3N-0E      | 0.015   | 0.53   | <1     |
| 09-Aug-08                 | 3N-1E      | 0.061   | 2.09   | 1      |
| 09-Aug-08                 | 3N-2E      | 0.014   | 0.47   | 2      |
| 09-Aug-08                 | 4N-0E      | 0.030   | 1.03   | 4      |
| 09-Aug-08                 | 4N-1E      | 0.055   | 1.88   | 4      |
| 09-Aug-08                 | 4N-2E      | 0.041   | 1.36   | 6      |
| 09-Aug-08                 | 4N-3E      | 0.026   | 0.88   | 3      |
| 09-Aug-08                 | 5N-0E      | 0.055   | 1.88   | 2      |
| 09-Aug-08                 | 5N-1E      | 0.067   | 2.29   | 4      |
| 09-Aug-08                 | 5N-2E      | 0.027   | 0.91   | 3      |
| 09-Aug-08                 | 5N-3E      | 0.145   | 4.97   | 6      |
| 09-Aug-08                 | 5N-4E      | 0.036   | 1.24   | 1      |
| 09-Aug-08                 | 6N-2E      | 0.006   | 0.19   | 2      |
| 09-Aug-08                 | 6N-3E      | 0.043   | 1.47   | 4      |
| 09-Aug-08                 | 6N-4E      | 0.151   | 5.17   | 12     |
| 09-Aug-08                 | 6N-5E      | 0.024   | 0.82   | 7      |
| 09-Aug-08                 | 7N-3E      | 0.014   | 0.47   | 7      |
| 09-Aug-08                 | 7N-4E      | 0.020   | 0.7    | 1      |
| <b>1430 ft Level</b>      |            |         |        |        |
|                           | 1430-1     | 0.007   | 0.23   | 1      |
|                           | 1430-2     | 0.004   | 0.14   | 1      |
|                           | 1430-3     | 0.002   | 0.07   | 2      |
|                           | 1430-4     | 0.007   | 0.22   | <1     |
|                           | 1430-5     | 0.004   | 0.13   | 1      |
|                           | 1430-6     | 0.004   | 0.13   | <1     |
|                           | 1430 LR-01 | 0.006   | 0.21   | 1      |
|                           | 1430 RD-2  | .0003   | <0.01  | 1      |
|                           | 1430 RD-3  | 0.003   | 0.11   | 1      |
|                           | 1430 RD-4  | 0.003   | 0.09   | <1     |
|                           | 1430 RD-5  | 0.015   | 0.47   | 2      |



LRC REV / LRC\_14\_Smp\_Loc.dwg (Layout: 1K\_1450\_Adit)  
 Last revision date: Monday 20 July 2009

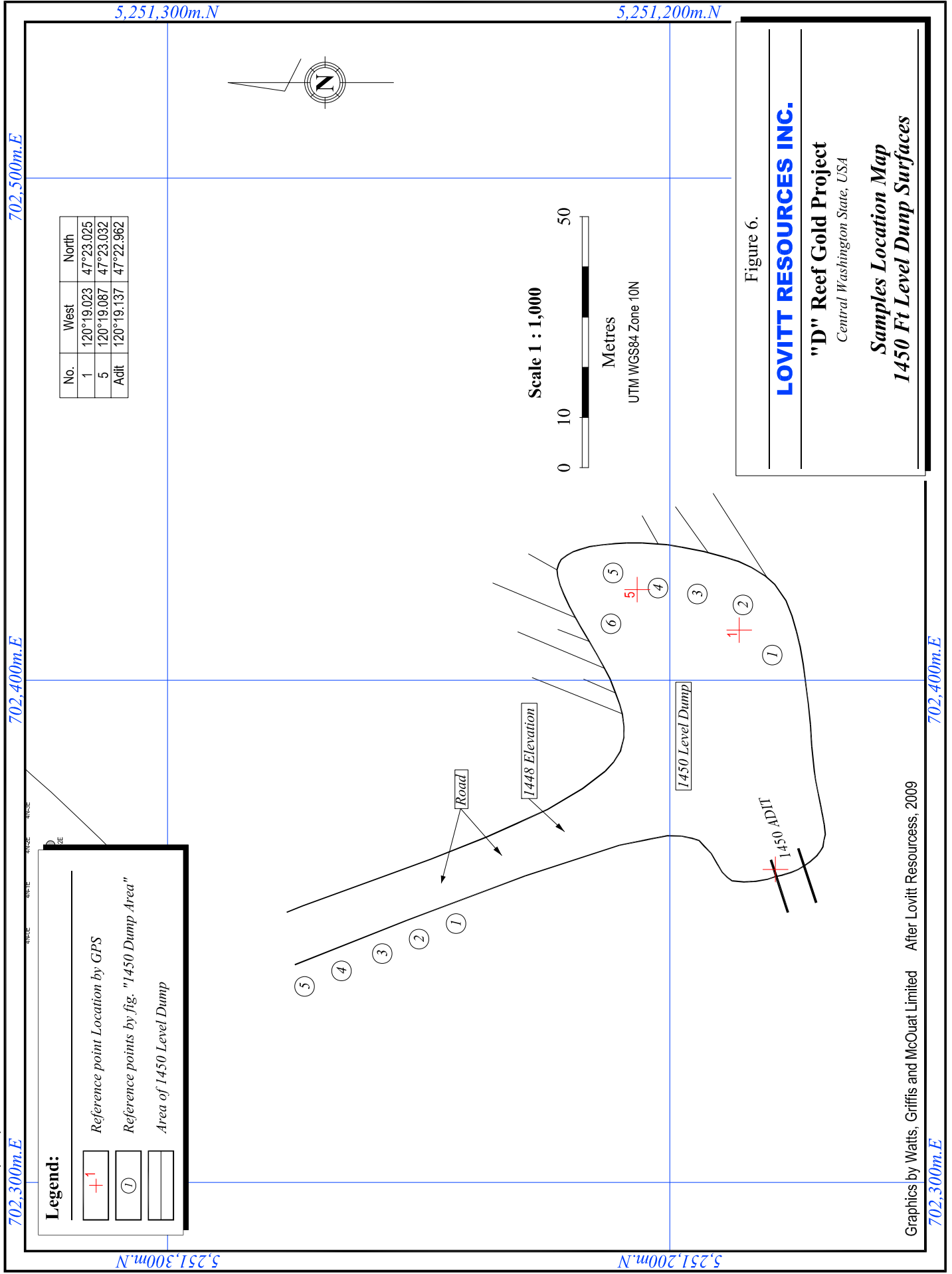


Figure 6.

**LOVITT RESOURCES INC.**  
**"D" Reef Gold Project**  
 Central Washington State, USA  
**Samples Location Map**  
**1450 Ft Level Dump Surfaces**




702,300m.E

702,300m.E

5,251,300m.N

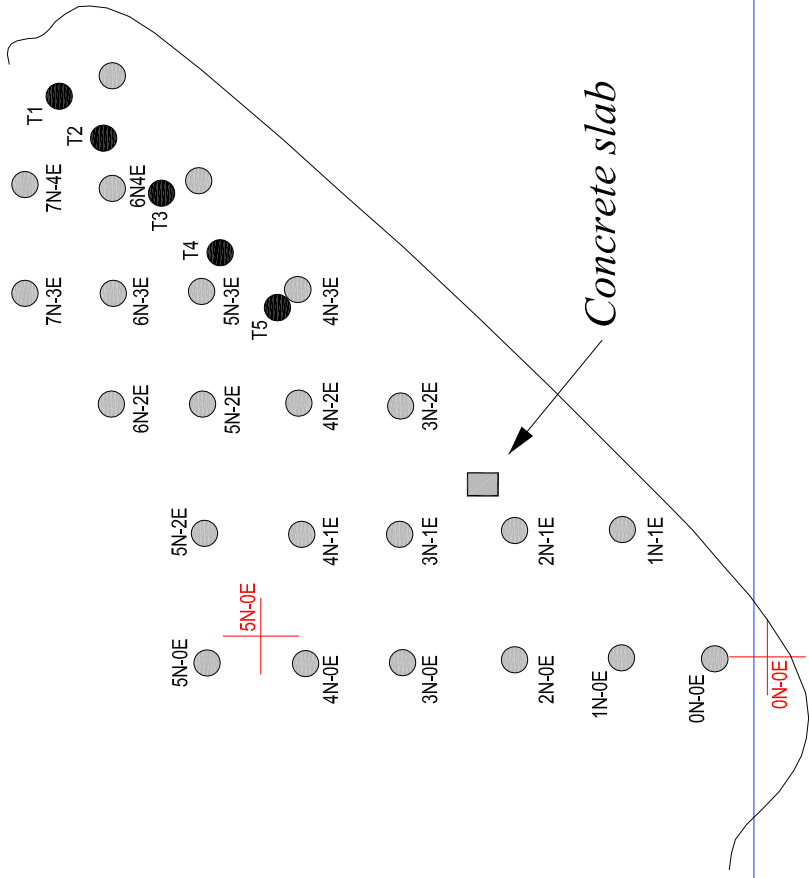
5,251,300m.N

**Legend:**

-  Reference point Location by GPS
-  Reference points by fig. "1450 Dump Area"
-  Area of 1550 Level Dump

1550 Dump Area

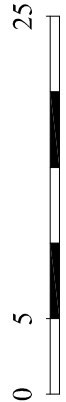
| No.   | West       | North     |
|-------|------------|-----------|
| 7N-4E | 120°19.117 | 47°23.066 |
| 5N-0E | 120°19.141 | 47°23.045 |
| 0N-0E | 120°19.143 | 47°23.027 |



Concrete slab

Figure 7.

Scale 1 : 500



Metres

UTM WGS84 Zone 10N

**LOVITT RESOURCES INC.**

**"D" Reef Gold Project**  
 Central Washington State, USA

**Samples Location Map**  
 1550 Ft Level Dump Surfaces

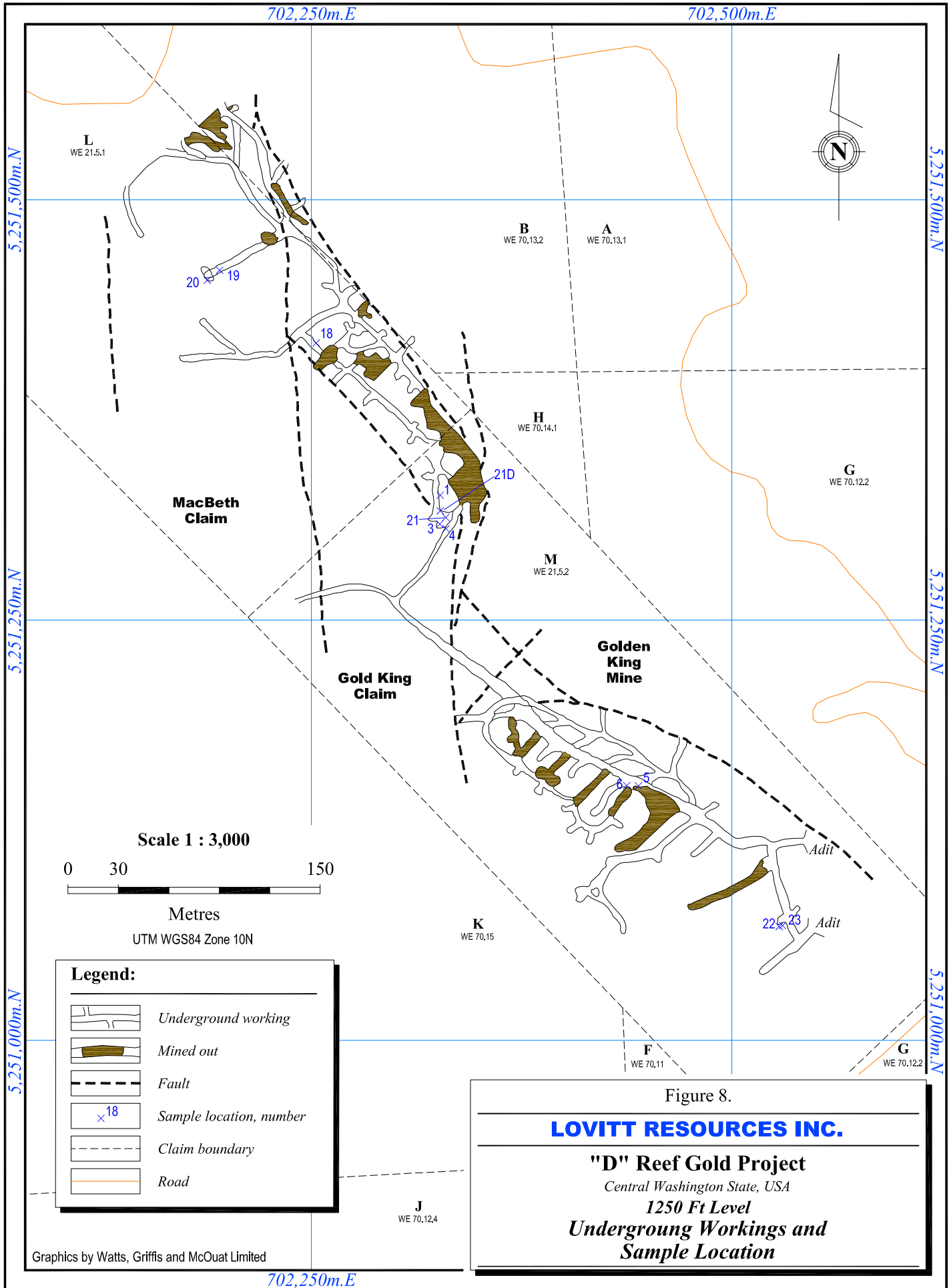
702,300m.E

numerous white quartz veins. The sample #8-14-3 (Aug 14, 3<sup>rd</sup> sample) was a channel sample over 1.5 m (5 ft) was collected in the "JP Room". It was taken from silicified meta-sediments, with numerous white quartz veins and veinlets trending N35E and dipping steeply to the NW. Another sample (#8-14-4) was collected from the "Bulkhead Left Muck Room". It was a continuous sample collected across the face. The rock was described as a "silicified and brecciated meta-sediment with criss-crossing quartz veins/veinlets" and all samples were coated with sulphate salt growths (Gill, 2008). All samples were stored in a secured facility until shipped to the laboratory by courier.

