



OZ MINERALS LTD
EL 5/2002 - EAST RENISON
ANNUAL REPORT FOR YEAR ENDING APRIL 2009,
L F STEWART

KEYWORDS & LOCALITY

Keywords

EAST RENISON, AEROMAGNETICS, TMI, DIAMOND DRILLING, GRANITE, SKARN, AVEBURY, NICKEL, COPPER

Locality

1:250,000	QUEENSTOWN SK55-5
1:100,000	PIEMAN 7914, SOPHIA 8014
1:25,000	ROSEBERY 3637, DUNDAS 3636

SUMMARY

Prior to 2008 Allegiance Mining NL and Eastren Pty Limited (a wholly owned subsidiary of Allegiance Mining NL) had been exploring EL 5/2002 East Renison since 2002.

The exploration campaigns of Allegiance Mining/Eastren for the years of tenure 2002 – 2009 included collation of previous exploration, geological mapping and sampling, an airborne magnetic survey and the drilling of 7 diamond drill holes.

No on-the-ground exploration was carried out on EL 5/2002 in the year ending March 2009, except for site visits to inspect access routes and the condition of existing tracks. Most work carried out has been of an administrative and data management and review nature, because of the change of project management from Eastren Pty Ltd to OZ Minerals Limited.

OZ Minerals Limited has applied to Mineral Resources Tasmania for an extension of EL 05/2002 for a further year and an exemption from the expenditure conditions over EL 05/2002 for the past year. The exemption from expenditure conditions was sought because of the abnormal corporate and financial circumstances that OZ Minerals Limited faced during 2008 and 2009.

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1. INTRODUCTION

Exploration Licence EL 5/2002, East Renison, straddles the Murchison Highway between the town of Rosebery and the Renison Mine in Western Tasmania (Figure 1) and has an area of 24 km². The status of land covered by EL 5/2002 is varied and includes Crown Land, HEC Land, Informal Reserve, and State Forest.

Exploration Licence 5/2002 of 24 sq km is held by Eastren Pty Ltd (a wholly owned subsidiary of OZ Minerals Australia Limited and formerly a wholly owned subsidiary of Allegiance Mining NL) and in its original form would have expired on 10 May 2007. The licence has been renewed two times and in its current form expires on 10 May 2009. The licence was originally granted for a six (6) square kilometre area east of Renison Bell but was amalgamated with the contiguous EL 12/2002 (18 sq km) on 10 December 2002.

The ground covered by EL 5/2002 is invariably rugged, heavily forested and difficult-to-access. Much of EL 5/2002 is only accessible to drilling with helicopter support, which is, for operational reasons, only possible in 2-3 months of the year. Ground access for drilling in the remainder is not ideal in the Autumn-Spring period for environmental reasons.

Extensive previous exploration by others has been undertaken in selected areas within EL 5/2002, such as over the tin deposits known as the Pieman Zone, the Ag-Pb-Zn deposits known as the Salmon Deposit and the Cu-As skarn zones on Colebrook Hill.

This report comprises the Annual Report for the year ended April 2009 for EL 5/2002 East Renison.

2. REGIONAL AND LOCAL GEOLOGY

EL 5/2002 is interpreted to cover a sequence of Cambrian sediments, cut by two belts of highly magnetic Cambrian mafic/ultramafic rocks intruded and altered by a Devonian-Carboniferous granite (Figures 2 and 3). The granite forms an ENE trending ridge at approximately one kilometre depth and connects to granite outcrops at Pine Hill in the west and Granite Tor in the east.

Intrusion of the granite has resulted in extensive alteration of the adjacent sediments and mafic-ultramafic belts, ranging from contact metasomatism adjacent to the granite to more distal alteration, caused by migrating hydrothermal fluids. The ultramafics, which were probably pyroxenites, were altered to dark-green serpentinite carrying abundant magnetite. Gabbros, particularly associated with the western ultramafic, were extensively altered to talc-carbonate. This alteration appears most intense around structural zones (faults) cutting the gabbro. Calcareous sediments were extensively altered to marbles and garnet rich skarns.

