ACACIA RESOURCES LTD
MT RINGWOOD PROJECT

ANNUAL REPORT FOR EL 7552 & EL 7889
FOR THE PERIODS
12/12/98 – 22/10/99 & 6/1/99 – 22/10/99

&

FINAL REPORT FOR EL 7552 & EL 7889
FOR THE PERIODS
12/12/91 - 22/10/99 & 6/1/93 – 22/10/99

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1:250,000 Map Sheet - Pine Creek
1:100,000 Map Sheet - Batchelor

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1        Acacia Resources (Melbourne)
2        Acacia Resources (Darwin)
3        Acacia Resources (Brocks Creek)
4        Acacia Resources (Field)
SUMMARY

ELs 7552 and 7889 are located approximately 100 kms southeast of Darwin. EL 7552 (Ringwood) was granted to Solomon Pacific Resources NL on 12\textsuperscript{th} December 1991 for five years, and originally covered eight graticular blocks. The tenement has since been reduced to its present size of two graticular blocks. EL 7889 (North Ringwood) was granted to Solomon Pacific Resources NL on 6\textsuperscript{th} January 1993 for three years, and originally covered two graticular blocks. The tenement commenced its second renewal phase on the 5\textsuperscript{th} January 1998.

Solomon Pacific Resources NL were taken over in June 1996 by Acacia Resources Limited (Acacia), and is now the wholly owned subsidiary of Acacia Resources (Brocks Creek Pty Ltd).

On October 22\textsuperscript{nd} 1999, SEL22183 covering 4 graticular blocks was granted over EL's 7552 and 7889, which were surrendered on the same date.

This final report discusses exploration conducted on ELs 7552 and 7889 in the periods 12\textsuperscript{th} December 1991 – 22\textsuperscript{nd} October 1999 and 6\textsuperscript{th} January 1993 – 22\textsuperscript{nd} October 1999 respectively. A summary of the work completed is detailed below:

**EL 7552**
- Acquisition, compilation and review of all geochemical, geological, drilling and multielement aeromagnetic data
- Geological mapping
- Gridding
- Flight of a detailed aeromagnetic and radiometric survey.
- Regional interpretation of all geophysical data.
- 2 RC holes for 100m
- 78 Post hole RAB samples
- 49 stream samples
- 95 rock chip samples
- 49 stream samples

**EL 7889**
- Acquisition, compilation and review of all geochemical, geological and drilling data
- Acquisition and interpretation of multielement aeromagnetic data
- Gridding
- Flight of a detailed aeromagnetic and radiometric survey.
- Regional interpretation of all geophysical data.
- Detailed geological mapping
- 18 RC holes for 1057m
- 1241 Auger/Hand soil samples
- 754 Rock chip samples
- 127 stream samples

All of the area covered by EL's 7552 and 7889 remains under Acacia title (SEL22183) and therefore details covered in this report are to remain *Closed File.*
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1. **INTRODUCTION**

Exploration Licences 7552 and 7889 were granted to Solomon Pacific Resources NL on 12th December 1991 and 6th January 1993 respectively.

This report reviews the location, access, tenure, history of previous exploration and geology of EL’s 7552 and 7889, up until October 22nd 1999, when SEL22183 was granted over the licences. It also discusses work completed during the 1999/2000 reporting year, and the results of this exploration.

2. **LOCATION AND ACCESS**

Exploration Licences 7552 and 7889 are located approximately 100 kms southeast of Darwin (Figure 1), on Old Mount Bundey Station (NT Por 4938). Access to the Ringwood Project tenements is gained by dirt tracks heading east from the Mount Ringwood Station Homestead: Alternate access to the tenements may be gained south of the Arnhem Highway (25 kms) on station tracks on Old Mount Bundey Station. Within the licence, access is limited to a single track which runs between the old diggings (the ‘Ringwood Trend’) along the eastern boundary of EL7552. Most of the licence may be reached during the dry season, by four-wheel-drive vehicles, using the black soil plains situated between areas of low hills. During the wet season the licences are inaccessible due to flooding of the black soil plains.

3. **TENEMENT STATUS, ABORIGINAL & HERITAGE ISSUES**

Exploration Licence 7889 was granted to Solomon Pacific Resources NL on 6th January 1993 for a period of three years. A first renewal for a period of two years expiring on the 5th January 1998 was granted in November 1995. A second renewal application for a further two years was submitted by Acacia Resources on 13th October 1997 and granted on 26th May 1998.

Exploration Licence 7552 was granted to Solomon Pacific Resources NL on 12th December 1991 for a period of five years. An application to renew this licence for a further two (2) years was granted on the 18th June 1997. A further application to renew this tenement was lodged on 12th September 1998 and granted on 23rd February 1999.

The area of both EL 7552 and EL 7889 is 2 graticular blocks (Figure 2), EL 7552 having been reduced from 8 blocks to 4 blocks in December 1993, and 4 blocks to 2 blocks in December 1994.

SEL 22183, comprised of 4 graticular blocks, was granted over the two tenements on 22nd October 1999. EL7552 and EL7889 were surrendered on 22nd October, with the grant of SEL22183-Horizon

The Aboriginal Areas Protection Authority completed clearances on both licences in the Ringwood Project for the work programme undertaken in the reporting period. authority certificates were issued, covering Acacia’s exploration work on both EL 7889 and EL 7552 on September 16th 1997 and 12th March 1999.
4. **EXPLORATION HISTORY**

A detailed report of exploration over the area encompassed by EL’s 7552 and 7889, prior to December 1991 was given by Collis (1992) and is outlined briefly below:

4.1. **EL 7889 - Ringwood North**

Chinese prospectors initiated exploration activity in this area in the late nineteenth century. These men found and worked the North Ringwood Mine, which is located in the south-east corner of EL 7889. Approximately 2000 ounces of gold are thought to have been extracted from the numerous shallow pits and trenches in and around these old workings.