Sample descriptions and assay results are summarized in Table 8 and the sample locations are shown in Figure 8.

**TABLE 8.**  
**1250 ft LEVEL UNDERGROUND SAMPLES**

| Date      | Sample ID | oz Au/T | g Au/t | g Ag/t | Sample Description<br>All samples on 1250 level                                   |
|-----------|-----------|---------|--------|--------|---|
| 14-Aug-08 | 1         | 0.46    | 15.90  | 9      | Average grade of a 10 foot chip sample over 10 feet at Station 21D + 25 feet left |
| "         | 2         | 0.01    | 0.31   | <1     | Average grade of a 10 foot chip sample over 10 feet at Station 21D + 35 feet left |
| "         | 3         | 0.01    | 0.34   | 13     | Average grade of a 5 foot chip sample in JP room                                  |
| "         | 4         | 0.03    | 1.16   | 43     | Average grade of a 5 foot chip sample in BLM room                                 |
| 30-Aug-08 | 5         | 0.36    | 12.45  | 151    | Average grade of a 10 foot chip sample at Station 7D                              |
| "         | 6         | 0.64    | 21.8   | 33     | Average grade of a sample of material at the base of the ore chute at Stn 7M      |
| 13-Nov-08 | 7         | 0.03    | 1.13   | 1      | Rock chip samples from west rib every 2.5 feet from Station 21D                   |
| "         | 8         | 0.01    | 0.45   | 2      | 21D+2.5'  |
| "         | 9         | 0.03    | 0.88   | 2      | 21D+5.0'  |
| "         | 10        | 0.01    | 0.33   | 3      | 21D+7.5'  |
| "         | 11        | 0.01    | 0.42   | 2      | 21D+10'   |
| "         | 12        | 0.33    | 11.15  | 6      | 21D+ 12.5'  |
| "         | 13        | <0.01   | 0.15   | 1      | 21D-2.5'  |
| "         | 14        | <0.01   | 0.24   | 2      | 21D-5.0'  |
| "         | 15        | 0.01    | 0.34   | 4      | 21D-7.5'  |
| "         | 16        | 0.06    | 2.06   | 10     | 21D-10'   |
| "         | 17        | 0.01    | 0.49   | 4      | 21D-12.5'   |
| "         | 18        | 0.02    | 0.63   | 2      | Grab sample from east rib at Station 31D  |
| "         | 19        | <0.01   | 0.17   | 4      | Grab samples from right rib 5 feet from BR Room                                   |
| "         | 20        | <0.01   | 0.12   | 5      | Grab sample from BR Room  |
| 13-Jan-09 | 21        | 0.27    | 9.13   | 9.97   | 80 lb bulk sample micro-blasted from the east rib at 21D-12.5 feet                |
| 15-Jan-09 | 22        | 0.28    | 9.43   | 11     | 12 inch horizontal continuous sample from vein on drift between adits             |
| "         | 23        | 0.03    | 0.45   | 7      | 36 inch continuous sample from hanging wall side of the above vein                |



## **11. DRILLING**

The company has not conducted any drilling on the property.

## **12. SAMPLING METHOD AND APPROACH**

All sampling, both surface and underground, by the company has been conducted by or supervised by the project geologist, R Gill, a former geologist with Asamera, licensed in the State of Washington. The sampling programs are designed to identify areas that would support a small tonnage operation and/or drill targets (pers. comm., L. Brown, 2008).

### **12.1 SURFACE SAMPLING**

#### **1450 ft Level**

A series of six test pits or trenches were developed using a backhoe along the eastern edge of the dump. The location of the trenches were referenced to the northern 1450 ft Level portal timber (47° 22.97' N/120° 19.13' W) at an elevation of approximately 447 m (1466 ft).

An additional five trenches also were dug by backhoe along the 1450 ft Level access road. The access road trenches were located approximately 6 m (20 ft) upslope from the road, along a N26E bearing and spaced at approximately 6 m (20 ft) intervals. No reference point was established for the "access road" trenches, but the first trench (# 1) is at the southwest and numbering increased towards the northeast to trench 5 (Gill, 2008).

#### **1550 ft Level**

Surface sampling included the sampling of the ore/waste piles near the former portals on the 1550 ft Level. Sampling was from a series of hand-dug and mechanically dug pits (pers. comm., L. Brown, 2008).

The "45 cm" pits were hand-dug, while the deeper pits were mechanically dug using an excavator. The "45 cm" pits were oriented on a N48E trend at 3 m (10 ft) spacing. The sample material was a composite channel sample from top to bottom of the pit, collected from the north and south sides of the pits. The "150 cm" pits were developed on a North-South grid with 7.6 m (25 ft) spacing. The average sample weight was 31.2 kg (70 lb). The sample material was collected as channel samples from the top to a depth of 1.2 m (4 ft) on the northeast side of the pit (Gill, 2008).



## **12.2 UNDERGROUND SAMPLING**

Sampling included chip, channel and bulk sampling and was limited to the 1250 ft Level. Channel sampling was conducted over various intervals, including 0.3 m (1 ft), 0.9 m (3 ft), 1.5 m (5 ft) and 3 m (10 ft). Please refer to Table 8 for individual sample descriptions.

The company is attempting to substantiate previous historical results with this underground sampling program (pers. comm., L. Brown, 2008).

## 13. SAMPLE PREPARATION, ANALYSES AND SECURITY

### 13.1 SAMPLE PREPARATION AND ASSAYING

The company is using ALS Chemex in Reno, Nevada for the sample preparation and analysis. The laboratory provided the following description of sample preparation protocols.

#### **Fire Assay**

Samples were crushed to finer than 70% -2 mm, and a 250 g split was taken and pulverized to better than 85% passing 75 microns. Standard laboratory procedures were followed. ALS Chemex uses a 30 g maximum charge weight for their fire assay sub-sample. The prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required and then inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in a mixture of 0.5 ml dilute nitric acid and 0.5 ml of concentrated hydrochloric acid. The digested solution is cooled, diluted to a total volume of 10 ml with de-ionized water and analyzed by atomic absorption spectroscopy against matrix-matched standards.

#### **Exploration Geochemistry Analysis**

Samples also were submitted for an exploration suite analysis consisting of 38 elements. The analytical method used was the ICP-MS. The sample material had a lithium borate fusion prior to its dissolution in the acid mix. This fusion provides the most quantitative analysis of a wide suite of elements, and using the ICP-MS, low detection limits can be achieved.

The prepared sample (0.5 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted with de-ionized water, mixed and analyzed by induced coupled plasma-atomic emission spectrometry. Following the analysis, the results are reviewed for bismuth, mercury, molybdenum, silver and tungsten levels and diluted accordingly. Samples then are analyzed by ICP-MS for the remaining suite of elements. The analytical results are corrected for inter-element spectral interferences.

## **13.2 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)**

The company uses ALS Chemex as their primary laboratory and Inspectorate as the secondary lab. Both laboratory facilities are in Reno, Nevada. Inspectorate Laboratory is one of the few laboratories in the United States that roasts the sample prior to analysis.

Early in the program, the company, LRC, sent several samples to a small laboratory facility which utilised the roasting method. There was a large difference in the results between the "roasted" and "unroasted" methods. According to the company, the flux method used by ALS Chemex and the "roast" method used by Inspectorate were found to give comparable results.

### **13.2.1 LABORATORY**

#### **ALS Chemex**

The ALS Chemex Laboratory uses the ALS Chemex quality system, which complies with the requirements of the International Standards ISO 9001:2000 and ISO 17025:2005 and operates in all ALS Chemex laboratory sites. The custom Laboratory Information Management System has been designed using these requirements to enhance laboratory quality assurance protocols and to provide report traceability.

The laboratory's "Open Lab Initiative" web-site provides up-to-date information regarding the sample at that particular moment, as well as a complete trail in the chain of custody and records for every action carried out on the sample. Audit trails are produced and up-dated each time the sample is moved allowing for complete traceability of the sample. QC data for the sample preparation and analytical stages also can be obtained through this site.

ALS Chemex uses a batch size of 84 samples in the fire assay analysis; for each batch, one blank, two standards and three duplicates are included. In its' "Exploration Geochemistry Analysis", ALS Chemex uses a batch size of 40, with one blank, two standards and one duplicate in each laboratory batch.

#### **Inspectorate**

The Inspectorate Laboratory is accredited to relevant national and international standards (UKAS, NAMAS, STERLAB and ISO 9001 & 17025) and it has developed specific "centres of excellence" for precious metal analysis.

Inspectorate Laboratory uses a batch size of 80 samples per load in their fire assay analysis. The repeats were inserted at every 19<sup>th</sup> position and the blanks/standards at every 20<sup>th</sup>

positions, with the blanks and standards alternating. An additional blank and standard were inserted at the end of the job.

### 13.2.2 LOVITT RESOURCES INC.

#### **Surface Samples**

The company submitted the five (5) pulp samples from the 1550 ft Level dump "45 cm" pits to Inspectorate, the secondary laboratory, as a check. The results from the ALS Chemex (flux method) and Inspectorate (roast method) are presented below.

| Sample ID | Chemex |        | Inspectorate |        |
|-----------|--------|--------|--------------|--------|
|           | g Au/t | g Ag/t | g Au/t       | g Ag/t |
| T-1       | 2.74   | 3.0    | 2.12         | 2.0    |
| T-2       | 2.48   | 4.0    | 2.72         | 2.0    |
| T-3       | 7.60   | 9.0    | 5.95         | 5.0    |
| T-4       | 3.86   | 11.0   | 3.12         | 9.0    |
| T-5       | 11.70  | 9.0    | 8.36         | 9.0    |

No check samples were submitted from the 1450 ft Level dump samples.

#### **Underground Samples**

The company did not include any control samples with their samples that were sent to ALS Chemex, but rather relied upon the laboratory's "in-house" QA/QC procedures. No check samples were submitted to other laboratories from the 1250 ft level underground samples.

### 13.3 SECURITY

The samples were kept in a locked facility under the supervision of the project geologist until shipped directly by courier to the laboratory.

## 14. DATA VERIFICATION

A nine-day site visit was conducted by WGM from November 10-18, 2008. During the site visit, Mr. D. Power-Fardy reviewed reports, maps and sections held in the company's possession, visited the underground workings and surface showings and collected 10 independent verification samples. Also at this time, Mr. Power-Fardy was able to meet with a former Asamera exploration geologist, Roger Gill, who is familiar with the geology of the property and surrounding area, and with a former miner, Jim Marr Jr., who worked underground at the Lovitt Mine.

Surface verification samples were not taken, as the surface pits were filled in as per the safety regulations in the State of Washington. The underground verification samples were chosen by WGM to correspond with historic values and to include a range of "high" and "low" values, to determine how the WGM and historic results compared, though their main purpose was to determine the general character and tenor of the gold mineralization.

Verification sample WGM-LR-001 was taken from the "mucking chamber" on the 1250 ft Level about 75 m from the portal entrance in Block 1. This sample returned values of 29.7 g Au/t and 25 g Ag/t. Nellie's Room was a multi-ounce, multi-million dollar stope within Block 2. The verification sample, WGM-LR-007, returned values of 1.14 g Au/t and 88 g Ag/t. A sample, WGM-LR-010, from a major quartz vein in Block 3 returned values of 1.8 g Au/t and 2.0 g Ag/t. The WGM verification samples are summarized in Appendix 2.

WGM, having reviewed the analytical results of the company's exploration samples and our own verification samples, is of the opinion that the results are within expectations for this type of deposit.