Prior to exploration conducted by Allegiance Mining/Eastren, a variety of mineralisation styles was known from extensive previous exploration by others, such as:

- iron metasomatism in the serpentinites, in the form of abundant late stage veins
- Cu-Pb-Zn-Ag veins in altered gabbros in the western mafic/ultramafic sequence (Salmon)
- Quartz-cassiterite veining at Pieman and Exe River prospects
- Large Cu-As (-W) skarns on Colebrook Hill
- Pervasive (sometimes massive) pyrrhotite mineralisation in altered gabbros and altered sediments around the western mafic/ultramafic complex
- Scheelite mineralisation in skarned sediments on Colebrook Hill and in altered gabbros near Salmon

Allegiance Mining NL also considered the area as geologically analogous to the Avebury mine area and considered the East Renison EL as prospective for Avebury-style remobilised nickel sulphide deposits.

3. WORK COMPLETED IN THE CURRENT YEAR

No on-the-ground exploration was carried out on EL 5/2002 in the last year of tenure except for several site visits to inspect access routes and the condition of existing tracks.

Most work carried out has been of an administrative and data management and review nature, because of the change of project management from Allegiance Mining NL to the OZ Minerals Exploration group. At the direction of MRT, a drill site, ER006, and a short length (approximately 150m) of track excavated to access this drill site were rehabilitated in April 2009.

Expenditure on EL 5/2002 East Renison for the year ending March 2009 was approximately \$10,000.

4. WORK CONDUCTED BY ALLEGIANCE MINING/EASTREN ON EL 5/2002

Work described in this section is taken from previous Annual Reports on EL 5/2002 submitted by Allegiance Mining and Eastren. A list of these reports is attached as Appendix 4.

4.1. YEAR 1, ENDED MARCH 2003

No work was undertaken during the year on the licence, apart from the administrative work involved with the licence amalgamation.

4.2. YEAR 2, ENDED MARCH 2004

Work was focused on two sub-projects:

- a detailed aeromagnetic survey
- collation of previous exploration data

Aeromagnetic Survey:

A high resolution aeromagnetic survey was completed over the whole licence area by Fugro in January 2004. Data from this survey was interpreted by Steve Webster Pty Limited, and reproduced in the report titled: 'Allegiance Metals Pty Ltd, Helimag Survey in Western Tasmania by Fugro Airborne Surveys. Quality Control Report and Preliminary Interpretation' by Steve Webster Pty Ltd, February 2004, which is attached as Appendix 1

In summary, this survey identified and defined several mafic-ultramafic bodies (Figure 3), interpreted as having been intruded at shallow depth by Carboniferous granite.

Collation of Previous Exploration Data:

A substantial quantity of exploration data has been acquired over the past 40 years on the area now covered by EL 5/2002. A summary of that data collated as a report by Michael

McKeown, is titled: 'Allegiance Metals Pty Ltd. Exploration Licence 5/2002 East Renison Progress Report' by Michael V McKeown, April 2004, and attached as Appendix 2. Figure 4 displays the collar locations of previous drill holes in the East Renison area as determined by this data review. Appendix 5 contains tables of drill hole collars, downhole surveys, assays, geology and geology codes for previous drill holes as well as holes drilled by Allegiance Mining/Eastren.

Because this area lies between the Renison and Rosebery mines, the focus of former exploration efforts was for Renison-type tin and Rosebery-type copper-lead-zinc.

Apart from some historical small scale mining which noted the presence of nickel, no exploration has been specifically aimed at nickel.

The data review highlighted several key features of the licence area which are important to the Avebury-style remobilised nickel sulphide model:

- presence of several large, tectonically disrupted, ultramafic bodies
- presence of a granite at relatively shallow depths beneath these ultramafics
- extensive alteration of the ultramafics and their enclosing sediments, related to the granite intrusion
- widespread mineralisation associated with this alteration event

4.3. YEAR 3, ENDED MARCH 2005

Collation of previous exploration data commenced in 2003-04, continued, but not completed in 2004-05 and used to develop detailed geological and geochemical plans of the licence area at 1:5,000 and 1:10,000 scales.