In 1978 the NTGS conducted some 264m (four holes) of diamond drilling within the North Ringwood workings. Poor recoveries were reported and assaying was selective. The gold results included; 1m @ 330.3g/t, 2.5m @ 3.1g/t and 0.5m @ 8 g/t.

Occidental Minerals Corp picked up this ground as portions of EL 1291 and 1592 in 1978/79. They conducted a base metal/uranium exploration program which included airborne magnetics, radiometrics and stream sediment sampling. Weak anomalism was detected in the vicinity of the North Ringwood Prospect.

In 1982 Euralba Mining Limited conducted a reconnaissance exploration program for gold, uranium and base metals over the North Ringwood Prospect. Euralba noted and described four zones of quartz reef and stockwork at North Ringwood, each zone being approximately 100 metres in length and around 20 to 100 metres wide. Rock chip sampling in the area returned Au grades of up to 0.9g/t from quartz reefs, quartz stockworks and hematitic shales. High As (up to 6.2%) and Pb (up to 5.1%) were associated with gold. Further work was recommended in and around the North Ringwood Prospect.

A portion of EL 4220, a tenement managed and leased by Grants Patch Mining Limited in 1986, also included the North Ringwood Prospect. Grants Patch carried out systematic soil and rock-chip sampling along four, 1000m long lines. The most encouraging result was a 120m long rock-chip traverse that averaged 1.02 g/t, which included an interval of 40m averaging 2.33g/t.

White Mining Services held the ground in the north Ringwood area in 1988 and conducted an extensive soil geochemical program over the entire area on a 20x100m grid. Numerous thin, north-west trending anomalies, with Au peaks of 2g/t, were detected. The two most anomalous areas were named the Pelican Prospect and the Old Workings Prospect (located at the old North Ringwood Mine). Trenching, RC and diamond drilling were undertaken at each prospect (in all 3488m of costeans, 2021m of RC and 174m of diamond drilling). “In house” resources estimates were calculated for each prospect by Whites Mining:

- Pelican: 1 million tonnes @ 0.8 g/t Au
- Old Workings: 50,000 tonnes @ 2.6 g/t Au

No further work was undertaken before the licence was relinquished in 1992.

4.2. **EL 7552 - Ringwood**

Ringwood and South Ringwood are two small prospects located within EL7552 that can be dated back to the late nineteenth century phase of exploration. These prospects are located along the far eastern boundary of this tenement and are thought to be part of a roughly north-south oriented mineralised trend.
The tenement area was first held by Occidental Minerals Corp in 1978/79 as portions of EL1291 and EL1592. Occidental conducted a base metals/uranium exploration program over the area which included airborne magnetics, radiometrics and stream sediment sampling. The stream sediment program detected run-off anomalism from the Ringwood Gold Prospects and North Ringwood prospect (see EL7889).

In 1982 the ground was held by Euralba Mining Limited as a portion of EL3039. A reconnaissance gold, uranium and base metal exploration program was conducted over the area. The rock chip sampling program returned good results in the vicinity of the North Ringwood Prospect (see EL7889) and it was concluded that the best potential for mineralisation was along this trend.

A Billiton/Hamilton JV covering MCN's 1030-34, 1642-43 and 2519 was initiated in 1989. The program conducted by Billiton over these areas included airborne magnetics, geological mapping, soil sampling and 1000m of RC percussion drilling. The drilling (10 holes) was testing for economic halo mineralisation along the main zones of old workings along both the North Ringwood and South Ringwood Trends. This Billiton data is still waiting to be incorporated into the Mt Ringwood database.

5. GEOLOGY

5.1. Regional Geology

EL 7552 and 7889 occur within the Pine Creek Geosyncline in the Darwin-Katherine region of the Northern Territory (Figure 2). They contain Archaean and Early Proterozoic rocks, which are bounded by younger, largely undeformed sedimentary rocks. Needham and DeRoss (1990) described the geology of the region.

The oldest rocks in the region are Archaean granites and metamorphics of the Rum Jungle, Waterhouse and Nanambu Complexes. These rocks formed a shallow intracratonic basin into which the Early Proterozoic sediments were deposited. This Early Proterozoic sequence has been sub-divided, by the BMR (1995) into four main groups from oldest to youngest as follows:-

(a) Namoona Group - is composed of conglomerates, sandstones, quartzites, carbonates and minor banded iron formation which lie unconformably on Archaean basement rocks.

(b) Mount Partridge Group - consists of conglomerates, sandstones, siltstones, shales, quartzites, cherts, carbonates and basic volcanics which lie unconformably on Namoona Group.

(c) South Alligator Group - is made up of greywackes, quartzites, siltstones, cherts, tuffs, phyllites, carbonates, and banded iron formation and lies unconformably on Mount Partridge Group.

(d) Finnis River Group - is composed of conglomerates, greywackes, siltstones, shales and slates and lies conformably on South Alligator Group.

Intrusion of this sequence by basic intrusives of the Zamu Dolerite occurred prior to greenschist facies metamorphism and a major phase of deformation. This metamorphic event and polyphase deformation occurred about 1870 - 1800Ma and was followed by the intrusion of granites around 1760Ma.
5.2. Tenement Geology

Sediments belonging to Burrell Creek Formation underlie EL's 7552 and 7889. They form the Finnis River Group in this area. Lithology's present on the lease include greywackes, siltstones, and shales which are intruded by northwest trending lamprophyre dykes.