## 15. ADJACENT PROPERTIES

### **Cannon Mine**

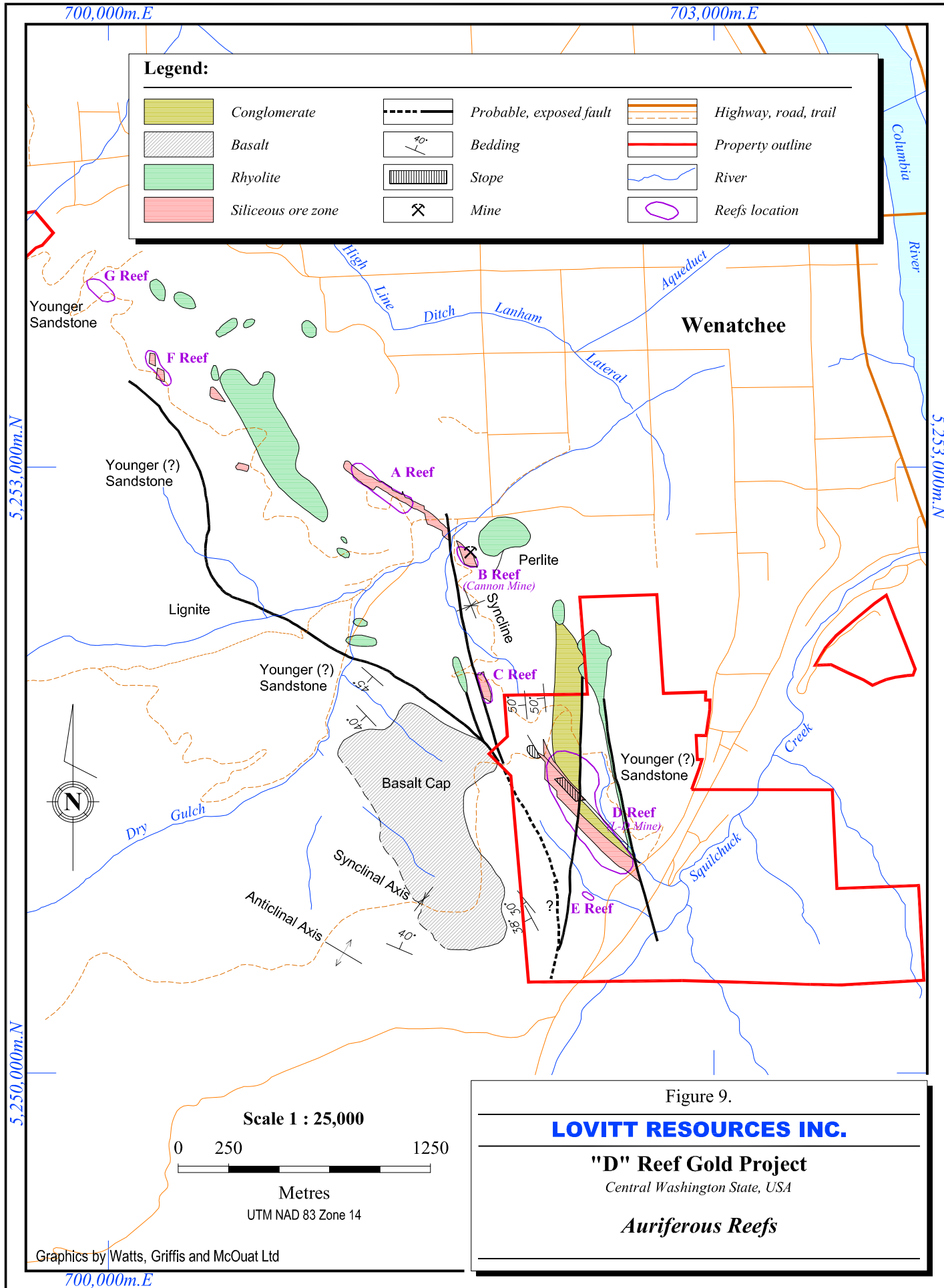
Anaconda Copper explored the area around the "B" Reef in the early 1950s. Cyprus found the "B West" Reef in the mid-1970s. In 1981, Asamera had an Option Agreement with Cyprus for the area. By 1983, exploration drilling revealed the presence of the larger, richer "B North" Reef. By late 1984, Asamera – Breakwater JV had delineated approximately 4.7 Mt averaging 7.4 g Au/t and 13.8 g Ag/t. By the mid-1985, and 1,800 t/d flotation mill was operational. Initial production came from the larger "B North" ore shoot (Ott, 1988).

The Cannon Mine consisted of three zones known as the "B", "B West" and "B North" Reefs. The deposit was classified as a low sulphidation epithermal deposit. Mineralization styles included disseminated sulphides, quartz-feldspar veins and veinlets. Gold mineralization at the Cannon Mine "B" Reef deposit occurred primarily as free gold and electrum. The ore minerals were accompanied by minor amounts of pyrite and trace amounts of arsenopyrite, marcacite and chalcopyrite. The gold was predominantly very fine grained, but occasionally visible coarse grained gold was observed within distinctly banded quartz veinlets. The auriferous mineralization was associated with the pervasively silicified host rocks and to the quartz veinlets developed within the silicified envelope ([www.geocities.com/cannon\\_mine](http://www.geocities.com/cannon_mine), November, 2008 and Ott, 1988).

The Cannon Mine was one of the top gold producers in North America, as one of the lower cost and most profitable gold mines in North America. Their operating costs were on the order of US\$150/oz gold. One of the main reasons for the low operating costs was the low electrical power costs. In its 10 years of operation, the Cannon Mine produced approximately 37,324 kg (1.2 m oz) gold (Burgoyne, 1996). Cameron (1996) reported that 4.1 Mt of ore were extracted over the mine life producing 38,854 kg gold and 64,560 kg silver. The current status is as a past producer (exhausted). Production was stopped in 1994 and the mine was sealed. Asamera completed the reclamation in 2000 (Gosselin and Dube, 2007).

### **Other Auriferous Reefs**

At least five other reefs (apart from the above-mentioned "B" Reef (Cannon Mine) have been identified within the vicinity of the "D" Reef. These are named aptly "A", "C", "E", "F" and "G" Reefs. Although each of these exposures has been prospected in varying detail, no economic mineralization has been identified yet. The relationship of the reefs and the surrounding geology is shown on Figure 9.





The "A" Reef, located on the north side of Dry Gulch, is the largest of these non-economic zones. It is located some 600 m northwest of the "B" Reef (Cannon Mine) and is approximately 380 m x 45 m in size. It differs from the other reefs in the district in that the silicification and quartz veins occur in andesite ("Saddle Rock"). In 1952, Anaconda Copper developed an exploration drift along the 1250 ft level for approximately 150 m. The andesite was found to be strongly silicified and argillized, and cut by northeast-trending quartz veins. Locally, the veins graded up to 7 g Au/t (0.2 oz Au/T). Cyprus collected a series of underground channel samples and surface trench samples. Thirty-nine (39) samples were analyzed for gold and silver by CMS and Union Assay Laboratories. The underground samples averaged 0.85 g Au/t and 16 g Ag/t (0.025 oz Au/T and 0.47 Ag/T). Muck samples from the same adit by Lovitt returned values of 1.27 g Au/t and 17.49 g Ag/t (0.037 oz Au/T and 0.51 oz Ag/T). The surface trench samples returned an average value of 1.5 g Au/t and 15.77 g Ag/t (0.044 oz Au/T and 0.46 oz Ag/T) (Schmidt, 1976). Drilling was not carried out to test the mineralization to depth.

There is a small exposure of silicified and iron-stained arkose some 380 m north of the "A" Reef. The silicified arkose appears to be bounded by a west-trending fault zone to the north. Channel sampling returned average values of 0.96 g Au/t and 17.14 g Ag/t (0.028 oz Au/T and 0.5 oz Ag/T), however some anomalous gold values were revealed, with one 3 m sample assaying 87.44 g Au/t (2.55 oz Au/T) (Schmidt, 1976).

The "C" Reef is located between the "D" and "B" Reefs, along the main mineralized trend extending from the "D" Reef to the "A" Reef. It forms a small ridge, with limited outcrop. A small exploration adit/drift was developed on the 1575 ft level. One 6 m (20 ft) interval assayed 4.46 g Au/t and 8.23 g Ag/t (0.13 oz Au/T and 0.24 oz Ag/T) (Schmidt, 1976). Geological and assay data indicated that the sedimentary rocks, though extensively silicified, are not well mineralized.

Both the "A" and "C" Reefs have been the focus of intense exploration activity including drilling by Cyprus, Asamera and Breakwater. The "C" Reef appears to be a weakly mineralized extension of the "D" Reef and could be considered as Block 4 in the "en echelon" series of the blocks.

Numerous pits and trenches have been developed around the other zones. West of the "C" Reef, there is a hornblende andesite outcrop with northeast-trending hematite-chalcedony veins. The veins contain no apparent gold mineralization.

The "E" Reef is located some 45 m west of the "D" Reef and west of the Saddle Rock andesite. The "F" and "G" Reefs, located west of the Saddle Rock andesite, are poorly exposed. Several trenches have been developed in the area of these reefs. On the west side of Saddle Rock, intensely altered arkose with jarasite and goethite staining have been exposed. These altered areas were found to be anomalous in gold, averaging 1.2 g Au/t (0.035 oz Au/T) (Schmidt, 1976).

#### *Compton's Knob*

Compton's Knob is located about a kilometre to the southeast of the "D" Reef. It was reported to contain about 17,230 t grading at 10.29 g Au/t (Burgoyne, 1996). It is under an option agreement to Kimberly Gold Mines, who also has other leases from Asamera and Mathews for other properties in the area.

## 16. MINERAL PROCESSING AND METALLURGICAL TESTING

The current property owner, LRC, has not conducted any metallurgical test work on the ore; however, previous property owners had commissioned several metallurgical tests. The results are presented below.

### **16.1 BOTTLE ROLL TESTS**

Asamera conducted metallurgical bottle roll testing on the ores from the "D" Reef in 1988 (Alexander, 1988). Cyanide bottle roll tests were performed by Kapps, Cassidy & Associates ("KCA") in June of 1988. Four drill chip samples were delivered to KCA's laboratory in Sparks, Nevada on May 10, 1988. The four samples were identified as Stn 1 & 2 oxide, Stn 3, 4, 5 sulphide, Stn 6 sulphide and Rib Chips. The samples ranged from 55 to 91 kg of -1/4 inch rock chips. Pulps from each sample were sent to three independent laboratories (Legend Metallurgical Laboratories, American Assay Laboratories and Hunter Mining Laboratories) for head fire assay determinations.

Sample preparation used in the test program was as follows: sample was air-dried, weighed and weight was recorded; four 5 kg portions were split and crushed to a minus 10 mesh and pulverized; three of the pulverized portions were submitted for fire assay, while the fourth portion was used for the bottle roll test.

The bottle roll test procedure was as follows: the 500 gram sample was placed in a 3 litre glass bottle and 1 litre of distilled water was added; it was mixed thoroughly and the pH of the slurry was checked and adjusted to between 10.0 and 10.5 using hydrated lime; 1 gram of sodium cyanide was then added and the bottle was placed on rollers; the solution was checked 2, 4, 8, 24 and 48 hours for pH, NaCN, Au, Ag and Cu; addition sodium cyanide and hydrated lime was added as required; the slurry was then filtered, washed and dried; the dried tailings were pulverized and two pulps were submitted for fire assay (Dix, 1989).

Results of the bottle roll test are summarized as follows: a) Block 1 of "D" Reef oxide ore had 64% recovery from head grade of 1.89 g Au/t; b) Block 1 "D" Reef sulphide ore had 38% recovery from head grade of 1.99 g Au/t; and c) Block 1 "D" Reef 68% oxide ore had 51% recovery from head grade of 2.64 g Au/t (Alexander, 1988).

## **16.2 CYANIDE LEACH TESTS**

Three bulk samples of ore from the "D" Reef were received at KCA's laboratory from Asamera. The samples were identified as Block 1 Oxide, Block 1 Sulphide and Block 2 Sulphide. Each bulk sample consisted of two 55-gallon drums of ore. One drum of each sample material was taken and combined into a composite and the head grade of the composite was 19.5 g Au/t. Due to the high head grade, the composite was not used for the column leach testing. The remaining drum of each sample material was treated individually and identically.

The entire sample material was screened at 3 inches and the oversize was crushed to minus 3 inches. The sample was recombined and cone and quartered twice. A  $\frac{1}{4}$  split was taken and crushed to 100% passing minus  $\frac{1}{2}$  inch. The remaining sample material was stored. A 10 kg, 20 kg, and 50 kg portion was split from the crushed ore. The rejects were stored. The 10 kg portion was used in the agitated cyanide bottle roll test. The 20 kg portion was used for fire assay determinations and the 50 kg portion was used for the cyanide column leach test.

Results of the head fire assays on the Block 1 Oxide ore indicated an average head grade of 38.57 g Au/t and no further work was conducted on the sample.

Agitated cyanide bottle roll tests were conducted on pulverized (minus 100 mesh) portion of each of the remaining sample material (Blocks 1 & 2 Sulphide). Gold recovery on Block 1 Sulphide ore was 50.0% based on a calculated head grade of 2.33 g Au/t and a recovery of 81.4% on the Block 2 Sulphide ore was returned based on a calculated head grade of 2.4 g Au/t.

The results of the column leach tests indicated a gold recovery on the Block 1 Sulphide was 53.97% after 40 days of leaching based on a calculated head grade of 2.33 g Au/t, and a recovery of 19.04% on the Block 2 Sulphide after 62 days of leaching based on a calculated head grade of 2.33 g Au/t (Kappes, Cassidy and Associates, 1989).

## **17. MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**

### **17.1 MINERAL RESOURCES**

The current property owner, LRC, has not produced a compliant Mineral Resource estimate. However several resource estimates were produced prior to the implementation of NI 43-101 standards and CIM definitions by former property owners. This information is presented in the "History" Section of this report and should not be relied upon.

Cyprus, United and Tenneco completed resource estimates in 1976, 1983 and 1984, respectively. The estimates by Cyprus and Tenneco used a 0.05 oz Au/T (1.71 g Au/t) cutoff and anticipated an open-pit operation. The estimation by United and conducted by Wright Engineering used a 0.10 oz Au/T (3.42 g Au/t) cutoff and anticipated underground mining. The estimates were superseded by estimates completed by Asamera and WGM in 1986, 1988 and 1990.

Lovitt Resources and WGM believe that the historical results provide an indication of the potential of the property and are relevant to ongoing exploration.

### **17.2 MINERAL RESERVES**

The current property owner, LRC, has not produced a compliant Mineral Reserve estimate. Former property owner Asamera in 1988 commissioned a pre-feasibility study of pit mining and heap leaching of the "D" Reef. Based on the data at that time, the project appeared to be economic (Asamera, 1988). This information is presented in the "History" section of this report and was completed prior to the implementation of NI 43-101 standards and CIM definitions and should not be relied upon.

## **18. OTHER RELEVANT DATA AND INFORMATION**

A sample from the 1550 ft Level dump was processed and taken to the HCWL Laboratory to determine its moisture content and size fraction. Dust from the pulveriser also was collected to determine sample graduation.