During 2004-05 work was concentrated on the Lynton Mine area which consists of a group of small workings developed on the western margin of the eastern ultramafic in the late 19th century. The target of this work was silver-lead mineralisation associated with barite veins in the ultramafic margin. Some nickel sulphides were reported from these workings.

Work completed in the year ended March 2005 included:

- upgrading of the access road to the top of Colebrook Ridge
- cutting a walking track into the Lynton Mine
- locating and sampling the old workings of the Lynton Mine
- collating previous exploration data in the vicinity of the workings

The mine workings were located and sampled. The results of this sampling are attached, together with a rough sketch of the workings derived from the Zinafex archives at Rosebery as Appendix 3. Several of the samples taken contained significant Pb-Zn-S and anomalous nickel. Of special note was the sample from near the end of the main adit which assayed 0.6% Ni.

4.4. YEAR 4, ENDED MARCH 2006

Allegiance Mining/Eastren undertook minimal work on EL 5/2002 during the 2005-06 year. A minor effort was directed to identification and collation of previous exploration work ahead of a major exploration program planned for 2006-07.

4.5. YEAR 5, ENDED MARCH 2007

During the 12-month period ending March 2007, Eastren Pty Limited:

- drilled two (2) DDH, ER001 and ER002, totalling 907 m to test for remobilised nickel sulphides in altered ultramafics south of Colebrook Hill
- drilled two (2) DDH, ER003 and ER004, totalling 839 m to test for remobilised nickel sulphides in altered ultramafics north of the Karlson Riley workings in the western ultramafic belt
- completed (but had not assayed) DDH ER005 at 604 m and commenced but had not completed ER006 which was in progress at 650 m at the end of the year, to test for southern and depth extensions of the identified Salmon Ag-Pb-Zn resource

4.5.1. Diamond Drill Holes ER001 and ER002

ER001 and ER002, totalling 907 m were drilled to test for remobilised nickel sulphides in altered ultramafics south of Colebrook Hill which had not previously been drill tested. The location of these drill holes can be seen relative to geology in Figure 2, relative to magnetics in Figure 3 and relative to other drill holes in Figure 4. Strip logs for ER001 and 002 are displayed in Figures 5 and 6 respectively while original logs are attached in Appendix 6.

ER001

Ni values in the ultramafic were typically in the range 1,500-4,000 ppm and together with low sulphur values indicate that the nickel was present as nickel silicates rather than sulphides. The ultramafic was only 90 m (drill width) thick, approximately 63 m true width.

ER002

Tested the ultramafic beneath the Lynton Mine workings where chip sampling had identified nickel sulphides in adits. It intersected serpentinised ultramafics from 125m but did not reach the eastern margin of the ultramafics. The ultramafics were thus in excess of 300 m wide, compared with ~70 m in ER001. Ni values in the ultramafics were in the range 1,000 - 3,000 ppm with very low, typically <600 ppm, sulphur values, again suggesting nickel present was present in nickel silicates not sulphides.

Discussion

Geochemical analysis produced no evidence to suggest that the granite-related metasomatic event has remobilised nickel from nickel silicates to nickel sulphides. However, ER002 did

not test the interpreted prime Avebury mineralisation site - the footwall of the altered ultramafic - and therefore cannot be considered a definitive test of prospectivity.

4.5.2. Diamond Drill Holes ER003 and ER004

ER003 and ER004, totalling 839m tested altered ultramafics north of the Karlson-Riley workings in the western ultramafic belt for remobilised nickel sulphides. The location of these drill holes can be seen relative to geology in Figure 2, relative to magnetics in Figure 3 and relative to other drill holes in Figure 4. Strip logs for ER003 and 004 are displayed in Figures 7 and 8 respectively while original logs are attached in Appendix 6.

ER003

ER003 tested the western gabbro-ultramafic sequence northeast of the Karlson Riley workings. The hole intersected 335m of serpentinised ultramafics from 155-490m, approximately 250m true width. Ni values in altered ultramafics were in the range of 1,000-3,000 ppm. Sulphur values were typically <200 ppm. Tin, lead, zinc and arsenic values were all very low.