These rocks have experienced polyphase deformation, and folding is tight to isoclinal with the fold axes trending north to north-northwest and plunging to the northwest. Bedding strikes north-northwest and varies from steeply dipping to subvertical. The rocks exhibit lower greenschist facies metamorphism and possess localised zones of weak hornfelsing.

6. MINERALISATION

6.1. Regional Mineralisation

Nicholson and Eupene (1990) have described three types of gold mineralisation from within the Pine Creek Geosyncline as follows:-

(a) Gold Mineralisation Associated with Alligator River-Style Uranium Mineralisation.

This type of mineralisation has an association with the Early/Mid Proterozoic unconformity and/or acid volcanism and brecciation coupled with ferromagnesian alteration. These ore bodies are hosted by Namoona and the El Sharana Groups and include the Jabiluka, Coronation Hill and Ranger deposits.

(b) Stratiform Gold - Base Metal Mineralisation

All significant known deposits of this type occur within the South Alligator Group although some small deposits have been found in upper Mount Partridge Group and Cahill Formation equivalents. Gold is concentrated within lenses of bedded sulphides hosted by iron formation, carbonaceous mudstones and cherts. The Cosmo Howley, Golden Dyke Dome and Iron Blow/Mount Bonnie deposits are of this style.

(c) Quartz Vein and Stockwork Gold - Base Metal Mineralisation

Economically this is the most important style of mineralisation in the area. This type of mineralisation is found in upper South Alligator and Finnis River Groups. Veining occurs as continuous, often conformable to bedding veins and stockworks. Vein systems are typically located near antoclinal axes and associated with lamprophyre dykes intruded parallel to cleavage. Included in this style are the Enterprise, Goodall, Tom's Gully, Mount Todd, Woolwonga, Moline, Union Reefs and Brocks Creek deposits.
6.2. Tenement Mineralisation

Known gold mineralisation is hosted by numerous parallel quartz veins, saddle reefs and stockworks. These quartz veins often occur within axial planar shears and fractures, or along lithological contacts. Individual veins can measure from 0.02 to 1.0 metre wide and may extend for over 50 metres in length. Veins are highly variable in grade and tend to pinch and swell unpredictably both along strike and down dip.

There are three sets of old workings which lie within or adjacent to the present boundaries of EL 7552 and 7889 (Figure 3). The first are the North Ringwood workings, located within EL7552. The two other sets of old workings occur outside the eastern boundary of EL7552. These are the Ringwood and South Ringwood workings. Chinese miners worked the three deposits between 1894 and 1902 with a total of 2,800 ounces of gold being produced. All three of the deposits occur along a north-northwest trending zone of gold mineralisation (the 'Ringwood Trend') which has a strike length of eight kilometres. All three of these deposits belong to the Category C type deposit described previously.

7. NON-ACACIA WORK COMPLETED SINCE INCEPTION

All drillhole locations are given in Figure 4, with representative sections in Figure 6. All geochemical sample locations are given in Figure 4, with results in Figure 5.

7.1. 1992 Delta EL 7552 Ringwood

In the first year of the Solomon and Delta Ringwood Joint Venture, Delta conducted a regional exploration program consisting of stream sediment sampling, rockchip sampling and reconnaissance geological mapping. Two prospects were delineated by this work and were named Hidden Valley and Lost Horizon. Follow up work on these prospects included geological mapping, rock-chip sampling, soil sampling and magnetometer surveying. This work resulted in the discovery of numerous long, continuous but narrow gold anomalies (Collis, 1992).

7.2. 1993 Delta Gold

7.2.1. EL 7889 North Ringwood

Delta conducted an exploration program consisting of two fence lines of RC drilling each comprising three 60 metre holes (NR1-6), at the North Ringwood prospect (1.5 to 2km north of the North Ringwood Old Workings; Collis, 1993). The targets being tested were geochemical anomalies discovered by White Mining Services in 1988.

Each of the holes drilled by Delta intersected an alternating sequence of interbedded siltstone and greywacke. These rocks showed several types of alteration including heavy bleaching, partial silicification, sulphide mineralisation and possible tourmalinisation. Narrow (2m) low grade (0.2 g/t Au) gold mineralisation was reported from most holes; the best intersection being 2 metres grading 0.94 g/t Au.

7.2.2. EL 7552 Ringwood

In the second year of the Ringwood Joint Venture, two phases of exploration were carried out. The first phase was a bulk sediment survey to assess the potential of finding diamondiferous lamprophyre. Heavy mineral concentrates from these samples failed to reveal the presence of significant indicator minerals. The second phase was a program of RC percussion drilling to test a gold in soil geochemical anomaly at the Hidden Valley Prospect. The anomaly was tested by two fence lines
of three 60 metre holes (HV1-6) inclined at 60 degrees. The only significant intersection recorded was two metres grading 14.4 g/t Au (Collis, 1993).

In December 1993 Delta withdrew from the Joint Venture.

7.3. **1994 Solomon Pacific (Solpac)**

7.3.1. **EL 7889 North Ringwood**

In 1994 Solpac’s exploration program concentrated on the area around the North Ringwood "Old Workings" prospect. The work included establishing a grid, soil sampling and a program of detailed geological mapping. A total of 169 soil samples was collected and analysed for gold and arsenic. Plots of the gold and arsenic geochemistry suggested that gold and arsenic mineralisation are structurally controlled around a syncline. The results were generally encouraging with a maximum value of 13100ppb Au detected.

7.3.2. **EL 7552 Ringwood**

Exploration concentrated on mapping and rock-chip sampling in the vicinity of the North Ringwood old workings. The purpose of this work was to ascertain the controls to mineralisation in order to define future exploration targets. Unfortunately, because of the early onset of the wet season, the 1994 exploration program was cut short.