A "master" sample weighing approximately 364 kg (800 lb) was collected from the 1550 Level dump and was crushed to about minus 50 mesh using a lab impact mill. A 17 kg (39 lb) sample then was extracted and reduced to 0.14 kg (0.25 lb) using an "Action Mining" gravity table. The concentrate and tails were sent to the laboratory (ALS Chemex) for analysis. The concentrate returned values of 339 g Au/t and 87 g Ag/t, and the tails returned values of 1.33 g Au/t and 1.0 g Ag/t (Gill, 2008).

## 19. INTERPRETATION AND CONCLUSIONS

The "D" Reef is approximately 915 m in length by 90 m in width and 315 m thick and was divided into three resource blocks (Block 1, 2 and 3). In previous evaluations, it is important to understand that the resource estimates were based on differing cutoff grades and that the various blocks had different owners at different times. The location of the historical resource blocks is shown in Figure 10.

The most recent resource estimates (historical) based on all drillhole and underground data are: 1) the WGM 1988 "resource estimate" for the former LMC portion of Blocks 2 and 3, which was 1 Mt grading 0.19 opt gold with a cutoff grade at 0.10 opt gold; and 2) the Asamera 1990 open pit resource estimate of Block 1 and the western portion of Block 2, which was 2,291,669 tons grading 0.097 opt gold with a cutoff grade at 0.04 opt gold. This would give a total historical resource estimate of 3,291,669 tons grading 0.125 opt gold (or 2,985,543 tonnes grading 4.29 g Au/t).

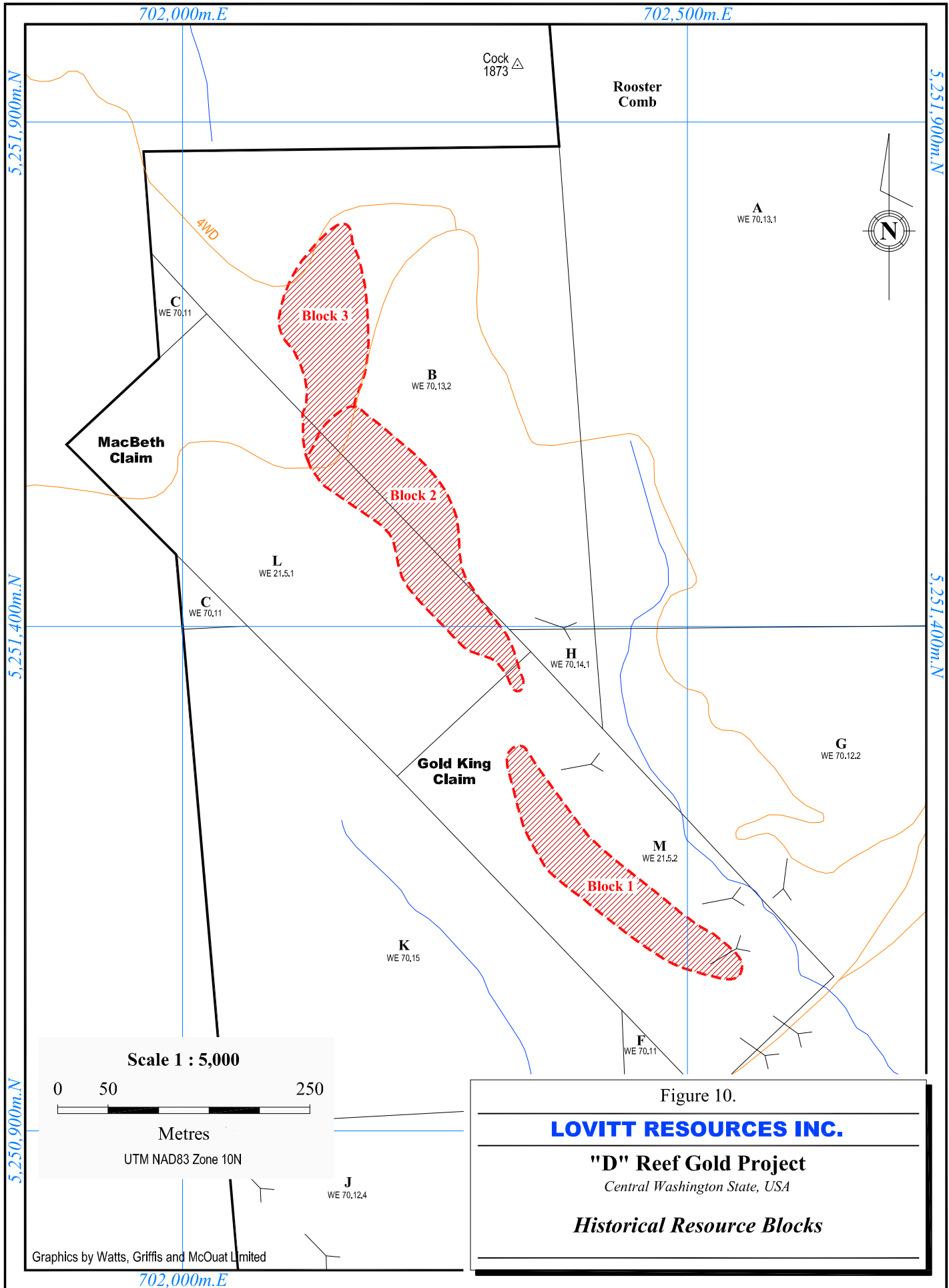
The area around the tailings is classified as wetlands and environmental concerns remain high for any development. As a result, the tailings "resource" was not included in the resource estimate. It has been reported that the State government is considering restoring the drainage system to its original condition and if its goes ahead the tailings will need to be moved (pers. comm., L. Brown, 2009). An estimate by WGM (1988) of the tailings was approximately 272,000 t (300,000 T) grading 1 g Au/t (0.035 oz Au/T).

It should be noted that the estimates were completed prior to the implementation of NI 43-101 standards and CIM definitions and should not be relied upon. LRC and WGM believe that the historical results provide an indication of the potential of the property and are relevant to ongoing exploration.

There is a need to define the limits of the mineralization and previous mining within the "D" Reef. The last significant exploration was in 1987 by Teck for LMC on the east part of Block 2 and Block 3.

Underground work in the "D" Reef will require the rehabilitation of the 1250 ft Level prior to any work being carried out. The mine was abandoned and most pipe and rail were removed. Asamera reported that initial rehabilitation would involve approximately 2,100 m of drift on the 1250 and 1450 ft Levels (Alexander, 1988). Portals, except on the 1250 ft Level, have collapsed and are covered with debris talus.





A variety of geophysical methods should be evaluated for their effectiveness in identifying the silicified horizons and mineralized zones. Silicified rock is commonly associated with resistivity "highs", i.e., silicified rock and carbonate minerals associated with the veins increase density and resistivity. Such geophysical exploration methods should include resistivity, complex resistivity (CR), controlled source audio-frequency magneto-tellurics (CSAMT), induced polarization (IP) and very low frequency electro-magnetics (VLF-EM). It should be noted that previously CSAMT has been used successfully in identifying the "high velocity" (silicified) zones.

WGM had discussions with geophysical service company Northwest Geophysical Associates, Inc., and it was decided that the two most effective geophysical methods would be IP and CSAMT surveys. The geophysical service company estimated that the IP survey would take 6 days to complete and would be the dipole-dipole arrangement, with A-spacings of 10 and 20 m and A\*N distances up to 200 m. The company proposed the use of the Sting-Swift system from Advanced Geosciences Inc. The CSAMT survey would take about 4 days to complete and consist of approximately 60 stations at 50 m intervals. The Stratigem EH-4 system would be used for the survey (pers. comm., R. French, 2009).

Geochemical gold associations will need to be determined. Common gold pathfinder elements arsenic and antimony do not correlate well with gold at the "D" Reef (Roberts, 1990). Most of the arsenic occurs as arsenopyrite within the wall rock and not with the gold mineralization. Antimony is associated with the sulphosalts which are rare. There also is no correlation between gold and selenium, as there are no selenide phases with the gold mineralization, however, sphalerite has been reported in close association with the gold. LRC has reported high values of rubidium, in both the wallrock and vein material (pers. comm., L. Brown, 2009).

Low sulphidation sub-type epithermal vein gold deposits often contain only a few percent or less of sulphides. Sulphides commonly include pyrite plus varying amounts of chalcopyrite, tetrahedrite, galena, sphalerite, and arsenopyrite. The principal gangue minerals are calcite, chlorite, adularia, barite, rhodochrosite, fluorite, and sericite. In sediment-hosted, low sulphidation gold deposits, the characteristic gangue minerals include cinnabar, orpiment-realgar, and stibnite, as well as jasperoid, quartz, dolomite, and calcite.

A two-phase exploration program is proposed, incorporating ground geophysics and geochemistry with a follow-up drilling program. The initial phase would attempt to define the extent of the gold mineralization. The second phase would investigate the favourable exploration areas identified in the "Recommendations" Section as items 1 through 5. The exploration program is discussed further in the "Recommendations" Section of this report.

There is also the need to compile the existing data, both exploration and mining, into a useable database for future programs. This will be carried out in the initial exploration phase.

## 20. RECOMMENDATIONS

WGM, in consultation with LRC, recommends the following:

### **QA/QC Procedures**

In every laboratory batch of samples, LRC should have its own set of control samples consisting of a combination of sample Duplicates, Blanks and Standards. Depending upon the tenure of the gold content, more than one Standard should be used.

Selected samples should be sent to a secondary accredited laboratory as a check on the primary laboratory on an on-going basis as part of the QA/QC program.

### **Proposed 2009 Exploration Program and Budget**

WGM has been advised by LRC that the initial exploration program should cover only the two patented claims, as there is no agreement in place at this time with the other stakeholders for the other claim areas. Therefore, the following exploration program and budget is for the two patented claims, MacBeth and Golden King.

WGM recommends that agreements be reached with the other stakeholders as this will have a direct impact on future programs.

#### *Initial Exploration Phase*

The initial exploration program would consist of geophysical and geochemical surveys with follow-up surface drilling. The survey grid would cover the entire patented claim area. The two patented claims cover an area of approximately 900 m in length by 180 m in width. A grid consisting of a 900 m baseline and 10 wing-lines of 200 m each would cover the two patented claims. The follow-up drilling would be dependent upon the results of the geophysical and geochemical surveys, however, four (4) holes at 200 m each, totalling 800 m have been budgeted.

The compilation of existing data, both exploration and mining, into a useable database for future programs is recommended. Approximately 30 days (based on an 8 hr/day) have been budgeted for this component and would be part of the initial exploration phase.

### *Second Exploration Phase*

There are several favourable areas within the patented claims that require further investigation prior to underground exploration or development, and these include the following:

- 1) The area between Mine Sections 0 and 18, as defined by the Asamera open pit pre-feasibility study between these sections, should be re-examined for possible high-grade zones. Preliminary exploration would be carried out during the initial exploration phase. Two drillholes at 200 m each have been budgeted.
- 2) A high-grade stockwork was reported in the mine records as occurring in the I-49 Zone between Sections 20 and 25 in Block 2-3 (32,000 T at 0.50 opt). This area should be further investigated as it was not re-opened or drilled off. Initial investigation would include two drillholes of at least 200 m each based on the existing data.
- 3) The area along strike south-east of Block 1 is considered to have exploration potential in that it was not fully explored. It should be noted that past drilling was in a northwest direction which is not the best orientation to intersect the north-dipping dilatant veins. As with other bonanza vein systems, care should be taken in the choice of drilling direction so as to intersect mineralized subsidiary dilatant veins at the best possible angle. Drilling should be in a south to southeast orientation for a more favourable intersection with the north-dipping dilatant veins. There is approximately 170 m of strike-length to test. Preliminary investigations would be conducted in the initial exploration phase to identify favourable drill targets and this follow-up drilling would be conducted in the second phase of exploration. Drillholes would be on the order of 250 m each. Two drill holes have been budgeted.
- 4) The extension of the major auriferous veins should be located and tested. The plan showing the surface trace of the major auriferous veins within the Golden King Claim area indicates at least 8 veins totalling some 350 m of strike-length. These traces should be examined and the depicted traces tested. Two drill holes have been budgeted at 200 m each.
- 5) Other areas of known mineralization and silicification indicated on maps and sections need to be located and tested for any extensions. Preliminary exploration would be carried out during the initial exploration phase. Two drillholes totalling 400 m have been budgeted.

The proposed exploration program and budget for both phases is summarized in Table 9.