ER004

ER004 was also designed to test the western gabbro-ultramafic sequence between Karlson-Riley and Salmon. The hole intersected 281m of serpentinite from 58 -339m, approximately 220m true width. Ni and S values were similar to those in ER003.

Discussion

Geochemical analysis produced no evidence to suggest that the granite-related metasomatic event has remobilised nickel from nickel silicates to nickel sulphides. While ER003 drilled into and out of an ultramafic, ER004 was abandoned before drilling right through the ultramafic and therefore did not test the interpreted prime Avebury mineralisation site - the footwall of the altered ultramafic. It therefore cannot be considered a definitive test of prospectivity

A geological interpretation of ER003 and ER004 indicates an altered ultramafic 200-300 m wide trending NNE of Karlson Riley, which appears to have disappeared by ER006 further to the NNE. This interpretation is supported by the aeromagnetic data

4.6. YEAR 6, ENDED MARCH 2008

4.6.1. Diamond Drill Holes ER005 and ER006

ER 005 and ER 006 tested both the southern strike extension of the Salmon deposit and the altered gabbros for nickel sulphide mineralisation. Pieman and Salmon have a combined strike length of 1,000 m, and are developed within a series of veins or faults developed in both Crimson Creek sediments in the north (Pieman) and altered gabbro in the south (Salmon). The location of these drill holes can be seen relative to geology in Figure 2, relative to magnetics in Figure 3 and relative to other drill holes in Figure 4. Strip logs for ER005 and

006 are displayed in Figures 9 and 10 respectively while original logs are attached in Appendix 6.

ER005

ER 005 drilled in the previous year was not assayed till this year, intersected a broad strongly-altered gabbro-ultramafic from 477.8-554.4m. A section of mixed altered gabbro and ultramafics from 502.0-537.0 m was considered “anomalous” in nickel (1,000-2,000 ppm) and arsenic (1,000-8,000ppm) by Eastren.

Of greater note was the scheelite anomalous zone from 506.0-510.0 m, which included 1 m 2.77% WO₃. Also, on the footwall of the altered ultramafic, the interval 535.9-537.6 m assayed 0.45% Pb, 1.87% Zn, and 7 g/t Ag. A zone of quartz-carbonate veining in altered sediments from 569.4-581.0 m contained significant arsenopyrite, but only minor Pb-Zn. Tin values were only weakly anomalous throughout, with a maximum assay of 0.2% Sn.

ER 006

ER 006 intersected several units of altered gabbro and ultramafic between 535.0-650.0 m. Ni values were low throughout. Quartz-carbonate alteration was pervasive, typically accompanied by significant pyrrhotite. The best intersection was:

556.6-561.0 m: 4.4 m 2.3%Zn, <0.1% Pb, 11 g/t Ag, including 0.4 m 19% Zn, 0.36% Sn.

This zone may correlate with Salmon Deposit.

Discussion

The interpreted prime site for Avebury style mineralisation - the footwall of the altered ultramafic – was tested by both these holes. Geochemical analysis produced no evidence to suggest that the granite-related metasomatic event has remobilised nickel from nickel silicates to nickel sulphides. However, Eastren logged “probable nickel sulphides” in the area of elevated nickel geochemistry in ER005.

The discovery of scheelite in ER005 is considered significant considering that altered gabbros in the Salmon-Pieman area have not been UV-lamped for scheelite nor assayed for tungsten. The scheelite observation in ER005, combined with the tungsten intersection in DDH CB1 (10.8 m 1.22% WO₃) and reported scheelite in the Colebrook Hill axinite skarns, suggests altered calcareous formations in this area are viable tungsten skarn targets. The calcareous formations could be either altered gabbros or altered calcareous sediments.

The anomalous intersections of scheelite, WO₃, Zn-Pb, Ni and Cu reported from drill hole ER005 were located close to what is regarded as the most likely host area - on the footwall of the altered ultramafic.