7.4. **1995 Solpac**

7.4.1. **EL 7889 North Ringwood**

The existing Ringwood Grid was expanded by Solpac and a total of 655 soil samples were collected on a 25x20m grid. Forty, ten metre long rock-chip channel samples were also taken.

The soil sampling program was fairly successful with just under half the samples returning > 50ppb Au (maximum of 1045 ppb Au).

The strongest Au anomaly defined was located at the Old Workings Prospect and is thought to be related to the gold bearing quartz veins worked by the old miners. Numerous NNW/SSE trending anomalies were detected by the soil sampling program. The best anomaly detected by the rock-chip sampling program was 1.89 g/t gold with 10 of the 40 samples submitted returning results greater than 0.5 g/t gold.

Geological mapping and rock-chip sampling was undertaken in the Old Workings Prospect in order to identify the source of anomalism and thereby define drill targets. All of the samples were taken from walls on the old workings or from nearby outcrops with the majority returned results >1g/t Au. Following the encouraging results of this work, a six hole RC program (NRRC19-NRRC24) was planned to test the anomalous trend beneath the old mine workings. A total of 302 metres were drilled (generally 50m holes) at varying azimuth’s at an inclination of 60°. The results from this drilling were disappointing with the best mineralised intersection returning 2m @ 6.777g/t. The drilling indicated that gold distribution was spotty with small, isolated gold rich pods.
7.4.2. EL 7552 Ringwood

Two comprehensive soil-sampling programs were conducted over new portions of the Ringwood Grid and over a stream sediment gold anomaly (discovered by Delta in 1992), known as the Vanishing Point Prospect. This work resulted in the definition of two, northwest trending, large distinct gold anomalies (max Au = 1305ppb at the Vanishing Point Prospect) and seven discrete spot anomalies (ranging between 15 and 995ppb Au). Arsenic anomalism was found to be generally co-incident with gold anomalism. An old shaft related to nineteenth century mining lies close to the Vanishing Point main anomaly.

To test anomalism detected at the Lost Horizon Prospect (defined by a large gold in soil anomaly in excess of 500ppb and rock chip samples up to 35.4g/t) two 50m deep, scissored RC holes (60° declination) were drilled in 1995. Whilst minor quartz + pyrite mineralisation was noted in both holes the best result returned was 1m @ 0.4 g/t within LHRC002 from 11 metres.


7.5.1. EL 7889 North Ringwood

A total of two (2) RC drillholes (NRRC25-26) were completed in the 1996 reporting year prior to the Acacia takeover in June. The work tested the anomalous trend defined from the 1995 RC drilling, underneath and to the north of the North Ringwood old workings. The holes were drilled at azimuth’s of 080° and 260° respectively; inclined at -60° and drilled to a depth of 50 metres.

The peak result returned was 1m @ 0.65g/t.

Four (4) soil samples were taken at North Ringwood for a peak result of 50ppb.

7.5.2. EL 7552 Ringwood

No work carried out.

8. WORK COMPLETED BY ACACIA RESOURCES LIMITED

8.1. Assay techniques

All auger samples were sent to Assay Corp in Pine Creek. Samples were crushed and pulverised to greater than 90% passing through a -100μm sieve and analysed for Au by fire assay (method FA50). Rock chip samples and hand samples were also assayed using the above method. In addition some hand samples and all rock chips were tested for Cu, Pb, Zn, and As, using Atomic Absorption Spectroscopy (AAS).

Rock chips collected during 1999 were sent to Amdel laboratories in Darwin. Samples were crushed to 90% passing through a -75μm sieve, and assayed by low level fire assay (FA3) with a detection of 1ppb Au, using AAS determination.

8.2. June 1996 - 1997

Following the takeover in June 1996 Acacia spent a significant amount of time obtaining all of the drilling, geochemical and geological data available on the Ringwood tenements and transforming it into a suitable format for review. In addition multichannel aeromagnetic data for the tenements was acquire, and an interpretation of this data was carried out.
8.3. 1997

8.3.1. 6/1/97 TO 5/1/98 - EL 7889- NORTH RINGWOOD

- Continued data assessment and compilation of the historic database relating to EL 7889.

- Acquisition and interpretation of multiclient aeromagnetic data covering EL 7889.

- 10.9 line km of traverse line gridding (traverse lines are oriented at 0° magnetic) in preparation for soil sampling. Gridding was carried out using a compass and chain.

- 145 soil samples (of a proposed 451 soil samples) were collected via mechanical auger over the NW trend between the Old Workings Prospect and the Pelican Prospect.

- 7 rock chip samples were collected over areas of prospective quartz veining.

- Reconnaissance mapping and ground validation of previous mapping was concentrated in the area between the Pelican Prospect and the Old Workings Prospect. The reconnaissance geological fact map is presented as Figure 7a, with the detailed fact map in Figure 7b.

The location and sample numbers of all soil and rockchip samples collected in this and previous periods are shown in Figure 4.

The soil sampling program undertaken in this reporting period returned a best result of 2720 ppb Au, along with a cluster of anomalous results ranging from 67 ppb through to 1300 ppb Au in the area around the Pelican Prospect. The rockchip samples taken over areas of prospective quartz veining returned a best result of 22 ppb Au. These rockchip results are disappointing considering the anomalism apparent from the soil sampling results.

8.3.2. 12/12/96 TO 11/12/97 - EL7552 RINGWOOD

Assessment of the compiled data was carried out, and this was followed up with ground validation of previous mapping.

8.4. 1998

A detailed aeromagnetic and radiometric survey was flown over both tenements during this field season. The specifications for this survey are given in Appendix 2, Appendix 4 displays the flight lines, and contours, and the reduced to pole magnetic image is in Figure 8. As a consequence of this work, a new regional interpretation was prepared by Hungerford Geophysical Consulting (Figure 9).