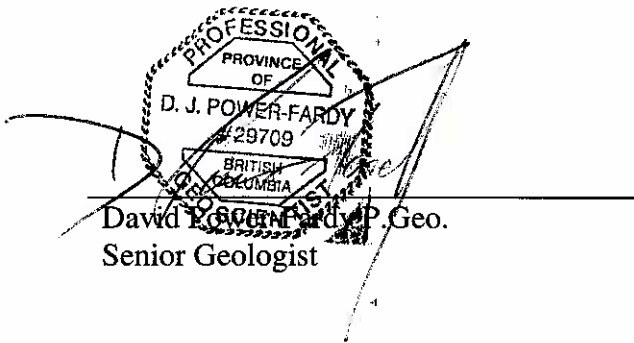
**TABLE 9.**  
**2009 PROPOSED EXPLORATION BUDGET, PHASES 1 AND 2 (C\$)**

| Program Description  | Unit                      | Cost            | Total Cost (C\$)        |
|--|---------------------------|-----------------|-------------------------|
| <b>PHASE 1</b>   |                           |                 |                         |
| <b>Geophysical Survey</b>  | 6 days - 2-man field crew |                 |                         |
| IP Survey: Mob/demob   |                           | \$2,500         |                         |
| Field costs (\$2,100/day)  |                           | \$12,600        |                         |
| Field crew support (\$400/day)   |                           | \$2,400         |                         |
| Data processing  |                           | \$2,000         |                         |
| Report preparation   |                           | <u>\$1,000</u>  | \$20,500                |
| CSAMT Survey   | 4 days - 2-man field crew |                 |                         |
| Mob/demob  |                           | \$2,800         |                         |
| Field costs (\$2,000/day)  |                           | \$8,000         |                         |
| Field crew support (\$400/day)   |                           | \$1,600         |                         |
| Data processing  |                           | \$1,500         |                         |
| Report preparation   |                           | <u>\$1,000</u>  | <u>\$14,900</u>         |
| <b>Subtotal Geophysical Survey</b>   |                           |                 | <b><u>\$35,400</u></b>  |
| <b>Geochemical Survey</b>  | 2 days                    |                 |                         |
| Field crew: Geochemist/Geologist at a rate of \$1,700/day  |                           | \$4,400         |                         |
| 2-man field crew at a rate of \$250/man-day  |                           |                 |                         |
| Support for personnel (at a rate of \$500/day)   |                           | \$1,000         |                         |
| Geochemical analysis (100 samples, including controls, at \$35/samples, includes sample prep. and storage) |                           | \$3,500         |                         |
| Interpretation and report  | 3 days at \$1,700/day     | \$5,100         |                         |
| Geochemical Survey Costs   |                           | \$14,000        |                         |
| Initial Follow-up Drilling Program   | "All-in" cost of \$200/m  |                 |                         |
| Four drillholes totalling 800 m  |                           |                 |                         |
| Drill Cost   |                           | \$160,000       |                         |
| Data Compilation   | 30 days                   |                 |                         |
| GIS specialist at \$900/day  |                           |                 |                         |
| Data Compilation Costs   |                           | <u>\$27,000</u> |                         |
| <b>Subtotal Geochemical Survey</b>   |                           |                 | <b><u>\$236,400</u></b> |
| <b>TOTAL PHASE 1</b>   |                           |                 | <b><u>\$271,800</u></b> |
| <b>PHASE 2</b>   |                           |                 |                         |
| Investigation of the "open-pit" area (two drillholes totalling 400 m)                                      | "All-in" cost of \$200/m  | \$80,000        |                         |
| Investigation of the "I-49" Zone (two drillholes at 200 m each, totalling 400 m)                           | "All-in" cost of \$200/m  | \$80,000        |                         |
| Investigation of the southeast extension of resource Block 1 (two drillholes totalling 500 m)              | "All-in" cost of \$200/m  | \$100,000       |                         |
| Investigation of major auriferous quartz veins (two drillholes totalling 400 m)                            | "All-in" cost of \$200/m  | \$80,000        |                         |
| Investigation of other known areas of mineralized and silicification (two drill holes totalling 400 m)     | "All-in" cost of \$200/m  | <u>\$80,000</u> |                         |
| <b>TOTAL PHASE 2</b>   | "All-in" cost of \$200/m  |                 | <b><u>\$420,000</u></b> |
| <b>GRAND TOTAL PHASES 1 and 2</b>  |                           |                 | <b><u>\$656,400</u></b> |

## 21. SIGNATURE PAGE

This report titled "*A Technical Review of the "D" Reef (formerly the Lovitt-Day Gold Mine) Wenatchee, Washington, USA for Lovitt Resources Inc.*" and dated July 30, 2009, was prepared and signed by the following authors:

Dated effective as of July 30, 2009.

  
David Power-Fardy, P. Geo.  
Senior Geologist



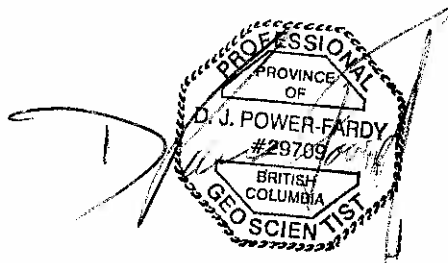
## CERTIFICATE

**To Accompany the Report Entitled "A Technical Review of the "D" Reef  
(formerly the Lovitt-Day Gold Mine) Wenatchee, Washington, USA  
for Lovitt Resources Inc." dated July 30, 2009**

I, David Power-Fardy, do hereby certify that:

1. My permanent address is 28 Tanglewood Drive, Bells Corners, Nepean, Ottawa, Ontario, Canada, K2H 6P3.
2. I graduated from Carleton University in Ottawa, Ontario Canada in 1976 with an Honours B.Sc. in Earth Sciences (Geology) and graduated from Queens University in Kingston, Ontario, Canada, in 1984 with a M.Sc. in Mineral Exploration. I have practiced my profession for more than 30 years in Canada and internationally.
3. I have more than 5 years experience in gold exploration in various capacities from field geologist, senior economic geologist and exploration manager.
4. I am a Senior Geologist with Watts, Griffis and McOuat Limited, a firm of consulting engineers and geologists, which has been authorized to practice professional engineering by Professional Engineers Ontario since 1969, and professional geoscience by the Association of Professional Geoscientists of Ontario.
5. I am a Practicing Member of the Association of Professional Geoscientists of Ontario (membership #0922) and the Association of Professional Engineers and Geoscientists of British Columbia (membership # 29709).
6. I visited the property from November 10 to 18, 2008.
7. I am independent of the Issuer, applying all of the tests in Section 1.4 of National Instrument 43-101.
8. I have no personal knowledge as of the date of this Certificate, of any material fact or change which is not reflected in this report, and I have had no prior involvement with the properties discussed in this report.
9. I am the author of this report, responsible for all sections.
10. Neither I nor any affiliated entity of mine is at present under an agreement, arrangement or understanding, or expects to become an insider, associate, affiliated entity or employee of Lovitt Resources Inc., or any associated or affiliated entities.

11. Neither I nor any affiliated entity of mine, own, directly or indirectly, nor expect to receive any interest in the properties or securities of Lovitt Resources Inc., or any associated or affiliated companies.
12. Neither I nor any affiliated entity of mine, have earned the majority of our income during the preceding three years from Lovitt Resources., or any associated or affiliated companies.
13. I have read NI 43-101 and Form 43-101F1 and have prepared the technical report in compliance with NI 43-101 and Form 43-101F1; and have prepared the report in conformity with generally accepted Canadian mining industry practice, and as of the date of the certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.



David Power-Fardy, M.Sc., P. Geo.,  
July 30, 2009

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**APPENDICES**



**APPENDIX 1:  
CURRENT CLAIMS**

**Brief Descriptions of the Claim Areas\****Block "A" (WE 70.13.1) \**

70% of the surface estate and mineral estate in and to the following described property: the east half of the Northwest quarter of Section 22, Township 22N, Range 20 East Willamette Meridian (W.M.), subject to prescribed easements for transmission power lines;

*Block "B" (WE 70.13.2)*

70% of the surface estate and mineral estate in and to the following described property: the Southwest quarter defined as Government Lot 1 of Section 22, Township 22 N, Range 20 East W.M. subject to prescribed easements for transmission power lines;

*Block "C" (WE 70.14.2)*

70 % of the surface estate and mineral estate in and to the following described property: the Patented Sam Lode mining claim in Section 22, Township 22 N, Range 20 E W.M., Patent dated June 30, 1961, recorded July 31, 1961 in Book 614 of Mining Patents, Pages 339 to 356, and designated Mineral survey No. 1306;

*Block "D" (WE 70.10)*

100% of the surface estate and 70% of the mineral estate in and to the following described property: the southwest quarter of the Northeast quarter of Section 22, Township 22 N, Range 20 E W.M., lying westerly of the county road as established in February 1945; a portion of which appears to overlap into the northwest quarter of the northeast quarter of Section 22; Note there are two parcels of land excluded (see Watts, Griffis and McOuat, 1988 and Johnson, 1988); Note the company has sold 2.5 acres;

*Block "E" (WE 70.11)*

100% of the surface estate and 100% of the mineral estate of in and to the following described property: the Southeast quarter of Section 22, Township 20 N, Range 20 E W.M., except that portion thereof conveyed to Chilean County for road purposes by deed recorded December 10, 1947, under Auditor's File 402103, subject to prescribed easements and rights-of-way; Note the company has sold the surface rights but has retained mineral rights;

*Block "F" (WE70.12.1)*

100% of the surface estate and 70% mineral estate in and to the following described property: that area in the southwest portion of the Northeast quarter to the southwest of the Patented Gold King mining claim of the southwest quarter of Section 22, Township 22 N, Range 20 E W.M.;

*Block "G" (WE 70.12.2 & WE 29)*

100% of the surface estate and 70% of the mineral estate in and to the following described property: the northeast quarter of the Southwest quarter to the northeast and east of the Patented Golden King mining claim of Section 22, Township 20 N, Range 20 E W.M.;

*Block "H" (WE 70.14.1)*

100% of the surface estate and 70% of the mineral estate in and to the following described property: the northeast portion of the northwest quarter to the northeast of the Patented Golden King mining claim of the Southwest quarter of Section 22, Township 20 N, Range 20 E W.M.;

*Block "I" (WE 70.12.3)*

100% of the surface estate and 70% of the mineral estate in and to the following described property: the southeast quarter of the Southwest quarter of Section 22, Township 20 N, Range 20 E W.M.;

*Block "J" (WE 70.12.4)*

100% of the surface estate and 70% of the mineral estate in and to the following described property: the southwest quarter of the Southwest quarter of Section 22, Township 20 N, Range 20 E W.M.;

Note that Blocks "F", "G", "I", "J" are located in Government Lots 5, 6 and 7

*Block "K" (WE 15)*

100% of the surface estate and 100% of the mineral estate in and to the following described property: the northwest quarter to the southwest of the Patented Golden King and MacBeth mining claims of the Southwest quarter of Section 22, Township 20 N, Range 20 E W.M.;

*Block "L" (WE 21.5.1)*

100% of the surface estate and 100% of the mineral estate in and to the following described property: the Patented MacBeth mining claim in Section 22, Township 20 N, Range 20 E W.M.;

*Block "M" (WE 21.5.2)*

100% of the surface estate and 100% of the mineral estate in and to the following described property: The Patented Golden King mining claim in Section 22, Township 20 N, Range 20 E W.M.;

*Block "N" (WE 70.15.1)*

100% of the surface estate and 70% of the mineral estate in and to the following described property: the southwest quarter of the Southwest of Section 23, Township 20 N, Range 20 E W.M.; Note the company has sold the surface rights but has retained mineral rights;

*Block "O" (WE 70.15.2)*

100% of the surface estate and 100% of the mineral estate in and to the following described property: Lots 1, 2, 3, and 4 in Amended Plat of Lebeck's Orchards, according to the plat thereof recorded in Volume 2 of Plats, Page 38, records of said County, which are located in Section 23, Township 22 N, Range 20 E W.M.; also that part of the north half of the Northwest quarter of Section 23, Township 22 N, Range 20 E W.M.; Note the company has sold the surface rights but has retained mineral rights;

*Block "P" (WE 70.16, formerly WE 70.16.1a & WE 70.16.3)*

100% of the surface estate and 100% of the mineral estate in and to the following described property: all that part of Section 8, Township 22 N, Range 20 E W.M. beginning at the quarter section corner on the South side of said section, subject to the prescribed easements and rights-of way; Note the company has sold the surface rights but has retained mineral rights;

**Lovitt Mining Corporation Properties**

| Section | Location        | Code | Parcel     | Original Remaining |       | Surface  | Mineral  |
|---------|-----------------|------|------------|--------------------|-------|----------|----------|
|         |                 |      |            | Acres              | Acres | Rights % | Rights % |
| 22      | E 1/2 NW 1/4    | A    | WE 70.13.1 | 95                 | 95    | 70       | 70       |
| 22      | Lot 1           | B    | WE 70.13.2 | 33                 | 33    | 70       | 70       |
| 22      | Fraction        | C    | WE 70.14.2 | 1                  | 1     | 70       | 70       |
| 22      | SW 1/4 NE 1/4   | D    | WE 70.10   | 24                 | 21.5  | 100      | 70       |
| 22      | SE 1/4 Lots 4,6 | E    | WE 70.11   | 178                | 0     | 0        | 100      |
| 22      |                 | F    | WE 70.12.1 | 1                  | 1     | 100      | 70       |
| 22      |                 | G    | WE 70.12.2 | 28                 | 25.7  | 100      | 70       |
| 22      |                 | H    | WE 70.14.1 | 1                  | 1     | 100      | 70       |
| 22      | SW 1/4 SW 1/4   | I    | WE 70.12.3 | 47                 | 5     | 100      | 70       |
| 22      | & Lot 7         | J    | WE 70.12.4 | 27                 | 27    | 100      | 70       |
| 22      | SW 1/4          | K    | WE 15      | 48                 | 48    | 100      | 100      |
| 22      | NW 1/4 SW 1/4   | L    | WE 21.5.1  | 15                 | 15    | 100      | 100      |
| 22      | SW 1/4          | M    | WE 21.5.2  | 18                 | 18    | 100      | 100      |
| 23      | SW 1/4          | N    | WE 70.15.1 | 40                 | 0     | 0        | 70       |
| 23      | NW 1/4          | O    | WE 70.15.2 | 24                 | 0     | 0        | 100      |
| 8       | S 1/2           | P    | WE 70.16   | 34                 | 0     | 0        | 70       |

If land is sold, mineral rights are retained, so mineral rights remain as stated for the original acres.

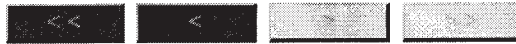
**Note:** Full claim descriptions are found in Watts, Griffis and McOuat, 1988 and Johnson, 1988; the block "letter" identifiers (A–P) are from the "Burgoyne" report (1996); the prefixed "WE" block identifiers are the Asamera land parcel numbers

Map reference: Wenatchee Quadrangle: Wenatchee, WA., 7.5 minute series (topographic), 47120-D3-TF-024, NGA 1978 IV NE-Series V891, US Geological Survey, 1987, revision US Forest Service, 2003.