4.6.2. Diamond Drill Hole ER007

ER 007 was drilled to test the depth extensions of the Colebrook Hill skarns for Cu, Sn and WO₃ mineralisation. The location of ER007 can be seen relative to geology in Figure 2, relative to magnetics in Figure 3 and relative to other drill holes in Figure 4. A strip log for ER007 is displayed in Figure 11 while original logs are attached in Appendix 6.

ER 007

Eight major skarn zones (altered sediments) were intersected between 200-741m, with the major skarns between 665-741 m probably correlating with the Colebrook Hill skarns. Narrow veins of >1% Cu were common in most of the skarn zones, but the best intersection was only 665.1-683.3 m: 18.2 m 0.22% Cu, 203 ppm Co. A semi-massive sulfide (pyrrhotite) zone at 739.0-741.4 m intersected 2.4 m @ 0.44% Cu, 430 ppm Co, 0.25% WO₃ and 0.2 g/t Au.

Also of interest were two zones of heavily disseminated semi-massive sulfide, intersected at relatively shallow depths:

- 90.0-95.5m, 5.5 m @ 0.2% Cu
- 104.3-113.0m, 8.7 m @ 0.2% Cu

Both of these units were also anomalous in As and Ni, suggesting they were probably altered gabbros and they lie well west of the main Colebrook Hill skarns.

Discussion

Skarn related Cu, Co, Au and WO₃ anomalism intersected in ER007 were generally located below 650m. The two zones of copper bearing, heavily disseminated, semi-massive sulfide intersected at relatively shallow depths are of more interest.

An interpretive east-west district scale section on northing 5,371,700N shows drill holes ER005, 006 and 007 relative to previously drilled areas of mineralisation, regional structures and the interpreted granite at depth.

4.7. CURRENT YEAR, ENDED MARCH 2009

No on-the-ground exploration was carried out on EL 5/2002 in this last year of tenure except for several site visits to inspect access routes and the condition of existing tracks.

Most work carried out has been of an administrative and data management and review nature including database validation, because of the change of project management from Allegiance Mining NL to the OZ Minerals Limited Exploration group.

5. DISCUSSION AND FUTURE ACTIONS

Results from drill testing of the Eastern (ER 001 and 002) Western (ER003, 004, 005 and 006) Ultramafic to locate an Avebury-style remobilised nickel sulphide deposit were considered negative although somewhat equivocal because two of the six holes drilled failed to test the footwall of the altered ultramafic. Geochemical results with low Ni and S values in altered ultramafics were interpreted to indicate that nickel when present, was present in silicates rather than sulphides.

The anomalous intersections of scheelite, WO_3 , Zn-Pb, and Cu reported from drill holes ER005 and ER007 were in a favourable structural zone - on the footwall of the altered ultramafic - but deep.

The two relatively shallow (90 – 113m) zones of copper bearing (0.2%) disseminated semi-massive sulphides intersected in ER007 were interpreted to be gabbro related and located well west of the main Colebrook Hill skarns. However, this zone has been previously surveyed by others with a variety of EM, IP, magnetic and geochemical programs and no anomaly considered indicative of a large, shallow deposit with significant copper grades was identified.

OZ Minerals Ltd considers that the seven diamond drill holes completed to date by East Ren Pty Ltd targeting the NNE/SSW striking mafic-ultramafic outcrop expressed in the airborne magnetics data as very strong magnetic highs have not fully tested the potential of these rocks to host an Avebury-style nickel sulphide deposit. In the extension period OZ proposes to further drill test these rocks guided by the results of a study of the origins of the Avebury deposit and geochemical test work currently being carried out by researchers at CODES and Monash University.