Soil sampling was carried out on both tenements, with sampling targeted on the By/C horizon interface. A truck mounted mechanical Auger was used when this horizon was too deep to be

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sampled by hand. Some rock chip sampling was carried out in areas of anomalous soil results.

8.4.1. 06/01/98 TO 05/01/99 EL-7889 NORTH RINGWOOD
Auger based soil sampling was concentrated on the North Ringwood Prospect in the north of the tenement. The sample coverage in this area has been tightened to \(100\times 25\) m for a total of three hundred and six (306) samples. These results were higher than the surrounding results by an order of magnitude, with the peak gold result being 7.93 g/t Au. Seven (7) other results returned values above 0.5 g/t Au.

Rock chip sampling also returned favourable results, with a peak result from 13 samples, of 3.26 g/t Au.

8.4.2. 12/12/97 TO 11/12/98 -EL7552 RINGWOOD
One hundred and nineteen (119) grid based soil samples were taken to the south of the Vanishing Point prospect. The peak result returned was 55 ppb Au.

8.5. 1999

8.5.1. EL 7889 North Ringwood
Rock chip sampling (8) carried out in 1999, tested the surrounds of the Old Workings prospect. The peak result returned was 11 ppb Au.

8.5.2. EL 7552 Ringwood
One rock chip sample was taken from Ringwood EL in 1999, as part of the Work around the Old Workings prospect in North Ringwood. This sample returned a result of 3 ppb Au.

9. CONCLUSIONS

Sampling coverage within the two tenements is extensive, although not comprehensive. Several areas within the tenements display small zones of strong mineralisation – \(2\times 6.77 \text{ g/t Au}\) from RC drilling, and 13 g/t Au in soils. The mechanisms and controls on this mineralisation are still poorly understood.

The detailed Aeromagnetics provided a much better picture of the underlying geology in the area, and a better understanding of controls on the mineralisation. For example; it has highlighted possible ENE trends of mineralisation in the North Ringwood and northern Ringwood tenements, which needs follow up work. To the north of the Old Workings Prospect in North Ringwood, several previously identified geochemical anomalies have been associated with magnetic highs, upgrading their prospectivity.

As a consequence of this the new SEL 22183 (Horizon) is considered to have good potential to host small relatively high grade pods of mineralisation. The challenge now is to define enough of these to make the region viable for mining.
10. EXPENDITURES

10.1. EL7889 North Ringwood Expenditure to 05/01/99

<table>
<thead>
<tr>
<th>Company</th>
<th>Period</th>
<th>Expenditure</th>
<th>Covenant</th>
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<td>Solpac</td>
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<tr>
<td>Acacia</td>
<td>06/01/98 to 05/01/99</td>
<td>$27,966</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

10.2. EL7552 Ringwood Expenditure to 11/12/98

<table>
<thead>
<tr>
<th>Company</th>
<th>Period</th>
<th>Expenditure</th>
<th>Covenant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delta Gold NL</td>
<td>12/12/91 to 11/12/92</td>
<td>$38,432</td>
<td>$20,000</td>
</tr>
<tr>
<td>Delta Gold NL</td>
<td>12/12/92 to 11/12/93</td>
<td>$25,084</td>
<td></td>
</tr>
<tr>
<td>Solpac</td>
<td>12/12/93 to 11/12/94</td>
<td>$8,644</td>
<td>$10,000</td>
</tr>
<tr>
<td>Solpac</td>
<td>12/12/94 to 11/12/95</td>
<td>$21,274</td>
<td>$15,000</td>
</tr>
<tr>
<td>Solpac/Acacia</td>
<td>12/12/95 to 11/12/96</td>
<td>$2,794</td>
<td>$25,000</td>
</tr>
<tr>
<td>Acacia</td>
<td>12/12/96 to 11/12/97</td>
<td>$11,854</td>
<td>$22,000</td>
</tr>
<tr>
<td>Acacia</td>
<td>12/12/97 to 11/12/98</td>
<td>$25,215</td>
<td>$34,000</td>
</tr>
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</table>

10.3. EL 7889 North Ringwood Expenditure 06/01/99 to 22/10/99

<table>
<thead>
<tr>
<th>Item</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>$4,328</td>
</tr>
<tr>
<td>Support</td>
<td>$200</td>
</tr>
<tr>
<td>Assays</td>
<td>$116</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$311</td>
</tr>
<tr>
<td>Consumables</td>
<td>$198</td>
</tr>
<tr>
<td>Tenement Costs</td>
<td>$120</td>
</tr>
<tr>
<td>Accommodation</td>
<td>$257</td>
</tr>
<tr>
<td>Contractors</td>
<td>$107</td>
</tr>
<tr>
<td>Drafting</td>
<td>$539</td>
</tr>
<tr>
<td>Administration (15%)</td>
<td>$927</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$7,100</strong></td>
</tr>
</tbody>
</table>

10.4. EL 7552 Ringwood Expenditure 12/11/98 to 22/10/99

<table>
<thead>
<tr>
<th>Item</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>$3,481</td>
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<tr>
<td>Support</td>
<td>$753</td>
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<tr>
<td>Assays</td>
<td>$9</td>
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<tr>
<td>Vehicles</td>
<td>$140</td>
</tr>
<tr>
<td>Consumables</td>
<td>$519</td>
</tr>
<tr>
<td>Tenement Costs</td>
<td>$120</td>
</tr>
<tr>
<td>Accommodation</td>
<td>$257</td>
</tr>
<tr>
<td>Administration (15%)</td>
<td>$792</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$6,070</strong></td>
</tr>
</tbody>
</table>
11.0 REFERENCES