**APPENDIX 2:  
CERTIFICATES OF ANALYSIS**

| Date      | Sample Location | oz per ton gold | grams per ton gold | grams per ton silver | Sample Description  |
|-----------|-----------------|-----------------|--------------------|----------------------|---|
| 14-Aug-08 | 1               | 0.46            | 15.90              | 9                    | Average grade of a 10 foot chip sample over 10 feet at Station 21D + 25 feet left |
| "         | 2               | 0.01            | 0.31               | <1                   | Average grade of a 10 foot chip sample over 10 feet at Station 21D + 35 feet left |
| "         | 3               | 0.01            | 0.34               | 13                   | Average grade of a 5 foot chip sample in JP room                                  |
| "         | 4               | 0.03            | 1.16               | 43                   | Average grade of a 5 foot chip sample in BLM room                                 |
| 30-Aug-08 | 5               | 0.36            | 12.45              | 151                  | Average grade of a 10 foot chip sample at Station 7D                              |
| "         | 6               | 0.64            | 21.8               | 33                   | Average grade of a sample of material at the base of the ore chute at Stn 7M      |
| 13-Nov-08 | 7               | 0.03            | 1.13               | 1                    | Rock chip samples from west rib every 2.5 feet from Station 21D                   |
| "         | 8               | 0.01            | 0.45               | 2                    | 21D+2.5'  |
| "         | 9               | 0.03            | 0.88               | 2                    | 21D+5.0'  |
| "         | 10              | 0.01            | 0.33               | 3                    | 21D+7.5'  |
| "         | 11              | 0.01            | 0.42               | 2                    | 21D+10'   |
| "         | 12              | 0.33            | 11.15              | 6                    | 21D+ 12.5'  |
| "         | 13              | <0.01           | 0.15               | 1                    | 21D-2.5'  |
| "         | 14              | <0.01           | 0.24               | 2                    | 21D-5.0'  |
| "         | 15              | 0.01            | 0.34               | 4                    | 21D-7.5'  |
| "         | 16              | 0.06            | 2.06               | 10                   | 21D-10'   |
| "         | 17              | 0.01            | 0.49               | 4                    | 21D-12.5'   |
| "         | 18              | 0.02            | 0.63               | 2                    | Grab sample from east rib at Station 31D  |
| "         | 19              | <0.01           | 0.17               | 4                    | Grab samples from right rib 5 feet from BR Room                                   |
| "         | 20              | <0.01           | 0.12               | 5                    | Grab sample from BR Room  |
| 13-Jan-09 | 21              | 0.27            | 9.13               | 9.97                 | 80 lb bulk sample micro-blasted from the east rib at 21D-12.5 feet                |
| 15-Jan-09 | 22              | 0.28            | 9.43               | 11                   | 12 inch continuous sample from vein on drift between adits                        |
| "         | 23              | 0.03            | 0.45               | 7                    | 36 inch continuous sample from hanging wall side of the above vein                |



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# Workorders

|                   |  |              |   |
|-------------------|--|--------------|---|
| Workorder:        | RE08119247   | Client:      | Lovitt Resources                            |
| Received Date:    | 2008-08-25   | Client Code: | LOVITT                                      |
| Project:          | Lovitt Mine  | Address:     | P.O. Box 2479                               |
| # of Samples:     | 4  |              | Wenatchee,WA                                |
| Sample Type:      | Rock   |              | 98807,USA                                   |
| CPT:              | Default CPT  |              |   |
| PO:               |  | Phone:       | +1 (509) 393-4916                           |
| Carrier:          | UPS  | Fax:         | +1 (509) 667-1970                           |
| Waybill:          | 1Z297ET0398213870  |              |   |
| # of Pieces:      | 1  | Certificate: | <input checked="" type="checkbox"/>         |
| Workorder Status: | <b>Finalized 2008-09-20</b> <a href="#">Show Storage</a> | Invoice:     | Inviced <input checked="" type="checkbox"/> |
| Instructions:     |  |              |   |

### Methods Applied to Workorder RE08119247

| Method                   | Samples Remaining               | Samples Complete | Completion, % | Approved Date |
|--------------------------|---------------------------------|------------------|---------------|---------------|
| <a href="#">WEI-21</a>   |                                 | 4                | 100%          | 2008-09-11    |
| <a href="#">SPL-21</a>   |                                 | 4                | 100%          | 2008-09-12    |
| <a href="#">PUL-31</a>   | <a href="#">Prep QC Summary</a> | 4                | 100%          | 2008-09-12    |
| <a href="#">LOG-22</a>   | <a href="#">Prep QC Summary</a> | 4                | 100%          | 2008-09-12    |
| <a href="#">CRU-31</a>   | <a href="#">Prep QC Summary</a> | 4                | 100%          | 2008-09-12    |
| <a href="#">ASY-AR01</a> |                                 | 4                | 100%          | 2008-09-18    |
| <a href="#">FA-FUS03</a> |                                 | 4                | 100%          | 2008-09-17    |
| <a href="#">Au-AA25</a>  |                                 | 4                | 100%          | 2008-09-19    |
| <a href="#">Ag-AA46</a>  |                                 | 4                | 100%          | 2008-09-20    |

### References for Workorder RE08119247

no references found



|                | <b>RE08119247</b> |                |                |
|----------------|-------------------|----------------|----------------|
| <b>Method</b>  | <u>WEI-21</u>     | <u>Au-AA25</u> | <u>Ag-AA46</u> |
| <b>Analyte</b> | <b>Recvd Wt.</b>  | <b>Au</b>      | <b>Ag</b>      |
|                | kg                | ppm            | ppm            |
|                | 0.02              | 0.01           | 1              |
| 8-14-1         | 1.61              | 15.90          | 9              |
| 8-14-2         | 2.54              | 0.31           | <1             |
| 8-14-3         | 1.43              | 0.34           | 13             |
| 8-14-4         | 3.30              | 1.16           | 43             |

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Data

Distribution

At

# Workorders

Workorder: RE08125793      Client: Lovitt Resources  
 Received Date: 2008-09-04      Client Code: LOVITT  
 Project: Lovitt Mine      Address: P.O. Box 2479  
 # of Samples: 2      Wenatchee,WA  
 Sample Type: Rock      98807,USA  
 CPT: Default CPT  
 PO:  
 Carrier: Fed Ex      Phone: +1 (509) 393-4916  
 Waybill: 9612019045809310018711      Fax: +1 (509) 667-1970  
 # of Pieces: 1      Certificate:   
 Workorder Status: **Finalized 2008-09-22** [Show Storage](#)      Invoice: Invoiced   
 Instructions:

### Methods Applied to Workorder RE08125793

| Method                   | Samples Remaining               | Samples Complete | Completion, % | Approved Date |
|--------------------------|---------------------------------|------------------|---------------|---------------|
| <a href="#">WEI-21</a>   |                                 | 2                | 100%          | 2008-09-09    |
| <a href="#">SPL-21</a>   |                                 | 2                | 100%          | 2008-09-10    |
| <a href="#">PUL-31</a>   | <a href="#">Prep QC Summary</a> | 2                | 100%          | 2008-09-10    |
| <a href="#">LOG-22</a>   | <a href="#">Prep QC Summary</a> | 2                | 100%          | 2008-09-10    |
| <a href="#">CRU-31</a>   | <a href="#">Prep QC Summary</a> | 2                | 100%          | 2008-09-10    |
| <a href="#">ASY-AR01</a> |                                 |                  | 0%            | 2008-09-21    |
| <a href="#">FA-FUS03</a> |                                 | 2                | 100%          | 2008-09-13    |
| <a href="#">Au-AA25</a>  |                                 | 2                | 100%          | 2008-09-15    |
| <a href="#">Ag-AA46</a>  |                                 | 2                | 100%          | 2008-09-22    |

### References for Workorder RE08125793

[RE08171086](#)

|         |         | RE08125793    |                |                |
|---------|---------|---------------|----------------|----------------|
| Method  |         | <u>WEI-21</u> | <u>Au-AA25</u> | <u>Ag-AA46</u> |
| Analyte |         | Recvd Wt.     | Au             | Ag             |
|         |         | kg            | ppm            | ppm            |
|         |         | 0.02          | 0.01           | 1              |
| 001     | 1250-7D | 3.32          | 12.45          | 151            |
| 002     | 1250-7M | 4.38          | 21.8           | 33             |



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Method
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**Workorder:** RE08164875

**Received Date:** 2008-11-24

**Project:** 1119LOV08

**# of Samples:** 14

**Sample Type:** Rock

**CPT:** Default CPT

**PO:** 11

**Carrier:** UPS

**Waybill:** 1Z2972ES039123962

**# of Pieces:**

**Workorder Status:** **Finalized 2008-12-09** [Show Storage](#)

**Instructions:**

**Client:** Lovitt Resources

**Client Code:** LOVITT

**Address:** P.O. Box 2479  
Wenatchee, WA  
98807, USA

**Phone:** +1 (509) 393-4916

**Fax:** +1 (509) 667-1970

**Certificate:**

**Invoice:**

**Methods Applied to Workorder RE08164875**

| Method           | Samples Remaining | Samples Complete | Completion, % | Approved Date |
|------------------|-------------------|------------------|---------------|---------------|
| <u>SPL-21</u>    | 14                | 14               | 100%          | 2008-11-29    |
| <u>LOG-22</u>    | Prep_QC Summary   | 14               | 100%          | 2008-11-29    |
| <u>PUL-31</u>    | Prep_QC Summary   | 14               | 100%          | 2008-11-29    |
| <u>WEI-21</u>    |                   | 14               | 100%          | 2008-11-25    |
| <u>PUL-QC</u>    |                   | 1                | 100%          | 2008-11-29    |
| <u>CRU-31</u>    |                   | 14               | 100%          | 2008-11-29    |
| <u>CRU-QC</u>    | Prep_QC Summary   | 1                | 100%          | 2008-11-29    |
| <u>FUS-LI01</u>  |                   |                  | 0%            | 2008-12-07    |
| <u>GEO-AR01</u>  |                   | 2                | 100%          | 2008-12-05    |
| <u>WEI-GRA05</u> |                   | 2                | 100%          | 2008-12-03    |
| <u>ASY-AR01</u>  |                   | 14               | 100%          | 2008-12-04    |
| <u>FA-FUS03</u>  |                   | 14               | 100%          | 2008-12-06    |
| <u>Au-AA25</u>   |                   | 14               | 100%          | 2008-12-07    |
| <u>ME-ICP06</u>  |                   | 2                | 100%          | 2008-12-07    |
| <u>OA-GRA05</u>  |                   | 2                | 100%          | 2008-12-05    |
| <u>ME-MS81</u>   |                   | 2                | 100%          | 2008-12-09    |
| <u>Ag-AA46</u>   |                   | 14               | 100%          | 2008-12-04    |
| <u>ME-MS42</u>   |                   | 2                | 100%          | 2008-12-08    |
| <u>S-IR08</u>    |                   | 2                | 100%          | 2008-12-09    |
| <u>C-IR07</u>    |                   | 2                | 100%          | 2008-12-09    |





Workorder: RE08164875

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| RE08164875 |              |         |         |          |          |          |          |          |          |          |          |          |          |
|------------|--------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Method     | WEI-21       | AU-AA25 | Ag-AA46 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 |
| Analyte    | Recvd Wt.    | Au      | Ag      | SiO2     | Al2O3    | Fe2O3    | CaO      | MgO      | Na2O     | K2O      | Cr2O3    |          |          |
|            | kg           | ppm     | ppm     | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        |
| 001        | D21+1        | 1.32    | 1.13    | 1        | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     |
| 002        | D21+2        | 0.60    | 0.45    | 2        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 003        | D21+3        | 0.30    | 0.88    | 2        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 004        | D21+4        | 0.74    | 0.33    | 3        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 005        | D21+5        | 1.18    | 0.42    | 2        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 006        | D21-1        | 1.56    | 11.15   | 6        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 007        | D21-2        | 1.02    | 0.15    | 1        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 008        | D21-3        | 1.34    | 0.24    | 2        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 009        | D21-4        | 2.08    | 0.34    | 4        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 010        | D21-5        | 1.10    | 2.06    | 10       | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 011        | D21-6        | 1.48    | 0.49    | 4        | *        | *        | *        | *        | *        | *        | *        | *        | *        |
| 012        | 3ID          | 1.78    | 0.63    | 2        | 87.2     | 4.81     | 0.89     | 0.22     | 0.25     | 1.68     | 0.01     | 0.06     | 0.01     |
| 013        | BR 2.5       | 2.40    | 0.17    | 4        | 81.6     | 8.23     | 1.58     | 0.17     | 0.47     | 3.51     | <0.01    | 0.30     | <0.01    |
| 014        | BullRun Grab | 3.56    | 0.12    | 5        | *        | *        | *        | *        | *        | *        | *        | *        | *        |





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**Workorder:** RE09007014  
**Received Date:** 2009-01-22  
**Project:**  
**# of Samples:** 3  
**Sample Type:** Rock  
**CPT:** Default CPT  
**PO:** 1250-2101  
**Carrier:** UPS  
**Waybill:** 1Z292570398966549  
**# of Pieces:** 1  
**Workorder Status:** **Finalized 2009-01-30** [Show Storage](#)  
**Instructions:**