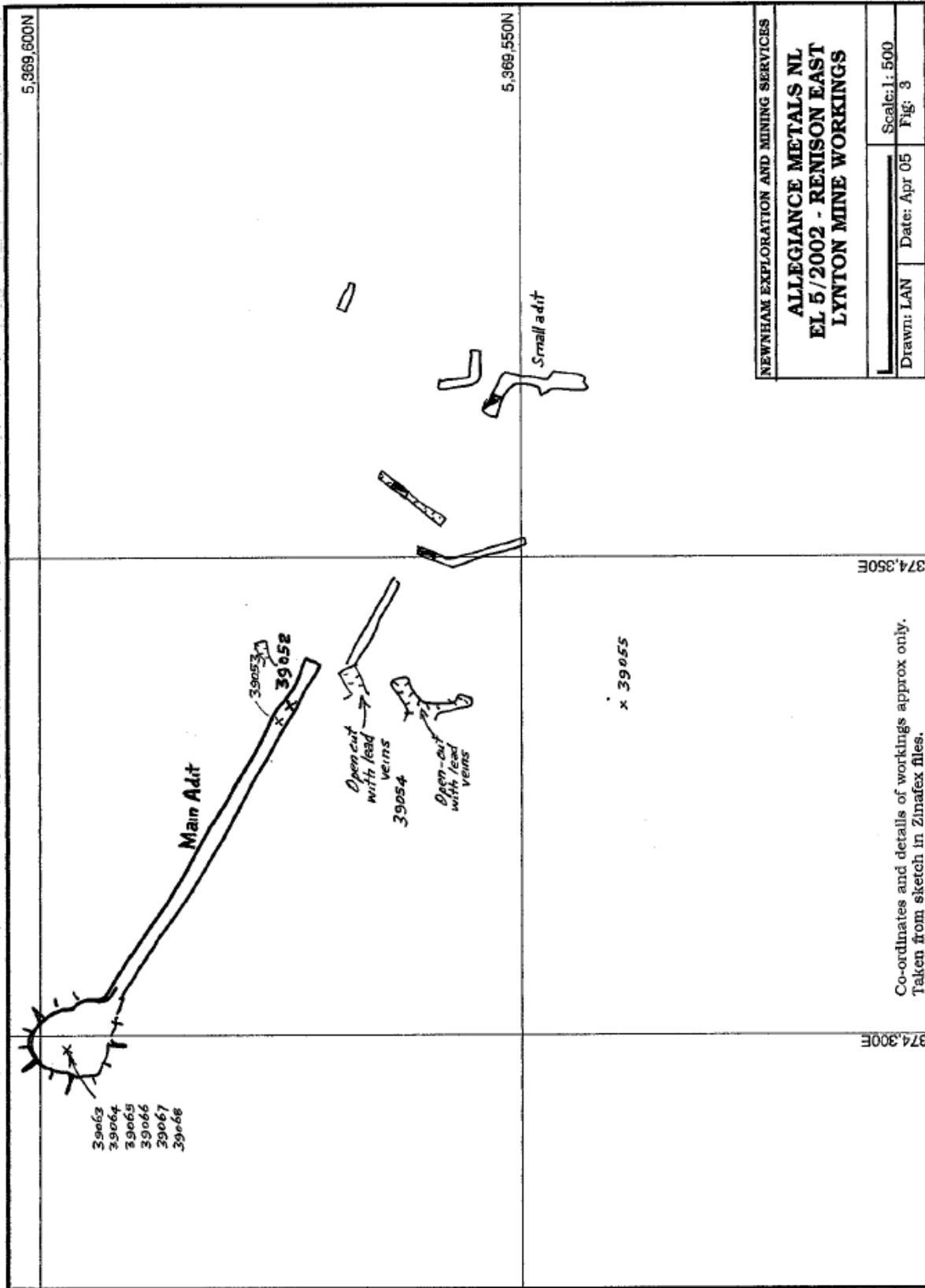
APPENDIX 1

Allegiance Metals Pty Ltd, Helimag Survey in Western Tasmania by Fugro Airborne Surveys. Quality Control Report and Preliminary Interpretation by Steve Webster Pty Ltd, February 2004

APPENDIX 2

**Allegiance Metals Pty Ltd. Exploration Licence 5/2002 East Renison, Progress Report, by
Michael V McKeown, April 2004**

APPENDIX 3
Assay Data and Sketch Plan, Lynton Mine area



APPENDIX 4
References

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APPENDIX 5
East Renison Regional Drill Hole Database
Collars, Downhole Surveys, Assays, Geology, Codes

APPENDIX 6
DDH ER001 – ER007 Drill Logs