Collis, G.D., 1992, Delta Gold NL. Exploration Licence 7552, Mt Ringwood Northern Territory. First Annual Report (Delta Gold NL), NT Open File. (08.8386)


APPENDIX 1

All Sampling Data
(Including soils, rock chips, streams and drilling)
ASCII comma delimited format.
APPENDIX 2

Aeromagnetic Survey Specifications
## Multi-Client Airborne Survey Specifications

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aircraft</strong></td>
<td>Rockwell Shrike Commander 500S</td>
</tr>
<tr>
<td><strong>Magnetometer</strong></td>
<td>Scintrex V201 split beam caesium vapour</td>
</tr>
<tr>
<td>Resolution,</td>
<td>0.044 nT</td>
</tr>
<tr>
<td>Cycle rate,</td>
<td>0.2 seconds</td>
</tr>
<tr>
<td>Sample interval,</td>
<td>14 metres</td>
</tr>
<tr>
<td><strong>Data Acquisition</strong></td>
<td>Hewlett Packard 8000 Series computer.</td>
</tr>
<tr>
<td><strong>Flight Line Spacing</strong></td>
<td>Traverse Lines: 200 metres</td>
</tr>
<tr>
<td>Tie Lines:</td>
<td>5,000 metres</td>
</tr>
<tr>
<td><strong>Flight Line Direction</strong></td>
<td>Traverse Lines: 090-270°</td>
</tr>
<tr>
<td>Tie Lines:</td>
<td>180-360°</td>
</tr>
<tr>
<td><strong>Survey Height</strong></td>
<td>70 metres – mean terrain clearance</td>
</tr>
<tr>
<td><strong>Navigation</strong></td>
<td>Syledis UHF positioning system</td>
</tr>
</tbody>
</table>
APPENDIX 3

Environmental Register
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
LAND STATUS RECORD

Project: Ringwood

Tenement Name: Ringwood & Ringwood North  Loc. Code: N0321, N0322

Tenement No's: EL 7552 & EL 7889

Registered Holder(s): Solomon Pacific Resources Pty Ltd (now Acacia Resources (Brocks Creek) Pty Ltd)

Date Granted: EL 7552 11/12/91 EL 7889 6/12/93

Term: EL 7552 5yrs  Area: 2 blocks
(1st renewal granted until 12th December 1998 then renewed for further two years until 12/12/2000)

EL 7889 3 yrs  2 blocks
(first renewal granted until 5th January 1998 then renewed for further two years until 5/01/2000)

Bond/Security: None

JV Partners (if any): None

Land Classification: (Crown, Private, Lease) Perpetual Pastoral Lease

Land Holder/Occupier: B.F. Coulter  Station: Old Mount Bundey Station

Address: Off Arnhem Highway  Phone: (08) 89 788910
Via Cooinda
NT

Contacted By: Helen Clark  Date: 30/10/97

Pastoral Notes: (Stock, Cultivation, Access, Rainfall)
No stock or cultivation observed in either EL 7552 or EL 7889

Environmental Notes: (Flora/Fauna, Erosion, Bushfires, Flooding)
Pastoral land with extensive black soil plains, mainly with open scrubby flood plains

Groundwater: (Bores/Wells/Dams, streams, drainage, test data)
EL 7552 has extensive drainage from hilly regions

Aboriginal Notes: (Sacred Sites, Cultural)
No Significant Sites according to AAPA tickets C97/137 & C99/15, which expires on March 12th 2001.

**Historic Relics:**
(Mine Workings, Equipment, Homesteads etc.)
Several areas of old workings

**Previous Activity:**
(Mining, Exploration, Forestry, etc.)
Regional Exploration, shallow historical mining from late nineteenth century. Exploration conducted by at least 5 different companies prior to Acacia involvement.
Tenement Name: Ringwood & Ringwood North  No(s): N0321, N0322

Exploration Activity Area: Ringwood Project

Shafts/Pits/Dumps: Several historical shallow workings

Track/Access: No new tracks. Regional Access tracks via Ringwood Station Homestead

Line Clearing: Dozer clearing for access to drill pads and costeans at Old Workings, Pelican and North Ringwood prospects

Costeaming: 33 costeans which have been filled; 16 from Pelican prospect (White Mining) and 17 from Old Workings (White Mining)

Drill Sites: Pelican Prospect - 16 RC holes (White Mining)

North Ringwood Prospect 6 RC hole (Delta Gold)

Old Workings Prospect 26 RC holes (18 holes White Mining, 6 holes Solpac; 2 holes Acacia Resources (Brocks Creek); 5 Diamond drill holes (1 hole White Mining; NTGS 4 holes)

Lost Horizon 2 RC holes

The drill holes observed at Old Workings. Pelican and North Ringwood were capped with PVC cap and still visible from the surface.

Location Data: McKinlay River 1:100,000 Geology Sheet

Mount Ringwood 1:50,000 Topographic Sheet

Compiled by: Bruce Kendall  Date: 10th December 1997
Tenement Name: Ringwood & Ringwood North  
No (s): N0321, N0322

Report Ref No's: 08.8326, 08.8377, 08.8384, 08.8385, 08.8386, 08.8480, 08.8481

Exploration Activities: Geological mapping, gridding and auger sampling

Grids & Traverses: Approximately 10.9 line km of regional gridding (EL 7889) - 1997

Soil Sampling: 145 soil samples via mechanical auger - 1997 EL7889  
7 rock chip samples - 1997 EL 7889  
119 soil hand samples -1998 EL 7552  
306 auger based soil samples -1998 EL 7889  
13 rock chip samples -1998 EL 7889  
8 rock chip samples - 1999 EL 7889  
1 rock chip sample – 1999 EL 7552

Costeans / Pits: N/A

Drilling: mechanical auger holes to average depth of 2m

Drill Traverses: Hand clearing

Drill Pads: None

Ground Geophysics: None

Access Tracks: No new access tracks

Camps: N/A

Compiled by: Bruce Kendall  
Damien Stephens

Date: 10th of December 1997  
7th December 1998
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA REHABILITATION RECORD

Tenement Name: Ringwood & Ringwood North  
No(s): N0321, N0322

Disturbance: minimal  
Rehabilitation: none  
Date: November 1997

Grids & Traverses: Hand Clearing only

Soil Sampling: 451 soil samples via mechanical auger, holes backfilled on completion.