**Client:** Lovitt Resources  
**Client Code:** LOVITT  
**Address:** P.O. Box 2479  
 Wenatchee, WA  
 98807, USA  
**Phone:** +1 (509) 393-4916  
**Fax:** +1 (509) 667-1970  
**Certificate:**   
**Invoice:**

| Method    | Samples Remaining | Samples Complete | Completion, % | Approved Date |
|-----------|-------------------|------------------|---------------|---------------|
| WEI-21    | 3                 | 3                | 100%          | 2009-01-24    |
| LOG-22    | Prep_QC_Summary   | 3                | 100%          | 2009-01-25    |
| SPL-21    | 3                 | 3                | 100%          | 2009-01-25    |
| PUL-31    | Prep_QC_Summary   | 3                | 100%          | 2009-01-25    |
| CRU-31    | Prep_QC_Summary   | 2                | 100%          | 2009-01-25    |
| WEI-GRA05 | 3                 | 3                | 100%          | 2009-01-29    |
| FA-FUSPG1 | 3                 | 3                | 100%          | 2009-01-28    |
| GEO-CN04  | 3                 | 3                | 100%          | 2009-01-28    |
| FUS-LI01  | 3                 | 3                | 100%          | 2009-01-28    |
| GEO-AR01  | 3                 | 3                | 100%          | 2009-01-28    |
| ME-MS42   | 3                 | 3                | 100%          | 2009-01-28    |
| PGM-ICP23 | 3                 | 3                | 100%          | 2009-01-29    |
| ME-ICP06  | 3                 | 3                | 100%          | 2009-01-30    |
| OA-GRA05  | 3                 | 3                | 100%          | 2009-01-29    |
| ME-MS81   | 3                 | 3                | 100%          | 2009-01-30    |
| Au-AA13   | 3                 | 3                | 100%          | 2009-01-28    |
| S-IR08    | 3                 | 3                | 100%          | 2009-01-30    |
| C-IR07    | 3                 | 3                | 100%          | 2009-01-30    |
| TOT-ICP06 | 3                 | 3                | 100%          | 2009-01-30    |



# WORKORDERS

**Workorder:** RE09007014  
**Received Date:** 2009-01-22  
**Project:**  
**# of Samples:** 3  
**Sample Type:** Rock  
**CPT:** Default CPT  
**PO:** 1250-2101  
**Carrier:** UPS  
**Waybill:** 1Z292570398966549  
**# of Pieces:** 1  
**Workorder Status:** **Finalized 2009-01-30** [Show Storage](#)  
**Instructions:**

**Client:** Lovitt Resources  
**Client Code:** LOVITT  
**Address:** P.O. Box 2479  
 Wenatchee, WA  
 98807, USA  
**Phone:** +1 (509) 393-4916  
**Fax:** +1 (509) 667-1970  
**Certificate:**   
**Invoice:**

| Method    | Samples Remaining | Samples Complete | Completion, % | Approved Date |
|-----------|-------------------|------------------|---------------|---------------|
| WEI-21    | 3                 | 3                | 100%          | 2009-01-24    |
| LOG-22    | Prep QC Summary   | 3                | 100%          | 2009-01-25    |
| SPL-21    | 3                 | 3                | 100%          | 2009-01-25    |
| PUL-31    | Prep QC Summary   | 3                | 100%          | 2009-01-25    |
| CRU-31    | Prep QC Summary   | 2                | 100%          | 2009-01-25    |
| WEI-GRA05 | 3                 | 3                | 100%          | 2009-01-29    |
| FA-FUSPG1 | 3                 | 3                | 100%          | 2009-01-28    |
| GEO-CN04  | 3                 | 3                | 100%          | 2009-01-28    |
| FUS-LI01  | 3                 | 3                | 100%          | 2009-01-28    |
| GEO-AR01  | 3                 | 3                | 100%          | 2009-01-28    |
| ME-MS42   | 3                 | 3                | 100%          | 2009-01-28    |
| PGM-ICP23 | 3                 | 3                | 100%          | 2009-01-29    |
| ME-ICP06  | 3                 | 3                | 100%          | 2009-01-30    |
| OA-GRA05  | 3                 | 3                | 100%          | 2009-01-29    |
| ME-MS81   | 3                 | 3                | 100%          | 2009-01-30    |
| Au-AA13   | 3                 | 3                | 100%          | 2009-01-28    |
| S-IR08    | 3                 | 3                | 100%          | 2009-01-30    |
| C-IR07    | 3                 | 3                | 100%          | 2009-01-30    |
| TOT-ICP06 | 3                 | 3                | 100%          | 2009-01-30    |



REF09003309

| Method     | WEI-21    | AU-AA26 | Ag-AA46 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 |
|------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Analyte    | Recvd Wt. | Au      | Ag      | Ag      | Ba      | Ce      | Co      | Cr      | Cs      | Cu      | Dy      |         |
|            | kg        | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     |         |
| 001        | 0.02      | 0.01    | 1       | 1       | 0.5     | 0.5     | 0.5     | 10      | 0.01    | 5       | 0.05    |         |
| 11509-00V  | 6.40      | 9.43    | 11      | 8       | 90.2    | 22.0    | 0.5     | 10      | 1.82    | 7       | 0.63    |         |
| 002        | 6.02      | 0.45    | 7       | 4       | 741     | 38.9    | 1.8     | 20      | 6.64    | 33      | 1.21    |         |
| Jms Vein-1 | 2.12      | 0.07    | 1       | 1       | 1135    | 41.1    | 3.8     | 10      | 4.66    | 10      | 1.69    |         |



# WORKORDERS

**Workorder:** RE09003309  
**Received Date:** 2009-01-24  
**Project:** 1250WGM  
**# of Samples:** 3  
**Sample Type:** Rock  
**CPT:** Default CPT  
**PO:**  
**Carrier:** UPS  
**Waybill:** 1ZT62Y200391259790  
**# of Pieces:**  
**Workorder Status:** **Finalized 2009-02-01** [Show Storage](#)  
**Instructions:**

**Client:** Lovitt Resources  
**Client Code:** LOVITT  
**Address:** P.O. Box 2479  
 Wenatchee, WA  
 98807, USA  
**Phone:** +1 (509) 393-4916  
**Fax:** +1 (509) 667-1970  
**Certificate:**   
**Invoice:**

| Method          | Samples Remaining | Samples Complete | Completion, % | Approved Date |
|-----------------|-------------------|------------------|---------------|---------------|
| <u>PUL-31</u>   | Prep QC Summary   | 3                | 100%          | 2009-01-25    |
| <u>SPL-21</u>   |                   | 3                | 100%          | 2009-01-25    |
| <u>WEI-21</u>   |                   | 3                | 100%          | 2009-01-24    |
| <u>LOG-22</u>   | Prep QC Summary   | 3                | 100%          | 2009-01-25    |
| <u>CRU-31</u>   | Prep QC Summary   | 3                | 100%          | 2009-01-25    |
| <u>FUS-LI01</u> |                   | 3                | 100%          | 2009-01-31    |
| <u>FA-FUS04</u> |                   | 3                | 100%          | 2009-01-29    |
| <u>ASY-AR01</u> |                   | 3                | 100%          | 2009-01-29    |
| <u>ME-MS81</u>  |                   | 3                | 100%          | 2009-01-31    |
| <u>Ag-AA46</u>  |                   | 3                | 100%          | 2009-01-30    |
| <u>Au-AA26</u>  |                   | 3                | 100%          | 2009-01-29    |

References for Workorder RE09003309

no references found



# Workorders

|                   |  |              |  |
|-------------------|--|--------------|--|
| Workorder:        | RE08122480   | Client:      | Lovitt Resources                             |
| Received Date:    | 2008-09-11   | Client Code: | LOVITT                                       |
| Project:          | Lovitt Mine  | Address:     | P.O. Box 2479                                |
| # of Samples:     | 37   |              | Wenatchee,WA                                 |
| Sample Type:      | Rock   |              | 98807,USA                                    |
| CPT:              | Default CPT  |              |  |
| PO:               |  | Phone:       | +1 (509) 393-4916                            |
| Carrier:          | VIA LTL  | Fax:         | +1 (509) 667-1970                            |
| Waybill:          |  |              |  |
| # of Pieces:      |  | Certificate: | <input checked="" type="checkbox"/>          |
| Workorder Status: | <b>Finalized 2008-10-08</b> <a href="#">Show Storage</a> | Invoice:     | Invoiced <input checked="" type="checkbox"/> |
| Instructions:     |  |              |  |

### Methods Applied to Workorder RE08122480

| Method                    | Samples Remaining               | Samples Complete | Completion, % | Approved Da |
|---------------------------|---------------------------------|------------------|---------------|-------------|
| <a href="#">WEI-21</a>    |                                 | 37               | 100%          | 2008-09-12  |
| <a href="#">HOM-01</a>    |                                 | 34               | 100%          | 2008-09-17  |
| <a href="#">CRU-31</a>    | <a href="#">Prep QC Summary</a> | 34               | 100%          | 2008-09-17  |
| <a href="#">LOG-22</a>    | <a href="#">Prep QC Summary</a> | 34               | 100%          | 2008-09-17  |
| <a href="#">SPL-21</a>    |                                 | 34               | 100%          | 2008-09-17  |
| <a href="#">CRU-QC</a>    |                                 | 6                | 100%          | 2008-09-16  |
| <a href="#">PUL-36</a>    | <a href="#">Prep QC Summary</a> | 34               | 100%          | 2008-09-17  |
| <a href="#">PUL-QC</a>    |                                 | 7                | 100%          | 2008-09-17  |
| <a href="#">TRA-21</a>    |                                 | 34               | 100%          | 2008-09-17  |
| <a href="#">PUL-32</a>    | <a href="#">Prep QC Summary</a> | 34               | 100%          | 2008-09-17  |
| <a href="#">ASY-4A01</a>  |                                 | 34               | 100%          | 2008-09-23  |
| <a href="#">WEI-GRA05</a> |                                 | 1                | 100%          | 2008-09-22  |
| <a href="#">GEO-CN06</a>  |                                 | 34               | 100%          | 2008-10-07  |
| <a href="#">GEO-AR01</a>  |                                 | 1                | 100%          | 2008-09-23  |
| <a href="#">FUS-LI01</a>  |                                 | 1                | 100%          | 2008-09-30  |
| <a href="#">Au-AA15</a>   |                                 | 34               | 100%          | 2008-10-08  |
| <a href="#">ME-MS81</a>   |                                 | 1                | 100%          | 2008-09-26  |
| <a href="#">ME-OG62</a>   |                                 | 34               | 100%          | 2008-09-24  |
| <a href="#">OA-GRA05</a>  |                                 | 1                | 100%          | 2008-09-23  |
| <a href="#">ME-ICP06</a>  |                                 | 1                | 100%          | 2008-10-01  |
| <a href="#">ME-MS42</a>   |                                 | 1                | 100%          | 2008-09-26  |
| <a href="#">S-IR08</a>    |                                 | 1                | 100%          | 2008-09-25  |
| <a href="#">C-IR07</a>    |                                 | 1                | 100%          | 2008-09-25  |
| <a href="#">TOT-ICP06</a> |                                 | 1                | 100%          | 2008-10-01  |
| <a href="#">Ag-OG62</a>   |                                 | 34               | 100%          | 2008-09-24  |

### References for Workorder RE08122480

[RE08161320](#)





**ALS Chemex**  
**EXCELLENCE IN ANALYTICAL CHEMISTRY**  
 ALS USA Inc.

994 Glendale Avenue, Unit 3  
 Sparks NV 89431-5730  
 Phone: 775 356 5395 Fax: 775 355 0179 www.alschemex.com

To: LOVITT RESOURCES  
 P.O. BOX 2479  
 WENATCHEE WA 98807

Page: 1  
 Finalized Date: 22-SEP-2008  
 Account: LOVITT

|   |            |
|---|------------|
| <b>CERTIFICATE RE08122935</b>   |            |
| Project: Lovitt Mine  |            |
| P.O. No.:   |            |
| This report is for 2 Concentrate samples submitted to our lab in Reno, NV, USA on 2-SEP-2008. |            |
| The following have access to data associated with this certificate:                           |            |
| LORNE BROWN   | ROGER GILL |

| SAMPLE PREPARATION |                                |
|--------------------|--------------------------------|
| ALS CODE           | DESCRIPTION                    |
| WEI-21             | Received Sample Weight         |
| LOG-22             | Sample login - Rcd w/o BarCode |
| PUL-31             | Pulverize split to 85% <75 um  |
| SPL-21             | Split sample - riffle splitter |

| ANALYTICAL PROCEDURES |                               |            |
|-----------------------|-------------------------------|------------|
| ALS CODE              | DESCRIPTION                   | INSTRUMENT |
| Au-AA25               | Ore Grade Au 30g FA AA finish | AAS        |
| Au-GRA21              | Au 30g FA-GRAV finish         | WST-SIM    |
| Ag-AA46               | Ore grade Ag - aqua regia/AA  | AAS        |

The results of this assay were obtained using the standard procedure. Any deviation to invest should be made only after the potential financial value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by investor and based on an evaluation of all engineering data which is available concerning any proposed project.