Costeans/Pits: N/A

Drilling: shallow holes via mechanical auger

Drill Traverses: Only hand clearing

Drill Pads: N/A

Ground Geophysics: None

Access Tracks: No new tracks

Camps: Mount Ringwood Station Homestead

Other:

Inspected / Clearance: NA  
Bond/Security released: NA

Compiled by: Bruce Kendall  
Damien Stephens  
Date: 10th of December 1997  
7th of December 1998

Follow-up Inspection Report: To be compiled at completion of tenure.
APPENDIX 4

Aeromagnetic Data
**Aeromagnetic Survey Specifications**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft</td>
<td>FU24-950</td>
</tr>
<tr>
<td>Magnetometer</td>
<td>Scintrex Caesium Vapour Cs2</td>
</tr>
<tr>
<td></td>
<td>Develco Vector Magnetometer</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.001nT</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0.001nT</td>
</tr>
<tr>
<td>Recording Interval</td>
<td>0.1 Seconds</td>
</tr>
<tr>
<td>Compensation</td>
<td>RMS AADC II Compensator</td>
</tr>
<tr>
<td>Flight Line Separation</td>
<td>50m</td>
</tr>
<tr>
<td>Flight Line Orientation</td>
<td>AMG E-W</td>
</tr>
<tr>
<td>Tie Line Separation</td>
<td>500m</td>
</tr>
<tr>
<td>Tie line Orientation</td>
<td>AMG N-S</td>
</tr>
<tr>
<td>Mean terrain clearance</td>
<td>25m</td>
</tr>
<tr>
<td>Sample Interval</td>
<td>4 - 5 m</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>Exploramium Model GR-820</td>
</tr>
<tr>
<td>Navigation</td>
<td>Novatel 3951R 12 Channel Differential GPS</td>
</tr>
<tr>
<td></td>
<td>RACAL satellite DGPS correction receiver</td>
</tr>
<tr>
<td>Altimeter</td>
<td>King Model KRA-405 Radar Altimeter</td>
</tr>
<tr>
<td></td>
<td>Air DB Barometric Altimeter</td>
</tr>
<tr>
<td>Base Station Sensors</td>
<td>Scintrex “Envi-Mag” Proton Precession</td>
</tr>
<tr>
<td></td>
<td>Magnetometer</td>
</tr>
<tr>
<td></td>
<td>Geometrics G-856 Proton Precession</td>
</tr>
<tr>
<td></td>
<td>Magnetometer</td>
</tr>
</tbody>
</table>
APPENDIX 5

Geological Logging Codes
### Acacia Exploration
### Geological Logging Codes

<table>
<thead>
<tr>
<th>TEXTURE Ctd.</th>
<th>REGOLITH</th>
<th>ROCKTYPE Ctd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TEXT)</td>
<td>(REGO)</td>
<td>(MAJ, MIN1, MIN2)</td>
</tr>
</tbody>
</table>

#### Metamorphic
- CR: Crenulated
- MY: Mylonitic
- PB: Porphyroblastic
- SC: Schistose
- SP: Spotted

#### Igneous
- AC: Acicular
- AM: Amygadaloidal
- AN: Anphanitic
- EQ: Equigranular
- PO: Porphyritic
- PW: Pillow

#### Structural
- BO: Boxwork
- BX: Brecciated
- FD: Folded
- FO: Foliated
- FR: Fractured
- LI: Lineated
- RO: Rosed
- SH: Sheared
- SL: Slickensides

#### Others
- CX: Crystalline
- CO: Competent
- FB: Fibrous
- GO: Gossanous
- MS: Massive

#### Sedimentary
- AG: Agglomerate
- BX: Breccia
- BIF: Banded Iron Form
- CB: Carbonate
- CG: Conglomerate
- CGW: Carbonaceous Greywacke
- CH: Chert
- CSH: Carbonaceous Shale
- CSI: Carbonaceous Siltstone
- CSS: Carbonaceous Sandstone
- DO: Dolomite
- EE: Epiclastic
- GGW: Graphitic Greywacke
- GSC: Graphic Schist
- GSH: Graphic Shale
- GSI: Graphic Siltstone
- GW: Greywacke (>15% matrix)
- HS: Haemaitic Shale
- LM: Limestone
- SH: Shale
- SI: Siltstone
- SS: Sandstone
- TF: Tuff

#### Igneous
- AP: Agpnite
- DL: Dolerite
- EB: Basalt
- EBA: Antrim Plateau Volcanics
- FI: Felsic Intrusive (undiff)
- GB: Gabro
- GR: Granite (undiff)
- GRA: Aikali Granite
- GRD: Granodiorite
- MI: Mafic Intrusive (undiff)
- PG: Pegmatite
- PO: Porphyry
- VA: Acid Volcanic
- VB: Basic Volcanic
- VI: Intermediate Volcanic

#### Metamorphic
- AM: Amphibolite
- BMS: Biotite Mica Schist
- GN: Gneiss
- HF: Hornfels
- MB: Marble

#### Phyllite
- QC: Quartz Carbonate
- QMS: Quartz Mica Schist
- QT: Quartzite
- SC: Schist
- SL: Slate
- SSM: Metasediment
- TM: Tourmalinite

#### Other
- CL: Clay
- CT: Calcrete
- CV: Cavity
- FT: Ferricrete
- GV: Gravel
- GO: Gossan
- IS: Ironstone
- MK: Mollusk
- MY: Mylonite
- NS: No Sample
- PI: Pisolithic Gravel
- QV: Massive Quartz Vein
- SD: Sand
- ST: Silcrete
- TL: Laterite

#### MINERALS
- (ALTER, VEIN-MIN)
- AB: Albite
- AD: Andalusite
- AM: Amphibole
- AS: Arsenopyrite
- AT: Altered (undiff)
- AU: Gold
- BI: Biotite
- BL: Bleaching (cb-s)
- CB: Carbonate
- CH: Chlortite
- CL: Clay
- CO: Cordierite
- CW: Clay Weathering
- EP: Epidote
- FE: Iron
- FL: Fluorine
- GA: Garnet
- GN: Green Alunite
- GP: Graphite
- GT: Goethite
- HM: Haematite
- KA: Kaolinite
- KS: K-Feldspar
- KY: Kyanite
- LI: Limonite
- LX: Leucoxene
- MI: Mica
- MN: Manganese
- MT: Magnetite
- MU: Muscovite
- PH: Phlogopite
- PI: Piagiolacite
- PO: Pyrrhotite
- PY: Pyrite
- SE: Sericite
- SI: Silica
- SR: Siderite
- TC: Talc
- TE: Tremolite
- TM: Tourmaline
- ZE: Zeolite

### HARDNESS
- VH: Very Hard
- H: Hard
- M: Medium
- S: Soft
- VS: Very Soft

### COLOUR (COLOUR)
- Qualifier
  - DK: Dark
  - LT: Light
  - BE: Beige
  - BG: Bluegreen
  - BK: Black
  - BL: Blue
  - BN: Brown
  - CM: Cream
  - GN: Green
  - GY: Grey
  - KK: Khaki
  - MS: Mustard
  - OR: Orange
  - PI: Pink
  - PP: Purple
  - RD: Red
  - TN: Tan
  - WH: White
  - YE: Yellow

### GRAIN SIZE (GN_SZ)
- VF: Very Fine
- FN: Fine - not visible to naked eye
- MD: Medium - visible to naked eye
- CS: Coarse - >2mm
- VC: Very Coarse (pebble)

### WEATHE (Weathering) (WTH)
- EW: Extremely weathered with poor textural preservation
- HW: Highly weathered with moderate textural preservation
- MW: Moderately weathered with good textural preservation
- SW: Slightly weathered with < 20% oxides
- FR: Fresh Bedrock

---

Revised 10/12/1999

x:\Technical\Computing\Geology Logging Codes.xls
<table>
<thead>
<tr>
<th>ALT QUAL (QUAL)</th>
<th>MINERALISATION (OTHER MIN)</th>
<th>STRUCTURAL DEFECTS (Geotech)</th>
<th>ROUGHNESS (Geotech)</th>
<th>BROKEN ZONE (Geotech)</th>
<th>FRACTURING (Geotech)</th>
<th>SHAPE (Geotech)</th>
<th>ROCK STRENGTH (Geotech)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifier</td>
<td>AZ Azurite</td>
<td>AXP Axial Plane</td>
<td>SK Slickenslided</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR Trace</td>
<td>AU Gold</td>
<td>BG Bedding Parting</td>
<td>PO Polished</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>WK Weak</td>
<td>BI Biolite</td>
<td>BK Broken Zone</td>
<td>RO Rough</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD Moderate</td>
<td>BO Bornite</td>
<td>CV Cleavage</td>
<td>SM Smooth</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>ST Strong</td>
<td>CB Carbonate (undiff)</td>
<td>CN Contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN Intense</td>
<td>CN Native Copper</td>
<td>CR Crushed Seam</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>DM Disseminated</td>
<td>GR Garnet</td>
<td>DC Decomposed Zone</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PV Pervasive</td>
<td>GT Goethite</td>
<td>DK Dyke</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PT Patchy</td>
<td>HM Haematite</td>
<td>FA Fold Axis</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>SV Solvedge</td>
<td>MA Malachite</td>
<td>FD Fold</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VN Vein</td>
<td>NB: Mineral content must be expressed as a numeric e.g. 0.5, 1, 5 etc.</td>
<td>FG Fragmented Zone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>e.g. STDM, MRSV</td>
<td></td>
<td>FH Fold Hinge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FC Fractured Zone</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FT Fault</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FT1 Early Fault</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>FT2 Late Fault</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>FTM Minor Fault</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>FTL Fault Large</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>FV Fractured Vein</td>
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<td></td>
<td></td>
<td>IF Infill Zone</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LI Lineation</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>JN Joint</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>SC Schistosity</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>S0 Bedding</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S1 Earliest Schistosity</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>S2 Second Earliest Schistosity</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>SH Shear Zone</td>
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<td>VS Vein Stockwork</td>
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<td>BK Buck</td>
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<td>BX Breccia</td>
<td>CC Chalcopyrite</td>
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<td>CB Combi</td>
<td>CP Chalcopryite</td>
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<td>CH Chalcedonic</td>
<td>CU Cuprite</td>
<td>QT Quartz</td>
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<td>FB Fibrous</td>
<td>CV Covellite</td>
<td>CL Clay</td>
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<td>MI Milky</td>
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<td>RF Rock Fragments</td>
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