To: LOVITT RESOURCES  
 ATTN: LORNE BROWN  
 P.O. BOX 2479  
 WENATCHEE WA 98807

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

**Signature:**



Colin Ramshaw, Vancouver Laboratory Manager

**ALS Chemex**  
**EXCELLENCE IN ANALYTICAL CHEMISTRY**

ALS USA Inc.  
 994 Glendale Avenue, Unit 3  
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To: LOVITT RESOURCES  
 P.O. BOX 2479  
 WENATCHEE WA 98807

Page: 2 - A  
 Total # Pages: 2 (A)  
 Finalized Date: 22-SEP-2008  
 Account: LOVITT

Project: Lovitt Mine ✓

**CERTIFICATE OF ANALYSIS RE08122935**

| Method Analyte Units LOR | WEI-21<br>Receiv. Wt.<br>kg | AU-AA25<br>Au<br>ppm | AU-GRA21<br>Au<br>ppm | AG-AA46<br>Ag<br>ppm |
|--------------------------|-----------------------------|----------------------|-----------------------|----------------------|
| Sample Description       | 0.14                        | >100                 | 339                   | 87                   |
| 1550 Ore                 | 1.00                        | 1.33                 |                       | 1                    |

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# Workorders

Workorder: RE09033026  
 Received Date: 2009-04-03  
 Project: LR 093103  
 # of Samples: 6  
 Sample Type: Rock  
 CPT: Default CPT  
 PO:  
 Carrier: UPS  
 Waybill: 1ZZ972ETO399671598  
 # of Pieces:  
 Workorder Status: **Finalized 2009-04-13** [Show Storage](#)  
 Instructions:

Client: Lovitt Resources  
 Client Code: LOVITT  
 Address: P.O. Box 2479  
 Wenatchee,WA  
 98807,USA  
 Phone: +1 (509) 393-4916  
 Fax: +1 (509) 667-1970  
 Certificate:   
 Invoice: Invoiced

### Methods Applied to Workorder RE09033026

| Method                   | Samples Remaining               | Samples Complete | Completion, % | Approved Date |
|--------------------------|---------------------------------|------------------|---------------|---------------|
| <a href="#">WEI-21</a>   |                                 | 6                | 100%          | 2009-04-06    |
| <a href="#">SPL-21</a>   |                                 | 6                | 100%          | 2009-04-07    |
| <a href="#">PUL-31</a>   | <a href="#">Prep QC Summary</a> | 6                | 100%          | 2009-04-07    |
| <a href="#">LOG-22</a>   | <a href="#">Prep QC Summary</a> | 6                | 100%          | 2009-04-07    |
| <a href="#">CRU-31</a>   | <a href="#">Prep QC Summary</a> | 6                | 100%          | 2009-04-07    |
| <a href="#">FA-FUS04</a> |                                 | 1                | 100%          | 2009-04-10    |
| <a href="#">ASY-AR01</a> |                                 | 6                | 100%          | 2009-04-10    |
| <a href="#">Ag-AA46</a>  |                                 | 6                | 100%          | 2009-04-11    |
| <a href="#">Au-AA26</a>  |                                 | 6                | 100%          | 2009-04-10    |

### References for Workorder RE09033026

no references found

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Workorder: RE09033026

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RE09033026

|     | Method      | <a href="#">WEI-21</a> | <a href="#">Au-AA26</a> | <a href="#">Ag-AA46</a> |
|-----|-------------|------------------------|-------------------------|-------------------------|
|     | Analyte     | Recvd Wt.              | Au                      | Ag                      |
|     |             | kg                     | ppm                     | ppm                     |
|     |             | 0.02                   | 0.01                    | 1                       |
| 001 | 32809MCBS-1 | 2.75                   | 0.91                    | 2                       |
| 002 | 32809MCBS-2 | 2.70                   | 2.87                    | 10                      |
| 003 | 32809BS-1   | 3.71                   | 15.50                   | 15                      |
| 004 | 32809BS-2   | 6.57                   | 28.4                    | 106                     |
| 005 | 32809BS-3   | 3.61                   | 9.41                    | 6                       |
| 006 | 32809BS-4   | 3.33                   | 14.75                   | 9                       |



RE08161320

|         | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 | ME-ICP06 |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Method  | SiO2     | Al2O3    | Fe2O3    | CaO      | MgO      | Na2O     | K2O      | Cr2O3    | TiO2     | MnO      | P2O5     |          |          |
| Analyte | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        |          |          |
| 008     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     | 0.01     |          |          |
| 3N- 2E  | 68.2     | 14.80    | 2.66     | 1.05     | 0.56     | 0.94     | 2.95     | <0.01    | 0.45     | 0.01     | 0.04     |          |          |
| 012     | 70.1     | 13.65    | 2.57     | 1.08     | 0.56     | 1.77     | 3.42     | <0.01    | 0.40     | 0.02     | 0.07     |          |          |
| 015     | 70.5     | 12.55    | 3.25     | 1.06     | 0.52     | 1.51     | 3.59     | <0.01    | 0.37     | 0.01     | 0.04     |          |          |
| 021     | 72.8     | 11.05    | 2.59     | 1.56     | 0.73     | 1.98     | 3.68     | 0.01     | 0.33     | 0.04     | 0.10     |          |          |
| 026     | 75.7     | 11.95    | 1.87     | 0.14     | 0.22     | 2.72     | 3.48     | <0.01    | 0.37     | 0.01     | 0.02     |          |          |

|         |          | RE08161320 |        |        |         |         |         |         |         |         |         |         |
|---------|----------|------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Method  | ME-ICP06 | ME-ICP06   | C-IR07 | S-IR08 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 | ME-MS81 |
| Analyte | SrO      | BaO        | C      | S      | Ag      | Ba      | Ce      | Co      | Cr      | Cs      | Cu      | Dy      |
|         | %        | %          | %      | %      | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     | ppm     |
| 008     | 0.01     | 0.01       | 0.01   | 0.01   | 1       | 0.5     | 0.5     | 0.5     | 10      | 0.01    | 5       | 0.05    |
| 012     | 0.02     | 0.10       | 0.17   | 0.80   | 2       | 868     | 54.4    | 1.9     | 20      | 18.25   | 12      | 1.93    |
| 015     | 0.03     | 0.09       | 0.17   | 0.74   | 2       | 756     | 43.8    | 2.6     | 30      | 11.60   | 100     | 1.60    |
| 021     | 0.03     | 0.08       | 0.17   | 1.00   | 2       | 679     | 38.2    | 2.3     | 20      | 6.72    | 32      | 1.15    |
| 026     | 0.04     | 0.08       | 0.21   | 0.89   | 1       | 631     | 32.6    | 5.9     | 40      | 3.78    | 34      | 1.46    |
| 1430- 3 | 0.05     | 0.10       | 0.11   | 0.27   | 1       | 813     | 42.7    | 0.6     | 30      | 5.51    | 11      | 1.09    |

|         |         | RE08161320              |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |
|---------|---------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Method  |         | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> |
| Analyte |         | Er                      | Eu                      | Ga                      | Gd                      | Hf                      | Ho                      | La                      | Lu                      | Mo                      | Nb                      | Nd                      | Ni                      |
|         |         | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     |
| 008     | 3N- 2E  | 0.03                    | 0.03                    | 0.1                     | 0.05                    | 0.2                     | 0.01                    | 0.5                     | 0.01                    | 2                       | 0.2                     | 0.1                     | 5                       |
| 012     | 4N- 3E  | 1.13                    | 0.78                    | 20.5                    | 3.14                    | 4.5                     | 0.35                    | 28.8                    | 0.15                    | <2                      | 9.8                     | 22.5                    | 6                       |
| 015     | 5N- 2E  | 0.88                    | 0.67                    | 18.9                    | 2.57                    | 4.0                     | 0.30                    | 23.1                    | 0.13                    | <2                      | 8.7                     | 18.5                    | 7                       |
| 021     | 6N- 5E  | 0.66                    | 0.54                    | 16.0                    | 2.02                    | 3.3                     | 0.21                    | 20.6                    | 0.08                    | <2                      | 7.5                     | 15.4                    | 8                       |
| 026     | 1430- 3 | 0.77                    | 0.72                    | 13.5                    | 2.33                    | 2.7                     | 0.26                    | 16.8                    | 0.10                    | 2                       | 5.4                     | 15.0                    | 9                       |
|         |         | 0.61                    | 0.60                    | 15.3                    | 2.11                    | 3.6                     | 0.19                    | 23.9                    | 0.08                    | <2                      | 6.8                     | 16.0                    | 5                       |

|         |         | RE08161320              |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |          |
|---------|---------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------|
| Method  |         | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> |          |
| Analyte |         | <b>Pb</b>               | <b>Pr</b>               | <b>Rb</b>               | <b>Sm</b>               | <b>Sn</b>               | <b>Sr</b>               | <b>Ta</b>               | <b>Tb</b>               | <b>Th</b>               | <b>Tl</b>               | <b>Tm</b>               | <b>U</b> |
|         |         | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm      |
| 008     | 3N- 2E  | 5                       | 0.03                    | 0.2                     | 0.03                    | 1                       | 0.1                     | 0.1                     | 0.01                    | 0.05                    | 0.5                     | 0.01                    | 0.05     |
| 012     | 4N- 3E  | 13                      | 6.15                    | 135.5                   | 3.60                    | 2                       | 172.5                   | 0.8                     | 0.39                    | 5.25                    | <0.5                    | 0.16                    | 1.68     |
| 015     | 5N- 2E  | 9                       | 5.07                    | 159.0                   | 3.01                    | 1                       | 239                     | 0.7                     | 0.33                    | 4.20                    | <0.5                    | 0.12                    | 1.51     |
| 021     | 6N- 5E  | 12                      | 4.22                    | 177.5                   | 2.37                    | 12                      | 241                     | 0.6                     | 0.23                    | 3.79                    | <0.5                    | 0.09                    | 1.25     |
| 026     | 1430- 3 | 10                      | 3.85                    | 151.0                   | 2.62                    | 1                       | 305                     | 0.4                     | 0.29                    | 2.75                    | 0.5                     | 0.11                    | 1.02     |
|         |         | 10                      | 4.57                    | 141.5                   | 2.46                    | 1                       | 430                     | 0.6                     | 0.23                    | 3.25                    | <0.5                    | 0.08                    | 1.29     |

|         |         | RE08161320              |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |                         |
|---------|---------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Method  |         | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS81</a> | <a href="#">ME-MS42</a> | <a href="#">ME-MS42</a> | <a href="#">ME-MS42</a> | <a href="#">ME-MS42</a> |
| Analyte |         | V                       | W                       | Y                       | Yb                      | Zn                      | Zr                      | As                      | Bi                      | Hg                      | Sb                      | Se                      | Te                      |                         |                         |
|         |         | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     | ppm                     |
| 008     | 3N- 2E  | 5                       | 1                       | 0.5                     | 0.03                    | 5                       | 2                       | 0.1                     | 0.01                    | 0.005                   | 0.05                    | 0.2                     | 0.01                    |                         |                         |
| 012     | 4N- 3E  | 61                      | 3                       | 10.2                    | 1.09                    | 31                      | 167                     | 111.0                   | 0.12                    | 0.672                   | 2.87                    | 1.8                     | 0.19                    |                         |                         |
| 015     | 5N- 2E  | 56                      | 3                       | 8.3                     | 0.89                    | 31                      | 136                     | 119.5                   | 0.16                    | 0.535                   | 3.35                    | 2.3                     | 0.18                    |                         |                         |
| 021     | 6N- 5E  | 51                      | 3                       | 5.6                     | 0.68                    | 33                      | 119                     | 161.0                   | 0.35                    | 0.109                   | 2.46                    | 4.7                     | 0.62                    |                         |                         |
| 026     | 1430- 3 | 45                      | 4                       | 7.1                     | 0.74                    | 62                      | 99                      | 138.0                   | 0.11                    | 0.048                   | 2.64                    | 2.9                     | 0.34                    |                         |                         |
|         |         | 49                      | 21                      | 5.4                     | 0.59                    | 12                      | 133                     | 139.0                   | 0.12                    | 0.153                   | 1.81                    | 1.9                     | 0.49                    |                         |                         |

|     |         | RE08161320 |           |
|-----|---------|------------|-----------|
|     | Method  | QA-GRA05   | TOI-ICP06 |
|     | Analyte | LOI        | Total     |
|     |         | %          | %         |
|     |         | 0.01       | 0.01      |
| 008 | 3N- 2E  | 7.69       | 99.5      |
| 012 | 4N- 3E  | 5.48       | 99.2      |
| 015 | 5N- 2E  | 5.38       | 98.9      |
| 021 | 6N- 5E  | 3.60       | 98.6      |
| 026 | 1430- 3 | 2.39       | 99.0      |

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1

Workorder: EL08096586

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EL08096586

|     | Method      | <a href="#">WEI-21</a> | <a href="#">Au-AA25</a> | <a href="#">Ag-AA46</a> |
|-----|-------------|------------------------|-------------------------|-------------------------|
|     | Analyte     | Recvd Wt.              | Au                      | Ag                      |
|     |             | kg                     | ppm                     | ppm                     |
|     |             | 0.02                   | 0.01                    | 1                       |
| 001 | 1550-T-01   | 29.86                  | 2.74                    | 3                       |
| 002 | 1550-T-02   | 30.82                  | 2.48                    | 4                       |
| 003 | 1550-T-03   | 31.05                  | 7.60                    | 9                       |
| 004 | 1550-T-04   | 29.15                  | 3.66                    | 11                      |
| 005 | 1550-T-05   | 24.34                  | 11.70                   | 9                       |
| 006 | 1250-GOB-01 | 32.53                  | 0.25                    | 5                       |

**APPENDIX 3:  
WGM VERIFICATION SAMPLES**



VA08168899 - Finalized

CLIENT : "ADA - Watts Griffis And Mcouat Limited"

# of SAMPLES : 10

DATE RECEIVED : 2008-11-27 DATE FINALIZED : 2008-12-07

PROJECT : "LRC REV"

CERTIFICATE COMMENTS : ""

PO NUMBER : " "

| SAMPLE<br>DESCRIPTION | Au-AA25   | Ag-AA46   |
|-----------------------|-----------|-----------|
|                       | Au<br>ppm | Ag<br>ppm |
| WGM-LR-01             | 29.7      | 25        |
| WGM-LR-02             | 0.34      | 1         |
| WGM-LR-03             | 0.29      | 1         |
| WGM-LR-04             | 1.37      | 2         |
| WGM-LR-05             | 0.54      | 11        |
| WGM-LR-06             | 0.95      | 1         |
| WGM-LR-07             | 1.14      | 88        |
| WGM-LR-08             | 0.13      | 6         |
| WGM-LR-09             | 0.14      | 7         |
| WGM-LR-10             | 1.8       | 2         |